

Comments Letter

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Response to Comments Letter

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1140 S. Coast Hwy 101
Encinitas, CA 92024
Tel 760-942-8505
Fax 760-942-8515
www.CoastLawGroup.com

October 9, 2017

Marisa Smith
Planning & Development Services
5510 Overland Avenue, Suite 310
San Diego, CA 92123
marisa.smith@sdcounty.ca.gov
Donna.Beddow@sdcounty.ca.gov

By Email

Re: Comments Re Draft SEIR for Chinese Bible Church of San Diego
PDS2014-SPA-14-001, PDS2010-3300-10-032(MUP), PDS2012-3940-12-
002(VAC), PDS2010-2910-9509007L(ER), SCH#214011018

Dear Ms. Smith:

This letter is submitted on behalf of 4S Santa Fe Valley Mega-Project Abatement Coalition (the "Coalition") to provide comments on the Draft Subsequent Environmental Impact Report ("DEIR") prepared for the Chinese Bible Church Project. As discussed below, the DEIR fails to adequately address, among other things, the preschool and kindergarten that was initially proposed by the project applicant; the project's traffic, land use and community character impacts; impacts to biological resources (including the onsite wetland and wetland buffer); and impacts of the project's greenhouse gas emissions. The DEIR should be amended to address these deficiencies and recirculated for further comment.

A. Introduction

The applicant proposes to develop and operate a massive campus consisting of five buildings and 89,234 sf of usable interior space. The project site is located in the Santa Fe Valley Specific Plan ("Specific Plan") and, as a result of the significant planning efforts undertaken in connection with the Specific Plan, has been designated for low-medium density residential uses (1 unit per 1-1.9 acres). In addition, the General Plan regional category for the site is "semi-rural," and the site is virtually surrounded by open space, wetland habitat and residential uses. The project is thus poorly suited for the site, incompatible with surrounding uses, and inconsistent with all applicable land use plans, and its approval will relatedly (and predictably) result in

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O-1-1 The comment states the letter is written on behalf of the 4S Santa Fe Valley Mega-Project Abatement Coalition, and also states the DSEIR fails to adequately address the preschool, traffic, land use and community character, biological, and greenhouse gas emissions impacts. The County of San Diego appreciates the comments. The comment summarizes points that will be raised in the letter but no specific comments are made, so a detailed response is not possible. Each of these issues is discussed in more detail below.

O-1-2 The comment states the square footage of the project's buildings and describes the planning characteristics of the site and surrounding uses. The comment concludes that the project is poorly suited for the site, incompatible with surrounding uses, and inconsistent with all applicable land use plans. The site is bordered on the north and west by open space, on the east by residential uses, and on the south by civic and residential uses. The land use study (DSEIR Appendix O) considers immediate uses as well as nearby uses in its analysis. This is appropriate in order to provide a complete picture of the uses and character of the area as it exists today. No additional specific issues were raised about the DSEIR so an additional response is not possible. A general response to land use is provided in Chapter 8.2.1, General Response 1 "Planning and Land Use."

O-1-3 The comment states that approval of the project will result in environmental impacts, including traffic, community character, and open space, and that these issues are not addressed in the DSEIR so the DSEIR will need to be recirculated. It also asserts findings for the project cannot be made. Impacts to biology, traffic, and community character are analyzed in detail in DSEIR Chapters 2.2, 3.1.6, and 3.1.4, respectively. The DSEIR determines that impact to biology are significant but can be mitigated to a level below significance through implementation measures MM-BI-1 and MM-BI-2, which will be required as a condition of project approval. Traffic and community character impacts are analyzed and the DSEIR (Sections 3.1.6 and 3.1.2) and determined that these impacts will not be significant when design features of the project are adopted. Proposed design features were summarized in Chapter 7 of the DSEIR. The comment that these subjects were not analyzed as so the DSEIR should be recirculated is therefore without foundation. The comment on findings is a

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numerous environmental impacts (including to traffic, community character, and the surrounding open space and wetland habitat). The DEIR, however, does not adequately address these or other environmental issues. As a result, while the project should ultimately be denied in any event (including because findings of approval cannot be made), the DEIR must be amended and recirculated to comply with CEQA.

B. The DEIR Improperly Ignores Impacts of the Preschool and Kindergarten

CEQA requires that an EIR analyze environmental effects of future expansion or other action if: "(1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change ... [the project's] environmental effects." (*Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 395-396). This rule is intended to, among other things, (i) ensure that "environmental considerations do not become submerged by chopping up a large project into many little ones – each with a minimal impact on the environment – which cumulatively may have disastrous consequences" (*Id.* at 396); (ii) promote the basic CEQA tenet that "an environmental analysis should be prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design ..." (*Id.*, citing 14 CCR § 15004); and (iii) account for the concern that delay in reviewing reasonably foreseeable actions can result in "bureaucratic and financial momentum" for a project, which in turn can "provid[e] a strong incentive to ignore environmental concerns that could be dealt with more easily at an early stage of the project." (*Laurel Heights, supra*, at p.395).

Here, the applicant initially proposed that onsite buildings and facilities would be used to operate a preschool and kindergarten for up to 150 children. Indeed, one of the stated and primary objectives of the project was to "furnish kindergarten/preschool facilities for up to 150 students to provide a strong spiritual foundation to the children of the church and surrounding community." (Emphasis added) (*See, e.g., Recon's Land Use Analysis*, p.19, Section 1.5). The project was accordingly described by one of the applicant's consultants as being a "church and preschool/kindergarten." (*Id.* at p.53).

While the DEIR was being prepared, however, the preschool/kindergarten was removed from the project description in order to support a finding that - due to the resulting reduction in project-related vehicle miles traveled ("VMTs") (i.e., in the amount of VMTs attributable to operating the school) - the project would no longer exceed the 900 metric ton screening limit for greenhouse gas emissions. (*See, e.g., Recon's Dec. 30, 2016 Addendum to Land Use and Planning Analysis*).

Significantly, however, no relevant physical changes to the project are contemplated, such that the very same buildings and facilities that were to be used for

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O-1-3 general opinion, so a detailed response is not possible. A general response to the issue of findings is provided in EIR Section 3.1.4.3 "Physical Compatibility with Surrounding Areas/Community Character", starting on page 3-76. No changes to the DSEIR are needed as a result of the comment.

O-1-4 The comment cites case law related to fragmenting projects. As the comment does not raise an issue with the analysis within the DSEIR, no further response is warranted.

O-1-5 The comment states that a kindergarten/preschool was a prior goal of the project and that, although it was eliminated from the project, the project was not physically altered as a result. After evaluation, the project applicants determined that the preschool and kindergarten were no longer necessary to meet the underlying objectives of the proposed project. The applicant has planned multiple uses for the proposed facilities, so reduction in building square footage would hamper other planned activities. The applicant has identified a range of uses that will take place on the site, including worship, fellowship, Bible study, and Christian education, café and bookstore, as well as administrative activities. These activities will make full use of the planned facilities; therefore, no excess capacity that might be used for a kindergarten/preschool at a later date is being created.

O-1-6 The comment states it is probable that the school will be re-introduced to the project, and so should be analyzed by this DEIR. Project operations have been laid out in detail in the DSEIR and they exclude the school use. Details of proposed uses are provided in DSEIR Section 1.2.2.7, page 1-6, and Table 4, page 36 of the land use study (Appendix O). A change of those operations as extensive as the addition of a school would trigger a revision of the MUP conditions, so discretionary approval would be triggered. This would involve a new application, additional environmental review which at a minimum would require a new traffic analysis, a public notice, and a public hearing. The school could not be added as a minor deviation because this change would be an operational change.

The CEQA process is intended to disclose environmental impacts and does not preclude project applicants from modifying projects during the process to avoid significant impacts on the environment. As previously detailed, the

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the preschool and kindergarten are still proposed as part of the project. (Compare, e.g., Recon's Land Use Analysis, pp.19-22 and DEIR, Figure 1.2).

Under these circumstances, it is likely (and at the very least "reasonably foreseeable") that, after obtaining its initial approval through the pending administrative process, the applicant will seek to reintroduce the onsite preschool and kindergarten. This is particularly true given that one of the very reasons the applicant proposed the project in the first place was to "furnish kindergarten/preschool facilities...."

In addition, under the rule stated in *Laurel Heights*, the kindergarten/preschool is "significant" in that it will change the project's environmental consequences, including, for example, as they relate to traffic and GHG emissions. Indeed, the sole reason the school was excluded was to justify a finding of "no significant impact" under the 900 MT screening limit for greenhouse gas emissions, which cannot be met when the school is taken into account.

The kindergarten/preschool thus remains a reasonably foreseeable consequence of the project, and the decision to remove it from the project description reflects an impermissible effort to "chop[] up" the project to avoid addressing the full scope of foreseeable environmental consequences. The DEIR must therefore be revised and recirculated to consider, and to allow the public to comment upon, the environmental effects of the proposed preschool and kindergarten.

C. The DEIR's Discussion of Traffic Impacts Is Inadequate.

Relying on the traffic impact study prepared ("TIS") for the project by KOA Corporation ("KOA"), the DEIR concludes the project's traffic impacts will be less than significant. (DEIR, pp.3-92 to 3-112). However, as detailed in the attached expert comments of Urban Systems Associates, Inc. ("USAI") (a licensed civil and traffic engineering firm), the TIS includes numerous analytical errors that render it inaccurate and unreliable, and that further caused the significance of the project's traffic impacts to be drastically understated. In addition, as discussed in comments submitted by Dr. Gerald Kent, the project includes insufficient parking, such that congregants and other visitors will be forced to search for offsite parking, and will as a result cause further impacts to area traffic conditions that have not been considered in the DEIR. For these reasons, the conclusion that the project will cause no significant traffic impacts is not supported by substantial evidence, and the DEIR's traffic analysis (including the TIS) must be revised and recirculated.

D. The DEIR's Discussion of Land Use & Community Character Is Inadequate

The DEIR concludes the project's impacts related to land use and community character will be less than significant. This conclusion is based on the Land Use & Planning Analysis prepared by the applicant's consultant RECON Environmental, Inc.,

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O-1-6 preschool/kindergarten component was removed from the proposed project and it is speculative to assume that the project would incorporate the component at a later date. Any attempt to expand the project to include the kindergarten/preschool as some future date would involve a Specific Plan Amendment, and MUP, as well as environmental analysis at least as rigorous as this five-year process has been. The DSEIR appropriately evaluates the entire project and has considered the full range of impacts resulting from it. No changes to the DSEIR are required as a result of the comment.

O-1-7 This comment provides introductory remarks about the traffic study prepared for the project and references a traffic memorandum prepared by a traffic consultant. In order to fully respond to as many of the comments comprehensively, KOA, the firm that prepared the traffic study for the project, conducted a supplemental traffic analysis. The supplemental analysis and response to the other traffic consultant's memo are provided as Attachment A at the end of the responses to the Coast Law Group letter. The supplemental analysis concluded that no new significant impacts would occur that were not already identified in the DSEIR.

O-1-8 This comment states that the project does not provide enough parking, and that the search for off-site parking will result in traffic impacts. The County disagrees with the contentions raised within this comment for several reasons. As detailed within Section 3.1.6.3 of the DSEIR, Section 6764 of the County of San Diego Zoning Ordinance identifies the parking requirements for civic uses, including public assembly/religious assembly uses. Per the Zoning Ordinance, 0.25 parking spaces per person, based on total occupancy of the largest assembly room, are required. Since the Project would have an ultimate buildout of a 1,500-seat sanctuary, a total of 375 off-street parking spaces will be required for the Project. The project is providing 417 parking spaces, which is in excess of County requirements by 42 spaces. It also proposes an "overflow" parking area to accommodate cars during special events (DSEIR Section 1.2.2.3, page 1-5). The project's operational requirements also include the use of two shuttle buses on Sunday when services are held. This service is already in use at existing church locations so it will be a familiar service that will reduce parking pressures from the start of church operations at this new location. As the project would provide exceed zoning ordinance requirements, impacts would be less than significant. No changes were made the DSEIR based upon this comment.

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which in large part is dedicated to substantiating the project's purported compatibility with the community and surrounding area, as well as its alleged consistency with applicable land use plans and regulations. However, residents in the area have submitted detailed comments, based on their personal experiences, observations and knowledge about the area, that directly refute Recon's analysis and the conclusions in the DEIR. As established by these comments (including those submitted by Dr. Kent and the Coalition): (i) findings necessary to grant a Major Use Permit and to otherwise approve the project cannot be made, and (ii) the DEIR's conclusion that the project will have no significant land use impacts or effects on community character are not supported by substantial evidence.

E. The DEIR's Discussion of the Wetland and the County's RPO Is Inadequate.

Under the County's Resource Protection Ordinance ("RPO"), discretionary project applications require preparation of Resource Protection Studies in order to determine compliance with, among other things, the 50-200 ft. wetland buffer standard set forth in RPO § 86.602(r). (RPO § 86.603).

Here, while the DEIR acknowledges that "high value" emergent wetland habitat is present in the northern portion of the site, it concludes the RPO and its wetland buffer requirements are inapplicable to the project, and that, as a result, there will be no relevant impacts for purposes of CEQA. (E.g., DEIR, pp.2-41 to 2-42).

The bases for these conclusions are not clear. They apparently rest, however, on: (i) RPO § 86.603(a), which, as discussed, provides that Resource Protection Studies must be completed prior to approval of certain discretionary projects, (ii) the DEIR's claim that this project lacks a discretionary application that would "trigger" §86.603, and (iii) the wetland's location in an existing open-space easement, which the DEIR claims was created in 1998 in connection with TPM 20340. (See, e.g., DEIR, pp. 2-41 to 2-42; See also, DEIR Appendix E, Biological Letter Report, p.8).

The DEIR's analysis, however, is flawed for several reasons.

First, the assertion that "there is no trigger" for RPO § 86.603 is simply incorrect. That section provides: "Prior to approval of ... [certain discretionary applications], a Resource Protection Study must be completed and the approving authority shall make a finding that the use or development permitted by the application is consistent with the provisions of this chapter." (RPO § 86.603). It further specifies that applications for Major Use Permits require § 86.603 compliance. The MUP application for the project in this case thus "triggered" RPO §86.603, and the DEIR's contrary assertion is unsubstantiated and incorrect.

Second, the DEIR's assumption that the existing open space easement somehow obviates the wetland buffer and other requirements of the RPO is unfounded.

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O-1-9 This comment provides summary remarks regarding the project's traffic impact analysis. As detailed in responses O-1-8, the project adequately analyzed the project's potential traffic and parking impacts consistent with County requirements and adopted thresholds. Traffic impacts will be less than significant.

O-1-10 The comment describes aspects of the land use study (Appendix O of the DSEIR). The study provides detailed analyses of the existing uses in the area (Chapter 1.0) and its compatibility in terms of the physical characteristics of the project (Chapter 2.1) and land use (Chapter 2.2). It also evaluates relevant planning documents (Chapter 4.0). No changes are needed to the DSEIR as a result of the comment.

O-1-11 The comment states that other comments about land use have been made by community members. Several public comment letters were received from community members. These include Rob and Patty Anders (letter F), Jason Hightower (letter G), Shamim, Habib, and Jasmin Husain (letter H), Arne Johnson (letter I), Gerald Kent (comment letter J), and Bruno Leone (letter K). A letter was also received from the 4S Santa Fe Valley Mega-Project Abatement Coalition (letter B). Full responses have been made to these comments and are included in the FEIR. A comment was made that the MUP findings could not be made for bulk, scale, and community character. The County disagrees. The project has been designed with differences in the height of the buildings, several different exterior shades and textures, and breaks between buildings to eliminate "massing" and give visual interest. Attachment B of Appendix C in the DEIR notes the tallest existing buildings within one mile of the project site, which demonstrates how the proposed height of the Church is in harmony with the community. And the design of the Church will have landscaping throughout the property with special attention to the perimeter, which will buffer and screen the Church from various vantage points. No change to the DSEIR are warranted as a result of the comment.

O-1-12 This comment provides general comments about the County's Resources Protection Ordinance (RPO) wetland buffer standards for discretionary projects. Further comments on this item are expanded in General Response 2, Biology and Resource Protection Ordinance, Section 8.2.1 of the DSEIR. Please also see response O-1-13, below.

O-1-13 This comment relates to statements in the DSEIR about the RPO. The DSEIR adequately addresses the RPO issue, but the DSEIR text is being modified in order to clarify the buffer discussion and reflect a conservative approach to

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There is nothing in the RPO that would support such a conclusion, and the DEIR's cursory analysis of the issue (which is virtually incomprehensible) does not suggest otherwise.

And third, even if the DEIR were correct in its assumption that the RPO is inapplicable (which is not the case), this would not – in the absence of further environmental analysis (e.g., of the type normally required by the RPO) – support the determination that the project will have no impacts related to the wetland or the wetland buffer for purposes of CEQA.

Further analysis of the project and the wetland is therefore required under both CEQA and the RPO. This is particularly true given that the project contemplates a buffer of as little as 16 ft. between the development footprint and the edge of the easement in which the wetland is located. (DEIR, p.2-51). In addition, the DEIR itself acknowledges that an increased buffer would reduce the project's impacts to biological resources. (DEIR, p.4-9 ("An increased open space buffer along the northern boundary [would] reduce impacts in several ways.")). It is thus clear, even in the absence of the review required by RPO § 86.603, that the project will impermissibly encroach on the mandated 50-200 ft. buffer, and in doing so will cause significant impacts to biological resources. (See, e.g., County of San Diego Guidelines for Determining Significance, Biological Resources, Fourth Revision, pp.7, 16-17¹). Under these circumstances, the DEIR's relevant "no impact" conclusions (see, e.g., DEIR at pp.2-51, 2-53, and 3-83) are not supported by substantial evidence, and the applicant's failure to comply with the RPO precludes project approval.

F. The DEIR's Discussion of Greenhouse Gas Emissions Is Inadequate.

The DEIR concludes the project will cause no significant impacts related to greenhouse gas emissions. However, these conclusions (and the analyses that support them) are deficient for reasons previously discussed. For example, the DEIR's GHG analysis rests in part on trip rates obtained from the KOA Traffic Impact Study (see, e.g., DEIR Appendix L, p.30), but that study, for reasons detailed in Mr. Schlaefli's comments, is unreliable and likely significantly underreports project-related trips.

Further, the DEIR, as discussed, impermissibly fails to account for reasonably foreseeable trips and miles traveled associated with the preschool/kindergarten. These errors directly affect the DEIR's GHG analysis, and they render it deficient as well.

In addition to these previously-discussed issues, DEIR's analysis is also inadequate for the following reasons:

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O-1-13 biological protection. A 50 foot buffer from the resource to the edge of development has been defined. No development will take place within this buffer. A further 150 foot buffer has been declared beyond that, in which occur some building elements, parking spaces, hardscape, turf, and landscaping, and a volleyball court. In addition, a retaining wall, fencing, and landscaping are used to protect the open space from intrusions. The revisions are shown on Figure 2.2-1. The DEIR text has been modified on pages 2-42, -50, -51 - 53, and -55. Further details are provided in EIR Section 3.1.4.3 "Physical Compatibility with Surrounding Areas/Community Character", starting on page 3-76.

O-1-14 This comment addresses the greenhouse gas (GHG) analysis prepared for the project. The traffic analysis was based on industry standard trip generation for religious land uses. It was reviewed by County traffic engineers and determined to be adequate. The alternative analysis referred to in the comment was reviewed by the traffic engineers for the project. The scenarios suggested were run using appropriate computer programs to determine if the alternate analysis would make a significant difference in the traffic impact analysis outcomes. No significant differences were found. Please also see Response O-1-16 below for a discussion of Vehicle Miles Traveled (VMT). No changes are warranted as a result of the comment.

O-1-15 This comment addresses reasonably foreseeable vehicular trips associated with the school. No school is proposed so the addition of school trips would not be accurate. Please see Response O-1-5 and O-1-6 above.

O-1-16 The comment states that the GHG analysis does not take into account growth factors such as an increase in the number of congregants. The commenter states that the assumed 17.8 percent reduction in vehicle miles traveled is based on the conclusory statement that the proposed use is more central than existing churches it is replacing, and that the supporting survey of congregants is undisclosed. An analysis of the existing congregation and the attendance at each of the current sites was conducted as part of the GHG analysis. Based on the analysis, it was determined the congregants are spread throughout coastal and inland portions of the County, which is similar to where future congregants would come from. The distance that each family travels to the current facility of attendance was calculated based on the origin and destination assuming the shortest route. These same origin locations were then used to calculate the distance all current congregants attending the disparate facilities would have to travel to attend the new facility. This difference was calculated to be a 17.8

¹ Available here: http://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/Biological_Guidelines.pdf

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1. *The DEIR Improperly Relies on a 17.8% reduction in VMTs.*

The DEIR's GHG analysis relies on the CAPCOA screening threshold of 900 metric tons of CO_{2e} to determine that the Project's contribution to GHG emissions will not result in significant impacts. (DEIR, p. 3-34). To make this determination, the DEIR relies, in significant part, on a purported 17.8 percent reduction in vehicle miles traveled attributable to the project, which it contends is justified based on (i) its conclusory assertion that the proposed project is "more centrally located than existing facilities" (DEIR, p.3-39), and (ii) the results of undisclosed "surveys" of congregation families.² (DEIR, Appendix L, p. 30). However, even assuming these bases for the reduction were adequately disclosed in the DEIR (and they are not), the analysis does not purport to account for the project's increased intensity relative to existing facilities. For example, one the expressed objectives of the project is to "[p]rovide a new church-owned campus of appropriate size and ancillary services to fulfill the religious mission of the church...for an existing and growing population of congregants." (DEIR, p. 1-1, emphasis added). The DEIR accordingly describes the "ability to accommodate growth" as "essential to [the applicant's] mission," such that any reduction in the project's size would prevent attainment of project objectives. (DEIR, p.4-10). Yet nothing in the DEIR's GHG analysis suggests it accounts in any way for additional VMTs associated with the anticipated "growing population of congregants."² Similarly, the VMT analysis fails to account for trips and miles traveled associated with events, employees, pastors and visitors, as well as with many of the project's ancillary services/facilities (including, for example, the education building, meeting building, learning center and administration building). The DEIR thus assumes the project will result in a 17.8% reduction in VMTs, but its analysis improperly fails to account for aspects of the project that will result in additional trips and miles traveled. In addition, the DEIR's traffic analysis (on which the mobile emissions analysis was based) acknowledges the project will increase intensity relative to the existing facilities, and further suggests diverted trips will not create an across-the-board decrease in traffic volume, all of which undermines the VMT reduction rate applied in the GHG analysis. (See, e.g., DEIR, Appendix B, p.24). Under these circumstances, the DEIR's application of a 17.8 percent reduction in VMT is inappropriate, and its determination that there will be no significant GHG-related impacts is not supported by substantial evidence.

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² "Argument, speculation, unsubstantiated opinion or narrative" does not constitute substantial evidence. (CEQA Guideline § 15384(a)). Rather, substantial evidence includes facts, reasonable assumptions predicated on facts, and expert opinion supported by facts. (CEQA Guideline § 15384(b)).

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percent reduction in travel distance. To account for this reduction in VMT, the standard trip lengths included in the computer model were reduced by 17.8 percent. Details are provided in the greenhouse gas analysis, Appendix L. The statement is therefore not conclusory but rather is based on a detailed analysis of the travel distances with and without the new church. The survey data used to calculate travel distances are confidential as disclosing these data would disclose the physical addresses of congregants.

The comment also states increased intensity such as growth in the congregation was not taken into account. The DEIR and the traffic analysis do take into account growth in the congregations because they analyze the project at full buildout. There are two phases of the project, and the first phase calls for a sanctuary with 1000 seats. The second phase adds 500 seats, which accounts for a 50 percent increase in church attendees. The traffic analysis was based on this 1500 seat capacity, so it accurately takes into account increased intensity of use of the site. The GHG analysis prepared for the DSEIR is based on industry standard methodologies and relies on traffic data that are also based on industry standard methodologies. Therefore, the GHG analysis is adequate in identifying GHG impacts associated with the project.

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O-1-17 The comment states the traffic analysis fails to account for traffic associated with events, employees, pastors, visitors, and ancillary uses. The traffic analysis was based on industry standard trip generation rates for religious land uses and was reviewed by County traffic engineers and determined to be adequate. Trip generation accounts for the total use of a facility including the size of the land use. For a church, it is based on the number of seats as supported by studies of various churches across the country conducted by the Institute of Traffic Engineers (ITE). ITE provides guidance on calculating the total trips generated by church uses based on the number of seats, which includes the congregants, the people who work at the church, the people who visit the church, deliveries, and ancillary trips in and out of the church for various unrelated activities. Therefore, as the project is based on the size of the church as needed to accommodate the number of new congregants as well as the existing congregants, the GHG analysis does analyze the growth associated with the future congregation. The use of the reduced trip distance is appropriate, as it is assessing the emissions reductions throughout the County associated with the change in location of the facility including the changes that would occur over time as the congregation grows. For a discussion of uses associated with increased intensity, please see Response 16 above. The project's reliance on the 17.8 reduction in VMT is based on a detailed analysis using established methodologies, and its use in the greenhouse gas analysis is appropriate and accurate.

This comment states the project was not evaluated in relation to the County Draft Climate Action Plan (CAP)'s Consistency Review Checklist. The project used a screening level threshold to determine if further analysis of greenhouse gases generated by the project is warranted. The analysis (Appendix L, and as summarized in DSEIR Section 3.1.2) determined the project did not exceed this threshold and therefore the project did not require further analysis. Analyzing the project against the CAP checklist is therefore not required. The County Climate Action Plan is a draft, as noted, and subject to change. Use of this list to determine the adequacy of the greenhouse gas analysis would therefore be premature and speculative. For a discussion of specific CAP provisions, please see Response 20 below. The greenhouse gas analysis (Table 10) also provided an extensive analysis of the County's adopted General Plan and found the project was consistent with it.

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2. *The DEIR Does not Assess Consistency with the County's Draft CAP.*

The County's draft Climate Action Plan (CAP)³ is intended to mitigate the impacts of the 2011 General Plan and future county-wide impacts from individual projects. The CAP is therefore to serve as the County's qualified greenhouse gas reduction plan pursuant to 14 CCR §15183.5. To implement the CAP, the County has further developed a CEQA checklist to assess individual projects' consistency with the CAP.⁴ Here, however, the DEIR does not disclose the County's CAP or consistency checklist (which were recently released for public review), and it accordingly fails to measure the project's impacts under them. This is particularly problematic given that: (i) the CAPCOA 900 MT threshold relied upon in the DEIR is (as discussed below) is outdated and unreliable, and (ii) the draft CAP reflects the County's best and most updated effort to establish an appropriate significance threshold. Moreover, the project is *not* consistent with the proposed CAP. For example, Checklist Item 4.a. requires non-residential construction to achieve a 10% greater building energy efficiency than required by 2016 Title 4 standards. (Checklist A-7), but the project does not incorporate this reduction. (Appendix L, p. 31) Similarly, Checklist Item 6.a. requires non-residential projects to provide 100% of the project's annual electricity through rooftop solar or to procure 100% renewable energy from a utility purveyor (Checklist A-8), but the project proposes rooftop solar to offset only 10% of its energy demand. (DEIR, Appendix L, p.1). The project should therefore be reviewed for compliance with, and found to have a significant impact under, the CAP and its implementing checklist.

3. *The DEIR's Reliance on the CAPCOA Threshold Is Improper.*

In drafting the CAP, the County compiled County-specific data to establish regional targets and a County-specific checklist. The DEIR nevertheless ignores the CAP and instead uses the 900 MT threshold from a decade-old CAPCOA guidance document. However, the CAPCOA document itself cautions that, because data from only 4 cities was compiled, more information is required for full-scale application of its threshold. (See, CAPCOA, CEQA and Climate Change, Jan. 2008, p. 43 ("If this threshold is preferred, it is suggested that a more robust data set be examined to increase the representativeness of the selected thresholds. At a minimum, a diverse set of at least 20 cities and/or counties from throughout the state should be examined in order to support the market capture goals of this threshold. Further, an investigation of market capture may need to be conducted for different commercial project types and for industrial projects in order to examine whether multiple quantitative emissions

³ Available at: http://www.sandiegocounty.gov/content/sdco/pds/ceqa/Climate_Action_Plan_Public_Review.html

⁴ Available at <http://www.sandiegocounty.gov/content/dam/sdco/pds/advance/cap/publicreviewdocuments/CAPfilespublicreview/Draft%20CAP%20Consistency%20Review%20Checklist.pdf>

O-1-18

O-1-18

The comment states the CAPCOA 900 metric ton (MT) threshold is outdated and that the CAP represents the County's best effort to establish a significance threshold. The greenhouse gas analysis (Appendix L), Section 4.4 states:

The screening level used in this analysis is not based on the future County CAP and not based upon a threshold adopted by a public hearing process, but rather it is considered to be appropriate based on the nature of the proposed project. The screening level used in this analysis represents a good faith effort to evaluate whether GHG impacts from the proposed project may be significant, taking into account the type and location of the proposed development, the best available scientific data regarding GHG emissions, and the current state reduction targets and strategies for reduction of GHG emissions.

As stated in the DSEIR, the 900 MT CO₂e threshold is a screening threshold used to determine if a project's emissions are low enough to have no cumulative effect on statewide emissions. Project size-based screening levels have been published by the California Air Pollution Control Officers Association (CAPCOA) for determining the need for additional analysis and mitigation for GHG-related impacts under CEQA. The annual 900 MTCO₂e screening level referenced in the CAPCOA white paper is used as a conservative screening criterion for determining which projects may require further analysis (CAPCOA 2010). The white paper also provides guidance on the identification of project design features and potential mitigation measures regarding GHG emissions. The CAPCOA white paper reports that the 900 MTCO₂e per year screening level would capture more than 90 percent of development projects, allowing for mitigation towards achieving the State GHG reduction goals. CAPCOA has recommended screening thresholds based on various land use densities and project types. Using CAPCOA guidance, land use projects that meet or fall below the screening thresholds are expected to result in 900 MTCO₂e per year of GHG emissions or less and would not require additional analysis; therefore, the climate change impacts would be considered less than significant. See also Section 4.0 of the Global Climate Change Analysis, which was included as Appendix L of the DSEIR. For a discussion of the CAP, please see Response O-1-17 above.

O-1-19

O-1-20

O-1-21

O-1-19

This comment states the project does not comply with the County's draft CAP. For a response to the issue of using the CAP, please see Response O-1-17 and O-1-18 above.

O-1-20

This comment questions the use of the CAPCOA screening threshold over that of the CAP. Please see Responses O-1-17 and O-1-18 for a response.

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Response to Comments Letter

O-1-

October 9, 2017
Page 8 of 8

thresholds or different thresholds should be developed..."). Because the Project does not fit squarely in the residential, commercial or industrial categories examined by CAPCOA, application of its threshold is particularly inappropriate.

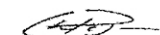
4. The DEIR's Analysis of GHG Reduction Targets Beyond 2020 is Deficient.

Relying on its conclusion that the project falls below the 900 MT screening threshold, the DEIR assumes the Project will not frustrate attainment of the State's GHG reduction targets beyond 2020. However, the CAPCOA screening threshold was established almost a decade ago, before the State adopted its interim 2030 goal.⁵ Despite the uncertainties associated with the CAPCOA threshold, the DEIR summarily claims that the threshold would be consistent with AB 32 reduction targets, and that, "[b]ased on currently available models and regulatory forecasting, project emissions would continue to decline from 2020 through at least 2050." (DEIR, Appendix L, p. 37). However, the DEIR does not explain how the project will reduce emissions beyond 2020 in line with the State's quantitative 2030 and 2050 targets. (*Id.*) This is inappropriate, especially in light of the Project's presumed 30-year life span.⁶ In addition, while the County's CAP was developed to meet the 2020 and 2030 reduction targets county-wide, the project, as discussed, does not satisfy the CAP's project-level requirements, reflecting that it will impede attainment of GHG reduction targets beyond 2020. The DEIR's analysis is therefore deficient, and it's conclusion that the project will not cause significant GHG-related impacts is not supported by substantial evidence.

G. Conclusion

For the reasons discussed above - as well as those discussed in the comments submitted by USAI, the Coalition and other members of the community - the DEIR cannot be certified under CEQA. It should accordingly amended to address the identified deficiencies and recirculated for further comment.

Sincerely,
COAST LAW GROUP, LLP



Chris Polychron
cpolychron@coastlawgroup.com

Enc: Comments by Urban Systems Associates, Inc., dated October 9, 2017

⁵ Even at the time of its original publication the CAPCOA guidance acknowledged uncertainties with the 900 MT threshold. It states, for example, that: "Approach 2 thresholds with lower quantitative (2.1 and 2.2) or qualitative (2.5) thresholds will have uncertainties associated with the ability to achieve GHG reductions from small to medium projects." (CAPCOA, CEQA and Climate Change, Jan. 2008, pp.54-55).

⁶ DEIR, Appendix L, p. 29 [construction emissions amortized over 30 years]

O-1-21

O-1-21

This comment questions the use of the CAPCOA screening threshold over that of the CAP. Please see Response O-1-18 for a response.

O-1-22

O-1-22

This comment states the DEIR assumes the project will not frustrate attainment of the State of California's GHG reduction targets beyond 2020. The 900 MT CO₂E screening level is conservative and represents a 90 percent capture rate. Projects that do not exceed this screening level would not conflict with the state reduction targets and would therefore be less than cumulatively considerable. CAPCOA guidance indicates that projects that emit less than 900 MT CO₂E annually would be consistent with state reduction targets identified by Assembly Bill (AB) 32. Further, emissions are generally highest during the first year the project is fully operational and continue to decline in the future as a result of continued implementation of federal and state reduction measures, such as increased federal and state vehicle efficiency standards and utility renewables generation requirements. As a result, operational emissions associated with vehicles, energy use, and water consumption would reduce beyond those estimated for the first operational year. Thus, the project would not conflict with the achievement of state reduction goals identified and codified by Executive Order B-30-15 and Senate Bill (SB) 32.

O-1-23

O-1-23

The comment presents a closing statement. Recirculation of the DSEIR is not required for the reasons expressed in the foregoing responses. Community character, traffic, and land use were included in the DSEIR and we extensively evaluated. The DEIR's exclusion of the pre-school/kindergarten is appropriate because this use is no longer proposed. The RPO analysis was reviewed and changes were made as a result of the comment, but these changes clarified the existing conclusion that the project does not have direct biological impacts. The traffic analysis was carried out using industry-standard methodologies and the recommended alternative methodologies did not significantly alter the traffic analysis conclusions. Vehicle trips were accurately assessed and the greenhouse gas analysis appropriately used the CAPCOA screening level threshold.



MEMO

ATTN: Chris Polychron
Coast Law Group, LLP
E-Mail: ▼
cpolychron@coastlawgroup.com

FROM: Justin P. Schlaefli, PE TE PTOE
TOTAL PAGES (Including Cover):

DATE: October 9, 2017
TIME: 11:12:58 AM
JOB NUMBER: N/A

SUBJECT: Santa Fe Valley Chinese Bible Church TIS- Comments

Confidential Communications

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As requested, we have reviewed the Traffic Impact Study for the Santa Fe Valley Chinese Bible Church. The study comprises Appendix B to the Environmental Impact Report. It was prepared by KOA Corporation and is dated March 2017. Our comments are below:

1. The Trip Generation for the proposed project does not appear to meet standards. Specifically, the trip generation uses multiple sources without explanation. Table 5 (weekday project trip generation) in the TIS uses SANDAG trip rates while Table 6 utilizes ITE Trip Generation, 8th Edition. In general, the recommended practice based on ITE, Trip Generation Handbook, 2nd Edition is to use local data when there are five or fewer data points or when an independent variable does not fall within the range of data. This is the case with the trip rate utilized for Daily trips on Sunday in Table 6. According to notes in the publication, the rate should be treated with "caution" and should be used carefully due to small sample sizes. As mentioned, in addition to the small sample size, the 1,500 seat intensity is significantly higher than any other studied site with respect to the daily rate.
 - a. In addition to the primary issue described above, the proportion of Sunday peak hour traffic appears to be miscalculated. 33% of 2,775 is 916 peak hour trips (not 925 as reported in Table 6).
 - b. The intensity reported in Table 5 does not match the project description. Table 5 shows an intensity of 43,500 square feet while the project description in the EIR notes the project will consist of five buildings totaling 89,234 square feet. This would more than double the projected weekday trip generation once corrected. It should be noted that common ITE descriptions of church uses include ancillary facilities such as assembly halls, meeting rooms, classrooms and other facilities such that it is inappropriate to discount such space unless it legitimately serves an alternative use. If such ancillary facilities serve an alternative use (i.e. daycare), they should be evaluated separately for weekday trip generation purposes and as part of a church facility on weekends during services.
 - c. The TIS references ITE, Trip Generation, 8th Edition as the source for data in Table 6. This reference is outdated. The correct data source at the time of the preparation of the TIS (March 2017) was the 9th Edition of Trip Generation.

Comment 1

Memo

5095 Murphy Canyon Road, Suite 330, San Diego, CA 92123
T: 619.683.2933 | F: 619.683.7982 | www.koacorp.com
MONTEREY PARK ORANGE ONTARIO SAN DIEGO



TECHNICAL MEMORANDUM

From: J. Arnold Torma, California RTE # 1143
To: Ron Harper and Howard Cooper

Date: February 14, 2018

SUBJECT: RESPONSE TO USA COMMENTS OF 2-5-18 ON SANTA FE VALLEY CHINESE BIBLE CHURCH TIS – JB42038

In order to fully respond to as many of the comments comprehensively we have conducted a supplemental analysis of the project impacts that make use of revised assumptions for many of the specific issues discussed individually below. The conclusion of this supplemental analysis as shown in the attached materials is that no new significant impact is created as the result of project.

1. Two sources of trip generation rates are recognized as noted in the comments. One of the differences between the locally published rates (SANDAG) and the nationally recognized ones (ITE) is how the Sunday traffic is estimated. The national rates from ITE apply a rate per seat of the sanctuary while the local rates from SANDAG simply multiply the weekday rate by four to obtain a Sunday rate. Since we had the number of seats available for the proposed sanctuary to use with the ITE rates we were able to obtain a Sunday trip estimate. In addition, the SANDAG rates do not offer an appropriate peak hour percentage of traffic for making calculations whereas the ITE rates do. So, to be consistent between the daily rate and the peak hour calculation the ITE rates were exclusively used for Sunday traffic estimates in the original analysis. For this supplemental analysis we have employed SANDAG's method of calculating Sunday trips (4x the weekday amount), but in order to obtain the peak hour ratios we have used the peaking factor derived from ITE by comparing daily to peak hour rates.
 - 1a. The difference in the calculation is 9 trips, and the correct amount was used in the supplemental analysis.
 - 1b. The 43,500 s.f. amount is for the sanctuary building. In discussions between the project team and the County it was concluded that the driving factor for trip estimation is the square footage we used for sanctuary and administrative use rather than the ancillary buildings that are in the proposed plan. For the supplemental analysis we have used all of the square footage for the project for calculating weekday trips with the SANDAG rate.
 - 1c. For the supplemental analysis we have employed the SANDAG rates for Sunday with peaking factors derived from the ITE rates since SANDAG doesn't specifically provide unique peaking factors for maximum hour on a worship day.
 - 1d. While the material referenced is not included in the appendix, it is incorporated by reference to the appropriate sources.
2. The geometry as it exists at the time of this response has been verified and incorporated into the supplemental analysis.
3. For the supplemental analysis we have made use of Synchro Version 9 software which incorporates the HCM 2010 standards.
4. Peak hour factors from the latest available counts at intersections as used in the 2016 addendum for the project have been incorporated into this supplemental analysis of existing conditions.

- d. The TIS references Appendix D in the development of project trips. In reviewing Appendix D, no SANDAG trip generation rates or other information is provided to support the findings in the TIS. Instead, survey data apparently supporting the distribution of trips is presented. This appendix should be updated with corrected information supporting the trip generation assumptions.
2. There are multiple flaws in the analysis of intersections. Most significantly, the lane configurations shown in the report (Figure 2-1 and Figure 3-17) do not match field conditions. For example, a field check of the I-15 NB ramps at Camino Del Norte shows a shared left turn in the NB direction not shown on the graphics. Another example is the NB leg of the intersection of Camino Del Norte and 4S Ranch Parkway which field checks show a left turn lane, a thru lane and a right turn lane while Figure 3-17 shows a shared lane. Several other intersections do not match field conditions and some of the appendices do not match the figures in the report. This should be rectified and the level of service results should be updated based on the revised analysis.
3. According to the TIS appendices, the analysis tool, Traffix 8.0 was utilized for the analysis with the HCM2000 methodology. At the time of the analysis, the HCM 6th Edition methodology was current. This methodology is two generations newer and is the current industry standard. The analysis should be revised consistent with this methodology where possible consistent with the current state of the practice.
4. The analysis appears to assume a uniform Peak Hour Factor of 0.95 for all intersections. According to count data provided in appendix B, this assumption is improper for multiple locations. A notable example is at the intersection of Dove Canyon and Lone Quail where existing counts show an intersection peak hour factor of 0.776 in the AM peak hour while the analysis in Appendix C and elsewhere. The proper peak hour factor should be utilized at all locations and the revised analysis results reported.
5. Figure 3-18 does not show any cumulative traffic on multiple side streets including 4 Gee Road. It appears the volume on 4 Gee Road was whited out. This figure should be corrected.
6. The analysis of 4 Gee Road assumes a consistent capacity across jurisdictional boundaries. As noted in the TIS, the capacities and level of service criteria differ between the City of San Diego and the County of San Diego. 4 Gee Road and any other applicable segments should be divided at jurisdictional boundaries to illustrate the change in level of service criteria.
7. Based on the revised trip generation, the intersections of Camino Del Norte at the I-15 Interchange should be re-evaluated for potential queuing impacts. Additional ramp meter analysis should also be provided as the proposed project generates more than 20 peak hour trips at ramps with a meter in the City of San Diego.
8. The proposed project feature of a traffic signal at 4 Gee Road and the project driveway/fire station driveway is not supported by documentation. A signal warrant should be prepared and provided in an appendix to the TIS to support the installation of a signal. In addition, the operations study referenced should be provided in an appendix. Coordination across jurisdictional boundaries for traffic signal operation is notoriously difficult. Documentation from the City of San Diego, Traffic Operations should be provided indicating acceptance of the proposed signal and agreement with the proposed signal timing, interconnect and coordination scheme. Likewise, documentation regarding coordination and acceptance by the fire department should be provided to ensure proper access for emergency services and ensure that the proposed project does not impact fire station access. The List of Preparers and Persons and Organizations Contacted does not include contacts with the City of San Diego or the Fire Department. It is noteworthy that the conceptual signal design appears to show only a single detection zone for trucks leaving the fire station. This is not adequate as there are three separate exit lanes from the fire station which must be taken into account. In addition, the conceptual design of the proposed signal should take into account all proposed lanes. The design concept only shows a single outbound

Comment 2

Memo



5. As part of the development of cumulative growth in the area a factor was applied to account for general background growth and various other sources of traffic growth. This resulted in some growth to 4G Road in the traffic study as well as on the other facilities studied.
 6. The roadway capacity value that has been used for 4G Road in the analysis is the County's value of 16,000 ADT which is applicable on the County's side of the jurisdictional line. Had the City's capacity value been used for the short stretch south of that boundary (whether 8,000 ADT or 15,000 ADT depending on the defined cross section) no impact would result since the project plus background volumes are substantially lower and between three and four thousand ADT depending on the scenario.
 7. The ramp metering analysis would normally be expected for volumes on an operating, metered ramp that exceeds 20 vehicles per hour. The project volumes in the original study and the supplemental analysis are well below that amount, and the metering is only actuated during the peak hour in one direction, not both, at the freeway and the project's contribution to the peak direction on the ramps is negligible.
 8. The requirement for a traffic signal at the driveway/fire station location is a requirement initiated by the Fire District who worked in cooperation with the County staff. Coordination and input was received from the City of San Diego traffic operations staff that control and maintain the adjacent signal 4G at Camino Del Sur. Once the actual City permits and design for the public improvements associated with this requirement is undertaken issues such as loop detector placement, emergency preemption, lane allocation from the fire station driveway, etc. will be finalized. The project applicant recognizes this.
 9. The current signal timing sheets are attached to this memorandum regarding the supplemental analysis.
 10. The referenced turning movement numbers at the Camino Del Norte at the SB I-15 ramp are from an earlier version of the project that had also contained a school. The school has been removed from the project description, and the respective project right turns in the AM and PM for eastbound traffic to the SB I-15 ramp are actually 5 and 9 trips per hour respectively. The ramp intersections are in the City of San Diego although they are understandably maintained and operated by Caltrans. The County's guidelines for traffic studies contains a discussion of critical movements at ramp signals and allowable additional vehicles in poor operating conditions and on critical movements, notably when the intersection is operating at LOS=F. As the original and supplemental analysis shows, this intersection is operating at better than LOS=F conditions in the scenarios studied.
 11. This comment is being addressed by others.
 12. That incorrect reference is noted, and the appropriate California Traffic Engineer Registration number is 1143 for Mr. Torma.
- Attachments:
- Project trip generation table
 - Segment LOS tables
 - Intersection delay/LOS tables
 - Calculation output sheets
 - Signal timing sheets

- lane while the report analysis and Figure 3-17 show two lanes outbound (one right and one left). These inconsistencies must be reconciled to provide an adequate intersection analysis. Additionally, if provided and incorporated as a project feature, the conceptual design should be prepared by a licensed Civil Engineer showing proper pole locations, cabinet locations and detection zones.
9. The signal timing sheets for all intersections should be provided in an appendix to verify signal timing inputs and cycle lengths utilized in the analysis. Timing inputs could not be verified based on information currently available.
 10. The intersection of Camino Del Norte and I-15 SB ramps shows a deficient level of service on the EB right turn movement, WB thru movement and SB movements. Each of these movements has an excessive queue. In particular, the project contributes a minimum of 21 AM peak trips to the EB right turn and 38 AM peak trips to the WB thru movement. Utilizing County of San Diego Impact thresholds, impacts to this intersection would result. This analysis should be revisited using significance criteria approved by the County of San Diego as well as significance criteria from the City of San Diego.
 11. The TIS notes that 375 off-street parking spaces are required and that the church will provide 42 additional parking spaces over Code requirements. However, the TIS also notes that the parking will be assessed by County staff during the review and approval process of the site plan. It is unclear how the 375 space requirement was calculated. County Code Section 6764 notes that 0.25 parking spaces per person (based on total occupancy of the largest assembly room permitted by the County Building Code) is required. This requirement differs from the calculation in the site plan which notes a 1,500 seating capacity. The seating capacity of a facility is often less than the total occupancy. This is particularly true of churches where the person capacity of an assembly room exceeds the seating capacity allowing for additional personnel necessary for the church service including the pastor, ushers, musicians, performers and other persons also occupying the assembly room. Parking for these additional personnel should be provided and planned for. As the parking requirement will undoubtedly exceed what is shown on the site plan and in the TIS, a corrected number should be provided. Additional parking may be necessary.
 12. The List of Preparers and Persons and Organizations Contacted (Chapter 5.0) of the TIS records an incorrect license number for the Principal Engineer. According to the Board of Professional Engineers and Land Surveyors, the Principal Engineer is not a registered Civil Engineer but is indeed a licensed Traffic Engineer. This should be corrected for the record.

Supporting documentation for these responses follows.



PROJECT TRIP GENERATION TABLE

Land Use	Intensity	Units	Rate/Trips	Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Weekday Trip Generation										
Church (House of Worship)	43.5	ksf	Rate Trips	9 392	5% 20	60% 12	40% 8	8% 31	50% 16	50% 16
TOTAL				392	20	12	8	31	16	16

Source: SANDAG Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April 2002).



SEGMENT LOS TABLES

Roadway Segment	Lanes/ Class	LOS E Capacity	Existing				Existing + Project			Δ V/C	Significant?	
			ADT	LOS	V/C	Project Added Traffic	ADT	LOS	V/C			
Weekday												
4 Gee Rd between Camino Del Norte and the Project Driveway	2LC	16,200	3,088	B	0.191	390	3,478	B	0.215	0.02	No	
Camino Del Norte between 4 Gee Rd and Rancho Bernardo Rd	4MR	40,000	25,523	C	0.638	356	25,879	C	0.647	0.01	No	
Camino Del Norte between Rancho Bernardo Rd and 4S Ranch Pkwy	4MR	37,000	20,071	B	0.542	301	20,372	B	0.551	0.01	No	
Camino Del Norte between 4S Ranch Rd and Dove Canyon Rd	4MR	37,000	20,839	B	0.563	296	21,135	B	0.571	0.01	No	
Camino Del Norte between Dove Canyon Rd and Bernardo Center Dr	6PA	60,000	26,816	B	0.447	202	27,018	B	0.450	0.00	No	
Camino Del Norte between Bernardo Center Dr and Paseo Montanoso	6PA	60,000	49,587	D	0.826	198	49,785	D	0.830	0.00	No	
Camino Del Norte between Paseo Montanosos and I-15 Ramps	6PA	60,000	51,471	E	0.858	196	51,667	E	0.861	0.00	No	
Dove Canyon Rd between Camino Del Norte and Lone Quail Rd	4MR	37,000	13,355	A	0.361	94	13,449	A	0.363	0.00	No	
Weekend												
4 Gee Rd between Camino Del Norte and the Project Driveway	2LC	16,200	2,306	B	0.142	2,758	5,064	C	0.313	0.17	No	
Camino Del Norte between 4 Gee Rd and Rancho Bernardo Rd	4MR	40,000	14,661	A	0.367	2,520	17,181	B	0.430	0.06	No	
Camino Del Norte between Rancho Bernardo Rd and 4S Ranch Pkwy	4MR	37,000	12,740	A	0.344	2,131	14,871	B	0.402	0.06	No	
Camino Del Norte between 4S Ranch Rd and Dove Canyon Rd	4MR	37,000	13,402	A	0.362	2,098	15,500	B	0.419	0.06	No	
Camino Del Norte between Dove Canyon Rd and Bernardo Center Dr	6PA	60,000	19,134	A	0.319	1,429	20,563	A	0.343	0.02	No	
Camino Del Norte between Bernardo Center Dr and Paseo Montanoso	6PA	60,000	29,855	B	0.498	1,399	31,254	B	0.521	0.02	No	
Camino Del Norte between Paseo Montanosos and I-15 Ramps	6PA	60,000	32,566	B	0.543	1,385	33,951	B	0.566	0.02	No	
Dove Canyon Rd between Camino Del Norte and Lone Quail Rd	4MR	37,000	8,978	A	0.243	669	9,647	A	0.261	0.02	No	

Abbreviations: 2LC is a 2 lane Light Collector. 4MR is a 4 lane Major Road. 6PA is a 6 lane Prime Arterial.

Roadway Segment	Lanes/ Class	LOS E Capacity	Near Term				Near Term + Project					
			ADT	LOS	V/C	Project Added Traffic	ADT	LOS	V/C	Δ V/C	Significant?	
Weekday												
4 Gee Rd between Camino Del Norte and the Project Driveway	2LC	16,200	3,212	B	0.1982	390	3,601	B	0.2223	0.02	No	
Camino Del Norte between 4 Gee Rd and Rancho Bernardo Rd	4MR	40,000	26,544	C	0.6636	1,037	27,581	C	0.6895	0.03	No	
Camino Del Norte between Rancho Bernardo Rd and 4S Ranch Pkwy	4MR	37,000	20,874	B	0.5642	301	21,175	B	0.5723	0.01	No	
Camino Del Norte between 4S Ranch Rd and Dove Canyon Rd	4MR	37,000	21,673	B	0.5857	296	21,969	B	0.5938	0.01	No	
Camino Del Norte between Dove Canyon Rd and Bernardo Center Dr	6PA	60,000	27,889	B	0.4648	202	28,091	B	0.4682	0.00	No	
Camino Del Norte between Bernardo Center Dr and Paseo Montanoso	6PA	60,000	54,098	E	0.9016	198	54,296	E	0.9049	0.00	No	
Camino Del Norte between Paseo Montanosos and I-15 Ramps	6PA	60,000	55,289	E	0.9215	196	55,484	E	0.9247	0.00	No	
Dove Canyon Rd between Camino Del Norte and Lone Quail Rd	4MR	37,000	14,079	A	0.3805	94	14,174	A	0.3831	0.00	No	
Weekend												
4 Gee Rd between Camino Del Norte and the Project Driveway	2LC	16,200	2,467	B	0.1523	2,758	5,226	C	0.3226	0.17	No	
Camino Del Norte between 4 Gee Rd and Rancho Bernardo Rd	4MR	40,000	15,687	B	0.3922	2,520	18,207	B	0.4552	0.06	No	
Camino Del Norte between Rancho Bernardo Rd and 4S Ranch Pkwy	4MR	37,000	13,632	A	0.3684	2,131	15,763	B	0.4260	0.06	No	
Camino Del Norte between 4S Ranch Rd and Dove Canyon Rd	4MR	37,000	14,340	A	0.3876	2,098	16,438	B	0.4443	0.06	No	
Camino Del Norte between Dove Canyon Rd and Bernardo Center Dr	6PA	60,000	20,473	A	0.3412	1,429	21,903	A	0.3650	0.02	No	
Camino Del Norte between Bernardo Center Dr and Paseo Montanoso	6PA	60,000	31,945	B	0.5324	1,399	33,343	B	0.5557	0.02	No	
Camino Del Norte between Paseo Montanosos and I-15 Ramps	6PA	60,000	34,846	B	0.5808	1,385	36,230	B	0.6038	0.02	No	
Dove Canyon Rd between Camino Del Norte and Lone Quail Rd	4MR	37,000	9,606	A	0.2596	669	10,275	A	0.2777	0.02	No	

Abbreviations: 2LC is a 2 lane Light Collector. 4MR is a 4 lane Major Road. 6PA is a 6 lane Prime Arterial.



INTERSECTION DELAY/LOS TABLES

Existing + Project Intersection Level of Service

Intersection	Existing Condition		Existing + Project Condition		Δ Delay	Significant?
	Delay	LOS	Delay	LOS		
AM Peak Hour						
1. Project Driveway & 4 Gee Rd	0.7	A	0.7	A	0.0	No
2. Camino Del Sur & 4 Gee Rd	22.3	C	22.4	C	0.1	No
3. Camino Del Sur & Rancho Bernardo Rd/Lone Quail Rd	43.3	D	43.5	D	0.2	No
4. Camino Del Norte & 4S Ranch Pkwy	18.1	B	18.1	B	0.0	No
5. Camino Del Norte & Dove Canyon Rd	29.0	C	29.1	C	0.1	No
6. Camino Del Norte & Bernardo Center Dr	57.7	E	57.8	E	0.1	No
7. Camino Del Norte & Paseo Montanoso	9.5	A	9.5	A	0.0	No
8. Camino Del Norte & I-15 SB Ramps	52.3	D	52.5	D	0.2	No
9. Camino Del Norte & I-15 NB Ramps	32.8	C	33.0	C	0.2	No
10. Dove Canyon Rd & Lone Quail Rd	21.8	C	21.9	C	0.1	No
PM Peak Hour						
1. Project Driveway & 4 Gee Rd	0.6	A	0.6	A	0.0	No
2. Camino Del Sur & 4 Gee Rd	18.6	B	19.3	B	0.7	No
3. Camino Del Sur & Rancho Bernardo Rd/Lone Quail Rd	35.1	D	35.6	D	0.5	No
4. Camino Del Norte & 4S Ranch Pkwy	19.9	B	19.9	B	0.0	No
5. Camino Del Norte & Dove Canyon Rd	45.2	D	45.4	D	0.2	No
6. Camino Del Norte & Bernardo Center Dr	113.5	F	113.4	F	-0.1	No
7. Camino Del Norte & Paseo Montanoso	13.9	B	13.9	B	0.0	No
8. Camino Del Norte & I-15 SB Ramps	30.1	C	30.4	C	0.3	No
9. Camino Del Norte & I-15 NB Ramps	25.9	C	26.0	C	0.1	No
10. Dove Canyon Rd & Lone Quail Rd	21.9	C	22.0	C	0.1	No

Near Term + Project Intersection Level of Service

Intersection	Near Term Condition		Near Term + Project Condition		Δ Delay	Significant?
	Delay	LOS	Delay	LOS		
AM Peak Hour						
1. Project Driveway & 4 Gee Rd	0.7	A	0.7	A	0.0	No
2. Camino Del Sur & 4 Gee Rd	23.5	C	23.6	C	0.1	No
3. Camino Del Sur & Rancho Bernardo Rd/Lone Quail Rd	46.3	D	46.5	D	0.2	No
4. Camino Del Norte & 4S Ranch Pkwy	18.5	B	18.5	B	0.0	No
5. Camino Del Norte & Dove Canyon Rd	34.3	C	34.7	C	0.4	No
6. Camino Del Norte & Bernardo Center Dr	88.3	F	88.3	F	0.0	No
7. Camino Del Norte & Paseo Montanoso	10.6	B	10.6	B	0.0	No
8. Camino Del Norte & I-15 SB Ramps	56.6	E	56.9	E	0.3	No
9. Camino Del Norte & I-15 NB Ramps	54.2	D	54.6	D	0.4	No
10. Dove Canyon Rd & Lone Quail Rd	22.7	C	22.7	C	0.0	No
PM Peak Hour						
1. Project Driveway & 4 Gee Rd	0.6	A	0.7	A	0.1	No
2. Camino Del Sur & 4 Gee Rd	18.6	B	19.3	B	0.7	No
3. Camino Del Sur & Rancho Bernardo Rd/Lone Quail Rd	38.0	D	38.8	D	0.8	No
4. Camino Del Norte & 4S Ranch Pkwy	20.5	C	20.5	C	0.0	No
5. Camino Del Norte & Dove Canyon Rd	56.3	E	56.6	E	0.3	No
6. Camino Del Norte & Bernardo Center Dr	73.8	E	74.2	E	0.4	No
7. Camino Del Norte & Paseo Montanoso	16.6	B	16.8	B	0.2	No
8. Camino Del Norte & I-15 SB Ramps	43.2	D	43.5	D	0.3	No
9. Camino Del Norte & I-15 NB Ramps	33.4	C	33.6	C	0.2	No
10. Dove Canyon Rd & Lone Quail Rd	23.0	C	23.0	C	0.0	No

* SANTEC Significance Threshold test applied to determine if any appreciable difference exists between the two studies. This does not represent a project incremental increase that causes a significant

Existing Weekend & Near Term Peak Hours + Project Intersection Level of Service

Intersection	Existing Condition		Existing + Project Condition		Δ Delay	Significant?
	Delay	LOS	Delay	LOS		
Peak Hour						
1. Project Driveway & 4 Gee Rd	0.5	A	1.7	A	1.2	No
2. Camino Del Sur & 4 Gee Rd	18.4	B	41.5	D	23.1	No
3. Camino Del Sur & Rancho Bernardo Rd/Lone Quail Rd	22.9	C	26.0	C	3.1	No
4. Camino Del Norte & 4S Ranch Pkwy	17.0	B	17.0	B	0.0	No
5. Camino Del Norte & Dove Canyon Rd	35.9	D	38.8	D	2.9	No
6. Camino Del Norte & Bernardo Center Dr	35.2	D	36.0	D	0.8	No
7. Camino Del Norte & Paseo Montanoso	8.6	A	8.4	A	-0.2	No
8. Camino Del Norte & I-15 SB Ramps	18.5	B	17.9	B	-0.6	No
9. Camino Del Norte & I-15 NB Ramps	14.7	B	16.0	B	1.3	No
10. Dove Canyon Rd & Lone Quail Rd	19.6	B	21.7	C	2.1	No
Intersection	Near Term Condition		Near Term + Project Condition		Δ Delay	Significant?
	Delay	LOS	Delay	LOS		
Peak Hour						
1. Project Driveway & 4 Gee Rd	0.5	A	1.7	A	1.2	No
2. Camino Del Sur & 4 Gee Rd	16.1	B	42.6	D	26.5	No
3. Camino Del Sur & Rancho Bernardo Rd/Lone Quail Rd	22.4	C	27.4	C	5.0	No
4. Camino Del Norte & 4S Ranch Pkwy	17.3	B	17.6	B	0.3	No
5. Camino Del Norte & Dove Canyon Rd	38.5	D	51.4	D	12.9	No
6. Camino Del Norte & Bernardo Center Dr	36.3	D	37.7	D	1.4	No
7. Camino Del Norte & Paseo Montanoso	8.7	A	8.7	A	0.0	No
8. Camino Del Norte & I-15 SB Ramps	24.0	C	23.0	C	-1.0	No
9. Camino Del Norte & I-15 NB Ramps	20.2	C	21.8	C	1.6	No
10. Dove Canyon Rd & Lone Quail Rd	19.5	B	21.6	C	2.1	No

* SANTEC Significance Threshold test applied to determine if any appreciable difference exists between the two studies. This does not represent a project incremental increase that causes a significant












CALCULATION OUTPUT SHEETS

HCM 2010 Signalized Intersection Summary





















601: 4 Gee Rd & Project Driveway

02/15/2018

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	1	0	104	1	0	236		
Future Volume (veh/h)	1	0	104	1	0	236		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	1	0	109	1	0	248		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1474	14	0	1490		
Arrive On Green	0.00	0.00	0.80	0.80	0.00	0.80		
Sat Flow, veh/h	0	0	1843	17	0	1863		
Grp Volume(v), veh/h	0	0	0	110	0	248		
Grp Sat Flow(s),veh/h/ln	0	0	0	1860	0	1863		
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.7		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.3	0.0	0.7		
Prop In Lane	0.00	0.00		0.01	0.00			
Lane Grp Cap(c), veh/h	0	0	0	1488	0	1490		
V/C Ratio(X)	0.00	0.00	0.00	0.07	0.00	0.17		
Avail Cap(c_a), veh/h	0	0	0	1488	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.4		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.6	0.0	0.8		
LnGrp LOS				A		A		
Approach Vol, veh/h	0		110			248		
Approach Delay, s/veh	0.0		0.6			0.8		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.3		0.0		2.7		
Green Ext Time (p_c), s		1.7		0.0		1.7		
Intersection Summary								
HCM 2010 Ctrl Delay			0.7					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1059	48	156	979	35	108	50	85	60	54	116
Future Volume (veh/h)	50	1059	48	156	979	35	108	50	85	60	54	116
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	1115	51	164	1031	37	114	53	89	63	57	122
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	1681	77	199	1912	69	239	140	235	271	118	254
Arrive On Green	0.05	0.49	0.49	0.11	0.55	0.55	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3447	158	1774	3485	125	1200	626	1051	1241	529	1133
Grp Volume(v), veh/h	53	572	594	164	523	545	114	0	142	63	0	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1835	1774	1770	1841	1200	0	1677	1241	0	1663
Q Serve(g_s), s	2.5	21.4	21.4	7.9	16.6	16.6	8.0	0.0	6.3	4.0	0.0	8.2
Cycle Q Clear(g_c), s	2.5	21.4	21.4	7.9	16.6	16.6	16.1	0.0	6.3	10.2	0.0	8.2
Prop In Lane	1.00		0.09	1.00		0.07	1.00		0.63	1.00		0.68
Lane Grp Cap(c), veh/h	93	863	895	199	971	1010	239	0	375	271	0	372
V/C Ratio(X)	0.57	0.66	0.66	0.83	0.54	0.54	0.48	0.00	0.38	0.23	0.00	0.48
Avail Cap(c_a), veh/h	370	863	895	282	971	1010	425	0	636	464	0	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.4	16.9	16.9	37.9	12.6	12.6	36.5	0.0	28.7	33.1	0.0	29.5
Incr Delay (d2), s/veh	2.0	4.0	3.9	8.8	2.1	2.1	0.6	0.0	0.2	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	11.3	11.7	4.4	8.6	8.9	2.7	0.0	2.9	1.4	0.0	3.8
LnGrp Delay(d),s/veh	42.4	20.9	20.8	46.7	14.8	14.7	37.1	0.0	29.0	33.2	0.0	29.8
LnGrp LOS	D	C	C	D	B	B	D		C	C		C
Approach Vol, veh/h		1219			1232			256			242	
Approach Delay, s/veh		21.8			19.0			32.6			30.7	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	48.6		24.4	9.0	53.9		24.4				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	13.9	42.6		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	9.9	23.4		12.2	4.5	18.6		18.1				
Green Ext Time (p_c), s	0.1	18.6		1.5	0.0	19.2		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				22.3								
HCM 2010 LOS				C								
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	282	818	50	66	662	21	76	145	79	66	257	444
Future Volume (veh/h)	282	818	50	66	662	21	76	145	79	66	257	444
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	297	861	53	69	697	22	80	153	83	69	271	467
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	1475	91	115	991	31	102	357	194	88	543	486
Arrive On Green	0.19	0.44	0.44	0.03	0.28	0.28	0.06	0.31	0.31	0.05	0.31	0.31
Sat Flow, veh/h	1774	3387	208	3442	3502	111	1774	1137	617	1774	1770	1583
Grp Volume(v), veh/h	297	450	464	69	352	367	80	0	236	69	271	467
Grp Sat Flow(s),veh/h/ln	1774	1770	1826	1721	1770	1843	1774	0	1754	1774	1770	1583
Q Serve(g_s), s	18.1	21.3	21.3	2.2	19.7	19.8	4.9	0.0	11.8	4.3	13.9	32.2
Cycle Q Clear(g_c), s	18.1	21.3	21.3	2.2	19.7	19.8	4.9	0.0	11.8	4.3	13.9	32.2
Prop In Lane	1.00		0.11	1.00		0.06	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	330	771	795	115	501	522	102	0	551	88	543	486
V/C Ratio(X)	0.90	0.58	0.58	0.60	0.70	0.70	0.79	0.00	0.43	0.78	0.50	0.96
Avail Cap(c_a), veh/h	400	771	795	177	501	522	136	0	554	120	543	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	23.7	23.7	52.9	35.6	35.6	51.6	0.0	30.1	52.1	31.5	37.8
Incr Delay (d2), s/veh	20.8	3.2	3.1	5.9	3.7	3.6	20.8	0.0	0.5	21.9	0.7	31.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	11.1	11.4	1.1	10.1	10.6	3.0	0.0	5.8	2.6	6.9	18.2
LnGrp Delay(d),s/veh	64.9	26.9	26.8	58.7	39.3	39.2	72.4	0.0	30.7	74.0	32.2	69.0
LnGrp LOS	E	C	C	E	D	D	E		C	E	C	E
Approach Vol, veh/h		1211			788			316			807	
Approach Delay, s/veh		36.2			41.0			41.2			57.1	
Approach LOS		D			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.7	54.3	9.9	39.0	24.6	37.4	9.0	39.8				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.7	48.3	8.5	34.0	25.0	29.0	7.5	35.0				
Max Q Clear Time (g_c+I1), s	4.2	23.3	6.9	34.2	20.1	21.8	6.3	13.8				
Green Ext Time (p_c), s	0.0	6.1	0.0	0.0	0.5	3.5	0.0	5.7				
Intersection Summary												
HCM 2010 Ctrl Delay			43.3									
HCM 2010 LOS			D									























HCM 2010 Signalized Intersection Summary
604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	864	33	36	664	102	41	95	73	112	95	70
Future Volume (veh/h)	83	864	33	36	664	102	41	95	73	112	95	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	909	35	38	699	107	43	100	77	118	100	74
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	1715	66	67	1626	727	73	251	213	197	150	111
Arrive On Green	0.07	0.49	0.49	0.04	0.46	0.46	0.04	0.13	0.13	0.06	0.15	0.15
Sat Flow, veh/h	1774	3475	134	1774	3539	1583	1774	1863	1583	3442	996	737
Grp Volume(v), veh/h	87	463	481	38	699	107	43	100	77	118	0	174
Grp Sat Flow(s),veh/h/ln	1774	1770	1839	1774	1770	1583	1774	1863	1583	1721	0	1733
Q Serve(g_s), s	3.2	12.0	12.0	1.4	8.9	2.6	1.6	3.3	3.0	2.2	0.0	6.3
Cycle Q Clear(g_c), s	3.2	12.0	12.0	1.4	8.9	2.6	1.6	3.3	3.0	2.2	0.0	6.3
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	128	873	908	67	1626	727	73	251	213	197	0	261
V/C Ratio(X)	0.68	0.53	0.53	0.57	0.43	0.15	0.59	0.40	0.36	0.60	0.00	0.67
Avail Cap(c_a), veh/h	263	873	908	159	1626	727	175	864	734	335	0	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.3	11.6	11.6	31.6	12.2	10.5	31.5	26.4	26.3	30.8	0.0	26.8
Incr Delay (d2), s/veh	6.3	2.3	2.2	7.3	0.1	0.0	7.4	1.0	1.0	2.9	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	6.3	6.6	0.8	4.3	1.1	0.9	1.8	1.3	1.1	0.0	3.3
LnGrp Delay(d),s/veh	36.6	13.9	13.8	38.9	12.2	10.5	38.9	27.5	27.3	33.7	0.0	29.7
LnGrp LOS	D	B	B	D	B	B	D	C	C	C		C
Approach Vol, veh/h		1031			844			220			292	
Approach Delay, s/veh		15.8			13.2			29.6			31.3	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	39.0	6.3	15.1	8.8	36.7	7.3	14.0				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	33.0	6.6	30.9	9.9	29.1	6.5	31.0				
Max Q Clear Time (g_c+I1), s	3.4	14.0	3.6	8.3	5.2	10.9	4.2	5.3				
Green Ext Time (p_c), s	0.0	4.7	0.0	1.7	0.1	4.6	0.1	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			18.1									
HCM 2010 LOS			B									



































HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	790	166	121	620	149	145	295	235	208	271	25
Future Volume (veh/h)	72	790	166	121	620	149	145	295	235	208	271	25
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	76	832	175	127	653	157	153	311	247	219	285	26
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1654	346	196	2003	624	187	817	366	249	650	59
Arrive On Green	0.06	0.39	0.39	0.06	0.39	0.39	0.11	0.23	0.23	0.07	0.20	0.20
Sat Flow, veh/h	1774	4216	881	3442	5085	1583	1774	3539	1583	3442	3283	297
Grp Volume(v), veh/h	76	668	339	127	653	157	153	311	247	219	153	158
Grp Sat Flow(s),veh/h/ln	1774	1695	1707	1721	1695	1583	1774	1770	1583	1721	1770	1810
Q Serve(g_s), s	3.5	12.4	12.5	3.0	7.4	5.5	7.0	6.1	11.8	5.2	6.3	6.4
Cycle Q Clear(g_c), s	3.5	12.4	12.5	3.0	7.4	5.5	7.0	6.1	11.8	5.2	6.3	6.4
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	98	1330	670	196	2003	624	187	817	366	249	350	358
V/C Ratio(X)	0.77	0.50	0.51	0.65	0.33	0.25	0.82	0.38	0.68	0.88	0.44	0.44
Avail Cap(c_a), veh/h	212	1330	670	208	2003	624	191	1538	688	249	707	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	19.1	19.1	38.2	17.5	16.9	36.3	26.9	29.0	38.1	29.2	29.2
Incr Delay (d2), s/veh	14.2	1.4	2.7	6.8	0.4	1.0	23.3	0.4	2.6	28.0	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	6.0	6.3	1.6	3.5	2.6	4.7	3.0	5.4	3.4	3.2	3.3
LnGrp Delay(d),s/veh	52.9	20.4	21.8	45.1	17.9	17.9	59.6	27.2	31.7	66.1	30.2	30.2
LnGrp LOS	D	C	C	D	B	B	E	C	C	E	C	C
Approach Vol, veh/h		1083			937			711			530	
Approach Delay, s/veh		23.1			21.6			35.7			45.0	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	39.0	12.7	21.9	9.1	39.1	10.0	24.6				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.9	33.1	9.9	27.6	6.0	36.0				
Max Q Clear Time (g_c+I1), s	5.0	14.5	9.0	8.4	5.5	9.4	7.2	13.8				
Green Ext Time (p_c), s	0.0	6.8	0.0	5.5	0.1	6.9	0.0	5.4				
Intersection Summary												
HCM 2010 Ctrl Delay			29.0									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 	 		 	 	
Traffic Volume (veh/h)	377	1164	50	307	1594	524	55	517	456	216	427	297
Future Volume (veh/h)	377	1164	50	307	1594	524	55	517	456	216	427	297
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	397	1225	53	323	1678	552	58	544	480	227	449	313
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	444	1969	613	372	1863	580	106	994	445	273	1165	521
Arrive On Green	0.13	0.39	0.39	0.11	0.37	0.37	0.03	0.28	0.28	0.08	0.33	0.33
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	397	1225	53	323	1678	552	58	544	480	227	449	313
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	16.7	28.5	3.1	13.6	45.8	49.7	2.4	19.2	41.2	9.5	14.3	24.2
Cycle Q Clear(g_c), s	16.7	28.5	3.1	13.6	45.8	49.7	2.4	19.2	41.2	9.5	14.3	24.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	1969	613	372	1863	580	106	994	445	273	1165	521
V/C Ratio(X)	0.89	0.62	0.09	0.87	0.90	0.95	0.55	0.55	1.08	0.83	0.39	0.60
Avail Cap(c_a), veh/h	507	1969	613	495	1896	590	120	994	445	300	1165	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	36.3	28.5	64.4	43.9	45.2	70.1	44.8	52.7	66.6	37.8	41.1
Incr Delay (d2), s/veh	15.6	0.8	0.1	9.9	6.6	25.8	4.3	2.2	65.7	16.5	1.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	13.5	1.4	7.0	22.6	25.9	1.2	9.7	26.1	5.2	7.1	11.3
LnGrp Delay(d),s/veh	78.5	37.1	28.6	74.3	50.6	71.0	74.4	47.0	118.4	83.1	38.8	46.2
LnGrp LOS	E	D	C	E	D	E	E	D	F	F	D	D
Approach Vol, veh/h		1675			2553			1082			989	
Approach Delay, s/veh		46.7			58.0			80.1			51.3	
Approach LOS		D			E			F			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	47.2	20.3	63.2	8.9	54.3	23.3	60.1				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	12.8	39.8	21.1	55.1	5.1	* 48	21.6	* 55				
Max Q Clear Time (g_c+I1), s	11.5	43.2	15.6	30.5	4.4	26.2	18.7	51.7				
Green Ext Time (p_c), s	0.1	0.0	0.3	24.1	0.0	17.3	0.3	2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			57.7									
HCM 2010 LOS			E									
Notes												













HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte

02/15/2018

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗		
Traffic Volume (veh/h)	1775	49	58	2353	80	159		
Future Volume (veh/h)	1775	49	58	2353	80	159		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1868	52	61	2477	84	167		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3400	95	78	3852	229	204		
Arrive On Green	0.67	0.67	0.04	0.76	0.13	0.13		
Sat Flow, veh/h	5254	141	1774	5253	1774	1583		
Grp Volume(v), veh/h	1244	676	61	2477	84	167		
Grp Sat Flow(s),veh/h/ln	1695	1838	1774	1695	1774	1583		
Q Serve(g_s), s	17.1	17.2	3.0	20.5	3.9	9.1		
Cycle Q Clear(g_c), s	17.1	17.2	3.0	20.5	3.9	9.1		
Prop In Lane		0.08	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2266	1228	78	3852	229	204		
V/C Ratio(X)	0.55	0.55	0.78	0.64	0.37	0.82		
Avail Cap(c_a), veh/h	2266	1228	185	3852	648	578		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.7	7.7	42.1	5.1	35.4	37.7		
Incr Delay (d2), s/veh	1.0	1.8	6.1	0.8	0.4	3.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	8.3	9.2	1.6	9.7	1.9	4.2		
LnGrp Delay(d),s/veh	8.7	9.5	48.2	5.9	35.8	40.8		
LnGrp LOS	A	A	D	A	D	D		
Approach Vol, veh/h	1920			2538	251			
Approach Delay, s/veh	9.0			7.0	39.1			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.9	65.6				73.5		15.5
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	9.3	54.1				67.4		32.5
Max Q Clear Time (g_c+I1), s	5.0	19.2				22.5		11.1
Green Ext Time (p_c), s	0.0	34.9				44.8		0.4
Intersection Summary								
HCM 2010 Ctrl Delay			9.5					
HCM 2010 LOS			A					



















HCM 2010 Signalized Intersection Summary
608: I-15 SB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↖↖		↗↗
Traffic Volume (veh/h)	0	907	1067	378	2258	0	0	0	0	1077	0	78
Future Volume (veh/h)	0	907	1067	378	2258	0	0	0	0	1077	0	78
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	955	1123	398	2377	0				1134	0	82
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	2103	915	469	2626	0				1196	0	969
Arrive On Green	0.00	0.33	0.33	0.14	0.52	0.00				0.35	0.00	0.35
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	955	1123	398	2377	0				1134	0	82
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	11.8	32.8	11.3	42.4	0.0				32.1	0.0	2.0
Cycle Q Clear(g_c), s	0.0	11.8	32.8	11.3	42.4	0.0				32.1	0.0	2.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2103	915	469	2626	0				1196	0	969
V/C Ratio(X)	0.00	0.45	1.23	0.85	0.91	0.00				0.95	0.00	0.08
Avail Cap(c_a), veh/h	0	2103	915	595	2626	0				1236	0	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.81	0.81	0.37	0.37	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.5	33.6	42.2	22.0	0.0				31.7	0.0	21.9
Incr Delay (d2), s/veh	0.0	0.6	110.5	3.0	2.3	0.0				14.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	26.6	5.6	20.4	0.0				17.5	0.0	0.8
LnGrp Delay(d),s/veh	0.0	27.1	144.1	45.2	24.3	0.0				46.1	0.0	21.9
LnGrp LOS		C	F	D	C					D		C
Approach Vol, veh/h		2078			2775						1216	
Approach Delay, s/veh		90.3			27.3						44.5	
Approach LOS		F			C						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.8	40.3		40.9		59.1						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 17	28.0		35.9		50.5						
Max Q Clear Time (g_c+I1), s	13.3	34.8		34.1		44.4						
Green Ext Time (p_c), s	0.3	0.0		0.7		5.8						
Intersection Summary												
HCM 2010 Ctrl Delay			52.3									
HCM 2010 LOS			D									
Notes												




















HCM 2010 Signalized Intersection Summary
 609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	1839	0	0	1242	610	1514	0	195	0	0	0
Future Volume (veh/h)	127	1839	0	0	1242	610	1514	0	195	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	134	1936	0	0	1307	642	1594	0	205			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	193	2009	0	0	1838	799	1614	0	1307			
Arrive On Green	0.11	0.79	0.00	0.00	0.29	0.29	0.47	0.00	0.47			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	134	1936	0	0	1307	642	1594	0	205			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	3.7	33.5	0.0	0.0	18.3	21.3	45.8	0.0	4.2			
Cycle Q Clear(g_c), s	3.7	33.5	0.0	0.0	18.3	21.3	45.8	0.0	4.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	193	2009	0	0	1838	799	1614	0	1307			
V/C Ratio(X)	0.69	0.96	0.00	0.00	0.71	0.80	0.99	0.00	0.16			
Avail Cap(c_a), veh/h	213	2009	0	0	1838	799	1614	0	1307			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.61	0.61	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	43.6	9.9	0.0	0.0	31.9	33.0	26.3	0.0	15.2			
Incr Delay (d2), s/veh	3.9	9.2	0.0	0.0	2.4	8.4	19.4	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.9	16.1	0.0	0.0	8.4	9.1	26.0	0.0	1.6			
LnGrp Delay(d),s/veh	47.5	19.1	0.0	0.0	34.3	41.4	45.6	0.0	15.2			
LnGrp LOS	D	B			C	D	D		B			
Approach Vol, veh/h		2070			1949			1799				
Approach Delay, s/veh		20.9			36.7			42.2				
Approach LOS		C			D			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		47.0			10.8	36.2		53.0				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		39.5			* 6.2	28.1		46.9				
Max Q Clear Time (g_c+I1), s		35.5			5.7	23.3		47.8				
Green Ext Time (p_c), s		3.8			0.0	4.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				32.8								
HCM 2010 LOS				C								
Notes												










HCM 2010 Signalized Intersection Summary
610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	34	135	39	23	194	67	331	83	163	345	62
Future Volume (veh/h)	129	34	135	39	23	194	67	331	83	163	345	62
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	136	36	142	41	24	204	71	348	87	172	363	65
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	102	282	452	245	700	302	480	118	299	507	90
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	543	230	638	817	554	1583	1774	2815	695	1774	3005	533
Grp Volume(v), veh/h	314	0	0	65	0	204	71	217	218	172	212	216
Grp Sat Flow(s),veh/h/ln	1412	0	0	1372	0	1583	1774	1770	1740	1774	1770	1769
Q Serve(g_s), s	7.2	0.0	0.0	0.0	0.0	5.4	2.2	7.5	7.7	5.8	7.4	7.5
Cycle Q Clear(g_c), s	9.8	0.0	0.0	1.4	0.0	5.4	2.2	7.5	7.7	5.8	7.4	7.5
Prop In Lane	0.43		0.45	0.63		1.00	1.00		0.40	1.00		0.30
Lane Grp Cap(c), veh/h	704	0	0	697	0	700	302	302	296	299	299	298
V/C Ratio(X)	0.45	0.00	0.00	0.09	0.00	0.29	0.23	0.72	0.73	0.57	0.71	0.72
Avail Cap(c_a), veh/h	704	0	0	697	0	700	765	763	751	795	793	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	0.0	0.0	10.5	0.0	11.6	23.3	25.5	25.5	24.8	25.5	25.5
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.0	0.0	0.1	0.1	1.2	1.3	0.6	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	0.7	0.0	2.3	1.1	3.8	3.8	2.9	3.7	3.8
LnGrp Delay(d),s/veh	14.7	0.0	0.0	10.5	0.0	11.7	23.4	26.7	26.9	25.5	26.7	26.8
LnGrp LOS	B			B		B	C	C	C	C	C	C
Approach Vol, veh/h		314			269			506			600	
Approach Delay, s/veh		14.7			11.4			26.3			26.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.7		15.6		33.7		15.7				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.7		29.1		28.7		28.0				
Max Q Clear Time (g_c+I1), s		11.8		9.5		7.4		9.7				
Green Ext Time (p_c), s		1.6		1.5		1.7		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				21.8								
HCM 2010 LOS				C								





















HCM 2010 Signalized Intersection Summary
 601: 4 Gee Rd & Project Driveway

02/15/2018

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	9	0	104	13	0	236		
Future Volume (veh/h)	9	0	104	13	0	236		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	9	0	109	14	0	248		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1295	166	0	1490		
Arrive On Green	0.00	0.00	0.80	0.80	0.00	0.80		
Sat Flow, veh/h	0	0	1618	208	0	1863		
Grp Volume(v), veh/h	0	0	0	123	0	248		
Grp Sat Flow(s),veh/h/ln	0	0	0	1826	0	1863		
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.7		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.3	0.0	0.7		
Prop In Lane	0.00	0.00		0.11	0.00			
Lane Grp Cap(c), veh/h	0	0	0	1461	0	1490		
V/C Ratio(X)	0.00	0.00	0.00	0.08	0.00	0.17		
Avail Cap(c_a), veh/h	0	0	0	1461	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.4		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.6	0.0	0.8		
LnGrp LOS				A		A		
Approach Vol, veh/h	0		123			248		
Approach Delay, s/veh	0.0		0.6			0.8		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.3		0.0		2.7		
Green Ext Time (p_c), s		1.8		0.0		1.8		
Intersection Summary								
HCM 2010 Ctrl Delay			0.7					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1059	48	156	979	46	108	50	85	67	54	117
Future Volume (veh/h)	51	1059	48	156	979	46	108	50	85	67	54	117
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	54	1115	51	164	1031	48	114	53	89	71	57	123
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	1680	77	199	1885	88	239	141	236	272	118	255
Arrive On Green	0.05	0.49	0.49	0.11	0.55	0.55	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3447	158	1774	3444	160	1199	626	1051	1241	526	1136
Grp Volume(v), veh/h	54	572	594	164	530	549	114	0	142	71	0	180
Grp Sat Flow(s),veh/h/ln	1774	1770	1835	1774	1770	1834	1199	0	1677	1241	0	1662
Q Serve(g_s), s	2.6	21.4	21.4	7.9	16.9	16.9	8.0	0.0	6.3	4.5	0.0	8.2
Cycle Q Clear(g_c), s	2.6	21.4	21.4	7.9	16.9	16.9	16.2	0.0	6.3	10.8	0.0	8.2
Prop In Lane	1.00		0.09	1.00		0.09	1.00		0.63	1.00		0.68
Lane Grp Cap(c), veh/h	94	862	894	199	969	1004	239	0	377	272	0	373
V/C Ratio(X)	0.57	0.66	0.66	0.83	0.55	0.55	0.48	0.00	0.38	0.26	0.00	0.48
Avail Cap(c_a), veh/h	369	862	894	282	969	1004	423	0	635	463	0	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.4	17.0	17.0	38.0	12.8	12.8	36.5	0.0	28.7	33.3	0.0	29.5
Incr Delay (d2), s/veh	2.1	4.0	3.9	8.8	2.2	2.1	0.6	0.0	0.2	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	11.3	11.7	4.4	8.8	9.1	2.7	0.0	2.9	1.6	0.0	3.8
LnGrp Delay(d),s/veh	42.5	21.0	20.9	46.8	15.0	14.9	37.1	0.0	28.9	33.5	0.0	29.8
LnGrp LOS	D	C	C	D	B	B	D		C	C		C
Approach Vol, veh/h		1220			1243			256			251	
Approach Delay, s/veh		21.9			19.2			32.6			30.9	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	48.6		24.5	9.0	53.9		24.5				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	13.9	42.6		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	9.9	23.4		12.8	4.6	18.9		18.2				
Green Ext Time (p_c), s	0.1	18.6		1.5	0.0	18.9		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				22.4								
HCM 2010 LOS				C								
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	824	50	66	671	21	76	145	79	66	257	445
Future Volume (veh/h)	283	824	50	66	671	21	76	145	79	66	257	445
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	298	867	53	69	706	22	80	153	83	69	271	468
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	331	1476	90	115	990	31	102	357	194	88	543	486
Arrive On Green	0.19	0.44	0.44	0.03	0.28	0.28	0.06	0.31	0.31	0.05	0.31	0.31
Sat Flow, veh/h	1774	3389	207	3442	3504	109	1774	1137	617	1774	1770	1583
Grp Volume(v), veh/h	298	453	467	69	356	372	80	0	236	69	271	468
Grp Sat Flow(s),veh/h/ln	1774	1770	1826	1721	1770	1843	1774	0	1754	1774	1770	1583
Q Serve(g_s), s	18.2	21.5	21.5	2.2	20.1	20.1	4.9	0.0	11.8	4.3	13.9	32.3
Cycle Q Clear(g_c), s	18.2	21.5	21.5	2.2	20.1	20.1	4.9	0.0	11.8	4.3	13.9	32.3
Prop In Lane	1.00		0.11	1.00		0.06	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	331	771	796	115	500	521	102	0	551	88	543	486
V/C Ratio(X)	0.90	0.59	0.59	0.60	0.71	0.71	0.79	0.00	0.43	0.78	0.50	0.96
Avail Cap(c_a), veh/h	400	771	796	177	500	521	136	0	554	120	543	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	23.7	23.7	52.9	35.7	35.7	51.6	0.0	30.1	52.1	31.5	37.8
Incr Delay (d2), s/veh	20.9	3.3	3.2	5.9	4.1	3.9	20.8	0.0	0.5	21.9	0.7	31.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	11.1	11.5	1.1	10.4	10.8	3.0	0.0	5.8	2.6	6.9	18.3
LnGrp Delay(d),s/veh	65.0	27.0	26.9	58.7	39.8	39.7	72.4	0.0	30.7	74.0	32.2	69.5
LnGrp LOS	E	C	C	E	D	D	E		C	E	C	E
Approach Vol, veh/h		1218			797			316			808	
Approach Delay, s/veh		36.3			41.4			41.2			57.4	
Approach LOS		D			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.7	54.3	9.9	39.0	24.7	37.3	9.0	39.8				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.7	48.3	8.5	34.0	25.0	29.0	7.5	35.0				
Max Q Clear Time (g_c+I1), s	4.2	23.5	6.9	34.3	20.2	22.1	6.3	13.8				
Green Ext Time (p_c), s	0.0	6.2	0.0	0.0	0.5	3.5	0.0	5.7				
Intersection Summary												
HCM 2010 Ctrl Delay			43.5									
HCM 2010 LOS			D									
























HCM 2010 Signalized Intersection Summary
604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	870	33	36	673	102	41	95	73	112	95	70
Future Volume (veh/h)	83	870	33	36	673	102	41	95	73	112	95	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	916	35	38	708	107	43	100	77	118	100	74
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	1716	66	67	1626	727	73	251	213	197	150	111
Arrive On Green	0.07	0.49	0.49	0.04	0.46	0.46	0.04	0.13	0.13	0.06	0.15	0.15
Sat Flow, veh/h	1774	3476	133	1774	3539	1583	1774	1863	1583	3442	996	737
Grp Volume(v), veh/h	87	466	485	38	708	107	43	100	77	118	0	174
Grp Sat Flow(s),veh/h/ln	1774	1770	1839	1774	1770	1583	1774	1863	1583	1721	0	1733
Q Serve(g_s), s	3.2	12.1	12.1	1.4	9.0	2.6	1.6	3.3	3.0	2.2	0.0	6.3
Cycle Q Clear(g_c), s	3.2	12.1	12.1	1.4	9.0	2.6	1.6	3.3	3.0	2.2	0.0	6.3
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	128	873	908	67	1626	727	73	251	213	197	0	261
V/C Ratio(X)	0.68	0.53	0.53	0.57	0.44	0.15	0.59	0.40	0.36	0.60	0.00	0.67
Avail Cap(c_a), veh/h	263	873	908	159	1626	727	175	864	734	335	0	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.3	11.6	11.6	31.6	12.2	10.5	31.5	26.4	26.3	30.8	0.0	26.8
Incr Delay (d2), s/veh	6.3	2.3	2.2	7.3	0.1	0.0	7.4	1.0	1.0	2.9	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	6.4	6.6	0.8	4.4	1.1	0.9	1.8	1.3	1.1	0.0	3.3
LnGrp Delay(d),s/veh	36.6	14.0	13.9	38.9	12.3	10.5	38.9	27.5	27.3	33.7	0.0	29.7
LnGrp LOS	D	B	B	D	B	B	D	C	C	C		C
Approach Vol, veh/h		1038			853			220			292	
Approach Delay, s/veh		15.8			13.2			29.6			31.3	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	39.0	6.3	15.1	8.8	36.7	7.3	14.0				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	33.0	6.6	30.9	9.9	29.1	6.5	31.0				
Max Q Clear Time (g_c+I1), s	3.4	14.1	3.6	8.3	5.2	11.0	4.2	5.3				
Green Ext Time (p_c), s	0.0	4.7	0.0	1.7	0.1	4.7	0.1	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			18.1									
HCM 2010 LOS			B									

























HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	794	168	121	626	149	148	295	235	208	271	25
Future Volume (veh/h)	72	794	168	121	626	149	148	295	235	208	271	25
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	76	836	177	127	659	157	156	311	247	219	285	26
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1651	347	196	2003	624	190	817	366	249	644	58
Arrive On Green	0.06	0.39	0.39	0.06	0.39	0.39	0.11	0.23	0.23	0.07	0.20	0.20
Sat Flow, veh/h	1774	4211	886	3442	5085	1583	1774	3539	1583	3442	3283	297
Grp Volume(v), veh/h	76	672	341	127	659	157	156	311	247	219	153	158
Grp Sat Flow(s),veh/h/ln	1774	1695	1706	1721	1695	1583	1774	1770	1583	1721	1770	1810
Q Serve(g_s), s	3.5	12.5	12.6	3.0	7.5	5.5	7.1	6.1	11.8	5.2	6.3	6.4
Cycle Q Clear(g_c), s	3.5	12.5	12.6	3.0	7.5	5.5	7.1	6.1	11.8	5.2	6.3	6.4
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	98	1330	669	196	2003	624	190	817	366	249	347	355
V/C Ratio(X)	0.77	0.51	0.51	0.65	0.33	0.25	0.82	0.38	0.68	0.88	0.44	0.45
Avail Cap(c_a), veh/h	212	1330	669	208	2003	624	191	1538	688	249	707	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	19.1	19.1	38.2	17.5	16.9	36.2	26.9	29.0	38.1	29.3	29.3
Incr Delay (d2), s/veh	14.2	1.4	2.8	6.8	0.4	1.0	23.9	0.4	2.6	28.0	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	6.0	6.4	1.6	3.6	2.6	4.8	3.0	5.4	3.4	3.2	3.3
LnGrp Delay(d),s/veh	52.9	20.5	21.9	45.1	17.9	17.9	60.1	27.2	31.7	66.1	30.4	30.4
LnGrp LOS	D	C	C	D	B	B	E	C	C	E	C	C
Approach Vol, veh/h		1089			943			714			530	
Approach Delay, s/veh		23.2			21.6			35.9			45.1	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	39.0	12.9	21.8	9.1	39.1	10.0	24.6				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.9	33.1	9.9	27.6	6.0	36.0				
Max Q Clear Time (g_c+I1), s	5.0	14.6	9.1	8.4	5.5	9.5	7.2	13.8				
Green Ext Time (p_c), s	0.0	6.9	0.0	5.5	0.1	6.9	0.0	5.4				
Intersection Summary												
HCM 2010 Ctrl Delay				29.1								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary
606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	1168	50	307	1600	524	55	517	456	216	427	297
Future Volume (veh/h)	377	1168	50	307	1600	524	55	517	456	216	427	297
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	397	1229	53	323	1684	552	58	544	480	227	449	313
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	444	1969	613	372	1863	580	106	994	445	273	1165	521
Arrive On Green	0.13	0.39	0.39	0.11	0.37	0.37	0.03	0.28	0.28	0.08	0.33	0.33
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	397	1229	53	323	1684	552	58	544	480	227	449	313
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	16.7	28.6	3.1	13.6	46.0	49.7	2.4	19.2	41.2	9.5	14.3	24.2
Cycle Q Clear(g_c), s	16.7	28.6	3.1	13.6	46.0	49.7	2.4	19.2	41.2	9.5	14.3	24.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	1969	613	372	1863	580	106	994	445	273	1165	521
V/C Ratio(X)	0.89	0.62	0.09	0.87	0.90	0.95	0.55	0.55	1.08	0.83	0.39	0.60
Avail Cap(c_a), veh/h	507	1969	613	495	1896	590	120	994	445	300	1165	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	36.3	28.5	64.4	44.0	45.2	70.1	44.8	52.7	66.6	37.8	41.1
Incr Delay (d2), s/veh	15.6	0.9	0.1	9.9	6.9	25.8	4.3	2.2	65.7	16.5	1.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	13.6	1.4	7.0	22.7	25.9	1.2	9.7	26.1	5.2	7.1	11.3
LnGrp Delay(d),s/veh	78.5	37.2	28.6	74.3	50.9	71.0	74.4	47.0	118.4	83.1	38.8	46.2
LnGrp LOS	E	D	C	E	D	E	E	D	F	F	D	D
Approach Vol, veh/h		1679			2559			1082			989	
Approach Delay, s/veh		46.7			58.2			80.1			51.3	
Approach LOS		D			E			F			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	47.2	20.3	63.2	8.9	54.3	23.3	60.1				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	12.8	39.8	21.1	55.1	5.1	* 48	21.6	* 55				
Max Q Clear Time (g_c+I1), s	11.5	43.2	15.6	30.6	4.4	26.2	18.7	51.7				
Green Ext Time (p_c), s	0.1	0.0	0.3	24.0	0.0	17.3	0.3	2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			57.8									
HCM 2010 LOS			E									
Notes												













HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte

02/15/2018

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗		
Traffic Volume (veh/h)	1779	49	58	2359	80	159		
Future Volume (veh/h)	1779	49	58	2359	80	159		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1873	52	61	2483	84	167		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3400	94	78	3852	229	204		
Arrive On Green	0.67	0.67	0.04	0.76	0.13	0.13		
Sat Flow, veh/h	5255	141	1774	5253	1774	1583		
Grp Volume(v), veh/h	1248	677	61	2483	84	167		
Grp Sat Flow(s),veh/h/ln	1695	1838	1774	1695	1774	1583		
Q Serve(g_s), s	17.2	17.2	3.0	20.6	3.9	9.1		
Cycle Q Clear(g_c), s	17.2	17.2	3.0	20.6	3.9	9.1		
Prop In Lane		0.08	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2266	1228	78	3852	229	204		
V/C Ratio(X)	0.55	0.55	0.78	0.64	0.37	0.82		
Avail Cap(c_a), veh/h	2266	1228	185	3852	648	578		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.7	7.7	42.1	5.1	35.4	37.7		
Incr Delay (d2), s/veh	1.0	1.8	6.1	0.8	0.4	3.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	8.3	9.3	1.6	9.7	1.9	4.2		
LnGrp Delay(d),s/veh	8.7	9.5	48.2	6.0	35.8	40.8		
LnGrp LOS	A	A	D	A	D	D		
Approach Vol, veh/h	1925			2544	251			
Approach Delay, s/veh	9.0			7.0	39.1			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.9	65.6				73.5		15.5
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	9.3	54.1				67.4		32.5
Max Q Clear Time (g_c+I1), s	5.0	19.2				22.6		11.1
Green Ext Time (p_c), s	0.0	34.8				44.7		0.4
Intersection Summary								
HCM 2010 Ctrl Delay			9.5					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary
 608: I-15 SB Ramps & Camino Del Norte



























02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↖↖		↗↗
Traffic Volume (veh/h)	0	909	1069	378	2264	0	0	0	0	1077	0	78
Future Volume (veh/h)	0	909	1069	378	2264	0	0	0	0	1077	0	78
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	957	1125	398	2383	0				1134	0	82
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	2103	915	469	2626	0				1196	0	969
Arrive On Green	0.00	0.33	0.33	0.14	0.52	0.00				0.35	0.00	0.35
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	957	1125	398	2383	0				1134	0	82
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	11.8	32.8	11.3	42.6	0.0				32.1	0.0	2.0
Cycle Q Clear(g_c), s	0.0	11.8	32.8	11.3	42.6	0.0				32.1	0.0	2.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2103	915	469	2626	0				1196	0	969
V/C Ratio(X)	0.00	0.46	1.23	0.85	0.91	0.00				0.95	0.00	0.08
Avail Cap(c_a), veh/h	0	2103	915	595	2626	0				1236	0	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.81	0.81	0.37	0.37	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.5	33.6	42.2	22.0	0.0				31.7	0.0	21.9
Incr Delay (d2), s/veh	0.0	0.6	111.4	3.0	2.3	0.0				14.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	26.7	5.6	20.4	0.0				17.5	0.0	0.8
LnGrp Delay(d),s/veh	0.0	27.1	145.0	45.2	24.4	0.0				46.1	0.0	21.9
LnGrp LOS		C	F	D	C					D		C
Approach Vol, veh/h		2082			2781						1216	
Approach Delay, s/veh		90.8			27.3						44.5	
Approach LOS		F			C						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.8	40.3		40.9		59.1						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 17	28.0		35.9		50.5						
Max Q Clear Time (g_c+I1), s	13.3	34.8		34.1		44.6						
Green Ext Time (p_c), s	0.3	0.0		0.7		5.6						
Intersection Summary												
HCM 2010 Ctrl Delay			52.5									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary




















609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  	 	 		 			
Traffic Volume (veh/h)	127	1841	0	0	1245	610	1517	0	195	0	0	0
Future Volume (veh/h)	127	1841	0	0	1245	610	1517	0	195	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	134	1938	0	0	1311	642	1597	0	205			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	193	2009	0	0	1838	799	1614	0	1307			
Arrive On Green	0.11	0.79	0.00	0.00	0.29	0.29	0.47	0.00	0.47			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	134	1938	0	0	1311	642	1597	0	205			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	3.7	33.7	0.0	0.0	18.3	21.3	46.0	0.0	4.2			
Cycle Q Clear(g_c), s	3.7	33.7	0.0	0.0	18.3	21.3	46.0	0.0	4.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	193	2009	0	0	1838	799	1614	0	1307			
V/C Ratio(X)	0.69	0.96	0.00	0.00	0.71	0.80	0.99	0.00	0.16			
Avail Cap(c_a), veh/h	213	2009	0	0	1838	799	1614	0	1307			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.61	0.61	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	43.6	9.9	0.0	0.0	32.0	33.0	26.3	0.0	15.2			
Incr Delay (d2), s/veh	3.9	9.4	0.0	0.0	2.4	8.4	19.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.9	16.1	0.0	0.0	8.4	9.1	26.2	0.0	1.6			
LnGrp Delay(d),s/veh	47.5	19.2	0.0	0.0	34.4	41.4	46.1	0.0	15.2			
LnGrp LOS	D	B			C	D	D		B			
Approach Vol, veh/h		2072			1953			1802				
Approach Delay, s/veh		21.1			36.7			42.6				
Approach LOS		C			D			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		47.0			10.8	36.2		53.0				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		39.5			* 6.2	28.1		46.9				
Max Q Clear Time (g_c+I1), s		35.7			5.7	23.3		48.0				
Green Ext Time (p_c), s		3.6			0.0	4.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				33.0								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary
 610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	34	135	39	23	194	67	334	83	163	347	62
Future Volume (veh/h)	129	34	135	39	23	194	67	334	83	163	347	62
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	136	36	142	41	24	204	71	352	87	172	365	65
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	101	282	451	244	698	304	484	118	300	509	90
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	543	230	638	817	554	1583	1774	2822	689	1774	3008	531
Grp Volume(v), veh/h	314	0	0	65	0	204	71	219	220	172	213	217
Grp Sat Flow(s),veh/h/ln	1412	0	0	1371	0	1583	1774	1770	1741	1774	1770	1769
Q Serve(g_s), s	7.2	0.0	0.0	0.0	0.0	5.4	2.2	7.6	7.8	5.8	7.4	7.5
Cycle Q Clear(g_c), s	9.9	0.0	0.0	1.4	0.0	5.4	2.2	7.6	7.8	5.8	7.4	7.5
Prop In Lane	0.43		0.45	0.63		1.00	1.00		0.40	1.00		0.30
Lane Grp Cap(c), veh/h	702	0	0	695	0	698	304	303	299	300	299	299
V/C Ratio(X)	0.45	0.00	0.00	0.09	0.00	0.29	0.23	0.72	0.74	0.57	0.71	0.72
Avail Cap(c_a), veh/h	702	0	0	695	0	698	763	762	749	793	791	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	0.0	0.0	10.5	0.0	11.7	23.3	25.5	25.6	24.9	25.5	25.6
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.0	0.0	0.1	0.1	1.2	1.3	0.6	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	0.7	0.0	2.3	1.1	3.8	3.8	2.9	3.7	3.8
LnGrp Delay(d),s/veh	14.8	0.0	0.0	10.6	0.0	11.8	23.4	26.7	26.9	25.5	26.7	26.8
LnGrp LOS	B			B		B	C	C	C	C	C	C
Approach Vol, veh/h		314			269			510			602	
Approach Delay, s/veh		14.8			11.5			26.3			26.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.7		15.6		33.7		15.8				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.7		29.1		28.7		28.0				
Max Q Clear Time (g_c+I1), s		11.9		9.5		7.4		9.8				
Green Ext Time (p_c), s		1.6		1.5		1.7		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				21.9								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary

601: 4 Gee Rd & Project Driveway





















02/15/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	0	0	170	0	0	78		
Future Volume (veh/h)	0	0	170	0	0	78		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	0	0	179	0	0	82		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1490	0	0	1490		
Arrive On Green	0.00	0.00	0.80	0.00	0.00	0.80		
Sat Flow, veh/h	0	0	1863	0	0	1863		
Grp Volume(v), veh/h	0	0	179	0	0	82		
Grp Sat Flow(s),veh/h/ln	0	0	1863	0	0	1863		
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	0.2		
Cycle Q Clear(g_c), s	0.0	0.0	0.5	0.0	0.0	0.2		
Prop In Lane	0.00	0.00		0.00	0.00			
Lane Grp Cap(c), veh/h	0	0	1490	0	0	1490		
V/C Ratio(X)	0.00	0.00	0.12	0.00	0.00	0.06		
Avail Cap(c_a), veh/h	0	0	1490	0	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.5	0.0	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.0	0.0	0.1		
LnGrp Delay(d),s/veh	0.0	0.0	0.7	0.0	0.0	0.5		
LnGrp LOS			A			A		
Approach Vol, veh/h	0		179			82		
Approach Delay, s/veh	0.0		0.7			0.5		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.5		0.0		2.2		
Green Ext Time (p_c), s		1.2		0.0		1.2		
Intersection Summary								
HCM 2010 Ctrl Delay			0.6					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	1011	43	199	848	65	39	43	74	44	32	25
Future Volume (veh/h)	86	1011	43	199	848	65	39	43	74	44	32	25
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	91	1064	45	209	893	68	41	45	78	46	34	26
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	1837	78	247	1987	151	232	84	146	177	135	103
Arrive On Green	0.08	0.53	0.53	0.14	0.60	0.60	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1774	3460	146	1774	3334	254	1337	613	1062	1263	981	750
Grp Volume(v), veh/h	91	544	565	209	474	487	41	0	123	46	0	60
Grp Sat Flow(s),veh/h/ln	1774	1770	1837	1774	1770	1818	1337	0	1675	1263	0	1730
Q Serve(g_s), s	4.0	16.7	16.7	9.2	11.9	11.9	2.3	0.0	5.5	2.8	0.0	2.5
Cycle Q Clear(g_c), s	4.0	16.7	16.7	9.2	11.9	11.9	4.8	0.0	5.5	8.3	0.0	2.5
Prop In Lane	1.00		0.08	1.00		0.14	1.00		0.63	1.00		0.43
Lane Grp Cap(c), veh/h	134	940	975	247	1055	1083	232	0	231	177	0	238
V/C Ratio(X)	0.68	0.58	0.58	0.84	0.45	0.45	0.18	0.00	0.53	0.26	0.00	0.25
Avail Cap(c_a), veh/h	402	940	975	307	1055	1083	600	0	691	525	0	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.1	12.7	12.7	33.7	8.9	8.9	33.0	0.0	32.2	36.1	0.0	30.9
Incr Delay (d2), s/veh	2.2	2.6	2.5	13.6	1.4	1.3	0.1	0.0	0.7	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	8.7	9.0	5.5	6.2	6.4	0.8	0.0	2.6	1.0	0.0	1.2
LnGrp Delay(d),s/veh	38.3	15.3	15.2	47.3	10.3	10.3	33.2	0.0	32.9	36.3	0.0	31.1
LnGrp LOS	D	B	B	D	B	B	C		C	D		C
Approach Vol, veh/h		1200			1170			164			106	
Approach Delay, s/veh		17.0			16.9			33.0			33.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	48.6		15.9	10.5	53.8		15.9				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	13.9	42.6		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	11.2	18.7		10.3	6.0	13.9		7.5				
Green Ext Time (p_c), s	0.1	22.6		0.8	0.1	23.2		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			18.6									
HCM 2010 LOS			B									
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	787	38	91	792	52	20	81	46	50	132	299
Future Volume (veh/h)	369	787	38	91	792	52	20	81	46	50	132	299
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	388	828	40	96	834	55	21	85	48	53	139	315
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	423	1736	84	154	1050	69	32	244	138	68	422	378
Arrive On Green	0.24	0.51	0.51	0.04	0.31	0.31	0.02	0.22	0.22	0.04	0.24	0.24
Sat Flow, veh/h	1774	3437	166	3442	3371	222	1774	1119	632	1774	1770	1583
Grp Volume(v), veh/h	388	426	442	96	438	451	21	0	133	53	139	315
Grp Sat Flow(s),veh/h/ln	1774	1770	1833	1721	1770	1824	1774	0	1751	1774	1770	1583
Q Serve(g_s), s	20.4	15.0	15.0	2.6	21.6	21.6	1.1	0.0	6.1	2.8	6.2	18.1
Cycle Q Clear(g_c), s	20.4	15.0	15.0	2.6	21.6	21.6	1.1	0.0	6.1	2.8	6.2	18.1
Prop In Lane	1.00		0.09	1.00		0.12	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	423	894	926	154	551	568	32	0	382	68	422	378
V/C Ratio(X)	0.92	0.48	0.48	0.62	0.79	0.79	0.66	0.00	0.35	0.78	0.33	0.83
Avail Cap(c_a), veh/h	464	894	926	205	551	568	158	0	641	139	629	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	15.4	15.4	44.9	30.1	30.1	46.7	0.0	31.6	45.6	30.1	34.6
Incr Delay (d2), s/veh	22.3	1.8	1.8	4.9	7.3	7.1	24.9	0.0	0.5	20.3	0.5	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	7.8	8.1	1.3	11.7	12.0	0.8	0.0	3.0	1.8	3.1	8.6
LnGrp Delay(d),s/veh	57.8	17.2	17.2	49.8	37.4	37.2	71.6	0.0	32.2	65.8	30.5	41.3
LnGrp LOS	E	B	B	D	D	D	E		C	E	C	D
Approach Vol, veh/h		1256			985			154			507	
Approach Delay, s/veh		29.8			38.5			37.5			40.9	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	54.3	5.2	27.8	26.8	35.8	7.2	25.9				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.7	48.3	8.5	34.0	25.0	29.0	7.5	35.0				
Max Q Clear Time (g_c+I1), s	4.6	17.0	3.1	20.1	22.4	23.6	4.8	8.1				
Green Ext Time (p_c), s	0.0	7.0	0.0	2.8	0.4	3.0	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay				35.1								
HCM 2010 LOS				D								
























HCM 2010 Signalized Intersection Summary
604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	705	36	33	790	208	25	104	26	77	93	148
Future Volume (veh/h)	128	705	36	33	790	208	25	104	26	77	93	148
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	135	742	38	35	832	219	26	109	27	81	98	156
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	1615	83	63	1452	649	50	342	291	156	130	207
Arrive On Green	0.10	0.47	0.47	0.04	0.41	0.41	0.03	0.18	0.18	0.05	0.20	0.20
Sat Flow, veh/h	1774	3426	175	1774	3539	1583	1774	1863	1583	3442	648	1032
Grp Volume(v), veh/h	135	383	397	35	832	219	26	109	27	81	0	254
Grp Sat Flow(s),veh/h/ln	1774	1770	1832	1774	1770	1583	1774	1863	1583	1721	0	1681
Q Serve(g_s), s	5.2	10.2	10.2	1.4	12.7	6.6	1.0	3.6	1.0	1.6	0.0	10.0
Cycle Q Clear(g_c), s	5.2	10.2	10.2	1.4	12.7	6.6	1.0	3.6	1.0	1.6	0.0	10.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	171	834	864	63	1452	649	50	342	291	156	0	337
V/C Ratio(X)	0.79	0.46	0.46	0.56	0.57	0.34	0.52	0.32	0.09	0.52	0.00	0.75
Avail Cap(c_a), veh/h	251	834	864	152	1471	658	167	825	701	320	0	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.9	12.5	12.5	33.2	15.9	14.1	33.5	24.8	23.7	32.7	0.0	26.3
Incr Delay (d2), s/veh	9.8	1.8	1.8	7.6	0.3	0.1	8.0	0.5	0.1	2.7	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	5.3	5.5	0.8	6.2	2.9	0.6	1.9	0.4	0.8	0.0	4.9
LnGrp Delay(d),s/veh	40.7	14.3	14.2	40.8	16.3	14.2	41.5	25.3	23.9	35.3	0.0	29.8
LnGrp LOS	D	B	B	D	B	B	D	C	C	D		C
Approach Vol, veh/h		915			1086			162			335	
Approach Delay, s/veh		18.2			16.6			27.7			31.1	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	39.0	5.5	19.0	10.8	34.7	6.7	17.9				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	33.0	6.6	30.9	9.9	29.1	6.5	31.0				
Max Q Clear Time (g_c+I1), s	3.4	12.2	3.0	12.0	7.2	14.7	3.6	5.6				
Green Ext Time (p_c), s	0.0	4.9	0.0	2.1	0.1	4.4	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			19.9									
HCM 2010 LOS			B									

























HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	594	90	208	840	311	110	336	163	318	286	65
Future Volume (veh/h)	95	594	90	208	840	311	110	336	163	318	286	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	100	625	95	219	884	327	116	354	172	335	301	68
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1809	272	215	2009	626	147	715	320	257	558	124
Arrive On Green	0.07	0.41	0.41	0.06	0.40	0.40	0.08	0.20	0.20	0.07	0.19	0.19
Sat Flow, veh/h	1774	4464	670	3442	5085	1583	1774	3539	1583	3442	2878	641
Grp Volume(v), veh/h	100	473	247	219	884	327	116	354	172	335	183	186
Grp Sat Flow(s),veh/h/ln	1774	1695	1744	1721	1695	1583	1774	1770	1583	1721	1770	1750
Q Serve(g_s), s	4.4	7.7	7.9	5.0	10.2	12.6	5.1	7.1	7.8	6.0	7.5	7.7
Cycle Q Clear(g_c), s	4.4	7.7	7.9	5.0	10.2	12.6	5.1	7.1	7.8	6.0	7.5	7.7
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	129	1374	707	215	2009	626	147	715	320	257	343	339
V/C Ratio(X)	0.78	0.34	0.35	1.02	0.44	0.52	0.79	0.50	0.54	1.30	0.53	0.55
Avail Cap(c_a), veh/h	219	1374	707	215	2009	626	197	1589	711	257	730	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	16.5	16.5	37.6	17.8	18.5	36.1	28.4	28.6	37.1	29.1	29.1
Incr Delay (d2), s/veh	11.4	0.7	1.4	66.9	0.7	3.1	14.2	0.6	1.7	160.9	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.7	4.0	4.3	4.9	6.0	3.1	3.6	3.5	8.6	3.8	3.9
LnGrp Delay(d),s/veh	48.0	17.2	17.9	104.7	18.5	21.6	50.3	29.0	30.3	198.0	30.6	30.8
LnGrp LOS	D	B	B	F	B	C	D	C	C	F	C	C
Approach Vol, veh/h		820			1430			642			704	
Approach Delay, s/veh		21.1			32.4			33.2			110.3	
Approach LOS		C			C			C			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	10.6	21.1	10.3	38.2	10.0	21.7				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.9	33.1	9.9	27.6	6.0	36.0				
Max Q Clear Time (g_c+I1), s	7.0	9.9	7.1	9.7	6.4	14.6	8.0	9.8				
Green Ext Time (p_c), s	0.0	7.6	0.0	5.9	0.1	6.0	0.0	6.1				
Intersection Summary												
HCM 2010 Ctrl Delay			45.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	1382	69	329	1367	244	51	355	271	657	443	269
Future Volume (veh/h)	265	1382	69	329	1367	244	51	355	271	657	443	269
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	279	1455	73	346	1439	257	54	374	285	692	466	283
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	1885	587	396	1982	617	106	983	440	306	1189	532
Arrive On Green	0.10	0.37	0.37	0.11	0.39	0.39	0.03	0.28	0.28	0.09	0.34	0.34
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	279	1455	73	346	1439	257	54	374	285	692	466	283
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	11.5	36.2	4.4	14.2	34.6	17.0	2.2	12.3	22.8	12.8	14.5	20.8
Cycle Q Clear(g_c), s	11.5	36.2	4.4	14.2	34.6	17.0	2.2	12.3	22.8	12.8	14.5	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	1885	587	396	1982	617	106	983	440	306	1189	532
V/C Ratio(X)	0.85	0.77	0.12	0.87	0.73	0.42	0.51	0.38	0.65	2.26	0.39	0.53
Avail Cap(c_a), veh/h	517	1949	607	505	1982	617	122	983	440	306	1189	532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.9	39.9	29.8	62.6	37.3	31.9	68.6	41.9	45.7	65.5	36.5	38.6
Incr Delay (d2), s/veh	4.3	2.2	0.2	11.1	1.6	0.9	3.8	1.1	7.2	576.3	1.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	17.4	1.9	7.4	16.6	7.6	1.1	6.2	10.8	30.6	7.2	9.6
LnGrp Delay(d),s/veh	68.2	42.1	30.0	73.7	39.0	32.9	72.3	43.0	52.9	641.8	37.5	42.4
LnGrp LOS	E	D	C	E	D	C	E	D	D	F	D	D
Approach Vol, veh/h		1807			2042			713			1441	
Approach Delay, s/veh		45.6			44.1			49.2			328.6	
Approach LOS		D			D			D			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.2	45.9	20.9	59.7	8.8	54.3	18.2	62.4				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	12.8	39.8	21.1	55.1	5.1	* 48	21.6	* 55				
Max Q Clear Time (g_c+I1), s	14.8	24.8	16.2	38.2	4.2	22.8	13.5	36.6				
Green Ext Time (p_c), s	0.0	10.8	0.3	15.0	0.0	16.0	0.3	17.7				
Intersection Summary												
HCM 2010 Ctrl Delay			113.5									
HCM 2010 LOS			F									
Notes												

HCM 2010 Signalized Intersection Summary













607: Paseo Montanoso & Camino Del Norte

02/15/2018

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗		
Traffic Volume (veh/h)	2301	32	192	1923	33	93		
Future Volume (veh/h)	2301	32	192	1923	33	93		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	2422	34	202	2024	35	98		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3309	46	195	4057	147	131		
Arrive On Green	0.64	0.64	0.11	0.80	0.08	0.08		
Sat Flow, veh/h	5335	72	1774	5253	1774	1583		
Grp Volume(v), veh/h	1587	869	202	2024	35	98		
Grp Sat Flow(s),veh/h/ln	1695	1850	1774	1695	1774	1583		
Q Serve(g_s), s	26.7	26.9	9.3	11.3	1.6	5.1		
Cycle Q Clear(g_c), s	26.7	26.9	9.3	11.3	1.6	5.1		
Prop In Lane		0.04	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2171	1185	195	4057	147	131		
V/C Ratio(X)	0.73	0.73	1.03	0.50	0.24	0.75		
Avail Cap(c_a), veh/h	2171	1185	195	4057	683	609		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	10.3	10.3	37.6	2.9	36.3	37.9		
Incr Delay (d2), s/veh	2.2	4.0	73.7	0.4	0.3	3.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	13.0	14.8	8.5	5.2	0.8	2.4		
LnGrp Delay(d),s/veh	12.5	14.3	111.4	3.3	36.6	41.1		
LnGrp LOS	B	B	F	A	D	D		
Approach Vol, veh/h	2456			2226	133			
Approach Delay, s/veh	13.1			13.1	39.9			
Approach LOS	B			B	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	13.3	60.2				73.5		11.0
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	9.3	54.1				67.4		32.5
Max Q Clear Time (g_c+I1), s	11.3	28.9				13.3		7.1
Green Ext Time (p_c), s	0.0	25.2				53.9		0.2
Intersection Summary								
HCM 2010 Ctrl Delay			13.9					
HCM 2010 LOS			B					



















HCM 2010 Signalized Intersection Summary
 608: I-15 SB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↘	↖↗	↑↑↑					↖↗		↗↘
Traffic Volume (veh/h)	0	1192	1222	218	2003	0	0	0	0	813	0	82
Future Volume (veh/h)	0	1192	1222	218	2003	0	0	0	0	813	0	82
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1255	1286	229	2108	0				856	0	86
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	2876	1251	301	2992	0				948	0	768
Arrive On Green	0.00	0.45	0.45	0.09	0.59	0.00				0.28	0.00	0.28
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1255	1286	229	2108	0				856	0	86
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	13.4	44.9	6.5	29.1	0.0				24.0	0.0	2.3
Cycle Q Clear(g_c), s	0.0	13.4	44.9	6.5	29.1	0.0				24.0	0.0	2.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2876	1251	301	2992	0				948	0	768
V/C Ratio(X)	0.00	0.44	1.03	0.76	0.70	0.00				0.90	0.00	0.11
Avail Cap(c_a), veh/h	0	2876	1251	595	2992	0				1270	0	1028
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.62	0.62	0.59	0.59	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.9	27.6	44.6	14.5	0.0				34.9	0.0	27.1
Incr Delay (d2), s/veh	0.0	0.3	27.6	0.9	0.8	0.0				6.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	22.0	3.1	13.7	0.0				12.2	0.0	0.9
LnGrp Delay(d),s/veh	0.0	19.2	55.2	45.5	15.3	0.0				41.1	0.0	27.1
LnGrp LOS		B	F	D	B					D		C
Approach Vol, veh/h		2541			2337						942	
Approach Delay, s/veh		37.4			18.3						39.8	
Approach LOS		D			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.0	52.4		33.7		66.3						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 17	27.0		36.9		49.5						
Max Q Clear Time (g_c+I1), s	8.5	46.9		26.0		31.1						
Green Ext Time (p_c), s	0.3	0.0		1.6		16.5						
Intersection Summary												
HCM 2010 Ctrl Delay				30.1								
HCM 2010 LOS				C								
Notes												




















HCM 2010 Signalized Intersection Summary
 609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	1860	0	0	1034	792	1277	0	270	0	0	0
Future Volume (veh/h)	152	1860	0	0	1034	792	1277	0	270	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	160	1958	0	0	1088	834	1344	0	284			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	213	2265	0	0	2124	924	1440	0	1166			
Arrive On Green	0.12	0.89	0.00	0.00	0.33	0.33	0.42	0.00	0.42			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	160	1958	0	0	1088	834	1344	0	284			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	4.5	18.3	0.0	0.0	13.7	28.6	37.3	0.0	6.6			
Cycle Q Clear(g_c), s	4.5	18.3	0.0	0.0	13.7	28.6	37.3	0.0	6.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	213	2265	0	0	2124	924	1440	0	1166			
V/C Ratio(X)	0.75	0.86	0.00	0.00	0.51	0.90	0.93	0.00	0.24			
Avail Cap(c_a), veh/h	213	2265	0	0	2124	924	1614	0	1307			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.74	0.74	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	43.1	4.0	0.0	0.0	26.9	31.9	27.7	0.0	18.8			
Incr Delay (d2), s/veh	9.3	3.5	0.0	0.0	0.9	13.8	9.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.4	8.0	0.0	0.0	6.2	12.8	19.4	0.0	2.5			
LnGrp Delay(d),s/veh	52.4	7.6	0.0	0.0	27.8	45.7	37.0	0.0	18.9			
LnGrp LOS	D	A			C	D	D		B			
Approach Vol, veh/h		2118			1922			1628				
Approach Delay, s/veh		10.9			35.6			33.8				
Approach LOS		B			D			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		52.0			11.4	40.6		48.0				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		39.5			* 6.2	28.1		46.9				
Max Q Clear Time (g_c+I1), s		20.3			6.5	30.6		39.3				
Green Ext Time (p_c), s		15.6			0.0	0.0		2.6				
Intersection Summary												
HCM 2010 Ctrl Delay				25.9								
HCM 2010 LOS				C								
Notes												










HCM 2010 Signalized Intersection Summary
 610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	31	31	62	42	215	32	321	84	211	273	99
Future Volume (veh/h)	54	31	31	62	42	215	32	321	84	211	273	99
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	57	33	33	65	44	226	34	338	88	222	287	104
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	195	166	471	298	701	297	466	120	304	439	156
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	581	442	375	864	672	1583	1774	2790	716	1774	2563	909
Grp Volume(v), veh/h	123	0	0	109	0	226	34	213	213	222	196	195
Grp Sat Flow(s),veh/h/ln	1398	0	0	1536	0	1583	1774	1770	1736	1774	1770	1702
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	6.0	1.1	7.4	7.6	7.7	6.7	6.9
Cycle Q Clear(g_c), s	2.8	0.0	0.0	2.3	0.0	6.0	1.1	7.4	7.6	7.7	6.7	6.9
Prop In Lane	0.46		0.27	0.60		1.00	1.00		0.41	1.00		0.53
Lane Grp Cap(c), veh/h	700	0	0	768	0	701	297	296	290	304	303	292
V/C Ratio(X)	0.18	0.00	0.00	0.14	0.00	0.32	0.11	0.72	0.73	0.73	0.65	0.67
Avail Cap(c_a), veh/h	700	0	0	768	0	701	766	764	750	796	794	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	0.0	0.0	10.7	0.0	11.8	22.9	25.6	25.6	25.5	25.0	25.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.1	0.1	1.2	1.4	1.3	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	1.2	0.0	2.7	0.5	3.7	3.7	3.9	3.3	3.3
LnGrp Delay(d),s/veh	11.4	0.0	0.0	10.7	0.0	11.9	23.0	26.8	27.0	26.7	25.9	26.1
LnGrp LOS	B			B		B	C	C	C	C	C	C
Approach Vol, veh/h		123			335			460			613	
Approach Delay, s/veh		11.4			11.5			26.6			26.3	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.7		15.7		33.7		15.4				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.7		29.1		28.7		28.0				
Max Q Clear Time (g_c+I1), s		4.8		9.7		8.0		9.6				
Green Ext Time (p_c), s		1.1		1.4		1.1		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				21.9								
HCM 2010 LOS				C								





















HCM 2010 Signalized Intersection Summary
 601: 4 Gee Rd & Project Driveway

02/15/2018

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	16	0	170	16	0	78		
Future Volume (veh/h)	16	0	170	16	0	78		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	17	0	179	17	0	82		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1340	127	0	1490		
Arrive On Green	0.00	0.00	0.80	0.80	0.00	0.80		
Sat Flow, veh/h	0	0	1676	159	0	1863		
Grp Volume(v), veh/h	0	0	0	196	0	82		
Grp Sat Flow(s),veh/h/ln	0	0	0	1835	0	1863		
Q Serve(g_s), s	0.0	0.0	0.0	0.5	0.0	0.2		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.5	0.0	0.2		
Prop In Lane	0.00	0.00		0.09	0.00			
Lane Grp Cap(c), veh/h	0	0	0	1468	0	1490		
V/C Ratio(X)	0.00	0.00	0.00	0.13	0.00	0.06		
Avail Cap(c_a), veh/h	0	0	0	1468	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.1		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.7	0.0	0.5		
LnGrp LOS				A		A		
Approach Vol, veh/h	0		196			82		
Approach Delay, s/veh	0.0		0.7			0.5		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.5		0.0		2.2		
Green Ext Time (p_c), s		1.3		0.0		1.3		
Intersection Summary								
HCM 2010 Ctrl Delay			0.6					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	1011	43	199	848	79	39	43	74	58	32	26
Future Volume (veh/h)	87	1011	43	199	848	79	39	43	74	58	32	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	92	1064	45	209	893	83	41	45	78	61	34	27
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	1811	77	247	1925	179	245	91	157	190	143	113
Arrive On Green	0.08	0.52	0.52	0.14	0.59	0.59	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3460	146	1774	3274	304	1336	613	1062	1263	963	765
Grp Volume(v), veh/h	92	544	565	209	483	493	41	0	123	61	0	61
Grp Sat Flow(s),veh/h/ln	1774	1770	1837	1774	1770	1809	1336	0	1675	1263	0	1728
Q Serve(g_s), s	4.1	17.2	17.2	9.4	12.6	12.6	2.3	0.0	5.5	3.8	0.0	2.5
Cycle Q Clear(g_c), s	4.1	17.2	17.2	9.4	12.6	12.6	4.8	0.0	5.5	9.3	0.0	2.5
Prop In Lane	1.00		0.08	1.00		0.17	1.00		0.63	1.00		0.44
Lane Grp Cap(c), veh/h	135	926	962	247	1040	1064	245	0	248	190	0	256
V/C Ratio(X)	0.68	0.59	0.59	0.85	0.46	0.46	0.17	0.00	0.50	0.32	0.00	0.24
Avail Cap(c_a), veh/h	397	926	962	303	1040	1064	590	0	681	517	0	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.6	13.3	13.3	34.2	9.5	9.5	32.7	0.0	31.9	36.1	0.0	30.6
Incr Delay (d2), s/veh	2.3	2.7	2.6	14.3	1.5	1.5	0.1	0.0	0.6	0.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.0	9.3	5.6	6.5	6.6	0.9	0.0	2.6	1.3	0.0	1.2
LnGrp Delay(d),s/veh	38.9	16.1	16.0	48.5	11.0	11.0	32.9	0.0	32.4	36.5	0.0	30.8
LnGrp LOS	D	B	B	D	B	B	C		C	D		C
Approach Vol, veh/h		1201			1185			164			122	
Approach Delay, s/veh		17.8			17.6			32.5			33.6	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.8	48.6		17.0	10.6	53.8		17.0				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	13.9	42.6		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	11.4	19.2		11.3	6.1	14.6		7.5				
Green Ext Time (p_c), s	0.1	22.1		0.8	0.1	22.6		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay				19.3								
HCM 2010 LOS				B								
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	371	799	38	91	804	52	20	81	46	50	132	301
Future Volume (veh/h)	371	799	38	91	804	52	20	81	46	50	132	301
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	391	841	40	96	846	55	21	85	48	53	139	317
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	1735	83	154	1043	68	32	246	139	68	424	380
Arrive On Green	0.24	0.50	0.50	0.04	0.31	0.31	0.02	0.22	0.22	0.04	0.24	0.24
Sat Flow, veh/h	1774	3440	164	3442	3374	219	1774	1119	632	1774	1770	1583
Grp Volume(v), veh/h	391	433	448	96	444	457	21	0	133	53	139	317
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1721	1770	1824	1774	0	1751	1774	1770	1583
Q Serve(g_s), s	20.6	15.4	15.4	2.6	22.1	22.1	1.1	0.0	6.1	2.8	6.2	18.2
Cycle Q Clear(g_c), s	20.6	15.4	15.4	2.6	22.1	22.1	1.1	0.0	6.1	2.8	6.2	18.2
Prop In Lane	1.00		0.09	1.00		0.12	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	426	892	925	154	547	564	32	0	384	68	424	380
V/C Ratio(X)	0.92	0.48	0.48	0.62	0.81	0.81	0.66	0.00	0.35	0.78	0.33	0.83
Avail Cap(c_a), veh/h	463	892	925	205	547	564	157	0	640	139	628	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	15.6	15.6	44.9	30.5	30.5	46.7	0.0	31.6	45.7	30.0	34.6
Incr Delay (d2), s/veh	22.7	1.9	1.8	4.9	8.4	8.1	24.9	0.0	0.5	20.3	0.4	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.8	7.9	8.2	1.4	12.1	12.5	0.8	0.0	3.0	1.8	3.1	8.7
LnGrp Delay(d),s/veh	58.2	17.5	17.4	49.8	38.9	38.6	71.7	0.0	32.1	65.9	30.5	41.5
LnGrp LOS	E	B	B	D	D	D	E		C	E	C	D
Approach Vol, veh/h		1272			997			154			509	
Approach Delay, s/veh		30.0			39.8			37.5			41.0	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	54.3	5.2	28.0	27.0	35.6	7.2	26.0				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.7	48.3	8.5	34.0	25.0	29.0	7.5	35.0				
Max Q Clear Time (g_c+I1), s	4.6	17.4	3.1	20.2	22.6	24.1	4.8	8.1				
Green Ext Time (p_c), s	0.0	7.2	0.0	2.7	0.4	2.9	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay			35.6									
HCM 2010 LOS			D									
























HCM 2010 Signalized Intersection Summary
 604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	717	36	33	802	208	25	104	26	77	93	148
Future Volume (veh/h)	128	717	36	33	802	208	25	104	26	77	93	148
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	135	755	38	35	844	219	26	109	27	81	98	156
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	1617	81	63	1452	649	50	342	291	156	130	207
Arrive On Green	0.10	0.47	0.47	0.04	0.41	0.41	0.03	0.18	0.18	0.05	0.20	0.20
Sat Flow, veh/h	1774	3429	173	1774	3539	1583	1774	1863	1583	3442	648	1032
Grp Volume(v), veh/h	135	389	404	35	844	219	26	109	27	81	0	254
Grp Sat Flow(s),veh/h/ln	1774	1770	1832	1774	1770	1583	1774	1863	1583	1721	0	1681
Q Serve(g_s), s	5.2	10.4	10.4	1.4	12.9	6.6	1.0	3.6	1.0	1.6	0.0	10.0
Cycle Q Clear(g_c), s	5.2	10.4	10.4	1.4	12.9	6.6	1.0	3.6	1.0	1.6	0.0	10.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	171	834	864	63	1452	649	50	342	291	156	0	337
V/C Ratio(X)	0.79	0.47	0.47	0.56	0.58	0.34	0.52	0.32	0.09	0.52	0.00	0.75
Avail Cap(c_a), veh/h	251	834	864	152	1471	658	167	825	701	320	0	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.9	12.5	12.5	33.2	16.0	14.1	33.5	24.8	23.7	32.7	0.0	26.3
Incr Delay (d2), s/veh	9.8	1.9	1.8	7.6	0.4	0.1	8.0	0.5	0.1	2.7	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	5.5	5.7	0.8	6.3	2.9	0.6	1.9	0.4	0.8	0.0	4.9
LnGrp Delay(d),s/veh	40.7	14.4	14.4	40.8	16.4	14.2	41.5	25.3	23.9	35.3	0.0	29.8
LnGrp LOS	D	B	B	D	B	B	D	C	C	D		C
Approach Vol, veh/h		928			1098			162			335	
Approach Delay, s/veh		18.2			16.7			27.7			31.1	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	39.0	5.5	19.0	10.8	34.7	6.7	17.9				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	33.0	6.6	30.9	9.9	29.1	6.5	31.0				
Max Q Clear Time (g_c+I1), s	3.4	12.4	3.0	12.0	7.2	14.9	3.6	5.6				
Green Ext Time (p_c), s	0.0	5.0	0.0	2.1	0.1	4.5	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			19.9									
HCM 2010 LOS			B									

























HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	602	94	208	848	311	114	336	163	318	286	65
Future Volume (veh/h)	95	602	94	208	848	311	114	336	163	318	286	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	100	634	99	219	893	327	120	354	172	335	301	68
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1796	277	214	2002	623	152	724	324	257	557	124
Arrive On Green	0.07	0.40	0.40	0.06	0.39	0.39	0.09	0.20	0.20	0.07	0.19	0.19
Sat Flow, veh/h	1774	4446	686	3442	5085	1583	1774	3539	1583	3442	2878	641
Grp Volume(v), veh/h	100	482	251	219	893	327	120	354	172	335	183	186
Grp Sat Flow(s),veh/h/ln	1774	1695	1742	1721	1695	1583	1774	1770	1583	1721	1770	1750
Q Serve(g_s), s	4.5	7.9	8.1	5.0	10.4	12.7	5.3	7.1	7.8	6.0	7.5	7.7
Cycle Q Clear(g_c), s	4.5	7.9	8.1	5.0	10.4	12.7	5.3	7.1	7.8	6.0	7.5	7.7
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	129	1370	704	214	2002	623	152	724	324	257	343	339
V/C Ratio(X)	0.78	0.35	0.36	1.02	0.45	0.52	0.79	0.49	0.53	1.31	0.54	0.55
Avail Cap(c_a), veh/h	218	1370	704	214	2002	623	196	1584	708	257	728	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	16.7	16.7	37.7	17.9	18.6	36.1	28.3	28.6	37.2	29.2	29.3
Incr Delay (d2), s/veh	11.5	0.7	1.4	67.9	0.7	3.1	15.2	0.6	1.6	162.6	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.8	4.1	4.4	4.9	6.1	3.2	3.6	3.5	8.6	3.8	3.9
LnGrp Delay(d),s/veh	48.1	17.4	18.1	105.8	18.7	21.8	51.3	28.9	30.2	199.9	30.7	30.9
LnGrp LOS	D	B	B	F	B	C	D	C	C	F	C	C
Approach Vol, veh/h		833			1439			646			704	
Approach Delay, s/veh		21.3			32.6			33.4			111.3	
Approach LOS		C			C			C			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	10.9	21.1	10.3	38.2	10.0	22.0				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.9	33.1	9.9	27.6	6.0	36.0				
Max Q Clear Time (g_c+I1), s	7.0	10.1	7.3	9.7	6.5	14.7	8.0	9.8				
Green Ext Time (p_c), s	0.0	7.7	0.0	5.9	0.1	6.1	0.0	6.1				
Intersection Summary												
HCM 2010 Ctrl Delay			45.4									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	1390	69	329	1375	244	51	355	271	657	443	269
Future Volume (veh/h)	265	1390	69	329	1375	244	51	355	271	657	443	269
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	279	1463	73	346	1447	257	54	374	285	692	466	283
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	1885	587	396	1983	617	106	983	440	306	1189	532
Arrive On Green	0.10	0.37	0.37	0.11	0.39	0.39	0.03	0.28	0.28	0.09	0.34	0.34
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	279	1463	73	346	1447	257	54	374	285	692	466	283
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	11.5	36.5	4.4	14.2	34.9	17.0	2.2	12.3	22.8	12.8	14.5	20.8
Cycle Q Clear(g_c), s	11.5	36.5	4.4	14.2	34.9	17.0	2.2	12.3	22.8	12.8	14.5	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	1885	587	396	1983	617	106	983	440	306	1189	532
V/C Ratio(X)	0.85	0.78	0.12	0.87	0.73	0.42	0.51	0.38	0.65	2.26	0.39	0.53
Avail Cap(c_a), veh/h	517	1949	607	505	1983	617	122	983	440	306	1189	532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.9	39.9	29.8	62.6	37.4	31.9	68.6	41.9	45.7	65.5	36.5	38.6
Incr Delay (d2), s/veh	4.3	2.3	0.2	11.1	1.7	0.9	3.8	1.1	7.2	576.4	1.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	17.5	1.9	7.4	16.7	7.6	1.1	6.2	10.8	30.6	7.2	9.6
LnGrp Delay(d),s/veh	68.2	42.2	30.0	73.7	39.1	32.9	72.4	43.0	52.9	641.9	37.5	42.4
LnGrp LOS	E	D	C	E	D	C	E	D	D	F	D	D
Approach Vol, veh/h		1815			2050			713			1441	
Approach Delay, s/veh		45.8			44.1			49.2			328.7	
Approach LOS		D			D			D			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.2	45.9	20.9	59.7	8.8	54.3	18.2	62.4				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	12.8	39.8	21.1	55.1	5.1	* 48	21.6	* 55				
Max Q Clear Time (g_c+I1), s	14.8	24.8	16.2	38.5	4.2	22.8	13.5	36.9				
Green Ext Time (p_c), s	0.0	10.8	0.3	14.8	0.0	16.0	0.3	17.5				
Intersection Summary												
HCM 2010 Ctrl Delay			113.4									
HCM 2010 LOS			F									
Notes												













HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte

02/15/2018

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗		
Traffic Volume (veh/h)	2309	32	192	1931	33	93		
Future Volume (veh/h)	2309	32	192	1931	33	93		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	2431	34	202	2033	35	98		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3310	46	195	4057	147	131		
Arrive On Green	0.64	0.64	0.11	0.80	0.08	0.08		
Sat Flow, veh/h	5336	72	1774	5253	1774	1583		
Grp Volume(v), veh/h	1593	872	202	2033	35	98		
Grp Sat Flow(s),veh/h/ln	1695	1850	1774	1695	1774	1583		
Q Serve(g_s), s	26.9	27.1	9.3	11.4	1.6	5.1		
Cycle Q Clear(g_c), s	26.9	27.1	9.3	11.4	1.6	5.1		
Prop In Lane		0.04	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2171	1185	195	4057	147	131		
V/C Ratio(X)	0.73	0.74	1.03	0.50	0.24	0.75		
Avail Cap(c_a), veh/h	2171	1185	195	4057	683	609		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	10.3	10.3	37.6	2.9	36.3	37.9		
Incr Delay (d2), s/veh	2.2	4.1	73.7	0.4	0.3	3.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	13.1	14.9	8.5	5.2	0.8	2.4		
LnGrp Delay(d),s/veh	12.5	14.4	111.4	3.3	36.6	41.1		
LnGrp LOS	B	B	F	A	D	D		
Approach Vol, veh/h	2465			2235	133			
Approach Delay, s/veh	13.2			13.1	39.9			
Approach LOS	B			B	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	13.3	60.2				73.5		11.0
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	9.3	54.1				67.4		32.5
Max Q Clear Time (g_c+I1), s	11.3	29.1				13.4		7.1
Green Ext Time (p_c), s	0.0	25.0				53.8		0.2
Intersection Summary								
HCM 2010 Ctrl Delay			13.9					
HCM 2010 LOS			B					



























HCM 2010 Signalized Intersection Summary
608: I-15 SB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↗↗		↗↗
Traffic Volume (veh/h)	0	1195	1227	218	2011	0	0	0	0	813	0	82
Future Volume (veh/h)	0	1195	1227	218	2011	0	0	0	0	813	0	82
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1258	1292	229	2117	0				856	0	86
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	2876	1251	301	2992	0				948	0	768
Arrive On Green	0.00	0.45	0.45	0.09	0.59	0.00				0.28	0.00	0.28
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1258	1292	229	2117	0				856	0	86
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	13.5	44.9	6.5	29.4	0.0				24.0	0.0	2.3
Cycle Q Clear(g_c), s	0.0	13.5	44.9	6.5	29.4	0.0				24.0	0.0	2.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2876	1251	301	2992	0				948	0	768
V/C Ratio(X)	0.00	0.44	1.03	0.76	0.71	0.00				0.90	0.00	0.11
Avail Cap(c_a), veh/h	0	2876	1251	595	2992	0				1270	0	1028
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.62	0.62	0.58	0.58	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.9	27.6	44.6	14.5	0.0				34.9	0.0	27.1
Incr Delay (d2), s/veh	0.0	0.3	29.0	0.9	0.8	0.0				6.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	22.2	3.1	13.8	0.0				12.2	0.0	0.9
LnGrp Delay(d),s/veh	0.0	19.2	56.6	45.5	15.4	0.0				41.1	0.0	27.1
LnGrp LOS		B	F	D	B					D		C
Approach Vol, veh/h		2550			2346						942	
Approach Delay, s/veh		38.1			18.3						39.8	
Approach LOS		D			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.0	52.4		33.7		66.3						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 17	27.0		36.9		49.5						
Max Q Clear Time (g_c+I1), s	8.5	46.9		26.0		31.4						
Green Ext Time (p_c), s	0.3	0.0		1.6		16.3						
Intersection Summary												
HCM 2010 Ctrl Delay			30.4									
HCM 2010 LOS			C									
Notes												




















HCM 2010 Signalized Intersection Summary
 609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  	 	 		 			
Traffic Volume (veh/h)	152	1863	0	0	1037	792	1282	0	270	0	0	0
Future Volume (veh/h)	152	1863	0	0	1037	792	1282	0	270	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	160	1961	0	0	1092	834	1349	0	284			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	213	2259	0	0	2116	920	1445	0	1170			
Arrive On Green	0.12	0.89	0.00	0.00	0.33	0.33	0.42	0.00	0.42			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	160	1961	0	0	1092	834	1349	0	284			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	4.5	18.8	0.0	0.0	13.8	28.6	37.4	0.0	6.6			
Cycle Q Clear(g_c), s	4.5	18.8	0.0	0.0	13.8	28.6	37.4	0.0	6.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	213	2259	0	0	2116	920	1445	0	1170			
V/C Ratio(X)	0.75	0.87	0.00	0.00	0.52	0.91	0.93	0.00	0.24			
Avail Cap(c_a), veh/h	213	2259	0	0	2116	920	1614	0	1307			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.74	0.74	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	43.1	4.2	0.0	0.0	27.0	32.0	27.7	0.0	18.7			
Incr Delay (d2), s/veh	9.3	3.6	0.0	0.0	0.9	14.2	9.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.4	8.4	0.0	0.0	6.2	12.8	19.5	0.0	2.5			
LnGrp Delay(d),s/veh	52.4	7.8	0.0	0.0	27.9	46.2	37.0	0.0	18.8			
LnGrp LOS	D	A			C	D	D		B			
Approach Vol, veh/h		2121			1926			1633				
Approach Delay, s/veh		11.2			35.8			33.8				
Approach LOS		B			D			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		51.9			11.4	40.5		48.1				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		39.5			* 6.2	28.1		46.9				
Max Q Clear Time (g_c+I1), s		20.8			6.5	30.6		39.4				
Green Ext Time (p_c), s		15.3			0.0	0.0		2.6				
Intersection Summary												
HCM 2010 Ctrl Delay				26.0								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary
 610: Dove Canyon Rd & Lone Quail Rd










02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	31	31	62	42	215	32	325	84	211	277	99
Future Volume (veh/h)	54	31	31	62	42	215	32	325	84	211	277	99
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	57	33	33	65	44	226	34	342	88	222	292	104
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	195	166	470	297	699	299	471	120	304	442	154
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	581	442	375	864	672	1583	1774	2797	710	1774	2575	898
Grp Volume(v), veh/h	123	0	0	109	0	226	34	215	215	222	199	197
Grp Sat Flow(s),veh/h/ln	1398	0	0	1536	0	1583	1774	1770	1737	1774	1770	1704
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	6.0	1.1	7.5	7.6	7.7	6.8	7.0
Cycle Q Clear(g_c), s	2.8	0.0	0.0	2.3	0.0	6.0	1.1	7.5	7.6	7.7	6.8	7.0
Prop In Lane	0.46		0.27	0.60		1.00	1.00		0.41	1.00		0.53
Lane Grp Cap(c), veh/h	698	0	0	767	0	699	299	298	292	304	303	292
V/C Ratio(X)	0.18	0.00	0.00	0.14	0.00	0.32	0.11	0.72	0.74	0.73	0.65	0.68
Avail Cap(c_a), veh/h	698	0	0	767	0	699	764	763	749	795	793	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	0.0	0.0	10.8	0.0	11.8	22.9	25.6	25.7	25.5	25.1	25.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.0	0.1	0.1	1.2	1.4	1.3	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	1.2	0.0	2.7	0.5	3.7	3.8	3.9	3.4	3.4
LnGrp Delay(d),s/veh	11.4	0.0	0.0	10.8	0.0	11.9	23.0	26.8	27.0	26.8	26.0	26.2
LnGrp LOS	B			B		B	C	C	C	C	C	C
Approach Vol, veh/h		123			335			464			618	
Approach Delay, s/veh		11.4			11.5			26.6			26.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.7		15.7		33.7		15.5				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.7		29.1		28.7		28.0				
Max Q Clear Time (g_c+I1), s		4.8		9.7		8.0		9.6				
Green Ext Time (p_c), s		1.1		1.4		1.1		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				22.0								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary





















601: 4 Gee Rd & Project Driveway

02/15/2018

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	2	0	91	2	0	59		
Future Volume (veh/h)	2	0	91	2	0	59		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	2	0	96	2	0	62		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1455	30	0	1490		
Arrive On Green	0.00	0.00	0.80	0.80	0.00	0.80		
Sat Flow, veh/h	0	0	1818	38	0	1863		
Grp Volume(v), veh/h	0	0	0	98	0	62		
Grp Sat Flow(s),veh/h/ln	0	0	0	1856	0	1863		
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.2		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.3	0.0	0.2		
Prop In Lane	0.00	0.00		0.02	0.00			
Lane Grp Cap(c), veh/h	0	0	0	1485	0	1490		
V/C Ratio(X)	0.00	0.00	0.00	0.07	0.00	0.04		
Avail Cap(c_a), veh/h	0	0	0	1485	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.1		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.6	0.0	0.5		
LnGrp LOS				A		A		
Approach Vol, veh/h	0		98			62		
Approach Delay, s/veh	0.0		0.6			0.5		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.3		0.0		2.2		
Green Ext Time (p_c), s		0.6		0.0		0.6		
Intersection Summary								
HCM 2010 Ctrl Delay			0.5					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	648	45	209	548	31	31	17	98	21	23	28
Future Volume (veh/h)	70	648	45	209	548	31	31	17	98	21	23	28
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	682	47	220	577	33	33	18	103	22	24	29
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	1809	125	259	2107	120	216	29	167	154	93	113
Arrive On Green	0.07	0.54	0.54	0.15	0.62	0.62	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1774	3360	231	1774	3404	194	1346	241	1379	1265	769	929
Grp Volume(v), veh/h	74	359	370	220	300	310	33	0	121	22	0	53
Grp Sat Flow(s),veh/h/ln	1774	1770	1822	1774	1770	1828	1346	0	1619	1265	0	1699
Q Serve(g_s), s	3.2	9.3	9.3	9.6	6.1	6.2	1.8	0.0	5.6	1.3	0.0	2.2
Cycle Q Clear(g_c), s	3.2	9.3	9.3	9.6	6.1	6.2	4.0	0.0	5.6	6.9	0.0	2.2
Prop In Lane	1.00		0.13	1.00		0.11	1.00		0.85	1.00		0.55
Lane Grp Cap(c), veh/h	118	953	981	259	1095	1132	216	0	196	154	0	206
V/C Ratio(X)	0.63	0.38	0.38	0.85	0.27	0.27	0.15	0.00	0.62	0.14	0.00	0.26
Avail Cap(c_a), veh/h	408	953	981	312	1095	1132	616	0	677	530	0	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.0	10.6	10.6	32.9	6.9	6.9	33.4	0.0	33.0	36.3	0.0	31.5
Incr Delay (d2), s/veh	2.0	1.1	1.1	14.8	0.6	0.6	0.1	0.0	1.2	0.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.8	4.9	5.8	3.2	3.3	0.7	0.0	2.6	0.5	0.0	1.1
LnGrp Delay(d),s/veh	38.0	11.7	11.7	47.8	7.5	7.5	33.5	0.0	34.2	36.5	0.0	31.8
LnGrp LOS	D	B	B	D	A	A	C		C	D		C
Approach Vol, veh/h		803			830			154			75	
Approach Delay, s/veh		14.1			18.2			34.1			33.2	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	48.6		14.5	9.7	55.0		14.5				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	13.9	42.6		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	11.6	11.3		8.9	5.2	8.2		7.6				
Green Ext Time (p_c), s	0.1	22.5		0.7	0.1	22.0		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			18.4									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	578	33	14	557	46	31	37	26	86	34	215
Future Volume (veh/h)	150	578	33	14	557	46	31	37	26	86	34	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	608	35	15	586	48	33	39	27	91	36	226
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	1921	110	48	1545	126	45	143	99	116	318	284
Arrive On Green	0.11	0.56	0.56	0.01	0.47	0.47	0.03	0.14	0.14	0.07	0.18	0.18
Sat Flow, veh/h	1774	3402	196	3442	3314	271	1774	1027	711	1774	1770	1583
Grp Volume(v), veh/h	158	316	327	15	312	322	33	0	66	91	36	226
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1721	1770	1815	1774	0	1737	1774	1770	1583
Q Serve(g_s), s	7.4	8.1	8.1	0.4	9.8	9.8	1.6	0.0	2.9	4.3	1.5	11.7
Cycle Q Clear(g_c), s	7.4	8.1	8.1	0.4	9.8	9.8	1.6	0.0	2.9	4.3	1.5	11.7
Prop In Lane	1.00		0.11	1.00		0.15	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	199	999	1032	48	825	846	45	0	242	116	318	284
V/C Ratio(X)	0.79	0.32	0.32	0.31	0.38	0.38	0.73	0.00	0.27	0.78	0.11	0.79
Avail Cap(c_a), veh/h	519	999	1032	229	825	846	176	0	711	156	703	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	9.9	9.9	41.8	14.8	14.8	41.4	0.0	32.9	39.4	29.4	33.6
Incr Delay (d2), s/veh	8.2	0.8	0.8	4.3	0.1	0.1	23.8	0.0	0.6	18.1	0.2	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	4.2	4.3	0.2	4.8	4.9	1.1	0.0	1.4	2.7	0.7	5.5
LnGrp Delay(d),s/veh	45.2	10.7	10.7	46.1	14.9	14.9	65.1	0.0	33.5	57.4	29.5	38.6
LnGrp LOS	D	B	B	D	B	B	E		C	E	C	D
Approach Vol, veh/h		801			649			99			353	
Approach Delay, s/veh		17.5			15.6			44.1			42.5	
Approach LOS		B			B			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.2	54.3	5.7	20.4	13.6	45.9	9.1	16.9				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.7	48.3	8.5	34.0	25.0	29.0	7.5	35.0				
Max Q Clear Time (g_c+I1), s	2.4	10.1	3.6	13.7	9.4	11.8	6.3	4.9				
Green Ext Time (p_c), s	0.0	4.5	0.0	1.7	0.4	4.1	0.0	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay				22.9								
HCM 2010 LOS				C								























HCM 2010 Signalized Intersection Summary
 604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	568	15	27	498	127	16	65	34	95	50	113
Future Volume (veh/h)	115	568	15	27	498	127	16	65	34	95	50	113
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	121	598	16	28	524	134	17	68	36	100	53	119
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1800	48	54	1607	719	36	223	190	178	77	174
Arrive On Green	0.09	0.51	0.51	0.03	0.45	0.45	0.02	0.12	0.12	0.05	0.15	0.15
Sat Flow, veh/h	1774	3522	94	1774	3539	1583	1774	1863	1583	3442	512	1149
Grp Volume(v), veh/h	121	300	314	28	524	134	17	68	36	100	0	172
Grp Sat Flow(s),veh/h/ln	1774	1770	1846	1774	1770	1583	1774	1863	1583	1721	0	1660
Q Serve(g_s), s	4.3	6.4	6.5	1.0	6.1	3.3	0.6	2.2	1.3	1.8	0.0	6.3
Cycle Q Clear(g_c), s	4.3	6.4	6.5	1.0	6.1	3.3	0.6	2.2	1.3	1.8	0.0	6.3
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	156	905	944	54	1607	719	36	223	190	178	0	251
V/C Ratio(X)	0.78	0.33	0.33	0.52	0.33	0.19	0.47	0.30	0.19	0.56	0.00	0.69
Avail Cap(c_a), veh/h	272	905	944	165	1607	719	181	895	760	347	0	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	9.3	9.3	30.8	11.3	10.5	31.3	25.9	25.6	29.9	0.0	25.9
Incr Delay (d2), s/veh	8.1	1.0	0.9	7.4	0.0	0.0	9.2	0.8	0.5	2.8	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.3	3.5	0.6	3.0	1.4	0.4	1.2	0.6	0.9	0.0	3.1
LnGrp Delay(d),s/veh	36.9	10.3	10.2	38.2	11.3	10.6	40.5	26.7	26.1	32.7	0.0	29.2
LnGrp LOS	D	B	B	D	B	B	D	C	C	C		C
Approach Vol, veh/h		735			686			121			272	
Approach Delay, s/veh		14.6			12.3			28.5			30.5	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.0	39.0	4.8	14.8	9.7	35.3	6.8	12.7				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	33.0	6.6	30.9	9.9	29.1	6.5	31.0				
Max Q Clear Time (g_c+I1), s	3.0	8.5	2.6	8.3	6.3	8.1	3.8	4.2				
Green Ext Time (p_c), s	0.0	3.1	0.0	1.4	0.1	3.1	0.1	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				17.0								
HCM 2010 LOS				B								

























HCM 2010 Signalized Intersection Summary
605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	503	109	162	461	317	91	251	104	298	158	41
Future Volume (veh/h)	96	503	109	162	461	317	91	251	104	298	158	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	101	529	115	171	485	334	96	264	109	314	166	43
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	1821	387	230	2170	676	124	518	232	275	439	111
Arrive On Green	0.07	0.43	0.43	0.07	0.43	0.43	0.07	0.15	0.15	0.08	0.16	0.16
Sat Flow, veh/h	1774	4201	894	3442	5085	1583	1774	3539	1583	3442	2801	707
Grp Volume(v), veh/h	101	425	219	171	485	334	96	264	109	314	103	106
Grp Sat Flow(s),veh/h/ln	1774	1695	1705	1721	1695	1583	1774	1770	1583	1721	1770	1738
Q Serve(g_s), s	4.2	6.1	6.3	3.7	4.5	11.5	4.0	5.2	4.7	6.0	3.9	4.1
Cycle Q Clear(g_c), s	4.2	6.1	6.3	3.7	4.5	11.5	4.0	5.2	4.7	6.0	3.9	4.1
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	130	1469	739	230	2170	676	124	518	232	275	278	273
V/C Ratio(X)	0.78	0.29	0.30	0.75	0.22	0.49	0.78	0.51	0.47	1.14	0.37	0.39
Avail Cap(c_a), veh/h	234	1469	739	230	2170	676	211	1699	760	275	781	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	13.8	13.8	34.4	13.6	15.6	34.3	29.5	29.3	34.5	28.3	28.4
Incr Delay (d2), s/veh	11.2	0.5	1.0	12.8	0.2	2.6	10.0	0.9	1.8	97.5	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.9	3.1	2.1	2.2	5.5	2.3	2.6	2.2	6.6	2.0	2.1
LnGrp Delay(d),s/veh	45.3	14.3	14.8	47.2	13.9	18.2	44.3	30.5	31.1	132.0	29.3	29.5
LnGrp LOS	D	B	B	D	B	B	D	C	C	F	C	C
Approach Vol, veh/h		745			990			469			523	
Approach Delay, s/veh		18.6			21.1			33.4			91.0	
Approach LOS		B			C			C			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	9.2	17.3	10.0	38.5	10.0	16.5				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.9	33.1	9.9	27.6	6.0	36.0				
Max Q Clear Time (g_c+I1), s	5.7	8.3	6.0	6.1	6.2	13.5	8.0	7.2				
Green Ext Time (p_c), s	0.0	5.1	0.0	3.8	0.1	4.4	0.0	3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			35.9									
HCM 2010 LOS			D									







HCM 2010 Signalized Intersection Summary
 606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	1113	26	180	792	93	21	222	265	106	339	116
Future Volume (veh/h)	94	1113	26	180	792	93	21	222	265	106	339	116
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	99	1172	27	189	834	98	22	234	279	112	357	122
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	1938	603	244	2079	647	72	1203	538	163	1296	580
Arrive On Green	0.04	0.38	0.38	0.07	0.41	0.41	0.02	0.34	0.34	0.05	0.37	0.37
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	99	1172	27	189	834	98	22	234	279	112	357	122
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	3.7	24.4	1.4	7.1	15.3	5.1	0.8	6.2	18.6	4.2	9.4	7.0
Cycle Q Clear(g_c), s	3.7	24.4	1.4	7.1	15.3	5.1	0.8	6.2	18.6	4.2	9.4	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	1938	603	244	2079	647	72	1203	538	163	1296	580
V/C Ratio(X)	0.67	0.60	0.04	0.78	0.40	0.15	0.30	0.19	0.52	0.69	0.28	0.21
Avail Cap(c_a), veh/h	564	2125	662	551	2109	657	133	1203	538	334	1296	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	32.8	25.7	60.2	27.6	24.6	63.6	30.8	34.9	61.8	29.5	28.7
Incr Delay (d2), s/veh	1.9	0.7	0.1	2.0	0.3	0.2	2.3	0.4	3.5	5.0	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.5	0.6	3.5	7.2	2.3	0.4	3.1	8.7	2.1	4.7	3.2
LnGrp Delay(d),s/veh	64.1	33.5	25.7	62.2	27.8	24.8	65.9	31.1	38.4	66.9	30.0	29.5
LnGrp LOS	E	C	C	E	C	C	E	C	D	E	C	C
Approach Vol, veh/h		1298			1121			535			591	
Approach Delay, s/veh		35.7			33.4			36.4			36.9	
Approach LOS		D			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	50.8	13.7	56.7	7.2	54.3	10.1	60.3				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	12.8	39.8	21.1	55.1	5.1	* 48	21.6	* 55				
Max Q Clear Time (g_c+I1), s	6.2	20.6	9.1	26.4	2.8	11.4	5.7	17.3				
Green Ext Time (p_c), s	0.1	9.6	0.2	23.8	0.0	13.2	0.1	29.7				
Intersection Summary												
HCM 2010 Ctrl Delay			35.2									
HCM 2010 LOS			D									
Notes												













HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte

02/15/2018

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵		
Traffic Volume (veh/h)	1526	12	106	1112	15	104		
Future Volume (veh/h)	1526	12	106	1112	15	104		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1606	13	112	1171	16	109		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3467	28	141	4033	156	140		
Arrive On Green	0.67	0.67	0.08	0.79	0.09	0.09		
Sat Flow, veh/h	5371	42	1774	5253	1774	1583		
Grp Volume(v), veh/h	1046	573	112	1171	16	109		
Grp Sat Flow(s),veh/h/ln	1695	1855	1774	1695	1774	1583		
Q Serve(g_s), s	12.7	12.7	5.3	5.3	0.7	5.7		
Cycle Q Clear(g_c), s	12.7	12.7	5.3	5.3	0.7	5.7		
Prop In Lane		0.02	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2259	1236	141	4033	156	140		
V/C Ratio(X)	0.46	0.46	0.79	0.29	0.10	0.78		
Avail Cap(c_a), veh/h	2259	1236	194	4033	678	605		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	6.8	6.8	38.4	2.4	35.7	37.9		
Incr Delay (d2), s/veh	0.7	1.3	9.7	0.2	0.1	3.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.0	6.8	3.0	2.5	0.4	2.6		
LnGrp Delay(d),s/veh	7.5	8.1	48.2	2.5	35.8	41.5		
LnGrp LOS	A	A	D	A	D	D		
Approach Vol, veh/h	1619			1283	125			
Approach Delay, s/veh	7.7			6.5	40.8			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.8	62.7				73.5		11.5
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	9.3	54.1				67.4		32.5
Max Q Clear Time (g_c+I1), s	7.3	14.7				7.3		7.7
Green Ext Time (p_c), s	0.0	37.3				55.4		0.2
Intersection Summary								
HCM 2010 Ctrl Delay			8.6					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary
608: I-15 SB Ramps & Camino Del Norte



























02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↖↖		↗↗
Traffic Volume (veh/h)	0	1015	586	186	1157	0	0	0	0	580	0	63
Future Volume (veh/h)	0	1015	586	186	1157	0	0	0	0	580	0	63
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1068	617	196	1218	0				611	0	66
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	3401	1479	269	3361	0				699	0	566
Arrive On Green	0.00	0.53	0.53	0.08	0.66	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1068	617	196	1218	0				611	0	66
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	9.4	13.3	5.6	10.7	0.0				17.2	0.0	1.9
Cycle Q Clear(g_c), s	0.0	9.4	13.3	5.6	10.7	0.0				17.2	0.0	1.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3401	1479	269	3361	0				699	0	566
V/C Ratio(X)	0.00	0.31	0.42	0.73	0.36	0.00				0.87	0.00	0.12
Avail Cap(c_a), veh/h	0	3401	1479	681	3361	0				1098	0	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.87	0.87	0.89	0.89	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.2	14.1	45.1	7.6	0.0				38.6	0.0	32.5
Incr Delay (d2), s/veh	0.0	0.2	0.8	1.3	0.3	0.0				3.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.2	5.3	2.7	5.0	0.0				8.4	0.0	0.7
LnGrp Delay(d),s/veh	0.0	13.4	14.9	46.3	7.8	0.0				41.7	0.0	32.6
LnGrp LOS		B	B	D	A					D		C
Approach Vol, veh/h		1685			1414						677	
Approach Delay, s/veh		14.0			13.2						40.8	
Approach LOS		B			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.0	60.6		26.4		73.6						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 20	29.5		31.9		54.5						
Max Q Clear Time (g_c+I1), s	7.6	15.3		19.2		12.7						
Green Ext Time (p_c), s	0.2	9.7		1.1		17.6						
Intersection Summary												
HCM 2010 Ctrl Delay			18.5									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary

609: I-15 NB Ramps & Camino Del Norte






















02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  	 	 		 			
Traffic Volume (veh/h)	118	1476	0	0	696	584	630	5	186	0	0	0
Future Volume (veh/h)	118	1476	0	0	696	584	630	5	186	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1900	1863			
Adj Flow Rate, veh/h	124	1554	0	0	733	615	663	5	196			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	184	3270	0	0	3444	1498	761	0	616			
Arrive On Green	0.11	1.00	0.00	0.00	0.54	0.54	0.22	0.22	0.22			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	124	1554	0	0	733	615	663	0	196			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	3.5	0.0	0.0	0.0	6.0	13.1	18.6	0.0	5.9			
Cycle Q Clear(g_c), s	3.5	0.0	0.0	0.0	6.0	13.1	18.6	0.0	5.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	184	3270	0	0	3444	1498	761	0	616			
V/C Ratio(X)	0.67	0.48	0.00	0.00	0.21	0.41	0.87	0.00	0.32			
Avail Cap(c_a), veh/h	337	3270	0	0	3444	1498	1201	0	973			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.85	0.85	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	43.8	0.0	0.0	0.0	12.1	13.7	37.6	0.0	32.6			
Incr Delay (d2), s/veh	1.4	0.4	0.0	0.0	0.1	0.8	2.7	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.7	0.1	0.0	0.0	2.7	5.2	9.1	0.0	2.3			
LnGrp Delay(d),s/veh	45.2	0.4	0.0	0.0	12.2	14.6	40.3	0.0	32.7			
LnGrp LOS	D	A			B	B	D		C			
Approach Vol, veh/h		1678			1348			859				
Approach Delay, s/veh		3.7			13.3			38.6				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		71.8			10.6	61.2		28.2				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		51.5			* 9.8	36.5		34.9				
Max Q Clear Time (g_c+I1), s		2.0			5.5	15.1		20.6				
Green Ext Time (p_c), s		18.9			0.1	12.9		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				14.7								
HCM 2010 LOS				B								
Notes												

HCM 2010 Signalized Intersection Summary










610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	26	19	41	13	172	29	200	77	162	182	65
Future Volume (veh/h)	77	26	19	41	13	172	29	200	77	162	182	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	81	27	20	43	14	181	31	211	81	171	192	68
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	496	162	103	637	193	771	231	329	122	251	366	126
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.13	0.13	0.13	0.14	0.14	0.14
Sat Flow, veh/h	813	333	212	1088	397	1583	1774	2526	940	1774	2588	888
Grp Volume(v), veh/h	128	0	0	57	0	181	31	146	146	171	129	131
Grp Sat Flow(s),veh/h/ln	1358	0	0	1485	0	1583	1774	1770	1697	1774	1770	1706
Q Serve(g_s), s	1.6	0.0	0.0	0.0	0.0	3.9	0.9	4.6	4.8	5.4	4.0	4.2
Cycle Q Clear(g_c), s	2.7	0.0	0.0	1.0	0.0	3.9	0.9	4.6	4.8	5.4	4.0	4.2
Prop In Lane	0.63		0.16	0.75		1.00	1.00		0.55	1.00		0.52
Lane Grp Cap(c), veh/h	761	0	0	831	0	771	231	230	221	251	250	241
V/C Ratio(X)	0.17	0.00	0.00	0.07	0.00	0.23	0.13	0.63	0.66	0.68	0.52	0.54
Avail Cap(c_a), veh/h	761	0	0	831	0	771	843	841	807	876	874	843
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.4	0.0	0.0	8.0	0.0	8.7	22.7	24.3	24.4	24.0	23.4	23.5
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.1	0.1	1.1	1.3	1.2	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	0.5	0.0	1.7	0.5	2.3	2.4	2.7	2.0	2.0
LnGrp Delay(d),s/veh	8.9	0.0	0.0	8.0	0.0	8.8	22.8	25.4	25.6	25.2	24.0	24.2
LnGrp LOS	A			A		A	C	C	C	C	C	C
Approach Vol, veh/h		128			238			323			431	
Approach Delay, s/veh		8.9			8.6			25.2			24.6	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.7		12.9		33.7		12.3				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.7		29.1		28.7		28.0				
Max Q Clear Time (g_c+I1), s		4.7		7.4		5.9		6.8				
Green Ext Time (p_c), s		0.9		0.9		0.9		0.9				
Intersection Summary												
HCM 2010 Ctrl Delay				19.6								
HCM 2010 LOS				B								





















HCM 2010 Signalized Intersection Summary
601: 4 Gee Rd & Project Driveway

02/15/2018

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	456	9	87	456	9	55		
Future Volume (veh/h)	456	9	87	456	9	55		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1900	1863		
Adj Flow Rate, veh/h	480	9	92	480	9	58		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	209	1089	264	1307		
Arrive On Green	0.00	0.00	0.80	0.80	0.80	0.80		
Sat Flow, veh/h	0	0	261	1362	103	1633		
Grp Volume(v), veh/h	0	0	0	572	67	0		
Grp Sat Flow(s),veh/h/ln	0	0	0	1622	1736	0		
Q Serve(g_s), s	0.0	0.0	0.0	2.5	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.5	0.2	0.0		
Prop In Lane	0.00	0.00		0.84	0.13			
Lane Grp Cap(c), veh/h	0	0	0	1298	1571	0		
V/C Ratio(X)	0.00	0.00	0.00	0.44	0.04	0.00		
Avail Cap(c_a), veh/h	0	0	0	1298	1571	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.7	0.5	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.3	0.1	0.0		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	1.8	0.5	0.0		
LnGrp LOS				A	A			
Approach Vol, veh/h	0		572			67		
Approach Delay, s/veh	0.0		1.8			0.5		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		4.5		0.0		2.2		
Green Ext Time (p_c), s		3.7		0.0		4.0		
Intersection Summary								
HCM 2010 Ctrl Delay			1.7					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	641	45	209	541	444	31	17	98	434	23	65
Future Volume (veh/h)	107	641	45	209	541	444	31	17	98	434	23	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	113	675	47	220	569	467	33	18	103	457	24	68
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	1054	73	251	691	567	535	95	542	506	169	479
Arrive On Green	0.08	0.31	0.31	0.14	0.37	0.37	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1774	3358	234	1774	1849	1516	1299	241	1379	1265	430	1218
Grp Volume(v), veh/h	113	356	366	220	545	491	33	0	121	457	0	92
Grp Sat Flow(s),veh/h/ln	1774	1770	1822	1774	1770	1595	1299	0	1619	1265	0	1648
Q Serve(g_s), s	6.4	17.6	17.6	12.4	28.4	28.4	1.7	0.0	5.0	35.1	0.0	3.7
Cycle Q Clear(g_c), s	6.4	17.6	17.6	12.4	28.4	28.4	5.4	0.0	5.0	40.1	0.0	3.7
Prop In Lane	1.00		0.13	1.00		0.95	1.00		0.85	1.00		0.74
Lane Grp Cap(c), veh/h	147	555	572	251	661	596	535	0	637	506	0	648
V/C Ratio(X)	0.77	0.64	0.64	0.87	0.82	0.82	0.06	0.00	0.19	0.90	0.00	0.14
Avail Cap(c_a), veh/h	317	555	572	305	661	596	535	0	637	506	0	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.8	30.0	30.0	42.9	28.9	28.9	21.6	0.0	20.3	34.2	0.0	19.9
Incr Delay (d2), s/veh	3.2	5.6	5.4	18.5	11.1	12.2	0.0	0.0	0.1	18.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	9.5	9.7	7.3	15.8	14.4	0.6	0.0	2.2	15.5	0.0	1.7
LnGrp Delay(d),s/veh	49.0	35.6	35.5	61.3	40.0	41.1	21.6	0.0	20.3	53.1	0.0	19.9
LnGrp LOS	D	D	D	E	D	D	C		C	D		B
Approach Vol, veh/h		835			1256			154			549	
Approach Delay, s/veh		37.4			44.2			20.6			47.6	
Approach LOS		D			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.9	38.0		45.0	12.8	44.1		45.0				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	17.5	32.0		40.1	18.2	31.4		40.1				
Max Q Clear Time (g_c+I1), s	14.4	19.6		42.1	8.4	30.4		7.4				
Green Ext Time (p_c), s	0.1	11.6		0.0	0.1	1.0		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			41.5									
HCM 2010 LOS			D									
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	928	38	12	907	46	36	37	24	86	34	266
Future Volume (veh/h)	201	928	38	12	907	46	36	37	24	86	34	266
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	212	977	40	13	955	48	38	39	25	91	36	280
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1873	77	42	1402	70	48	185	119	116	376	337
Arrive On Green	0.14	0.54	0.54	0.01	0.41	0.41	0.03	0.17	0.17	0.07	0.21	0.21
Sat Flow, veh/h	1774	3465	142	3442	3430	172	1774	1062	681	1774	1770	1583
Grp Volume(v), veh/h	212	499	518	13	493	510	38	0	64	91	36	280
Grp Sat Flow(s),veh/h/ln	1774	1770	1838	1721	1770	1832	1774	0	1743	1774	1770	1583
Q Serve(g_s), s	10.4	16.1	16.1	0.3	20.4	20.4	1.9	0.0	2.8	4.5	1.5	15.1
Cycle Q Clear(g_c), s	10.4	16.1	16.1	0.3	20.4	20.4	1.9	0.0	2.8	4.5	1.5	15.1
Prop In Lane	1.00		0.08	1.00		0.09	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	256	957	993	42	723	749	48	0	304	116	376	337
V/C Ratio(X)	0.83	0.52	0.52	0.31	0.68	0.68	0.78	0.00	0.21	0.78	0.10	0.83
Avail Cap(c_a), veh/h	496	957	993	220	723	749	169	0	683	149	673	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	13.1	13.1	43.7	21.6	21.6	43.2	0.0	31.6	41.1	28.3	33.6
Incr Delay (d2), s/veh	8.1	2.0	2.0	4.8	2.2	2.1	27.4	0.0	0.3	19.8	0.1	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	8.3	8.6	0.2	10.3	10.6	1.3	0.0	1.4	2.8	0.7	7.1
LnGrp Delay(d),s/veh	45.2	15.2	15.1	48.5	23.8	23.7	70.6	0.0	31.9	60.9	28.4	39.0
LnGrp LOS	D	B	B	D	C	C	E		C	E	C	D
Approach Vol, veh/h		1229			1016			102			407	
Approach Delay, s/veh		20.3			24.1			46.3			42.9	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.1	54.3	5.9	24.0	16.9	42.5	9.4	20.6				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.7	48.3	8.5	34.0	25.0	29.0	7.5	35.0				
Max Q Clear Time (g_c+I1), s	2.3	18.1	3.9	17.1	12.4	22.4	6.5	4.8				
Green Ext Time (p_c), s	0.0	8.6	0.0	1.9	0.6	4.0	0.0	2.2				
Intersection Summary												
HCM 2010 Ctrl Delay			26.0									
HCM 2010 LOS			C									
























HCM 2010 Signalized Intersection Summary
 604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	911	21	25	841	127	22	65	32	95	50	113
Future Volume (veh/h)	115	911	21	25	841	127	22	65	32	95	50	113
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	121	959	22	26	885	134	23	68	34	100	53	119
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1800	41	51	1593	713	46	234	199	177	77	173
Arrive On Green	0.09	0.51	0.51	0.03	0.45	0.45	0.03	0.13	0.13	0.05	0.15	0.15
Sat Flow, veh/h	1774	3537	81	1774	3539	1583	1774	1863	1583	3442	512	1149
Grp Volume(v), veh/h	121	480	501	26	885	134	23	68	34	100	0	172
Grp Sat Flow(s),veh/h/ln	1774	1770	1848	1774	1770	1583	1774	1863	1583	1721	0	1660
Q Serve(g_s), s	4.3	11.8	11.8	0.9	11.9	3.3	0.8	2.1	1.2	1.8	0.0	6.4
Cycle Q Clear(g_c), s	4.3	11.8	11.8	0.9	11.9	3.3	0.8	2.1	1.2	1.8	0.0	6.4
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	156	900	941	51	1593	713	46	234	199	177	0	251
V/C Ratio(X)	0.78	0.53	0.53	0.51	0.56	0.19	0.50	0.29	0.17	0.56	0.00	0.69
Avail Cap(c_a), veh/h	271	900	941	164	1593	713	181	890	757	345	0	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.0	10.7	10.7	31.0	13.1	10.7	31.2	25.7	25.3	30.0	0.0	26.1
Incr Delay (d2), s/veh	8.1	2.3	2.2	7.6	0.3	0.0	8.0	0.7	0.4	2.8	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	6.3	6.6	0.6	5.8	1.4	0.5	1.1	0.6	0.9	0.0	3.1
LnGrp Delay(d),s/veh	37.1	13.0	12.9	38.6	13.3	10.8	39.1	26.4	25.7	32.8	0.0	29.4
LnGrp LOS	D	B	B	D	B	B	D	C	C	C		C
Approach Vol, veh/h		1102			1045			125			272	
Approach Delay, s/veh		15.6			13.6			28.6			30.7	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.9	39.0	5.2	14.8	9.7	35.2	6.8	13.1				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	33.0	6.6	30.9	9.9	29.1	6.5	31.0				
Max Q Clear Time (g_c+I1), s	2.9	13.8	2.8	8.4	6.3	13.9	3.8	4.1				
Green Ext Time (p_c), s	0.0	5.6	0.0	1.4	0.1	5.2	0.1	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay			17.0									
HCM 2010 LOS			B									

























HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	732	221	160	690	314	203	251	102	295	158	41
Future Volume (veh/h)	96	732	221	160	690	314	203	251	102	295	158	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	101	771	233	168	726	331	214	264	107	311	166	43
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	1640	491	224	2104	655	205	597	267	268	367	93
Arrive On Green	0.07	0.42	0.42	0.06	0.41	0.41	0.12	0.17	0.17	0.08	0.13	0.13
Sat Flow, veh/h	1774	3885	1163	3442	5085	1583	1774	3539	1583	3442	2801	707
Grp Volume(v), veh/h	101	672	332	168	726	331	214	264	107	311	103	106
Grp Sat Flow(s),veh/h/ln	1774	1695	1658	1721	1695	1583	1774	1770	1583	1721	1770	1738
Q Serve(g_s), s	4.3	11.0	11.1	3.7	7.5	11.9	8.9	5.2	4.6	6.0	4.1	4.3
Cycle Q Clear(g_c), s	4.3	11.0	11.1	3.7	7.5	11.9	8.9	5.2	4.6	6.0	4.1	4.3
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	130	1431	700	224	2104	655	205	597	267	268	232	228
V/C Ratio(X)	0.78	0.47	0.47	0.75	0.35	0.51	1.04	0.44	0.40	1.16	0.45	0.46
Avail Cap(c_a), veh/h	228	1431	700	224	2104	655	205	1655	740	268	761	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	16.0	16.1	35.4	15.4	16.7	34.0	28.7	28.5	35.5	30.9	30.9
Incr Delay (d2), s/veh	11.2	1.1	2.3	13.7	0.5	2.8	74.7	0.6	1.2	105.1	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	5.4	5.5	2.2	3.6	5.7	8.6	2.6	2.1	6.7	2.1	2.2
LnGrp Delay(d),s/veh	46.3	17.1	18.4	49.1	15.9	19.5	108.8	29.4	29.7	140.6	32.5	32.7
LnGrp LOS	D	B	B	D	B	B	F	C	C	F	C	C
Approach Vol, veh/h		1105			1225			585			520	
Approach Delay, s/veh		20.2			21.4			58.5			97.2	
Approach LOS		C			C			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	12.9	15.6	10.1	38.4	10.0	18.5				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.9	33.1	9.9	27.6	6.0	36.0				
Max Q Clear Time (g_c+I1), s	5.7	13.1	10.9	6.3	6.3	13.9	8.0	7.2				
Green Ext Time (p_c), s	0.0	7.8	0.0	3.8	0.1	6.6	0.0	3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			38.8									
HCM 2010 LOS			D									







HCM 2010 Signalized Intersection Summary
 606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1331	28	163	1010	92	23	222	248	105	339	119
Future Volume (veh/h)	97	1331	28	163	1010	92	23	222	248	105	339	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	102	1401	29	172	1063	97	24	234	261	111	357	125
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	2003	624	226	2113	658	76	1187	531	162	1275	571
Arrive On Green	0.04	0.39	0.39	0.07	0.42	0.42	0.02	0.34	0.34	0.05	0.36	0.36
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	102	1401	29	172	1063	97	24	234	261	111	357	125
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	3.9	30.9	1.5	6.6	20.7	5.1	0.9	6.3	17.6	4.3	9.6	7.3
Cycle Q Clear(g_c), s	3.9	30.9	1.5	6.6	20.7	5.1	0.9	6.3	17.6	4.3	9.6	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	2003	624	226	2113	658	76	1187	531	162	1275	571
V/C Ratio(X)	0.67	0.70	0.05	0.76	0.50	0.15	0.32	0.20	0.49	0.69	0.28	0.22
Avail Cap(c_a), veh/h	555	2090	651	542	2113	658	131	1187	531	329	1275	571
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.1	34.0	25.1	61.6	29.0	24.4	64.5	31.7	35.4	62.9	30.5	29.8
Incr Delay (d2), s/veh	1.9	1.3	0.1	2.0	0.4	0.2	2.4	0.4	3.2	5.1	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	14.6	0.7	3.2	9.7	2.3	0.5	3.1	8.2	2.1	4.8	3.4
LnGrp Delay(d),s/veh	65.1	35.3	25.1	63.6	29.3	24.6	66.9	32.1	38.7	68.0	31.0	30.7
LnGrp LOS	E	D	C	E	C	C	E	C	D	E	C	C
Approach Vol, veh/h		1532			1332			519			593	
Approach Delay, s/veh		37.1			33.4			37.0			37.9	
Approach LOS		D			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	51.0	13.2	59.2	7.4	54.3	10.3	62.1				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	12.8	39.8	21.1	55.1	5.1	* 48	21.6	* 55				
Max Q Clear Time (g_c+I1), s	6.3	19.6	8.6	32.9	2.9	11.6	5.9	22.7				
Green Ext Time (p_c), s	0.1	9.8	0.2	19.9	0.0	13.0	0.1	29.1				
Intersection Summary												
HCM 2010 Ctrl Delay			36.0									
HCM 2010 LOS			D									
Notes												













HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte

02/15/2018

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵		
Traffic Volume (veh/h)	1723	14	104	1309	17	102		
Future Volume (veh/h)	1723	14	104	1309	17	102		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1814	15	109	1378	18	107		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3481	29	138	4038	154	138		
Arrive On Green	0.67	0.67	0.08	0.79	0.09	0.09		
Sat Flow, veh/h	5370	43	1774	5253	1774	1583		
Grp Volume(v), veh/h	1182	647	109	1378	18	107		
Grp Sat Flow(s),veh/h/ln	1695	1855	1774	1695	1774	1583		
Q Serve(g_s), s	15.0	15.0	5.1	6.5	0.8	5.6		
Cycle Q Clear(g_c), s	15.0	15.0	5.1	6.5	0.8	5.6		
Prop In Lane		0.02	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2269	1241	138	4038	154	138		
V/C Ratio(X)	0.52	0.52	0.79	0.34	0.12	0.78		
Avail Cap(c_a), veh/h	2269	1241	194	4038	679	606		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.1	7.1	38.5	2.5	35.7	37.9		
Incr Delay (d2), s/veh	0.9	1.6	8.6	0.2	0.1	3.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.2	8.1	2.8	3.0	0.4	2.6		
LnGrp Delay(d),s/veh	8.0	8.7	47.1	2.7	35.9	41.5		
LnGrp LOS	A	A	D	A	D	D		
Approach Vol, veh/h	1829			1487	125			
Approach Delay, s/veh	8.2			6.0	40.7			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.6	62.9				73.5		11.4
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	9.3	54.1				67.4		32.5
Max Q Clear Time (g_c+I1), s	7.1	17.0				8.5		7.6
Green Ext Time (p_c), s	0.0	36.2				56.8		0.2
Intersection Summary								
HCM 2010 Ctrl Delay			8.4					
HCM 2010 LOS			A					



























HCM 2010 Signalized Intersection Summary
608: I-15 SB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↖↖		↗↗
Traffic Volume (veh/h)	0	1079	717	180	1352	0	0	0	0	564	0	64
Future Volume (veh/h)	0	1079	717	180	1352	0	0	0	0	564	0	64
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1136	755	189	1423	0				594	0	67
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	3449	1500	261	3388	0				681	0	551
Arrive On Green	0.00	0.54	0.54	0.08	0.67	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1136	755	189	1423	0				594	0	67
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	9.9	17.2	5.4	13.0	0.0				16.7	0.0	2.0
Cycle Q Clear(g_c), s	0.0	9.9	17.2	5.4	13.0	0.0				16.7	0.0	2.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3449	1500	261	3388	0				681	0	551
V/C Ratio(X)	0.00	0.33	0.50	0.72	0.42	0.00				0.87	0.00	0.12
Avail Cap(c_a), veh/h	0	3449	1500	647	3388	0				1029	0	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.83	0.83	0.82	0.82	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.0	14.6	45.2	7.7	0.0				38.9	0.0	33.0
Incr Delay (d2), s/veh	0.0	0.2	1.0	1.2	0.3	0.0				3.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.4	6.7	2.6	6.0	0.0				8.3	0.0	0.8
LnGrp Delay(d),s/veh	0.0	13.2	15.6	46.3	8.0	0.0				42.7	0.0	33.0
LnGrp LOS		B	B	D	A					D		C
Approach Vol, veh/h		1891			1612						661	
Approach Delay, s/veh		14.2			12.5						41.7	
Approach LOS		B			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.8	61.3		25.9		74.1						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 19	32.5		29.9		56.5						
Max Q Clear Time (g_c+I1), s	7.4	19.2		18.7		15.0						
Green Ext Time (p_c), s	0.2	10.3		1.0		21.6						
Intersection Summary												
HCM 2010 Ctrl Delay			17.9									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary
 609: I-15 NB Ramps & Camino Del Norte




















02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  	 	 		 			
Traffic Volume (veh/h)	118	1523	0	0	754	568	761	0	180	0	0	0
Future Volume (veh/h)	118	1523	0	0	754	568	761	0	180	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	124	1603	0	0	794	598	801	0	189			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	184	3063	0	0	3184	1385	900	0	729			
Arrive On Green	0.11	1.00	0.00	0.00	0.50	0.50	0.26	0.00	0.26			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	124	1603	0	0	794	598	801	0	189			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	3.5	0.0	0.0	0.0	7.1	13.7	22.4	0.0	5.4			
Cycle Q Clear(g_c), s	3.5	0.0	0.0	0.0	7.1	13.7	22.4	0.0	5.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	184	3063	0	0	3184	1385	900	0	729			
V/C Ratio(X)	0.67	0.52	0.00	0.00	0.25	0.43	0.89	0.00	0.26			
Avail Cap(c_a), veh/h	303	3063	0	0	3184	1385	1304	0	1056			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.85	0.85	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	43.8	0.0	0.0	0.0	14.4	16.1	35.5	0.0	29.2			
Incr Delay (d2), s/veh	1.4	0.5	0.0	0.0	0.2	1.0	4.3	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.7	0.2	0.0	0.0	3.2	5.4	11.2	0.0	2.1			
LnGrp Delay(d),s/veh	45.2	0.5	0.0	0.0	14.6	17.1	39.8	0.0	29.3			
LnGrp LOS	D	A			B	B	D		C			
Approach Vol, veh/h		1727			1392			990				
Approach Delay, s/veh		3.8			15.7			37.8				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		67.7			10.5	57.2		32.3				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		48.5			* 8.8	34.5		37.9				
Max Q Clear Time (g_c+I1), s		2.0			5.5	15.7		24.4				
Green Ext Time (p_c), s		19.7			0.1	12.3		1.8				
Intersection Summary												
HCM 2010 Ctrl Delay				16.0								
HCM 2010 LOS				B								
Notes												

HCM 2010 Signalized Intersection Summary

610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	26	16	39	13	175	26	306	75	165	288	65
Future Volume (veh/h)	77	26	16	39	13	175	26	306	75	165	288	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	81	27	17	41	14	184	27	322	79	174	303	68
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	476	154	84	597	190	726	285	454	110	273	443	98
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.16	0.16	0.16	0.15	0.15	0.15
Sat Flow, veh/h	830	336	184	1082	414	1583	1774	2828	684	1774	2882	638
Grp Volume(v), veh/h	125	0	0	55	0	184	27	200	201	174	184	187
Grp Sat Flow(s),veh/h/ln	1350	0	0	1495	0	1583	1774	1770	1742	1774	1770	1750
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	4.5	0.8	6.7	6.9	5.8	6.2	6.3
Cycle Q Clear(g_c), s	3.1	0.0	0.0	1.0	0.0	4.5	0.8	6.7	6.9	5.8	6.2	6.3
Prop In Lane	0.65		0.14	0.75		1.00	1.00		0.39	1.00		0.36
Lane Grp Cap(c), veh/h	714	0	0	786	0	726	285	284	280	273	272	269
V/C Ratio(X)	0.18	0.00	0.00	0.07	0.00	0.25	0.09	0.70	0.72	0.64	0.68	0.69
Avail Cap(c_a), veh/h	714	0	0	786	0	726	794	792	780	825	823	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	0.0	0.0	9.4	0.0	10.4	22.4	24.8	24.9	24.8	25.0	25.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.1	0.1	1.2	1.3	0.9	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	0.5	0.0	2.0	0.4	3.4	3.4	2.9	3.1	3.1
LnGrp Delay(d),s/veh	10.5	0.0	0.0	9.5	0.0	10.4	22.4	26.0	26.2	25.8	26.1	26.3
LnGrp LOS	B			A		B	C	C	C	C	C	C
Approach Vol, veh/h		125			239			428			545	
Approach Delay, s/veh		10.5			10.2			25.9			26.1	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.7		14.2		33.7		14.7				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.7		29.1		28.7		28.0				
Max Q Clear Time (g_c+I1), s		5.1		8.3		6.5		8.9				
Green Ext Time (p_c), s		0.8		1.3		0.8		1.2				
Intersection Summary												
HCM 2010 Ctrl Delay				21.7								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary

601: 4 Gee Rd & Project Driveway






















02/15/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	1	0	108	1	0	245		
Future Volume (veh/h)	1	0	108	1	0	245		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	1	0	114	1	0	258		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1475	13	0	1490		
Arrive On Green	0.00	0.00	0.80	0.80	0.00	0.80		
Sat Flow, veh/h	0	0	1844	16	0	1863		
Grp Volume(v), veh/h	0	0	0	115	0	258		
Grp Sat Flow(s),veh/h/ln	0	0	0	1860	0	1863		
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.7		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.3	0.0	0.7		
Prop In Lane	0.00	0.00		0.01	0.00			
Lane Grp Cap(c), veh/h	0	0	0	1488	0	1490		
V/C Ratio(X)	0.00	0.00	0.00	0.08	0.00	0.17		
Avail Cap(c_a), veh/h	0	0	0	1488	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.5		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.6	0.0	0.8		
LnGrp LOS				A		A		
Approach Vol, veh/h	0		115			258		
Approach Delay, s/veh	0.0		0.6			0.8		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.3		0.0		2.7		
Green Ext Time (p_c), s		1.8		0.0		1.8		
Intersection Summary								
HCM 2010 Ctrl Delay			0.7					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	1101	50	162	1021	36	112	52	88	62	56	121
Future Volume (veh/h)	52	1101	50	162	1021	36	112	52	88	62	56	121
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	55	1159	53	171	1075	38	118	55	93	65	59	127
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	1647	75	206	1888	67	242	144	243	275	122	262
Arrive On Green	0.05	0.48	0.48	0.12	0.54	0.54	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3447	158	1774	3487	123	1193	623	1054	1235	527	1135
Grp Volume(v), veh/h	55	595	617	171	545	568	118	0	148	65	0	186
Grp Sat Flow(s),veh/h/ln	1774	1770	1835	1774	1770	1841	1193	0	1677	1235	0	1662
Q Serve(g_s), s	2.7	23.2	23.3	8.3	18.0	18.0	8.4	0.0	6.5	4.1	0.0	8.5
Cycle Q Clear(g_c), s	2.7	23.2	23.3	8.3	18.0	18.0	16.9	0.0	6.5	10.7	0.0	8.5
Prop In Lane	1.00		0.09	1.00		0.07	1.00		0.63	1.00		0.68
Lane Grp Cap(c), veh/h	95	845	877	206	958	997	242	0	387	275	0	384
V/C Ratio(X)	0.58	0.70	0.70	0.83	0.57	0.57	0.49	0.00	0.38	0.24	0.00	0.48
Avail Cap(c_a), veh/h	367	845	877	293	958	997	415	0	631	455	0	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.7	18.1	18.1	38.0	13.4	13.4	36.6	0.0	28.5	33.0	0.0	29.3
Incr Delay (d2), s/veh	2.1	4.9	4.7	9.0	2.5	2.4	0.6	0.0	0.2	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	12.4	12.8	4.6	9.3	9.6	2.8	0.0	3.1	1.4	0.0	4.0
LnGrp Delay(d),s/veh	42.7	22.9	22.8	47.0	15.8	15.7	37.1	0.0	28.7	33.2	0.0	29.6
LnGrp LOS	D	C	C	D	B	B	D		C	C		C
Approach Vol, veh/h		1267			1284			266			251	
Approach Delay, s/veh		23.7			19.9			32.5			30.5	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.7	48.0		25.2	9.1	53.6		25.2				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	14.5	42.0		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	10.3	25.3		12.7	4.7	20.0		18.9				
Green Ext Time (p_c), s	0.1	16.3		1.6	0.0	18.0		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				23.5								
HCM 2010 LOS				C								
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	851	52	69	691	22	79	151	82	69	267	462
Future Volume (veh/h)	293	851	52	69	691	22	79	151	82	69	267	462
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	308	896	55	73	727	23	83	159	86	73	281	486
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	340	1470	90	120	971	31	105	355	192	93	541	484
Arrive On Green	0.19	0.43	0.43	0.03	0.28	0.28	0.06	0.31	0.31	0.05	0.31	0.31
Sat Flow, veh/h	1774	3388	208	3442	3502	111	1774	1138	616	1774	1770	1583
Grp Volume(v), veh/h	308	468	483	73	367	383	83	0	245	73	281	486
Grp Sat Flow(s),veh/h/ln	1774	1770	1826	1721	1770	1843	1774	0	1754	1774	1770	1583
Q Serve(g_s), s	18.9	22.7	22.7	2.3	21.1	21.1	5.1	0.0	12.4	4.5	14.6	34.0
Cycle Q Clear(g_c), s	18.9	22.7	22.7	2.3	21.1	21.1	5.1	0.0	12.4	4.5	14.6	34.0
Prop In Lane	1.00		0.11	1.00		0.06	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	340	768	792	120	491	511	105	0	548	93	541	484
V/C Ratio(X)	0.91	0.61	0.61	0.61	0.75	0.75	0.79	0.00	0.45	0.78	0.52	1.00
Avail Cap(c_a), veh/h	398	768	792	176	491	511	135	0	552	120	541	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	24.2	24.2	52.9	36.7	36.7	51.7	0.0	30.6	52.1	31.9	38.7
Incr Delay (d2), s/veh	22.2	3.6	3.5	5.8	5.6	5.4	22.0	0.0	0.6	23.7	0.9	42.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	11.8	12.2	1.2	11.1	11.5	3.2	0.0	6.1	2.8	7.2	20.4
LnGrp Delay(d),s/veh	66.2	27.8	27.7	58.8	42.3	42.1	73.7	0.0	31.2	75.8	32.8	80.8
LnGrp LOS	E	C	C	E	D	D	E		C	E	C	F
Approach Vol, veh/h		1259			823			328			840	
Approach Delay, s/veh		37.2			43.7			41.9			64.3	
Approach LOS		D			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.9	54.3	10.1	39.0	25.3	36.9	9.4	39.8				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.7	48.3	8.5	34.0	25.0	29.0	7.5	35.0				
Max Q Clear Time (g_c+I1), s	4.3	24.7	7.1	36.0	20.9	23.1	6.5	14.4				
Green Ext Time (p_c), s	0.0	6.4	0.0	0.0	0.4	3.2	0.0	5.9				
Intersection Summary												
HCM 2010 Ctrl Delay			46.3									
HCM 2010 LOS			D									























HCM 2010 Signalized Intersection Summary
 604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	899	34	37	694	106	43	99	76	116	99	73
Future Volume (veh/h)	86	899	34	37	694	106	43	99	76	116	99	73
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	91	946	36	39	731	112	45	104	80	122	104	77
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1702	65	68	1611	721	75	259	220	202	155	114
Arrive On Green	0.07	0.49	0.49	0.04	0.46	0.46	0.04	0.14	0.14	0.06	0.16	0.16
Sat Flow, veh/h	1774	3477	132	1774	3539	1583	1774	1863	1583	3442	996	737
Grp Volume(v), veh/h	91	482	500	39	731	112	45	104	80	122	0	181
Grp Sat Flow(s),veh/h/ln	1774	1770	1839	1774	1770	1583	1774	1863	1583	1721	0	1733
Q Serve(g_s), s	3.4	12.9	12.9	1.5	9.6	2.8	1.7	3.4	3.1	2.3	0.0	6.6
Cycle Q Clear(g_c), s	3.4	12.9	12.9	1.5	9.6	2.8	1.7	3.4	3.1	2.3	0.0	6.6
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	129	866	901	68	1611	721	75	259	220	202	0	269
V/C Ratio(X)	0.70	0.56	0.56	0.57	0.45	0.16	0.60	0.40	0.36	0.61	0.00	0.67
Avail Cap(c_a), veh/h	263	866	901	158	1611	721	176	857	728	332	0	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.5	12.1	12.1	31.9	12.6	10.8	31.7	26.5	26.3	31.0	0.0	26.9
Incr Delay (d2), s/veh	6.8	2.6	2.5	7.3	0.1	0.0	7.5	1.0	1.0	2.9	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.8	7.0	0.9	4.7	1.2	1.0	1.8	1.4	1.2	0.0	3.4
LnGrp Delay(d),s/veh	37.4	14.6	14.5	39.2	12.7	10.8	39.2	27.5	27.3	33.9	0.0	29.8
LnGrp LOS	D	B	B	D	B	B	D	C	C	C		C
Approach Vol, veh/h		1073			882			229			303	
Approach Delay, s/veh		16.5			13.6			29.7			31.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	39.0	6.3	15.5	8.9	36.7	7.4	14.4				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	33.0	6.7	30.8	10.0	29.0	6.5	31.0				
Max Q Clear Time (g_c+I1), s	3.5	14.9	3.7	8.6	5.4	11.6	4.3	5.4				
Green Ext Time (p_c), s	0.0	4.9	0.0	1.8	0.1	4.8	0.1	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			18.5									
HCM 2010 LOS			B									

























HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	822	173	126	645	155	154	346	249	216	286	26
Future Volume (veh/h)	75	822	173	126	645	155	154	346	249	216	286	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	79	865	182	133	679	163	162	364	262	227	301	27
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	1620	339	202	1960	610	147	862	386	244	762	68
Arrive On Green	0.06	0.38	0.38	0.06	0.39	0.39	0.08	0.24	0.24	0.07	0.23	0.23
Sat Flow, veh/h	1774	4215	882	3442	5085	1583	1774	3539	1583	3442	3288	293
Grp Volume(v), veh/h	79	695	352	133	679	163	162	364	262	227	161	167
Grp Sat Flow(s),veh/h/ln	1774	1695	1707	1721	1695	1583	1774	1770	1583	1721	1770	1811
Q Serve(g_s), s	3.7	13.4	13.5	3.2	8.0	6.0	7.0	7.3	12.7	5.5	6.5	6.6
Cycle Q Clear(g_c), s	3.7	13.4	13.5	3.2	8.0	6.0	7.0	7.3	12.7	5.5	6.5	6.6
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	102	1303	656	202	1960	610	147	862	386	244	410	420
V/C Ratio(X)	0.77	0.53	0.54	0.66	0.35	0.27	1.10	0.42	0.68	0.93	0.39	0.40
Avail Cap(c_a), veh/h	210	1303	656	203	1960	610	147	1507	674	244	732	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	20.2	20.2	39.0	18.4	17.8	38.8	27.0	29.0	39.1	27.5	27.5
Incr Delay (d2), s/veh	13.8	1.6	3.1	7.9	0.5	1.1	104.6	0.4	2.5	38.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.6	6.9	1.7	3.8	2.8	7.7	3.6	5.8	3.9	3.3	3.4
LnGrp Delay(d),s/veh	53.1	21.7	23.3	46.9	18.9	18.9	143.4	27.4	31.5	78.0	28.2	28.2
LnGrp LOS	D	C	C	D	B	B	F	C	C	E	C	C
Approach Vol, veh/h		1126			975			788			555	
Approach Delay, s/veh		24.4			22.7			52.6			48.6	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	11.0	25.1	9.4	39.1	10.0	26.1				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	7.0	35.0	10.0	27.5	6.0	36.0				
Max Q Clear Time (g_c+I1), s	5.2	15.5	9.0	8.6	5.7	10.0	7.5	14.7				
Green Ext Time (p_c), s	0.0	7.0	0.0	6.3	0.1	7.1	0.0	5.9				
Intersection Summary												
HCM 2010 Ctrl Delay				34.3								
HCM 2010 LOS				C								







HCM 2010 Signalized Intersection Summary
606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	392	1216	52	319	1658	857	57	754	474	260	468	309
Future Volume (veh/h)	392	1216	52	319	1658	857	57	754	474	260	468	309
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	413	1280	55	336	1745	902	60	794	499	274	493	325
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	334	2047	637	384	2120	660	105	915	409	297	1113	498
Arrive On Green	0.10	0.40	0.40	0.11	0.42	0.42	0.03	0.26	0.26	0.09	0.31	0.31
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	413	1280	55	336	1745	902	60	794	499	274	493	325
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	14.6	30.2	3.2	14.5	45.8	62.7	2.6	32.2	38.9	11.9	16.7	26.6
Cycle Q Clear(g_c), s	14.6	30.2	3.2	14.5	45.8	62.7	2.6	32.2	38.9	11.9	16.7	26.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	2047	637	384	2120	660	105	915	409	297	1113	498
V/C Ratio(X)	1.24	0.63	0.09	0.88	0.82	1.37	0.57	0.87	1.22	0.92	0.44	0.65
Avail Cap(c_a), veh/h	334	2047	637	501	2120	660	117	915	409	297	1113	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	35.9	27.8	65.8	38.9	43.8	71.9	53.3	55.7	68.2	41.1	44.5
Incr Delay (d2), s/veh	129.4	0.8	0.1	10.9	3.1	174.5	5.3	10.9	118.7	32.4	1.3	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	14.3	1.4	7.5	21.9	59.3	1.3	17.2	30.5	7.0	8.3	12.6
LnGrp Delay(d),s/veh	197.3	36.7	27.9	76.6	42.0	218.4	77.2	64.2	174.5	100.5	42.3	51.0
LnGrp LOS	F	D	C	E	D	F	E	E	F	F	D	D
Approach Vol, veh/h		1748			2983			1353			1092	
Approach Delay, s/veh		74.4			99.2			105.4			59.5	
Approach LOS		E			F			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.4	44.9	21.2	66.9	9.0	53.3	19.0	69.1				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	13.0	38.6	21.9	55.3	5.1	* 47	14.6	* 63				
Max Q Clear Time (g_c+I1), s	13.9	40.9	16.5	32.2	4.6	28.6	16.6	64.7				
Green Ext Time (p_c), s	0.0	0.0	0.3	22.9	0.0	16.5	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			88.3									
HCM 2010 LOS			F									
Notes												

HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte













02/15/2018

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵		
Traffic Volume (veh/h)	1886	51	60	2759	83	165		
Future Volume (veh/h)	1886	51	60	2759	83	165		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1985	54	63	2904	87	174		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3377	92	81	3832	237	211		
Arrive On Green	0.66	0.66	0.05	0.75	0.13	0.13		
Sat Flow, veh/h	5258	138	1774	5253	1774	1583		
Grp Volume(v), veh/h	1321	718	63	2904	87	174		
Grp Sat Flow(s),veh/h/ln	1695	1838	1774	1695	1774	1583		
Q Serve(g_s), s	19.2	19.3	3.1	29.3	4.0	9.6		
Cycle Q Clear(g_c), s	19.2	19.3	3.1	29.3	4.0	9.6		
Prop In Lane		0.08	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2249	1219	81	3832	237	211		
V/C Ratio(X)	0.59	0.59	0.78	0.76	0.37	0.82		
Avail Cap(c_a), veh/h	2249	1219	135	3832	645	575		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	8.3	8.3	42.2	6.3	35.3	37.7		
Incr Delay (d2), s/veh	1.1	2.1	6.0	1.4	0.4	3.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.2	10.3	1.7	14.0	2.0	4.4		
LnGrp Delay(d),s/veh	9.4	10.4	48.2	7.8	35.7	40.8		
LnGrp LOS	A	B	D	A	D	D		
Approach Vol, veh/h	2039			2967	261			
Approach Delay, s/veh	9.8			8.6	39.1			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.1	65.4				73.5		15.9
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	6.8	56.6				67.4		32.5
Max Q Clear Time (g_c+I1), s	5.1	21.3				31.3		11.6
Green Ext Time (p_c), s	0.0	35.2				36.0		0.4
Intersection Summary								
HCM 2010 Ctrl Delay			10.6					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary



















608: I-15 SB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↗↗		↗↗
Traffic Volume (veh/h)	0	956	1137	393	2660	0	0	0	0	1120	0	81
Future Volume (veh/h)	0	956	1137	393	2660	0	0	0	0	1120	0	81
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1006	1197	414	2800	0				1179	0	85
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	2488	1082	463	2835	0				1211	0	980
Arrive On Green	0.00	0.39	0.39	0.13	0.56	0.00				0.35	0.00	0.35
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1006	1197	414	2800	0				1179	0	85
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	17.1	58.2	17.7	81.3	0.0				50.7	0.0	3.1
Cycle Q Clear(g_c), s	0.0	17.1	58.2	17.7	81.3	0.0				50.7	0.0	3.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2488	1082	463	2835	0				1211	0	980
V/C Ratio(X)	0.00	0.40	1.11	0.89	0.99	0.00				0.97	0.00	0.09
Avail Cap(c_a), veh/h	0	2488	1082	594	2835	0				1214	0	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.77	0.77	0.26	0.26	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	33.3	45.9	63.8	32.7	0.0				47.9	0.0	32.5
Incr Delay (d2), s/veh	0.0	0.4	58.8	3.4	6.1	0.0				19.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.6	31.2	8.7	39.5	0.0				27.4	0.0	1.2
LnGrp Delay(d),s/veh	0.0	33.7	104.7	67.3	38.8	0.0				67.6	0.0	32.5
LnGrp LOS		C	F	E	D					E		C
Approach Vol, veh/h		2203			3214						1264	
Approach Delay, s/veh		72.3			42.5						65.2	
Approach LOS		E			D						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	25.4	65.7		58.9		91.1						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 26	52.4		52.9		83.5						
Max Q Clear Time (g_c+I1), s	19.7	60.2		52.7		83.3						
Green Ext Time (p_c), s	0.4	0.0		0.1		0.2						
Intersection Summary												
HCM 2010 Ctrl Delay			56.6									
HCM 2010 LOS			E									
Notes												




















HCM 2010 Signalized Intersection Summary
 609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	1926	0	0	1391	634	1788	0	203	0	0	0
Future Volume (veh/h)	132	1926	0	0	1391	634	1788	0	203	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	139	2027	0	0	1464	667	1882	0	214			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	181	1949	0	0	1897	825	1810	0	1466			
Arrive On Green	0.11	0.77	0.00	0.00	0.30	0.30	0.53	0.00	0.53			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	139	2027	0	0	1464	667	1882	0	214			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	5.9	57.5	0.0	0.0	31.3	33.2	78.9	0.0	5.9			
Cycle Q Clear(g_c), s	5.9	57.5	0.0	0.0	31.3	33.2	78.9	0.0	5.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	181	1949	0	0	1897	825	1810	0	1466			
V/C Ratio(X)	0.77	1.04	0.00	0.00	0.77	0.81	1.04	0.00	0.15			
Avail Cap(c_a), veh/h	197	1949	0	0	1897	825	1810	0	1466			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.62	0.62	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	66.2	17.5	0.0	0.0	48.2	48.9	35.5	0.0	18.3			
Incr Delay (d2), s/veh	8.6	27.6	0.0	0.0	3.1	8.4	32.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.0	30.6	0.0	0.0	14.2	13.7	45.3	0.0	2.3			
LnGrp Delay(d),s/veh	74.8	45.1	0.0	0.0	51.3	57.2	67.8	0.0	18.3			
LnGrp LOS	E	F			D	E	F		B			
Approach Vol, veh/h		2166			2131			2096				
Approach Delay, s/veh		47.0			53.1			62.7				
Approach LOS		D			D			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		65.0			13.1	51.9		85.0				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		57.5			* 8.6	43.7		78.9				
Max Q Clear Time (g_c+I1), s		59.5			7.9	35.2		80.9				
Green Ext Time (p_c), s		0.0			0.0	7.8		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				54.2								
HCM 2010 LOS				D								
Notes												

HCM 2010 Signalized Intersection Summary
 610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	35	140	46	24	213	70	380	86	170	363	64
Future Volume (veh/h)	134	35	140	46	24	213	70	380	86	170	363	64
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	141	37	147	48	25	224	74	400	91	179	382	67
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	97	271	444	214	679	329	533	120	308	524	91
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.19	0.19	0.19	0.17	0.17	0.17
Sat Flow, veh/h	539	227	633	827	498	1583	1774	2871	647	1774	3015	524
Grp Volume(v), veh/h	325	0	0	73	0	224	74	245	246	179	223	226
Grp Sat Flow(s),veh/h/ln	1399	0	0	1325	0	1583	1774	1770	1749	1774	1770	1770
Q Serve(g_s), s	8.5	0.0	0.0	0.0	0.0	6.3	2.4	8.8	8.9	6.2	8.0	8.1
Cycle Q Clear(g_c), s	11.1	0.0	0.0	1.9	0.0	6.3	2.4	8.8	8.9	6.2	8.0	8.1
Prop In Lane	0.43		0.45	0.66		1.00	1.00		0.37	1.00		0.30
Lane Grp Cap(c), veh/h	677	0	0	658	0	679	329	329	325	308	307	307
V/C Ratio(X)	0.48	0.00	0.00	0.11	0.00	0.33	0.22	0.75	0.76	0.58	0.73	0.74
Avail Cap(c_a), veh/h	677	0	0	658	0	679	740	738	729	767	765	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	0.0	11.4	0.0	12.7	23.2	25.8	25.9	25.5	26.2	26.3
Incr Delay (d2), s/veh	2.4	0.0	0.0	0.0	0.0	0.1	0.1	1.3	1.4	0.6	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	0.0	0.8	0.0	2.8	1.2	4.4	4.4	3.1	4.0	4.1
LnGrp Delay(d),s/veh	16.3	0.0	0.0	11.4	0.0	12.8	23.3	27.1	27.3	26.1	27.4	27.6
LnGrp LOS	B			B		B	C	C	C	C	C	C
Approach Vol, veh/h		325			297			565			628	
Approach Delay, s/veh		16.3			12.5			26.7			27.1	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.8		16.3		33.8		17.1				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.8		29.0		28.8		28.0				
Max Q Clear Time (g_c+I1), s		13.1		10.1		8.3		10.9				
Green Ext Time (p_c), s		1.7		1.5		1.8		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				22.7								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary

601: 4 Gee Rd & Project Driveway





















02/15/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	9	0	108	13	0	245		
Future Volume (veh/h)	9	0	108	13	0	245		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	9	0	114	14	0	258		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1302	160	0	1490		
Arrive On Green	0.00	0.00	0.80	0.80	0.00	0.80		
Sat Flow, veh/h	0	0	1628	200	0	1863		
Grp Volume(v), veh/h	0	0	0	128	0	258		
Grp Sat Flow(s),veh/h/ln	0	0	0	1827	0	1863		
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.7		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.3	0.0	0.7		
Prop In Lane	0.00	0.00		0.11	0.00			
Lane Grp Cap(c), veh/h	0	0	0	1462	0	1490		
V/C Ratio(X)	0.00	0.00	0.00	0.09	0.00	0.17		
Avail Cap(c_a), veh/h	0	0	0	1462	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.5		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.6	0.0	0.8		
LnGrp LOS				A		A		
Approach Vol, veh/h	0		128			258		
Approach Delay, s/veh	0.0		0.6			0.8		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.3		0.0		2.7		
Green Ext Time (p_c), s		1.9		0.0		1.9		
Intersection Summary								
HCM 2010 Ctrl Delay			0.7					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	1101	50	162	1021	47	112	52	88	69	56	122
Future Volume (veh/h)	53	1101	50	162	1021	47	112	52	88	69	56	122
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	56	1159	53	171	1075	49	118	55	93	73	59	128
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	1647	75	206	1866	85	242	144	244	276	121	264
Arrive On Green	0.05	0.48	0.48	0.12	0.54	0.54	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3447	158	1774	3448	157	1192	623	1054	1235	524	1138
Grp Volume(v), veh/h	56	595	617	171	552	572	118	0	148	73	0	187
Grp Sat Flow(s),veh/h/ln	1774	1770	1835	1774	1770	1835	1192	0	1677	1235	0	1662
Q Serve(g_s), s	2.7	23.3	23.4	8.3	18.4	18.4	8.4	0.0	6.6	4.7	0.0	8.6
Cycle Q Clear(g_c), s	2.7	23.3	23.4	8.3	18.4	18.4	17.0	0.0	6.6	11.2	0.0	8.6
Prop In Lane	1.00		0.09	1.00		0.09	1.00		0.63	1.00		0.68
Lane Grp Cap(c), veh/h	96	846	877	206	958	993	242	0	388	276	0	385
V/C Ratio(X)	0.59	0.70	0.70	0.83	0.58	0.58	0.49	0.00	0.38	0.26	0.00	0.49
Avail Cap(c_a), veh/h	366	846	877	287	958	993	412	0	629	453	0	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.8	18.1	18.1	38.2	13.5	13.5	36.7	0.0	28.6	33.3	0.0	29.4
Incr Delay (d2), s/veh	2.1	4.9	4.7	9.7	2.5	2.4	0.6	0.0	0.2	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	12.5	13.0	4.6	9.6	9.9	2.8	0.0	3.1	1.6	0.0	4.0
LnGrp Delay(d),s/veh	42.9	23.0	22.8	47.9	16.0	15.9	37.3	0.0	28.8	33.5	0.0	29.7
LnGrp LOS	D	C	C	D	B	B	D		C	C		C
Approach Vol, veh/h		1268			1295			266			260	
Approach Delay, s/veh		23.8			20.2			32.6			30.8	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.7	48.2		25.4	9.2	53.8		25.4				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	14.3	42.2		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	10.3	25.4		13.2	4.7	20.4		19.0				
Green Ext Time (p_c), s	0.1	16.4		1.6	0.0	17.6		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				23.6								
HCM 2010 LOS				C								
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	294	857	52	69	700	22	79	151	82	69	267	463
Future Volume (veh/h)	294	857	52	69	700	22	79	151	82	69	267	463
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	309	902	55	73	737	23	83	159	86	73	281	487
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	1469	90	120	968	30	105	356	192	93	541	484
Arrive On Green	0.19	0.43	0.43	0.04	0.28	0.28	0.06	0.31	0.31	0.05	0.31	0.31
Sat Flow, veh/h	1774	3389	207	3442	3504	109	1774	1138	616	1774	1770	1583
Grp Volume(v), veh/h	309	471	486	73	372	388	83	0	245	73	281	487
Grp Sat Flow(s),veh/h/ln	1774	1770	1826	1721	1770	1843	1774	0	1754	1774	1770	1583
Q Serve(g_s), s	18.9	22.8	22.8	2.3	21.4	21.4	5.1	0.0	12.4	4.5	14.6	34.0
Cycle Q Clear(g_c), s	18.9	22.8	22.8	2.3	21.4	21.4	5.1	0.0	12.4	4.5	14.6	34.0
Prop In Lane	1.00		0.11	1.00		0.06	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	341	767	792	120	489	509	105	0	548	93	541	484
V/C Ratio(X)	0.91	0.61	0.61	0.61	0.76	0.76	0.79	0.00	0.45	0.78	0.52	1.01
Avail Cap(c_a), veh/h	399	767	792	180	489	509	136	0	552	120	541	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	24.3	24.3	52.9	36.9	36.9	51.6	0.0	30.5	52.0	31.9	38.6
Incr Delay (d2), s/veh	22.2	3.7	3.5	5.8	6.2	6.0	22.0	0.0	0.6	23.6	0.9	42.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	11.9	12.3	1.2	11.3	11.7	3.2	0.0	6.1	2.8	7.2	20.5
LnGrp Delay(d),s/veh	66.1	28.0	27.9	58.7	43.1	42.9	73.6	0.0	31.1	75.7	32.7	81.0
LnGrp LOS	E	C	C	E	D	D	E		C	E	C	F
Approach Vol, veh/h		1266			833			328			841	
Approach Delay, s/veh		37.2			44.4			41.9			64.4	
Approach LOS		D			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.9	54.2	10.1	39.0	25.4	36.7	9.3	39.8				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.8	48.2	8.5	34.0	25.0	29.0	7.5	35.0				
Max Q Clear Time (g_c+I1), s	4.3	24.8	7.1	36.0	20.9	23.4	6.5	14.4				
Green Ext Time (p_c), s	0.0	6.4	0.0	0.0	0.4	3.1	0.0	6.0				
Intersection Summary												
HCM 2010 Ctrl Delay			46.5									
HCM 2010 LOS			D									
























HCM 2010 Signalized Intersection Summary
 604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	905	34	37	703	106	43	99	76	116	99	73
Future Volume (veh/h)	86	905	34	37	703	106	43	99	76	116	99	73
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	91	953	36	39	740	112	45	104	80	122	104	77
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1703	64	68	1611	721	75	259	220	202	155	114
Arrive On Green	0.07	0.49	0.49	0.04	0.46	0.46	0.04	0.14	0.14	0.06	0.16	0.16
Sat Flow, veh/h	1774	3478	131	1774	3539	1583	1774	1863	1583	3442	996	737
Grp Volume(v), veh/h	91	485	504	39	740	112	45	104	80	122	0	181
Grp Sat Flow(s),veh/h/ln	1774	1770	1840	1774	1770	1583	1774	1863	1583	1721	0	1733
Q Serve(g_s), s	3.4	13.0	13.0	1.5	9.7	2.8	1.7	3.4	3.1	2.3	0.0	6.6
Cycle Q Clear(g_c), s	3.4	13.0	13.0	1.5	9.7	2.8	1.7	3.4	3.1	2.3	0.0	6.6
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	129	866	901	68	1611	721	75	259	220	202	0	269
V/C Ratio(X)	0.70	0.56	0.56	0.57	0.46	0.16	0.60	0.40	0.36	0.61	0.00	0.67
Avail Cap(c_a), veh/h	237	866	901	158	1611	721	176	857	728	332	0	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.5	12.1	12.1	31.9	12.6	10.8	31.7	26.5	26.3	31.0	0.0	26.9
Incr Delay (d2), s/veh	6.8	2.6	2.5	7.3	0.1	0.0	7.5	1.0	1.0	2.9	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.0	7.2	0.9	4.7	1.2	1.0	1.8	1.4	1.2	0.0	3.4
LnGrp Delay(d),s/veh	37.4	14.7	14.6	39.2	12.7	10.8	39.2	27.5	27.3	33.9	0.0	29.8
LnGrp LOS	D	B	B	D	B	B	D	C	C	C		C
Approach Vol, veh/h		1080			891			229			303	
Approach Delay, s/veh		16.6			13.6			29.7			31.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	39.0	6.3	15.5	8.9	36.7	7.4	14.4				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	33.0	6.7	30.8	9.0	30.0	6.5	31.0				
Max Q Clear Time (g_c+I1), s	3.5	15.0	3.7	8.6	5.4	11.7	4.3	5.4				
Green Ext Time (p_c), s	0.0	4.9	0.0	1.8	0.1	4.9	0.1	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			18.5									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	826	175	126	651	155	157	346	249	216	286	26
Future Volume (veh/h)	75	826	175	126	651	155	157	346	249	216	286	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	79	869	184	133	685	163	165	364	262	227	301	27
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	1618	341	202	1960	610	147	862	386	244	762	68
Arrive On Green	0.06	0.38	0.38	0.06	0.39	0.39	0.08	0.24	0.24	0.07	0.23	0.23
Sat Flow, veh/h	1774	4210	887	3442	5085	1583	1774	3539	1583	3442	3288	293
Grp Volume(v), veh/h	79	699	354	133	685	163	165	364	262	227	161	167
Grp Sat Flow(s),veh/h/ln	1774	1695	1706	1721	1695	1583	1774	1770	1583	1721	1770	1811
Q Serve(g_s), s	3.7	13.5	13.6	3.2	8.1	6.0	7.0	7.3	12.7	5.5	6.5	6.6
Cycle Q Clear(g_c), s	3.7	13.5	13.6	3.2	8.1	6.0	7.0	7.3	12.7	5.5	6.5	6.6
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	102	1303	656	202	1960	610	147	862	386	244	410	420
V/C Ratio(X)	0.77	0.54	0.54	0.66	0.35	0.27	1.12	0.42	0.68	0.93	0.39	0.40
Avail Cap(c_a), veh/h	210	1303	656	203	1960	610	147	1507	674	244	732	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	20.2	20.2	39.0	18.5	17.8	38.8	27.0	29.0	39.1	27.5	27.5
Incr Delay (d2), s/veh	13.8	1.6	3.2	7.9	0.5	1.1	111.3	0.4	2.5	38.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.6	7.0	1.7	3.8	2.8	7.9	3.6	5.8	3.9	3.3	3.4
LnGrp Delay(d),s/veh	53.1	21.8	23.4	46.9	18.9	18.9	150.1	27.4	31.5	78.0	28.2	28.2
LnGrp LOS	D	C	C	D	B	B	F	C	C	E	C	C
Approach Vol, veh/h		1132			981			791			555	
Approach Delay, s/veh		24.5			22.7			54.4			48.6	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	11.0	25.1	9.4	39.1	10.0	26.1				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	7.0	35.0	10.0	27.5	6.0	36.0				
Max Q Clear Time (g_c+I1), s	5.2	15.6	9.0	8.6	5.7	10.1	7.5	14.7				
Green Ext Time (p_c), s	0.0	7.0	0.0	6.3	0.1	7.1	0.0	5.9				
Intersection Summary												
HCM 2010 Ctrl Delay				34.7								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary
 606: Bernardo Center Dr & Camino Del Norte







02/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	392	1220	52	319	1664	857	57	754	474	260	468	309
Future Volume (veh/h)	392	1220	52	319	1664	857	57	754	474	260	468	309
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	413	1284	55	336	1752	902	60	794	499	274	493	325
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	334	2047	637	384	2120	660	105	915	409	297	1113	498
Arrive On Green	0.10	0.40	0.40	0.11	0.42	0.42	0.03	0.26	0.26	0.09	0.31	0.31
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	413	1284	55	336	1752	902	60	794	499	274	493	325
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	14.6	30.4	3.2	14.5	46.1	62.7	2.6	32.2	38.9	11.9	16.7	26.6
Cycle Q Clear(g_c), s	14.6	30.4	3.2	14.5	46.1	62.7	2.6	32.2	38.9	11.9	16.7	26.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	2047	637	384	2120	660	105	915	409	297	1113	498
V/C Ratio(X)	1.24	0.63	0.09	0.88	0.83	1.37	0.57	0.87	1.22	0.92	0.44	0.65
Avail Cap(c_a), veh/h	334	2047	637	501	2120	660	117	915	409	297	1113	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	35.9	27.8	65.8	39.0	43.8	71.9	53.3	55.7	68.2	41.1	44.5
Incr Delay (d2), s/veh	129.4	0.8	0.1	10.9	3.1	174.5	5.3	10.9	118.7	32.4	1.3	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	14.3	1.4	7.5	22.2	59.3	1.3	17.2	30.5	7.0	8.3	12.6
LnGrp Delay(d),s/veh	197.3	36.8	27.9	76.6	42.1	218.4	77.2	64.2	174.5	100.5	42.3	51.0
LnGrp LOS	F	D	C	E	D	F	E	E	F	F	D	D
Approach Vol, veh/h		1752			2990			1353			1092	
Approach Delay, s/veh		74.3			99.2			105.4			59.5	
Approach LOS		E			F			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.4	44.9	21.2	66.9	9.0	53.3	19.0	69.1				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	13.0	38.6	21.9	55.3	5.1	* 47	14.6	* 63				
Max Q Clear Time (g_c+I1), s	13.9	40.9	16.5	32.4	4.6	28.6	16.6	64.7				
Green Ext Time (p_c), s	0.0	0.0	0.3	22.8	0.0	16.5	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			88.3									
HCM 2010 LOS			F									
Notes												

HCM 2010 Signalized Intersection Summary

607: Paseo Montanoso & Camino Del Norte













02/15/2018

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↑	↑↑↑	↑	↑		
Traffic Volume (veh/h)	1889	51	60	2765	83	165		
Future Volume (veh/h)	1889	51	60	2765	83	165		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1988	54	63	2911	87	174		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3377	92	81	3832	237	211		
Arrive On Green	0.66	0.66	0.05	0.75	0.13	0.13		
Sat Flow, veh/h	5258	138	1774	5253	1774	1583		
Grp Volume(v), veh/h	1323	719	63	2911	87	174		
Grp Sat Flow(s),veh/h/ln	1695	1838	1774	1695	1774	1583		
Q Serve(g_s), s	19.3	19.3	3.1	29.5	4.0	9.6		
Cycle Q Clear(g_c), s	19.3	19.3	3.1	29.5	4.0	9.6		
Prop In Lane		0.08	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2249	1220	81	3832	237	211		
V/C Ratio(X)	0.59	0.59	0.78	0.76	0.37	0.82		
Avail Cap(c_a), veh/h	2249	1220	135	3832	645	575		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	8.3	8.3	42.2	6.3	35.3	37.7		
Incr Delay (d2), s/veh	1.1	2.1	6.0	1.5	0.4	3.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.2	10.3	1.7	14.0	2.0	4.4		
LnGrp Delay(d),s/veh	9.4	10.4	48.2	7.8	35.7	40.8		
LnGrp LOS	A	B	D	A	D	D		
Approach Vol, veh/h	2042			2974	261			
Approach Delay, s/veh	9.8			8.7	39.1			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.1	65.4				73.5		15.9
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	6.8	56.6				67.4		32.5
Max Q Clear Time (g_c+I1), s	5.1	21.3				31.5		11.6
Green Ext Time (p_c), s	0.0	35.2				35.8		0.4
Intersection Summary								
HCM 2010 Ctrl Delay			10.6					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary



















608: I-15 SB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↗↗		↗↗
Traffic Volume (veh/h)	0	958	1139	393	2666	0	0	0	0	1120	0	81
Future Volume (veh/h)	0	958	1139	393	2666	0	0	0	0	1120	0	81
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1008	1199	414	2806	0				1179	0	85
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	2488	1082	463	2835	0				1211	0	980
Arrive On Green	0.00	0.39	0.39	0.13	0.56	0.00				0.35	0.00	0.35
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1008	1199	414	2806	0				1179	0	85
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	17.1	58.2	17.7	81.7	0.0				50.7	0.0	3.1
Cycle Q Clear(g_c), s	0.0	17.1	58.2	17.7	81.7	0.0				50.7	0.0	3.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2488	1082	463	2835	0				1211	0	980
V/C Ratio(X)	0.00	0.41	1.11	0.89	0.99	0.00				0.97	0.00	0.09
Avail Cap(c_a), veh/h	0	2488	1082	594	2835	0				1214	0	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.77	0.77	0.25	0.25	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	33.3	45.9	63.8	32.8	0.0				47.9	0.0	32.5
Incr Delay (d2), s/veh	0.0	0.4	59.5	3.4	6.4	0.0				19.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.6	31.3	8.7	39.6	0.0				27.4	0.0	1.2
LnGrp Delay(d),s/veh	0.0	33.7	105.4	67.2	39.2	0.0				67.6	0.0	32.5
LnGrp LOS		C	F	E	D					E		C
Approach Vol, veh/h		2207			3220						1264	
Approach Delay, s/veh		72.7			42.8						65.2	
Approach LOS		E			D						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	25.4	65.7		58.9		91.1						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 26	52.4		52.9		83.5						
Max Q Clear Time (g_c+I1), s	19.7	60.2		52.7		83.7						
Green Ext Time (p_c), s	0.4	0.0		0.1		0.0						
Intersection Summary												
HCM 2010 Ctrl Delay			56.9									
HCM 2010 LOS			E									
Notes												




















HCM 2010 Signalized Intersection Summary
 609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	1928	0	0	1394	634	1792	0	203	0	0	0
Future Volume (veh/h)	132	1928	0	0	1394	634	1792	0	203	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	139	2029	0	0	1467	667	1886	0	214			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	181	1949	0	0	1897	825	1810	0	1466			
Arrive On Green	0.11	0.77	0.00	0.00	0.30	0.30	0.53	0.00	0.53			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	139	2029	0	0	1467	667	1886	0	214			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	5.9	57.5	0.0	0.0	31.4	33.2	78.9	0.0	5.9			
Cycle Q Clear(g_c), s	5.9	57.5	0.0	0.0	31.4	33.2	78.9	0.0	5.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	181	1949	0	0	1897	825	1810	0	1466			
V/C Ratio(X)	0.77	1.04	0.00	0.00	0.77	0.81	1.04	0.00	0.15			
Avail Cap(c_a), veh/h	197	1949	0	0	1897	825	1810	0	1466			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.62	0.62	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	66.2	17.5	0.0	0.0	48.2	48.9	35.5	0.0	18.3			
Incr Delay (d2), s/veh	8.6	28.0	0.0	0.0	3.1	8.4	33.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.0	30.7	0.0	0.0	14.3	13.7	45.5	0.0	2.3			
LnGrp Delay(d),s/veh	74.8	45.5	0.0	0.0	51.3	57.2	68.5	0.0	18.3			
LnGrp LOS	E	F			D	E	F		B			
Approach Vol, veh/h		2168			2134			2100				
Approach Delay, s/veh		47.4			53.2			63.4				
Approach LOS		D			D			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		65.0			13.1	51.9		85.0				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		57.5			* 8.6	43.7		78.9				
Max Q Clear Time (g_c+I1), s		59.5			7.9	35.2		80.9				
Green Ext Time (p_c), s		0.0			0.0	7.8		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				54.6								
HCM 2010 LOS				D								
Notes												

HCM 2010 Signalized Intersection Summary
 610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	35	140	46	24	213	70	383	86	170	365	64
Future Volume (veh/h)	134	35	140	46	24	213	70	383	86	170	365	64
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	141	37	147	48	25	224	74	403	91	179	384	67
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	97	271	443	213	678	331	536	120	309	525	91
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.19	0.19	0.19	0.17	0.17	0.17
Sat Flow, veh/h	539	227	633	827	498	1583	1774	2875	643	1774	3018	522
Grp Volume(v), veh/h	325	0	0	73	0	224	74	247	247	179	224	227
Grp Sat Flow(s),veh/h/ln	1399	0	0	1324	0	1583	1774	1770	1749	1774	1770	1771
Q Serve(g_s), s	8.5	0.0	0.0	0.0	0.0	6.3	2.4	8.9	9.0	6.2	8.0	8.2
Cycle Q Clear(g_c), s	11.1	0.0	0.0	1.9	0.0	6.3	2.4	8.9	9.0	6.2	8.0	8.2
Prop In Lane	0.43		0.45	0.66		1.00	1.00		0.37	1.00		0.29
Lane Grp Cap(c), veh/h	676	0	0	656	0	678	331	330	326	309	308	308
V/C Ratio(X)	0.48	0.00	0.00	0.11	0.00	0.33	0.22	0.75	0.76	0.58	0.73	0.74
Avail Cap(c_a), veh/h	676	0	0	656	0	678	739	737	728	765	763	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	0.0	11.5	0.0	12.8	23.2	25.9	25.9	25.5	26.3	26.3
Incr Delay (d2), s/veh	2.4	0.0	0.0	0.0	0.0	0.1	0.1	1.3	1.4	0.6	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	0.0	0.8	0.0	2.8	1.2	4.4	4.5	3.1	4.0	4.1
LnGrp Delay(d),s/veh	16.4	0.0	0.0	11.5	0.0	12.9	23.3	27.1	27.3	26.2	27.5	27.6
LnGrp LOS	B			B		B	C	C	C	C	C	C
Approach Vol, veh/h		325			297			568			630	
Approach Delay, s/veh		16.4			12.6			26.7			27.2	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.8		16.3		33.8		17.1				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.8		29.0		28.8		28.0				
Max Q Clear Time (g_c+I1), s		13.1		10.2		8.3		11.0				
Green Ext Time (p_c), s		1.7		1.5		1.8		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				22.7								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary
 601: 4 Gee Rd & Project Driveway





















02/15/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	0	0	177	0	0	81		
Future Volume (veh/h)	0	0	177	0	0	81		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	0	0	186	0	0	85		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1490	0	0	1490		
Arrive On Green	0.00	0.00	0.80	0.00	0.00	0.80		
Sat Flow, veh/h	0	0	1863	0	0	1863		
Grp Volume(v), veh/h	0	0	186	0	0	85		
Grp Sat Flow(s),veh/h/ln	0	0	1863	0	0	1863		
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	0.2		
Cycle Q Clear(g_c), s	0.0	0.0	0.5	0.0	0.0	0.2		
Prop In Lane	0.00	0.00		0.00	0.00			
Lane Grp Cap(c), veh/h	0	0	1490	0	0	1490		
V/C Ratio(X)	0.00	0.00	0.12	0.00	0.00	0.06		
Avail Cap(c_a), veh/h	0	0	1490	0	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.5	0.0	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.0	0.0	0.1		
LnGrp Delay(d),s/veh	0.0	0.0	0.7	0.0	0.0	0.5		
LnGrp LOS			A			A		
Approach Vol, veh/h	0		186			85		
Approach Delay, s/veh	0.0		0.7			0.5		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.5		0.0		2.2		
Green Ext Time (p_c), s		1.2		0.0		1.2		
Intersection Summary								
HCM 2010 Ctrl Delay			0.6					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1070	45	207	889	68	41	45	77	46	33	26
Future Volume (veh/h)	89	1070	45	207	889	68	41	45	77	46	33	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	94	1126	47	218	936	72	43	47	81	48	35	27
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	1765	74	259	1928	148	243	88	152	185	140	108
Arrive On Green	0.08	0.51	0.51	0.15	0.58	0.58	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1774	3462	144	1774	3331	256	1335	615	1060	1257	977	753
Grp Volume(v), veh/h	94	575	598	218	497	511	43	0	128	48	0	62
Grp Sat Flow(s),veh/h/ln	1774	1770	1837	1774	1770	1818	1335	0	1676	1257	0	1730
Q Serve(g_s), s	4.0	18.2	18.2	9.2	12.7	12.7	2.3	0.0	5.4	2.8	0.0	2.4
Cycle Q Clear(g_c), s	4.0	18.2	18.2	9.2	12.7	12.7	4.7	0.0	5.4	8.3	0.0	2.4
Prop In Lane	1.00		0.08	1.00		0.14	1.00		0.63	1.00		0.44
Lane Grp Cap(c), veh/h	139	902	937	259	1024	1052	243	0	241	185	0	249
V/C Ratio(X)	0.68	0.64	0.64	0.84	0.49	0.49	0.18	0.00	0.53	0.26	0.00	0.25
Avail Cap(c_a), veh/h	420	902	937	399	1024	1052	626	0	721	546	0	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.5	13.7	13.7	32.0	9.5	9.5	31.3	0.0	30.5	34.4	0.0	29.2
Incr Delay (d2), s/veh	2.1	3.4	3.3	5.6	1.6	1.6	0.1	0.0	0.7	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	9.7	10.0	4.9	6.5	6.7	0.8	0.0	2.6	1.0	0.0	1.2
LnGrp Delay(d),s/veh	36.6	17.1	17.0	37.6	11.1	11.1	31.5	0.0	31.2	34.6	0.0	29.4
LnGrp LOS	D	B	B	D	B	B	C		C	C		C
Approach Vol, veh/h		1267			1226			171			110	
Approach Delay, s/veh		18.5			15.8			31.3			31.7	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	45.2		15.9	10.4	50.5		15.9				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	17.3	39.2		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	11.2	20.2		10.3	6.0	14.7		7.4				
Green Ext Time (p_c), s	0.1	18.3		0.8	0.1	22.7		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay				18.6								
HCM 2010 LOS				B								
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	384	837	40	95	831	54	21	84	48	52	137	311
Future Volume (veh/h)	384	837	40	95	831	54	21	84	48	52	137	311
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	404	881	42	100	875	57	22	88	51	55	144	327
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	437	1727	82	159	1019	66	33	248	144	71	433	388
Arrive On Green	0.25	0.50	0.50	0.05	0.30	0.30	0.02	0.22	0.22	0.04	0.24	0.24
Sat Flow, veh/h	1774	3439	164	3442	3374	220	1774	1108	642	1774	1770	1583
Grp Volume(v), veh/h	404	453	470	100	459	473	22	0	139	55	144	327
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1721	1770	1824	1774	0	1749	1774	1770	1583
Q Serve(g_s), s	21.8	16.8	16.8	2.8	24.0	24.0	1.2	0.0	6.6	3.0	6.6	19.3
Cycle Q Clear(g_c), s	21.8	16.8	16.8	2.8	24.0	24.0	1.2	0.0	6.6	3.0	6.6	19.3
Prop In Lane	1.00		0.09	1.00		0.12	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	437	888	921	159	534	551	33	0	391	71	433	388
V/C Ratio(X)	0.92	0.51	0.51	0.63	0.86	0.86	0.67	0.00	0.36	0.78	0.33	0.84
Avail Cap(c_a), veh/h	470	888	921	252	550	566	108	0	606	108	613	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	16.4	16.4	46.0	32.3	32.3	47.9	0.0	32.2	46.7	30.5	35.3
Incr Delay (d2), s/veh	23.6	2.1	2.0	4.8	12.0	11.7	25.4	0.0	0.5	20.4	0.4	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	8.7	9.0	1.4	13.5	13.9	0.8	0.0	3.2	1.9	3.3	9.3
LnGrp Delay(d),s/veh	59.7	18.5	18.4	50.8	44.3	44.0	73.3	0.0	32.7	67.1	30.9	43.5
LnGrp LOS	E	B	B	D	D	D	E		C	E	C	D
Approach Vol, veh/h		1327			1032			161			526	
Approach Delay, s/veh		31.0			44.8			38.3			42.5	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	55.3	5.3	29.1	28.2	35.6	7.4	27.0				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	7.2	49.3	6.0	34.0	26.0	30.5	6.0	34.0				
Max Q Clear Time (g_c+I1), s	4.8	18.8	3.2	21.3	23.8	26.0	5.0	8.6				
Green Ext Time (p_c), s	0.1	7.6	0.0	2.8	0.4	2.8	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			38.0									
HCM 2010 LOS			D									
























HCM 2010 Signalized Intersection Summary
604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	752	37	34	829	216	26	108	27	80	97	154
Future Volume (veh/h)	133	752	37	34	829	216	26	108	27	80	97	154
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	140	792	39	36	873	227	27	114	28	84	102	162
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	1608	79	63	1431	640	52	354	301	157	134	213
Arrive On Green	0.10	0.47	0.47	0.04	0.40	0.40	0.03	0.19	0.19	0.05	0.21	0.21
Sat Flow, veh/h	1774	3433	169	1774	3539	1583	1774	1863	1583	3442	649	1031
Grp Volume(v), veh/h	140	408	423	36	873	227	27	114	28	84	0	264
Grp Sat Flow(s),veh/h/ln	1774	1770	1833	1774	1770	1583	1774	1863	1583	1721	0	1681
Q Serve(g_s), s	5.5	11.3	11.3	1.4	13.9	7.1	1.1	3.8	1.0	1.7	0.0	10.5
Cycle Q Clear(g_c), s	5.5	11.3	11.3	1.4	13.9	7.1	1.1	3.8	1.0	1.7	0.0	10.5
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	177	829	859	63	1431	640	52	354	301	157	0	347
V/C Ratio(X)	0.79	0.49	0.49	0.57	0.61	0.35	0.52	0.32	0.09	0.54	0.00	0.76
Avail Cap(c_a), veh/h	275	829	859	155	1431	640	150	812	690	290	0	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.3	13.1	13.1	33.7	16.7	14.7	34.0	24.8	23.7	33.2	0.0	26.6
Incr Delay (d2), s/veh	8.1	2.1	2.0	7.7	0.6	0.1	8.0	0.5	0.1	2.8	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	5.9	6.1	0.8	6.8	3.1	0.6	2.0	0.5	0.9	0.0	5.2
LnGrp Delay(d),s/veh	39.4	15.1	15.1	41.4	17.3	14.8	42.0	25.4	23.9	36.0	0.0	30.0
LnGrp LOS	D	B	B	D	B	B	D	C	C	D		C
Approach Vol, veh/h		971			1136			169			348	
Approach Delay, s/veh		18.6			17.6			27.8			31.5	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	39.3	5.6	19.7	11.1	34.7	6.7	18.5				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.2	33.3	6.0	31.0	11.0	28.5	6.0	31.0				
Max Q Clear Time (g_c+I1), s	3.4	13.3	3.1	12.5	7.5	15.9	3.7	5.8				
Green Ext Time (p_c), s	0.0	5.2	0.0	2.2	0.1	4.5	0.0	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			20.5									
HCM 2010 LOS			C									

























HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	618	113	245	874	323	121	364	181	331	348	68
Future Volume (veh/h)	99	618	113	245	874	323	121	364	181	331	348	68
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	104	651	119	258	920	340	127	383	191	348	366	72
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	1687	304	206	1904	593	158	826	370	247	638	124
Arrive On Green	0.07	0.39	0.39	0.06	0.37	0.37	0.09	0.23	0.23	0.07	0.22	0.22
Sat Flow, veh/h	1774	4333	782	3442	5085	1583	1774	3539	1583	3442	2955	576
Grp Volume(v), veh/h	104	507	263	258	920	340	127	383	191	348	218	220
Grp Sat Flow(s),veh/h/ln	1774	1695	1725	1721	1695	1583	1774	1770	1583	1721	1770	1761
Q Serve(g_s), s	4.8	9.0	9.2	5.0	11.5	14.3	5.9	7.8	8.8	6.0	9.2	9.4
Cycle Q Clear(g_c), s	4.8	9.0	9.2	5.0	11.5	14.3	5.9	7.8	8.8	6.0	9.2	9.4
Prop In Lane	1.00		0.45	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	133	1320	671	206	1904	593	158	826	370	247	382	380
V/C Ratio(X)	0.78	0.38	0.39	1.25	0.48	0.57	0.80	0.46	0.52	1.41	0.57	0.58
Avail Cap(c_a), veh/h	191	1320	671	206	1904	593	174	1526	683	247	716	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	18.3	18.4	39.2	20.0	20.8	37.3	27.5	27.9	38.7	29.3	29.3
Incr Delay (d2), s/veh	14.0	0.8	1.7	146.8	0.9	4.0	21.3	0.5	1.3	205.6	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.3	4.6	6.6	5.5	6.9	3.8	3.8	4.0	9.9	4.6	4.7
LnGrp Delay(d),s/veh	51.9	19.2	20.1	186.1	20.8	24.8	58.6	28.0	29.2	244.3	30.9	31.0
LnGrp LOS	D	B	C	F	C	C	E	C	C	F	C	C
Approach Vol, veh/h		874			1518			701			786	
Approach Delay, s/veh		23.3			49.8			33.9			125.4	
Approach LOS		C			D			C			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	11.5	23.5	10.7	37.8	10.0	25.0				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.2	33.8	9.0	28.5	6.0	36.0				
Max Q Clear Time (g_c+I1), s	7.0	11.2	7.9	11.4	6.8	16.3	8.0	10.8				
Green Ext Time (p_c), s	0.0	7.9	0.0	6.7	0.1	6.1	0.0	6.9				
Intersection Summary												
HCM 2010 Ctrl Delay				56.3								
HCM 2010 LOS				E								

HCM 2010 Signalized Intersection Summary
 606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	1447	72	342	1448	325	53	417	282	983	669	280
Future Volume (veh/h)	276	1447	72	342	1448	325	53	417	282	983	669	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	291	1523	76	360	1524	342	56	439	297	1035	704	295
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	1557	485	383	1659	516	104	472	211	1060	1455	651
Arrive On Green	0.09	0.31	0.31	0.11	0.33	0.33	0.03	0.13	0.13	0.31	0.41	0.41
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	291	1523	76	360	1524	342	56	439	297	1035	704	295
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	12.6	44.5	5.2	15.6	43.3	27.9	2.4	18.4	20.0	44.7	21.9	20.2
Cycle Q Clear(g_c), s	12.6	44.5	5.2	15.6	43.3	27.9	2.4	18.4	20.0	44.7	21.9	20.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	1557	485	383	1659	516	104	472	211	1060	1455	651
V/C Ratio(X)	0.93	0.98	0.16	0.94	0.92	0.66	0.54	0.93	1.41	0.98	0.48	0.45
Avail Cap(c_a), veh/h	314	1557	485	383	1661	517	133	472	211	1060	1455	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	51.6	37.9	66.2	48.6	43.4	71.7	64.3	65.0	51.4	32.5	32.0
Incr Delay (d2), s/veh	31.7	17.9	0.3	30.6	8.9	4.1	4.3	27.3	209.1	22.1	1.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	23.4	2.3	9.0	21.7	12.8	1.2	10.8	21.0	24.5	11.0	9.3
LnGrp Delay(d),s/veh	99.4	69.4	38.2	96.8	57.6	47.6	76.1	91.6	274.1	73.5	33.6	34.2
LnGrp LOS	F	E	D	F	E	D	E	F	F	E	C	C
Approach Vol, veh/h		1890			2226			792			2034	
Approach Delay, s/veh		72.8			62.4			159.0			54.0	
Approach LOS		E			E			F			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	50.6	26.0	21.1	52.3	8.9	67.7	18.1	55.3				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	46.2	20.0	16.7	45.9	5.8	* 61	13.7	* 49				
Max Q Clear Time (g_c+I1), s	46.7	22.0	17.6	46.5	4.4	23.9	14.6	45.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	25.6	0.0	3.7				
Intersection Summary												
HCM 2010 Ctrl Delay			73.8									
HCM 2010 LOS			E									
Notes												













HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte

02/15/2018

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗		
Traffic Volume (veh/h)	2703	33	200	2097	34	97		
Future Volume (veh/h)	2703	33	200	2097	34	97		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	2845	35	211	2207	36	102		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3202	39	230	4045	152	135		
Arrive On Green	0.62	0.62	0.13	0.80	0.09	0.09		
Sat Flow, veh/h	5346	63	1774	5253	1774	1583		
Grp Volume(v), veh/h	1859	1021	211	2207	36	102		
Grp Sat Flow(s),veh/h/ln	1695	1852	1774	1695	1774	1583		
Q Serve(g_s), s	39.3	39.8	10.0	13.3	1.6	5.3		
Cycle Q Clear(g_c), s	39.3	39.8	10.0	13.3	1.6	5.3		
Prop In Lane		0.03	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2096	1145	230	4045	152	135		
V/C Ratio(X)	0.89	0.89	0.92	0.55	0.24	0.75		
Avail Cap(c_a), veh/h	2096	1145	230	4045	680	607		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	13.7	13.8	36.4	3.1	36.2	37.9		
Incr Delay (d2), s/veh	6.0	10.6	36.7	0.5	0.3	3.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	19.8	23.5	7.2	6.1	0.8	2.5		
LnGrp Delay(d),s/veh	19.7	24.4	73.1	3.7	36.5	41.1		
LnGrp LOS	B	C	E	A	D	D		
Approach Vol, veh/h	2880			2418	138			
Approach Delay, s/veh	21.3			9.7	39.9			
Approach LOS	C			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	15.0	58.5				73.5		11.2
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	11.0	52.4				67.4		32.5
Max Q Clear Time (g_c+I1), s	12.0	41.8				15.3		7.3
Green Ext Time (p_c), s	0.0	10.6				51.9		0.2
Intersection Summary								
HCM 2010 Ctrl Delay			16.6					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary
 608: I-15 SB Ramps & Camino Del Norte



























02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↗↗		↗↗
Traffic Volume (veh/h)	0	1339	1482	227	2180	0	0	0	0	846	0	85
Future Volume (veh/h)	0	1339	1482	227	2180	0	0	0	0	846	0	85
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1409	1560	239	2295	0				891	0	89
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	3294	1433	286	3213	0				955	0	774
Arrive On Green	0.00	0.51	0.51	0.08	0.63	0.00				0.28	0.00	0.28
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1409	1560	239	2295	0				891	0	89
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	20.5	77.1	10.3	45.4	0.0				37.9	0.0	3.6
Cycle Q Clear(g_c), s	0.0	20.5	77.1	10.3	45.4	0.0				37.9	0.0	3.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3294	1433	286	3213	0				955	0	774
V/C Ratio(X)	0.00	0.43	1.09	0.84	0.71	0.00				0.93	0.00	0.12
Avail Cap(c_a), veh/h	0	3294	1433	397	3213	0				1260	0	1020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.37	0.37	0.57	0.57	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.7	36.4	67.8	18.5	0.0				52.8	0.0	40.4
Incr Delay (d2), s/veh	0.0	0.2	45.1	4.6	0.8	0.0				9.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.1	38.4	5.1	21.3	0.0				19.2	0.0	1.4
LnGrp Delay(d),s/veh	0.0	22.9	81.5	72.4	19.3	0.0				62.0	0.0	40.5
LnGrp LOS		C	F	E	B					E		D
Approach Vol, veh/h		2969			2534						980	
Approach Delay, s/veh		53.7			24.3						60.1	
Approach LOS		D			C						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	17.7	84.6		47.7		102.3						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 17	59.0		54.9		81.5						
Max Q Clear Time (g_c+I1), s	12.3	79.1		39.9		47.4						
Green Ext Time (p_c), s	0.2	0.0		1.8		30.6						
Intersection Summary												
HCM 2010 Ctrl Delay			43.2									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary




















609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  	 	 		 			
Traffic Volume (veh/h)	158	2033	0	0	1109	824	1391	0	281	0	0	0
Future Volume (veh/h)	158	2033	0	0	1109	824	1391	0	281	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	166	2140	0	0	1167	867	1464	0	296			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	209	2374	0	0	2380	1035	1523	0	1233			
Arrive On Green	0.12	0.93	0.00	0.00	0.37	0.37	0.44	0.00	0.44			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	166	2140	0	0	1167	867	1464	0	296			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	7.0	26.5	0.0	0.0	21.0	42.6	61.9	0.0	9.9			
Cycle Q Clear(g_c), s	7.0	26.5	0.0	0.0	21.0	42.6	61.9	0.0	9.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	209	2374	0	0	2380	1035	1523	0	1233			
V/C Ratio(X)	0.79	0.90	0.00	0.00	0.49	0.84	0.96	0.00	0.24			
Avail Cap(c_a), veh/h	289	2374	0	0	2380	1035	1604	0	1299			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.75	0.75	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	65.0	3.5	0.0	0.0	36.2	43.0	40.6	0.0	26.1			
Incr Delay (d2), s/veh	5.1	4.7	0.0	0.0	0.7	8.1	13.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.5	11.3	0.0	0.0	9.4	17.5	32.2	0.0	3.8			
LnGrp Delay(d),s/veh	70.1	8.2	0.0	0.0	37.0	51.1	54.3	0.0	26.1			
LnGrp LOS	E	A			D	D	D		C			
Approach Vol, veh/h		2306			2034			1760				
Approach Delay, s/veh		12.7			43.0			49.6				
Approach LOS		B			D			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		77.5			14.3	63.2		72.5				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		66.5			* 13	48.7		69.9				
Max Q Clear Time (g_c+I1), s		28.5			9.0	44.6		63.9				
Green Ext Time (p_c), s		28.7			0.1	3.9		2.5				
Intersection Summary												
HCM 2010 Ctrl Delay				33.4								
HCM 2010 LOS				C								
Notes												










HCM 2010 Signalized Intersection Summary
610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	32	32	75	44	248	33	343	117	283	319	103
Future Volume (veh/h)	56	32	32	75	44	248	33	343	117	283	319	103
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	59	34	34	79	46	261	35	361	123	298	336	108
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	169	142	450	244	626	327	480	161	377	563	178
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.18	0.18	0.18	0.21	0.21	0.21
Sat Flow, veh/h	551	429	358	921	617	1583	1774	2604	874	1774	2647	838
Grp Volume(v), veh/h	127	0	0	125	0	261	35	244	240	298	223	221
Grp Sat Flow(s),veh/h/ln	1339	0	0	1538	0	1583	1774	1770	1708	1774	1770	1715
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	8.2	1.1	8.9	9.1	10.9	7.8	8.0
Cycle Q Clear(g_c), s	4.3	0.0	0.0	3.0	0.0	8.2	1.1	8.9	9.1	10.9	7.8	8.0
Prop In Lane	0.46		0.27	0.63		1.00	1.00		0.51	1.00		0.49
Lane Grp Cap(c), veh/h	606	0	0	694	0	626	327	326	315	377	376	365
V/C Ratio(X)	0.21	0.00	0.00	0.18	0.00	0.42	0.11	0.75	0.76	0.79	0.59	0.61
Avail Cap(c_a), veh/h	606	0	0	694	0	626	737	735	710	789	787	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	0.0	13.4	0.0	15.0	23.2	26.4	26.5	25.5	24.2	24.3
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.0	0.2	0.1	1.3	1.5	1.4	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	1.5	0.0	3.6	0.5	4.4	4.4	5.4	3.8	3.8
LnGrp Delay(d),s/veh	14.4	0.0	0.0	13.5	0.0	15.1	23.2	27.7	27.9	26.9	24.8	24.9
LnGrp LOS	B			B		B	C	C	C	C	C	C
Approach Vol, veh/h		127			386			519			742	
Approach Delay, s/veh		14.4			14.6			27.5			25.7	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.0		19.1		32.0		17.2				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		27.0		30.4		27.0		28.4				
Max Q Clear Time (g_c+I1), s		6.3		12.9		10.2		11.1				
Green Ext Time (p_c), s		1.2		1.7		1.2		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				23.0								
HCM 2010 LOS				C								























HCM 2010 Signalized Intersection Summary
 601: 4 Gee Rd & Project Driveway

02/15/2018

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	16	0	177	16	0	81		
Future Volume (veh/h)	16	0	177	16	0	81		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	17	0	186	17	0	85		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1346	123	0	1490		
Arrive On Green	0.00	0.00	0.80	0.80	0.00	0.80		
Sat Flow, veh/h	0	0	1682	154	0	1863		
Grp Volume(v), veh/h	0	0	0	203	0	85		
Grp Sat Flow(s),veh/h/ln	0	0	0	1836	0	1863		
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.2		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.6	0.0	0.2		
Prop In Lane	0.00	0.00		0.08	0.00			
Lane Grp Cap(c), veh/h	0	0	0	1468	0	1490		
V/C Ratio(X)	0.00	0.00	0.00	0.14	0.00	0.06		
Avail Cap(c_a), veh/h	0	0	0	1468	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.1		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.7	0.0	0.5		
LnGrp LOS				A		A		
Approach Vol, veh/h	0		203			85		
Approach Delay, s/veh	0.0		0.7			0.5		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.6		0.0		2.2		
Green Ext Time (p_c), s		1.3		0.0		1.3		
Intersection Summary								
HCM 2010 Ctrl Delay			0.7					
HCM 2010 LOS			A					

























HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (veh/h)	90	1070	45	207	889	82	41	45	77	60	33	27
Future Volume (veh/h)	90	1070	45	207	889	82	41	45	77	60	33	27
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	1126	47	218	936	86	43	47	81	63	35	28
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	1740	73	259	1872	172	255	95	163	198	148	118
Arrive On Green	0.08	0.50	0.50	0.15	0.57	0.57	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3462	144	1774	3278	301	1334	615	1060	1257	960	768
Grp Volume(v), veh/h	95	575	598	218	505	517	43	0	128	63	0	63
Grp Sat Flow(s),veh/h/ln	1774	1770	1837	1774	1770	1810	1334	0	1676	1257	0	1727
Q Serve(g_s), s	4.1	18.7	18.7	9.3	13.4	13.4	2.3	0.0	5.5	3.8	0.0	2.5
Cycle Q Clear(g_c), s	4.1	18.7	18.7	9.3	13.4	13.4	4.8	0.0	5.5	9.2	0.0	2.5
Prop In Lane	1.00		0.08	1.00		0.17	1.00		0.63	1.00		0.44
Lane Grp Cap(c), veh/h	140	889	923	259	1010	1033	255	0	258	198	0	266
V/C Ratio(X)	0.68	0.65	0.65	0.84	0.50	0.50	0.17	0.00	0.50	0.32	0.00	0.24
Avail Cap(c_a), veh/h	414	889	923	393	1010	1033	615	0	711	538	0	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.0	14.3	14.3	32.4	10.0	10.0	31.1	0.0	30.2	34.4	0.0	29.0
Incr Delay (d2), s/veh	2.2	3.6	3.5	6.2	1.8	1.7	0.1	0.0	0.5	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	10.0	10.4	5.0	7.0	7.1	0.8	0.0	2.6	1.3	0.0	1.2
LnGrp Delay(d),s/veh	37.2	17.9	17.8	38.6	11.8	11.8	31.2	0.0	30.8	34.8	0.0	29.1
LnGrp LOS	D	B	B	D	B	B	C		C	C		C
Approach Vol, veh/h		1268			1240			171			126	
Approach Delay, s/veh		19.3			16.5			30.9			32.0	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.9	45.2		16.9	10.5	50.5		16.9				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	17.3	39.2		33.1	18.2	38.4		33.1				
Max Q Clear Time (g_c+I1), s	11.3	20.7		11.2	6.1	15.4		7.5				
Green Ext Time (p_c), s	0.1	17.9		0.8	0.1	22.1		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay				19.3								
HCM 2010 LOS				B								


























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 		 	 						 	
Traffic Volume (veh/h)	386	849	40	95	843	54	21	84	48	52	137	313
Future Volume (veh/h)	386	849	40	95	843	54	21	84	48	52	137	313
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	406	894	42	100	887	57	22	88	51	55	144	329
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	440	1725	81	159	1012	65	33	249	144	71	435	390
Arrive On Green	0.25	0.50	0.50	0.05	0.30	0.30	0.02	0.22	0.22	0.04	0.25	0.25
Sat Flow, veh/h	1774	3442	162	3442	3377	217	1774	1108	642	1774	1770	1583
Grp Volume(v), veh/h	406	460	476	100	465	479	22	0	139	55	144	329
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1721	1770	1824	1774	0	1749	1774	1770	1583
Q Serve(g_s), s	22.0	17.2	17.2	2.8	24.5	24.5	1.2	0.0	6.6	3.0	6.6	19.5
Cycle Q Clear(g_c), s	22.0	17.2	17.2	2.8	24.5	24.5	1.2	0.0	6.6	3.0	6.6	19.5
Prop In Lane	1.00		0.09	1.00		0.12	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	440	887	919	159	530	547	33	0	393	71	435	390
V/C Ratio(X)	0.92	0.52	0.52	0.63	0.88	0.88	0.67	0.00	0.35	0.78	0.33	0.84
Avail Cap(c_a), veh/h	476	887	919	252	542	558	108	0	605	108	612	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	16.5	16.5	46.1	32.7	32.7	48.0	0.0	32.1	46.8	30.4	35.3
Incr Delay (d2), s/veh	23.1	2.2	2.1	4.8	14.2	13.8	25.5	0.0	0.5	20.4	0.4	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	8.8	9.1	1.4	14.1	14.5	0.8	0.0	3.2	1.9	3.3	9.4
LnGrp Delay(d),s/veh	59.2	18.7	18.6	50.9	46.9	46.5	73.5	0.0	32.7	67.2	30.9	43.7
LnGrp LOS	E	B	B	D	D	D	E		C	E	C	D
Approach Vol, veh/h		1342			1044			161			528	
Approach Delay, s/veh		30.9			47.1			38.2			42.6	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	55.3	5.3	29.2	28.4	35.5	7.4	27.1				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	7.2	49.3	6.0	34.0	26.4	30.1	6.0	34.0				
Max Q Clear Time (g_c+I1), s	4.8	19.2	3.2	21.5	24.0	26.5	5.0	8.6				
Green Ext Time (p_c), s	0.1	7.7	0.0	2.7	0.4	2.3	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay				38.8								
HCM 2010 LOS				D								
























HCM 2010 Signalized Intersection Summary
 604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 					 		
Traffic Volume (veh/h)	133	764	37	34	841	216	26	108	27	80	97	154
Future Volume (veh/h)	133	764	37	34	841	216	26	108	27	80	97	154
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	140	804	39	36	885	227	27	114	28	84	102	162
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	1610	78	63	1431	640	52	354	301	157	134	213
Arrive On Green	0.10	0.47	0.47	0.04	0.40	0.40	0.03	0.19	0.19	0.05	0.21	0.21
Sat Flow, veh/h	1774	3436	167	1774	3539	1583	1774	1863	1583	3442	649	1031
Grp Volume(v), veh/h	140	414	429	36	885	227	27	114	28	84	0	264
Grp Sat Flow(s),veh/h/ln	1774	1770	1833	1774	1770	1583	1774	1863	1583	1721	0	1681
Q Serve(g_s), s	5.5	11.5	11.5	1.4	14.1	7.1	1.1	3.8	1.0	1.7	0.0	10.5
Cycle Q Clear(g_c), s	5.5	11.5	11.5	1.4	14.1	7.1	1.1	3.8	1.0	1.7	0.0	10.5
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	177	829	859	63	1431	640	52	354	301	157	0	347
V/C Ratio(X)	0.79	0.50	0.50	0.57	0.62	0.35	0.52	0.32	0.09	0.54	0.00	0.76
Avail Cap(c_a), veh/h	275	829	859	155	1431	640	150	812	690	290	0	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.3	13.1	13.1	33.7	16.8	14.7	34.0	24.8	23.7	33.2	0.0	26.6
Incr Delay (d2), s/veh	8.1	2.1	2.1	7.7	0.6	0.1	8.0	0.5	0.1	2.8	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.1	6.3	0.8	7.0	3.1	0.6	2.0	0.5	0.9	0.0	5.2
LnGrp Delay(d),s/veh	39.4	15.3	15.2	41.4	17.4	14.8	42.0	25.4	23.9	36.0	0.0	30.0
LnGrp LOS	D	B	B	D	B	B	D	C	C	D		C
Approach Vol, veh/h		983			1148			169			348	
Approach Delay, s/veh		18.7			17.7			27.8			31.5	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	39.3	5.6	19.7	11.1	34.7	6.7	18.5				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.2	33.3	6.0	31.0	11.0	28.5	6.0	31.0				
Max Q Clear Time (g_c+I1), s	3.4	13.5	3.1	12.5	7.5	16.1	3.7	5.8				
Green Ext Time (p_c), s	0.0	5.3	0.0	2.2	0.1	4.5	0.0	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay				20.5								
HCM 2010 LOS				C								



































HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	626	117	245	882	323	125	364	181	331	348	68
Future Volume (veh/h)	99	626	117	245	882	323	125	364	181	331	348	68
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	104	659	123	258	928	340	132	383	191	348	366	72
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	1675	309	205	1896	590	164	836	374	246	636	124
Arrive On Green	0.07	0.39	0.39	0.06	0.37	0.37	0.09	0.24	0.24	0.07	0.22	0.22
Sat Flow, veh/h	1774	4317	795	3442	5085	1583	1774	3539	1583	3442	2955	576
Grp Volume(v), veh/h	104	516	266	258	928	340	132	383	191	348	218	220
Grp Sat Flow(s),veh/h/ln	1774	1695	1722	1721	1695	1583	1774	1770	1583	1721	1770	1761
Q Serve(g_s), s	4.8	9.2	9.4	5.0	11.7	14.4	6.1	7.8	8.8	6.0	9.2	9.4
Cycle Q Clear(g_c), s	4.8	9.2	9.4	5.0	11.7	14.4	6.1	7.8	8.8	6.0	9.2	9.4
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	133	1315	668	205	1896	590	164	836	374	246	381	379
V/C Ratio(X)	0.78	0.39	0.40	1.26	0.49	0.58	0.80	0.46	0.51	1.41	0.57	0.58
Avail Cap(c_a), veh/h	191	1315	668	205	1896	590	180	1521	680	246	708	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	18.5	18.6	39.4	20.2	21.0	37.3	27.4	27.8	38.9	29.4	29.5
Incr Delay (d2), s/veh	14.1	0.9	1.8	148.6	0.9	4.1	21.2	0.5	1.3	207.8	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.5	4.8	6.6	5.7	7.0	4.0	3.8	4.0	9.9	4.6	4.8
LnGrp Delay(d),s/veh	52.2	19.4	20.3	188.0	21.1	25.0	58.5	27.9	29.1	246.6	31.0	31.2
LnGrp LOS	D	B	C	F	C	C	E	C	C	F	C	C
Approach Vol, veh/h		886			1526			706			786	
Approach Delay, s/veh		23.5			50.2			33.9			126.5	
Approach LOS		C			D			C			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	11.7	23.5	10.8	37.7	10.0	25.3				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.5	33.5	9.0	28.5	6.0	36.0				
Max Q Clear Time (g_c+I1), s	7.0	11.4	8.1	11.4	6.8	16.4	8.0	10.8				
Green Ext Time (p_c), s	0.0	8.0	0.0	6.6	0.1	6.2	0.0	6.9				
Intersection Summary												
HCM 2010 Ctrl Delay				56.6								
HCM 2010 LOS				E								

HCM 2010 Signalized Intersection Summary
606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 	 		 	 	
Traffic Volume (veh/h)	276	1455	72	342	1456	325	53	417	282	983	669	280
Future Volume (veh/h)	276	1455	72	342	1456	325	53	417	282	983	669	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	291	1532	76	360	1533	342	56	439	297	1035	704	295
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	1567	488	383	1669	520	104	465	208	1060	1448	648
Arrive On Green	0.09	0.31	0.31	0.11	0.33	0.33	0.03	0.13	0.13	0.31	0.41	0.41
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	291	1532	76	360	1533	342	56	439	297	1035	704	295
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	12.6	44.8	5.2	15.6	43.5	27.8	2.4	18.5	19.7	44.7	22.0	20.3
Cycle Q Clear(g_c), s	12.6	44.8	5.2	15.6	43.5	27.8	2.4	18.5	19.7	44.7	22.0	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	1567	488	383	1669	520	104	465	208	1060	1448	648
V/C Ratio(X)	0.93	0.98	0.16	0.94	0.92	0.66	0.54	0.94	1.43	0.98	0.49	0.46
Avail Cap(c_a), veh/h	314	1567	488	383	1671	520	133	465	208	1060	1448	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	51.4	37.7	66.2	48.5	43.2	71.7	64.6	65.2	51.4	32.7	32.2
Incr Delay (d2), s/veh	31.7	17.7	0.3	30.6	8.9	4.0	4.3	30.0	218.4	22.1	1.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	23.6	2.3	9.0	21.8	12.7	1.2	11.0	21.2	24.5	11.0	9.3
LnGrp Delay(d),s/veh	99.4	69.1	38.0	96.8	57.4	47.2	76.1	94.6	283.6	73.5	33.9	34.5
LnGrp LOS	F	E	D	F	E	D	E	F	F	E	C	C
Approach Vol, veh/h		1899			2235			792			2034	
Approach Delay, s/veh		72.5			62.2			164.2			54.1	
Approach LOS		E			E			F			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	50.6	25.7	21.1	52.6	8.9	67.4	18.1	55.6				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	46.2	19.7	16.7	46.2	5.8	* 61	13.7	* 49				
Max Q Clear Time (g_c+I1), s	46.7	21.7	17.6	46.8	4.4	24.0	14.6	45.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	25.4	0.0	3.7				
Intersection Summary												
HCM 2010 Ctrl Delay			74.2									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte













02/15/2018

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↖	↑↑↑	↖	↗		
Traffic Volume (veh/h)	2711	33	200	2105	34	97		
Future Volume (veh/h)	2711	33	200	2105	34	97		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	2854	35	211	2216	36	102		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3202	39	230	4045	152	135		
Arrive On Green	0.62	0.62	0.13	0.80	0.09	0.09		
Sat Flow, veh/h	5346	63	1774	5253	1774	1583		
Grp Volume(v), veh/h	1865	1024	211	2216	36	102		
Grp Sat Flow(s),veh/h/ln	1695	1852	1774	1695	1774	1583		
Q Serve(g_s), s	39.5	40.0	10.0	13.4	1.6	5.3		
Cycle Q Clear(g_c), s	39.5	40.0	10.0	13.4	1.6	5.3		
Prop In Lane		0.03	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2096	1145	230	4045	152	135		
V/C Ratio(X)	0.89	0.89	0.92	0.55	0.24	0.75		
Avail Cap(c_a), veh/h	2096	1145	230	4045	680	607		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	13.7	13.8	36.4	3.1	36.2	37.9		
Incr Delay (d2), s/veh	6.1	10.9	36.7	0.5	0.3	3.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	19.9	23.7	7.2	6.4	0.8	2.5		
LnGrp Delay(d),s/veh	19.9	24.7	73.1	3.7	36.5	41.1		
LnGrp LOS	B	C	E	A	D	D		
Approach Vol, veh/h	2889			2427	138			
Approach Delay, s/veh	21.6			9.7	39.9			
Approach LOS	C			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	15.0	58.5				73.5		11.2
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	11.0	52.4				67.4		32.5
Max Q Clear Time (g_c+I1), s	12.0	42.0				15.4		7.3
Green Ext Time (p_c), s	0.0	10.4				51.8		0.2
Intersection Summary								
HCM 2010 Ctrl Delay			16.8					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary



















608: I-15 SB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↘	↖↗	↑↑↑					↖↗		↗↘
Traffic Volume (veh/h)	0	1342	1487	227	2188	0	0	0	0	846	0	85
Future Volume (veh/h)	0	1342	1487	227	2188	0	0	0	0	846	0	85
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1413	1565	239	2303	0				891	0	89
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	3294	1433	286	3213	0				955	0	774
Arrive On Green	0.00	0.51	0.51	0.08	0.63	0.00				0.28	0.00	0.28
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1413	1565	239	2303	0				891	0	89
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	20.6	77.1	10.3	45.7	0.0				37.9	0.0	3.6
Cycle Q Clear(g_c), s	0.0	20.6	77.1	10.3	45.7	0.0				37.9	0.0	3.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3294	1433	286	3213	0				955	0	774
V/C Ratio(X)	0.00	0.43	1.09	0.84	0.72	0.00				0.93	0.00	0.12
Avail Cap(c_a), veh/h	0	3294	1433	397	3213	0				1260	0	1020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.36	0.36	0.57	0.57	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.7	36.4	67.8	18.6	0.0				52.8	0.0	40.4
Incr Delay (d2), s/veh	0.0	0.1	46.5	4.6	0.8	0.0				9.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.2	38.7	5.1	21.6	0.0				19.2	0.0	1.4
LnGrp Delay(d),s/veh	0.0	22.9	82.9	72.4	19.4	0.0				62.0	0.0	40.5
LnGrp LOS		C	F	E	B					E		D
Approach Vol, veh/h		2978			2542						980	
Approach Delay, s/veh		54.4			24.4						60.1	
Approach LOS		D			C						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	17.7	84.6		47.7		102.3						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 17	59.0		54.9		81.5						
Max Q Clear Time (g_c+I1), s	12.3	79.1		39.9		47.7						
Green Ext Time (p_c), s	0.2	0.0		1.8		30.4						
Intersection Summary												
HCM 2010 Ctrl Delay			43.5									
HCM 2010 LOS			D									
Notes												




















HCM 2010 Signalized Intersection Summary
 609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	2036	0	0	1112	824	1396	0	281	0	0	0
Future Volume (veh/h)	158	2036	0	0	1112	824	1396	0	281	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	166	2143	0	0	1171	867	1469	0	296			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	209	2368	0	0	2372	1032	1527	0	1237			
Arrive On Green	0.12	0.93	0.00	0.00	0.37	0.37	0.44	0.00	0.44			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	166	2143	0	0	1171	867	1469	0	296			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	7.0	27.7	0.0	0.0	21.1	42.7	62.1	0.0	9.9			
Cycle Q Clear(g_c), s	7.0	27.7	0.0	0.0	21.1	42.7	62.1	0.0	9.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	209	2368	0	0	2372	1032	1527	0	1237			
V/C Ratio(X)	0.79	0.91	0.00	0.00	0.49	0.84	0.96	0.00	0.24			
Avail Cap(c_a), veh/h	289	2368	0	0	2372	1032	1604	0	1299			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.75	0.75	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	65.0	3.7	0.0	0.0	36.4	43.2	40.5	0.0	26.0			
Incr Delay (d2), s/veh	5.1	4.9	0.0	0.0	0.7	8.2	13.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.5	11.8	0.0	0.0	9.5	17.6	32.3	0.0	3.8			
LnGrp Delay(d),s/veh	70.1	8.6	0.0	0.0	37.1	51.4	54.4	0.0	26.0			
LnGrp LOS	E	A			D	D	D		C			
Approach Vol, veh/h		2309			2038			1765				
Approach Delay, s/veh		13.0			43.2			49.6				
Approach LOS		B			D			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		77.3			14.3	63.0		72.7				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		66.5			* 13	48.7		69.9				
Max Q Clear Time (g_c+I1), s		29.7			9.0	44.7		64.1				
Green Ext Time (p_c), s		28.0			0.1	3.8		2.4				
Intersection Summary												
HCM 2010 Ctrl Delay				33.6								
HCM 2010 LOS				C								
Notes												










HCM 2010 Signalized Intersection Summary
 610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	32	32	75	44	248	33	346	117	284	322	103
Future Volume (veh/h)	56	32	32	75	44	248	33	346	117	284	322	103
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	59	34	34	79	46	261	35	364	123	299	339	108
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	169	141	449	243	624	328	483	161	378	566	178
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.19	0.19	0.19	0.21	0.21	0.21
Sat Flow, veh/h	551	429	358	922	617	1583	1774	2609	869	1774	2653	832
Grp Volume(v), veh/h	127	0	0	125	0	261	35	245	242	299	224	223
Grp Sat Flow(s),veh/h/ln	1338	0	0	1539	0	1583	1774	1770	1709	1774	1770	1716
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	8.2	1.1	9.0	9.2	10.9	7.8	8.0
Cycle Q Clear(g_c), s	4.3	0.0	0.0	3.0	0.0	8.2	1.1	9.0	9.2	10.9	7.8	8.0
Prop In Lane	0.46		0.27	0.63		1.00	1.00		0.51	1.00		0.49
Lane Grp Cap(c), veh/h	605	0	0	692	0	624	328	328	316	378	377	366
V/C Ratio(X)	0.21	0.00	0.00	0.18	0.00	0.42	0.11	0.75	0.76	0.79	0.59	0.61
Avail Cap(c_a), veh/h	605	0	0	692	0	624	736	734	709	787	786	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	0.0	13.5	0.0	15.0	23.2	26.4	26.5	25.5	24.3	24.4
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.0	0.2	0.1	1.3	1.5	1.4	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	1.5	0.0	3.6	0.6	4.5	4.4	5.5	3.9	3.8
LnGrp Delay(d),s/veh	14.5	0.0	0.0	13.5	0.0	15.2	23.2	27.7	27.9	26.9	24.8	25.0
LnGrp LOS	B			B		B	C	C	C	C	C	C
Approach Vol, veh/h		127			386			522			746	
Approach Delay, s/veh		14.5			14.7			27.5			25.7	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.0		19.2		32.0		17.3				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		27.0		30.4		27.0		28.4				
Max Q Clear Time (g_c+I1), s		6.3		12.9		10.2		11.2				
Green Ext Time (p_c), s		1.2		1.7		1.2		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				23.0								
HCM 2010 LOS				C								





















HCM 2010 Signalized Intersection Summary
601: 4 Gee Rd & Project Driveway

02/15/2018

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	2	0	95	2	0	61		
Future Volume (veh/h)	2	0	95	2	0	61		
Number	7	14	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1900	1863		
Adj Flow Rate, veh/h	2	0	100	2	0	64		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	1456	29	0	1490		
Arrive On Green	0.00	0.00	0.80	0.80	0.00	0.80		
Sat Flow, veh/h	0	0	1820	36	0	1863		
Grp Volume(v), veh/h	0	0	0	102	0	64		
Grp Sat Flow(s),veh/h/ln	0	0	0	1856	0	1863		
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.2		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.3	0.0	0.2		
Prop In Lane	0.00	0.00		0.02	0.00			
Lane Grp Cap(c), veh/h	0	0	0	1485	0	1490		
V/C Ratio(X)	0.00	0.00	0.00	0.07	0.00	0.04		
Avail Cap(c_a), veh/h	0	0	0	1485	0	1490		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.5	0.0	0.5		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.1		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.6	0.0	0.5		
LnGrp LOS				A		A		
Approach Vol, veh/h	0		102			64		
Approach Delay, s/veh	0.0		0.6			0.5		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.5		0.0		22.5		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		18.0		18.0		18.0		
Max Q Clear Time (g_c+I1), s		2.3		0.0		2.2		
Green Ext Time (p_c), s		0.7		0.0		0.7		
Intersection Summary								
HCM 2010 Ctrl Delay			0.5					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	674	47	217	570	32	32	18	102	22	24	29
Future Volume (veh/h)	73	674	47	217	570	32	32	18	102	22	24	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	77	709	49	228	600	34	34	19	107	23	25	31
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1637	113	276	1947	110	241	32	179	178	98	122
Arrive On Green	0.07	0.49	0.49	0.16	0.57	0.57	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1774	3359	232	1774	3406	193	1342	244	1376	1260	758	939
Grp Volume(v), veh/h	77	373	385	228	311	323	34	0	126	23	0	56
Grp Sat Flow(s),veh/h/ln	1774	1770	1822	1774	1770	1829	1342	0	1620	1260	0	1697
Q Serve(g_s), s	2.9	9.3	9.3	8.4	6.2	6.2	1.6	0.0	5.0	1.2	0.0	2.0
Cycle Q Clear(g_c), s	2.9	9.3	9.3	8.4	6.2	6.2	3.6	0.0	5.0	6.2	0.0	2.0
Prop In Lane	1.00		0.13	1.00		0.11	1.00		0.85	1.00		0.55
Lane Grp Cap(c), veh/h	129	862	888	276	1012	1045	241	0	211	178	0	221
V/C Ratio(X)	0.60	0.43	0.43	0.83	0.31	0.31	0.14	0.00	0.60	0.13	0.00	0.25
Avail Cap(c_a), veh/h	482	862	888	616	1012	1045	722	0	792	629	0	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.5	11.3	11.3	27.7	7.5	7.5	28.1	0.0	27.8	30.7	0.0	26.5
Incr Delay (d2), s/veh	1.7	1.6	1.5	2.4	0.8	0.8	0.1	0.0	1.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	4.8	5.0	4.3	3.2	3.4	0.6	0.0	2.3	0.4	0.0	0.9
LnGrp Delay(d),s/veh	32.1	12.9	12.8	30.1	8.3	8.3	28.2	0.0	28.8	30.8	0.0	26.7
LnGrp LOS	C	B	B	C	A	A	C		C	C		C
Approach Vol, veh/h		835			862			160			79	
Approach Delay, s/veh		14.6			14.1			28.7			27.9	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	39.0		13.7	9.3	44.7		13.7				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	23.5	33.0		33.1	18.4	38.2		33.1				
Max Q Clear Time (g_c+I1), s	10.4	11.3		8.2	4.9	8.2		7.0				
Green Ext Time (p_c), s	0.2	17.3		0.7	0.1	22.5		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			16.1									
HCM 2010 LOS			B									
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	601	34	15	579	48	32	38	27	89	35	224
Future Volume (veh/h)	156	601	34	15	579	48	32	38	27	89	35	224
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	164	633	36	16	609	51	34	40	28	94	37	236
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	1847	105	51	1461	122	47	150	105	122	335	300
Arrive On Green	0.12	0.54	0.54	0.01	0.44	0.44	0.03	0.15	0.15	0.07	0.19	0.19
Sat Flow, veh/h	1774	3405	193	3442	3307	277	1774	1022	715	1774	1770	1583
Grp Volume(v), veh/h	164	329	340	16	325	335	34	0	68	94	37	236
Grp Sat Flow(s),veh/h/ln	1774	1770	1829	1721	1770	1814	1774	0	1737	1774	1770	1583
Q Serve(g_s), s	7.4	8.5	8.5	0.4	10.3	10.3	1.6	0.0	2.8	4.3	1.4	11.6
Cycle Q Clear(g_c), s	7.4	8.5	8.5	0.4	10.3	10.3	1.6	0.0	2.8	4.3	1.4	11.6
Prop In Lane	1.00		0.11	1.00		0.15	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	206	960	992	51	782	801	47	0	255	122	335	300
V/C Ratio(X)	0.80	0.34	0.34	0.31	0.42	0.42	0.73	0.00	0.27	0.77	0.11	0.79
Avail Cap(c_a), veh/h	413	960	992	232	782	801	141	0	723	276	871	780
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	10.5	10.5	39.8	15.6	15.6	39.5	0.0	30.9	37.4	27.4	31.5
Incr Delay (d2), s/veh	8.3	1.0	0.9	4.1	0.1	0.1	22.7	0.0	0.6	11.6	0.1	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	4.4	4.5	0.2	5.0	5.1	1.0	0.0	1.4	2.5	0.7	5.4
LnGrp Delay(d),s/veh	43.4	11.5	11.4	43.9	15.7	15.7	62.1	0.0	31.5	49.0	27.5	36.1
LnGrp LOS	D	B	B	D	B	B	E		C	D	C	D
Approach Vol, veh/h		833			676			102			367	
Approach Delay, s/veh		17.7			16.4			41.7			38.5	
Approach LOS		B			B			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.2	50.3	5.6	20.5	13.5	42.1	9.1	17.0				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.5	44.3	6.5	40.2	19.0	30.8	12.7	34.0				
Max Q Clear Time (g_c+I1), s	2.4	10.5	3.6	13.6	9.4	12.3	6.3	4.8				
Green Ext Time (p_c), s	0.0	4.8	0.0	1.9	0.3	4.3	0.1	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			22.4									
HCM 2010 LOS			C									
























HCM 2010 Signalized Intersection Summary
604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	591	16	28	518	132	17	68	35	99	52	118
Future Volume (veh/h)	120	591	16	28	518	132	17	68	35	99	52	118
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	126	622	17	29	545	139	18	72	37	104	55	124
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	1780	49	56	1575	705	38	233	198	180	80	180
Arrive On Green	0.09	0.51	0.51	0.03	0.45	0.45	0.02	0.13	0.13	0.05	0.16	0.16
Sat Flow, veh/h	1774	3519	96	1774	3539	1583	1774	1863	1583	3442	510	1150
Grp Volume(v), veh/h	126	313	326	29	545	139	18	72	37	104	0	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1846	1774	1770	1583	1774	1863	1583	1721	0	1660
Q Serve(g_s), s	4.5	6.9	6.9	1.0	6.5	3.5	0.7	2.3	1.4	1.9	0.0	6.6
Cycle Q Clear(g_c), s	4.5	6.9	6.9	1.0	6.5	3.5	0.7	2.3	1.4	1.9	0.0	6.6
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	163	895	934	56	1575	705	38	233	198	180	0	259
V/C Ratio(X)	0.77	0.35	0.35	0.52	0.35	0.20	0.48	0.31	0.19	0.58	0.00	0.69
Avail Cap(c_a), veh/h	383	895	934	164	1575	705	164	890	757	356	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	9.6	9.6	30.9	11.8	10.9	31.4	25.8	25.4	30.0	0.0	25.9
Incr Delay (d2), s/veh	7.5	1.1	1.0	7.4	0.0	0.1	9.0	0.7	0.4	2.9	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.6	3.7	0.6	3.2	1.5	0.4	1.2	0.6	1.0	0.0	3.3
LnGrp Delay(d),s/veh	36.3	10.7	10.7	38.3	11.8	11.0	40.3	26.5	25.8	33.0	0.0	29.1
LnGrp LOS	D	B	B	D	B	B	D	C	C	C		C
Approach Vol, veh/h		765			713			127			283	
Approach Delay, s/veh		14.9			12.8			28.3			30.5	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.0	38.8	4.9	15.1	10.0	34.9	6.9	13.1				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	6.0	32.8	6.0	31.7	14.0	24.8	6.7	31.0				
Max Q Clear Time (g_c+I1), s	3.0	8.9	2.7	8.6	6.5	8.5	3.9	4.3				
Green Ext Time (p_c), s	0.0	3.2	0.0	1.5	0.2	3.1	0.1	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay				17.3								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary
 605: Dove Canyon Rd & Camino Del Norte

























02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	523	113	168	479	330	95	261	108	310	164	43
Future Volume (veh/h)	100	523	113	168	479	330	95	261	108	310	164	43
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	105	551	119	177	504	347	100	275	114	326	173	45
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	1813	384	228	2143	667	128	535	239	274	443	112
Arrive On Green	0.08	0.43	0.43	0.07	0.42	0.42	0.07	0.15	0.15	0.08	0.16	0.16
Sat Flow, veh/h	1774	4206	890	3442	5085	1583	1774	3539	1583	3442	2798	709
Grp Volume(v), veh/h	105	442	228	177	504	347	100	275	114	326	108	110
Grp Sat Flow(s),veh/h/ln	1774	1695	1706	1721	1695	1583	1774	1770	1583	1721	1770	1738
Q Serve(g_s), s	4.4	6.4	6.6	3.8	4.8	12.2	4.2	5.4	5.0	6.0	4.1	4.3
Cycle Q Clear(g_c), s	4.4	6.4	6.6	3.8	4.8	12.2	4.2	5.4	5.0	6.0	4.1	4.3
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	135	1461	735	228	2143	667	128	535	239	274	280	275
V/C Ratio(X)	0.78	0.30	0.31	0.78	0.24	0.52	0.78	0.51	0.48	1.19	0.38	0.40
Avail Cap(c_a), veh/h	212	1461	735	228	2143	667	205	1690	756	274	782	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	14.0	14.1	34.6	14.0	16.2	34.4	29.5	29.3	34.7	28.4	28.5
Incr Delay (d2), s/veh	11.0	0.5	1.1	15.7	0.3	2.9	9.7	0.9	1.8	115.9	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.1	3.3	2.3	2.3	5.8	2.4	2.7	2.3	7.2	2.1	2.1
LnGrp Delay(d),s/veh	45.2	14.6	15.2	50.4	14.3	19.0	44.1	30.4	31.0	150.6	29.5	29.7
LnGrp LOS	D	B	B	D	B	B	D	C	C	F	C	C
Approach Vol, veh/h		775			1028			489			544	
Approach Delay, s/veh		18.9			22.1			33.3			102.1	
Approach LOS		B			C			C			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	9.5	17.4	10.2	38.3	10.0	16.9				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	8.7	33.3	9.0	28.5	6.0	36.0				
Max Q Clear Time (g_c+I1), s	5.8	8.6	6.2	6.3	6.4	14.2	8.0	7.4				
Green Ext Time (p_c), s	0.0	5.4	0.0	4.0	0.1	4.6	0.0	4.0				
Intersection Summary												
HCM 2010 Ctrl Delay				38.5								
HCM 2010 LOS				D								

HCM 2010 Signalized Intersection Summary

606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	1158	27	187	824	97	22	231	276	110	353	121
Future Volume (veh/h)	98	1158	27	187	824	97	22	231	276	110	353	121
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	103	1219	28	197	867	102	23	243	291	116	372	127
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	1925	599	250	2071	645	74	1214	543	167	1310	586
Arrive On Green	0.04	0.38	0.38	0.07	0.41	0.41	0.02	0.34	0.34	0.05	0.37	0.37
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	103	1219	28	197	867	102	23	243	291	116	372	127
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	4.0	26.4	1.5	7.6	16.4	5.5	0.9	6.5	19.9	4.5	10.0	7.4
Cycle Q Clear(g_c), s	4.0	26.4	1.5	7.6	16.4	5.5	0.9	6.5	19.9	4.5	10.0	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	1925	599	250	2071	645	74	1214	543	167	1310	586
V/C Ratio(X)	0.68	0.63	0.05	0.79	0.42	0.16	0.31	0.20	0.54	0.70	0.28	0.22
Avail Cap(c_a), veh/h	297	2063	642	450	2294	714	194	1214	543	322	1310	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.4	34.2	26.5	61.4	28.5	25.3	64.9	31.2	35.6	63.1	29.8	29.0
Incr Delay (d2), s/veh	2.0	0.8	0.1	2.1	0.3	0.2	2.4	0.4	3.8	5.1	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	12.5	0.7	3.7	7.7	2.4	0.4	3.2	9.3	2.2	5.0	3.4
LnGrp Delay(d),s/veh	65.4	35.0	26.5	63.5	28.8	25.5	67.2	31.6	39.3	68.2	30.4	29.9
LnGrp LOS	E	D	C	E	C	C	E	C	D	E	C	C
Approach Vol, veh/h		1350			1166			557			615	
Approach Delay, s/veh		37.2			34.4			37.1			37.4	
Approach LOS		D			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.9	52.2	14.2	57.3	7.3	55.8	10.3	61.2				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	12.6	44.0	17.6	54.6	7.6	* 50	11.6	* 61				
Max Q Clear Time (g_c+I1), s	6.5	21.9	9.6	28.4	2.9	12.0	6.0	18.4				
Green Ext Time (p_c), s	0.1	10.9	0.2	22.6	0.0	14.0	0.1	33.8				
Intersection Summary												
HCM 2010 Ctrl Delay			36.3									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte













02/15/2018

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗		
Traffic Volume (veh/h)	1587	12	110	1156	16	108		
Future Volume (veh/h)	1587	12	110	1156	16	108		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1671	13	116	1217	17	114		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3430	27	147	4012	163	145		
Arrive On Green	0.66	0.66	0.08	0.79	0.09	0.09		
Sat Flow, veh/h	5373	40	1774	5253	1774	1583		
Grp Volume(v), veh/h	1088	596	116	1217	17	114		
Grp Sat Flow(s),veh/h/ln	1695	1856	1774	1695	1774	1583		
Q Serve(g_s), s	13.7	13.7	5.4	5.6	0.7	6.0		
Cycle Q Clear(g_c), s	13.7	13.7	5.4	5.6	0.7	6.0		
Prop In Lane		0.02	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2234	1223	147	4012	163	145		
V/C Ratio(X)	0.49	0.49	0.79	0.30	0.10	0.78		
Avail Cap(c_a), veh/h	2234	1223	318	4012	690	616		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.3	7.3	38.2	2.5	35.3	37.7		
Incr Delay (d2), s/veh	0.8	1.4	3.6	0.2	0.1	3.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.6	7.4	2.8	2.7	0.4	2.7		
LnGrp Delay(d),s/veh	8.0	8.6	41.7	2.7	35.4	41.1		
LnGrp LOS	A	A	D	A	D	D		
Approach Vol, veh/h	1684			1333	131			
Approach Delay, s/veh	8.2			6.1	40.4			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.0	62.0				73.0		11.8
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	15.2	47.7				66.9		33.0
Max Q Clear Time (g_c+I1), s	7.4	15.7				7.6		8.0
Green Ext Time (p_c), s	0.1	30.9				55.5		0.2
Intersection Summary								
HCM 2010 Ctrl Delay			8.7					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary



















608: I-15 SB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↖↖		↗↗
Traffic Volume (veh/h)	0	1056	609	193	1203	0	0	0	0	603	0	65
Future Volume (veh/h)	0	1056	609	193	1203	0	0	0	0	603	0	65
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1112	641	203	1266	0				635	0	68
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	3839	1669	252	3595	0				696	0	564
Arrive On Green	0.00	0.60	0.60	0.07	0.71	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1112	641	203	1266	0				635	0	68
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	12.6	18.0	8.7	14.6	0.0				27.1	0.0	3.0
Cycle Q Clear(g_c), s	0.0	12.6	18.0	8.7	14.6	0.0				27.1	0.0	3.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3839	1669	252	3595	0				696	0	564
V/C Ratio(X)	0.00	0.29	0.38	0.81	0.35	0.00				0.91	0.00	0.12
Avail Cap(c_a), veh/h	0	3839	1669	569	3595	0				1260	0	1020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	0.85	0.85	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.6	15.7	68.5	8.6	0.0				58.5	0.0	48.9
Incr Delay (d2), s/veh	0.0	0.2	0.6	2.0	0.2	0.0				2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.6	7.0	4.2	6.9	0.0				13.1	0.0	1.2
LnGrp Delay(d),s/veh	0.0	14.7	16.2	70.4	8.8	0.0				60.7	0.0	49.0
LnGrp LOS		B	B	E	A					E		D
Approach Vol, veh/h		1753			1469						703	
Approach Delay, s/veh		15.3			17.3						59.6	
Approach LOS		B			B						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	16.2	97.4		36.4		113.6						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 25	51.5		54.9		81.5						
Max Q Clear Time (g_c+I1), s	10.7	20.0		29.1		16.6						
Green Ext Time (p_c), s	0.3	16.6		1.3		21.3						
Intersection Summary												
HCM 2010 Ctrl Delay			24.0									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 609: I-15 NB Ramps & Camino Del Norte




















02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1535	0	0	724	607	655	0	193	0	0	0
Future Volume (veh/h)	123	1535	0	0	724	607	655	0	193	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	129	1616	0	0	762	639	689	0	203			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	173	3506	0	0	3874	1685	757	0	613			
Arrive On Green	0.10	1.00	0.00	0.00	0.60	0.60	0.22	0.00	0.22			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	129	1616	0	0	762	639	689	0	203			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	5.5	0.0	0.0	0.0	8.0	17.6	29.3	0.0	9.2			
Cycle Q Clear(g_c), s	5.5	0.0	0.0	0.0	8.0	17.6	29.3	0.0	9.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	173	3506	0	0	3874	1685	757	0	613			
V/C Ratio(X)	0.75	0.46	0.00	0.00	0.20	0.38	0.91	0.00	0.33			
Avail Cap(c_a), veh/h	340	3506	0	0	3874	1685	1283	0	1038			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.86	0.86	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	66.5	0.0	0.0	0.0	13.3	15.2	57.1	0.0	49.2			
Incr Delay (d2), s/veh	2.1	0.4	0.0	0.0	0.1	0.7	3.3	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	0.1	0.0	0.0	3.6	6.9	14.3	0.0	3.6			
LnGrp Delay(d),s/veh	68.6	0.4	0.0	0.0	13.4	15.9	60.4	0.0	49.4			
LnGrp LOS	E	A			B	B	E		D			
Approach Vol, veh/h		1745			1401			892				
Approach Delay, s/veh		5.4			14.5			57.9				
Approach LOS		A			B			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		110.9			12.7	98.2		39.1				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		80.5			* 15	60.5		55.9				
Max Q Clear Time (g_c+I1), s		2.0			7.5	19.6		31.3				
Green Ext Time (p_c), s		22.6			0.1	18.9		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay				20.2								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary

610: Dove Canyon Rd & Lone Quail Rd










02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	27	20	43	14	179	30	208	80	168	189	68
Future Volume (veh/h)	80	27	20	43	14	179	30	208	80	168	189	68
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	28	21	45	15	188	32	219	84	177	199	72
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	486	159	102	625	194	757	238	339	126	258	375	131
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.13	0.13	0.13	0.15	0.15	0.15
Sat Flow, veh/h	806	332	214	1083	405	1583	1774	2526	940	1774	2571	902
Grp Volume(v), veh/h	133	0	0	60	0	188	32	151	152	177	135	136
Grp Sat Flow(s),veh/h/ln	1352	0	0	1488	0	1583	1774	1770	1697	1774	1770	1704
Q Serve(g_s), s	1.8	0.0	0.0	0.0	0.0	4.1	0.9	4.7	5.0	5.5	4.1	4.3
Cycle Q Clear(g_c), s	2.9	0.0	0.0	1.0	0.0	4.1	0.9	4.7	5.0	5.5	4.1	4.3
Prop In Lane	0.63		0.16	0.75		1.00	1.00		0.55	1.00		0.53
Lane Grp Cap(c), veh/h	746	0	0	818	0	757	238	237	228	258	258	248
V/C Ratio(X)	0.18	0.00	0.00	0.07	0.00	0.25	0.13	0.64	0.67	0.68	0.52	0.55
Avail Cap(c_a), veh/h	746	0	0	818	0	757	860	858	822	890	888	855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.7	0.0	0.0	8.3	0.0	9.1	22.4	24.0	24.1	23.8	23.2	23.2
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.1	0.1	1.1	1.3	1.2	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	0.5	0.0	1.8	0.5	2.4	2.4	2.8	2.1	2.1
LnGrp Delay(d),s/veh	9.2	0.0	0.0	8.3	0.0	9.1	22.5	25.1	25.4	25.0	23.8	23.9
LnGrp LOS	A			A		A	C	C	C	C	C	C
Approach Vol, veh/h		133			248			335			448	
Approach Delay, s/veh		9.2			8.9			25.0			24.3	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.0		13.1		33.0		12.5				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.0		29.4		28.0		28.4				
Max Q Clear Time (g_c+I1), s		4.9		7.5		6.1		7.0				
Green Ext Time (p_c), s		0.9		1.0		0.9		0.9				
Intersection Summary												
HCM 2010 Ctrl Delay				19.5								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary





















601: 4 Gee Rd & Project Driveway

02/15/2018

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	456	9	91	456	9	57		
Future Volume (veh/h)	456	9	91	456	9	57		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1900	1863		
Adj Flow Rate, veh/h	480	9	96	480	9	60		
Adj No. of Lanes	1	0	1	0	0	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	2	2	2	2		
Cap, veh/h	0	0	217	1083	260	1314		
Arrive On Green	0.00	0.00	0.80	0.80	0.80	0.80		
Sat Flow, veh/h	0	0	271	1353	98	1643		
Grp Volume(v), veh/h	0	0	0	576	69	0		
Grp Sat Flow(s),veh/h/ln	0	0	0	1624	1741	0		
Q Serve(g_s), s	0.0	0.0	0.0	2.5	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.5	0.2	0.0		
Prop In Lane	0.00	0.00		0.83	0.13			
Lane Grp Cap(c), veh/h	0	0	0	1299	1574	0		
V/C Ratio(X)	0.00	0.00	0.00	0.44	0.04	0.00		
Avail Cap(c_a), veh/h	0	0	0	1299	1574	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.7	0.5	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.4	0.1	0.0		
LnGrp Delay(d),s/veh	0.0	0.0	0.0	1.8	0.5	0.0		
LnGrp LOS				A	A			
Approach Vol, veh/h	0		576			69		
Approach Delay, s/veh	0.0		1.8			0.5		
Approach LOS			A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		22.5				22.5		0.0
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		18.0				18.0		18.0
Max Q Clear Time (g_c+I1), s		4.5				2.2		0.0
Green Ext Time (p_c), s		3.7				4.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			1.7					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 602: Paseo Del Sur/4 Gee Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	667	47	217	563	445	32	18	102	435	24	66
Future Volume (veh/h)	110	667	47	217	563	445	32	18	102	435	24	66
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	702	49	228	593	468	34	19	107	458	25	69
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	1068	75	260	718	566	521	94	528	489	168	465
Arrive On Green	0.08	0.32	0.32	0.15	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1774	3357	234	1774	1885	1486	1297	244	1376	1260	439	1211
Grp Volume(v), veh/h	116	370	381	228	557	504	34	0	126	458	0	94
Grp Sat Flow(s),veh/h/ln	1774	1770	1821	1774	1770	1601	1297	0	1620	1260	0	1649
Q Serve(g_s), s	6.5	18.3	18.4	12.8	28.9	29.0	1.8	0.0	5.3	33.8	0.0	3.8
Cycle Q Clear(g_c), s	6.5	18.3	18.4	12.8	28.9	29.0	5.6	0.0	5.3	39.1	0.0	3.8
Prop In Lane	1.00		0.13	1.00		0.93	1.00		0.85	1.00		0.73
Lane Grp Cap(c), veh/h	150	563	580	260	674	610	521	0	622	489	0	633
V/C Ratio(X)	0.77	0.66	0.66	0.88	0.83	0.83	0.07	0.00	0.20	0.94	0.00	0.15
Avail Cap(c_a), veh/h	317	563	580	315	674	610	521	0	622	489	0	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.6	29.9	29.9	42.6	28.4	28.5	22.3	0.0	20.9	35.5	0.0	20.5
Incr Delay (d2), s/veh	3.2	5.9	5.7	18.4	11.1	12.2	0.0	0.0	0.1	25.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	9.9	10.1	7.6	16.1	14.8	0.6	0.0	2.4	16.2	0.0	1.7
LnGrp Delay(d),s/veh	48.8	35.8	35.7	61.0	39.5	40.6	22.3	0.0	21.0	60.8	0.0	20.5
LnGrp LOS	D	D	D	E	D	D	C		C	E		C
Approach Vol, veh/h		867			1289			160			552	
Approach Delay, s/veh		37.5			43.7			21.3			53.9	
Approach LOS		D			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.4	38.4		44.0	13.0	44.8		44.0				
Change Period (Y+Rc), s	4.5	6.0		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	18.1	32.4		39.1	18.2	32.4		39.1				
Max Q Clear Time (g_c+I1), s	14.8	20.4		41.1	8.5	31.0		7.6				
Green Ext Time (p_c), s	0.1	11.4		0.0	0.1	1.4		1.8				
Intersection Summary												
HCM 2010 Ctrl Delay				42.6								
HCM 2010 LOS				D								
























HCM 2010 Signalized Intersection Summary
 603: Lone Quail Rd/Rancho Bernardo Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	951	39	13	929	48	37	38	25	89	35	275
Future Volume (veh/h)	207	951	39	13	929	48	37	38	25	89	35	275
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	218	1001	41	14	978	51	39	40	26	94	37	289
Adj No. of Lanes	1	2	0	2	2	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1858	76	45	1385	72	49	189	123	120	387	346
Arrive On Green	0.14	0.54	0.54	0.01	0.40	0.40	0.03	0.18	0.18	0.07	0.22	0.22
Sat Flow, veh/h	1774	3465	142	3442	3422	178	1774	1056	686	1774	1770	1583
Grp Volume(v), veh/h	218	511	531	14	506	523	39	0	66	94	37	289
Grp Sat Flow(s),veh/h/ln	1774	1770	1838	1721	1770	1831	1774	0	1742	1774	1770	1583
Q Serve(g_s), s	10.8	17.0	17.0	0.4	21.5	21.5	2.0	0.0	2.9	4.7	1.5	15.8
Cycle Q Clear(g_c), s	10.8	17.0	17.0	0.4	21.5	21.5	2.0	0.0	2.9	4.7	1.5	15.8
Prop In Lane	1.00		0.08	1.00		0.10	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	256	949	985	45	716	741	49	0	311	120	387	346
V/C Ratio(X)	0.85	0.54	0.54	0.31	0.71	0.71	0.80	0.00	0.21	0.78	0.10	0.83
Avail Cap(c_a), veh/h	333	949	985	209	724	749	133	0	655	167	698	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	13.7	13.7	44.2	22.4	22.4	43.7	0.0	31.7	41.5	28.2	33.8
Incr Delay (d2), s/veh	15.8	2.2	2.1	4.6	2.6	2.6	28.5	0.0	0.3	16.5	0.1	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.8	9.1	0.2	11.1	11.4	1.4	0.0	1.4	2.9	0.8	7.4
LnGrp Delay(d),s/veh	53.6	15.9	15.8	48.8	25.1	25.0	72.2	0.0	32.1	58.0	28.3	39.1
LnGrp LOS	D	B	B	D	C	C	E		C	E	C	D
Approach Vol, veh/h		1260			1043			105			420	
Approach Delay, s/veh		22.4			25.4			47.0			42.4	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.2	54.5	6.0	24.8	17.1	42.6	9.6	21.2				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.5	48.5	6.8	35.7	17.0	37.0	8.5	34.0				
Max Q Clear Time (g_c+I1), s	2.4	19.0	4.0	17.8	12.8	23.5	6.7	4.9				
Green Ext Time (p_c), s	0.0	8.9	0.0	2.0	0.3	6.6	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay				27.4								
HCM 2010 LOS				C								
























HCM 2010 Signalized Intersection Summary
 604: 4S Ranch Pkwy & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	934	22	26	861	132	23	68	33	99	52	118
Future Volume (veh/h)	120	934	22	26	861	132	23	68	33	99	52	118
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	126	983	23	27	906	139	24	72	35	104	55	124
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1804	42	52	1589	711	48	242	206	177	79	178
Arrive On Green	0.09	0.51	0.51	0.03	0.45	0.45	0.03	0.13	0.13	0.05	0.15	0.15
Sat Flow, veh/h	1774	3535	83	1774	3539	1583	1774	1863	1583	3442	510	1150
Grp Volume(v), veh/h	126	492	514	27	906	139	24	72	35	104	0	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1848	1774	1770	1583	1774	1863	1583	1721	0	1660
Q Serve(g_s), s	4.6	12.5	12.5	1.0	12.6	3.5	0.9	2.3	1.3	2.0	0.0	6.8
Cycle Q Clear(g_c), s	4.6	12.5	12.5	1.0	12.6	3.5	0.9	2.3	1.3	2.0	0.0	6.8
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	161	903	943	52	1589	711	48	242	206	177	0	257
V/C Ratio(X)	0.78	0.54	0.54	0.52	0.57	0.20	0.50	0.30	0.17	0.59	0.00	0.70
Avail Cap(c_a), veh/h	267	903	943	150	1589	711	160	869	739	311	0	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.5	11.0	11.0	31.8	13.6	11.1	31.9	26.1	25.7	30.8	0.0	26.6
Incr Delay (d2), s/veh	7.9	2.4	2.3	7.6	0.3	0.0	7.9	0.7	0.4	3.1	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	6.6	6.9	0.6	6.1	1.5	0.5	1.2	0.6	1.0	0.0	3.3
LnGrp Delay(d),s/veh	37.5	13.4	13.3	39.4	13.9	11.1	39.8	26.8	26.1	33.9	0.0	30.0
LnGrp LOS	D	B	B	D	B	B	D	C	C	C		C
Approach Vol, veh/h		1132			1072			131			283	
Approach Delay, s/veh		16.0			14.2			29.0			31.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.0	39.9	5.3	15.3	10.0	35.8	6.9	13.6				
Change Period (Y+Rc), s	4.0	6.0	3.5	5.0	4.0	6.0	3.5	5.0				
Max Green Setting (Gmax), s	5.6	33.9	6.0	31.0	10.0	29.5	6.0	31.0				
Max Q Clear Time (g_c+I1), s	3.0	14.5	2.9	8.8	6.6	14.6	4.0	4.3				
Green Ext Time (p_c), s	0.0	5.8	0.0	1.5	0.1	5.3	0.0	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay				17.6								
HCM 2010 LOS				B								

























HCM 2010 Signalized Intersection Summary
605: Dove Canyon Rd & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	752	225	166	708	327	207	261	106	307	164	43
Future Volume (veh/h)	100	752	225	166	708	327	207	261	106	307	164	43
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	105	792	237	175	745	344	218	275	112	323	173	45
Adj No. of Lanes	1	3	0	2	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	1679	498	228	2143	667	141	534	239	274	422	107
Arrive On Green	0.08	0.43	0.43	0.07	0.42	0.42	0.08	0.15	0.15	0.08	0.15	0.15
Sat Flow, veh/h	1774	3894	1155	3442	5085	1583	1774	3539	1583	3442	2798	709
Grp Volume(v), veh/h	105	689	340	175	745	344	218	275	112	323	108	110
Grp Sat Flow(s),veh/h/ln	1774	1695	1659	1721	1695	1583	1774	1770	1583	1721	1770	1738
Q Serve(g_s), s	4.4	10.9	11.1	3.8	7.5	12.1	6.0	5.4	4.9	6.0	4.1	4.3
Cycle Q Clear(g_c), s	4.4	10.9	11.1	3.8	7.5	12.1	6.0	5.4	4.9	6.0	4.1	4.3
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	135	1462	715	228	2143	667	141	534	239	274	267	262
V/C Ratio(X)	0.78	0.47	0.48	0.77	0.35	0.52	1.54	0.51	0.47	1.18	0.40	0.42
Avail Cap(c_a), veh/h	212	1462	715	228	2143	667	141	1690	756	274	845	830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	15.3	15.3	34.6	14.8	16.1	34.7	29.5	29.2	34.7	28.9	29.0
Incr Delay (d2), s/veh	11.0	1.1	2.3	14.9	0.4	2.8	276.7	0.9	1.7	111.8	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.3	5.5	2.3	3.6	5.7	13.8	2.7	2.2	7.1	2.1	2.2
LnGrp Delay(d),s/veh	45.2	16.4	17.6	49.5	15.2	18.9	311.4	30.4	31.0	146.5	30.1	30.3
LnGrp LOS	D	B	B	D	B	B	F	C	C	F	C	C
Approach Vol, veh/h		1134			1264			605			541	
Approach Delay, s/veh		19.4			21.0			131.8			99.6	
Approach LOS		B			C			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.0	10.0	16.9	10.2	38.3	10.0	16.9				
Change Period (Y+Rc), s	4.5	6.5	4.0	5.5	4.5	6.5	4.0	5.5				
Max Green Setting (Gmax), s	5.0	32.5	6.0	36.0	9.0	28.5	6.0	36.0				
Max Q Clear Time (g_c+I1), s	5.8	13.1	8.0	6.3	6.4	14.1	8.0	7.4				
Green Ext Time (p_c), s	0.0	8.1	0.0	4.0	0.1	7.0	0.0	4.0				
Intersection Summary												
HCM 2010 Ctrl Delay			51.4									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 606: Bernardo Center Dr & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	1376	29	170	1042	96	24	231	259	109	353	124
Future Volume (veh/h)	101	1376	29	170	1042	96	24	231	259	109	353	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	106	1448	31	179	1097	101	25	243	273	115	372	131
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	2053	639	228	2165	674	76	1180	528	162	1269	568
Arrive On Green	0.04	0.40	0.40	0.07	0.43	0.43	0.02	0.33	0.33	0.05	0.36	0.36
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	106	1448	31	179	1097	101	25	243	273	115	372	131
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	4.3	33.6	1.7	7.3	22.4	5.5	1.0	7.0	19.7	4.7	10.7	8.2
Cycle Q Clear(g_c), s	4.3	33.6	1.7	7.3	22.4	5.5	1.0	7.0	19.7	4.7	10.7	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	2053	639	228	2165	674	76	1180	528	162	1269	568
V/C Ratio(X)	0.70	0.71	0.05	0.79	0.51	0.15	0.33	0.21	0.52	0.71	0.29	0.23
Avail Cap(c_a), veh/h	233	2103	655	355	2286	712	136	1180	528	257	1269	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.8	35.2	25.7	65.2	29.8	25.0	68.3	33.8	38.1	66.6	32.6	31.8
Incr Delay (d2), s/veh	2.2	1.3	0.1	2.5	0.4	0.2	2.5	0.4	3.6	5.6	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	15.9	0.7	3.5	10.5	2.5	0.5	3.5	9.1	2.3	5.3	3.7
LnGrp Delay(d),s/veh	69.0	36.6	25.8	67.7	30.2	25.2	70.7	34.2	41.6	72.1	33.2	32.7
LnGrp LOS	E	D	C	E	C	C	E	C	D	E	C	C
Approach Vol, veh/h		1585			1377			541			618	
Approach Delay, s/veh		38.5			34.7			39.7			40.3	
Approach LOS		D			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	53.2	13.8	63.6	7.5	56.8	10.6	66.7				
Change Period (Y+Rc), s	4.4	6.0	4.4	6.4	4.4	* 6	4.4	* 6.4				
Max Green Setting (Gmax), s	10.6	45.0	14.6	58.6	5.6	* 51	9.6	* 64				
Max Q Clear Time (g_c+I1), s	6.7	21.7	9.3	35.6	3.0	12.7	6.3	24.4				
Green Ext Time (p_c), s	0.1	11.1	0.1	21.6	0.0	13.9	0.0	35.6				
Intersection Summary												
HCM 2010 Ctrl Delay			37.7									
HCM 2010 LOS			D									
Notes												













HCM 2010 Signalized Intersection Summary
607: Paseo Montanoso & Camino Del Norte

02/15/2018

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗		
Traffic Volume (veh/h)	1784	14	108	1353	18	106		
Future Volume (veh/h)	1784	14	108	1353	18	106		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1878	15	114	1424	19	112		
Adj No. of Lanes	3	0	1	3	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	3447	28	144	4021	161	143		
Arrive On Green	0.66	0.66	0.08	0.79	0.09	0.09		
Sat Flow, veh/h	5372	42	1774	5253	1774	1583		
Grp Volume(v), veh/h	1223	670	114	1424	19	112		
Grp Sat Flow(s),veh/h/ln	1695	1855	1774	1695	1774	1583		
Q Serve(g_s), s	16.2	16.2	5.4	6.9	0.8	5.9		
Cycle Q Clear(g_c), s	16.2	16.2	5.4	6.9	0.8	5.9		
Prop In Lane		0.02	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2246	1229	144	4021	161	143		
V/C Ratio(X)	0.54	0.54	0.79	0.35	0.12	0.78		
Avail Cap(c_a), veh/h	2246	1229	271	4021	679	606		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.6	7.6	38.4	2.6	35.6	37.9		
Incr Delay (d2), s/veh	1.0	1.7	3.6	0.2	0.1	3.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.8	8.8	2.8	3.3	0.4	2.7		
LnGrp Delay(d),s/veh	8.5	9.3	42.0	2.8	35.7	41.3		
LnGrp LOS	A	A	D	A	D	D		
Approach Vol, veh/h	1893			1538	131			
Approach Delay, s/veh	8.8			5.7	40.5			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.9	62.5				73.4		11.7
Change Period (Y+Rc), s	4.0	6.1				6.1		4.0
Max Green Setting (Gmax), s	13.0	50.3				67.3		32.6
Max Q Clear Time (g_c+I1), s	7.4	18.2				8.9		7.9
Green Ext Time (p_c), s	0.1	31.6				56.7		0.2
Intersection Summary								
HCM 2010 Ctrl Delay			8.7					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary
608: I-15 SB Ramps & Camino Del Norte



























02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗↗	↘↘	↑↑↑					↗↗		↗↗
Traffic Volume (veh/h)	0	1120	740	187	1398	0	0	0	0	587	0	65
Future Volume (veh/h)	0	1120	740	187	1398	0	0	0	0	587	0	65
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1179	779	197	1472	0				618	0	68
Adj No. of Lanes	0	4	2	2	3	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	3883	1689	246	3621	0				679	0	550
Arrive On Green	0.00	0.61	0.61	0.07	0.71	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	6669	2787	3442	5253	0				3442	0	2787
Grp Volume(v), veh/h	0	1179	779	197	1472	0				618	0	68
Grp Sat Flow(s),veh/h/ln	0	1602	1393	1721	1695	0				1721	0	1393
Q Serve(g_s), s	0.0	13.3	22.9	8.5	17.6	0.0				26.4	0.0	3.0
Cycle Q Clear(g_c), s	0.0	13.3	22.9	8.5	17.6	0.0				26.4	0.0	3.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3883	1689	246	3621	0				679	0	550
V/C Ratio(X)	0.00	0.30	0.46	0.80	0.41	0.00				0.91	0.00	0.12
Avail Cap(c_a), veh/h	0	3883	1689	546	3621	0				1168	0	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.79	0.79	0.82	0.82	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.3	16.2	68.6	8.8	0.0				58.9	0.0	49.5
Incr Delay (d2), s/veh	0.0	0.2	0.7	1.9	0.3	0.0				3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.9	8.9	4.1	8.3	0.0				12.8	0.0	1.2
LnGrp Delay(d),s/veh	0.0	14.4	16.9	70.5	9.0	0.0				62.2	0.0	49.6
LnGrp LOS		B	B	E	A					E		D
Approach Vol, veh/h		1958			1669						686	
Approach Delay, s/veh		15.4			16.3						61.0	
Approach LOS		B			B						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.9	98.4		35.7		114.3						
Change Period (Y+Rc), s	* 5.2	7.5		6.1		7.5						
Max Green Setting (Gmax), s	* 24	56.5		50.9		85.5						
Max Q Clear Time (g_c+I1), s	10.5	24.9		28.4		19.6						
Green Ext Time (p_c), s	0.3	19.6		1.2		27.6						
Intersection Summary												
HCM 2010 Ctrl Delay			23.0									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary




















609: I-15 NB Ramps & Camino Del Norte

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			  	 	 		 			
Traffic Volume (veh/h)	123	1582	0	0	782	591	786	0	187	0	0	0
Future Volume (veh/h)	123	1582	0	0	782	591	786	0	187	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	0	1863			
Adj Flow Rate, veh/h	129	1665	0	0	823	622	827	0	197			
Adj No. of Lanes	2	3	0	0	4	2	2	0	2			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	173	3300	0	0	3615	1572	896	0	726			
Arrive On Green	0.10	1.00	0.00	0.00	0.56	0.56	0.26	0.00	0.26			
Sat Flow, veh/h	3442	5253	0	0	6669	2787	3442	0	2787			
Grp Volume(v), veh/h	129	1665	0	0	823	622	827	0	197			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1393	1721	0	1393			
Q Serve(g_s), s	5.5	0.0	0.0	0.0	9.6	18.8	35.1	0.0	8.4			
Cycle Q Clear(g_c), s	5.5	0.0	0.0	0.0	9.6	18.8	35.1	0.0	8.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	173	3300	0	0	3615	1572	896	0	726			
V/C Ratio(X)	0.75	0.50	0.00	0.00	0.23	0.40	0.92	0.00	0.27			
Avail Cap(c_a), veh/h	317	3300	0	0	3615	1572	1374	0	1113			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.86	0.86	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	66.5	0.0	0.0	0.0	16.4	18.3	54.0	0.0	44.1			
Incr Delay (d2), s/veh	2.1	0.5	0.0	0.0	0.1	0.7	5.5	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	0.1	0.0	0.0	4.3	7.3	17.3	0.0	3.3			
LnGrp Delay(d),s/veh	68.6	0.5	0.0	0.0	16.5	19.1	59.5	0.0	44.2			
LnGrp LOS	E	A			B	B	E		D			
Approach Vol, veh/h		1794			1445			1024				
Approach Delay, s/veh		5.4			17.6			56.6				
Approach LOS		A			B			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		104.8			12.7	92.1		45.2				
Change Period (Y+Rc), s		7.5			* 5.2	7.5		6.1				
Max Green Setting (Gmax), s		76.5			* 14	57.5		59.9				
Max Q Clear Time (g_c+I1), s		2.0			7.5	20.8		37.1				
Green Ext Time (p_c), s		24.2			0.1	19.1		2.0				
Intersection Summary												
HCM 2010 Ctrl Delay				21.8								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary
 610: Dove Canyon Rd & Lone Quail Rd

02/15/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	27	17	41	14	182	27	314	78	171	295	68
Future Volume (veh/h)	80	27	17	41	14	182	27	314	78	171	295	68
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	28	18	43	15	192	28	331	82	180	311	72
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	464	151	84	585	190	712	292	465	114	280	452	103
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	821	335	186	1077	422	1583	1774	2821	689	1774	2863	654
Grp Volume(v), veh/h	130	0	0	58	0	192	28	206	207	180	191	192
Grp Sat Flow(s),veh/h/ln	1342	0	0	1499	0	1583	1774	1770	1741	1774	1770	1747
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	4.7	0.8	6.9	7.0	5.9	6.3	6.5
Cycle Q Clear(g_c), s	3.3	0.0	0.0	1.1	0.0	4.7	0.8	6.9	7.0	5.9	6.3	6.5
Prop In Lane	0.65		0.14	0.74		1.00	1.00		0.40	1.00		0.37
Lane Grp Cap(c), veh/h	698	0	0	774	0	712	292	292	287	280	279	276
V/C Ratio(X)	0.19	0.00	0.00	0.07	0.00	0.27	0.10	0.71	0.72	0.64	0.68	0.70
Avail Cap(c_a), veh/h	698	0	0	774	0	712	809	807	794	837	835	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.3	0.0	0.0	9.7	0.0	10.7	22.1	24.6	24.7	24.6	24.8	24.8
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.0	0.1	0.1	1.2	1.3	0.9	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.6	0.0	2.0	0.4	3.4	3.4	3.0	3.2	3.2
LnGrp Delay(d),s/veh	10.9	0.0	0.0	9.8	0.0	10.8	22.1	25.8	26.0	25.5	25.9	26.0
LnGrp LOS	B			A		B	C	C	C	C	C	C
Approach Vol, veh/h		130			250			441			563	
Approach Delay, s/veh		10.9			10.6			25.6			25.8	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.0		14.4		33.0		14.9				
Change Period (Y+Rc), s		5.0		4.6		5.0		4.6				
Max Green Setting (Gmax), s		28.0		29.4		28.0		28.4				
Max Q Clear Time (g_c+I1), s		5.3		8.5		6.7		9.0				
Green Ext Time (p_c), s		0.9		1.3		0.9		1.2				
Intersection Summary												
HCM 2010 Ctrl Delay				21.6								
HCM 2010 LOS				C								



SIGNAL TIMING SHEETS

INTERSECTION: CAMINO DEL SUR & FOUR GEE RD

PASEO DEL SUR

233 Program



Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Four Gee Rd / PASEO DEL SUR Last Database Change:
E/W Street: Camino del Sur

Timing sheets by: **JMV**

Approved by:

Timing implemented on: 4/3/2013 TO

Camino del Sur Four Gee Rd Camino del Sur

Phase Numbers---->	Phase							
	1	2	3	4	5	6	7	8
Row								
0	Ped Walk	7		7		7		7
1	Ped FDW	9	25	26		9	25	26
2	Min Green	4	7		4	4	7	4
3	Type 3 Disconnect							
4	Added per Vehicle		eml 5/22/13					
5	Veh Extension	2.0	5.5	6.6	2.0	2.0	5.2	6.6
6	Max Gap	2.0	5.5	6.6	2.0	2.0	5.2	6.6
7	Min Gap	2.0	0.2		2.0	2.0	0.2	2.0
8	Max Limit	30	60		40	30	60	30
9	Max Limit 2							
A	Adv. / Delay Walk							
B	PE Min Ped FDW							
C	Cond Serv Check							
D	Reduce Every		0.6	0.5			0.6	0.5
E	Yellow Change	3.4	5.0		3.9	3.4	5.0 5.1 ③	3.9
F	Red Clear	1.0	1.0		1.0	1.0	1.0	1.0

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

	F	Row
Permit	12_456_8	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
View Set Peds		5
Rest In Walk		6
Red Rest		7
Double Entry	-4-8	8
Max Recall		9
Soft Recall	2_6	A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	2_6	E
First Phases	4_8	F

Phase Timing - Bank 1

<F/1+Phase+Row> ③ AL3

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
Phase 1	---	---	---	---	---
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					
Alternate Timing					

Free Lag | 2_4_6_8 | <C/1+F+0>

How to Set Page Access Code:
F/1 - C + 0 + F = 1
F + 9 + E = 1

Preempt Timing <F/1+E+Row>

Drop Number		<C/0+0+0>
Zone Number		<C/0+0+1>
Area Number		<C/0+0+2>
Area Address		<C/0+0+3>
QuicNet Channel		(QuicNet)

Communication Addresses

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Notes: 33870-51-D

Phase Functions <F/1+F+Row>

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Manual Plan	14	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Row	Detector Name	0	1	2	3	1	3
		C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
0	2I2U	39					1.8
1	6J2U	40					1.8
2	4I6U	41					
3	8J6U	42					
4	2I2L	43					1.8
5	6J2L	44					1.8
6	4I6L	45				15.0	
7	8J6L	46					
8	2I4	47					
9	6J4	48					
A	4I8	49					
B	8J8	50					
C	5J1U	55					
D	1I1U	56					
E	7J5	57					
F	3I5	58					

Program Type:

	Ped / Phase / Overlap								Row
	1	2	3	4	5	6	7	8	
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30
--------------	----

<E/125+D+0>

Enable Redirection

(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
-------------------	----	-----------

Max ON (minutes)	60	<D/0+0+2>
------------------	----	-----------

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	4	5	6	7	2	4
		C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
0	5J9U	59					
1	1I9U	60					
2	7J9L	61					
3	3I9L	62					
4	2I3U	63					1.8
5	6J3U	64					1.8
6	4I7U	65					
7	8J7U	66					
8	2 PPB	67					
9	6 PPB	68					
A	4 PPB	69					
B	8 PPB	70					
C	2I3L	76					
D	6J3L	77					
E	4I7L	78					
F	8J7L	79					

Detector Attributes

- 1 = Full Time Delay
- 2 = Ped Call
- 3 =
- 4 = Count
- 5 = Extension
- 6 = Type 3
- 7 = Calling
- 8 = Alternate

Det. Assignments

- 1 = Det. Set 1
- 2 = Det. Set 2
- 3 = Det. Set 3
- 4 =
- 5 =
- 6 = Failure - Min Recall
- 7 = Failure - Max Recall
- 8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

Disable Alarms

- 1 = Stop Time
- 2 = Flash Sense
- 3 = Keyboard Entry
- 4 = Manual Plan
- 5 = Police Control
- 6 = External Alarm
- 7 = Detector Failure
- 8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?
------------	--------

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>
------	---	-----------

Redial Time (minutes)

(View Redial Timer at E/2+D+6)

Detector Assignments <E/126+Column+Row>

<D/0+Column+Row>

Dial-Back Telephone Number <C/5+D+Row>

		Overlap							
		1	2	3	4	5	6	7	8
Row									
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

		F	Row
	Fast Green Flash Phase		0
	Green Flash Phases		1
	Flashing Walk Phases		2
	Guaranteed Passage		3
	Simultaneous Gap Term		4
	Sequential Timing		5
	Advance Walk Phases		6
	Delay Walk Phases		7
	External Recall		8
	Start-up Overlap Green		9
	Max Extension		A
	Inhibit Ped Reservice		B
	Semi-Actuated		C
	Start-up Overlap Yellow		D
	Start-up Vehicle Calls		E
	Start-up Ped Calls		F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	---
RR-2 *	---
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

	2	Row
Phase 1	0	0
Phase 2	0	1
Phase 3	0	2
Phase 4	0	3
Phase 5	0	4
Phase 6	0	5
Phase 7	0	6
Phase 8	0	7
		8

<C/5+2+Row>

Coordination Transition Minimums

- Extra 1 Flags**
- 1 = TBC Type 1
 - 2 = NEMA Ext. Coord
 - 3 = Auto Daylight Savings
 - 4 = EV Advance
 - 5 = Extended Status
 - 6 = International Ped
 - 7 = Flash - Clear Outputs
 - 8 = Split Ring
- IC Select Flags**
- 1 =
 - 2 = Modem
 - 3 = 7-Wire Slave
 - 4 = Flash / Free
 - 5 =
 - 6 = Simplex Master
 - 7 = 7-Wire Master
 - 8 = Offset Interrupter

- Extra 2 Flags**
- 1 = AWB During Initial
 - 2 = LMU Installed
 - 3 = Disable Min Walk
 - 4 = QuicNet/4 System
 - 5 = Ignore P/P on EV
 - 6 =
 - 7 = Reserved
 - 8 =
- Flash to PE & PE Non-Lock**
- 1 = EV A 5 = RR 1
 - 2 = EV B 6 = RR 2
 - 3 = EV C 7 = SE 1
 - 4 = EV D 8 = SE 2

- 8-0 Hour, Minute, Day-of-Week
- 8-1 Day-of-Month, Year, Month
- 8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Spec. Funct. 1	NOT-3	Max 2	Pretimed	Set Monday	Dial 2 (7-Wire)	Sim Term	0
1	Spec. Funct. 2	NOT-4	System Det 1	Plan 1	Ext. Perm 1	Dial 3 (7-Wire)	EV-A	1
2	Spec. Funct. 3	OR-4 (a)	System Det 2	Plan 2	Ext. Perm 2	Offset 1 (7-Wire)	EV-B	2
3	Spec. Funct. 4	OR-4 (b)	System Det 3	Plan 3	Dimming	Offset 2 (7-Wire)	EV-C	3
4	NAND-3 (a)	OR-5 (a)	System Det 4	Plan 4	Set Clock	Offset 3 (7-Wire)	EV-D	4
5	NAND-3 (b)	OR-5 (b)	System Det 5	Plan 5	Stop Time	Free (7-Wire)	RR-1	5
6	NAND-4 (a)	OR-6 (a)	System Det 6	Plan 6	Flash Sense	81 Flash (7-Wire)	RR-2	6
7	NAND-4 (b)	OR-6 (b)	System Det 7	Plan 7	Manual Enable	Excl. Ped Omit	Spec. Event 1	7
8	OR-7 (a)	Fig 3 Diamond	System Det 8	Plan 8	Man. Advance	NOT-1	Spec. Event 2	8
9	OR-7 (b)	Fig 4 Diamond	Max Inhibit (nema)	Plan 9	External Alarm	NOT-2	External Lag	9
A	OR-7 (c)	AND-4 (a)	Force A (nema)	DELAY-A	Phase Bank 2	OR-1 (a)	AND-1 (a)	A
B	OR-7 (d)	AND-4 (b)	Force B (nema)	DELAY-B	Phase Bank 3	OR-1 (b)	AND-1 (b)	B
C	OR-8 (a)	NAND-1 (a)	C.N.A. (nema)	DELAY-C	Overlap Set 2	OR-2 (a)	AND-2 (a)	C
D	OR-8 (b)	NAND-1 (b)	Hold (nema)	DELAY-D	Overlap Set 3	OR-2 (b)	AND-2 (b)	D
E	OR-8 (c)	NAND-2 (a)	Max Recall	DELAY-E	Detector Set 2	OR-3 (a)	AND-3 (a)	E
F	OR-8 (d)	NAND-2 (b)	Min Recall	DELAY-F	Detector Set 3	OR-3 (b)	AND-3 (b)	F

Assignable Inputs

<E/126+Column+Row>

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Phase ON - 1	Preempt Fail	Flasher 0	Free	NOT-1	TOD Out 1	Dial 2 (7-Wire)	0
1	Phase ON - 2	Sp Evnt Out 1	Flasher 1	Plan 1	OR-1	TOD Out 2	Dial 3 (7-Wire)	1
2	Phase ON - 3	Sp Evnt Out 2	Fast Flasher	Plan 2	OR-2	TOD Out 3	Offset 1 (7-Wire)	2
3	Phase ON - 4	Sp Evnt Out 3	Fig 3 Diamond	Plan 3	OR-3	TOD Out 4	Offset 2 (7-Wire)	3
4	Phase ON - 5	Sp Evnt Out 4	Fig 4 Diamond	Plan 4	AND-1	TOD Out 5	Offset 3 (7-Wire)	4
5	Phase ON - 6	Sp Evnt Out 5		Plan 5	AND-2	TOD Out 6	Free (7-Wire)	5
6	Phase ON - 7	Sp Evnt Out 6		Plan 6	AND-3	TOD Out 7	Flash (7-Wire)	6
7	Phase ON - 8	Sp Evnt Out 7		Plan 7	NOT-2	TOD Out 8	Preempt	7
8	Ph. Check - 1	Sp Evnt Out 8	NOT-3	Plan 8	EV-A	Adv. Warn - 1	Low Priority A	8
9	Ph. Check - 2		NOT-4	Plan 9	EV-B	Adv. Warn - 2	Low Priority B	9
A	Ph. Check - 3	Detector Fail	OR-4	Spec. Funct. 3	EV-C	DELAY-A	Low Priority C	A
B	Ph. Check - 4	Spec. Funct. 1	OR-5	Spec. Funct. 4	EV-D	DELAY-B	Low Priority D	B
C	Ph. Check - 5	Spec. Funct. 2	OR-6	NAND-3	RR-1	DELAY-C		C
D	Ph. Check - 6	Central Control	AND-4	NAND-4	RR-2	DELAY-D		D
E	Ph. Check - 7	Excl. Ped DW	NAND-1	OR-7	Spec. Event 1	DELAY-E		E
F	Ph. Check - 8	Excl. Ped WK	NAND-2	OR-8	Spec. Event 2	DELAY-F		F

Assignable Outputs

<E/127+Column+Row>

INTERSECTION: Cam Del Norte @ Lone Quail Rd 75

QuicNet System Parameters

Group Assignment: **NONE**
 Field Master Assignment: **NONE**
 System Reference Number: **55**
 Communications Channel: **COM1:**
 Drop Address: **15**
 Area Number: **2**
 Area Address: **36**

N/S Street Name: **Lone Quail Rd**
 E/W Street Name: **Cam Del Norte**

Last QuicNet Database Change: 11/3/2016 10:57

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment	_____
Exclusive Walk	0
Exclusive FDW	0
All Red Clear	0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output	0
Don't Walk Output	0

Exclusive Ped Phase

Basic Phase Timing	Phase							
	1	2	3	4	5	6	7	8
Min Green	4	6	4	5	4	6	4	4
Extension	3.5	2.0	3.5	3.0	3.5	2.0	3.5	3.0
Max	25	50	20	45	30	40	17	25
Max 2	0	0	0	0	0	0	0	0
Cond Serve Check	0	0	0	0	0	0	0	0

Alternate Timing - Bank 1	Phase							
	1	2	3	4	5	6	7	8
Alternate Walk	0	0	0	0	0	0	0	0
Alternate Ped Clear	0	0	0	0	0	0	0	0
Alternate Minimum	0	0	0	0	0	0	0	0
Alternate Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Clear	Phase							
	1	2	3	4	5	6	7	8
Yellow Change	3.5	5.0	3.0	4.0	3.5	5.0	3.0	4.0
Red Clear	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0

Red Lock	_____
Yellow Lock	_____
Simultaneous Gap	_____
Rest In Walk	_____
Advance Walk	_____
Flashing Walk	_____
Max Extension	_____

Red Rest	_____
Dual Entry	_____
Sequential Timing	_____
Inhibit Ped Reservice	_____
Semi-Actuated	_____
Guaranteed Passage	_____
Conditional Service	_____

Phase Functions - Page 1

Pedestrian Timing	Phase							
	1	2	3	4	5	6	7	8
Walk	0	7	0	7	0	7	0	7
Ped Clear - FDW	0	17	0	27	0	20	0	27
Adv / Delay Walk	0	0	0	0	0	0	0	0
PE Min Ped FDW	0	0	0	0	0	0	0	0

Minimum Recall	2 6
Ped Recall	_____
Maximum Recall	_____
Green Flash	_____
Overlap Green Flash	_____

Soft Recall	_____
External Recall	_____
Manual Control Calls	_____
Fast Green Flash	_____
Fast Overlap G. Flash	_____

Phase Functions - Page 2

Volume Density	Phase							
	1	2	3	4	5	6	7	8
Type 3 Disconnect	0	0	0	0	0	0	0	0
Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Added Initial	0	0	0	0	0	0	0	0
Min Gap	3.5	1.0	3.5	3.0	3.5	1.0	3.5	3.0
Max Gap	3.5	2.0	3.5	3.0	3.5	2.0	3.5	3.0
Reduce Every	0.0	8.0	0.0	0.0	0.0	8.0	0.0	0.0

Phase Timing - Bank 1

INTERSECTION: Cam Del Norte @ 4S Ranch Pkwy750

Last QuicNet Database Change: 7/25/2012 14:05

QuicNet System Parameters
 Group Assignment: **NONE**
 Field Master Assignment: **NONE**
 System Reference Number: **299**
 Communications Channel: **COM1:**
 Drop Address: **14**
 Area Number: **2**
 Area Address: **35**

N/S Street Name: **4S Ranch Pkwy**
 E/W Street Name: **Cam Del Norte**

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment	_____	Note: Set the Exclusive Ped Outputs on the "Outputs / General" page
Exclusive Walk	0	
Exclusive FDW	0	
All Red Clear	0.0	

Walk Output	0
Don't Walk Output	0

Exclusive Ped Phase

Basic Phase Timing	Phase							
	1	2	3	4	5	6	7	8
Min Green	5	4	5	4	6	5	4	5
Extension	3.0	1.5	3.0	3.0	3.0	1.5	3.0	3.0
Max	17	40	17	20	17	40	20	40
Max 2	0	0	0	0	0	0	0	0
Cond Serve Check	0	0	0	0	0	0	0	0

Alternate Timing - Bank 1	Phase							
	1	2	3	4	5	6	7	8
Alternate Walk	0	0	0	0	0	0	0	0
Alternate Ped Clear	0	0	0	0	0	0	0	0
Alternate Minimum	0	0	0	0	0	0	0	0
Alternate Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Clear	Phase							
	1	2	3	4	5	6	7	8
Yellow Change	3.5	5.0	3.0	4.0	3.5	5.0	3.0	4.0
Red Clear	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0

Red Lock	_____	Red Rest	_____
Yellow Lock	_____	Dual Entry	_____
Simultaneous Gap	_____	Sequential Timing	_____
Rest In Walk	_____	Inhibit Ped Reservice	_____
Advance Walk	_____	Semi-Actuated	_____
Flashing Walk	_____	Guaranteed Passage	_____
Max Extension	_____	Conditional Service	_____

Phase Functions - Page 1

Pedestrian Timing	Phase							
	1	2	3	4	5	6	7	8
Walk	0	7	0	7	0	7	0	7
Ped Clear - FDW	0	14	0	21	0	15	0	24
Adv / Delay Walk	0	0	0	0	0	0	0	0
PE Min Ped FDW	0	0	0	0	0	0	0	0

Minimum Recall	<u> 2 </u> <u> 6 </u>	Soft Recall	_____
Ped Recall	_____	External Recall	_____
Maximum Recall	_____	Manual Control Calls	_____
Green Flash	_____	Fast Green Flash	_____
Overlap Green Flash	_____	Fast Overlap G. Flash	_____

Phase Functions - Page 2

Volume Density	Phase							
	1	2	3	4	5	6	7	8
Type 3 Disconnect	0	0	0	0	0	0	0	0
Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Added Initial	0	0	0	0	0	0	0	0
Min Gap	3.0	1.0	3.0	3.0	3.0	1.0	3.0	3.0
Max Gap	3.0	1.5	3.0	3.0	3.0	1.5	3.0	3.0
Reduce Every	0.0	8.0	0.0	0.0	0.0	8.0	0.0	0.0

Phase Timing - Bank 1

INTERSECTION: Cam Del Norte @ Dove Canyon Rd

Group Assignment: **NONE**

N/S Street Name: **Dove Canyon Rd**

Last Database Change: 3/1/2007 8:52

Field Master Assignment: **NONE**

E/W Street Name: **Cam Del Norte**

System Reference Number: **145**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	0	<C+0+0>
Zone Number	0	<C+0+1>
Area Number	0	<C+0+2>
Area Address	0	<C+0+3>
QuicNet Channel	COM1:	(QuicNet)

Manual Plan	14	<C+A+1>
Manual Offset	0	<C+B+1>

Max Initial	20	<F+0+E>
Red Revert	5.0	<F+0+F>
All Red Start	5.0	<F+C+0>

Communication Addresses

Manual Selection

Start / Revert Times

		Phase							
Column Numbers →		1	2	3	4	5	6	7	8
Row	Phase Names →								
0	Ped Walk	0	5	0	5	0	5	0	5
1	Ped FDW	0	27	0	28	0	21	0	31
2	Min Green	5	5	5	5	5	5	5	5
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	3.5	2.0	3.0	3.5	3.5	2.0	3.0	3.5
6	Max Gap	3.5	2.0	3.0	3.5	3.5	2.0	3.0	3.5
7	Min Gap	3.5	1.0	3.0	3.5	3.5	1.0	3.0	3.5
8	Max Limit	25	40	17	40	17	40	17	40
9	Max Limit 2	0	0	0	0	0	0	0	0
A		0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
D	Reduce Every	0.0	8.0	0.0	0.0	0.0	8.0	0.0	0.0
E	Yellow Change	3.5	5.0	3.0	4.0	3.5	5.0	3.0	4.0
F	Red Clear	1.0	1.5	1.0	1.5	1.0	1.5	1.0	1.5

Phase Timing - Bank 1 <F Page>

		E	F
RR-1 Delay	0		
RR-1 Clear	0		
EV-A Delay	0		
EV-A Clear	1		
EV-B Delay	0		
EV-B Clear	1		
EV-C Delay	0		
EV-C Clear	1		
EV-D Delay	0		
EV-D Clear	1		
RR-2 Delay	0		
RR-2 Clear	0		
View EV Delay	---		
View EV Clear	---		
View RR Delay	---		
View RR Clear	---		
Permit	12345678		
Red Lock	_____		
Yellow Lock	<u> 3 5 7 </u>		
Min Recall	<u> 2 6 </u>		
Ped Recall	_____		
View Set Peds	<u> 2 4 6 8 </u>		
Rest In Walk	_____		
Red Rest	_____		
Dual Entry	<u> 2 6 </u>		
Max Recall	_____		
Soft Recall	_____		
Max 2	_____		
Cond. Service	_____		
Man Cntrl Calls	_____		
Yellow Start	<u> 2 6 </u>		
First Phases	<u> 4 8 </u>		

Preempt Timing <F Page>

Manual Plan
 0 = Automatic
 1-9 = Plan 1-9
 14 = Free
 15 = Flash

Manual Offset
 0 = Automatic
 1 = Offset A
 2 = Offset B
 3 = Offset C

INTERSECTION: Bernardo Cnt Dr @ Camino Del Norte

Group Assignment:
Field Master Assignment:

N/S Street Name: Bernardo Cnt Dr
E/W Street Name: Camino Del Norte

Last Database Change:
System Ref. Number:



Row	Column # → Phase # →	Phase							
		1	2	3	4	5	6	7	8
0									
0	Ped Walk				7		7		7
1	Ped FDW				33		38		33
2	Min Green	4	7	4	10	4	7	4	10
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	5.4	2.0	4.8	2.0	5.9	2.0	4.9
6	Max Gap	2.0	5.4	2.0	4.8	2.0	5.9	2.0	4.9
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	60	40	30	60	30	40	30	60
9	Max Limit 2	60		30			40	30	60
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.6		0.7		0.5		0.6
E	Yellow	3.4	5.0	3.4	5.4	3.4	4.2	3.4	5.3
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

Row	E	F	Row
0	RR-1 Delay	Permit	0
1	RR-1 Clear	Red Lock	1
2	EV-A Delay	Yellow Lock	2
3	EV-A Clear	Min Recall	3
4	EV-B Delay	Ped Recall	4
5	EV-B Clear	Peds (View)	5
6	EV-C Delay	Rest In Walk	6
7	EV-C Clear	Red Rest	7
8	EV-D Delay	Dbl Entry	8
9	EV-D Clear	Max Recall	9
A	RR-2 Delay	Soft Recall	A
B	RR-2 Clear	Max 2	B
C	View EV Delay	Cond Serv	C
D	View EV Clear	Ped Lock	D
E	View RR Delay	Yellow Start	E
F	View RR Clear	1st Phases	F

Preempt Timing

F + E + Row

Phase Functions <F Page>

F + F + Row

Max Initial	0
Red Revert	5.0
All Red Start	0.0

F + 0 + E
F + 0 + F
F + C + 0

Start / Revert Times

Drop Number	
Zone Number	
Area Number	
Area Address	
QuicNet Channel	

C + 0 + 0
C + 0 + 1
C + 0 + 2
C + 0 + 3
(QuicNet)

Communication Addresses

C + F + 0	F	Row
Free Lag	2 4 6 8	0

Lag Phases

<C Page>

Overlap Timing

Row	G	C	D	0
	Green Clear	Yellow Change	Red Clear	Load-Switch #
Overlap A	A			
Overlap B	B			
Overlap C	C			
Overlap D	D			

<F Page>

F + COLOR +

<D Page>

D + 0 + OVERLAP

Downtime Flash 255 (minutes)

Downtime Before Auto Manual Flash

F + 0 + 8

Disable Ports 234

Disable Communication Ports

D + D + 9

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Timing Sheet By: rej

Approved By:

Drawing Number: 31963-28-D

Timing Implemented On: 3/25/2004

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

T.O.D. Functions
 0 = Permitted Phases
 1 = Red Lock
 2 = Yellow Lock
 3 = Veh Min Recall
 4 = Ped Recall
 5 =
 6 = Rest In Walk
 7 = Red Rest
 8 = Double Entry
 9 = Veh Max Recall
 A = Veh Soft Recall
 B = Maximum 2
 C = Conditional Service
 D = Free Lag Phases
 E = Bit 1 - Local Override
 Bit 2 - Phase Bank 2
 Bit 3 - Phase Bank 3
 Bit 4 - Disable Detector
 OFF Monitor
 Bit 7 - Detector Count Monitor
 Bit 8 - Real Time Split Monitor
 F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	<u> 2 </u>
6	Ped 6P	<u> 6 </u>
7	Ped 4P	<u> 4 </u>
8	Ped 8P	<u> 8 </u>
9	Yellow Flash Phases	
A	Overlap A - Phases	<u> 1 </u> <u> 8 </u>
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	<u> 1 </u>

TOD Function

7 + ROW

<D Page>
D + F + ROW

Configuration

E + F + ROW

<E Page>

Day of Week

- 1 = Sunday
- 2 = Monday
- 3 = Tuesday
- 4 = Wednesday
- 5 = Thursday
- 6 = Friday
- 7 = Saturday

- Assign 5 Outputs
- 1 = Right Turn Overlap
 - 2 = TOD Outputs
 - 3 = EV Beacon - Steady
 - 4 = EV Beacon - Flashing
 - 5 = Special Event Outputs
 - 6 = Phase 3 & 7 Ped
 - 7 = Advanced Warning Sign
 - 8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	<u> 8 </u>
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	<u> 2 </u> <u> 5 </u>
B	EV-B Phases	<u> 4 </u> <u> 7 </u>
C	EV-C Phases	<u> 1 </u> <u> 6 </u>
D	EV-D Phases	<u> 3 </u> <u> 8 </u>
E	Extra 1 Config. Bits	<u> 1 </u> <u> 345 </u>
F	IC Select (Interconnect)	<u> 2 </u>

- Extra 1 Flags
- 1 = TBC Type 1
 - 2 = NEMA Ext. Coord
 - 3 = Auto Daylight Savings
 - 4 = EV Advance
 - 5 = Remote Download
 - 6 = Special Event
 - 7 = Prelimed Operation
 - 8 = Split Ring Operation

- IC Select Flags
- 1 =
 - 2 = Modem
 - 3 = 7-Wire Slave
 - 4 = Flash / Free
 - 5 =
 - 6 = Simplex Master
 - 7 = 7-Wire Master
 - 8 = Offset Interrupter

Configuration

E + E + ROW

For access, set F + 9 + E = 1

Time and Date

- 8-0 Hour, Minute, Day-of-Week
- 8-1 Day-of-Month, Year, Month
- 8-F Seconds

Disable Parity	<u> 0 </u>	D+B+0
----------------	--------------	-------

Dial-Up Telephone Communications
 (If set to a non-zero value, parity will be disabled)

Program Information

- C + C + 0 = program
- C + C + F = version

Remote Download

- C + 0 + 4 = 1-255
- w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3	10.0	
4		
5		
6		
7		1.8
8		1.8
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	111	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
	---	---
	---	---

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		1.8
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
	---	---
	---	---

Row	Detector #
0	
1	System Det. # 1
2	System Det. # 2
3	System Det. # 3
4	System Det. # 4
5	System Det. # 5
6	System Det. # 6
7	System Det. # 7
8	System Det. # 8

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	F+C+1
Time Before Yellow	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	F+D+1
Time Before Yellow	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

Detector Delay & Carryover <D Page>

D + X (across) + ROW

SECTION: CAMINO DEL NORTE AT PASEO MONTANOSO

Group Assignment:
Field Master Assignment: None

N/S Street: PASEO MONTANOSO
E/W Street Name: CAMIN DEL NORTE

Last Change:
Timing Sheet By: RIA
Approved By: DRH

Drawing Number: 3123
System Ref. Number:
Timing implemented on: 8/30/2002

Row	Phase # ---->	Phase							
		1	2	3	4	5	6	7	8
0	Ped Walk		7						7
1	Ped FDW		10						25
2	Min Green	4	10				10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	5.3				5.3		2.0
6	Max Gap	2.0	5.3				5.3		2.0
7	Min Gap	2.0	0.2				0.2		2.0
8	Max Limit	30	60				60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs	6	6						
C	Reduce By		0.1				0.1		
D	Every		0.6				0.6		
E	Yellow	3.0	5.1				5.1		3.0
F	Red Clear	1.0	1.0				1.0		1.0

Phase Timing - Bank 1
F + Phase + Row

<F Page>

Row	E	F		Row
		Permit	12__6_8	
0	RR-1 Delay	Permit	12__6_8	0
1	RR-1 Clear	Red Lock		1
2	EV-A Delay	Yellow Lock		2
3	EV-A Clear	Min Recall		3
4	EV-B Delay	Ped Recall		4
5	EV-B Clear	Peds (View)		5
6	EV-C Delay	Rest In Walk		6
7	EV-C Clear	Red Rest		7
8	EV-D Delay	Dbl Entry		8
9	EV-D Clear	Max Recall		9
A	RR-2 Delay	Soft Recall	_2__6_	A
B	RR-2 Clear	Max 2		B
C	View EV Delay	Cond Serv		C
D	View EV Clear	Ped Lock	12345678	D
E	View RR Delay	Yellow Start	_2__6_	E
F	View RR Clear	1st Phases	_____8	F

Preempt Timing

F + E + Row

Phase Functions

F + F + Row

<F Page>

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + 0

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + 0	F	Row
Free Lag	_2__6_8	0
Lag Phases		<C Page>

Row	Overlap	G	C	D	0
A	Overlap A	Green Clear	Yellow Change	Red Clear	Load- Switch #
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <C Page>

F + COLOR +

<D Page>

D + 0 + OVERLAP

Downtime Flash 60 (minutes)

Downtime Before Auto Manual Flash

F + 0 + 8

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Disable Ports	234
---------------	-----

Disable Communications Ports

D + D + 9

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

T.O.D. Functions
 0 = Permitted Phases
 1 = Red Lock
 2 = Yellow Lock
 3 = Veh Min Recall
 4 = Ped Recall
 5 =
 6 = Rest In Walk
 7 = Red Rest
 8 = Double Entry
 9 = Veh Max Recall
 A = Veh Soft Recall
 B = Maximum 2
 C = Conditional Service
 D = Free Lag Phases
 E = Bit 1 - Local Override
 Bit 2 - Phase Bank 2
 Bit 3 - Phase Bank 3
 Bit 4 - Disable Detector
 OFF Monitor
 Bit 7 - Detector Count Monitor
 Bit 8 - Real Time Split Monitor
 F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

TOD Function

7 + ROW

<D Page>

D + F + ROW

Configuration

E + F + ROW

<E Page>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 3 4 5
F	IC Select (Interconnect)	2

Extra 1 Flags
 1 = TBC Type 1
 2 = NEMA Ext. Coord
 3 = Auto Daylight Savings
 4 = EV Advance
 5 = Remote Download
 6 = Special Event
 7 = Pretimed Operation
 8 = Split Ring Operation

IC Select Flags
 1 =
 2 = Modem
 3 = 7-Wire Slave
 4 = Flash / Free
 5 =
 6 = Simplex Master
 7 = 7-Wire Master
 8 = Offset Interrupter

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Day of Week

- 1 = Sunday
- 2 = Monday
- 3 = Tuesday
- 4 = Wednesday
- 5 = Thursday
- 6 = Friday
- 7 = Saturday

Assign 5 Outputs

- 1 = Right Turn Overlap
- 2 = TOD Outputs
- 3 = EV Beacon - Steady
- 4 = EV Beacon - Flashing
- 5 = Special Event Outputs
- 6 = Phase 3 & 7 Ped
- 7 = Advanced Warning Sign
- 8 =

Time and Date

- 8-0 Hour, Minute, Day-of-Week
- 8-1 Day-of-Month, Year, Month
- 8-F Seconds

Disable Parity D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

(This parameter is NOT downloaded)

Program Information

- C + C + 0 = program
- C + C + F = version

Remote Download

- C + 0 + 4 = 1-255
- w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		1.8
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E		---
F	---	---

Detector Name	332 Input File	Detector Number
	111	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row	0 Detector #
1	System Det. # 1
2	System Det. # 2
3	System Det. # 3
4	System Det. # 4
5	System Det. # 5
6	System Det. # 6
7	System Det. # 7
8	System Det. # 8

System Detectors <D Page>

Row	2 Delay	4 Carry-over
0		
1		1.8
2		1.8
3		
4		
5		
6		
7	10.0	
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)
(These parameters are NOT downloaded.)

Detector Delay & Carryover <D Page>

D + X (across) + ROW

	INTERVAL	PHASE TIMING								9	PRE-EMPTION		F										
		1	2	3	4	5	6	7	8		E	FLAGS	1	2	3	4	5	6	7	8			
0	WALK	1	7		1		7			CLK RST	EV SEL	0	PERMIT	1	2		4		6				0
1	DONT WALK	1	15		1		15				RR1 CLR	15	RED LOCK	1			4						1
2	MIN GREEN	5	5		5		8				EVA DLY	0	YEL LOCK										2
3	TYPE 3 DET	0	0		0		0				EVA CLR	5	V RECALL		2				6				3
4	ADD/VEH	0.0	0.0		0.0		0.0				EVB DLY	0	P RECALL										4
5	PASSAGE	2.0	2.0		2.0		2.0				EVB CLR	5	PED PHASES		2				6				5
6	MAX GAP	2.0	2.0		2.0		2.0				EVC DLY	0	RT OLA										6
7	MIN GAP	2.0	2.0		2.0		2.0				EVC CLR	5	RT OLB										7
8	MAX EXT	25	30		35		40				EVD DLY	0	DBL ENTRY										8
9	MAX 2									YR	EVD CLR	5	MAX 2 PHASES										9
A	MAX 3									MO	MAX EV	255	LAG PHASES	READ ONLY								A	
B										DAY	RR2 CLR	15	RED REST										B
C	REDUCE BY	0.0	0.0		0.0		0.0			DOW			REST-IN-WALK										C
D	EVERY	1.0	1.0		1.0		1.0			HR			MAX 3 PHASES										D
E	YELLOW	3.7	5.5		4.1		5.5			MIN			YEL START UP		2				6				E
F	RED	1.5	2.0		2.0		2.0			SEC			FIRST PHASE					4					F
3.5	PED XING FT		53				77							1	2	3	4	5	6	7	8		
	BIKE XING FT		68				120																

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5

FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0

FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1

CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

OLA = FZ 4

FZ 2 BIKE = 4 sec

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY



		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS										
		1	2	3	4	5	6	7	8	9		C	D	E	F										
0	CYCLE LENGTH	90	100	100	100	110									LAG FZ FREE	1	2	3	4	5	6	7	8	0	
1	FZ1 GRN FCTR	18	20	18	20	15								GAPOUT CP1	0	LAG FZ CP 1	2	4	6	8					1
2														GAPOUT CP2	0	LAG FZ CP 2	2	4	6	8					2
3	FZ3 GRN FCTR	0	0	0	0	0								GAPOUT CP3	0	LAG FZ CP 3	2	4	6	8					3
4	FZ4 GRN FCTR	25	30	28	26	35					PERM TIME			GAPOUT CP4	0	LAG FZ CP 4	2	4	6	8					4
5	FZ5 GRN FCTR	0	0	0	0	0					LAG OFFSET			GAPOUT CP5	0	LAG FZ CP 5	2	4	6	8					5
6											FORCE OFF			GAPOUT CP6		LAG FZ CP 6							6		
7	FZ7 GRN FCTR	0	0	0	0	0					LONG GRN			GAPOUT CP7		LAG FZ CP 7							7		
8	FZ8 GRN FCTR	0	0	0	0	0					NO GREEN			GAPOUT CP8		LAG FZ CP 8							8		
9	MULTI CYCLE	0	0	0	0	0								GAPOUT CP9		LAG FZ CP 9							9		
A	OFFSET A	43	55	55	55	65					OFFSET					LAG C COORD							A		
B	OFFSET B	43	55	55	55	65										LAG D COORD							B		
C	OFFSET C	43	55	55	55	65										COORD FAZES	2			6			C		
D	FZ 3 EXT																						D		
E	FZ 7 EXT																						E		
F	OFFSET INTRPT																						F		

- CO1 MANUAL CP
- CO2 MASTER CP
- CO3 CURRENT CP
- CO4 LAST CP
- CO7 TRNSMT CP
- COD MANUAL OFFSET
- CAO LOCAL CYCLE TIMER
- CBO MASTER CYCLE TIMER
- CAA LOCAL OFFSET
- CBA MASTER OFFSET

SYSTEM MASTER:
RTE 15 SB RAMP

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		7
8		

LOCATION	OFF	ON
1		
2		2
3		
4		
5		
6		
7		
8		

COO = 2

- CCB/CDB OFFSET TIMER
- CCC/CDC LAG GREEN TIMER
- CCD/CDD FORCE OFF TIMER
- CCE/CDE LONG GREEN TIMER
- CCF/CDF NO GREEN TIMER

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1	1			4					CP 1								
2	CP 2									CP 2	1			4					CP 2								
3	CP 3									CP 3	1			4					CP 3								
4	CP 4									CP 4	1			4					CP 4								
5	CP 5									CP 5	1			4					CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E
 MINUTE = D-B-E
 DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
 (CALL ACTIVE LIGHTS)
 RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
 (CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

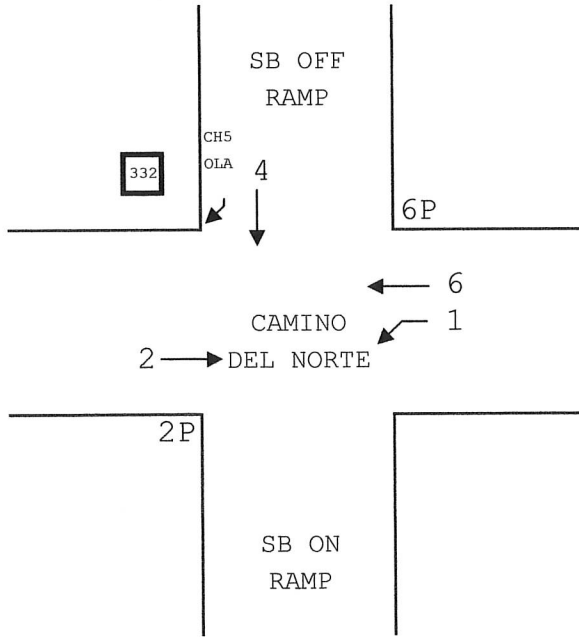
HOUR = D-A-F
 MINUTE = D-B-F
 DAY = D-C-F

D-E-E = C8 VERSION NUMBER
 D-E-F = LITHIUM BATTERY CONDITION
 84 = BAD
 85 = GOOD

DATE: 9/12/07

LOCATION: RTE 15 SB @ CAMINO DEL NORTE

CONFLICT MONITOR PROGRAM



	INTERVAL	PHASE TIMING								9	PRE-EMPTION E	F										
		1	2	3	4	5	6	7	8			FLAGS	1	2	3	4	5	6	7	8		
0	WALK		7			1	10		1	CLK RST	EV SEL	0	PERMIT					5	6		8	0
1	DONT WALK		18			1	10		1		RR1 CLR	15	RED LOCK					5			8	1
2	MIN GREEN		7			5	5		5		EVA DLY	0	YEL LOCK									2
3	TYPE 3 DET		0			0	0		0		EVA CLR	5	V RECALL		2				6			3
4	ADD/VEH		0.0			0.0	0.0		0.0		EVB DLY	0	P RECALL									4
5	PASSAGE		2.0			2.0	2.0		2.0		EVB CLR	5	PED PHASES		2				6			5
6	MAX GAP		2.0			2.0	2.0		2.0		EVC DLY	0	RT OLA									6
7	MIN GAP		2.0			2.0	2.0		2.0		EVC CLR	5	RT OLB									7
8	MAX EXT		30			15	25		35		EVD DLY	0	DBL ENTRY									8
9	MAX 2								45	YR	EVD CLR	5	MAX 2 PHASES								8	9
A	MAX 3									MO	MAX EV	255	LAG PHASES	READ ONLY								A
B										DAY	RR2 CLR	15	RED REST									B
C	REDUCE BY		0.0			0.0	0.0		0.0	DOW			REST-IN-WALK									C
D	EVERY		1.0			1.0	1.0		1.0	HR			MAX 3 PHASES									D
E	YELLOW		5.5			3.7	5.5		4.1	MIN			YEL START UP		2				6			E
F	RED		2.0			1.5	2.0		2.0	SEC			FIRST PHASE								8	F
3.5	PED XING FT		88				58							1	2	3	4	5	6	7	8	
	BIKE XING FT		112				81															

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5

FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0

FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1

CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

OLA = FZ 8

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY



		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS										
		1	2	3	4	5	6	7	8	9		C	D	E	F										
0	CYCLE LENGTH	90	100	100	100	110									LAG FZ FREE		2		4		6		8	0	
1	FZ1 GRN FCTR	0	0	0	0	0								GAPOUT CP1	0	LAG FZ CP 1		2		4		6		8	1
2														GAPOUT CP2	0	LAG FZ CP 2		2		4		6		8	2
3	FZ3 GRN FCTR	0	0	0	0	0								GAPOUT CP3	0	LAG FZ CP 3		2		4		6		8	3
4	FZ4 GRN FCTR	0	0	0	0	0					PERM TIME			GAPOUT CP4	0	LAG FZ CP 4		2		4		6		8	4
5	FZ5 GRN FCTR	16	10	16	10	10					LAG OFFSET			GAPOUT CP5	0	LAG FZ CP 5		2		4		6		8	5
6											FORCE OFF			GAPOUT CP6		LAG FZ CP 6									6
7	FZ7 GRN FCTR	0	0	0	0	0					LONG GRN			GAPOUT CP7		LAG FZ CP 7									7
8	FZ8 GRN FCTR	25	40	28	40	50					NO GREEN			GAPOUT CP8		LAG FZ CP 8									8
9	MULTI CYCLE	0	0	0	0	0								GAPOUT CP9		LAG FZ CP 9									9
A	OFFSET A	0	0	0	0	0					OFFSET					LAG C COORD									A
B	OFFSET B	0	0	0	0	0										LAG D COORD									B
C	OFFSET C	0	0	0	0	0										COORD FAZES		2				6			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRPT																								F

CO1 MANUAL CP
 CO2 MASTER CP
 CO3 CURRENT CP **SYSTEM MASTER:**
 CO4 LAST CP **RTE 15 SB RAMP**
 CO7 TRNSMT CP
 COD. MANUAL OFFSET
 CAO LOCAL CYCLE TIMER
 CBO MASTER CYCLE TIMER
 CAA LOCAL OFFSET
 CBA MASTER OFFSET

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		7
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = 1

CCB/CDB OFFSET TIMER
 CCC/CDC LAG GREEN TIMER
 CCD/CDD FORCE OFF TIMER
 CCE/CDE LONG GREEN TIMER
 CCF/CDF NO GREEN TIMER

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1				5					CP 1								8	CP 1								
2	CP 2				5					CP 2								8	CP 2								
3	CP 3				5					CP 3								8	CP 3								
4	CP 4				5					CP 4								8	CP 4								
5	CP 5				5					CP 5								8	CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

	E	FLAGS								F	FLAGS							
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8
0										CODE 4								
1										CODE 5								
2										C-RECALL								
3										D-RECALL								
4										EXCLUSIVE								
5										2 PED		2						
6										6 PED					6			
7										4 PED				4				
8										8 PED								8
9																		
A	OLA NOT									OLA ON								
B	OLB NOT									OLB ON								
C	OLC NOT									OLC ON								
D	OLD NOT									OLD ON								
E																		
F																		

LAST POWER FAILURE REGISTER

HOUR = D-A-E
 MINUTE = D-B-E
 DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
 (CALL ACTIVE LIGHTS)
 RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
 (CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

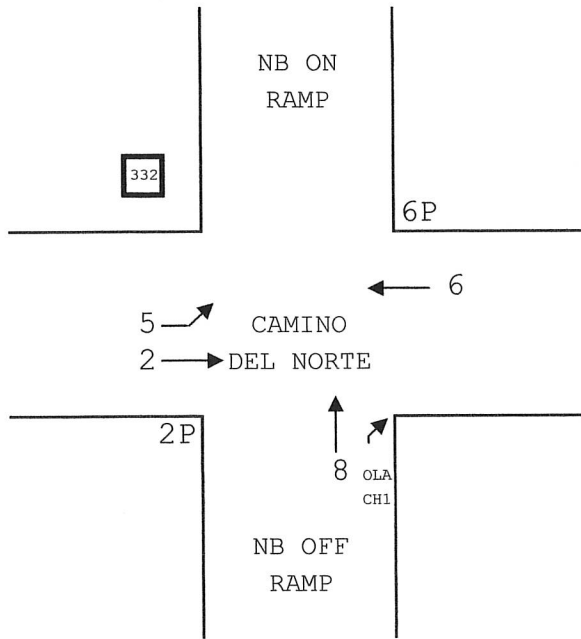
HOUR = D-A-F
 MINUTE = D-B-F
 DAY = D-C-F

D-E-E = C8 VERSION NUMBER
 D-E-F = LITHIUM BATTERY CONDITION
 84 = BAD
 85 = GOOD

DATE: 8/26/05

LOCATION: RTE 15 NB @ CAMINO DEL NORTE

CONFLICT MONITOR PROGRAM



INTERSECTION: Dove Canyon @ Lone Quail 750

QuickNet System Parameters

Group Assignment: **NONE**
 Field Master Assignment: **NONE**
 System Reference Number: **301**
 Communications Channel: **COM1:**
 Drop Address: **16**
 Area Number: **2**
 Area Address: **37**

N/S Street Name: **Dove Canyon**
 E/W Street Name: **Lone Quail**

Last QuickNet Database Change: 7/25/2012 11:29

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment	_____	Note: Set the Exclusive Ped Outputs on the "Outputs / General" page
Exclusive Walk	0	
Exclusive FDW	0	
All Red Clear	0.0	

Walk Output	0
Don't Walk Output	0

Exclusive Ped Phase

Basic Phase Timing	Phase							
	1	2	3	4	5	6	7	8
Min Green	4	6	0	4	4	6	0	4
Extension	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0
Max	15	30	0	30	15	30	0	30
Max 2	0	0	0	0	0	0	0	0
Cond Serve Check	0	0	0	0	0	0	0	0

Alternate Timing - Bank 1	Phase							
	1	2	3	4	5	6	7	8
Alternate Walk	0	0	0	0	0	0	0	0
Alternate Ped Clear	0	0	0	0	0	0	0	0
Alternate Minimum	0	0	0	0	0	0	0	0
Alternate Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Clear	Phase							
	1	2	3	4	5	6	7	8
Yellow Change	3.0	4.0	0.0	3.6	3.0	4.0	0.0	3.6
Red Clear	0.5	1.0	0.0	1.0	0.5	1.0	0.0	1.0

Red Lock	_____	Red Rest	_____
Yellow Lock	_____	Dual Entry	4 8
Simultaneous Gap	_____	Sequential Timing	_____
Rest In Walk	_____	Inhibit Ped Reservice	_____
Advance Walk	_____	Semi-Actuated	_____
Flashing Walk	_____	Guaranteed Passage	_____
Max Extension	_____	Conditional Service	_____

Pedestrian Timing	Phase							
	1	2	3	4	5	6	7	8
Walk	0	7	0	7	0	7	0	7
Ped Clear - FDW	0	18	0	22	0	11	0	21
Adv / Delay Walk	0	0	0	0	0	0	0	0
PE Min Ped FDW	0	0	0	0	0	0	0	0

Phase Functions - Page 1

Volume Density	Phase							
	1	2	3	4	5	6	7	8
Type 3 Disconnect	0	0	0	0	0	0	0	0
Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Added Initial	0	0	0	0	0	0	0	0
Min Gap	2.0	1.5	0.0	2.0	2.0	1.5	0.0	1.5
Max Gap	2.0	2.1	0.0	2.0	2.0	2.1	0.0	2.1
Reduce Every	0.0	4.6	0.0	0.0	0.0	4.6	0.0	4.6

Minimum Recall	2 6	Soft Recall	_____
Ped Recall	_____	External Recall	_____
Maximum Recall	_____	Manual Control Calls	_____
Green Flash	_____	Fast Green Flash	_____
Overlap Green Flash	_____	Fast Overlap G. Flash	_____

Phase Functions - Page 2

Phase Timing - Bank 1

Phase Functions - Page 2