RESOLUTION NO. 24-4779

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MURRIETA, CALIFORNIA APPROVING: (1) AN ADDENDUM TO A PREVIOUSLY CERTIFIED SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE TRIANGLE (2) TENTATIVE TRACT MAP 2022-2706 (TTM 38622), AND (3) DEVELOPMENT PLAN 2022-2705 FOR THE SHOPS AT THE TRIANGLE, A 64.3-ACRE SITE TO BE DEVELOPED WITH A 279,538 SQUARE FOOT REGIONAL SHOPPING CENTER ON APPROXIMATELY 36.5 ACRES AND TO SUBDIVIDE THE 64.3 ACRE SITE INTO 23 PARCELS AND RELATED IMPROVEMENTS FOR CIRCULATION, INFRASTRUCTURE, AND LANDSCAPING LOCATED SOUTHERLY OF MURRIETA HOT SPRINGS ROAD, EAST OF INTERSTATE 15 AND WEST OF INTERSTATE 215 (APN's 910-390-001 THROUGH 910-390-003, 910-390-008 THROUGH -018, 910-390-020 THROUGH 910-390-022, 910-400-001 THROUGH -018) WITHIN THE REGIONAL COMMERCIAL ZONE OF THE TRIANGLE SPECIFIC PLAN AREA

WHEREAS, Specific Plan 276 (Murrieta Springs Mall) was originally adopted by the County of Riverside on October 30, 1990 for an indoor retail mall, including uses such as offices, restaurant, entertainment, and hotel, with a maximum of approximately 1.7 million square feet, which also included certification of Environmental Impact Report (EIR) 358 (SCH No. 90020608); and

WHEREAS, on October 1, 2013, City Council adopted Resolution 13-3151, certifying Subsequent Environmental Impact Report (SEIR) associated with the approval of Specific Plan Amendment No. 1 to Specific Plan 276, finding that short term and long term traffic impacts and air quality impacts (operational, cumulative, and AQMP Consistency) associated with the development of the project could not be reduced to a level of less than significance even with the imposition of feasible mitigation measures. All other project impacts were found to either be less than significant or less than significant with the adoption of mitigation measures; and

WHEREAS, the applicant, Tres Estrellas, LLC (Applicant) on behalf of Tres Estrellas and Domenigoni Barton Properties, LLC (DBP) (Owner) filed applications with the City of Murrieta (City) for Specific Plan Amendment No. 2 (SP-2023-00003) to Specific Plan 276 (The Triangle), Tentative Tract Map 38622 (TTM-2022-2706), and Development Plan 2022-2705 to a 64.3 acre area (Project); and

WHEREAS, the Project site is generally located south of Murrieta Hot Springs Road and between Interstate Highway 15 (I-15) and 215 (I-215) in the City of Murrieta and County of Riverside; and

WHEREAS, the project area legal description is described as Parcels 1 through 29 of Parcel Map 28280, in the city of Murrieta, County of Riverside, State of California, as per plat recorded in Book 197, Pages 4 through 16, inclusive of parcels maps, records of said county. APN's 910-390-001 through 910-390-003, 910-390-008 through -018, 910-390-020 through 910-390-022, 910-400-001 through -018 all owned by Owner; and

WHEREAS, Applicant has submitted an application in accordance with Murrieta Municipal Code Title 16 (Development Code), Chapter 16.66 for Specific Plan Amendment (SPA) No.2 to SP 276 (The Triangle Specific Plan); and

WHEREAS, Applicant has submitted an application in accordance with Development Code Chapter 16.56 for Development Plan (DP-2022-2705) proposing the development of a 279,538 square foot regional commercial center on approximately 36.5 acres of the project site; and

WHEREAS, Applicant has submitted an application in accordance with Development Code Chapter 16.94 for Tentative Tract Map 36822 (TTM 2022-2706) proposing a 23 lot subdivision on 64.3 acres; and

WHEREAS, the proposed SPA maintains the development of approximately 1.7 million square feet of retail commercial, office, entertainment, and restaurant uses which was evaluated in the 2013 SEIR as part of the City's approval of Specific Plan Amendment No. 1; and

WHEREAS, pursuant to the provisions of the California Environmental Quality Act, Public Resources Code Section 21000 *et seq.* ("CEQA") the proposed approvals for the Project are subject to review under CEQA, and the City of Murrieta as the lead agency, is responsible for assessing the environmental impacts, if any, which may result from the Project; and

WHEREAS, the City of Murrieta, as lead agency, has evaluated the Project's potential environmental impacts and has determined that the Project will not: (1) result in any new significant impacts or a substantial increase in the severity of previously identified significant impacts as compared to the environmental impacts of the Specific Plan Amendment No. 1 that were examined in the SEIR; or (2) require any new mitigation measures or alternatives. The applicable mitigation measures identified in the SEIR for Specific Plan Amendment No. 1 are incorporated into the design of the Project or are imposed either as mitigation measures or as conditions of approval for the Project, or both, as appropriate. The City, therefore, has prepared an Addendum to the SEIR (Addendum) for the Project pursuant to Public Resources Code Sections 21166 and CEQA Guidelines Sections 15162 and 15164; and

WHEREAS, a public hearing was duly noticed for the Planning Commission meeting of July 24, 2024, by mailing a notice to property owners within a 300-foot radius of the site, publishing the notice in The Press Enterprise newspaper, and posting the Project site on or before July 14, 2024; and

WHEREAS, on July 24, 2024, the Planning Commission held a duly noticed public hearing, and considered all written and oral reports of staff, public testimony on the matter, and written and oral testimony provided by the applicant and such other matters as are reflected in the record of this matter; and

WHEREAS, the Planning Commission made a written recommendation to the City Council to approve: (1) the proposed Specific Plan Amendment and make findings as required by Development Code Section 16.66.100, (2) the Development Plan based on the findings contained in Development Code Section 16.56.040, and (3) proposed Tentative Tract Map based on the findings contained in Development Code Section 16.94.080, such that at its meeting of July 24, 2024, the Planning

Commission recommended that the City Council adopt an Ordinance and Resolution approving the project; and

WHEREAS, the Planning Commission used its independent judgment and considered all the reports, recommendations, and testimony set forth above, and, with a vote (3-0-1-1) recommended the approvals described above with an additional recommendation to add a requirement for the developer to provide a space within the center for the Police Department (if requested by the Police Department); and

WHEREAS, a hearing on this matter was duly noticed as provided in Development Code Chapter16.76 for the City Council meeting of August 20, 2024; and

WHEREAS, the City Council has considered the facts presented in this case, including the written and oral staff reports on the Project, public testimony, and written and oral evidence presented to the Planning Commission; and

WHEREAS, the City Council has considered the Addendum along with the SEIR for the Project pursuant to CEQA Guidelines Section 15164(d).

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MURRIETA, CALIFORNIA DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. That the above recitals are true and correct and incorporated herein by this reference.

SECTION 2. That the Project, as conditioned, conforms to the regulations contained within Title 16 of the Murrieta Development Code, the proposed requirements of Specific Plan Amendment No. 2, Murrieta Development Code, and with the adopted elements of the Murrieta General Plan.

SECTION 3. The City Council has independently considered the Addendum, along with the SEIR for the Project, and finds that no further environmental documentation is permitted or required because: (i) there are no substantial changes in the Project requiring major revisions of the SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (ii) there are no substantial changes with respect to the circumstances under which the Project is being undertaken which will require major revisions of the SEIR for the Project due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; and (iii) there is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the SEIR was certified for Specific Plan Amendment No. 1, showing that: (a) the Project will have one or more significant effects not discussed in the SEIR for Specific Plan Amendment No. 1; (b) significant effects previously examined will be substantially more severe than shown in the SEIR for Specific Plan Amendment No. 1; (c) mitigation measures or alternatives previously found not feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the mitigation measures or alternatives have not been adopted; or (d) mitigation measures or alternatives considerably different from those analyzed in the SEIR for Specific Plan Amendment No. 1 would substantially reduce one or more significant effects on the environment, but those mitigation measures or alternatives have not been adopted. (Public Resources Code § 21166 and CEQA Guidelines §§ 15162 and 15164.)

SECTION 4. The Addendum, attached hereto as Exhibit "C" is hereby adopted.

SECTION 5. Based upon the evidence presented, the City Council finds that approval of Tentative Tract Map 2022-2706 (TTM 38622) is appropriate pursuant to Development Code Chapter 16.94, subject to the approval of an Ordinance approving Specific Plan Amendment no. 2 for the Project:

A. *The proposed map, design or improvement is consistent with the objectives, policies, general land uses, and programs of the general plan and any applicable specific plans and all applicable provisions of the Murrieta Development Code.*

FACTS: The Specific Plan identifies the various objectives and how it meets or implements the City's General Plan goals and policies and is contained in Section 1 of the Specific Plan. The project (Specific Plan Amendment/Tentative Tract Map/Development Plan) is consistent with and implements many of the City's General Plan goals and policies.

General Plan Goal LU-1 - "A complimentary balance of land uses throughout the community that meets the needs of existing residents and businesses as well as anticipated growth, and achieves the community's vision."

- Policy LU-1.2, Ensure future development provides for a variety of commercial, industry, and housing that serve the spectrum of incomes within the region.
- Policy LU-1.3, Establish a range of residential density and non-residential intensities to encourage a wide range of development opportunities.
- Policy LU-1.5, Encourage a wide variety of retail and commercial services, such as restaurants, and cultural arts/entertainment, in appropriate locations.

Goal LU-7 "Economically viable, vital, and attractive commercial centers throughout the City that serve the needs of the community."

- Policy LU-7.1, Work with property owners of vacant commercially zoned property to develop their sites into appropriate, economically viable projects.
- Policy LU7.5, Provide convenient freeway access for regionally-serving commercial centers to attract a regional customer base.
- Policy LU-7.6, Focus commercial retail centers adjacent to major transportation corridors
- Policy LU-7.8, Encourage consolidation of parking and reciprocal access agreements between adjacent business and commercial center property owners.
- Policy LU-7.9, Encourage opportunities for complementary retail and service uses to serve local residents and the daytime employment population.
- Policy LU-7.10, Encourage a range of retail uses that serve local residents in the region.

Goal LU-8 –"A community that provides opportunities for mixed use and/or transit-oriented development."

- Policy LU-8.1, Encourage integrated development that incorporates a mix of uses (residential, commercial, office) in mixed use or transit-oriented development areas.
- Policy LU-8.6, Encourage higher density residential, commercial, and employment development near a future Metrolink or High Speed Rail Station, along other major public transportation routes, and at other suitable locations.

Goal LU-12 –"A focused development and economic development strategy that emphasizes specialized land use policies within identified Focus Areas."

- Policy LU-12.1, Provide for the highest level of retail and job-creating uses in areas adjacent to the I-15 and I-215 freeways. This includes the North Murrieta Business Corridor, Golden Triangle North (Central Murrieta), and South Murrieta Business Corridor Focus Areas.

Goal ED-1- "A highly visible and attractive commercial mixed-use regional hub located at the confluence of the I-15 and I-215 freeways in central Murrieta" and policies ED-1.1 & ED-1.3. The project provides the opportunity for a variety of commercial uses including retail, food/restaurant, and service uses which is conveniently located near two major freeways that will serve the region and the local residents. The planned additional services, employment opportunities, and potential fiscal revenue sources are intended to bring further balance to the existing and future residential uses in the city. The specific plan allows for a higher intensity of development and the Development Plan represents a phase within the specific plan with additional vacant land remaining for future development.

Other specific goals and policies the Project is consistent with are: General Plan Goal CIR-1. "A circulation system that serves the internal circulation needs of the City, while also addressing the inter-community or through travel needs and corresponding policies" (Policy CIR-1.1, CIR-1.3, CIR-1.10), Goal CIR-6 "Alternative travel modes and facilities are available to serve residents and employers/employees and reduce vehicle miles traveled".(Policy CIR-6.8, CIR-6.9, and CIR-6.13).

The project is limited to two main access drives and a restricted turning movement for the third access drive. The project is conditioned to provide a bus stop (turnout), shelter, and bench and is required to provide a Trip Reduction Plan prior to occupancy. Murrieta Hot Springs Road has a bike lane and the project is designed with bike lanes on the primary drive access. Additionally, a landscaped area will be provided between the road and the sidewalk along Murrieta Hot Springs Road.

The project meets Infrastructure Element Goal INF-1, "*New development and redevelopment is coordinated with the provision of adequate infrastructure for water, sewer, storm water, and energy." and corresponding policies INF-1.1, INF-1.4, and INF-1.21.* The project will construct facilities both on- and off-site to support the area and help protect off-site areas from inundation. These facilities will be constructed by the developer and then dedicated to the appropriate public agency for ownership.

B. *The site is physically suitable for the type or density of development proposed.*

FACTS: The site is physically suitable for development and is compatible with the surrounding properties. The property fronts a General Plan circulation element public street, Murrieta Hot Springs Road, and is located in close proximity to two state freeways (I-15 and I-215). The development is adequate in size to accommodate the proposed commercial uses while complying with or exceeding the specific plan's development standards. The General Plan EIR acknowledges future development in the project area. The project site is not located within a Subsidence Susceptibility Map area, Alquist Priolo Earthquake Fault Zone, liquefaction, FEMA flood zone, or dam inundation hazard area.

C. *The design of the subdivision or the proposed improvements are unlikely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.*

FACTS: The design of the tentative map is unlikely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat. The site is primarily disturbed land and contains very little area of native undisturbed land. No sensitive or protected wildlife was found on the site.

In accordance with CEQA Guidelines (Cal. Code. Regs. Title 14) Section 15164, a Consistency Analysis/Addendum was prepared and determined that the project falls within the scope of the previously certified SEIR as none of the criteria under CEQA Guidelines Section 15162 has occurred; (1) there are no substantial changes to the Project that require major revisions to the SEIR due to new significant environmental effects, (2) there are no substantial changes with respect to the circumstances under which the Project is considered that involve any new significant environmental effects or substantial increase in the severity of previously identified significant effects, and (3) no new information that shows the Project will have more significant effects not previously discussed, no new significant effects previously examined will be substantially more severe than previously shown, no new mitigation measures are necessary. The Project is subject to the previous Mitigation Measures identified in the MMRP.

D. *The proposed project will not adversely affect the public health, safety and welfare, nor be materially detrimental to the use, enjoyment, or valuation of persons or other property in the surrounding area.*

FACTS: The proposed subdivision was analyzed through the application process and the project is not located within a designated High Fire Hazard Area, on any known areas of Alquist-Priolo Earthquake Fault Zone, dam inundation, subsidence, FEMA flood plain, or liquefaction study zone. The proposed project will not adversely affect the public health, safety and welfare, nor be materially detrimental to the use, enjoyment, or valuation of persons or other property in the surrounding area.

E. *The design of the subdivision and the type of improvements would not conflict with easements, acquired by the public at large for access through or use of property within the proposed subdivision.*

FACTS: The proposed subdivision is conditioned to establish reciprocal access, parking and utility easements for each of the parcels. The improvements are conditioned through the Tentative Map. The proposed subdivision will not impact any easements or any other use of the property.

F. *The proposed Tentative Tract Map is consistent with the Murrieta Municipal Code and the Subdivision Map Act and complies with all applicable requirements of state law and local ordinances.*

FACTS: The proposed Tentative Tract Map is consistent with the Specific Plan, Murrieta Municipal Code and the Subdivision Map Act and complies with all applicable requirements of state law and local ordinances. Parcels meet the specific plan development requirements for commercial parcels in terms of minimum lot size and access. All the parcels have access to public streets through the site's interior driveway design and reciprocal access agreements. The tentative parcel map includes the dedication of access easements to ensure public and utility access to all the parcels.

SECTION 6. Based upon the evidence presented, the City Council makes the following findings of fact for Development Plan 2022-2705 pursuant to Development Code Section 16.56.040, subject to the approval of an Ordinance approving Specific Plan Amendment no. 2 for the Project:

A. *The proposed use is allowed within the subject zoning district and complies with all applicable provisions of this development code (specific plan).*

FACTS: The proposed Project is consistent with the SP 276 (The Triangle) zone and the development standards. The Development Plan complies with The Triangle Specific Plan requirements including but not limited to setbacks, building height, parking, landscape requirements, and building design. For example, the project is required to provide a minimum landscape percentage of 20% and is providing 28%. The project is required to provide 1438 parking spaces based on the uses identified on the project plans and the project is providing 1,675 parking spaces. The parking lots meet the minimum shading requirements and the project meets all landscape setback requirements along the perimeter of the project and along Murrieta Hot Springs Road.

B. *The proposed use would be consistent with the objectives, policies, general land uses and programs of the General Plan and any applicable specific plan.*

FACTS: The specific plan identifies the various objectives and how it meets or implements the City's General Plan goals and policies and is contained in Section 1 of the Specific Plan. The project (Specific Plan Amendment/Tentative Tract Map/Development Plan) is consistent with and implements many of the City's General Plan goals and policies.

General Plan Goal LU-1 - "A complimentary balance of land uses throughout the community that meets the needs of existing residents and businesses as well as anticipated growth, and achieves the community's vision."

- Policy LU-1.2, Ensure future development provides for a variety of commercial, industry, and housing that serve the spectrum of incomes within the region.
- Policy LU-1.3, Establish a range of residential density and non-residential intensities to encourage a wide range of development opportunities.
- Policy LU-1.5, Encourage a wide variety of retail and commercial services, such as restaurants, and cultural arts/entertainment, in appropriate locations.

Goal LU-7 "Economically viable, vital, and attractive commercial centers throughout the City that serve the needs of the community."

- Policy LU-7.1, Work with property owners of vacant commercially zoned property to develop their sites into appropriate, economically viable projects.

- Policy LU7.5, Provide convenient freeway access for regionally-serving commercial centers to attract a regional customer base.
- Policy LU-7.6, Focus commercial retail centers adjacent to major transportation corridors
- Policy LU-7.8, Encourage consolidation of parking and reciprocal access agreements between adjacent business and commercial center property owners.
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Goal LU-8 –"A community that provides opportunities for mixed use and/or transit-oriented development."

- Policy LU-8.1, Encourage integrated development that incorporates a mix of uses (residential, commercial, office) in mixed use or transit-oriented development areas.
- Policy LU-8.6, Encourage higher density residential, commercial, and employment development near a future Metrolink or High Speed Rail Station, along other major public transportation routes, and at other suitable locations.

Goal LU-12 –"A focused development and economic development strategy that emphasizes specialized land use policies within identified Focus Areas."

- Policy LU-12.1, Provide for the highest level of retail and job-creating uses in areas adjacent to the I-15 and I-215 freeways. This includes the North Murrieta Business Corridor, Golden Triangle North (Central Murrieta), and South Murrieta Business Corridor Focus Areas.

Goal ED-1- "A highly visible and attractive commercial mixed-use regional hub located at the confluence of the I-15 and I-215 freeways in central Murrieta" and policies ED-1.1 & ED-1.3. The project provides the opportunity for a variety of commercial uses including retail, food/restaurant, and service uses which is conveniently located near two major freeways that will serve the region and the local residents. The planned additional services, employment opportunities, and potential fiscal revenue sources are intended to bring further balance to the existing and future residential uses in the city. The specific plan allows for a higher intensity of development and the Development Plan represents a phase within the specific plan with additional vacant land remaining for future development.

Other specific goals and policies the Project is consistent with are: General Plan Goal CIR-1. "A circulation system that serves the internal circulation needs of the City, while also addressing the inter-community or through travel needs and corresponding policies" (Policy CIR-1.1, CIR-1.3, CIR-1.10), Goal CIR-6 "Alternative travel modes and facilities are available to serve residents and employers/employees and reduce vehicle miles traveled".(Policy CIR-6.8, CIR-6.9, and CIR-6.13).

The project is limited to two main access drives and a restricted turning movement for the third access drive. The project is conditioned to provide a bus stop (turnout), shelter, and bench and is required to provide a Trip Reduction Plan prior to occupancy. Murrieta Hot Springs Road has a bike lane and the project is designed with bike lanes on the primary drive access. Additionally, a landscaped area will be provided between the road and the sidewalk along Murrieta Hot Springs Road.

The project meets Infrastructure Element Goal INF-1, "*New development and redevelopment is coordinated with the provision of adequate infrastructure for water, sewer, storm water, and energy." and corresponding policies INF-1.1, INF-1.4, and INF-1.21.* The project will construct facilities both on- and off-site to support the area and help protect off-site areas from inundation. These facilities will be constructed by the developer and then dedicated to the appropriate public agency for ownership.

C. *The proposed use is in compliance with the provisions of the California Environmental Quality Act and there would be no potentially significant negative impacts upon environmental quality and natural resources that could not be properly mitigated and monitored.*

FACTS: In accordance with CEQA Guidelines (Cal. Code. Regs. Title 14) Section 15164, an Addendum was prepared and determined that the project falls within the scope of the previously certified SEIR as none of the criteria under CEQA Guidelines Section 15162 has occurred; (1) there are no substantial changes to the Project that require major revisions to the SEIR due to new significant environmental effects, (2) there are no substantial changes with respect to the circumstances under which the Project is considered that involve any new significant environmental effects or substantial increase in the severity of previously identified significant effects, and (3) no new information that shows the Project will have more significant effects not previously discussed, no new significant effects previously examined will be substantially more severe than previously shown, no new mitigation measures are necessary. The Project is subject to the previous Mitigation Measures identified in the MMRP.

D. *The location, size, design and operating characteristics of the proposed use would be compatible with existing land uses within the general area in which the proposed use is to be located.*

FACTS: The location, size, design and operating characteristics of the proposed use is compatible to the surrounding properties as it is surrounded by two freeways to the east, south, and west and a major circulation street to the north, Murrieta Hot Springs Road. There is currently commercial development on the north side of Murrieta Hot Springs Road and the proposed Development Plan proposes retail development similar in nature to what is in proximity to the project site.

E. *The site of the proposed use is physically suitable for the type and density/intensity of development being proposed.*

FACTS: The site is physically suitable for development and is compatible with the surrounding properties. The property fronts a General Plan circulation element public street, Murrieta Hot Springs Road, and is located in close proximity to two state freeways (I-15 and I-215). The development is adequate in size to accommodate the proposed commercial uses while complying with or exceeding the specific plan's development standards. The General Plan EIR acknowledges future development in the project area. The project site is not located within a Subsidence Susceptibility Map area, Alquist Priolo Earthquake Fault Zone, liquefaction, FEMA flood zone, or dam inundation hazard area.

F. *There are adequate provisions for sanitation, water, and public utilities to ensure public convenience, health, safety, and general welfare.*

> **FACTS:** The Eastern Municipal Water District will provide sewer and water services; electricity will be provided by Southern California Edison Company; and gas by Southern California Gas Company. These facilities will require extensions within Murrieta Hot Springs Road to the Project site.

SECTION 7. The City Council hereby approves Development Plan 2022-2705 and Tentative Tract Map 2022-2706 (TTM 38622) based on the above findings, staff report, the Addendum (Exhibit C) and all written and oral reports of staff, and public testimony on the matter, and written and oral testimony provided by the Applicant and such other matters as are reflected in the record of this matter subject to the attached Conditions of Approval in Exhibit "A" and Exhibit "B" and subject to the approval of an Ordinance approving Specific Plan Amendment No. 2 for the Project.

PASSED AND ADOPTED this 20th day of August 2024.

____
Lori Stone, Mayor

ATTEST:

____
Cristal McDonald, City Clerk

APPROVED AS TO FORM:

____
Tiffany Israel, City Attorney

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE)§
CITY OF MURRIETA)

I, Cristal McDonald, City Clerk of the City of Murrieta, California, do hereby certify that the foregoing Resolution No. 24-4779 was duly passed and adopted by the City Council of the City of Murrieta at the regular meeting thereof, held on the 20th day of August 2024, and was signed by the Mayor of the said City, and that the same was passed and adopted by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

____
Cristal McDonald City Clerk

EXHIBIT A

DRAFT CONDITIONS OF APPROVAL
FOR
DEVELOPMENT PLAN 2022-2705 (EPL # 2023-00017)
AUGUST 20, 2024

GENERAL:

The project approval represents the initial construction of SP 276 (The Triangle). DP-2022-2705 consists of the construction of a 268,438 square foot regional shopping center with approximately 11,100 s.f. of outdoor dining area (total = 279,538 square foot) within 18 buildings, 1675 parking spaces, on 36.46 net acres of an overall total project site of 64.28 acres. ("Project"). All construction plans and use shall be in substantial conformance with the approved site plans, floor plans, elevations, material and color board, landscaping plans. This permit runs with the land and shall be binding upon Permittee/Owner of the subject property ("Property Owner") and all subsequent successors in interest to the Permittee/Owner as to such land.

1. The Permittee/Owner shall defend (with attorneys approved by the City), indemnify and hold harmless the City of Murrieta, its agents, officers, and employees from any claims, damages, action, or proceeding against the City or its agents, officers, or employees to attack, set aside, void, or annul an approval of the City, its advisory agencies, appeal boards, or legislative body concerning this approval of Development Plan 2022-2705. The City will promptly notify the Permittee/Owner of any such claim, action, or proceeding against the City and will cooperate fully in the defense.

2. Any fees due the City of Murrieta for processing this project shall be paid to the City within thirty (30) calendar days of final action by the approval authority ("Effective Date"). Failure to pay such outstanding fees within the time specified shall invalidate any approval or conditional approval granted. No permits, site work, or other actions authorized by this action shall be processed by the City, nor permitted, authorized or commenced until all outstanding fees are paid to the City.

3. Pursuant to Section 711.4 of the State of California Fish and Game Code, the permittee is required to pay a $50.00 handling fee and a certification fee for the filing of a Notice of Determination related to the Triangle (Murrieta Springs Mall) Subsequent EIR. Said fees shall be paid to the Clerk/Recorder of the County of Riverside at the time the Notice of Determination is filed pursuant to Section 21152 of the Public Resources Code. If this fee is not paid, the approval of this project shall not be operative, vested, or final. To comply with State-mandated timelines for filing a Notice of Determination, the applicant shall file the NOD electronically to the Riverside County Clerk/Recorder's Office. Failure to remit the required fee in full within the time specified above will result in a delay of the start of the 180-day statute of limitations (SOL) on Court challenges to the approval under CEQA, whereas recordation of the NOD within five (5) days of project approval limits the SOL to 35 days. In order to comply with State mandated timelines for filing of a Notice of Determination, the above fee must be paid within **five (5)** days after the date of final approval.

4. This approval shall be implemented within four (4) years of approval date, August 20, 2024, otherwise it shall become null and void and of no effect whatsoever in accordance with SP 276 (The Triangle) and Development Code Section 16.52.060.B and 16.80.50.

5. Prior to the expiration of this approval, the Permittee/Owner may request an extension of time in accordance with The Triangle Specific Plan 276 Section 4.2.1-Development Plans.

6. This implementing Development Plan is within Planning Area(s) 1,2, and 3.
This implementing project consists of 36.46 acres.
This implementing project consists of:

195,997	square feet of retail/service,
1,194	square feet of office
82,347 +11,100 (outdoor)	square feet of restaurant
0	square feet of hospitality (# of rooms)
279,538 square feet + 11,100 outdoor dining	

7. The project shall be in substantial conformance with all adopted environmental mitigation measures, any written project proposal information and any verbal agreements or representations made by applicant to the decision-making body as part of its consideration of the project that are incorporated into the final written conditions of approval. Any proposed change substantially different than the approved project shall require an amendment to this approval in accordance with the Development Code.

8. The development of the premises shall comply with the standards of the City's Development Code, The Triangle Specific Plan, and all other applicable State and Federal Codes.

9. Subsequent modifications of this approval, which do not intensify the use, including but not limited to reorientation of structures, alteration of parking and circulation design, minor changes to the conditions of approval, interpretations of the conditions of approval relative to intent, necessity of, and timing, may be approved by the Director, unless the Director requires a Substantial Conformance or Revised Permit application in accordance with the Development Code.

10. The Permittee/Owner shall pay all applicable impact and/or mitigation fees or provide proof that all required fees have been paid in accordance with City policies and ordinances in effect at the time of permit issuance.

11. In the event the use(s) hereby permitted under this permit is: (a) found to be in violation of the terms and conditions of this permit; (b) found to have been obtained by fraud or perjured testimony; or (c) found to be detrimental to the public health, safety or general welfare, or a public nuisance; this permit shall be subject to the revocation procedures in Section 16.82 of the Development Code.

12. The Permittee/Owner shall comply with all applicable provisions of federal, state and local ordinances in effect at the time of building permit issuance.

13. The Permittee/Owner shall obtain approval of all necessary plans for the construction of the new structure proposed by the project on the subject property in accordance with the Murrieta Development Code. Such plans include, but are not limited to, site plans, floor plans, building elevations, grading plans and landscaping plans.

14. The Permittee/Owner shall comply with and implement all applicable Mitigation Measures (MM) and Project Design Features (PDF) contained in the Mitigation Monitoring & Reporting Program (MMRP), as identified in the Subsequent Environmental Impact Report (SEIR).

    For each permit request, the applicant shall submit a Mitigation Monitoring Reporting Program Compliance Plan indicating the items that are being implemented or satisfied, accompanied by the proof of how the mitigation measure is satisfied. The format shall be in the form of a binder containing the following: (1) cover sheet indicating the permit request phase, (2) table of contents, (3) copy of the MMRP filled out indicating items addressed, (4) supporting information demonstrating compliance

15. Applicant acknowledges that the City's approval of this application is based on the Applicant's conceptual plans for various improvements, including but not limited to all off-site improvements, emergency access, building elevations, floor plans, landscaping and irrigation, site grading and drainage, ADA accessibility, sight lighting, and on-site parking and circulation. Prior to issuance of any permits, the Applicant shall submit final design plans to the City for review and approval. The plans shall meet or exceed the requirements of the City's adopted codes and other policies and programs in order to receive the required permits and any subsequent approvals.

16. The project site shall be the point-of-sale for the purpose of collecting any sales tax on goods that are sold, delivered or rented on the site.

Parking, Loading, and Lighting

17. Parking for this project was determined on the basis of the parking standards contained in the Triangle Specific Plan, which requires a minimum of 1675 parking spaces in accordance with the approved site plan showing 279,538 square feet of retail, restaurant/food, outdoor dining, and office uses. The number of parking spaces required are established based on the uses and building square footage identified on Sheet A-00.1-Parking Data. The project shall provide 1675 parking spaces as identified on the site plan. Any changes to the number of parking spaces shall be based on the city minimum requirement and is subject to review in accordance with SP 276, Section 4.5.3.

18. All parking shall be designed and improved pursuant to parking standards contained in the Triangle Specific Plan, and when not clearly addressed Chapter 16.34 of the Murrieta Development Code, and shall be in conformance with the approved site plan.

19. There shall be no parking of semi-truck with trailers, unless associated with a service provided to the site. This condition does not apply to vehicles parked overnight in the loading areas.

20. A minimum of 84 bicycle rack/spaces (1675 x 5%) shall be provided in compliance with the Triangle Specific Plan. 120 bicycle spaces are shown on the approved preliminary site plan. A reduced number of bicycle racks/spaces (from the 120 spaces shown) may be provided as long as the 5% is maintained and the bicycle rack/spaces are

conveniently spaced throughout the center consistent with the spacing shown on the preliminary site plans.

Bicycle spaces for employees shall be secure, enclosed spaces that are located in a key-accessed area and are illuminated at night. Bicycle spaces for visitors and customers shall include bicycle racks located in areas that are clearly visible from a primary building entrance, illuminated at night, and protected from damage from moving and parked vehicles. These racks shall include provision for securing bicycles in which the user may lock the frame and wheels. (Triangle Specific Plan 2.9, No. 8/ PDF 2-3/ /PDF 10-6).

21. Parking spaces(s) for persons with disabilities shall be provided as shown on APPROVED PLANS. Each parking space reserved for persons with disabilities shall: (a) be identified by a permanently affixed reflective sign constructed of porcelain on steel, beaded text or equal, displaying the International Symbol of Accessibility; (b) not be smaller than 70 square inches in area; (c) be centered at the interior end of the parking space at a minimum height of 80 inches from the bottom of the sign to the parking space finished grade; and (d) have a surface identification sign duplicating the symbol of the accessibility in blue paint of at least 3 square feet in size.

22. A sign shall be posted in a conspicuous place at each entrance to the off-street parking area, not less than 17-inches by 22-inches, clearly and conspicuously stating the language provided by the Building and Safety Division regarding accessible parking.

23. A minimum of fourteen (14) loading spaces(s) shall be provided in accordance with Section 16.34.100 of the Development Code as shown on the approved plans or as otherwise provided for as shared loading spaces under SP 276. The loading space shall be surfaced with six (6) inches of concrete over a suitable base and shall not be less than 15 feet wide by 25 feet long, with 14 feet vertical clearance.

24. The retail area shall post signs limiting idling time for commercial vehicles to no more than five minutes. (Triangle Specific Plan 2.9, No. 6/ PDF 11-4) Sign(s) stating "EXTENDED (MORE THAN 5 MINUTES) IDLING FOR COMMERCIAL VEHICLES IS NOT PERMITED" shall be located at the loading area of the and at the truck parking areas. The sign(s) shall not be less than twenty-four inches square and will provide directions to truck parking spaces with electrical hookups. The hookups will provide power for refrigerated trailers that need to be parked on-sight for more than 15 minutes.

25. All exterior lighting shall comply with the Mt. Palomar Special Lighting Area, as defined in Section 16.18.110 and Section 16.18.100 Lighting of the Development Code.

26. All lighting fixtures including within parking areas shall be designed with shielding or cut-off fixtures to project in a downward manner to minimize glare and to not shine directly upon adjoining property or public rights-of-way.

Other

27. Pedestrian site design elements such as enhanced walking paths, trellis, and arbors as shown on the site plan shall be incorporated into the construction drawings and installed prior to any occupancy.

28. Roof gutters and downspouts are not permitted on the exterior of the front elevation of a building or building elevation facing Murrieta Hot Springs Road when the building is located within 100 feet of Murrieta Hot Springs Road, unless architecturally integrated into the building architecture. When roof gutters and downspouts are permitted on the exterior building elevation, they shall be painted the same color as the underlying wall color.

29. No signs are approved pursuant to this project approval. Prior to the installation of any on-site advertising or directional signs, a sign program shall be submitted to and approved by the Planning Division (Planning).

30. All trash bins shall be stored in approved enclosures and screened in compliance with Sections 16.18.120 and 16.18.150 of the Murrieta Development Code. The location of the enclosures must be shown on the precise grade plan and shall provide a minimum of 2021 square feet of refuse storage area (1010.5 square feet for refuse and 1010.5 square feet for recycling).

    a. Refuse/recycle/organic bins shall be stored in approved enclosures and screened in compliance with Sections 16.18.120 and 16.18.150 of the Murrieta Development Code as shown on Sheet A-040 through A-042 of the approved plans.

    b. The location of the enclosures must be shown on the precise grade plan and the surface, including the access apron, shall be constructed with concrete with a concrete apron a minimum of 6 inches thickness

31. Two trash compactors, as shown on the site plan, shall be provided for the project in-lieu of providing the minimum of 576 square feet of refuse/recycle area (288 square feet for refuse and 288 square feet for recycling) in accordance with Section 16.18.150. Prior to building permit issuance, the permittee shall provide verification from the waste provider of their ability to serve the site with the two compactors and that the area is adequate for the necessary refuse/recycling containers.

    a. Compactors shall be stored in approved enclosures and screened in compliance with Sections 16.18.120 and 16.18.150 of the Murrieta Development Code.

    b. The location of the enclosures must be shown on the precise grade plan and the surface, including the access apron, shall be constructed with a concrete apron a minimum of 6 inches thickness.

32. Recycling receptacles shall be located adjacent to trash receptacles in casual seating and dining areas and in plazas and courtyards to provide the opportunity for consumer recycling (Triangle Specific Plan 2.9, No. 7/ PDF 9-4/ PDF 11-5).

33. Product deliveries to this location shall not be permitted between the hours of 10:00pm and 6:00am. In accordance with Development Code Section 16.30.130 B.

34. All installed landscaping shall be maintained in good order and health in compliance with the approved landscape plans.

35. Any mechanical equipment and vents (ground or rooftop) shall be screened from view (per the approved plan) from any public right of ways (including Interstate 15 & 215), landscaping area, and open space area unless otherwise provided for under SPA 276. Line of sight details shall be included in/on the plans for review for building permit issuance and stamped by a licensed architect. In addition, details including the height of the roof-top equipment and height of the parapet must be a detail within/on the plans for building permit issuance.

    If any time during the building inspection process, any roof-top equipment is found to exceed the height provided in the details of the approved plans for building permit issuance, the applicant must submit proposed method for screening of the equipment. Approval of such screening method is at the discretion of the Planning Division. Planning Division approval and Building Permit issuance must be obtained prior to any installation of the proposed screening method.

36. If applicable: An interior room which may be shared by more than one tenant, with direct exterior access, shall be provided for the placement of main utility electrical switch gear distribution, roof access ladders and any other mechanical or utility equipment.

37. Walls or retaining walls proposed on-site shall be decorative and be comprised of the slump-stone, split face material, or approved landscaped geofabric interlocking landscape walls. All proposed walls shall comply with the Development Code with regards to setbacks and height limitations.

38. The project shall comply with the provisions pertaining to construction activity as stated in Section 16.30.130 of the City of Murrieta Municipal Code:
    a. The operation of tools or equipment used in construction, drilling, repair, alteration, or demolition work is prohibited between Monday through Saturday, from 7 P.M. and 7 A.M., or at any time on Sundays or holidays.
    b. Construction activities must be conducted in a manner that the maximum noise levels at the affected structures would not exceed those listed in section 16.30.130.
    c. All mobile or stationary internal combustion engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order.

39. All flat, non-visible portions of building roofs shall be cool colors that have a high solar reflectance and thermal emittance. These characteristics reflect light, thereby reducing heat transfer and further the ability to allow heat to escape from a surface once it has been absorbed (SP Section 2.9, No 5/ PDF 11-3).

40. Prior to issuance of occupancy permits, and in coordination with the City of Murrieta, the Property Owner/Developer shall implement security measures and design features to

reduce the demand for police services. Additional security measures may include, but not be limited to:

- Private security personnel staffed at the project site;
- On-site security cameras that are monitored;
- Increased lighting around facilities and parking lots;
- Anti-graffiti measures;
- On-site medical aide; and
- On-site, private, plain-clothed store security in retail businesses or anti-theft electronic monitors.

Evidence that security measures have been implemented to the satisfaction of the City shall be provided to the Community Development Department and Police Department. (MM 9-1).

41. Prior to building permit issuance for Building E, the permittee shall provide modifications to the Internal Connector Road and Murrieta Hot Spring Road facing building elevations to address the following Specific Plan Design Guidelines requirements:

    a) Massing -Provide horizontal and vertical wall articulation through the use of arcades, towers, wall recesses/ projections, and setting back the upper floors. Facades shall incorporate wall plane projections and recesses having a depth of at least three percent of the length of the façade and extending at least twenty percent of the length of the façade. (16.10.030.C.3.a.1)

    b) Facades of buildings facing the Internal Connector Road and Murrieta Hot Springs Road shall be fully articulated. Facades of buildings facing the freeway and rear may incorporate less detailing in consideration of the distance to the highway, but these facades shall include design elements that provide an appropriate level of interest.

42. Prior to occupancy, the permittee shall coordinate with the Police Department to provide an office space for use by the City of Murrieta Police Department, within the project boundaries, with the size, location, timing, and scope to be determined by staff in coordination with the Permittee.

Prior to Grading Permit Issuance

43. Grading plans must be reviewed by the Planning Division for compliance with the approved site plan.

44. Prior to the issuance of grading permits, the project applicant shall comply with the provisions of any existing City ordinance that has been established as a mitigation measure for the Stephens' Kangaroo Rat. These ordinances may include fee schedules, mechanisms for protecting habitat, or a combination thereof.

45. If the project is to be phased, a phasing plan shall be submitted and approved prior to grading permit issuance.

46. A minimum of 30-days prior to the placement of a construction trailer, a Temporary Use Permit application shall be submitted for review and approval.

47. Prior to issuance of a street improvement plan, plans shall show the location of a bus turnout on Murrieta Hot Springs Road (MMRP PDF 2-3/ PDF 10-7) The bus turnout and shelters located on Murrieta Hot Springs Road shall include a roof canopy, seating, and shade trees nearby to provide shelter for riders.

48. Prior to any ground disturbance or issuance of any grading plan, the Permittee shall submit a report prepared by a qualified biologist to the City documenting absence of Crotch's bumble bee from the project site.

Prior to Building Permit Issuance

49. If applicable, a minimum of 30-days prior to building permit issuance, the applicant shall submit an application for addressing.

50. The local postal delivery office shall review and approve all proposed postal delivery arrangements. The applicant shall provide the City with evidence of postal service approval.

51. All exterior/outdoor lighting fixtures including parking lot lights and outdoor lighting shall be shown on electrical plans submitted to the Department of Building and Safety for plan check approval and shall comply with the requirements of Development Code Section 16.18.100-Lighting and 16.18.110-Mt Palomar Lighting Standards.

52. A comprehensive master sign program for the project shall be submitted to the Planning Division for review, and approved prior to any building occupancy (PDF 1-9).

53. Tentative Tract Map 38622 shall be recorded. For any proposed buildings crossing over property lines, a lot line adjustment or parcel map shall be recorded.

Prior to Occupancy

54. Unless otherwise indicated, all conditions, and other requirements shall be fully constructed and implemented prior to final inspection of the building and/or site improvements.

55. The applicant shall contact the Planning Division a minimum of 72-hours to allow for scheduling of any inspection required for this project.

56. Comprehensive Sign Program for the project shall be approved.

57. All existing outdoor advertising displays, signs shall be removed, except for signs permitted by the Development Code.

58. Prior to the first release of occupancy for any development or building on any parcel approved by this development plan permit, a plan shall be provided to the City for and shall provide/identify temporary landscaping and a decorative barrier around the perimeter of undeveloped parcels. The temporary landscaping is subject to the approval of the City Landscape Architect and the Public Works Division. Temporary landscaping

shall also include a temporary irrigation system. All exterior perimeter landscaping, on-site driveway(s), parking areas, common areas, and pedestrian linkages shall be constructed prior to the release of first/any occupancy.

59. Recycling receptacles shall be located adjacent to trash receptacles in casual seating and dining areas and in plazas and courtyards to provide the opportunity for consumer recycling (PDF 9-4/PDF 11-5).

General Plan Mitigation Measures

60. (AES-2) During Pre-Construction and Construction-Construction documents shall include language requiring that construction vehicles be kept clean and free of mud and dust prior to leaving the development site. Streets surrounding the development site shall be swept daily and maintained free of dirt and debris.

61. (AES-3) During Pre-Construction and Construction-Construction worker parking may be located off-site with prior approval by the City. On-street parking of construction worker vehicles on residential streets shall be prohibited.

62. (CR-2) During Excavation and Grading Activities-In the event that cultural resources (archaeological, historical, paleontological) resources are inadvertently unearthed during excavation and grading activities of any future development project, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of discovery. If not already retained due to conditions present pursuant to Mitigation Measure CR-1, the project proponent shall retain a qualified professional (i.e., archaeologist, historian, architect, paleontologist, Native American Tribal monitor), subject to approval by the City of Murrieta to evaluate the significance of the find and appropriate course of action (refer to Mitigation Measures CR-1 and CR-3). If avoidance of the resources is not feasible, salvage operation requirements pursuant to Section 15064.5 of the CEQA Guidelines shall be followed. After the find has been appropriately avoided or mitigated, work in the area may resume.

63. (CR-3) During Excavation and Grading Activities-In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to State Health and Safety Code Section 7050.5, no further disturbance shall occur until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendant of the deceased Native American, who shall serve as consultant on how to proceed with the remains.

64. (WW-2) Prior to issuance of a building permit for any future development project, the Project Applicant shall prepare an engineering study to support the adequacy of the sewer systems and submit the engineering study to the City for review and approval. Any improvements recommended in the engineering study shall be installed prior to the certificate of occupancy for the development project.

65. (WW-3) Prior to issuance of a building permit for any future development project, the Project Applicant shall provide evidence that the RCWD, EVMWD, WMWD, or

EMWD has sufficient wastewater transmission and treatment plant capacity to accept sewage flows from buildings for which building permits are being requested.

66. (WW-1) Prior to issuance of a wastewater permit for any future development project, the Project Applicant shall pay applicable connection and/or user fees to RCWD, EVMWD, WMWD, or EMWD.

67. (FP-2) Prior to Initiation of Construction Activities-Brush clearance shall be conducted prior to initiation of construction activities in accordance with Murrieta Fire Department requirements.

68. (FP-3) During Construction-Adequate access to all buildings on the project site shall be provided for emergency vehicles during the building construction process.

69. (FP-4) During Construction-Adequate water availability shall be provided to service construction activities.

LANDSCAPING

Prior to the issuance of building permits

70. Project shall comply with the Triangle Specific Plan 276 including all relevant exhibits, landscape requirements, and other requirements, as applicable.

71. Printed copies and one digital copy of landscape construction plans shall be submitted to the Planning Division. Verify quantity of printed copies with Planning Division prior to submission. A licensed Landscape Architect shall prepare the plans. Applicant shall also verify with MCSD submittal requirements for any proposed MCSD maintained landscape areas.

72. The landscape construction plans shall be in substantial conformance with the preliminary landscape plans as approved by the City's Landscape Architect, City Administrative Staff, Planning Commission and/or City Council. Notes, details, and specifications shall be included.

73. Landscape plans shall be drawn at a scale of 1" equals 20'-0" or larger. The City Landscape Architect will not accept plans drawing at 1" equals 30'-0" or smaller.

74. It is the responsibility of the landscape architect to be aware of and comply with the requirements and standards of Title 16.28 of the Murrieta Municipal Code, the City's current policies, and current State of California water efficient landscape requirements.

75. It is the responsibility of the applicant and owner's design team to be aware of and comply with the layout and landscape requirements and standards for Off-Street parking according to Title 16.34 of the Murrieta Municipal Code.

76. It is the responsibility of the applicant and owner's design team to be aware of and comply with the requirements of Title 16.42 Tree Preservation. This chapter provides regulations for the protection, preservation, and maintenance of significant tree

resources and establishes minimum mitigation measures for trees removed as a result of new development.

77. All planter areas shall provide a minimum 5 feet wide planter area clear of curbs, concrete step-out strips, walkways, walls, footings, and overhead supports. Planters of lesser widths may be allowed provided they are in substantial conformance with the preliminary approved landscape concept plans or the Triangle Specific Plan 276. Plant materials for narrow planters shall fit within the provided planter width at maturity and shall not infringe upon or otherwise restrict use of adjacent required pedestrian access ways.

78. It is the responsibility of the applicant and owner's design team to be aware of and comply with the layout and landscape requirements and standards for Off-Street parking according to Title 16.34 of the Murrieta Municipal Code.

79. Diamond-in-profile tree planters are to be configured at sidewalks when directly adjacent to parking spaces. The diamond-in-profile shape will achieve a sufficient plantable area while avoiding conflicts with pedestrian path of travel. Interior plantable area is to be a minimum of 20 square feet, however, 25 square feet is preferred.

80. All bumper overhang areas shall be planted with a low-growing groundcover, highly tolerant of foot traffic, growing no greater than 6" high at maturity. All bumper overhang areas shall be shown graphically on plan and labeled clearly. Bumper overhang areas shall not count towards the minimum required landscape area.

81. No trees shall be located within the required bumper overhang area. Trees located at head of parking stalls, directly adjacent to bumper overhang area, shall be centered to align trunks with parking stall lines to minimize potential future conflicts between trunks and bumpers. All trees adjacent to bumper overhang area shall be standard form to avoid conflicts between car bumpers and tree trunks.

82. Curb-adjacent street trees shall be provided where the interior width of the parkway planter between the curb and sidewalk is 6'-0" or greater in width. Street tree selection in these areas shall be upright, narrow canopy trees that will avoid conflicts with adjacent traffic at maturity and provide minimum required pedestrian clearance along sidewalk as well. Proposed tree selections for right-of-way parkway trees shall be provided to Planning Division, Public Works Department, and City's Landscape Architect for review and approval.

83. Trees located in the frontage area along Murrieta Hot Springs Road, from the southern edge of the public side to approximately 25'-0 to 30'-0" south toward the onsite building, shall be provided at an average rate of 1 tree per 500 square feet. Trees in this area should include a combination of naturalistic stands of 3 – 5 canopy trees and compatible flowering understory trees placed between, creating an aesthetically pleasing rhythm of canopy and understory trees. Along building perimeters, trees shall be provided at minimum at a rate of 1 tree per 30 lineal feet of building perimeter. Trees shall generally be evenly dispersed but may be clustered where views into the site are desired, subject to Planning Division and City Landscape Architect review.

Tree species for frontage area shall be per the approved landscape concept plans. Cercis canadensis ‘Vanillia Twist’ shall be replaced within the frontage area with Cercis occidentalis, Cercis canadensis ‘Forest Pansy,’ or a similar understory, deciduous tree tolerant of drought and suited to slope conditions.

84. Fire apparatus access roads shall be illustrated, diminished, and labeled on planting plan. Trees are to be located so that the mature canopies do not encroach into the access road clear zone of 28 feet wide and 13.5 feet high. Notes shall be added to the plans stating that the trees shall be maintained clear of all vertical and horizontal fire access areas. Maintenance for fire access shall be included in the comprehensive maintenance schedule for the project and included within the plan set, as required per the City’s Landscape Architectural Plan Check checklist.

85. Perimeter landscape design shall coordinate with surrounding properties. Shrub and ground cover selections are to match or complement adjacent developments.

86. Enhanced corner planting using specimen trees and accent shrubs that do not conflict with vehicular line of sight. Limit shrubs to a maximum of 30” natural height. On center spacing of enhanced corner planting will be reviewed at time of plan check. Planting at corner shall be sized and spaced to be a minimum of 80% infilled at time of installation and fully infilled within 2 years from installation.

87. Avoid plants that require cutting back to keep them within a specific area or at a trimmed height. Carefully select and locate plants where they will be allowed to grow to maturity and keep their natural shape.

88. Plant materials within vehicular line of sight impact areas are to be limited to a maximum of 30” natural height. Impact areas include but are not limited to project entries, drive aisles, and parking lot island planters. Project Landscape Architect shall coordinate with Project Engineer to determine limited sight areas at corners as described per City Standard Plan No. 214. Intersection Sight Distance.

89. Slopes shall be landscaped, at a minimum, according to City’s Slope Landscaping, Requirements for Subdivision Tract and Commercial Slopes document. Refer to City’s website under Planning Division, Applications and Forms, Landscape Handouts. A combination of erosion control groundcover, shrubs, and trees shall be provided.

90. Linear root barriers shall be installed for all trees located within 5 feet of paving and within 10 feet of city sidewalks. Root barrier for trees in these locations shall be a minimum length of 20 linear feet centered on the tree trunk and a minimum depth of 24” inch or greater if required by other department standards.

91. Minimum clearance at all fire equipment and hydrants shall be provided. Within clearance area, only low growing groundcovers may be planted.

92. Utilities and light standard locations shall be coordinated with Owner’s engineering team to avoid conflicts with required tree locations and utility screening. Show the outline of any access areas required by the utility purveyor and provide suitable screening shrubs in 15 gallon size outside of access area, as needed to screen from public view. No light

fixture, electric transformer, fire detector check, or fire hydrant shall be designated for any location in a planting area that would make it necessary to eliminate a tree.

93. Plant materials shall be installed from the container sizes consistent with Murrieta Municipal Code Section 16.28.080, Table 3-5, Minimum Mix of Plant Materials. Where plans have proposed sizes greater than Table 3-5, the larger size shall be provided.

94. All groundcovers shall be installed from living plant materials. Spacing shall be such that 100% coverage is achieved within 2 years from installation.

95. All headlight glare from drive aisles and parking stalls shall be screened from public view. An opaque screen shall be installed along all drive aisles and parking areas abutting public streets and rights-of-way. The screening shall have a height of not less than thirty (30) inches and not more than forty-two (42) inches at maturity. For areas which would produce headlight glare impacting freeway, screening shrubs shall be 15 gallon size minimum and spaced closely to provide immediate screening at time of installation. Spacing for screen shrubs should be as close as feasible while still allowing for healthy long-term growth and condition at maturity. Screen walls shall be provided as indicated per the approved landscape concept plan and the approved wall and fence conceptual plan.

    The City, City's Landscape Inspector, and the City's Landscape Architect reserve the right to require additional 15 gallon screening shrubs at time of plan check and at time of final landscape inspection where necessary to screen headlights, utilities, bare or blank buildings facades and walls, and other unforeseen unsightly field conditions that may arise during the course of construction.

96. An updated shading exhibit shall be provided. A minimum of 50% of the total parking stall area shall be shaded at maturity by tree canopy, at approximately 15 years realistic canopy growth. Projected canopy size for trees in trees wells at parking lot interiors should consider the unfavorable parking lot conditions and reflected heat in these areas.

97. Required plaza/courtyard amenity areas shall be clearly delineated, dimensioned, and labeled on the landscape plans and all amenities shall be in substantial conformance with the amenities shown on the approved landscape concept plans, provided; however, that amenities can be adjusted and modified to address leasing requirements of tenants provided that it remains in compliance with the requirement of SP 276 and the Triangle Specific Plan Design Guidelines.

98. A landscape phasing exhibit shall be submitted to the Planning Division with the overall site phasing exhibit detailing the sequence of installation for all landscape improvements. All offsite improvements, including right-of-way landscaping along Murrieta Hot Springs Road, median landscaping, and similar shall be shown in the first phase of development. City may require perimeter fencing and perimeter screening and screening shrubs also be provided prior to first occupancy. Landscaping adjacent to the freeways may be reasonably adjusted based on the phasing of development.

99. Commercial zoning requires a minimum of 20% of the total onsite area be provided as landscape. In no case shall the total landscape area fall below the minimum requirement

for the Project as a whole or the 15% requirement within each Planning Area.

Prior to issuance of a Building Permit:

100. The landscape plans shall be approved by the City's Landscape Architect and Assigned Planner.

Prior to the initiation of landscape construction:

101. Contact City's Assigned Planner or Landscape Architect to determine if a pre-job meeting with the job site superintendent and the landscape contractor will be required. No landscaping shall occur prior to the meeting or the City's determination that it will not be required.

102. Contact Murrieta Community Services Department to determine if a pre-job meeting with the job site superintendent and the landscape contractor will be required. No landscaping shall occur prior to the meeting or the City's determination that it will not be required.

Prior to the issuance of occupancy permits:

103. All offsite and street frontage landscape improvements for Murrieta Hot Springs Road as described by the approved landscaping phasing exhibit shall be provided prior to first occupancy for any building.

104. All required landscaping and irrigation systems shall be installed in a condition acceptable to the City. The owner's contractor, construction manager, or Landscape Architect shall provide inspections throughout the landscape installation process. The owner shall provide the City's Assigned Planner with a Landscape Certificate of Completion documentation package at the time of final inspection request. The City will review the Certificate of Completion and conduct a final inspection to ensure that the landscape installation is in compliance with all City policies, practices and the approved landscape plans. The Certificate of Completion shall be complete with irrigation water audit, irrigation schedules, landscape maintenance schedules, and soil management report.

    A separate, complete Certificate of Completion package shall be provided for each plan set and each phase of occupancy, at time of final inspection request.

105. Performance securities, in the amount determined by the City to guarantee the adequate maintenance of the landscaping materials and irrigation system in accordance with the approved plans for a period of one (1) year from the date of final clearance of the installed landscaping by the City, shall be posted with the Planning Division. Acceptable forms of security shall be limited to cash deposit, cash bonds, or irrevocable letters of credit. The performance securities shall be released one (1) year after final clearance of the installed landscaping by the City, upon written request by the owner, if the landscaping has been adequately maintained and inspected. A deposit to cover this re-inspection of the landscape, at the current City rate, shall be posted with the Planning Division prior to re-inspection for maintenance bond release. Contact Planning Division

to verify current fee schedules and requirements prior to issuance.

DEPARTMENT OF PUBLIC WORKS

106. Since the project consists of multiple discretionary reviews and conditions of approval, (DP 2022-2705, TTM 2022-2706), all conditions of approval shall be referenced as "the conditions of approval" and shall be incorporated as a single project.

107. Any alteration to the final conditions of approval by the Permittee/Owner shall be reviewed by staff to determine whether approval of alteration shall be subject to M.M.C. Section 16.80.070, Changes to an Approved Project.

108. All items required to be submitted shall be, at a minimum, in electronic format (e.g., PDF, Word). Hard copies may also be required.

109. All conditions as approved shall be completed by the Permittee/Owner at no cost to the City, unless specified otherwise.

110. All designs shall conform, at a minimum, to the City of Murrieta Municipal Code, Development Code, Standard Drawings, Circulation Element, California Highway Design Manual, and Manual on Uniform Traffic Control Devices (MUTCD).

111. Prior to any permit issuance, all relevant plans and their associated bonds, reports, and supporting documents shall be prepared in accordance with the Murrieta Municipal Code, reviewed, all applicable fees paid, and approved by the City Engineer.

112. Future extensions are subject to any, and all, local, state, and federal current regulations not previously identified in the original conditions of approval. Revisions/Updates to the original project's exhibits, plans, reports, etc., at the time of any extension request, shall be at the discretion of the City Engineer. Regardless of revisions/updates to future extensions, revised/updated exhibits, plans, reports, etc., shall be submitted for review and approval for discretionary review and approval prior to submittal of construction documents (e.g., exhibits, plans, reports, etc.). The approved discretionary documents, and all applicable conditions of approval, shall then be submitted along with the construction documents for any permit issuance.

113. As part of the initial submittal of plans, reports, etc., for any grading permit or any other grant of approval, the Permittee/Owner shall submit the approved discretionary plans and reports (e.g., Tentative Map, Preliminary Grading Plan, Preliminary Water Quality Management Plan, Preliminary Hydrology Study, etc.) that were approved as part of the Discretionary Review Process, in addition to all applicable onsite and offsite plans, reports, reference documents, and/or document(s) deemed relevant for the issuance of a permit. All discretionary documents shall serve as a reference for final document preparation and approval, and are subject to revision to ensure compliance with all local, state, and federal requirements, as applicable.

114. The conditions herein, when addressing grading plans, implies precise grading plans for the front half of the project and mass grading plans for the back half of the project. Any

other type of grading plan will be explicitly named when applicable. Moreover, grading plans not specifically identified herein are not approved as part of these conditions of approval.

115. Grading plans' 1st submittal, for the front half with building pad location and elevation information, shall be submitted prior to, or concurrently with, building plans' 1st submittal. However, building plans' 1st submittal shall NOT be submitted prior to grading plans' 1st submittal. Moreover, building plans' 2nd submittal shall incorporate all applicable 1st review grading plans' comments. Subsequent building plan submittals shall also coincide with grading plans' latest and applicable revisions.

116. Prior to the issuance of any occupancy permit, including temporary certificate(s) of occupancy, all public improvement conditions set forth in these Conditions of Approval shall be completed and accepted/as-built.

117. In addition to any applicable permit issuance, an Encroachment Permit shall also be obtained from the Engineering Department prior to commencement of any construction within City right-of-way or public jurisdiction easements.

118. If applicable, an Encroachment Permit, or any other applicable type of permit or allowance, shall be obtained from CalTrans, Riverside County Flood Control and Water Conservation District, etc. prior to commencement of any construction within their right-of-way. Proof of permit issuance, or verification of acknowledgement with no permit issuance requirement, shall be submitted prior to city-issued permit issuance affecting said easement(s). Additionally, said approvals/acknowledgements shall be identified on the subject grading and/or improvement plans, as applicable.

119. The Permittee/Owner shall submit a current hyperlinked Preliminary Title Report (PTR) with active connectivity to all referenced recorded documents identified within the Preliminary Title Report.

    a. In addition to the hyperlinked PTR, all referenced recorded documents shall also be submitted, in PDF format.

120. It is understood that the Final Map will correctly show all existing and proposed easements, travel ways, grading, drainage courses, etc., and that any omission may require the resubmittal of documents and/or plans associated with this application for additional consideration.

121. All Engineering Plans (e.g., Improvement Plans, Grading Plans) shall be coordinated for consistency with adjacent projects and existing improvements contiguous to the site and shall be submitted on standard 24" x 36" City-formatted bond sheets. The Permittee/Owner shall review all plan check comments, make certain their consultants address all comments in each subsequent submittal, and return all plan check comments with each subsequent submittal. Failure to do so may result in additional plan check fees due to additional review time.

122. The Permittee/Owner shall comply with all current and applicable requirements set forth in the City of Murrieta's Municipal Code, Development Code, Standard Drawings,

Ordinances, Policies, and Resolutions, along with all applicable State (e.g., State Water Resources Control Board) and Federal regulations, whether or not such provisions or requirements have been specifically set forth in these conditions, all of which are now incorporated herein by reference, and fully set forth at this point.

123. Prior to approval of any plans, reports, or legal documents and/or permit issuance, the Permittee/Owner shall pay, at a minimum, all outstanding plan check and processing fees.

124. Security bonds, for a portion of the construction costs as outlined in the final cost estimate(s), shall be in the form of a cash deposit, as approved by the City Engineer.

PRIOR TO ISSUANCE OF ANY PERMIT, THE PERMITTEE/OWNER SHALL COMPLETE THE FOLLOWING

Acquiring Offsite Property/Easement

125. Prior to any permit issuance, the Permittee/Owner shall coordinate with adjacent property owners affected by proposed onsite and/or offsite improvements. The Permittee/Owner shall be solely responsible for acquisition of any necessary easements, agreements, etc. prior to plan approval. All easements, agreements, etc. shall be notarized and recorded in a format acceptable to the City Engineer. Agreements and/or easements shall designate maintenance responsibilities conforming to those associated/identified on the approved Tentative Map. The agreements and/or easements shall also address uninterrupted access and utility services to affected existing properties during construction, and show the recording information (instrument number and date) on the appropriate plan(s).

126. Upon property/easement acquisition, the Permittee/Owner shall complete the improvements as approved by the City Engineer.

127. Property/Easement acquisition necessary for public improvements shall be obtained, signed, notarized, and recorded, and copy submitted to the City, prior to approval of the improvement plans (bonding approved) and final map. Recordation of said property/easement acquisition may occur:
    a. prior to improvement plan approval with a deferred map if applicable,
    b. but not with a final map approval with a deferred improvement plan.

128. The Permittee/Owner shall obtain the required area from APN 910-031-020 and 910-031-011, to accommodate public improvements for the purpose of the traffic signal modifications and intersection improvements at Murrieta Hot Springs Rd and Monroe Ave. City-owned

    a. The Permittee/Owner shall complete the property acquisition process with the City in a timely manner to ensure the proposed design meets all requirements.

    b. Upon completion of the property acquisition, the Permittee/Owner shall complete the improvements as approved by the City Engineer.

c. If the Permittee/Owner does not acquire the City-owned parcel, the Permittee/Owner shall provide a redesign of the project ensuring connectivity between Murrieta Hot Springs Rd and Monroe Ave.

Grants of Easements

129. Dedications, grants of easements, and/or right-of-way dedications, shall occur via this project's Final Map or per separate instrument(s), as approved by the City Engineer.

130. All offers of dedication and conveyances shall be submitted for review and recorded as directed by the Engineering Department. The Permittee/Owner shall incur all costs associated with the formation of a suitable maintenance district for all associated easements.

131. All easements and/or right-of-way dedications shall be offered via an Irrevocable Offer of Dedication to the City or other appropriate agency and shall continue in force until the City or other agency accepts or abandons/rejects such offer(s).

132. All dedications shall be free from all encumbrances as approved by the Engineering Department.

133. Easements, when required for roadways, slopes, landscaping, drainage, utilities, etc., both onsite and offsite, shall be shown on a final map, or per separate document(s) as approved by the City Engineer. All grants of easements shall be approved prior to issuance of a grading permit.

Vacation or Abandonment of Easements

134. Vacations and/or abandonment of easements, shall occur via this project's Final Map or per separate instrument(s), as approved by the City Engineer.

135. Proposed vacations or abandonments of existing public right-of-way or easements shall be completed prior to plan approval, or as approved otherwise by the City Engineer.

136. Any proposed vacation(s) and/or abandonment(s) of existing right of way or public easements shall be shown on a final map, or per separate instrument(s) as approved by the City Engineer.

137. All vacations and/or abandonments, shall be submitted for review and approval by the Engineering Department and/or City Council, prior to being signed, notarized, and recorded. A copy of the notarized and recorded copy shall be provided to the City.

138. Subject to the discretion of, and final approval by, the City Council, the City shall vacate/abandon a portion of the following street's right-of-way.

a. Sparkman Court, aka Monroe Ave

b. If the vacation/abandonment is unsuccessful, Permittee/Owner shall submit revised plans for substantial conformance review as required by the City of Murrieta Development Code.

Street Improvement Plans

139. The Street Improvement Plan shall include the following "Improvement Note" to identify required improvements prior to first occupancy:

a. "All public improvements, as identified in the project's conditions of approval and approved public street improvement plans, shall be constructed/completed and accepted/as-built prior to first certificate of occupancy.

140. The Permittee/Owner shall provide the following items, but may be required to provide additional items to substantiate the proposed design:

a. A Street Improvement Plan prepared by a registered Civil Engineer, or licensed specialist, in accordance with City standards, California Highway Design Manual, and/or MUTCD requirements, with all improvements subject to the approval by the City Engineer.

i. The Street Improvement Plan may include within it, but may not be limited to, the following:

1. Standard section(s), plan(s), profile(s), station values, elevations, dimensions.

2. Signing and Striping plan, included with the street improvement plans for the project.

3. Traffic Signal Plan included with the street improvement plans for the project.

4. Wet Utility Plans (e.g., storm drain, water, sewer) included with the street improvement plans for the project.

b. A Cost Estimate, prepared, signed, and stamped, by the registered civil engineer preparing the plans. The cost estimate shall include all costs, but not limited to, plan preparation, plan check fees, permit fees, bonding, staking, construction costs, stormwater best management practices, erosion control, soils engineering; construction management, etc.

141. The Permittee/Owner shall design, for the guarantee of construction, the following public improvements to the current City of Murrieta Circulation Element and corresponding City standards. Improvements may include, but are not limited to: paving, curb and gutter; sidewalk; street lights; drainage facilities; water quality best management practices; signing and striping; utilities, including but not limited to, water and sewer; landscaping; with all improvements subject to the approval by the City Engineer.

a. Design Murrieta Hot Springs Rd frontage to be improved to a half width of seventy-five feet (75’) centerline to right-of-way, per Augmented Urban Arterial City Standard Drawing #102A. The following shall be provided, but may not be limited to:

i. An additional width, greater than the seventy-five feet (75’) centerline to right-of-way, shall be provided to accommodate the right-turn/decel lane, per Traffic Engineering requirements, to the satisfaction of the City Engineer.

ii. The required improvements shall include, and clearly show, connectivity to existing improvements at, and adjacent to, the project’s westerly and easterly property line(s), as well as Monroe Ave.

iii. The required improvements shall include connectivity to improvements existing opposite legal centerline.

iv. Provide a design identifying improvements, including but not limited to: a bike lane; eastbound trave/turn/decel lanes; westbound travel/turn lanes; existing/proposed raised/painted medians; existing eastbound parkway improvements; all as directed by the Traffic Engineer, and subject to approval by the City Engineer.

v. The project’s frontage shall identify the requested parkway to accommodate the enhanced parkway landscape, between the curb & gutter and the right-of-way line.

vi. The project shall provide a design to tie into existing medians and provide full width raised landscaped medians along the project’s frontage from the most westerly property line to the most easterly property line, except for the areas for turning lanes at the following intersections:

   1. Murrieta Hot Springs Rd & Monroe Ave

   2. Murrieta Hot Springs Rd & Hancock Avenue

vii. As applicable, callout right-of-way dedication/vacation along the frontage to provide the requested right-of-way for the required improvements.

viii. Restripe Murrieta Hot Springs Rd full width as directed by the Traffic Engineer and as approved by the City Engineer.

   1. Transition striping from the proposed frontage may be required to commence at the project boundary and extend offsite to the satisfaction of the City Engineer.

142. All street improvements shall be designed to provide adequate right-of-way and transitions to existing improvements.

143. Proper right-of-way shall be dedicated, beyond that required per City Standard Drawing #102A, along the entire Murrieta Hot Springs frontage, to accommodate the new parkway improvements, along with all access driveways to include the pedestrian

improvements/pathways.

144. Improvement plans shall show all existing and proposed drainage and stormwater facilities, including surface and subsurface construction.

145. The Permittee/Owner shall provide a design to construct/reconstruct handicap access ramps within the project's frontage public right-of-way to current ADA requirements (e.g., ramps with truncated domes/warning detection systems). Title II of the American Disabilities Act prohibits local governments from discriminating against persons with disabilities. This may include providing handicap access ramps across the street or driveway, or adjacent to the project's property line(s), to ensure public safety, to the satisfaction of the City Engineer.

   a. Sidewalks and pedestrian ramps fronting, adjacent to, and/or near the project shall be improved/provided to current ADA standards, to the satisfaction of the City Engineer.

   b. Pedestrian sidewalks and ramps, fronting, adjacent to, and near the project, shall be improved/provided, to ensure continuous connectivity to the nearest RTA bus stop and to current ADA standards, to the satisfaction of the City Engineer.

146. If applicable, the Permittee/Owner shall provide a design to construct/reconstruct handicap access ramps within the public right-of-way, and adjacent to the project, to current ADA requirements (e.g., ramps with truncated domes/warning detection systems). Title II of the American Disabilities Act prohibits local governments from discriminating against persons with disabilities. This may include providing handicap access ramps across the street or driveway to ensure public safety, to the satisfaction of the City Engineer.

147. The Permittee/Owner shall provide a design for bus turnouts with shelters at all existing and proposed bus stops as determined by the Engineering Department and the Riverside Transit Agency. The bus turnout may not be required if located within a right-turn lane for access onto the site, as approved by the City Engineer.

   A. Existing bus stops within proposed right-turn lanes shall be relocated to the satisfaction of the City Engineer.

   B. Details for the bus stop, shelter, and appurtenances shall be provided on the plans..

148. City-maintained drainage facilities located outside of city right-of-way shall be accompanied with proper public drainage easements and monumentation for review and approval by the City, and recorded on a city-approved format.

149. All storm drain easement widths shall adhere to Riverside County's storm drain easement width chart and have a maximum cross slope of 5%.

150. The parkway cross slope in the public right-of-way shall not exceed two percent, unless otherwise approved by the City Engineer.

151. Driveways and Site Access shall conform to Development Code 16.34.080.

152. Corner Site Distance and Stopping Sight Distance for the installation of pedestrian and traffic control facilities shall be provided at all street intersections and entrances in accordance with City Standards, as directed by the Traffic Engineer, to the satisfaction of the City Engineer. The line of sight shall be shown on all grading, street improvement, and landscape plans in accordance with Std. 214. Signs are not allowed within the Limited Use Area.

153. The Murrieta Hot Springs Rd and Monroe Ave pre-development drive lanes, paint, striping, and signage shall be reviewed and revised as needed by the City's Traffic Engineer, to the satisfaction of the City Engineer.

154. The exact alignment, width, and design of all turning lanes, travel lanes, driveways, striping, and all other traffic control devices and measures, including turnouts, bike lanes, and width transitions, shall be approved by the City Engineer.

155. A light emitting diode for the public and private street lighting system shall be shown on the street improvement plans and shall be installed at locations specified by the City Engineer at no cost to the public. All installations shall be compliant with the City's Street Lighting Standards, 619, 620, and 620C.

156. If the project is to be phased, the Permittee/Owner shall submit detailed plans describing activities for the entire phase(s). A Phasing Plan shall be reviewed and approved by the City Engineer and Planning Division Director. The plans shall address, in detail, the following, but not limited to, items:

a. The Permittee/Owner shall implement the requirements of the current General Construction Permit at all times to prevent discharge from the site for all phases of construction (e.g., demolition, grading, vertical construction, landscape/hardscape). Sediment and erosion controls shall be appropriately applied for the risk level assigned to the project.

b. Submit a landscape plan to the Planning Division that addresses both short term and long term slope stability and dust control including all temporary and permanent buildable pads. This plan shall also include all required BMP's and storm water design features.

c. Should the Permittee/Owner decide to develop phases out of numerical sequence with the approved phasing as shown on the plan, all conditions required of the proceeding phases shall be completed unless otherwise approved by the City Engineer and the Director of Planning. Other conditions may be imposed by the City Engineer and Planning Division Director to allow phased construction.

d. The Water Quality Improvement Plans (WQIP), approved as part of the grading plans, shall address the Best Management Practices (BMP's) to be utilized for each phase of development. The WQIP shall include an overview of project phasing that shows each project phase, prior to activation of the area for use in accordance with Order R9-2013-0001, that 100% of the impervious area for that phase will be treated and retained to meet water quality and hydro-modification requirements.

157. All existing street monuments within or abutting this project site shall be preserved. If such monuments are damaged or destroyed, the Permittee/Owner shall retain a licensed land surveyor or a qualified registered civil engineer to reset those monuments per City Standards 617a, 617b, and 617c, and file the necessary information with the County Recorder's office as required by California Business and Professions Code Section 8771. If damaged, existing monuments that are no longer relevant do not have to be replaced, subject to approval by the City Engineer.

158. If reconstructing an existing street or existing intersection, the Permittee/Owner shall provide a design with callouts for street centerline monuments to be set per City Std. 617a, 617b, and 617c, and elevations provided, unless specified otherwise by the City Engineer, or assignees.

   A. Set street centerline monumentation for the following street(s) and/or following intersection(s):

      i) Murrieta Hot Springs Rd & Monroe Ave

159. Centerline tie notes may be provided, when applicable as noted on City Std. 616, on 8.5 x 11 mylar sheets (identify locations if possible). Prior to installation, each location where tie notes may apply shall be reviewed and approved by the City Engineer, or assignees, to determine monument type to be used.

Traffic

160. Permittee/Owner shall provide a Street Improvement Plan prepared by a registered Civil Engineer in accordance with City standards, California Highway Design Manual standards, and MUTCD requirements, with all improvements subject to the approval of the City Engineer.

161. The Permittee/Owner shall provide a Signing and Striping plan, designed by a registered Civil Engineer and included with the street improvement plans for the project.

162. Traffic signal improvements shall be designed to coincide with the street improvement plans. Right-or-way acquisition necessary for street and traffic signal improvements shall be the responsibility of the Permittee/Owner. Traffic signals are not eligible for DIF credit.

163. Permittee/Owner shall design Traffic Signal Modifications to the existing signals on Murrieta Hot Springs Rd frontage. Designs shall be prepared by a registered Civil Engineer in accordance with City Standards with all improvements subject to the approval of the City Engineer.

164. Prior to issuance of Certificate of Occupancy permits for Phase 1A uses, design, furnish, and construct the following (MMRP PDF 10-1):

<u>Driveway 1 (Monroe Avenue) at Murrieta Hot Springs Road</u>

Northbound approach: 2 left-turn lanes, 2 through lanes with shared right-turn lane
Southbound approach: 2 left-turn lanes, 2 through lanes with shared right-turn lane
Eastbound approach: 2 left-turn lanes, 4 through lanes, 1 right-turn lane
Westbound approach: 2 left-turn lanes, 4 through lanes with shared right-turn lane
Install traffic signal

<u>Driveway 2 at Murrieta Hot Springs Road</u>

Northbound approach: 1 right-turn lane
Eastbound approach: 4 through lanes, 1 right-turn lane (200 feet minimum storage)
Westbound approach: 4 through lanes with shared right-turn lane

<u>Driveway 3 (Hancock Avenue) at Murrieta Hot Springs Road</u>

Northbound approach: 2 left-turn lanes, 2 through lanes with shared right-turn lane, 1 right-turn lane
Southbound approach: 2 left-turn lanes, 2 through lanes with shared right-turn lane
Eastbound approach: 2 left-turn lanes, 4 through lanes, 1 right-turn lane
Westbound approach: 2 left-turn lanes, 4 through lanes with shared right-turn lane
Modify traffic signal

165. Project shall comply with and provide documentation demonstrating compliance with Mitigation Monitoring & Reporting Program (MMRP) Mitigation Measures 10-1, 10-2, and 10-4.

166. Prior to issuance of a building permit, the permittee/owner shall provide pay the project's traffic impact fee (Fair Share Impact Fee established as a dollar amount per square foot of gross building area) as follows:

Building Square Foot Threshold	**Traffic Fee per square foot**
1 - 537,496	$0.37
537,497 - 1,240,556	$3.21
1,240,557 – 1,767,914	$0.80

This fee implements the fair share fee required to mitigate impacts to specified intersections identified part of MM 10-2.

Sewer & Water

167. Verify capacity of proposed sewer and water systems and provide approval from the Health Department or the governing Sewer and Water District that the proposed sewer and water system is compliant with the District's master plan.

168. The Permittee/Owner shall design and guarantee the construction of all sewer and water improvements necessary to serve this project. Private sewer force mains are not allowed in the public right-of-way unless otherwise approved by the City Engineer.

Utilities

169. The Permittee/Owner shall provide a design to install all existing and proposed utility systems underground. Utility systems include, but may not be limited to, electric lines 32kv and lower, telephone, and cable TV. The utilities shall be designed in accordance with City Codes and utility provider(s).

A. All applicable appurtenances shall also be coordinated with the building department and engineering department for review of proposed locations. Easements shall also be provided as required.

B. If there are any electric lines 33kv and higher, those existing lines will not be required to be placed underground.

C. Electric lines not required to be underground shall be relocated to accommodate required public roadway/parkway improvements.

170. Above-ground Edison transformers shall be located behind the right-of-way line. If necessary, retaining walls shall also be located behind the right-of-way and limited to maximum five feet in height. Safety railing is required for retaining wall heights above thirty inches.

171. Permittee/Owner shall provide a design identifying location of all wet utilities (e.g., water, sewer, storm drain, recycled, etc.).

Grading

172. The Permittee/Owner shall provide the following items, but may be required to provide additional items to substantiate the proposed design:

a. A Grading Plan prepared by a registered Civil Engineer in accordance with currently accepted design standards. The plan shall incorporate Grading Information, Erosion & Sediment Control Measures, Mitigation Measures as applicable, and Site Design & Source Control (Low Impact Development (LID)), as well as Pollutant Control and Hydromodification as applicable.

i. The Grading Plan shall include within it the following:

1. A Water Quality Improvement Plan prepared by a registered Civil Engineer in accordance with City standards and approved by the Engineering Department.

2. A Storm Drain Improvement Plan prepared by a registered Civil Engineer in accordance with City standards and approved by the Engineering Department.

3. An Erosion Control Plan prepared by a registered Civil Engineer in accordance with City standards and approved by the Engineering Department.

b. A Cost Estimate prepared, signed, and stamped, by a registered civil engineer. The cost estimate shall include all costs but not limited to plan preparation, plan check fees, permit fees, bonding, staking, construction costs, erosion control, soils engineering; construction management, etc.

173. The Grading Plan shall be prepared to the satisfaction of the City Engineer and shall also include, but may not be limited to:

a. Include a topographic map prepared by a Registered Civil Engineer or a Licensed Land Surveyor. The topographic map shall indicate property lines, topographic features and existing and/or proposed structures. Said map shall include two-foot contour lines and/or sufficient spot elevations to clearly represent existing and proposed topographical features, and existing and proposed drainage patterns. Survey shall extend a minimum of 100 feet beyond limits of work. Said map shall also show entire property boundary including any assumed found monuments, and bearings and distances based on record information.

b. Depict the limits of grading and provide cross sections as needed.

c. Incorporate all recommendations pursuant to the Hydrology/Hydraulic Report prepared for the project.

d. Incorporate all stormwater best management practices as quantified in the Water Quality Management Plan.

e. Include mitigation measures and project modifications as recommended in the required Geotechnical Report prepared for the project.

f. Depict the location of existing or proposed easements within the property boundary, as well as adjacent easement(s) which may impact, or may be impacted by, the project.

174. All onsite storm drain systems shall be privately owned and maintained. Private storm drain systems may connect to public storm drain facilities by installing cleanouts situated immediately adjacent to, and within, the public right-of-way.

175. Pay to City all County of Riverside Development Impact Fees applicable at time of grading permit issuance or as otherwise approved by ordinance. In the event these fees have been previously paid, the Permittee/Owner shall provide proof of payment. Said fees may include, but are also not limited to, the following:

A. Riverside County Area Drainage Fee
B. Kangaroo Rat Fee
C. Multiple Species Habitat Conversation Plan (MSHCP) Fee

176. Obtain written clearance, as deemed necessary by the Engineering Department, from the following departments/agencies:

A. Planning Division

B. Community Services Department
C. Building Division
D. Fire Department
E. Landscape (Planning Division)
F. Sewer and Water District(s)

177. If applicable, the Permittee/Owner shall obtain and provide the City with written clearance or a non-interference letter from Southern California Edison (SCE) prior to grading plan approval. Permittee/Owner shall submit directly to SCE.

178. Loading ramps or truck wells shall be profiled showing the ramp, ramp transitions, and overhead clearances. Drainage collection sump areas shall conform to clean water runoff standards. Loading, unloading, and truck turning movements onsite, along with contiguous adjacent public streets, shall be shown on the grading plan.

179. Development Standards for Off-Street Parking shall conform to Development Code 16.34.070.

180. If blasting of rock is required, a blasting permit will be required as part of the grading permit process. A blasting permit shall be obtained through the Riverside County Sheriff's Department. Notification shall also be provided to the City of Murrieta Police and Fire Departments prior to blasting.

181. If any water wells are found onsite, the intent shall be identified on the grading plan (e.g., if inoperable…to be abandoned; if operable…to be protected in place, etc.). If to be protected in place, easements may apply. Additionally, if to be abandoned, they shall be abandoned in a manner approved by the State Department of Water Resources and Riverside County Health Department. Confirmation of abandonment approval shall be provided to the City.

182. If applicable, a qualified biologist shall delineate jurisdiction areas that are not to be disturbed. Identify the installation of some type of barrier fence to delineate the areas of avoidance.

183. Construction fencing shall be placed so as not to interfere with sight distance and comply with City Std. No. 214.

184. City-maintained drainage facilities located outside of city right-of-way shall be accompanied with proper public drainage easements to be reviewed and approved by the City and recorded on a city-approved format.

A. All storm drain easement widths shall adhere to Riverside County's storm drain easement width chart and have a maximum cross slope of 5%.

185. All existing property monuments within or abutting this project site shall be preserved. If such monuments are damaged or destroyed, the Permittee/Owner shall retain a licensed land surveyor or a qualified registered civil engineer to reset those monuments per City Standards and file the necessary information with the County Recorder's office as required by California Business and Professions Code Section 8771. If damaged,

existing monuments that are no longer relevant do not have to be replaced, subject to approval by the City Engineer.

Geotechnical

186. A comprehensive geotechnical report shall be prepared by a registered Geotechnical Engineer and submitted to the engineering department as part of the initial grading plan check.

A. The report shall address in-situ soils conditions; shall provide the following, but not be limited to:

i) a percolation/infiltration analysis;

ii) identify any geotechnical hazards for the site;

iii) provide recommendations for the construction of engineered structures,

iv) provide preliminary pavement sections,

v) provide slope stability analysis,

vi) identify faults that may affect the proposed project and confirm buildings meet setback requirements, as applicable.

vii) evaluate slope stability and potential effect of proposed construction on nearby slopes, public right-of-way and neighboring properties.

viii) Address the feasibility of long-term infiltration of stormwater runoff onsite, and if subdrains will be required for any proposed infiltration BMPs.

ix) Provide recommendations for any special construction methods as necessary.

B. All recommended measures identified in the report shall be incorporated into the project design. If located in a Geologic Special Study Zone, the report may, at the discretion of the City Engineer, be subject to a third-party review. If third party review is required, the Permittee/Owner must submit an application and schedule to have any open trenches inspected by a City-approved third-party reviewing consultant.

187. If project is determined to be a “Priority Development Project”, a geotechnical engineer, civil engineer, certified engineering geologist or certified hydrogeologist shall prepare a percolation analysis and determine infiltration rates for the purpose of determining water quality best management practices (i.e., Water Quality Management Plan).

A. See Appendix A, Section 1.8 – Final Report, of the Riverside County Low Impact Development BMP Design Handbook, as a guide for preparing the analysis.

B. Infiltration testing requirements shall adhere to Appendix A – Infiltration Testing, of the Riverside County Low Impact Development BMP Design Handbook (e.g. Table 1 Infiltration Testing Requirements).

C. A note shall be added on the grading plan identifying the infiltration rates used in the WQMP. If BMP locations differ, laterally and/or vertically, from the WQMP, additional infiltration tests may be required to be conducted and submitted for review and approval by the City.

Water Quality Management Plan (WQMP)

188. The Permittee/Owner shall provide a Water Quality Management Plan (Report) prepared by a registered Civil Engineer in accordance with currently accepted design standards.

189. Water Quality Improvement Plans (WQIP) shall be integrated with the grading plans and included as part of the grading plans. Prior to final approval of the grading plans, the grading plans shall be in conformance with the Project-Specific WQMP.

190. A Final Project-Specific WQMP shall be submitted to the City for approval with the grading plan check application and approved by the Engineering Department prior to issuance of a grading permit. The WQMP shall include, but not be limited to, the following:

A. The Permittee/Owner, assigns, or heirs shall allow the City to enter the premises to conduct periodic inspections to ensure that the WQMP is being implemented, maintained, and to review the inspection and maintenance records.

B. Prepare a hydromodification analysis utilizing continuous simulation of the geomorphically significant flows starting at 10% of the 2-year runoff and up to the 10-year runoff (85^{th} percentile Design Capture Volume (DCV)). The analysis must have a maximum interval of 1-hour, or 15-minutes, and contain a minimum of 37 years of data.

C. The 85^{th} percentile DCV of on-site drainage shall be treated on site in accordance with the current NPDES MS4 Permit and the City's latest Water Quality Management Plan. The drainage shall be treated onsite prior to entering public right-of-way.

D. When continuous simulation is prepared, and acceptable, the continuous simulation may be used in-lieu of the 1, 3, 6 and 24-hour duration for the 2, 5, and 10-year frequency storms, if applicable.

E. The WQMP shall incorporate, but not be limited to, the following:

i) Site design BMP's,

ii)Source control BMP's,

iii) Pollutant control BMP's,

iv) Hydromodification

v) The WQMP shall identify affected and 303(d) receiving water bodies, applicable water-quality objectives, total maximum daily loads (TMDLS), pollutants of concern for the project type, and estimates for post-construction discharge rates (with all BMPs in place), and demonstrate that the project pollutant loads will be treated in accordance with the most current NPDES MS4 permit and will not cause a violation of the water quality objectives. The structural treatment and hydro-modification controls shall remove project pollutants anticipated to be generated by the project for the benefit of downstream impaired water bodies listed by the SWRCB 303(d) to a medium removal efficiency or better for the pollutants of concern.

vi) Long term operation and maintenance requirements, inspection and maintenance checklist;

vii) Record a restrictive covenant to ensure operation, maintenance, funding, and transfer of requirements.

viii) The post-construction best management practices (BMPs) outlined in the approved Final project-specific WQMP shall be incorporated in the grading plans.

F. A Water Quality Maintenance Agreement shall be recorded with the County Recorder and proof of the recordation shall be provided to the City. The agreement shall include summaries of water quality/hydromodification facilities and operations & maintenance.

i) The Maintenance Agreement shall identify public BMPs to be maintained by the development's assigned entity.

ii) The agreement shall also identify if the development's assigned entity fails to maintain said BMP(s) the City is authorized to maintain or replace BMP(s) for continued compliance and shall be reimbursed by the assigned entity.

G. A copy of the Final Project-Specific WQMP shall be kept onsite at all times. The Permittee/Owner shall make the occupants, tenants, staff, employees, and contractors aware of this document and educate them on the contents.

191. The project shall demonstrate infiltration abilities by converting the percolation tests taken at locations of proposed infiltration/biofiltration BMPs. Proposed BMPs shall be per the guidelines of the City of Murrieta's 2018 Santa Margarita Region Water Quality Management Plan and the most current order under the National Pollutant Discharge Elimination System (NPDES) Permit initiated under section 2 of the Federal Clean Water Act. The most current order shall be incorporated, as applicable.

192. The grading plan shall add a note to confirm the infiltration rates coincide with the rates used in the Water Quality Management Plan. If BMPs are to be placed in areas and/or depths different from the original infiltration testing, thereby posing potentially different infiltration rates from those originally obtained, new infiltration testing may be required, and BMP designs may be impacted.

193. It is the responsibility of the Permittee/Owner to ensure all applicable BMPs are correctly utilized as referenced in the California Stormwater Quality Association (CASQA) BMP Fact Sheet, and all maintenance measures implemented.

194. Where applicable, provide 12 foot wide x 6 inch thick concrete paved access to storm drain facilities with 12 percent maximum grade. Turnarounds are required, but may be waived depending on overall accessibility and, at the discretion of the Public Works Director.

195. The Permittee/Owner shall submit, for City review and approval, a mechanism ensuring ongoing long-term maintenance for the onsite post-construction Best Management Practices (BMPs).

Hydrology & Hydraulics

196. The Permittee/Owner shall provide a Hydrology & Hydraulics Reports prepared by a registered Civil Engineer in accordance with currently accepted design standards.

197. Ensure the Report addresses any proposed commingled flows from adjacent properties, unless procedures are incorporated to otherwise convey and properly dispose of the flows without commingling.

198. Alteration to the existing drainage pattern, including concentration or diversion of flows, are not allowed, unless the Permittee/Owner obtains permission and/or agreements from the affected property owner(s). This may involve, but is not limited to, obtaining notarized/recorded letters of permission and/or agreements, securing drainage easements and/or ponding easements, constructing adequate drainage improvements, and providing a maintenance mechanism for private drainage facilities.

199. The Permittee/Owner shall be responsible for mitigating impacts created by changes in drainage runoff course, water quality, hydro-modification, concentration, or quantity to the satisfaction of the City Engineer for both on-site and off-site drainage.

200. Accept and properly dispose of all offsite drainage currently flowing onto and/or through the site.

201. If possible, all drainage shall be conveyed onto public property. Cross lot drainage shall not be allowed. Where unavoidable, proper permissions, agreements, and easements shall be obtained by the Permittee/Owner.

202. The report shall show all existing and proposed onsite and/or offsite public and/or private drainage facilities intended to discharge the runoff. The study shall include a capacity analysis verifying the adequacy of the drainage facilities. Runoff from the development or partial phase of development of the property shall meet the following criteria:

   A. Permittee/Owner shall be responsible for mitigating impacts created to changes in drainage runoff course or quantity, for both on-site and off-site drainage, to the satisfaction of the City Engineer.

   B. Do not significantly exceed the existing natural discharge quantities.

   C. Street storm flows shall not exceed top of curb for the 10-year storm event.

   D. Must contain storm flows within the street right-of-way for the 100-year event.

E. All inlets, outlets, pipes, channels, basins, etc. must be capable of conveying the 100-year storm.

F. Sump conditions shall be designed to convey the 100-year storm flows

G. Secondary emergency escape path shall be provided.

H. If the project discharges/connects to an off-site detention basin, provide permission to drain/connect from the owner of basin or system. Off-site detention basins require a Declaration of Dedication. All detention measures shall have positive drainage with a minimum 48-hr draw-down time and be empty within 72 hours.

I. Standing water is not permitted.

J. Detention for projects that are 10 acres or greater shall analyze for the 1, 3, 6 and 24-hour duration for the 2, 5, and 10-year frequency storms.

203. When continuous simulation is prepared (see Water Quality Management Plan section), and acceptable, the continuous simulation may be used in-lieu of the 1, 3, 6 and 24-hour duration for the 2, 5, and 10-year frequency storms, if applicable.

Storm Water Pollution Prevention Plan (SWPPP)

204. The development shall comply with all applicable regulations established by the United States Environmental Protection Agency (USEPA) as set forth in the National Pollution Discharge Elimination System (NPDES) permit requirements for urban runoff and stormwater discharge and any regulations adopted by the City pursuant to the NPDES regulations and/or requirements. Furthermore, the Permittee/Owner may be required to file a Notice of Intent with the State Water Resources Control Board to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity and may be required to implement a SWPPP concurrent with the commencement of grading activities. SWPPPs shall include construction pollution prevention and pollution control measures. The applicant shall comply with all the provisions of the Clean Water Program during and after all phases of the development process, including but not limited to: mass grading, rough grading, construction of street and landscaping improvements, and construction of structures.

205. An adequate SWPPP shall be available to State and City Inspectors at the job site prior to commencing construction. The Permittee/Owner shall be responsible for implementation, monitoring, operation, and maintenance of the SWPPP until all construction is completed and improvements have been accepted by the City.

206. This document must minimize the disturbed area, label the total disturbed area, and identify equipment and material storage areas.

207. All grading activities shall minimize dust through compliance with AQMD Rule 403, which requires watering during earth moving operations.

208. All open or undeveloped land shall be maintained to prevent wind/water erosion of said land. All disturbed undeveloped land shall be planted with interim landscaping or stabilized with other erosion control measures.

209. The Permittee/Owner shall design and install the irrigation system so runoff does not discharge into the street or storm drain system.

210. Grading during the wet season should identify additional BMP's for rain events that may occur as necessary for compliance with the Santa Margarita Region MS4 Permit.

211. A copy of the Notice of Intent (NOI) and Waste Discharge Identification (WDID) number from the State Water Resources Control Board shall be identified on the SWPPP.

212. A Notice of Termination (NOT) can then be filed with the State Water Resources Control Board. Grading during the wet season should identify additional BMP's for rain events that may occur as necessary for compliance with the Santa Margarita Region MS4 Permit. This document must minimize the disturbed area, label the maximum disturbed area, and identify equipment and material storage areas.

213. Erosion and sediment control details shall be submitted on the grading plans to the City's Engineering Division for review and approval. The details shall conform to City standards, codes and ordinances, and the current State Water Resources Control Board (SWRCB) General Construction Permit (GCP), as applicable. The details shall include landscaping and irrigation systems on exposed slopes to achieve the General Construction Permit required coverage criteria, and for acceptance by the City's Engineering Department.

Final Map

214. The Permittee/Owner shall submit a Final Map prepared in accordance with the City of Murrieta Development Code and California Subdivision Map Act. The final map shall be prepared by a licensed land surveyor or qualified registered civil engineer.

215. The Final Map shall include the following "Improvement Note(s)" to identify required improvements prior to city-specified benchmarks (e.g., any permit issuance), in accordance with the Subdivision Map Act Section 66411.1. The following improvements notes shall be added on the Final Map:

    A. All public improvements, as identified per the conditions of approval and/or approved per the improvement plans, shall be completed, and accepted/as-built, prior to the first certificate of occupancy.

216. Prepare and record an Owner's statement acceptable to the City Engineer with a note to the effect that the property owner is responsible for the maintenance of the parkway lighting, landscaping and irrigation, and any applicable water quality treatment facilities/devices.

217. On-site public drainage facilities located outside of public right-of-way shall be contained within public drainage easements as determined to be necessary. A note shall be added on the Final Map stating, "Public *drainage easements shall be kept free of buildings and obstructions."*

218. Prior to approval of the Final Map, the Permittee/Owner shall submit an application and

pay a fee for the city administrator to reapportion any existing assessment district liens. The fee proposal from Willdan Financial Services includes a base amount and per parcel charge so the total amount will vary depending on number of parcels.

219. Easements, when required for roadway, slopes, landscaping, drainage facilities, utilities, etc., for either onsite or offsite, shall be shown on the Final Map. The Permittee/Owner shall incur all costs associated with the formation of a suitable maintenance district or other mechanism to maintain all associated roadway, slope, landscape, and drainage easements, including access.

220. All offers of dedication and conveyances shall be submitted for review and approval, and recorded as directed by the Engineering Department.

221. All easements and/or right-of-way dedications shall be offered on the Final Map to the City, or other appropriate agency, and shall continue in force until the City, or other agency, accepts or abandons/rejects such offer(s). All dedications shall be free from all encumbrances as approved by the Engineering Department.

222. Relinquish and waive abutter's right of access to and from Murrieta Hot Springs Rd, excepting those areas as shown on the approved tentative map.

223. Any proposed vacation(s) and/or abandonment(s) of existing right of way or public easements shall be shown on the Final Map, or per separate document(s) as approved by the City Engineer. Vacations and/or abandonments may be required to be approved prior to issuance of a grading permit.

224. Proof of payment of any, and all, delinquent property taxes shall be provided prior to recordation of the Final Map.

225. Provide an electronic copy of the Final Map in a PDF format and AutoCAD format, to the satisfaction of the City's GIS Department. A hard copy may also be required.

PRIOR TO ISSUANCE OF BUILDING PERMITS

226. The Permittee/Owner shall coordinate with the City's Construction Manager with approved/signed grading and/or improvement plans and grade/construct per said plans, as approved by the City Engineer.

227. The Permittee/Owner shall provide a copy of the recorded map and/or agreements to the Building Department and Engineering Department. Electronic and hard copies may be required, at the discretion of the City Engineer.

228. All easements, agreements of improvements, and dedications for required rights-of-way shall be approved by the Engineering Department.

229. Grading plans, with building pad location and elevation information, shall be approved, to the satisfaction of the City Engineer.

230. The building pad shall be certified by a registered Civil Engineer for location and

elevation. Additionally, the Soils Engineer shall issue a Final Soils Report addressing compaction and site conditions.

231. The Permittee/Owner shall pay to the City all applicable Development Impact Fees as required by, and in accordance with, City Ordinance 196-98, Resolution No. 08-2107 and Resolution No. 16-3602, or most recently adopted DIF Resolution.

232. The Permittee/Owner shall pay to the City the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) based on the applicable rates at time of permit.

DURING CONSTRUCTION

233. The Permittee/Owner shall coordinate with the City's Construction Manager with approved/signed grading and/or improvement plans and grade/construct per said plans, as approved by the City Engineer.

234. Permittee/Owner shall construct all public improvements, per the approved and bonded improvement plans, as approved by the City Engineer.

a. Minor field changes may occur at the discretion of the City's Construction Manager.

b. Changes other than minor shall be submitted to the engineering department as a construction change submittal for review by engineering and approval by the City Engineer.

235. The Permittee/Owner shall construct all onsite grading improvements, per the approved and bonded grading plans, as approved by the City Engineer.

a. Minor field changes may occur at the discretion of the City's Construction Manager.

b. Changes other than minor shall be submitted to the engineering department as a construction change submittal for review by engineering and approval by the City Engineer.

236. If applicable, a qualified biologist shall delineate jurisdictional areas that are not to be disturbed. Barrier fencing shall be installed, as approved, delineating the areas of avoidance. Once construction is completed, the same qualified biologist shall certify that no jurisdictional area was disturbed or damaged.

237. Construction fencing shall be placed so as not to interfere with sight distance and comply with City Std. No. 214.

238. If dirt or construction debris is to be transported into, or off, the site, a haul permit will be required as part of the grading permit process. Both import and export locations must be permitted sites. If so, submit a proposed haul route plan and comply with all conditions and requirements the City Engineer may impose to the hauling operation.

239. The exact depth of street structural section and subgrade requirement shall be based on subgrade "R" value tests in the field and the appropriate Traffic Index for the type of street, as determined by the Geotechnical Engineer and the City Standards, whichever

is greater.

240. If any water wells are found onsite, they shall be protected in place or abandoned, as approved by the State Department of Water Resources and Riverside County Health Department. Confirmation of abandonment approval shall be provided to the City.

241. The Permittee/owner shall confirm the infiltration rates coincide with the rates used in the Water Quality Management Plan. If BMPs are to be placed in areas and/or depths different from the original infiltration testing, thereby posing potentially different infiltration rates from those originally obtained, new infiltration testing may be required and BMP designs may be impacted.

242. The Permittee/Owner shall construct all sewer and water improvements necessary to serve this project. Private sewer force mains are not allowed in the public right-of-way unless otherwise approved by the City Engineer.

243. The Permittee/Owner shall install all existing and proposed utility systems underground, including electric lines 32kv and lower (as applicable), telephone, and cable TV, in accordance with City Codes, the utility provider, and as approved by the City Engineer. All applicable appurtenances shall also be installed. Easements shall also be provided as required.

244. Above ground Edison transformers shall be installed behind the right-of-way line, as approved.

245. Obtain clearance from the dry utility companies and gas company.

   a. Permittee/Owner shall install all dry, wet, and gas utilities prior to the placement of final cap or lift of asphalt pavement to avoid new street improvements from being marred by saw cuts, potholes, equipment, etc.

246. The building pad shall be certified by a registered Civil Engineer for location and elevation. Additionally, the Soils Engineer shall issue a Final Soils Report addressing compaction and site conditions.

   a. Building pad certification shall be obtained prior to building footing inspection.

   b. Building pad certification shall be obtained prior to building foundation cement pour.

247. The approved Storm Water Pollution Plan (SWPPP) shall be available onsite at all times from the Notice to Proceed until the issuance Notice of Termination. Moreover, the Permittee/Owner shall be responsible for implementation, monitoring, operation and maintenance of the SWPPP until all construction is completed and improvements have been accepted by the City.

248. The Permittee/Owner shall provide a construction area Traffic Control Plan, if required by the Traffic Engineer. The plan shall be prepared by a registered Civil Engineer in accordance with City standards and approved by the Engineering Department. The

Traffic Control Plan shall address roadway widening / street closures / median improvement, detour or other disruption to traffic circulation as required by the Engineering Department.

249. Traffic signal improvements shall be installed/constructed to coincide with the street improvements as approved by the City Engineer.

250. Permittee/Owner shall provide proof of dedication of easement to the City for access and maintenance of any traffic equipment.

251. The Permittee/Owner shall reconstruct existing handicap access ramps within the public right-of-way, and adjacent to the project, to current ADA requirements, as approved by the City Engineer.

252. All existing street monuments within or abutting this project site shall be preserved. If such monuments are damaged or destroyed, the Permittee/Owner shall retain a licensed land surveyor or a qualified registered civil engineer to reset those monuments per City Standards 617a, 617b, 617c, and file the necessary information with the County Recorder's office as required by California Business and Professions Code Section 8771. If damaged, existing monuments that are no longer relevant do not have to be replaced, subject to approval by the City Engineer.

253. For reconstructed existing street(s) and/or intersection(s), street centerline monuments shall be set per City Std. 617a, 617b, and 617c, and elevations provided, unless specified otherwise by the City Engineer, or assignees.

A. Set street centerline monumentation for the following street(s) and/or following intersection(s):

i) Murrieta Hot Springs Rd & Monroe Ave.

254. Centerline tie notes may be provided, when applicable as noted on City Std. 616, on 8.5 x 11 mylar sheets (identify locations if possible). Prior to installation, each location where tie notes may apply shall be reviewed and approved by the City Engineer, or assignees, to determine monument type to be used.

PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY

255. Prior to the issuance of the first (1st) certificate of occupancy, all public improvements, per the approved public improvement plan(s), shall be constructed, completed, and accepted/as-built, to the satisfaction of the City Engineer.

256. Prior to, but not necessarily the last, issuance of all certificates of occupancy, final grading of the subject property shall be constructed, completed, and accepted/as-built, to the satisfaction of the City Engineer.

257. All sewer and water improvements shall be constructed, completed, and accepted in accordance with the Sewer and Water District standards.

258. All existing and proposed dry, wet, and gas utility lines have been undergrounded and/or relocated, and/or easements provided, as necessary.

259. Final Map shall have been recorded, accepted by County, and a copy provided to the City Engineer, in the format requested.

260. If applicable, provide elevations for set Street Centerline Monuments. If approved, provide centerline tie notes per City Std. 616 on 8.5 x 11 mylar sheets for all monuments set.

261. Demonstrate that all treatment control BMP's described in the Final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications and the Permittee/Owner is prepared to maintain all BMP's described in the approved Final project-specific WQMP.

262. The Permittee/Owner shall prepare and provide an as-built project specific Final WQMP (updated to include any changes made during construction) and demonstrate that an adequate number of copies are available for the future owners / occupants.

    a. One (1) electronic format shall also be provided to the Department of Engineering, and/or a hard copy as requested.

263. The Permittee/Owner shall demonstrate that the irrigation controller and heads are set so irrigation runoff does not enter the street or storm drain systems.

264. The Permittee/Owner shall disclose to any other property owner(s) they are responsible for the maintenance of the parkway landscaping. And any other work within the public right-of-way will require an encroachment permit from the Engineering Department.

265. The Permittee/Owner shall provide one set of Mylars, scanned copy, and electronic copy of "As-Built" drawings of the grading and improvement plans. The electronic copy shall be in an AutoCAD format to the satisfaction of the City's GIS Department[2]. Coordinate system shall be NAD 1983 State plane California Zone V1 FIPS 0406 Feet.

    a. The Permittee/Owner shall provide electronic copies (e.g., thumb drive) of the approved WQMP, Hydrology/Hydraulic Report, Final Geotechnical Report, and any other applicable document(s). Said Electronic copies shall be in a Word.doc, PDF format, and/or other acceptable Microsoft format.

    b. The "As-Built" mylars shall include any, and all, construction changes, as well as all dry, wet, and gas utilities.

266. Obtain written clearance, as deemed necessary by the Engineering Department, from the following agencies:

    A. Planning Division

    B. Engineering Department

    C. Building & Safety Division

D. Fire Department

E. Landscape (Planning)

F. Community Services Department

G. Sewer and Water District(s)

H. Utility Companies

I. Southern California Edison Company

BUILDING DIVISION

General

267. All construction shall comply with the current California Building Codes (CBC), and related Codes and Ordinances of the City of Murrieta, as follows: The California Model Codes currently in effect are the 2022 California Codes, based on the 2021 International Residential Code (IRC), 2021 Uniform Plumbing and Mechanical Codes (UPC, UMC), 2020 National Electric Code(NEC), 2021 International Building Code (IBC), 2021 International Fire Code (IFC) and the 2022 California Energy Code, 2022 California Green Building Standard Code ("Cal Green"}; and the City of Murrieta Ordinance for Universal Design Residential Dwellings, to include applicable Murrieta City municipal codes.

268. Digital sets of plans shall be submitted for all building and exterior site improvements; and shall include building data, building use/occupancy, construction type, actual building square foot area and related building means of egress and ensuing egress discharge to the public right-of-way.

269. Architectural site and on-site civil design shall correlate, and details shall comply with accessibility standards of the State of California during plan review.

270. Construction plan submittals shall be subject to the current California Green Building Standards Code, wherein provisions for means of achieving material conservation and resource efficiency through construction waste reduction of at least 65% recycling and/or salvage for reuse, diversion, and employment of techniques to reduce pollution through recycling of materials.

271. Any proposed exterior lighting shall be shown on building permit plans and shall comply with the City of Murrieta's MMC Sec.16.18.110, Mt. Palomar Lighting Pollution Control Standards and/or equal. LED limits are 4050 lumens maximum per fixture and 3000K kelvin color rendition. Photometric plans are required.

272. Separate permits shall be obtained from the City of Murrieta Building & Safety Department, for individual structures and appurtenances e.g., construction trailer(s), parking lot lighting, masonry walls, retaining walls, monument signs, building and monument wall signs, site amenities, EV chargers, temporary power etc. Temporary power and temporary wiring shall comply with the current California Electrical Code.

273. Plans submitted during the permitting process, including but not limited to, site plan, precise grade plans and building architectural features, shall not vary substantially from plans previously reviewed and approved by the Planning, Engineering or other City Departments, without prior authorization from the City Planner, City Engineer and/or Director of Building and Safety.

274. Detectable warnings shall be cast in place and comply with the following:

A) Detectable warning surfaces shall be yellow and approximate FS 33538 of SAE AMS-STD-595A. (CBC 11B-705.1.1.3.1)

B) Detectable Warnings Shall be referenced at all outside curbs and drive lanes.

275. Walkways that are utilized for exterior routes of accessible travel shall be a minimum 48" inches in width, but when parked vehicles (head-in) abut to walkways, they shall be a minimum of 6'ft. wide (vehicle front-end overhang) or, wheel stops shall be used at those vehicle parking spaces. Complete dimensions shall be clearly identified on plans.

276. All Exterior Path of Travels Shall conform to current CA Building Codes and Accessible Standards.

277. Indicate a 12" inch wide step out curb at parking spaces located adjacent to island planters. Construction Details will be required during plan review.

278. All required Accessible spaces shall not be obstructed by landscaping and landscaping diamond/triangle feature areas and these shall not project into required parking space(s) accessibility dimensions.

279. Access to all required Accessible and EV Charging equipment from parking space(s) shall not be obstructed or blocked by any landscaping diamond/triangle areas or any similar physical barriers, such as landscaping features, etc.

280. Van accessible EVCS charging spaces shall be shown as 12' ft. wide and 18' ft. long, with a 5' ft wide by 18' ft. long access aisle. Accessible EVCS that serve a particular building or facility shall be located on an accessible route to an accessible entrance.

281. Van accessible spaces as required by the current California Building Code Chapter 11B shall be configured and shown as 12' ft wide with a minimum 5' ft wide access aisle on the passenger side of the parking space. See clarification below, and note that requirements will be required during plan review:

a. Required detailed dimensions for Accessible parking spaces shall comply with the following: Van accessible & EV spaces shall be configured as 12' ft minimum width, 5' ft minimum wide access aisle on the passenger side of the vehicle space and 18' ft minimum length.

b. Note that striping for EV access aisles that serve only the EV spaces shall not be Blue color used for accessible spaces. The preferred color is Green.

c. Typical length of all parking spaces shall be a minimum of 18 feet.

d. Standard accessible spaces shall be shown as 9' ft minimum width and a minimum 5' ft wide access aisle on a minimum of one side of the space.

282. All "NO Building" Zones Shall be recorded with Riverside County Assessor and referenced/superimposed on the site plan.

283. A pre-construction meeting shall be scheduled with the City of Murrieta Inspector of Record, prior to the first requested inspection.

Building Permit Application:

284. Digital sets of building construction plans shall be submitted, including a set of supplemental current soil report, structural calculations, energy calculations, etc. Submittals shall conform to the Electronic Plan Check Submittal Guide (Building Form IB-110). Plans must conform to Digital Submittal Requirements (Building Form DS-162). Plans shall conform to submittal requirements for new commercial structures (Form DS-136).

285. Plans submitted for building construction shall contain a full-size copy of the Final Approved set of city departments Conditions of Approval.

286. Submit a construction waste management plan (Building Form DS-153) for diversion of materials.

287. Will serve or first release forms from the governing water and sewer districts will be required.

288. Property and/or Building addressing shall be assigned by Planning and incorporated into the plan set, application and all related documents at time of building plan submission.

Prior to Permit Issuance:

289. A Waste Management Plan (Building Form DS-153), which may include a C & D letter from the Waste Management Company for the recycling, reuse and diversion of construction waste materials from landfills is required prior to the permit issuance.

290. All applicable fees and forms shall be paid. This may include TUMF, School, DIF, etc.

291. Verification of an approved, stamped and signed by the City of Murrieta Engineer, grading plan.

292. A fire access plan shall be approved by Murrieta City Fire Marshal and a copy or notice of approval by the City Fire Marshal shall be received by Building & Safety.

Prior to Building Final:

293. Final permit approvals shall be obtained, and any outstanding fees shall be paid to all City Departments, which may include Fire, Planning, Engineering, Building & Safety, and the City Landscape Architect prior to the issuance of a Certificate of Occupancy from the City of Murrieta Building and Safety Division.

294. TCO requests Shall be submitted Seven business days prior to the TCO occupancy request Date (DS-130 Bulletin).

FIRE DEPARTMENT

General:

295. The project shall comply with all requirements set forth by the California Code of Regulations Title 24 Parts 1-12 respectively.

296. The adopted edition of the California Code of Regulations, Title 24, Parts 1 through 12, and the Murrieta Municipal Code shall apply at the time the architectural plans are submitted for construction permits.

297. Prior to the issuance of any grading permit, the applicant shall provide evidence of sufficient fire flow of 3,000 GPM for 3 hours to the City of Murrieta Fire & Rescue. Murrieta Fire & Rescue Water Available/Fire Flow Form shall be utilized. The fire flow report shall be completed within 6 months of the time of submittal.

298. Prior to the issuance of any grading permit, the applicant shall provide a fire department access plan to the City of Murrieta Fire & Rescue for review and approval. The fire department access plan shall comply with the requirements specified by Murrieta Municipal Code, California Fire Code (CFC), Chapter 5 and Appendix D.

    a. Add a note to the fire access plans that all planter areas adjacent to any fire lane that the planting of trees and landscape shall not encroach into the fire lane and maintain a clear height of 13'-6" beneath the canopy.
    b. Add a note on the plans that all required fire hydrants shall be readily visible and immediately accessible. A clear space of not less than 5-feet shall be maintained at all times. Fire Hydrants shall be centered in a 4-foot x 4-foot concrete pad.

299. Prior to the issuance of any grading permit, the applicant shall submit water improvement plans to the City of Murrieta Fire & Rescue for review and approval. The Developer shall furnish Murrieta Fire & Rescue with three (3) copies of the water improvement plans designed by a Registered Engineer and/or Licensed Contractor. On-site private fire service mains shall have a minimum of eight (8) inch water mains with six (6) inch laterals and risers. Larger pipes may be required to meet required fire flow requirements. Fire hydrants shall provide one 4" port and 2- 2 ½ ports and must be an approved fire hydrant type. The private fire hydrant system must be approved, installed, tested, and accepted, prior to combustible construction.

300. Prior to the issuance of any building permit, the applicant shall install all required fire hydrants and water supplies with the following specific items:

    a. The fire hydrants shall be operational prior lumber drop and building construction. All fire hydrants shall remain operational during construction.

    b. All required fire hydrants shall be readily visible and immediately accessible and adjacent to the approved fire access road. A clear space of not less than 5 feet shall be maintained. Fire Hydrants shall be centered in a 4-foot x 4-foot concrete pad.

c. Fire hydrants shall be installed at intersections, at the beginning radius of cul-de-sacs, and every 300 feet of fire access roadways, regardless of parcel size. The size of fire hydrant outlets shall be a minimum of one 4 inch and two 2-½ inch NST outlet as required by the Fire Code official.

d. A minimum of two points of connection to public water shall be provided for the private fire-line water.

e. The private underground fire-line system shall be a looped design.

f. The private underground fire-line system shall have indicating sectional valves for every five (5) appurtenances.

g. The Fire Department Connection (FDC) shall be located within 50 feet of a public fire hydrant. The fire hydrant shall be on the same side of the street as the FDC. A vehicle access roadway/approach shall not be placed between the FDC and fire hydrant. A private hydrant may be used to support the FDC provided that an aboveground check valve is installed in a manner that prevents water from the FDC circulating back to the fire hydrant.

301. Prior to the issuance of any building permit, the applicant shall submit fire sprinkler system plans per NFPA13 for review and approval by the City of Murrieta Fire & Rescue.

302. Prior to lumber drop and construction, the general contractor shall install and post a temporary address sign which is clearly visible from the street.

303. Prior to certificate of occupancy, a permanent building address shall be provided and either internally or externally lit during hours of darkness (Mt Palomar lighting requirements apply). The address shall be clearly visible from the street fronting the property. The numbers shall be a minimum of 12" in height with a minimum stroke of 1". The background and numbers shall be highly contrasting.

304. Prior to building final, the building shall be provided with a Knox Lock key box located no more than 6-feet above the finished surfaced and near the main entrance door.

305. For all buildings greater than 10,000 square feet, prior to the issuance of a Certificate of Occupancy each building shall be provided with an emergency radio communication enhancement system that complies with CFC § 510 and MMC § 15.24.200. Plans for the emergency radio communication enhancement system shall be submitted to Murrieta Fire & Rescue for review and approval prior to installation. The system shall be installed and inspected by the Murrieta Fire & Rescue before the Certificate of Occupancy is issued. The requirement can be waived by the Fire Marshal if the building is evaluated by an Emergency Radio Communication Specialist licensed by the FCC, who certifies the building meets the emergency communications capability as specified by the CFC § 510 and MMC § 15.24.200. The certification shall be in the form of a written report which outlines the analysis used in determining the building meets the emergency communications without an enhancement system.

306. Murrieta Fire & Rescue approval shall be obtained prior to the storage and/or use of hazardous materials as defined by the CFC.

307. Murrieta Fire & Rescue approval shall be obtained prior to any high pile storage (HPS) as defined by the CFC.

308. A lighted directory map, meeting current fire department standards, shall be installed at the driveway entrance.

COMMUNITY SERVICE DEPARTMENT

309. Prior to approval of street improvement plans, the permittee shall prepare landscape plans for any Murrieta Community Service Department (MCSD) maintained areas.

310. Street improvements trigger the developer to install and modify the existing raised landscape medians along Murrieta Hot Springs Road. All landscaping within the raised median shall be installed per Community Service District's (CSD) Standards and Specifications Book. The Standards and Specifications Book can be found online at http://www.murrietaca.gov/DocumentCenter/View/1259/Community-Services-Department-Standards-and-Specifications-Book-PDF?bidId. Median landscape plans shall be included with the street improvement plans and reviewed by Public Works /MCSD. Please contact the Parks and Recreation Department at 951-461-6124 to set up an appointment for landscape plan review.

311. The applicant shall have in place an Association and/or Property Management to maintain all common areas, irrigation and landscape along the roadways as shown on plan. There appears that no areas will be maintained by the City of Murrieta, Community Services District.

312. The applicant shall contact the Murrieta Community Services Department (MCSD) prior to any construction in the existing landscape public right of way area maintained by the MCSD.

POLICE DEPARTMENT

General Conditions

313. Prior to building permit issuance, the Permittee/Owner shall coordinate with the Police Department to implement Mitigation Measure 9-1.

314. Roof Address Numbering: The number of each independently addressed building on the property shall be marked with a reflective material (vinyl or paint), or in a color that contrasts the color of the roofing material. The lettering must be at least 24 inches in height so that the address can be viewed from the sky and is on the flat portion of the roof of the building and does not negatively impact the aesthetics of the project. The

lettering must be positioned so that the address faces the direction of the corresponding street for which the address is assigned.

315. A “No Smoking” sign shall be placed outside the main entrances of any business in compliance with 5.23.060(a) MMC and referencing this section to prevent smoking within 15 feet of entrances. The signs must be at a minimum, 12” high by 9” wide and clearly state “No Smoking within 15 feet of doorway” with the universal no smoking logo on the sign and section 5.23.040(a) MMC referenced on the sign.

WATER DISTRICT

316. The Permittee/Owner shall meet all requirements established by the Eastern Municipal Water District. Prior to issuance of building permits, the permittee shall meet with the Eastern Municipal Water District to develop a plan of service, which shall detail water, wastewater and recycled water requirements to serve the project.

SCHOOL DISTRICT

317. Prior to the issuance of building permits, the Permittee/Owner shall pay the school district the required mitigation fee in effect at the time of request.

END CONDITIONS

EXHIBIT B

DRAFT CONDITIONS OF APPROVAL
FOR
TENTATIVE TRACT MAP NO. 38622 (TTM-2022-2706) (EP&L # MAP-2023-00013)
(ASSOC W/DP-2022-2705 (EPL # DP-2023-00017)
AUGUST 20, 2024

GENERAL:

Tentative Tract Map 38622 represents the subdivision of a 64.28-gross acres parcel into twenty-three (23) parcels totaling 63.56 acres and five (5) lettered parcels totaling 0.72 acres within Specific Plan 276 (The Triangle), (APNs: 910-390-001 through 910-390-003, 910-400-001 through -018, 910-390-008 through -022) in conjunction with Development Plan 2022-2705 ("Project"). This permit runs with the land and shall be binding upon Permittee/Owner of the subject property ("Property Owner") and all subsequent successors in interest to the Permittee/Owner as to such land.

1. The Subdivider/Owner shall defend (with attorneys approved by the City), indemnify and hold harmless the City of Murrieta, its agents, officers, and employees from any claims, damages, action, or proceeding against the City or its agents, officers, or employees to attack, set aside, void, or annul an approval of the City, its advisory agencies, appeal boards, or legislative body concerning this approval of Tentative Tract Map 2022-2706. The City will promptly notify the Permittee/Owner of any such claim, action, or proceeding against the City and will cooperate fully in the defense.

2. Any fees due the City of Murrieta for processing this project shall be paid to the City within thirty (30) calendar days of final action by the approval authority ("Effective Date"). Failure to pay such outstanding fees within the time specified shall invalidate any approval or conditional approval granted. No permits, site work, or other actions authorized by this action shall be processed by the City, nor permitted, authorized or commenced until all outstanding fees are paid to the City.

3. The land division hereby permitted is to subdivide an existing 64.28-gross acre project area consisting of multiple existing parcels into twenty-three (23) parcels. Any proposed change substantially different than the approved tentative map shall require an amendment to this approval in accordance with the Triangle Specific Plan 276.

4. The project shall be in substantial conformance with all adopted environmental mitigation measures, any written project proposal information and any verbal agreements or representations made by applicant to the decision making body as part of its consideration of the project that are incorporated into the final written conditions of approval. Any proposed change substantially different than the approved project shall require an amendment to this approval in accordance with the Development Code.

5. Pursuant to Section 711.4 of the State of California Fish and Game Code, the permittee is required to pay a $50.00 handling fee and a certification fee for the filing of a Notice of Determination related to the Triangle (Murrieta Springs Mall) Subsequent EIR. Said fees shall be paid to the Clerk/Recorder of the County of Riverside at the time the Notice of Determination is filed pursuant to Section 21152 of the Public Resources Code. If this fee is not paid, the approval of this project shall not be operative, vested, or final. To comply with State-mandated timelines for filing a Notice of Determination, the applicant

shall file the NOD electronically to the Riverside County Clerk/Recorder's Office. Failure to remit the required fee in full within the time specified above will result in a delay of the start of the 180-day statute of limitations (SOL) on Court challenges to the approval under CEQA, whereas recordation of the NOD within five (5) days of project approval limits the SOL to 35 days. In order to comply with State mandated timelines for filing of a Notice of Determination, the above fee must be paid within **five (5)** days after the date of final approval.

6. Tentative Tract Map 38622 shall record within three (3) years from the date of the approval or it shall become null and void unless an extension of time is granted pursuant to City requirements.

7. Prior to the expiration of this approval, the Permittee/Owner may request an extension of time in accordance with The Triangle Specific Plan 276 Section 4.2.2.

8. The development of the premises shall comply with the standards of The Triangle Specific Plan, City's Development Code, and all other applicable State and Federal Codes.

9. Subsequent modifications of this map approval shall be pursuant to The Triangle Specific Plan Section 4.2.2. and Development Code Section 18.86-Subdivisions.

10. The Subdivider/Owner shall pay all applicable impact and/or mitigation fees or provide proof that all required fees have been paid in accordance with City policies and ordinances in effect at the time of permit issuance.

11. In the event the use(s) hereby permitted under this permit is: (a) found to be in violation of the terms and conditions of this permit; (b) found to have been obtained by fraud or perjured testimony; or (c) found to be detrimental to the public health, safety or general welfare, or a public nuisance; this permit shall be subject to the revocation procedures in Section 16.82 of the Development Code.

12. This land division shall comply with the State of California Subdivision Map Act and with all requirements of the City's Development Code, and all other applicable State and Federal codes.

13. The Permittee/Owner shall obtain approval of all necessary plans for the construction of the new structure proposed by the project on the subject property in accordance with the Murrieta Development Code. Such plans include, but are not limited to, site plans, floor plans, building elevations, grading plans and landscaping plans.

14. The City is located within the Mt. Palomar Special Lighting Area, as defined in Section 16.18.110 of the Development Code, low pressure sodium vapor lighting or overhead high-pressure sodium vapor lighting with shields or cut off luminaries, or other complying lighting shall be utilized.

15. The Permittee/Owner shall comply with and implement all applicable Mitigation Measures (MM) and Project Design Features (PDF) contained in the Mitigation

Monitoring & Reporting Program (MMRP), as identified in the Subsequent Environmental Impact Report (SEIR).

For each permit request, the applicant shall submit a Mitigation Monitoring & Reporting Program (MMRP) Compliance Plan indicating the items that are being implemented or satisfied, accompanied by the proof of how the mitigation measure is satisfied. The format shall be in the form of a binder containing the following: (1) cover sheet indicating the permit request phase, (2) table of contents, (3) copy of the MMRP filled out indicating items addressed, (4) supporting information demonstrating compliance

16. Applicant acknowledges that the City's approval of this application is based on the Applicant's conceptual plans for various improvements, including but not limited to all off-site improvements, emergency access, building elevations, floor plans, landscaping and irrigation, site grading and drainage, ADA accessibility, sight lighting, and on-site parking and circulation. Prior to issuance of any permits, the Applicant shall submit final design plans to the City for review and approval. The plans shall meet or exceed the requirements of the City's adopted codes and other policies and programs in order to receive the required permits and any subsequent approvals.

17. The Subdivider, or any successor-in-interest to the land divider, shall be responsible for maintenance and upkeep of the proposed parcel and any slopes, landscaped areas and irrigation systems on the subject property.

18. Walls or retaining walls proposed on-site shall be decorative and be comprised of a split face or other decorative block material or approved geofabric interlocking landscape walls. All proposed walls shall comply with The Triangle Specific Plan and Development Code (Section 16.22) with regards to setbacks and height limitations.

19. The project shall comply with the provisions pertaining to construction activity as stated in Section 16.30.130 of the City of Murrieta Municipal Code:

    a. The operation of tools or equipment used in construction, drilling, repair, alteration, or demolition work is prohibited between Monday through Saturday, from 7 P.M. and 7 A.M., or at any time on Sundays or holidays.

    b. Construction activities must be conducted in a manner that the maximum noise levels at the affected structures would not exceed those listed in section 16.30.130.

    c. All mobile or stationary internal combustion engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order.

Prior to Grading Permit Issuance

20. Grading plans must be reviewed by the Planning Division for compliance with the approved site plan.

21. Prior to the issuance of grading permits, the project Subdivider shall comply with the provisions of any existing City ordinance that has been established as a mitigation

measure for the Stephens' Kangaroo Rat. These ordinances may include fee schedules, mechanisms for protecting habitat, or a combination thereof.

22. If the project is to be phased, a phasing plan shall be submitted and approved prior to grading permit issuance.

23. A minimum of 30-days prior to the placement of a construction trailer, a Temporary Use Permit application shall be submitted for review and approval.

24. Prior to issuance of a street improvement plan, plans shall show the location of a bus turnout on Murrieta Hot Springs Road (MMRP PDF 2-3/ PDF 10-7) The bus turnout and shelters located on Murrieta Hot Springs Road shall include a roof canopy, seating, and shade trees nearby to provide shelter for riders.

25. Prior to any ground disturbance or issuance of any grading plan, the Permittee shall submit a report prepared by a qualified biologist to the City documenting absence of Crotch's bumble bee from the project site.

Prior to Final Map Recordation

26. After approval of the Tentative Map and prior to the expiration of the map, the Subdivider shall cause the real property included within the Tentative Map, or any part thereof, to be surveyed and a Final Map (application) be submitted to the Engineering Department for review and approval.

27. The Final Map shall include easements and documentation for emergency access, legal access to each parcel, reciprocal access, and parking, including provisions for shared parking (if applicable).

28. The land divider shall prepare an Environmental Constraints Sheet (ECS) in accordance with Section 16.98.060.R of the City's Development Code, which shall be filed simultaneously with the plan check review of the final map. A note shall be placed below the surveyor's notes on the final map stating the following:

"ENVIRONMENTAL CONSTRAINTS NOTE: Environmental Constraints Sheet Affecting this map is on file in the E.C.S. Book__ , Page____. This note affects Lots Nos.____ or Parcel No.___ ."

29. The ECS shall be labeled "ENVIRONMENTAL CONSTRAINTS SHEET" in the top margin. Applicable items shall be shown under a heading labeled "Environmental Constraints Notes" and shall contain the following statement:

> "The environmental constraint information shown on this sheet is for informational purposes describing conditions as of the date of filing and is not intended to affect record title interest. This information is derived from public records or reports and does not imply the correctness or sufficiency of those records or reports by the preparer of this map sheet."

30. The following notes shall be placed on the Environmental Constraints Sheet:

a. "This property is subject to lighting restrictions as required by Murrieta Municipal Code (MMC) Title 16.18.110 (Mount Palomar Lighting), which are intended to reduce the effects of night lighting on the Mount Palomar Observatory. All proposed outdoor lighting systems shall be in conformance with MMC 16.18.110."
b. The natural watercourse that traverses Parcels 19, 20, 21, 22, and 23 shall be delineated and labeled on the environmental constraint sheet to accompany the final map. Notes shall be placed on the environmental constraint sheet stating that unless otherwise permitted pursuant to separate approvals by the appropriate state and federal regulatory agencies:
    i. "The water courses must be kept free of all buildings and obstructions." and
    ii. "No disturbances may occur within the boundaries of the of the constraint areas."
    iii.
c. "A cultural resources assessment was prepared for this property on July 16, 2008, by Brian Glenn of BonTerra Consulting" and is on file at the City of Murrieta Planning Division. The property is subject to surface alteration restrictions based on the results of the report."

31. The permittee/owner shall submit the following documents to the City for review and approval by the City Attorney. The intent is to establish a Declaration to insure maintenance of the landscaping, parking spaces (lot), detention basin(s) (drainage), common area(s) and reciprocal access and shared parking requirements.

a. A cover letter identifying the project for which approval is sought;

b. A signed and notarized declaration of covenants, conditions, and restrictions ("Declaration"); and

c. A sample document conveying title to the purchaser of an individual lot or unit which provides that the lot is subject to the Declaration.

d. The Declaration submitted for review shall (a) provide for a minimum term of 60 years, (b) provide reciprocal easements for ingress, egress, and parking, including shared parking (c) provide the Declarant to maintain the common areas and improvements, and (d) contain the following provisions verbatim:

    i. "Notwithstanding any provision in this Declaration to the contrary, the following provision shall apply:

    ii. The Declarant shall manage and continuously maintain the 'landscape area, parking spaces (lot), detention basin(s) (drainage), and common area(s) set forth in the.

    iii. The Declarant shall have the right to assess the owners of each individual parcel for the reasonable cost of maintaining the Common Areas and Common Area Improvements and shall have the right to lien the property of any such owner who defaults in the payment of a maintenance assessment. An assessment lien, once created, shall be prior to all other liens recorded subsequent to the notice of assessment or other document creating the assessment lien.

iv. The provisions of the Declaration set forth above shall not be terminated, substantially amended, or property deannexed therefrom absent the prior written consent of the Development Services Director of the City of Murrieta or the City's successor-in-interest.

v. A proposed amendment shall be considered substantial if it affects the extent, usage or maintenance of the 'landscape area, parking spaces (lot), detention basin(s) (drainage) and common area(s)' legal access, emergency access, or reciprocal easement established pursuant to the Declaration."

In the event of any conflict between this Declaration and the Articles of Incorporation, the Bylaws or the property owners association Rules and Regulations, if any, this declaration shall control.

Once approved by the City Attorney, the Declaration shall be recorded prior to final map recordation. A copy of the Declaration shall be provided to the City and retained for the project file at City Hall.

Prior to Building Permit Issuance

32. Tentative Tract Map 38622 shall be recorded. For any proposed buildings crossing over property lines, a lot line adjustment or parcel map shall be recorded.

33. Project shall demonstrate the tentative map/final map is consistent with Development Plan 2022-2705 or any subsequent approved Development Plan or revision thereof.

General Plan Mitigation Measures

34. (AES-2) During Pre-Construction and Construction-Construction documents shall include language requiring that construction vehicles be kept clean and free of mud and dust prior to leaving the development site. Streets surrounding the development site shall be swept daily and maintained free of dirt and debris.

35. (AES-3) During Pre-Construction and Construction-Construction worker parking may be located off-site with prior approval by the City. On-street parking of construction worker vehicles on residential streets shall be prohibited.

36. (CR-2) During Excavation and Grading Activities-In the event that cultural resources (archaeological, historical, paleontological) resources are inadvertently unearthed during excavation and grading activities of any future development project, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of discovery. If not already retained due to conditions present pursuant to Mitigation Measure CR-1, the project proponent shall retain a qualified professional (i.e., archaeologist, Native American Tribal monitor), subject to approval by the City of Murrieta to evaluate the

significance of the find and appropriate course of action (refer to Mitigation Measures CR-1 and CR-3). If avoidance of the resources is not feasible, requirements pursuant to Section 15064.5 of the CEQA Guidelines shall be followed. After the find(s) has been appropriately avoided or mitigated, work in the area may resume.

37. (CR-3) During Excavation and Grading Activities-In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to State Health and Safety Code Section 7050.5, no further disturbance shall occur until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendant of the deceased Native American, who shall serve as consultant on how to proceed with the remains.

38. (WW-2) Prior to issuance of a building permit for any future development project, the Project Applicant shall prepare an engineering study to support the adequacy of the sewer systems and submit the engineering study to the City for review and approval. Any improvements recommended in the engineering study shall be installed prior to the certificate of occupancy for the development project.

39. (WW-3) Prior to issuance of a building permit for any future development project, the Project Applicant shall provide evidence that the RCWD, EVMWD, WMWD, or EMWD has sufficient wastewater transmission and treatment plant capacity to accept sewage flows from buildings for which building permits are being requested.

40. (WW-1) Prior to issuance of a wastewater permit for any future development project, the Project Applicant shall pay applicable connection and/or user fees to RCWD, EVMWD, WMWD, or EMWD.

41. (FP-2) Prior to Initiation of Construction Activities-Brush clearance shall be conducted prior to initiation of construction activities in accordance with Murrieta Fire Department requirements.

42. (FP-3) During Construction-Adequate access to all buildings on the project site shall be provided for emergency vehicles during the building construction process.

43. (FP-4) During Construction-Adequate water availability shall be provided to service construction activities.

LANDSCAPING

Prior to the issuance of building permits

44. Project shall comply with the Triangle Specific Plan 276 including all relevant exhibits, landscape requirements, and other requirements, as applicable.

45. It is the responsibility of the applicant and owner’s design team to be aware of and comply with the requirements of Title 16.42 Tree Preservation. This chapter provides

regulations for the protection, preservation, and maintenance of significant tree resources and establishes minimum mitigation measures for trees removed as a result of new development.

46. Slopes shall be landscaped, at a minimum, according to City's Slope Landscaping, Requirements for Subdivision Tract and Commercial Slopes document. Refer to City's website under Planning Division, Applications and Forms, Landscape Handouts. A combination of erosion control groundcover, shrubs, and trees shall be provided.

DEPARTMENT OF PUBLIC WORKS

47. Since the project consists of multiple discretionary reviews and conditions of approval, (DP 2022-2705, TTM 2022-2706), all conditions of approval shall be referenced as "the conditions of approval" and shall be incorporated as a single project.

48. Any alteration to the final conditions of approval by the Permittee/Owner shall be reviewed by staff to determine whether approval of alteration shall be subject to M.M.C. Section 16.80.070, Changes to an Approved Project.

49. All items required to be submitted shall be, at a minimum, in electronic format (e.g., PDF, Word). Hard copies may also be required.

50. All conditions as approved shall be completed by the Permittee/Owner at no cost to the City, unless specified otherwise.

51. All designs shall conform, at a minimum, to the City of Murrieta Municipal Code, Development Code, Standard Drawings, Circulation Element, California Highway Design Manual, and Manual on Uniform Traffic Control Devices (MUTCD).

52. Prior to any permit issuance, all relevant plans and their associated bonds, reports, and supporting documents shall be prepared in accordance with the Murrieta Municipal Code, reviewed, all applicable fees paid, and approved by the City Engineer.

53. Future extensions are subject to any, and all, local, state, and federal current regulations not previously identified in the original conditions of approval. Revisions/Updates to the original project's exhibits, plans, reports, etc., at the time of any extension request, shall be at the discretion of the City Engineer. Regardless of revisions/updates to future extensions, revised/updated exhibits, plans, reports, etc., shall be submitted for review and approval for discretionary review and approval prior to submittal of construction documents (e.g., exhibits, plans, reports, etc.). The approved discretionary documents, and all applicable conditions of approval, shall then be submitted along with the construction documents for any permit issuance.

54. As part of the initial submittal of plans, reports, etc., for any grading permit or any other grant of approval, the Permittee/Owner shall submit the approved discretionary plans and reports (e.g., Tentative Map, Preliminary Grading Plan, Preliminary Water Quality Management Plan, Preliminary Hydrology Study, etc.) that were approved as part of the Discretionary Review Process, in addition to all applicable onsite and offsite plans, reports, reference documents, and/or document(s) deemed relevant for the issuance of

a permit. All discretionary documents shall serve as a reference for final document preparation and approval and are subject to revision to ensure compliance with all local, state, and federal requirements, as applicable.

55. The conditions herein, when addressing grading plans, implies precise grading plans for the front half of the project and mass grading plans for the back half of the project. Any other type of grading plan will be explicitly named when applicable. Moreover, grading plans not specifically identified herein are not approved as part of these conditions of approval.

56. Grading plans' 1^{st} submittal, for the front half with building pad location and elevation information, shall be submitted prior to, or concurrently with, building plans' 1^{st} submittal. However, building plans' 1^{st} submittal shall NOT be submitted prior to grading plans' 1^{st} submittal. Moreover, building plans' 2^{nd} submittal shall incorporate all applicable 1^{st} review grading plans' comments. Subsequent building plan submittals shall also coincide with grading plans' latest and applicable revisions.

57. Prior to the issuance of any occupancy permit, including temporary certificate(s) of occupancy, all public improvement conditions set forth in these Conditions of Approval shall be completed and accepted/as-built.

58. In addition to any applicable permit issuance, an Encroachment Permit shall also be obtained from the Engineering Department prior to commencement of any construction within City right-of-way or public jurisdiction easements.

59. If applicable, an Encroachment Permit, or any other applicable type of permit or allowance, shall be obtained from CalTrans, Riverside County Flood Control and Water Conservation District, etc. prior to commencement of any construction within their right-of-way. Proof of permit issuance, or verification of acknowledgement with no permit issuance requirement, shall be submitted prior to city-issued permit issuance affecting said easement(s). Additionally, said approvals/acknowledgements shall be identified on the subject grading and/or improvement plans, as applicable.

60. The Permittee/Owner shall submit a current hyperlinked Preliminary Title Report (PTR) with active connectivity to all referenced recorded documents identified within the Preliminary Title Report.

    a. In addition to the hyperlinked PTR, all referenced recorded documents shall also be submitted, in PDF format.

61. It is understood that the Final Map will correctly show all existing and proposed easements, travel ways, grading, drainage courses, etc., and that any omission may require the resubmittal of documents and/or plans associated with this application for additional consideration.

62. All Engineering Plans (e.g., Improvement Plans, Grading Plans) shall be coordinated for consistency with adjacent projects and existing improvements contiguous to the site and shall be submitted on standard 24" x 36" City-formatted bond sheets. The Permittee/Owner shall review all plan check comments, make certain their consultants

address all comments in each subsequent submittal, and return all plan check comments with each subsequent submittal. Failure to do so may result in additional plan check fees due to additional review time.

63. The Permittee/Owner shall comply with all current and applicable requirements set forth in the City of Murrieta's Municipal Code, Development Code, Standard Drawings, Ordinances, Policies, and Resolutions, along with all applicable State (e.g., State Water Resources Control Board) and Federal regulations, whether or not such provisions or requirements have been specifically set forth in these conditions, all of which are now incorporated herein by reference, and fully set forth at this point.

64. Prior to approval of any plans, reports, or legal documents and/or permit issuance, the Permittee/Owner shall pay, at a minimum, all outstanding plan check and processing fees.

65. Security bonds, for a portion of the construction costs as outlined in the final cost estimate(s), shall be in the form of a cash deposit, as approved by the City Engineer.

PRIOR TO ISSUANCE OF ANY PERMIT, THE PERMITTEE/OWNER SHALL COMPLETE THE FOLLOWING

Acquiring Offsite Property/Easement

66. Prior to any permit issuance, the Permittee/Owner shall coordinate with adjacent property owners affected by proposed onsite and/or offsite improvements. The Permittee/Owner shall be solely responsible for acquisition of any necessary easements, agreements, etc. prior to plan approval. All easements, agreements, etc. shall be notarized and recorded in a format acceptable to the City Engineer. Agreements and/or easements shall designate maintenance responsibilities conforming to those associated/identified on the approved Tentative Map. The agreements and/or easements shall also address uninterrupted access and utility services to affected existing properties during construction, and show the recording information (instrument number and date) on the appropriate plan(s).

67. Upon property/easement acquisition, the Permittee/Owner shall complete the improvements as approved by the City Engineer.

68. Property/Easement acquisition necessary for public improvements shall be obtained, signed, notarized, and recorded, and copy submitted to the City, prior to approval of the improvement plans (bonding approved) and final map. Recordation of said property/easement acquisition may occur:
    a. prior to improvement plan approval with a deferred map if applicable,
    b. but not with a final map approval with a deferred improvement plan.

69. The Permittee/Owner shall obtain the required area from APN 910-031-020 and 910-031-011, to accommodate public improvements for the purpose of the traffic signal modifications and intersection improvements at Murrieta Hot Springs Rd and Monroe Ave. City-owned.

a. The Permittee/Owner shall complete the property acquisition process with the City in a timely manner to ensure the proposed design meets all requirements.

b. Upon completion of the property acquisition, the Permittee/Owner shall complete the improvements as approved by the City Engineer.

c. If the Permittee/Owner does not acquire the City-owned parcel, the Permittee/Owner shall provide a redesign of the project ensuring connectivity between Murrieta Hot Springs Rd and Monroe Ave.

Grants of Easements

70. Dedications, grants of easements, and/or right-of-way dedications, shall occur via this project's Final Map or per separate instrument(s), as approved by the City Engineer.

71. All offers of dedication and conveyances shall be submitted for review and recorded as directed by the Engineering Department. The Permittee/Owner shall incur all costs associated with the formation of a suitable maintenance district for all associated easements.

72. All easements and/or right-of-way dedications shall be offered via an Irrevocable Offer of Dedication to the City or other appropriate agency and shall continue in force until the City or other agency accepts or abandons/rejects such offer(s). All dedications shall be free from all encumbrances as approved by the Engineering Department.

73. Easements, when required for roadways, slopes, landscaping, drainage, utilities, etc., both onsite and offsite, shall be shown on a final map, or per separate document(s) as approved by the City Engineer. All grants of easements shall be approved prior to issuance of a grading permit.

Vacation or Abandonment of Easements

74. Vacations and/or abandonment of easements, shall occur via this project's Final Map or per separate instrument(s), as approved by the City Engineer.

75. Proposed vacations or abandonments of existing public right-of-way or easements shall be completed prior to plan approval, or as approved otherwise by the City Engineer.

76. Any proposed vacation(s) and/or abandonment(s) of existing right of way or public easements shall be shown on a final map, or per separate instrument(s) as approved by the City Engineer.

77. All vacations and/or abandonments, shall be submitted for review and approval by the Engineering Department and/or City Council, prior to being signed, notarized, and recorded. A copy of the notarized and recorded copy shall be provided to the City.

78. Subject to the discretion of, and final approval by, the City Council, the City shall

vacate/abandon a portion of the following street's right-of-way.

a. Sparkman Court, aka Monroe Ave

b. If the vacation/abandonment is unsuccessful, Permittee/Owner shall submit revised plans for substantial conformance review as required by the City of Murrieta Development Code.

Street Improvement Plans

79. The Street Improvement Plan shall include the following "Improvement Note" to identify required improvements prior to first occupancy:

a. "All public improvements, as identified in the project's conditions of approval and approved public street improvement plans, shall be constructed/completed and accepted/as-built prior to first certificate of occupancy.

80. The Permittee/Owner shall provide the following items, but may be required to provide additional items to substantiate the proposed design:

a. A Street Improvement Plan prepared by a registered Civil Engineer, or licensed specialist, in accordance with City standards, California Highway Design Manual, and/or MUTCD requirements, with all improvements subject to the approval by the City Engineer.

i. The Street Improvement Plan may include within it, but may not be limited to, the following:

1. Standard section(s), plan(s), profile(s), station values, elevations, dimensions.

2. Signing and Striping plan, included with the street improvement plans for the project.

3. Traffic Signal Plan included with the street improvement plans for the project.

4. Wet Utility Plans (e.g., storm drain, water, sewer) included with the street improvement plans for the project.

b. A Cost Estimate, prepared, signed, and stamped, by the registered civil engineer preparing the plans. The cost estimate shall include all costs, but not limited to, plan preparation, plan check fees, permit fees, bonding, staking, construction costs, stormwater best management practices, erosion control, soils engineering, construction management, etc.

81. The Permittee/Owner shall design, for the guarantee of construction, the following public improvements to the current City of Murrieta Circulation Element and corresponding City standards. Improvements may include, but are not limited to: paving, curb and gutter; sidewalk; street lights; drainage facilities; water quality best management practices;

signing and striping; utilities, including but not limited to, water and sewer; landscaping; with all improvements subject to the approval by the City Engineer.

a. Design Murrieta Hot Springs Rd frontage to be improved to a half width of seventy-five feet (75') centerline to right-of-way, per Augmented Urban Arterial City Standard Drawing #102A. The following shall be provided, but may not be limited to:

   i. An additional width, greater than the seventy-five feet (75') centerline to right-of-way, shall be provided to accommodate the right-turn/decel lane, per Traffic Engineering requirements, to the satisfaction of the City Engineer.

   ii. The required improvements shall include, and clearly show, connectivity to existing improvements at, and adjacent to, the project's westerly and easterly property line(s), as well as Monroe Ave.

   iii. The required improvements shall include connectivity to improvements existing opposite legal centerline.

   iv. Provide a design identifying improvements, including but not limited to: a bike lane; eastbound trave/turn/decel lanes; westbound travel/turn lanes; existing/proposed raised/painted medians; existing eastbound parkway improvements; all as directed by the Traffic Engineer, and subject to approval by the City Engineer.

   v. The project's frontage shall identify the requested parkway to accommodate the enhanced parkway landscape, between the curb & gutter and the right-of-way line.

   vi. The project shall provide a design to tie into existing medians and provide full width raised landscaped medians along the project's frontage from the most westerly property line to the most easterly property line, except for the areas for turning lanes at the following intersections:

      1. Murrieta Hot Springs Rd & Monroe Ave

      2. Murrieta Hot Springs Rd & Hancock Avenue

   vii. As applicable, callout right-of-way dedication/vacation along the frontage to provide the requested right-of-way for the required improvements.

   viii. Restripe Murrieta Hot Springs Rd full width as directed by the Traffic Engineer and as approved by the City Engineer.

      1. Transition striping from the proposed frontage may be required to commence at the project boundary and extend offsite to the satisfaction of the City Engineer.

82. All street improvements shall be designed to provide adequate right-of-way and transitions to existing improvements.

83. Proper right-of-way shall be dedicated, beyond that required per City Standard Drawing #102A, along the entire Murrieta Hot Springs frontage, to accommodate the new parkway improvements, along with all access driveways to include the pedestrian improvements/pathways.

84. Improvement plans shall show all existing and proposed drainage and stormwater facilities, including surface and subsurface construction.

85. The Permittee/Owner shall provide a design to construct/reconstruct handicap access ramps within the project's frontage public right-of-way to current ADA requirements (e.g., ramps with truncated domes/warning detection systems). Title II of the American Disabilities Act prohibits local governments from discriminating against persons with disabilities. This may include providing handicap access ramps across the street or driveway, or adjacent to the project's property line(s), to ensure public safety, to the satisfaction of the City Engineer.

    a. Sidewalks and pedestrian ramps fronting, adjacent to, and/or near the project shall be improved/provided to current ADA standards, to the satisfaction of the City Engineer.

    b. Pedestrian sidewalks and ramps, fronting, adjacent to, and near the project, shall be improved/provided, to ensure continuous connectivity to the nearest RTA bus stop and to current ADA standards, to the satisfaction of the City Engineer.

86. If applicable, the Permittee/Owner shall provide a design to construct/reconstruct handicap access ramps within the public right-of-way, and adjacent to the project, to current ADA requirements (e.g., ramps with truncated domes/warning detection systems). Title II of the American Disabilities Act prohibits local governments from discriminating against persons with disabilities. This may include providing handicap access ramps across the street or driveway to ensure public safety, to the satisfaction of the City Engineer.

87. The Permittee/Owner shall provide a design for bus turnouts with shelter at all existing and proposed bus stops as determined by the Engineering Department and the Riverside Transit Agency. The bus turnout may not be required if located within a right-turn lane for access onto the site, as approved by the City Engineer.

    A. Existing bus stops within proposed right-turn lanes shall be relocated to the satisfaction of the City Engineer.

    B. Details for the bus stop, shelter, and appurtenances shall be provided on the plans.

88. City-maintained drainage facilities located outside of city right-of-way shall be accompanied with proper public drainage easements and monumentation for review and approval by the City and recorded on a city-approved format.

89. All storm drain easement widths shall adhere to Riverside County's storm drain easement width chart and have a maximum cross slope of 5%.

90. The parkway cross slope in the public right-of-way shall not exceed two percent, unless otherwise approved by the City Engineer.

91. Driveways and Site Access shall conform to Development Code 16.34.080.

92. Corner Site Distance and Stopping Sight Distance for the installation of pedestrian and traffic control facilities shall be provided at all street intersections and entrances in accordance with City Standards, as directed by the Traffic Engineer, to the satisfaction of the City Engineer. The line of sight shall be shown on all grading, street improvement, and landscape plans in accordance with Std. 214. Signs are not allowed within the Limited Use Area.

93. The Murrieta Hot Springs Rd and Monroe Ave pre-development drive lanes, paint, striping, and signage shall be reviewed and revised as needed by the City's Traffic Engineer, to the satisfaction of the City Engineer.

94. The exact alignment, width, and design of all turning lanes, travel lanes, driveways, striping, and all other traffic control devices and measures, including turnouts, bike lanes, and width transitions, shall be approved by the City Engineer.

95. A light emitting diode for the public and private street lighting system shall be shown on the street improvement plans and shall be installed at locations specified by the City Engineer at no cost to the public. All installations shall be compliant with the City's Street Lighting Standards, 619, 620, and 620C.

96. If the project is to be phased, the Permittee/Owner shall submit detailed plans describing activities for the entire phase(s). A Phasing Plan shall be reviewed and approved by the City Engineer and Planning Division Director. The plans shall address, in detail, the following, but not limited to, items:

    a. The Permittee/Owner shall implement the requirements of the current General Construction Permit at all times to prevent discharge from the site for all phases of construction (e.g., demolition, grading, vertical construction, landscape/hardscape). Sediment and erosion controls shall be appropriately applied for the risk level assigned to the project.

    b. Submit a landscape plan to the Planning Division that addresses both short term and long-term slope stability and dust control including all temporary and permanent buildable pads. This plan shall also include all required BMP's and storm water design features.

    c. Should the Permittee/Owner decide to develop phases out of numerical sequence with the approved phasing as shown on the plan, all conditions required of the proceeding phases shall be completed unless otherwise approved by the City Engineer and the Director of Planning. Other conditions may be imposed by the City Engineer and Planning Division Director to allow phased construction.

    d. The Water Quality Improvement Plans (WQIP), approved as part of the grading plans, shall address the Best Management Practices (BMP's) to be utilized for each phase of development. The WQIP shall include an overview of project phasing that shows each project phase, prior to activation of the area for use in accordance with Order R9-2013-0001, that 100% of the impervious area for that phase will be treated and retained to meet water quality and hydro-modification requirements.

97. All existing street monuments within or abutting this project site shall be preserved. If such monuments are damaged or destroyed, the Permittee/Owner shall retain a licensed land surveyor or a qualified registered civil engineer to reset those monuments per City Standards 617a, 617b, and 617c, and file the necessary information with the County Recorder's office as required by California Business and Professions Code Section 8771. If damaged, existing monuments that are no longer relevant do not have to be replaced, subject to approval by the City Engineer.

98. If reconstructing an existing street or existing intersection, the Permittee/Owner shall provide a design with callouts for street centerline monuments to be set per City Std. 617a, 617b, and 617c, and elevations provided, unless specified otherwise by the City Engineer, or assignees.

    A. Set street centerline monumentation for the following street(s) and/or following intersection(s):

        i) Murrieta Hot Springs Rd & Monroe Ave

99. Centerline tie notes may be provided, when applicable as noted on City Std. 616, on 8.5 x 11 mylar sheets (identify locations if possible). Prior to installation, each location where tie notes may apply shall be reviewed and approved by the City Engineer, or assignees, to determine monument type to be used.

Traffic

100. Permittee/Owner shall provide a Street Improvement Plan prepared by a registered Civil Engineer in accordance with City standards, California Highway Design Manual standards, and MUTCD requirements, with all improvements subject to the approval of the City Engineer.

101. The Permittee/Owner shall provide a Signing and Striping plan, designed by a registered Civil Engineer and included with the street improvement plans for the project.

102. Traffic signal improvements shall be designed to coincide with the street improvement plans. Right-or-way acquisition necessary for street and traffic signal improvements shall be the responsibility of the Permittee/Owner. Traffic signals are not eligible for DIF credit.

103. Permittee/Owner shall design Traffic Signal Modifications to the existing signals on Murrieta Hot Springs Rd frontage. Designs shall be prepared by a registered Civil Engineer in accordance with City Standards with all improvements subject to the approval of the City Engineer.

104. Prior to issuance of Certificate of Occupancy permits for Phase 1 uses, design, furnish, and construct the following (MMRP PDF 10-1):

<u>Driveway 1 (Monroe Avenue) at Murrieta Hot Springs Road</u>

Northbound approach:	2 left-turn lanes, 2 through lanes with shared right-turn lane
Southbound approach:	2 left-turn lanes, 2 through lanes with shared right-turn lane
Eastbound approach:	2 left-turn lanes, 4 through lanes, 1 right-turn lane
Westbound approach:	2 left-turn lanes, 4 through lanes with shared right-turn lane
	Install traffic signal

<u>Driveway 2 at Murrieta Hot Springs Road</u>

Northbound approach:	1 right-turn lane
Eastbound approach:	4 through lanes, 1 right-turn lane (200 feet minimum storage)
Westbound approach:	4 through lanes with shared right-turn lane

<u>Driveway 3 (Hancock Avenue) at Murrieta Hot Springs Road</u>

Northbound approach:	2 left-turn lanes, 2 through lanes with shared right-turn lane, 1 right-turn lane
Southbound approach:	2 left-turn lanes, 2 through lanes with shared right-turn lane
Eastbound approach:	2 left-turn lanes, 4 through lanes, 1 right-turn lane
Westbound approach:	2 left-turn lanes, 4 through lanes with shared right-turn lane
Modify traffic signal	

105. Project shall comply with and provide documentation demonstrating compliance with Mitigation Monitoring & Reporting Program (MMRP) Mitigation Measures 10-1, 10-2, and 10-4.

106. Prior to issuance of a building permit, the permittee/owner shall provide pay the project's traffic impact fee (Fair Share Impact Fee established as a dollar amount per square foot of gross building area) as follows:

Building Square Foot Threshold	Traffic Fee per square foot
1 - 537,496	$0.37
537,497 - 1,240,556	$3.21
1,240,557 – 1,767,914	$0.80

This fee implements the fair share fee required to mitigate impacts to specified intersections identified part of MM 10-2.

Sewer & Water

107. Verify capacity of proposed sewer and water systems and provide approval from the Health Department or the governing Sewer and Water District that the proposed sewer and water system is compliant with the District's master plan.

108. The Permittee/Owner shall design and guarantee the construction of all sewer and water

improvements necessary to serve this project. Private sewer force mains are not allowed in the public right-of-way unless otherwise approved by the City Engineer.

Utilities

109. The Permittee/Owner shall provide a design to install all existing and proposed utility systems underground. Utility systems include, but may not be limited to, electric lines 32kv and lower, telephone, and cable TV. The utilities shall be designed in accordance with City Codes and utility provider(s).

    A. All applicable appurtenances shall also be coordinated with the building department and engineering department for review of proposed locations. Easements shall also be provided as required.

    B. If there are any electric lines 33kv and higher, those existing lines will not be required to be placed underground.

    C. Electric lines not required to be underground shall be relocated to accommodate required public roadway/parkway improvements.

110. Above-ground Edison transformers shall be located behind the right-of-way line. If necessary, retaining walls shall also be located behind the right-of-way and limited to maximum five feet in height. Safety railing is required for retaining wall heights above thirty inches.

111. Permittee/Owner shall provide a design identifying location of all wet utilities (e.g., water, sewer, storm drain, recycled, etc.).

Grading

112. The Permittee/Owner shall provide the following items, but may be required to provide additional items to substantiate the proposed design:

    a. A Grading Plan prepared by a registered Civil Engineer in accordance with currently accepted design standards. The plan shall incorporate Grading Information, Erosion & Sediment Control Measures, Mitigation Measures as applicable, and Site Design & Source Control (Low Impact Development (LID)), as well as Pollutant Control and Hydromodification as applicable.

        i. The Grading Plan shall include within it the following:

            1. A Water Quality Improvement Plan prepared by a registered Civil Engineer in accordance with City standards and approved by the Engineering Department.

            2. A Storm Drain Improvement Plan prepared by a registered Civil Engineer in accordance with City standards and approved by the Engineering Department.

            3. An Erosion Control Plan prepared by a registered Civil Engineer in

accordance with City standards and approved by the Engineering Department.

b. A Cost Estimate prepared, signed, and stamped, by a registered civil engineer. The cost estimate shall include all costs but not limited to plan preparation, plan check fees, permit fees, bonding, staking, construction costs, erosion control, soils engineering, construction management, etc.

113. The Grading Plan shall be prepared to the satisfaction of the City Engineer and shall also include, but may not be limited to:

a. Include a topographic map prepared by a Registered Civil Engineer or a Licensed Land Surveyor. The topographic map shall indicate property lines, topographic features and existing and/or proposed structures. Said map shall include two-foot contour lines and/or sufficient spot elevations to clearly represent existing and proposed topographical features, and existing and proposed drainage patterns. Survey shall extend a minimum of 100 feet beyond limits of work. Said map shall also show entire property boundary including any assumed found monuments, and bearings and distances based on record information.

b. Depict the limits of grading and provide cross sections as needed.

c. Incorporate all recommendations pursuant to the Hydrology/Hydraulic Report prepared for the project.

d. Incorporate all stormwater best management practices as quantified in the Water Quality Management Plan.

e. Include mitigation measures and project modifications as recommended in the required Geotechnical Report prepared for the project.

f. Depict the location of existing or proposed easements within the property boundary, as well as adjacent easement(s) which may impact, or may be impacted by, the project.

114. All onsite storm drain systems shall be privately owned and maintained. Private storm drain systems may connect to public storm drain facilities by installing cleanouts situated immediately adjacent to, and within, the public right-of-way.

115. Pay to City all County of Riverside Development Impact Fees applicable at time of grading permit issuance or as otherwise approved by ordinance. In the event these fees have been previously paid, the Permittee/Owner shall provide proof of payment. Said fees may include, but are also not limited to, the following:

A. Riverside County Area Drainage Fee
B. Kangaroo Rat Fee
C. Multiple Species Habitat Conversation Plan (MSHCP) Fee

116. Obtain written clearance, as deemed necessary by the Engineering Department, from

the following departments/agencies:

A. Planning Division
B. Community Services Department
C. Building Division
D. Fire Department
E. Landscape (Planning)
F. Sewer and Water District(s)

117. If applicable, the Permittee/Owner shall obtain and provide the City with written clearance or a non-interference letter from Southern California Edison (SCE) prior to grading plan approval. Permittee/Owner shall submit directly to SCE.

118. Loading ramps or truck wells shall be profiled showing the ramp, ramp transitions, and overhead clearances. Drainage collection sump areas shall conform to clean water runoff standards. Loading, unloading, and truck turning movements onsite, along with contiguous adjacent public streets, shall be shown on the grading plan.

119. Development Standards for Off-Street Parking shall conform to Development Code 16.34.070.

120. If blasting of rock is required, a blasting permit will be required as part of the grading permit process. A blasting permit shall be obtained through the Riverside County Sheriff's Department. Notification shall also be provided to the City of Murrieta Police and Fire Departments prior to blasting.

121. If any water wells are found onsite, the intent shall be identified on the grading plan (e.g., if inoperable…to be abandoned; if operable…to be protected in place, etc.). If to be protected in place, easements may apply. Additionally, if to be abandoned, they shall be abandoned in a manner approved by the State Department of Water Resources and Riverside County Health Department. Confirmation of abandonment approval shall be provided to the City.

122. If applicable, a qualified biologist shall delineate jurisdiction areas that are not to be disturbed. Identify the installation of some type of barrier fence to delineate the areas of avoidance.

123. Construction fencing shall be placed so as not to interfere with sight distance and comply with City Std. No. 214.

124. City-maintained drainage facilities located outside of city right-of-way shall be accompanied with proper public drainage easements to be reviewed and approved by the City and recorded on a city-approved format.

    A. All storm drain easement widths shall adhere to Riverside County's storm drain easement width chart and have a maximum cross slope of 5%.

125. All existing property monuments within or abutting this project site shall be preserved. If such monuments are damaged or destroyed, the Permittee/Owner shall retain a licensed

land surveyor or a qualified registered civil engineer to reset those monuments per City Standards and file the necessary information with the County Recorder's office as required by California Business and Professions Code Section 8771. If damaged, existing monuments that are no longer relevant do not have to be replaced, subject to approval by the City Engineer.

Geotechnical

126. A comprehensive geotechnical report shall be prepared by a registered Geotechnical Engineer and submitted to the engineering department as part of the initial grading plan check.

    A. The report shall address in-situ soils conditions; shall provide the following, but not be limited to:

        i) a percolation/infiltration analysis;
        ii) identify any geotechnical hazards for the site;
        iii) provide recommendations for the construction of engineered structures,
        iv) provide preliminary pavement sections,
        v) provide slope stability analysis,
        vi) identify faults that may affect the proposed project and confirm buildings meet setback requirements, as applicable.
        vii) evaluate slope stability and potential effect of proposed construction on nearby slopes, public right-of-way and neighboring properties.
        viii) Address the feasibility of long-term infiltration of stormwater runoff onsite, and if subdrains will be required for any proposed infiltration BMPs.
        ix) Provide recommendations for any special construction methods as necessary.

    B. All recommended measures identified in the report shall be incorporated into the project design. If located in a Geologic Special Study Zone, the report may, at the discretion of the City Engineer, be subject to a third-party review. If third party review is required, the Permittee/Owner must submit an application and schedule to have any open trenches inspected by a City-approved third-party reviewing consultant.

127. If project is determined to be a "Priority Development Project", a geotechnical engineer, civil engineer, certified engineering geologist or certified hydrogeologist shall prepare a percolation analysis and determine infiltration rates for the purpose of determining water quality best management practices (i.e., Water Quality Management Plan).

    A. See Appendix A, Section 1.8 – Final Report, of the Riverside County Low Impact Development BMP Design Handbook, as a guide for preparing the analysis.

B. Infiltration testing requirements shall adhere to Appendix A – Infiltration Testing, of the Riverside County Low Impact Development BMP Design Handbook (e.g. Table 1 Infiltration Testing Requirements).

C. A note shall be added on the grading plan identifying the infiltration rates used in the WQMP. If BMP locations differ, laterally and/or vertically, from the WQMP, additional infiltration tests may be required to be conducted and submitted for review and approval by the City.

Water Quality Management Plan (WQMP)

128. The Permittee/Owner shall provide a Water Quality Management Plan (Report) prepared by a registered Civil Engineer in accordance with currently accepted design standards.

129. Water Quality Improvement Plans (WQIP) shall be integrated with the grading plans and included as part of the grading plans. Prior to final approval of the grading plans, the grading plans shall be in conformance with the Project-Specific WQMP.

130. A Final Project-Specific WQMP shall be submitted to the City for approval with the grading plan check application and approved by the Engineering Department prior to issuance of a grading permit. The WQMP shall include, but not be limited to, the following:

A. The Permittee/Owner, assigns, or heirs shall allow the City to enter the premises to conduct periodic inspections to ensure that the WQMP is being implemented, maintained, and to review the inspection and maintenance records.

B. Prepare a hydromodification analysis utilizing continuous simulation of the geomorphically significant flows starting at 10% of the 2-year runoff and up to the 10-year runoff (85th percentile Design Capture Volume (DCV)). The analysis must have a maximum interval of 1-hour, or 15-minutes, and contain a minimum of 37 years of data.

C. The 85th percentile DCV of on-site drainage shall be treated on site in accordance with the current NPDES MS4 Permit and the City's latest Water Quality Management Plan. The drainage shall be treated onsite prior to entering public right-of-way.

D. When continuous simulation is prepared, and acceptable, the continuous simulation may be used in-lieu of the 1, 3, 6 and 24-hour duration for the 2, 5, and 10-year frequency storms, if applicable.

E. The WQMP shall incorporate, but not be limited to, the following:

i) Site design BMP's,

ii) Source control BMP's,

iii) Pollutant control BMP's,

iv) Hydromodification

v) The WQMP shall identify affected and 303(d) receiving water bodies, applicable water-quality objectives, total maximum daily loads (TMDLS), pollutants of concern for the project type, and estimates for post-construction discharge rates (with all BMPs in place), and demonstrate that the project pollutant loads will be treated in accordance with the most current NPDES MS4 permit and will not cause a violation of the water quality objectives. The structural treatment and hydro-modification controls shall remove project pollutants anticipated to be generated by the project for the benefit of downstream impaired water bodies listed by the SWRCB 303(d) to a medium removal efficiency or better for the pollutants of concern.

vi) Long term operation and maintenance requirements, inspection and maintenance checklist;

vii) Record a restrictive covenant to ensure operation, maintenance, funding, and transfer of requirements.

viii) The post-construction best management practices (BMPs) outlined in the approved Final project-specific WQMP shall be incorporated in the grading plans.

F. A Water Quality Maintenance Agreement shall be recorded with the County Recorder and proof of the recordation shall be provided to the City. The agreement shall include summaries of water quality/hydromodification facilities and operations & maintenance.

i) The Maintenance Agreement shall identify public BMPs to be maintained by the development's assigned entity.

ii) The agreement shall also identify if the development's assigned entity fails to maintain said BMP(s) the City is authorized to maintain or replace BMP(s) for continued compliance and shall be reimbursed by the assigned entity.

G. A copy of the Final Project-Specific WQMP shall be kept onsite at all times. The Permittee/Owner shall make the occupants, tenants, staff, employees, and contractors aware of this document and educate them on the contents.

131. The project shall demonstrate infiltration abilities by converting the percolation tests taken at locations of proposed infiltration/biofiltration BMPs. Proposed BMPs shall be per the guidelines of the City of Murrieta's 2018 Santa Margarita Region Water Quality Management Plan and the most current order under the National Pollutant Discharge Elimination System (NPDES) Permit initiated under section 2 of the Federal Clean Water Act. The most current order shall be incorporated, as applicable.

132. The grading plan shall add a note to confirm the infiltration rates coincide with the rates used in the Water Quality Management Plan. If BMPs are to be placed in areas and/or depths different from the original infiltration testing, thereby posing potentially different infiltration rates from those originally obtained, new infiltration testing may be required, and BMP designs may be impacted.

133. It is the responsibility of the Permittee/Owner to ensure all applicable BMPs are correctly utilized as referenced in the California Stormwater Quality Association (CASQA) BMP Fact Sheet, and all maintenance measures implemented.

134. Where applicable, provide 12 foot wide x 6 inch thick concrete paved access to storm drain facilities with 12 percent maximum grade. Turnarounds are required, but may be waived depending on overall accessibility and at the discretion of the Public Works Director.

135. The Permittee/Owner shall submit, for City review and approval, a mechanism ensuring ongoing long-term maintenance for the onsite post-construction Best Management Practices (BMPs).

Hydrology & Hydraulics

136. The Permittee/Owner shall provide a Hydrology & Hydraulics Reports prepared by a registered Civil Engineer in accordance with currently accepted design standards.

137. Ensure the Report addresses any proposed commingled flows from adjacent properties, unless procedures are incorporated to otherwise convey and properly dispose of the flows without commingling.

138. Alteration to the existing drainage pattern, including concentration or diversion of flows, are not allowed, unless the Permittee/Owner obtains permission and/or agreements from the affected property owner(s). This may involve, but is not limited to, obtaining notarized/recorded letters of permission and/or agreements, securing drainage easements and/or ponding easements, constructing adequate drainage improvements, and providing a maintenance mechanism for private drainage facilities.

139. The Permittee/Owner shall be responsible for mitigating impacts created by changes in drainage runoff course, water quality, hydro-modification, concentration, or quantity to the satisfaction of the City Engineer for both on-site and off-site drainage.

140. Accept and properly dispose of all offsite drainage currently flowing onto and/or through the site.

141. If possible, all drainage shall be conveyed onto public property. Cross lot drainage shall not be allowed. Where unavoidable, proper permissions, agreements, and easements shall be obtained by the Permittee/Owner.

142. The report shall show all existing and proposed onsite and/or offsite public and/or private drainage facilities intended to discharge the runoff. The study shall include a capacity analysis verifying the adequacy of the drainage facilities. Runoff from the development or partial phase of development of the property shall meet the following criteria:

    A. Permittee/Owner shall be responsible for mitigating impacts created to changes in drainage runoff course or quantity, for both on-site and off-site drainage, to the satisfaction of the City Engineer.

    B. Do not significantly exceed the existing natural discharge quantities.

C. Street storm flows shall not exceed top of curb for the 10-year storm event.

D. Must contain storm flows within the street right-of-way for the 100-year event.

E. All inlets, outlets, pipes, channels, basins, etc. must be capable of conveying the 100-year storm.

F. Sump conditions shall be designed to convey the 100-year storm flows

G. Secondary emergency escape path shall be provided.

H. If the project discharges/connects to an off-site detention basin, provide permission to drain/connect from the owner of basin or system. Off-site detention basins require a Declaration of Dedication. All detention measures shall have positive drainage with a minimum 48-hr draw-down time and be empty within 72 hours.

I. Standing water is not permitted.

J. Detention for projects that are 10 acres or greater shall analyze for the 1, 3, 6 and 24-hour duration for the 2, 5, and 10-year frequency storms.

143. When continuous simulation is prepared (see Water Quality Management Plan section), and acceptable, the continuous simulation may be used in-lieu of the 1, 3, 6 and 24-hour duration for the 2, 5, and 10-year frequency storms, if applicable.

Storm Water Pollution Prevention Plan (SWPPP)

144. The development shall comply with all applicable regulations established by the United States Environmental Protection Agency (USEPA) as set forth in the National Pollution Discharge Elimination System (NPDES) permit requirements for urban runoff and stormwater discharge and any regulations adopted by the City pursuant to the NPDES regulations and/or requirements. Furthermore, the Permittee/Owner may be required to file a Notice of Intent with the State Water Resources Control Board to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity and may be required to implement a SWPPP concurrent with the commencement of grading activities. SWPPPs shall include construction pollution prevention and pollution control measures. The applicant shall comply with all the provisions of the Clean Water Program during and after all phases of the development process, including but not limited to: mass grading, rough grading, construction of street and landscaping improvements, and construction of structures.

145. An adequate SWPPP shall be available to State and City Inspectors at the job site prior to commencing construction. The Permittee/Owner shall be responsible for implementation, monitoring, operation, and maintenance of the SWPPP until all construction is completed and improvements have been accepted by the City.

146. This document must minimize the disturbed area, label the total disturbed area, and identify equipment and material storage areas.

147. All grading activities shall minimize dust through compliance with AQMD Rule 403, which requires watering during earth moving operations.

148. All open or undeveloped land shall be maintained to prevent wind/water erosion of said

land. All disturbed undeveloped land shall be planted with interim landscaping or stabilized with other erosion control measures.

149. The Permittee/Owner shall design and install the irrigation system so runoff does not discharge into the street or storm drain system.

150. Grading during the wet season should identify additional BMP's for rain events that may occur as necessary for compliance with the Santa Margarita Region MS4 Permit.

151. A copy of the Notice of Intent (NOI) and Waste Discharge Identification (WDID) number from the State Water Resources Control Board shall be identified on the SWPPP.

152. A Notice of Termination (NOT) can then be filed with the State Water Resources Control Board. Grading during the wet season should identify additional BMP's for rain events that may occur as necessary for compliance with the Santa Margarita Region MS4 Permit. This document must minimize the disturbed area, label the maximum disturbed area, and identify equipment and material storage areas.

153. Erosion and sediment control details shall be submitted on the grading plans to the City's Engineering Division for review and approval. The details shall conform to City standards, codes and ordinances, and the current State Water Resources Control Board (SWRCB) General Construction Permit (GCP), as applicable. The details shall include landscaping and irrigation systems on exposed slopes to achieve the General Construction Permit required coverage criteria, and for acceptance by the City's Engineering Department.

Final Map

154. The Permittee/Owner shall submit a Final Map prepared in accordance to the City of Murrieta Development Code and California Subdivision Map Act. The final map shall be prepared by a licensed land surveyor or qualified registered civil engineer.

155. The Final Map shall include the following "Improvement Note(s)" to identify required improvements prior to city-specified benchmarks (e.g., any permit issuance), in accordance with the Subdivision Map Act 66411.1. The following improvements notes shall be added on the Final Map:

    A. All public improvements, as identified per the conditions of approval and/or approved per the improvement plans, shall be completed, and accepted/as-built, prior to the first certificate of occupancy.

156. Prepare and record an Owner's statement acceptable to the City Engineer with a note to the effect that the property owner is responsible for the maintenance of the parkway lighting, landscaping and irrigation, and any applicable water quality treatment facilities/devices.

157. On-site public drainage facilities located outside of public right-of-way shall be contained within public drainage easements as determined to be necessary. A note shall be added on the Final Map stating, "Public *drainage easements shall be kept free of buildings and*

obstructions."

158. Prior to approval of the Final Map, the Permittee/Owner shall submit an application and pay a fee for the city administrator to reapportion any existing assessment district liens. The fee proposal from Willdan Financial Services includes a base amount and per parcel charge so the total amount will vary depending on the number of parcels.

159. Easements, when required for roadway, slopes, landscaping, drainage facilities, utilities, etc., for either onsite or offsite, shall be shown on the Final Map. The Permittee/Owner shall incur all costs associated with the formation of a suitable maintenance district or other mechanism to maintain all associated roadway, slope, landscape, and drainage easements, including access.

160. All offers of dedication and conveyances shall be submitted for review and approval and recorded as directed by the Engineering Department.

161. All easements and/or right-of-way dedications shall be offered on the Final Map to the City, or other appropriate agency, and shall continue in force until the City, or other agency, accepts or abandons/rejects such offer(s). All dedications shall be free from all encumbrances as approved by the Engineering Department.

162. Relinquish and waive abutter's right of access to and from Murrieta Hot Springs Rd, excepting those areas as shown on the approved tentative map.

163. Any proposed vacation(s) and/or abandonment(s) of existing right of way or public easements shall be shown on the Final Map, or per separate document(s) as approved by the City Engineer. Vacations and/or abandonments may be required to be approved prior to issuance of a grading permit.

164. Proof of payment of any, and all, delinquent property taxes shall be provided prior to recordation of the Final Map.

165. Provide an electronic copy of the Final Map in a PDF format and AutoCAD format, to the satisfaction of the City's GIS Department. A hard copy may also be required.

PRIOR TO ISSUANCE OF BUILDING PERMITS

166. The Permittee/Owner shall coordinate with the City's Construction Manager with approved/signed grading and/or improvement plans and grade/construct per said plans, as approved by the City Engineer.

167. The Permittee/Owner shall provide a copy of the recorded map and/or agreements to the Building Division and Engineering Department. Electronic and hard copies may be required, at the discretion of the City Engineer.

168. All easements, agreements of improvements, and dedications for required rights-of-way shall be approved by the Engineering Department.

169. Grading plans, with building pad location and elevation information, shall be approved, to the satisfaction of the City Engineer.

170. The building pad shall be certified by a registered Civil Engineer for location and elevation. Additionally, the Soils Engineer shall issue a Final Soils Report addressing compaction and site conditions.

171. The Permittee/Owner shall pay to the City all applicable Development Impact Fees as required by, and in accordance with, City Ordinance 196-98, Resolution No. 08-2107 and Resolution No. 16-3602, or most recently adopted DIF Resolution.

172. The Permittee/Owner shall pay to the City the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) based on the applicable rates at time of permit.

DURING CONSTRUCTION

173. The Permittee/Owner shall coordinate with the City's Construction Manager with approved/signed grading and/or improvement plans and grade/construct per said plans, as approved by the City Engineer.

174. Permittee/Owner shall construct all public improvements, per the approved and bonded improvement plans, as approved by the City Engineer.

    a. Minor field changes may occur at the discretion of the City's Construction Manager.

    b. Changes other than minor shall be submitted to the engineering department as a construction change submittal for review by engineering and approval by the City Engineer.

175. The Permittee/Owner shall construct all onsite grading improvements, per the approved and bonded grading plans, as approved by the City Engineer.

    a. Minor field changes may occur at the discretion of the City's Construction Manager.

    b. Changes other than minor shall be submitted to the engineering department as a construction change submittal for review by engineering and approval by the City Engineer.

176. If applicable, a qualified biologist shall delineate jurisdictional areas that are not to be disturbed. Barrier fencing shall be installed, as approved, delineating the areas of avoidance. Once construction is completed, the same qualified biologist shall certify that no jurisdictional area was disturbed or damaged.

177. Construction fencing shall be placed so as not to interfere with sight distance and comply with City Std. No. 214.

178. If dirt or construction debris is to be transported into, or off, the site, a haul permit will be required as part of the grading permit process. Both import and export locations must be permitted sites. If so, submit a proposed haul route plan and comply with all conditions and requirements the City Engineer may impose to the hauling operation.

179. The exact depth of street structural section and subgrade requirement shall be based on subgrade "R" value tests in the field and the appropriate Traffic Index for the type of street, as determined by the Geotechnical Engineer and the City Standards, whichever is greater.

180. If any water wells are found onsite, they shall be protected in place or abandoned, as approved by the State Department of Water Resources and Riverside County Health Department. Confirmation of abandonment approval shall be provided to the City.

181. The Permittee/owner shall confirm the infiltration rates coincide with the rates used in the Water Quality Management Plan. If BMPs are to be placed in areas and/or depths different from the original infiltration testing, thereby posing potentially different infiltration rates from those originally obtained, new infiltration testing may be required and BMP designs may be impacted.

182. The Permittee/Owner shall construct all sewer and water improvements necessary to serve this project. Private sewer force mains are not allowed in the public right-of-way unless otherwise approved by the City Engineer.

183. The Permittee/Owner shall install all existing and proposed utility systems underground, including electric lines 32kv and lower (as applicable), telephone, and cable TV, in accordance with City Codes, the utility provider, and as approved by the City Engineer. All applicable appurtenances shall also be installed. Easements shall also be provided as required.

184. Above ground Edison transformers shall be installed behind the right-of-way line, as approved.

185. Obtain clearance from the dry utility companies and gas company.

   a. Permittee/Owner shall install all dry, wet, and gas utilities prior to the placement of final cap or lift of asphalt pavement to avoid new street improvements from being marred by saw cuts, potholes, equipment, etc.

186. The building pad shall be certified by a registered Civil Engineer for location and elevation. Additionally, the Soils Engineer shall issue a Final Soils Report addressing compaction and site conditions.

   a. Building pad certification shall be obtained prior to building footing inspection.

   b. Building pad certification shall be obtained prior to building foundation cement pour.

187. The approved Storm Water Pollution Plan (SWPPP) shall be available onsite at all times from the Notice to Proceed until the issuance Notice of Termination. Moreover, the Permittee/Owner shall be responsible for implementation, monitoring, operation and maintenance of the SWPPP until all construction is completed and improvements have been accepted by the City.

188. The Permittee/Owner shall provide a construction area Traffic Control Plan, if required by the Traffic Engineer. The plan shall be prepared by a registered Civil Engineer in accordance with City standards and approved by the Engineering Department. The Traffic Control Plan shall address roadway widening / street closures / median improvement, detour or other disruption to traffic circulation as required by the Engineering Department.

189. Traffic signal improvements shall be installed/constructed to coincide with the street improvements as approved by the City Engineer.

190. Permittee/Owner shall provide proof of dedication of easement to the City for access and maintenance of any traffic equipment.

191. The Permittee/Owner shall reconstruct existing handicap access ramps within the public right-of-way, and adjacent to the project, to current ADA requirements, as approved by the City Engineer.

192. All existing street monuments within or abutting this project site shall be preserved. If such monuments are damaged or destroyed, the Permittee/Owner shall retain a licensed land surveyor or a qualified registered civil engineer to reset those monuments per City Standards 617a, 617b, 617c, and file the necessary information with the County Recorder's office as required by California Business and Professions Code Section 8771. If damaged, existing monuments that are no longer relevant do not have to be replaced, subject to approval by the City Engineer.

193. For reconstructed existing street(s) and/or intersection(s), street centerline monuments shall be set per City Std. 617a, 617b, and 617c, and elevations provided, unless specified otherwise by the City Engineer, or assignees.

    A. Set street centerline monumentation for the following street(s) and/or following intersection(s):

        i) Murrieta Hot Springs Rd & Monroe Ave.

194. Centerline tie notes may be provided, when applicable as noted on City Std. 616, on 8.5 x 11 mylar sheets (identify locations if possible). Prior to installation, each location where tie notes may apply shall be reviewed and approved by the City Engineer, or assignees, to determine monument type to be used.

PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY

195. Prior to the issuance of the first (1st) certificate of occupancy, all public improvements, per the approved public improvement plan(s), shall be constructed, completed, and accepted/as-built, to the satisfaction of the City Engineer.

196. Prior to, but not necessarily the last, issuance of all certificates of occupancy, final grading of the subject property shall be constructed, completed, and accepted/as-built, to the satisfaction of the City Engineer.

197. All sewer and water improvements shall be constructed, completed, and accepted in accordance with the Sewer and Water District standards.

198. All existing and proposed dry, wet, and gas utility lines have been undergrounded and/or relocated, and/or easements provided, as necessary.

199. Final Map shall have been recorded, accepted by County, and a copy provided to the City Engineer, in the format requested.

200. If applicable, provide elevations for set Street Centerline Monuments. If approved, provide centerline tie notes per City Std. 616 on 8.5 x 11 mylar sheets for all monuments set.

201. Demonstrate that all treatment control BMP's described in the Final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications and the Permittee/Owner is prepared to maintain all BMP's described in the approved Final project-specific WQMP.

202. The Permittee/Owner shall prepare and provide an as-built project specific Final WQMP (updated to include any changes made during construction) and demonstrate that an adequate number of copies are available for the future owners / occupants.

    a. One (1) electronic format shall also be provided to the Department of Engineering, and/or a hard copy as requested.

203. The Permittee/Owner shall demonstrate that the irrigation controller and heads are set so irrigation runoff does not enter the street or storm drain systems.

204. The Permittee/Owner shall disclose to any other property owner(s) they are responsible for the maintenance of the parkway landscaping. And any other work within the public right-of-way will require an encroachment permit from the Engineering Department.

205. The Permittee/Owner shall provide one set of Mylars, scanned copy, and electronic copy of "As-Built" drawings of the grading and improvement plans. The electronic copy shall be in an AutoCAD format to the satisfaction of the City's GIS Department[2]. Coordinate system shall be NAD 1983 State plane California Zone V1 FIPS 0406 Feet.

    a. The Permittee/Owner shall provide electronic copies (e.g., thumb drive) of the approved WQMP, Hydrology/Hydraulic Report, Final Geotechnical Report, and any other applicable document(s). Said Electronic copies shall be in a Word.doc, PDF format, and/or other acceptable Microsoft format.

    b. The "As-Built" mylars shall include any, and all, construction changes, as well as all dry, wet, and gas utilities.

206. Obtain written clearance, as deemed necessary by the Engineering Department, from the following agencies:

    A. Planning Division

B. Engineering Department

C. Building Division

D. Fire Department

E. Landscape (Planning)

F. Community Services Department

G. Sewer and Water District(s)

H. Utility Companies

I. Southern California Edison Company

FIRE DEPARTMENT

General:

207. The project shall comply with all requirements set forth by the California Code of Regulations Title 24 Parts 1-12 respectively.

208. The adopted edition of the California Code of Regulations, Title 24, Parts 1 through 12, and the Murrieta Municipal Code shall apply at the time the architectural plans are submitted for construction permits.

209. Prior to the issuance of any grading permit, the applicant shall provide evidence of sufficient fire flow of 3,000 GPM for 3 hours to the City of Murrieta Fire & Rescue. Murrieta Fire & Rescue Water Available/Fire Flow Form shall be utilized. The fire flow report shall be completed within 6 months of the time of submittal.

210. Prior to the issuance of any grading permit, the applicant shall provide a fire department access plan to the City of Murrieta Fire & Rescue for review and approval. The fire department access plan shall comply with the requirements specified by Murrieta Municipal Code, California Fire Code (CFC), Chapter 5 and Appendix D.

    a. Add a note to the fire access plans that all planter areas adjacent to any fire lane that the planting of trees and landscape shall not encroach into the fire lane and maintain a clear height of 13'-6" beneath the canopy.

    b. Add a note on the plans that all required fire hydrants shall be readily visible and immediately accessible. A clear space of not less than 5-feet shall be maintained at all times. Fire Hydrants shall be centered in a 4-foot x 4-foot concrete pad.

211. Prior to the issuance of any grading permit, the applicant shall submit water improvement plans to the City of Murrieta Fire & Rescue for review and approval. The Developer shall furnish Murrieta Fire & Rescue with three (3) copies of the water improvement plans designed by a Registered Engineer and/or Licensed Contractor. On-site private fire service mains shall have a minimum of eight (8) inch water mains with six (6) inch laterals and risers. Larger pipes may be required to meet required fire flow

requirements. Fire hydrants shall provide one 4” port and 2- 2 ½ ports and must be an approved fire hydrant type. The private fire hydrant system must be approved, installed, tested, and accepted, prior to combustible construction.

212. Prior to the issuance of any building permit, the applicant shall install all required fire hydrants and water supplies with the following specific items:

a. The fire hydrants shall be operational prior lumber drop and building construction. All fire hydrants shall remain operational during construction.

b. All required fire hydrants shall be readily visible and immediately accessible and adjacent to the approved fire access road. A clear space of not less than 5 feet shall be maintained. Fire Hydrants shall be centered in a 4-foot x 4-foot concrete pad.

c. Fire hydrants shall be installed at intersections, at the beginning radius of cul-de-sacs, and every 300 feet of fire access roadways, regardless of parcel size. The size of fire hydrant outlets shall be a minimum of one 4 inch and two 2-½ inch NST outlet as required by the Fire Code official.

d. A minimum of two points of connection to public water shall be provided for the private fire-line water.

e. The private underground fire-line system shall be a looped design.

f. The private underground fire-line system shall have indicating sectional valves for every five (5) appurtenances.

g. The Fire Department Connection (FDC) shall be located within 50 feet of a public fire hydrant. The fire hydrant shall be on the same side of the street as the FDC. A vehicle access roadway/approach shall not be placed between the FDC and fire hydrant. A private hydrant may be used to support the FDC provided that an aboveground check valve is installed in a manner that prevents water from the FDC circulating back to the fire hydrant.

213. Prior to the issuance of any building permit, the applicant shall submit fire sprinkler system plans per NFPA13 for review and approval by the City of Murrieta Fire & Rescue.

214. Prior to lumber drop and construction, the general contractor shall install and post a temporary address sign which is clearly visible from the street.

215. Prior to certificate of occupancy, a permanent building address shall be provided and either internally or externally lit during hours of darkness (Mt Palomar lighting requirements apply). The address shall be clearly visible from the street fronting the property. The numbers shall be a minimum of 12” in height with a minimum stroke of 1”. The background and numbers shall be highly contrasting.

216. Prior to building final, the building shall be provided with a Knox Lock key box located no more than 6-feet above the finished surfaced and near the main entrance door.

217. For all buildings greater than 10,000 square feet, prior to the issuance of a Certificate of Occupancy each building shall be provided with an emergency radio communication enhancement system that complies with CFC § 510 and MMC § 15.24.200. Plans for the emergency radio communication enhancement system shall be submitted to Murrieta Fire & Rescue for review and approval prior to installation. The system shall be installed and inspected by the Murrieta Fire & Rescue before the Certificate of Occupancy is issued. The requirement can be waived by the Fire Marshal if the building is evaluated by an Emergency Radio Communication Specialist licensed by the FCC, who certifies the building meets the emergency communications capability as specified by the CFC § 510 and MMC § 15.24.200. The certification shall be in the form of a written report which outlines the analysis used in determining the building meets the emergency communications without an enhancement system.

218. Murrieta Fire & Rescue approval shall be obtained prior to the storage and/or use of hazardous materials as defined by the CFC.

219. Murrieta Fire & Rescue approval shall be obtained prior to any high pile storage (HPS) as defined by the CFC.

220. A lighted directory map, meeting current fire department standards, shall be installed at the driveway entrance.

COMMUNITY SERVICE DEPARTMENT

221. Prior to approval of street improvement plans, the permittee shall prepare landscape plans for any Murrieta Community Service Department (MCSD) maintained areas.

222. Street improvements trigger the developer to install and modify the existing raised landscape medians along Murrieta Hot Springs Road. All landscaping within the raised median shall be installed per Community Service District's (CSD) Standards and Specifications Book. The Standards and Specifications Book can be found online at http://www.murrietaca.gov/DocumentCenter/View/1259/Community-Services-Department-Standards-and-Specifications-Book-PDF?bidId. Median landscape plans shall be included with the street improvement plans and reviewed by Public Works /MCSD. Please contact the Parks and Recreation Department at 951-461-6124 to set up an appointment for landscape plan review.

223. The applicant shall have in place an Association and/or Property Management to maintain all common areas, irrigation and landscape along the roadways as shown on plan. There appears that no areas will be maintained by the City of Murrieta, Community Services District.

224. The applicant shall contact the Murrieta Community Services Department (MCSD) prior to any construction in the existing landscape public right of way area maintained by the MCSD.

WATER DISTRICT

225. The Permittee/Owner shall meet all requirements established by the Eastern Municipal Water District. Prior to issuance of building permits, the permittee shall meet with the Eastern Municipal Water District to develop a plan of service, which shall detail water, wastewater and recycled water requirements to serve the project.

END CONDITIONS

EXHIBIT C

Addendum to the Supplemental Environmental Impact Report Prepared for The Triangle Specific Plan (SP0-007-2452)

SCH Number: 2008061104

Addendum to the Subsequent Environmental Impact Report Prepared for The Triangle Specific Plan (SP0-007-2452)

SCH Number: 2008061104

Prepared to Evaluate:

The Shops at the Triangle

Planning Applications:

Specific Plan Amendment (SP) 2023-00003

Development Plan (DP)2022-2705

Tentative Tract Map (TTM) 2022-2706

Development Agreement 2023-00003

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August 2024

TABLE OF CONTENTS

TABLES

APPENDICES

SECTION 1.0 PURPOSE AND BACKGROUND

1.1 PURPOSE

The overall Triangle Specific Plan was analyzed in a Subsequent Environmental Impact Report (SEIR) (State Clearinghouse [SCH] No. 2008061104). The SEIR was circulated in February 2013 and was certified by the City of Murrieta in October 2013 (City of Murrieta 2013a and 2013b).

The purpose of this evaluation is to assess, in light of the requirements of Public Resources Code (PRC) Section 21166, the consistency of The Shops at the Triangle Project (the Project or the current Project) with the SEIR prepared in compliance with the California Environmental Quality Act (CEQA).

1.2 BACKGROUND

This Addendum incorporates information from the SEIR to demonstrate that none of the events specified in PRC Section 21166 requiring subsequent environmental documentation have occurred. The following information provides context to the current Project.

1.2.1 CERTIFIED SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Project Location and Setting

The Triangle Specific Plan Project site is an approximate 64-acre, triangular-shaped property located in the City of Murrieta. The Project site is bordered by Murrieta Hot Springs Road to the north, Interstate (I) 15 to the southwest, and I-215 to the east. Regional access to the Project site is provided by I-15 and I-215.

The topography on the Project site slopes from north to the south. Elevations on the Project site range from approximately 1,112 feet above mean sea level (AMSL) near the northeastern corner to approximately 1,152 feet above AMSL near the northwestern corner. The Project site consists of vacant lands that have been previously graded. The Project site is regularly disturbed by weed abatement activities. A cleared dirt and gravel lot is located in the northwestern portion of the Project site. Gravel trails cross the Project site and several lined basins with lined spillways are scattered throughout. There are no permanent structures on the Project site; however, there are some temporary structures including for a seasonal strawberry stand and a Christmas tree lot/pumpkin patch, and two billboards that are located along the Project site’s perimeter.

Vegetation within the Project site includes disturbed/developed areas, ruderal areas, and disturbed buckwheat scrub habitat (Hernandez Environmental Services 2023).

The Project site contains a small, unnamed tributary to Murrieta Creek that conveys runoff from I-215 across the southern corner of the Project site. The drainage enters the Project site along the southeastern boundary and meanders through the southern portion of the Project site for approximately 524 feet until it exits at the southern boundary of the Project site. The drainage continues off-site for approximately 70 feet before it flows into a culvert and continues under the I-15 Freeway and outlets 0.12 mile north of

Monroe Avenue and continues for approximately 1 mile via storm drains until it connects to Murrieta Creek, which ultimately drains into the Santa Margarita River.

Land uses surrounding the Project site are primarily commercial, but also include office, light industrial, institutional, and residential. The Rancho Springs Medical Center is located north of the Project site along with several medical office buildings. Larger, big box retail stores are located east and west of the Project site along Murrieta Hot Springs Road, and limited residential development exists beyond that. West of I-15 and south of the WalMart center along Murrieta Hot Springs Road, development consists of a mix of rural residential and light industrial uses.

The Project site drains to Murrieta Creek and ultimately to the Santa Margarita River. Storm water from an approximate 38-acre off-site area enter the Project site from the east via three culverts that cross under I-215 and discharge via one culvert inlet onto the northeast corner of the Project site.

Project Description for the Overall Triangle Specific Plan

The overall Triangle Specific Plan consists of approximately 64.3 acres of mixed-use development that feature an open-air retail commercial district. Approved uses include retail uses in one or more shopping areas that blend restaurants, a mix of small and large retail stores, entertainment uses, and possibly offices located above retail uses; mid- and high-rise professional office space, served by parking structures; and hospitality uses that may include hotel rooms, conference and meeting space, dining, and its own recreational amenities. The intensity of development approved for The Triangle Specific Plan is regulated by the maximum gross building area for the site, building heights, property setbacks and parking requirements. Table 1 provides a summary of the maximum gross building area for approved land uses.

TABLE 1
STATISTICAL LAND USE SUMMARY FOR THE TRIANGLE SPECIFIC PLAN

Land Use	Phase 1A (gsf)	Phase 1B (gsf)	Phase 1C (gsf)	Phase 2 (gsf)	Phase 3 (gsf)	Buildout (gsf)
Restaurant	49,392	25,730	–	–	50,136	125,258
Commercial/ Retail	–	184,486	155,228	99,060	202,140	640,914
Theater	–	74,660	–	–	–	74,660
Hotel (220 rooms)	–	–	–	148,000	–	148,000
Office[a]	–	48,000	–	482,000	249,082	779,082
Total Maximum Gross Building Area[b]	49,392	322,876	155,228	729,060	501,358	1,767,914
gsf: gross square feet						

Land Use	Phase 1A (gsf)	Phase 1B (gsf)	Phase 1C (gsf)	Phase 2 (gsf)	Phase 3 (gsf)	Buildout (gsf)

[a] The office building use may include approximately 80,000 gsf of office space that may be located above retail.

[b] The individual building use gross building areas are approximate only and subject to change. In no case will the total maximum gross building area for the Project exceed 1,767,914 gsf.

Source: City of Murrieta 2013a and 2013b.

The Triangle Specific Plan was anticipated to be developed in phases based on market demand. Utility infrastructure for the overall Triangle Specific Plan was planned to be developed during Phase 1a. The SEIR assumed that the Specific Plan land uses would be built out over approximately 7 years. Phase 1a was anticipated to be completed in 2014, Phases 1b and 1c were expected to be completed by 2015, Phase 2 by 2019, and Phase 3 by 2021. This Addendum includes discussion where applicable regarding the Project's delayed implementation and how this might affect the environmental analysis and conclusions previously made by the City in the SEIR.

The Property Owner/Developer is concurrently processing an amendment to the Specific Plan (Planning Case No. SP-2023-00003) to update the Specific Plan and to modify the Conditions of Approval applicable to the Project site to (a) authorize drive through food uses, (b) to modify setbacks, landscape requirements, and similar site related conditions and standards to improve site conditions, enhance public spaces and allow greater flexibility in development to facilitate the synergy of best in class regional tenants, and (c) to update, clarify, modernize, enhance and increase the availability of signage and to add electronic signage to increase the visibility of the Project.

SECTION 2.0 PROJECT SETTING

2.1 REGULATORY SETTING

The consistency evaluation in this Addendum is prepared in accordance with the requirements contained in Section 21166 of the Public Resources Code. This Addendum contains an evaluation compares the current Project with the analysis and conclusions contained within the SEIR for the Triangle Specific Plan.

Section 21166 of the Public Resources Code states:

> "When an environmental impact report has been prepared for a project pursuant to this division, no subsequent or supplemental environmental impact report shall be required by the lead agency or by any responsible agency, unless one or more of the following events occurs":
>
> 1. Substantial changes are proposed in the project which will require major revisions of the environmental impact report.
> 2. Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report.
> 3. New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

If any of these three conditions apply, then subsequent environmental documentation would be required. The State CEQA Guidelines, specifically, Section 15162, provides more detail on how to assess the applicability of these standards. These parameters, summarized as follows, have been applied in the consistency evaluation that is provided in Section 4 of this Addendum.

(a) Substantial changes are proposed in the project which will require major revisions of the EIR.

The following four conditions must be found to exist for a finding that the first part of the test applies:

- The change in the project is substantial;
- The change involves new significant environmental impacts or a substantial increase in the severity of previously identified significant environmental impacts;
- The change will require major revisions to the previous EIR based on the new or more severe significant environmental impacts; and
- The new or more severe impacts were not considered in the previous EIR

(b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the EIR.

Four conditions must be found to exist for a finding that the second part of the test applies:

- The change in circumstances is substantial;
- The change involves new significant environmental impacts or a substantial increase in the severity of previously identified significant environmental impacts;
- The change will require major revisions to the previous EIR based on the new or more severe significant environmental impacts; and
- The new or more severe impacts were not considered in the previous EIR

(c) New information of substantial importance, which was not known and could not have been known at the time the EIR was certified, becomes available.

New information must show one of the following for the third part of the test to apply:

- The project will have significant effects not evaluated in the prior EIR;
- Significant effects previously examined will be substantially more severe than shown in the prior EIR;
- Mitigation measures or alternatives previously found infeasible are in fact feasible and would substantially reduce significant effects of the project, but the project proponent declines to adopt the mitigation measure or alternative; or
- Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce significant effects of the project, but the project proponent declines to adopt the mitigation measure or alternative.

SECTION 3.0 PROJECT DESCRIPTION

Summary

The Property Owner/Developer is requesting a Specific Plan Amendment (SPA) be approved by the City, which is necessary to better reflect the current site plan proposal, current market trends, and to provide more flexibility in implementing the Specific Plan without requiring the overhaul of the entire Specific Plan document.

The current Project, The Shops at the Triangle, consists of approximately 279,500 square feet of retail development. The development would be built on the northern portion of the triangular Project site on approximately 36.46 acres that generally front Murrieta Hot Springs Road.

Changes to the Specific Plan

Changes to the allowed uses in "Use Table 2-1"

- Allow drive through restaurant/fast food uses with limitations.
  - Planning Area 3 – Must be 200 feet back from Murrieta Hot Springs Road
- Adds "Vehicle Rental" as an allowed use, as an office only.
- Adds "Golf Driving Ranges (with or without restaurants) subject to a Minor CUP
- Changes "Outdoor Recreation, Commercial" from a CUP to a Minor CUP.
- Adds Hospitals, subject to a CUP
- Adds Extended Care Facilities (less than 30 day stay), subject to a Minor CUP.
- Modifies criteria for "Warehouse Retail Stores" to state "greater than 70,000 sf" and subject to a Minor CUP
- Amend "Veterinary Clinics, Animal Hospitals, Kennels and Boarding Facilities" from a permitted use to a Minor CUP and to remove the restriction that the facility be within a retail business and cannot exceed 40% of the business floor space.

Changes to Development Standards

- Change the 60-foot landscape setback along Murrieta Hot Springs Road to 15 feet for parking areas and 25 feet for buildings, with allowances for certain exceptions (For reference, See Exhibit 2-28 through 2-31 and Section 2.5.3-Office, Section 2.5.4-Retail & Restaurant, and Section 2.5.5-Hotel) (Section 2).
- Reduce various building and landscape setback requirements within the interior of the specific plan area (Section 2).
- Modify various setback standards as a result of changing the setbacks from the landscape setback to a more conventional method of applying setbacks from property lines (Section 2).

- Reduce parking garage setbacks from Murrieta Hot Springs Road from 100 feet to 25 feet when less than two stories (Section 2).
- Include provisions for the replacement of the two existing billboards for two electronic billboards (Section 4).
- Increasing the allowances for additional freeway and pylon signs, increased heights, larger sign area, and larger area for on-site digital signage (Section 4).
- Authorize the Development Services Director to consider reductions to various setbacks within the specific plan, either through a set 25% reduction, or through specified changes identified as Minor Exceptions (Section 4).

Tentative Tract Map 38622

A second component of the project is Tentative Tract Map 38622 which covers the entire 64.3-acre specific plan area. The map proposes to create 23 lots/parcels. There are five (5) lettered lots shown on the map which are required in order to dedicate specified areas along Murrieta Hot Springs Road to provide appropriate road right-of-way to meet city standard 102A, which is a 150 foot wide road width. Additional width is also necessary in areas where a deceleration lane is designed. The map includes a request for a vacation of a previously dedicated road, Rogers Dale Avenue. An access easement is shown providing appropriate legal and emergency/public access to all lots within the subdivision.

Development Plan 2022-2075

The project proposes approximately 279,500 square feet of retail development on 36.46 acres to begin development in this initial phase, accounting for approximately 25 buildings with twelve (12) of the buildings being pad buildings (a building or two buildings typically located in a separated area away from the primary shopping center buildings (in-line) surrounded by parking, drive aisles, landscaping) and the remaining considered to be in-line buildings (buildings typically aligned directly adjacent to each other, in many cases appearing as a single building). Eight of the twelve (12) pad buildings are located along Murrieta Hot Springs Road and the most easterly building proposed as a fast-food drive through. The development is focused on the northerly portion of the site in this initial phase as future phases would occur on the southerly portion. Specifically, there is 197,191 square feet of retail uses and 82,347 square feet of food/restaurant uses with 11,100 square feet of outdoor dining area. There are two primary access points into the center, one across from future Monroe Avenue (current Sparkman Court) and the other is across from existing Hancock Avenue, both of which will be signalized. Additional access will be provided in between the two primary access drives and will be limited to right-in and right-out vehicle turning movements. A total of 1,675 parking spaces are provided, which is more than would be required for this amount of retail development utilizing City standards in the Development Code.

Infrastructure improvements would consist of widening of Murrieta Hot Springs Road primarily to accommodate deceleration lanes into the project site and the installation of traffic signals at Hancock and Monroe Avenue. A sewer line will be extended from the north side of Monroe through the project site, under I-15 and connect to an existing line on the west side of I-15. Monroe Avenue on the north side of

Murrieta Hot Springs Road will also be realigned and widened to be more perpendicular to Murrieta Hot Springs Road and to accommodate proper lane configuration from the south side.

The proposed Development Plan anticipates being constructed in phases. All infrastructure (roads, signals, water/sewer, utilities) would be constructed prior to occupancy of any buildings within the first phase.

Development Agreement

The current Project includes the approval of a Development Agreement for the Project that includes specific details on the payment of development impact fees, payment for off-site improvements, and on the removal and replacement of billboards in the Project Site. The Project Site currently includes two double sided static billboards. The Development Agreement would allow the Property Owner/Developer to apply for a billboard relocation agreement pursuant to Title 16 of the Murrieta Municipal Code which, if approved, would memorialize the terms and conditions upon which Developer would have the right to relocate and reconstruct certain legally existing billboards within the Property ("Relocation Agreement"). At a maximum, two (2) new digital billboards would be relocated/reconstructed on the Project Sit and the existing non-conforming double-sided static billboards would be removed from the Project Site. No other aspects of the Development Agreement would have the potential to result in an environmental impact.

Phasing

The current Project consists of a portion of the development allowed for in the Triangle Specific Plan and that is generally proportional to the allotments shown above in Table 1 for Phases 1A, 1B, and 1C of the overall Triangle Specific Plan. There are a few minor differences between the phasing that was anticipated in the SEIR for the overall Triangle Specific Plan and the current Project, which are noted below. The Triangle Specific Plan and the SEIR assumed and allowed for minor deviations from the phasing based on market demand. Primary differences between the approved Triangle Specific Plan and current Project include the following:

- Overall, the Project would develop 279,500 gsf, which is approximately 247,996 gsf less of development than the 527,496 gsf of development that is approved for Phases 1A, 1B, and 1C of the Project, as shown in the SEIR.
- The Project would develop approximately 82,347 gsf of food/restaurant uses earlier than was expected for Phases 1A, 1B, and 1C in the SEIR; however, overall the Project would still be well below the 125,258 gsf of restaurant uses assumed for buildout.
- The Project would develop approximately 197,191 of retail uses, which is approximately 142,523 gsf fewer of commercial/retail uses than the 339,714 gsf that was expected of commercial/retail uses for Phases 1A, 1B, and 1C in the SEIR.
- No theater uses are currently proposed by the Project, whereas the SEIR assumed that all 74,660 sf of a theater would be built in Phase 1B.

Infrastructure

As anticipated in the SEIR, as the first phase of development within the Project site, the current Project will install the basic infrastructure that would be needed for the overall development. This includes the installation of the electrical, potable water, sewer, and stormwater drainage mainline systems for the overall development. Similarly, a portion of the internal connector road would be fully built out as part of the current Project, as anticipated in the SEIR. The current Project will also include roadway improvements, as discussed in PDF 10-1, including the installation of a signal on Murrieta Hot Springs Road and Monroe Avenue (i.e., Sparkman Court) and signal modifications at the existing intersection of Murrieta Hot Springs Road and Hancock Avenue.

Configuration of Development

The Project maintains the four separate planning areas, and general alignment of the internal connector road that were identified in the SEIR, although the SEIR allowed for the boundaries of the planning areas and alignment of the internal connector road may be reconfigured through review of the future Development Plans if desired by the Property Owner/Developer.

New Discretionary Approvals

The Project would require discretionary actions including: a Development Plan; a Tentative Tract Map; a Specific Plan Amendment; and a Development Agreement.

New land uses are proposed as part of the current Project that would be compatible with the uses allowed within the Specific Plan, and which are typical of a modern retail center.

Climate Action Plan Requirements

The following requirements apply to the current Project in accordance with the City's Climate Action Plan. For more details, see Appendix D, Climate Action Plan Consistency Checklist.

- Consistent with City requirements, the Project would recycle and/or salvage for reuse a minimum of 80 percent of the nonhazardous construction and demolition waste in accordance with either Section 5.408.1.1, 5.408.1.2 or 5.408.1.3 of the California Code of Regulations, Title 24.
- A transportation demand management plan has been prepared for the Project that meets requirements of Section 16.40 "Transportation Demand Management" of the City's Municipal Code and has been reviewed and approved by the City of Murrieta Public Works Department (RK Engineering Group, Inc. 2024). This Transportation Demand Management Memorandum is provided as Appendix G. The Transportation Demand Management Memorandum was prepared to develop strategies to reduce single-occupancy employee vehicle trips to and from the Project Site. The Transportation Demand Management Memorandum provides an evaluation of the number of employees that would work within the Project Site, and it describes the alternative transportation options that are available to employees that will travel to the Project Site. The memorandum provides Transportation Demand Management recommendations for the Project, including: providing flexible schedules to allow for use of public transit and carpooling; providing

preferential parking for employees that carpool; providing a transit information center for employees; and providing secure bicycle parking.

- Twenty percent of the total parking spaces required include Electric Vehicle Service Equipment (EVSE) to allow for electric vehicle charging by the occupant(s).
- The Project would include the planting of new trees where required by Section 16.28 "Landscaping Standards and Water Efficient Landscaping" of the City's Municipal Code.

SECTION 4.0 EVALUATION PURSUANT TO SECTION 21166

The discussion and analysis in this consistency document evaluates if the Project would result in any of the conditions identified in the three-part test in Section 21166 of the Public Resources Code (see Section 2.1 of this evaluation for the discussion of Section 21166 standards). To ensure this analysis is comprehensive, the topical areas identified in the most recent updates to the State CEQA Guidelines Environmental Checklist (Checklist) are used as guidance for this evaluation. This comparative analysis provides the City of Murrieta with the factual basis for determining whether any changes in the Project, any changes in circumstances, or any new information since the SEIR was certified, rise to the level that would require substantial revisions to the SEIR.

The analysis in this document includes a brief discussion of the environmental topics provided in the SEIR and how and if major revisions of the SEIR are required in light of modifications to the Project description, changed circumstances, and availability of information that was not known before. In addition to this discussion, the Project is evaluated in light of the criteria outlined in Section 21166 of Public Resources Code. Findings will be made as to the significance of changes to the Project and if those changes would require significant revisions of the SEIR; if there have been significant changes in circumstance under which the Project is implemented that would require major revisions in the SEIR; and if there is new information that was not known before that would become available.

The site plan for the current Project that was utilized in this analysis is provided as Appendix A.

Applicable mitigation measures for the current Project that were specified in the certified SEIR are provided within the Mitigation Monitoring and Reporting Program (MMRP) provided as Appendix B.

To summarize the analysis in this Section 4.0, there are no changes to the Project that would require significant revisions to the SEIR, no changes in circumstances that would require major revisions to the SEIR, and no new information that would require major revisions to the EIR.

4.1 AESTHETICS

Consistency Evaluation

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The Project would not exceed the height allowances for buildings that are defined within the SEIR. The topography and layout of the planning areas and the internal road that are proposed as part of the Project are generally the same as what was described for the Triangle Specific Plan in the SEIR. The Project would include the removal of two existing static billboards and the construction of two replacement electronic/digital billboards that were not evaluated within the SEIR. Given the number of billboards would not increase with the Project from existing conditions, the Project would not result in substantial damage to scenic vistas. The two replacement electronic/digital billboards would be reviewed by the City to ensure compliance with applicable City requirements including the Mt. Palomar lighting standards contained in Murrieta Municipal Code Section 16.18.110. Also, a highway advertising permit would need to be acquired from Caltrans. During the permitting process, Caltrans will review the billboards to ensure compliance with other applicable requirements including the State's Outdoor Advertising Act requirements and the Federal Highway Beautification Requirements. There are no other aspects of the Project that have changed substantially that could increase impacts to scenic vistas.

Similar to as identified in the SEIR, the Project would alter the existing visual condition of the Project site through introduction of development on a previously disturbed, undeveloped site. With implementation of PDFs 1-1 through 1-5, 1-9, and 1-10 the visual appearance of the Project would represent a unified, cohesive development. Adherence to the Development Standards identified in The Triangle Specific Plan, and implementation of The Triangle Design Guidelines which incorporate provisions of City's Commercial Districts Design Standards would ensure that proposed development would not degrade the visual character or quality of the Project site or surrounding areas.

No deviation from the standards mentioned above are proposed as part of the Project.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR, including disturbed topography and vegetation. The Project site is disturbed/previously graded with no scenic resources and there are no scenic vistas within the Project site.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

<u>**No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR**</u>

Substantial changes proposed in Project, which will require major revisions to the EIR?

The Project would include the removal of two existing billboards and the construction of two replacement electronic billboards that were not evaluated within the SEIR. Given the number of billboards would not increase with the Project from existing conditions, the Project would not result in substantial damage to scenic resources. Also, the two replacement electronic/digital billboards would be reviewed by the City to ensure compliance with applicable City requirements including the Mt. Palomar lighting standards contained in Murrieta Municipal Code Section 16.18.110. Also, a highway advertising permit would need to be acquired from Caltrans. During the permitting process, Caltrans will review the billboards to ensure compliance with other applicable requirements including the State's Outdoor Advertising Act requirements and the Federal Highway Beautification Requirements. No other aspects of the Project would result in increased impacts to scenic resources.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that existed at the time the SEIR was certified, including land use, topography, vegetation coverage, etc. not contain any scenic resources.

Consistent with the SEIR, the Project site is not visible from a State scenic highway. There are presently no officially designated State Scenic Highways that traverse Murrieta. I-15, which traverses the southwestern portion of Murrieta, is still an "Eligible State Scenic Highway" as it was at the time the SEIR was certified (Caltrans 2023).

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

This threshold has been modified in the current State CEQA Guidelines since certification of the SEIR. Previously, the threshold solely focused on whether a Project would substantially degrade the existing visual character or quality of the site and its surroundings. As written above, the current State CEQA threshold has been written to eliminate the requirement to evaluate whether a Project would degrade the existing visual character and quality of the Project site and its surroundings. For Projects within urbanized areas, such as the Project site, significance related to this threshold is determined solely based on whether the Project would conflict with applicable zoning and other regulations governing scenic quality. The Project is consistent with the current zoning for the Project site and would therefore be presumed to have a less than significant impact related to the updated threshold.

Related to the former threshold, consistent with the findings in the SEIR, the Project would alter the existing visual condition of the Project site through introduction of development on a previously disturbed, undeveloped site. Project Design Features (PDFs) 1-1 through 1-5, 1-9, and 1-10 would be implemented as part of the Project so that the overall Project site represents a unified, cohesive development. Adherence to the Development Standards identified in The Triangle Specific Plan, and implementation of

The Triangle Design Guidelines which incorporate provisions of City's Commercial Districts Design Standards would ensure that proposed development would not degrade the visual character or quality of the Project site or surrounding areas. The Project would involve minor revisions to the applicable development standards, including updates to Section 2.8.5, Billboard Replacement of the Triangle Specific Plan. This Specific Plan Amendment change would then provide a mechanism to allow for the construction of the two proposed replacement electronic billboards and would not result in any substantial changes to existing visual character or quality.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. Zoning for the Project site has not changed since the SEIR was certified. There has been minimal development on parcels near the Project site; therefore, the visual character of the vicinity has not changed substantially since the SEIR was certified. Several residential projects are being developed north of the Project Site, which are further urbanizing the Project vicinity.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

<u>No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR</u>

Substantial changes proposed in Project, which will require major revisions to the EIR?

The Project involves outdoor lighting, similar to what was assumed in the SEIR. As required by PDF 1-6, a Lighting Plan will be developed and submitted for review prior to approval of the Project that will demonstrate that the development standards identified in The Triangle Specific Plan as outlined in PDF 1-7 have been implemented. As required by PDF 1-7, 1-8, and 1-9, prior to approval of the Project, the Property Owner/Developer will be required to demonstrate to the City consistency with applicable standards related to exterior lighting and colors and materials. Also, as required by Mitigation Measure MM 358 AES-1, prior to site plan approval, the Property Owner/Developer will demonstrate to the satisfaction of the City of Murrieta Community Development Director or his/her designee, that no lighting will create a safety hazard or nuisance to off-site vehicular traffic or adjacent land uses. Measures to mitigate potential effects involve building design, building setbacks and screening direct lighting so as to avoid safety and nuisance hazards. The Project would involve the removal of two existing billboards within the Project Site and their replacement with two new electronic billboards that would be approximately 60 feet tall. To avoid the potential for the increased lighting from these billboards to result in light pollution, the two replacement electronic/digital billboards would be reviewed by the City to ensure compliance with applicable City requirements including the Mt. Palomar lighting standards contained in Murrieta Municipal Code Section 16.18.110. Also, a highway advertising permit would need to be acquired from

Caltrans. During the permitting process, Caltrans will review the billboards to ensure compliance with other applicable requirements including the State's Outdoor Advertising Act requirements and the Federal Highway Beautification Requirements. All of the PDFs and the MM identified above would still be applicable and implemented as part of the Project.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing exterior lighting environment is similar to the conditions that existed when the SEIR was certified except that additional lighting is being added associated with nearby development north of the Project Site.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- Project Design Features (PDFs) 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10;
- Standard Condition (SC) 1-1; and
- Mitigation Measure (MM) AES-1.

4.2 AGRICULTURAL AND FORESTRY RESOURCES

Consistency Evaluation

Would the Project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

Most of the Project site is still designated as Farmland of Local Importance, except for the northwest portion of the Project site which is designated now as Urban and Built-Up Land, rather than Other Lands previously (DOC 2023). The Project site is used intermittently to sell pumpkins and Christmas trees; however, there is still no agricultural or forestry activities occurring on the Project site and nearby. There are no known Williamson Act contracts within the Project site or nearby vicinity. Therefore, no new impacts pertaining to farmland and forestry would result from the Project.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing land uses and vegetative coverage within the Project site is similar to the conditions that existed when the SEIR was certified.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to these thresholds.

Applicable Measures from the MMRP:

There are no measures that are applicable to this resource topic.

4.3 AIR QUALITY

Consistency Evaluation

Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a significant unavoidable impact related to this threshold with implementation of mitigation measures. Specifically, the SEIR determined that the overall Triangle Specific Plan would not be consistent with the AQMP because of forecasted significant and unavoidable long-term emissions exceeding SCAQMD thresholds.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the

SEIR for The Triangle Specific Plan. The Project would result in fewer operational air quality emissions than was previously analyzed in the SEIR given that the Project would develop 279,500 gsf, which is approximately 247,996 gsf less of development than the 527,496 gsf of development that is approved for Phases 1A, 1B, and 1C of the Project as shown in the SEIR. According to the updated trip generation information prepared for the Project, the Project would result in fewer daily trips than the trips that were evaluated for Phases 1A, 1B, and 1C within the SEIR (Claremont Law Group, Inc 2024). Therefore, mobile source air quality emissions would be reduced with the Project from what was approved for the Triangle Specific Plan.

Vehicle queuing and idling related to drive-through fast food restaurants would result in air quality emissions; however, these emissions would not exceed the air quality emissions assumed for Phases 1A, 1B, and 1C given that the Project would only result in approximately 53 percent of the vehicular trips and resultant air quality emissions as was assumed for the Triangle Specific Plan in the SEIR. Also, the Triangle Specific Plan's SEIR already assumed similar drive-through retail uses would be developed as part of the Project, which involve similar vehicular queuing. Further, new regulations have been implemented since approval of the SEIR that would further serve to reduce mobile source emissions for vehicles idling from what was previously analyzed in the SEIR. For example, California's Advanced Clean Cars II Regulations ban the sale of all new light-duty gasoline powered cars after 2035 (California Energy Commission 2024a). As a result of these regulations, zero emission vehicle saturation in the vehicle fleet in California has been on the rise. In 2023 there were 1,516,107 zero emissions light duty vehicles in California compared to the 27,828,856 total non-zero emission light duty vehicles that existed in California in 2023 (California Energy Commission 2024b). By 2024 that number increased to 1,872,429 total zero emission vehicles in California. In the first quarter of 2024, approximately 25% of the light duty vehicles sold in 2024 were zero emission vehicles (California Energy Commission 2024a). Therefore, the gradual transition of the light duty vehicle fleet to zero emission vehicles will further reduce operational air quality effects of the proposed drive-through fast food restaurants.

As such, there are no substantial changes to the Project that would require major revisions to the SEIR and all applicable mitigation measures would be required for implementation of the Project.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The advancement of technology and adoption of State programs, standards, and regulations have reduced air pollutant emissions from short-term (construction) and long-term (operational) activities, and therefore, construction and operation of the Project would emit less criteria pollutants than previously assumed. No changes in Project context or circumstances beyond what was anticipated and analyzed in the SEIR have occurred that would result in new or more severe impacts pertaining to implementation of the applicable AQMP. Thus, no major revisions of the SEIR or new mitigation are required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

When it was adopted in 2013, the overall Triangle Specific Plan was found in the SEIR to have a significant unavoidable impact related to this threshold with implementation of mitigation measures. Specifically, the SEIR determined that implementation of the overall Triangle Specific Plan would exceed regional thresholds established by the SCAQMD for VOCs during the peak Project construction day.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. The Project would result in fewer operational air quality emissions than was previously analyzed in the SEIR given that the Project would develop 279,500 gsf, which is approximately 247,996 gsf less of development than the 527,496 gsf of development that is approved for Phases 1A, 1B, and 1C of the Project as shown in the SEIR. According to the updated trip generation information prepared for the Project, the Project would result in fewer daily trips than the trips that were evaluated for Phases 1A, 1B, and 1C within the SEIR (Claremont Law Group, Inc 2024). Therefore, mobile source air quality emissions would be reduced with the Project from what was approved for the Triangle Specific Plan.

Since the SEIR was adopted in 2013, the City has adopted an updated General Plan, Murrieta General Plan 2035. Murrieta General Plan 2035 contains an updated Air Quality Element. The Air Quality Element identifies key issues and challenges facing Murrieta in regards to air quality, its effects on the community, and how it can be addressed as the City continues to grow. The Element also contains a number of goals and policies intended to respond to the key issues and challenges identified within the Element. The Project

Goal AQ-1 Improved air quality through participation in regional and local efforts.

Goal AQ-3 Reduced emissions during construction activities.

Policy AQ-3.1 Ensure that construction activities follow current SCAQMD rules, regulations, and thresholds.

Policy AQ-3.2 Ensure all applicable best management practices are used in accordance with the SCAQMD to reduce emitting criteria pollutants during construction.

Policy AQ-3.3 Require all construction equipment for public and private projects comply with CARB's vehicle standards. For projects that may exceed daily construction emissions established by the SCAQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the SCAQMD.

Policy AQ-3.4 Require project proponents to prepare and implement a Construction Management Plan, which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded.

GOAL AQ-4 Mobile source emissions are reduced by providing a balance of jobs and housing that serve the needs of the community

Goal AQ-5 Air quality is improved through an efficient circulation system, reduced traffic congestion, and reduced vehicle miles traveled.

Policy AQ-5.1 Encourage employers to implement transportation demand management (TDM) measures, such as the following programs to reduce trips and vehicle miles traveled: • Transit subsidies • Bicycle facilities • Alternating work schedules • Ridesharing • Telecommuting and work-at-home programs • Employee education • Preferential parking for carpools/vanpools

Policy AQ-5.2 Re-designate truck routes away from sensitive land uses including schools, hospitals, elder and childcare facilities, or residences, where feasible.

Policy AQ-5.7 Reduce industrial truck idling by enforcing California's 5-minute maximum law, requiring warehouse and distribution facilities to provide adequate on site truck parking, and requiring refrigerated warehouses to provide generators for refrigerated trucks.

Goal AQ-6 Stationary source pollution (point source and area source) are minimized through existing and future regulations and new technology.

Policy AQ-6.7 During the design review process, encourage the use of measures to reduce indoor air quality impacts (i.e., air filtration systems, kitchen range top exhaust fans, and low-VOC paint and carpet for new developments and busy roadways with significant volumes of heavy truck traffic).

Goal AQ-7 Particulate matter and fugitive dust emissions are reduced throughout the City.

Policy AQ-7.4 Consider the suspension of all grading operations, not including dust control actions, at construction projects when the source represents a public nuisance or potential safety hazard due to reduced visibility on streets surrounding the property.

The Project would be consistent with the aforementioned rules and policies; specifically, the Project would comply with all current SCAQMD rules and regulations; specifically, the Project would comply with the following SCAQMD rules, as applicable: Rule 401 – Visible Emissions, Rule 402 – Nuisance, Rule 403 – Fugitive Dust, Rule 431.2 – Sulfur Content of Liquid Fuels, Rule 461 – Gasoline Transfer and Dispensing, Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines, and Rule 1113 – Architectural Coatings. Moreover, the SEIR for the Triangle Specific Plan found that the specific plan would result in reductions in vehicle miles traveled (VMT), although this particular threshold was not included in the State CEQA guidelines at the time. Specifically, the SEIR stated that proposed development would create jobs in the retail, restaurant, entertainment and hotel sectors and would attract business and jobs that would help to improve the jobs/housing balance and reducing VMT.

At the time the SEIR was adopted in 2013 the applicable SCAQMD Air Quality Management Plan (AQMP) was the 2012 AQMP. At that time, the Basin exceeded the pollutant concentration levels defined by the 8 and 1 hour ozone, 24 hour and annual PM2.5, and 24-hour PM10 National Ambient Air Quality Standards (NAAQS). The Basin was also a state nonattainment area for ozone, NO_2, PM10, and PM2.5 based on the California Ambient Air Quality Standards (CAAQS).

Since then, the SCAQMD has adopted multiple updated AQMPs. The latest AQMP is the 2022 AQMP. As discussed in the 2022 AQMP, in the 2018-2020 design value period, the Basin exceeded the pollutant concentration levels defined by the 8 and 1 hour ozone and annual PM2.5 NAAQS. The Basin also exceeded the pollutant concentration levels defined by the 8 and 1 hour ozone and annual PM10 and PM2.5 CAAQS. As such, based on the latest 2022 AQMP, the Basin is not in nonattainment for any pollutants for which the Basin was in attainment for at the time the SEIR was adopted in 2013.

As such, there are no substantial changes to the Project that would require major revisions to the SEIR and all applicable mitigation measures would be required for implementation of the Project .

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

Overall, the advancement of technology and adoption of State programs, standards, and regulations, have reduced air pollutant emissions from short-term and long-term activities, and therefore, construction and operation of the Project would emit less criteria pollutants than previously projected in the SEIR. No changes in Project context or circumstances beyond what was anticipated and analyzed in the SEIR have occurred that would result in new or more severe impacts pertaining to cumulatively considerable net increase of criteria pollutants for which the Project region is non-attainment under an applicable federal or State ambient air quality standard. Thus, no major revisions of the SEIR or new mitigation are required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

c) Expose sensitive receptors to substantial pollutant concentrations?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold. Specifically, the SEIR determined that concentrations of criteria pollutants at off site receptors would not exceed SCAQMD thresholds for ambient air quality, and that no impacts related to exposure of sensitive receptors to potential CO “hot spots” would occur.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. The Project would result in fewer operational air quality emissions than was previously analyzed in the SEIR given that the Project would develop 279,500 gsf, which is approximately 247,996 gsf less of development than the 527,496 gsf of development that is approved for Phases 1A, 1B, and 1C of the Project as shown in the SEIR. According to the updated trip generation information prepared for the Project, the Project would result in fewer daily trips than the trips that were evaluated for Phases 1A, 1B, and 1C within the SEIR (Claremont Law Group, Inc 2024). Therefore, mobile source air quality emissions would be reduced with the Project from what was approved for the Triangle Specific Plan.

Vehicle queuing and idling related to drive-through fast food restaurants would result in air quality emissions; however, these emissions would not exceed the air quality emissions assumed for Phases 1A, 1B, and 1C given that the Project would only result in approximately 53 percent of the vehicular trips and resultant air quality emissions as was assumed for the Triangle Specific Plan in the SEIR. Also, the Triangle Specific Plan's SEIR already assumed similar drive-through retail uses would be developed as part of the Project, which involve similar vehicular queuing. Further, new regulations have been implemented since approval of the SEIR that would further serve to reduce mobile source emissions for vehicles idling from what was previously analyzed in the SEIR. For example, California's Advanced Clean Cars II Regulations ban the sale of all new light-duty gasoline powered cars after 2035 (California Energy Commission 2024a). As a result of these regulations, zero emission vehicle saturation in the vehicle fleet in California has been on the rise. In 2023 there were 1,516,107 zero emissions light duty vehicles in California compared to the 27,828,856 total non-zero emission light duty vehicles that existed in California in 2023 (California Energy Commission 2024b). By 2024 that number increased to 1,872,429 total zero emission vehicles in California. In the first quarter of 2024, approximately 25% of the light duty vehicles sold in 2024 were zero emission vehicles (California Energy Commission 2024a). Therefore, the gradual transition of the light duty vehicle fleet to zero emission vehicles will further reduce operational air quality effects of the proposed drive-through fast food restaurants.

A CO hot spot is a localized concentration of CO that is above the state or national 1-hour or 8-hour CO ambient air standards. To verify that the Project would not cause or contribute to a violation of the 1-hour and 8-hour CO standards, an evaluation of the potential for CO hot spots at nearby intersections was conducted as described in more detail below.

A Focused Traffic Analysis was prepared for the Project, which is included as Appendix E, to evaluate whether there would be any substantial changes in the LOS at the intersections that would be affected by the Project (Rick Engineering Company 2023). The Transportation Project-Level Carbon Monoxide Protocol (California Department of Transportation 1998) was followed to determine whether a CO hot spot is likely to form due to Project-generated traffic, based upon traffic volumes provided by the Project's Focused Traffic Analysis.

In accordance with the Protocol, CO hot spots are typically evaluated when: (a) the LOS of an intersection decreases to a LOS E or worse; (b) signalization and/or channelization is added to an intersection; and

(c) sensitive receptors such as residences, schools, hospitals, etc., are located in the vicinity of the affected intersection or roadway segment.

According to the Focused Traffic Analysis, all of the intersections evaluated would meet the criteria mentioned above given that they would either operate at or exceed the acceptable threshold of LOS D except for one. The intersection of Murrieta Hot Springs Road/Sparkman Court would operate at LOS F during the AM and PM peak hours under the existing + ambient + cumulative 2025 condition and would operate at LOS E in the AM peak hours and LOS F in the PM peak hours under the existing + ambient + Project + cumulative 2025 condition, which indicates that further analyses related to CO hotspots should be conducted.

Using conservative industry screening methods, a project would not result in a significant impact to local CO concentrations if it meets all of the below criteria:

- The affected intersection carries less than 31,600 vehicles per hour;
- The project does not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, below-grade roadway, or other location where horizontal or vertical mixing of air would be substantially limited; and
- The affected intersection, which includes a mix of vehicle types, is not anticipated to be substantially different from the County average, as identified by EMFAC or CalEEMod models (SMAQMD 2009).

The greatest traffic volumes at the affected intersection are estimated to be 5,693 vehicles during the AM peak hour and 7,223 vehicles during the PM peak hour (RICK Engineering 2022). The intersections are not located in a tunnel, urban canyon, or similar area that would limit the mixing of air, nor is the vehicle mix anticipated to be substantially different than the County average. There would be no potential for a CO hot spot or exceedance of state or federal CO ambient air quality standards because the maximum traffic volume would be substantially less than the 31,600 vehicles per hour screening level. In addition, the congested intersection is located where mixing of air would not be limited; emission rates for CO have been reduced substantially to the point where the State of California has met the federal and State ambient air quality standards for the past decade. Therefore, impacts from CO hot spots would be less than significant.

As such, there are no substantial changes to the Project that would require major revisions to the SEIR and all applicable mitigation measures would be required for implementation of the Project.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

Overall, the advancement of technology and adoption of State programs, standards, and regulations, have reduced air pollutant emissions from construction and operational activities, and therefore, construction and operation of the Project would emit less criteria pollutants than previously projected. No changes in Project context or circumstances beyond what was anticipated and analyzed in the SEIR have occurred that would result in new or more severe impacts pertaining to sensitive receptors. Thus, no major revisions of the SEIR or new mitigation are required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require Major revisions to the EIR?

Odors were not required to be evaluated at the time the SEIR was certified; therefore, this threshold was not explicitly evaluated.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. The Project would result in fewer operational air quality emissions than was previously analyzed in the SEIR given that the Project would develop 279,500 gsf, which is approximately 247,996 gsf less of development than the 527,496 gsf of development that is approved for Phases 1A, 1B, and 1C of the Project as shown in the SEIR. According to the updated trip generation information prepared for the Project, the Project would result in fewer daily trips than the trips that were evaluated for Phases 1A, 1B, and 1C within the SEIR (Claremont Law Group, Inc 2024). Therefore, mobile source air quality emissions would be reduced with the Project from what was approved for the Triangle Specific Plan.

The Project would involve the development of restaurant land uses that could result in off-site odors; however, the Project would not increase the overall square footage of restaurant land uses when compared to what was evaluated in the SEIR. The reduced setbacks proposed by the Project would not result in a substantial increase in odors for off-site receptors given the distance to these receptors, including the medical centers and residents to the north of the Project Site. Therefore, no changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

There are no new land uses that have established since certification of the SEIR within the vicinity of the Project that would result in a substantial amount of additional people in the Project vicinity than what was assumed in the SEIR. There are expanded medical uses and residences entitled and under development north of the Project Site that were not considered when the SEIR was certified; however, these receptors are more than 185 feet away and would therefore not be substantially affected by odors from the Project due to the distance.

New information (which was not known and could not have been known at the time the EIR was certified) available?

Odors were not required to be evaluated at the time the SEIR was adopted; therefore, this threshold was not explicitly evaluated. There are expanded medical uses and residences entitled and under development north of the Project Site that were not considered when the SEIR was certified; however, these receptors are more than 185 feet away and would therefore not be substantially affected by odors from the Project due to the distance. Therefore, there is no substantial new information related to this threshold that could not have been known at the time the SEIR was certified.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- PDFs 2-1, 2-2, 2-3;
- SCs 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, and 2-8; and
- MMs 2-1, 2-2, 2-3, and 2-4.

4.4 BIOLOGICAL RESOURCES

Consistency Evaluation

Would the Project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project that will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold. Specifically, the SEIR determined implementation of the Triangle Specific Plan has the potential to impact burrowing owls and nesting birds. Through compliance with the MSHCP protective measures (i.e., pre-construction survey for burrowing owl) and permit conditions, no changes in the Project would occur that would require major revisions to the SEIR.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. The Project would result in less ground disturbance when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. As evidenced by the site reconnaissance conducted by biologists in 2023, conditions in the Project site are similar to when the SEIR was certified (Hernandez Environmental Services 2023). No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing land uses and vegetative coverage within the Project site is similar to the conditions that existed when the SEIR was certified.

New information (which was not known and could not have been known at the time the EIR was certified) available?

In April 2018, the tricolored blackbird (*Agelaius tricolor*) was listed as State Threatened. The tricolored blackbird has potential to occur in the Project vicinity. The MSHCP provides coverage for take of this species (Section 9, Conservation and Incidental Take Estimates). Therefore, no further surveys or mitigation would be required as the Project is consistent with the MSHCP. Pre-construction nesting bird surveys are required and would ensure that if the species is nesting on or adjacent to the Project site, it would be protected with a sufficient buffer.

In July 2019, Crotch's bumblebee (*Bombus crotchii*) was proposed as a State Endangered species; the State has yet to determine whether it will list the species. In the meantime, Crotch's bumblebee now has the same legal protection afforded to an endangered or threatened species. The Crotch's bumblebee is a ground nester and often makes its nest in abandoned mammal burrows and can be found in most native habitat types. The Crotch bumblebee prefers plant genera of *Antirrhinum, Phacelia, Clarkia, Dendromecon, Escholzia, and Eriogonum*. There is limited, disturbed potential habitat for Crotch's bumblebee on the Project site. Crotch's bumble bee is not covered by the MSHCP; however, the MSHCP does provide for the substantial conservation of habitat for Crotch's bumble bee. Crotch's bumble bee was not observed during general biological reconnaissance surveys of the Project Site. As a condition of approval for the Project, the Property Owner/Developer shall submit a letter report prepared by a qualified biologist to the City documenting absence of Crotch's bumble bee from the Project Site.

In April 2020, the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of mountain lion (*Puma concolor*) was proposed as a State Threatened species; the State has yet to determine if it will list this species. Mountain lions occur in a variety of habitats, especially brushy habitats and riparian areas with interspersed irregular terrain, rocky outcrops, and tree/brush edges. Mountain lions use caves, natural cavities, and thickets for cover. The Project site is surrounded by existing development and roadways, and does not contain the habitat types described above (Hernandez Environmental Services 2023). Therefore, the Project site does not contain suitable habitat for mountain lions.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project that will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold with implementation of mitigation measures. Specifically, the SEIR determined implementation of the Triangle Specific Plan has the potential to impact US Army Corps of Engineers (USACE) and California Department of Fish and Wildlife (CDFW) jurisdictional areas, riverine features pursuant to the MSHCP, and potentially suitable habitat for burrowing owl, The SEIR determined that with implementation of mitigation measures, impacts related to this threshold would be less than significant. The Project would not involve any increased impacts to jurisdictional waters, and compensatory mitigation will be coordinated with the regulatory agencies prior to the beginning of Project construction in jurisdictional waters.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in less ground disturbance when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. Conditions within the Project site are similar to when the SEIR was certified (Hernandez Environmental Services 2023). No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required and the current mitigation measures would still apply.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing land uses and vegetative coverage within the Project site is similar to the conditions that existed when the SEIR was certified. No new or substantially altered drainage patterns have developed within the Project site.

New information (which was not known and could not have been known at the time the EIR was certified) available?

Recently, the definition of Waters of the United States (WOTUS) has been the subject of shifting regulations. Recent federal revisions to regulations that address the extent of United States Army Corps of Engineers (USACE) jurisdiction and the definition of WOTUS have been issued by the Obama Administration in 2015 and the Trump Administration in 2020. On January 18, 2023, the United States Environmental Protection Agency (USEPA) published a final Water Rule in the Federal Register that took effect on March 20, 2023. To conform to the May 25, 2023 ruling by the U.S. Supreme Court (Sackett v. EPA), the USEPA issued a revised definition of WOTUS that was published in the Code of Federal Regulations (CFR) on September 8, 2023. The updated definition of WOTUS is provided in Title 40 §120.2(a) of the CFR and identifies federal jurisdiction under the CWA as:

1. Traditional Navigable Waters (TNWs), the territorial seas, and interstate non-wetland waters (“paragraph (a)(1) waters”);
2. Impoundments of “waters of the United States” (“paragraph (a)(2) impoundments”);
3. Tributaries to paragraph (a)(1) waters or (a)(2) impoundments when the tributaries are relatively permanent, standing or continuously flowing bodies of waters (“jurisdictional tributaries”);
4. Wetlands that have a continuous surface connection to paragraph (a)(1) waters, or relatively permanent, standing or continuously flowing jurisdictional tributaries that have a continuous surface connection to paragraph (a)(1) waters; and
5. Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to paragraph (a)(1) waters or jurisdictional tributaries.”

The above only applies to the enforcement of Section 404 of the federal Clean Water Act, therefore this only applies to waters subject to regulation by the USACE. The California Department of Fish and Wildlife and the State Water Resources Control Board and its local Regional Boards are not bound by this ruling.

The Certified EIR found the that jurisdictional areas within the Project site consist of five habitat types: southern willow scrub, mulefat scrub, herbaceous wetland, and non-wetland WOTUS/CDFW streambed; specifically, the EIR determined that areas under the USACE jurisdiction on-site consist of 0.02 acre of intermittent non-wetland WOTUS, comprised of 3 reaches totaling 410 linear feet and that areas under CDFW jurisdiction onsite total 0.05 acre and consist of less than 0.01 acre each of southern willow scrub and mulefat scrub, 0.03 acre of herbaceous wetland, and 0.02 acre of CDFW streambed.

These findings are consistent with the findings of the site reconnaissance for the Project prepared in January 2023 by Hernandez Environmental Services and included as Appendix C of this Addendum. The site reconnaissance determined that the onsite intermittent drainage and associated riparian vegetation are considered non-wetland WOTUS and this drainage is also regulated by CDFW’. Further, the onsite drainage and associated riparian vegetation are considered Riparian/Riverine areas pursuant to the MSHCP. The onsite drainage and associated riparian vegetation are also regulated by CDFW under the Fish and Game Code Section 1602. The onsite non-wetland WOTUS are regulated by the USACE and the Regional Water Quality Control Board (RWQCB) under Sections 404 and 401 of the Clean Water Act.

Although the regulatory definitions of the drainage feature in the Project site have changed since the SEIR was certified, this does not constitute new information that would result in more severe impacts that was not known at the time the SEIR was prepared.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

<u>No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR</u>

Substantial changes proposed in Project that will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold. Specifically, the SEIR determined implementation of the Triangle Specific Plan has the potential to impact USACE and CDFW jurisdictional areas.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in less ground disturbance when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing land uses and vegetative coverage within the Project site is similar to the conditions that existed when the SEIR was certified. No new or substantially altered drainage patterns have developed within the Project site.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

<u>No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR</u>

Substantial changes proposed in Project that will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold with implementation of mitigation measures. The SEIR determined implementation of the Triangle Specific Plan has the potential to impact USACE and CDFW jurisdictional areas, riverine features pursuant to the MSHCP, and potentially suitable habitat for burrowing owl, the SEIR determined that with implementation of mitigation measures, impacts related to this threshold would be less than significant.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing land uses and vegetative coverage within the Project site is similar to the conditions that existed when the SEIR was certified. No substantial changes have occurred that would increase wildlife movement or usage of the Project site.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

<u>**No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR**</u>

Substantial changes proposed in Project that will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold. The SEIR determined implementation of the Triangle Specific Plan would not impact trees which are protected pursuant to Section 16.42 of the City's Municipal Code. Furthermore, the SEIR found that since the overall Triangle Specific Plan would be implemented consistent with the requirements of the MSHCP, there would be less than significant impacts related to this threshold.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing land uses and vegetative coverage within the Project site is similar to the conditions that existed when the SEIR was certified. There are no new local policies or ordinances related to biological resources that were not previously in effect when the SEIR was certified.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project that will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold with implementation of mitigation measures. Specifically, the SEIR determined implementation of the Triangle Specific Plan has the potential to impact USACE and CDFW jurisdictional areas, riverine features pursuant to the MSHCP, and potentially suitable habitat for burrowing owl, The SEIR determined that with implementation of mitigation measures, impacts related to this threshold would be less than significant.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing land uses and vegetative coverage within the Project site is similar to the conditions that existed when the SEIR was certified. There are no new habitat conservation plans applicable to the Project that were not applicable with the SEIR was certified.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- SCs 3-1 and 3-2; and
- MMs BIO-1; 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, and 3-7.

4.5 CULTURAL RESOURCES

Consistency Evaluation

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

c) Disturb any human remains, including those interred outside of formal cemeteries?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project which will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold with implementation of mitigation measures. The SEIR determined implementation of the Triangle Specific Plan could impact unknown archaeological resources and/or human remains during grading and ground disturbance activities. However, the SEIR determined that with implementation of mitigation measures, the Project would have a less than significant impact related to this threshold.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in less ground disturbance when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The existing land uses and vegetative coverage within the Project site is similar to the conditions that existed when the SEIR was certified. No substantial changes have occurred that would increase wildlife movement or usage of the Project site.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- SCs 4-1 and 4-2; and
- MMs CULT-1, 4-1, and 4-2.

4.6 ENERGY

Consistency Evaluation

Would the Project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project which will require major revisions to the EIR?

The comprehensive energy usage of the approved Project was evaluated in the SEIR within the evaluation of the Triangle Specific Plan's potential impacts related to air quality, greenhouse gas emissions, and utility services. Since the approval of the SEIR, energy standards have become more stringent. The Project will be required to implement the current more stringent requirements pertaining to energy efficiency for buildings and the provision of electric vehicle charging infrastructure. Additionally, the Project consists of only a portion of the approved development analyzed by the SEIR; therefore, the current Project would result in less energy consumption and vehicle trips (i.e., fuel consumption) than what was previously analyzed in the SEIR. As a result, the energy usage would be expected to be less than energy demands required for implementation of the SEIR.

The Project proposes land uses that are consistent with what was analyzed in the SEIR for the Triangle Specific Plan. Therefore, there is not a substantial change in the Project from what was evaluated in the SEIR. The Project would be required to comply with the current energy efficiency standards (Title 24); therefore, the impacts on energy resources associated with implementing the Project would be no more severe than what was previously addressed in the SEIR. Revisions to the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

Although there has been a change in some of the regulatory requirements associated with nonresidential development, these changes would serve to reduce the impact on energy resources. The Project would be required to comply with applicable Title 24 energy efficiency standards and CALGreen Code which is more energy efficient than the State of California's building standards that were applicable at the time of the approved Project. As a result, there would not be new or substantially more severe impacts requiring major revisions to the SEIR.

New information (which was not known and could not have been known at the time the EIR was certified) available?

The SEIR analyzed energy impacts at it relates to air quality, GHG emissions, and utility services. Therefore, the overall energy demands were considered and would not constitute new information. The overall energy usage associated with nonresidential development has become more energy efficient since the preparation of the SEIR. With implementation of current codes, there are no new mitigation measures required to provide for greater energy efficiency. Therefore, there is no new information that would result in more severe impacts that was not known at the time the SEIR was prepared.

Applicable Measures from the MMRP:

There are no measures that are applicable to this resource topic.

4.7 GEOLOGY AND SOILS

Consistency Evaluation

Would the Project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

ii) Strong Seismic groundshaking?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold with implementation of mitigation measures. The SEIR determined that the Triangle Specific Plan is located in a seismically active region, and people and structures could be exposed to seismic ground shaking. However, with implementation of mitigation measures impacts would be reduced to less than significant levels related to earthquakes and strong seismic ground shaking.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in less ground disturbance when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

<u>No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR</u>

Substantial changes proposed in Project, which will require Major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to these thresholds with implementation of mitigation measures. The SEIR determined that the Project site has a low potential for liquefaction. However, the underlying soils are potentially unstable and highly expansive soils. With implementation of mitigation measures, the overall Triangle Specific Plan was found to have less than significant impacts related to these thresholds.

The extent of Project impacts upon existing seismically-induced conditions, such as liquefaction and landslides, would be the same as analyzed in the SEIR since no increase in the overall developable area is proposed. No changes are proposed to the Project, except that the Project is an initial phase of the Project and only a portion of the overall square footage and number of buildings would be built during this phase. Therefore, there would be no impacts above and beyond what was analyzed in the previous SEIR. Therefore, no new mitigation and no substantial changes to the SEIR would be required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The Project remains substantially the same with the exception of a reduction in the overall Project square footage and number of buildings. The context and circumstances for the Project have remained the same and not changed such that Project activities would result in a significant impact pertaining to liquefaction and landslides, requiring new mitigation. Thus, no substantial revisions to the SEIR would be required.

New information (which was not known and could not have been know at the time the EIR was certified) available?

There is no new information related to this threshold.

b) Result in substantial soil erosion or the loss of topsoil?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require Major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to soil erosion and loss of topsoil with implementation of mitigation measures.

The Project does not propose changes that would result in new impacts or increase the severity of previously analyzed impacts pertaining to soil erosion and loss of topsoil. Therefore, the Project would not require new mitigation measures or substantial changes to the SEIR as the impacts remain the same.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The context and circumstances for the Project remain the same and have not changed since certification of the SEIR such that Project activities would result in a significant new impact or more severe impacts pertaining to soil erosion and loss of topsoil or require new mitigation. Thus, no substantial revisions to the SEIR would be required.

New information (which was not known and could not have been know at the time the EIR was certified) available?

There is no new information related to this threshold.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require Major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have no impact related to this threshold because the Triangle Specific Plan would be connected to the municipal sewer system and does not propose any septic tanks. No new or more severe impacts would result that would require major revisions to the SEIR or new mitigation.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

No changes in circumstances have occurred that would result in new or more severe impacts that would require major revisions to the SEIR or new mitigation.

New information (which was not known and could not have been know at the time the EIR was certified) available?

There is no new information related to this threshold.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

Paleontological resources were evaluated in the SEIR for the Triangle Specific Plan within the cultural resources section, rather than providing this information in the Geology/Soils section as is common practice currently using the latest State CEQA Guidelines. The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to paleontological resources with implementation of mitigation measures including MM 358-CULT-1. The Project remains substantially the same with no increase in the extent of ground disturbance. The Project does not propose changes that would result in new impacts or increase the severity of previously analyzed impacts pertaining to paleontological resources. Therefore, the Project would not require substantial changes to the SEIR or new mitigation.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

No changes in circumstances have occurred that would result in new or more severe impacts that would require major revisions to the SEIR or new mitigation.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- SCs 5-1, 5-2, 5-3, and 5-4, and
- MMs CULT-1, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, and GEO-8.

4.8 GREENHOUSE GAS EMISSIONS

Consistency Evaluation

Would the Project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project which will require major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to this threshold with implementation of mitigation measures. The SEIR determined that the Triangle Specific Plan is substantially consistent with the City of Murrieta Climate Action Plan (CAP). However, the SEIR found that the Triangle Specific Plan is not consistent in the areas of public education and support for advanced technology vehicles. Mitigation measures were required to reduce impacts to less than significant levels related to greenhouse gas emissions. Pursuant to the Climate Action Plan Consistency Checklist provided as Appendix D, the Project would be required to implement construction waste diversion, transportation demand management, electric vehicle, tree planting requirements. The Transportation Demand Management Memorandum that was prepared for this phase of the Project is provided as Appendix G (RK Engineering Group, Inc, 2024).

The Project has not substantially changed from the project addressed in the SEIR. There are no elements of the Project that would result in the generation of substantially greater GHG emissions compared to the emissions generated by the development evaluated in the SEIR. Since there is less square footage of development and fewer buildings currently proposed than were approved, there would be a commensurate reduction in the emissions generated by the Project than what was previously analyzed. In addition, the changes in the California Code of Regulations [CCR]) established to reduce California's energy consumption (this is also discussed in Section 4.6, Energy) would have beneficial effects related to GHG emissions. The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. The Project would result in fewer operational GHG emissions than was previously analyzed in the SEIR given that the Project would develop 279,500 gsf, which is approximately 247,996 gsf less of development than the 527,496 gsf of development that is approved for Phases 1A, 1B, and 1C of the Project as shown in the SEIR. According to the updated trip generation information prepared for the Project, the Project would result in fewer daily trips than the trips that were evaluated for Phases 1A, 1B, and 1C within the SEIR (Claremont Law Group, Inc 2024). Therefore, mobile source GHG emissions would be reduced with the Project from what was approved for the Triangle Specific Plan.

As such, there are no substantial changes to the Project that would require major revisions to the SEIR.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The context in which the Project would be implemented is not substantially different than what was evaluated in the SEIR. There have been no major land use changes or developments in the Project vicinity since the SEIR was certified. The Project is consistent with the land use and zoning for the Project site and the Project would not allow for any new development or uses beyond that previously authorized.

New information (which was not known and could not have been known at the time the EIR was certified) available?

The City has prepared a Climate Action Plan (CAP) that outlines actions that the City will undertake to achieve its proportional share of State GHG emissions reductions (City of Murrieta 2011a). The CAP includes an emissions inventory, climate action strategies, and steps for implementation. The purpose of the City's CAP Consistency Checklist is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and that trigger environmental review pursuant to CEQA. A CAP Checklist has been prepared for the Project, which is attached as Appendix D. The Project shall implement construction waste diversion, transportation demand management, electric vehicle service equipment, and tree planting measures from the CAP to ensure consistency with City policies related to GHG emissions.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

PDFs 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, and 11-9.

- SCs 9-5 and 9-6, and
- MMs 11-1, 11-2, and 11-3.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Consistency Evaluation

Would the Project:

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

b) **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that the overall Triangle Specific Plan would have less than significant impacts related to the use and potential release of hazardous materials and that no mitigation was required beyond standard best practices.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in the less transport, use, and storage of hazardous wastes/substances/materials when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The context and circumstances for the Project have not changed such that construction and operation activities would result in a significant impact requiring mitigation. Thus, no substantial revisions to the SEIR or new mitigation would be required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

There are no existing or proposed schools within a one-quarter-mile radius of the Project site.

The Project would not result in an impact pertaining to emissions of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school that was not previously analyzed. Therefore, no substantial changes to the SEIR, and no mitigation is required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The context and circumstances for the Project have not changed such that construction and operation activities would result in a new impact or increase the severity of previous impacts pertaining to emissions of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school requiring mitigation.

New information (which was not known and could not have been known at the time the EIR was certified) available?

Regulations pertaining to hazardous materials have been updated since the SEIR was prepared; however, the nature of the materials associated with the proposed land uses have not substantially changed. Existing regulations, such as the California Code of Regulations Title 22 establishes requirements pertaining to the storage, transportation, and disposal of hazardous materials. To meet the requirements, construction contractors are required to implement control measures for handling and storing various types and quantities of regulated hazardous materials used. Any transport of hazardous materials facilities is also regulated at the federal (Title 49 of the Code of Federal Regulations) and State (Title 13 of the California Code of Regulations) regulations. The new regulations would not result in a new impact that would require major revisions to the SEIR or new mitigation.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 as of February 14, 2023 (CalEPA 2023a).

The Project would not involve any new areas of ground disturbance nor any new demolition that would have the potential to increase impacts related to this threshold. As such no changes are proposed that would result in new impact or increase the severity of previous impacts requiring mitigation. Therefore, no substantial changes to the SEIR or new mitigation are required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The context and circumstances under which the Project is being implemented have not changed. The Project site is still not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962. As such there are no new circumstances that would result in a significant impact pertaining to being on a list of hazardous materials site. Thus, no substantial changes to the SEIR or new mitigation are required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The Project site is not within an airport land use plan and is not located within two miles of an airport. According to the SEIR, the closest airport to the Project site is a general aviation facility located in French Valley, approximately three miles east of the Project. The Project site is outside the Airport Influence Area and identified Height Review Overlay Zones for this airport; therefore, the SEIR determined that the overall Triangle Specific Plan Project would have no impacts related to this threshold (RCALUC 2023a).

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The Project site is not within an airport land use plan and is not located within two miles of an airport. The context and circumstances for the Project have not changed (e.g., construction of an airport in the area) such that Project implementation would result in a new significant impact or increase the severity of the previous impacts pertaining to safety hazard or excessive noise, requiring mitigation. Thus, no substantial revisions to the SEIR or new mitigation are required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

<u>No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR</u>

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that the overall Triangle Specific Plan project would generate an increase in the amount and volume of traffic on local and regional roadway networks that could potentially impair implementation of emergency response; however, the Project would be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, State, and/or federal requirements related to emergency access and evacuation so there would be less than significant impacts. The SEIR also noted that key transportation facilities that provide emergency access in the vicinity of the Project (e.g., Murrieta Hot Springs Road) would remain fully operational during construction and operation of the Project. Emergency. Therefore, the Project was determined to have less than significant impacts related to this threshold.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. There have been no major changes to the major arterial roadways near the Project site. Conditions remain similar to the conditions that existed when the SEIR was certified.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR did not specifically evaluate wildfire susceptibility; however, emergency response and impacts on public service providers including the fire department was evaluated in the SEIR for the overall Triangle Specific Plan. Less than significant impacts were determined with implementation of mitigation measures.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in fewer vehicular trips and fewer buildings to respond to when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. According to a review of the latest available mapping, the Project site is not located within a wildfire susceptibility zone (CALFIRE 2023).

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

There are no measures that are applicable to this resource topic.

4.10 HYDROLOGY AND WATER QUALITY

Consistency Evaluation

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. The Project would result in less ground disturbance when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

No changes in Project context and circumstances have occurred such that a new or more severe water quality impact beyond what was analyzed, would result. The same requirements and standards discussed in previous analyses would still apply to the Project. Thus, no major revisions to the SEIR and new mitigation are required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

As described in the SEIR, the major recharge areas for the Temecula Valley Groundwater Basin include the Warm Springs, Tucalota, Santa Gertrudis, Murrieta, and Pechanga Creeks and the Temecula River. None of these water bodies are located on the Project site; therefore, development of the Project was determined to not interfere with groundwater recharge. Water service to the Project site would be provided by the Eastern Municipal Water District (EMWD), which derives approximately 22 percent of their water supply from groundwater (EMWD 2020a). However, the SEIR determined that the water demand that would result from implementation of the Triangle Specific Plan would not substantially deplete groundwater supplies. Therefore, no impact related to groundwater recharge or supplies would occur and no mitigation was required.

The Project does not include any changes that would adversely affect groundwater supplies or interfere substantially with groundwater recharge, resulting in a new or more severe impacts. Therefore, no major revisions to the SEIR or new mitigation are required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

There have not been any changes in Project context or circumstances such that a new or more severe impacts pertaining to reduction in groundwater supplies would occur. No new impacts or increase in the severity of previous impacts would result. Thus, no major revisions to the SEIR or new mitigation are required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

a. result in substantial erosion or siltation on- or off-site;

i. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

ii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iii. impede or redirect flood flows?

<u>No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR</u>

Substantial changes proposed in Project, which will require Major revisions to the EIR?

The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to soil erosion and loss of topsoil and related to substantially increase the rate and amount of surface runoff; however, with implementation of mitigation measures the overall Triangle Specific Plan would have less than significant impacts.

The Project remains substantially the same as the development analyzed in the Triangle Specific Plan SEIR. There would be no additional impervious surfaces development as part of the Project that would further generate stormwater quantities in exceedance of the downstream drainage systems' capacity The Project does not propose changes that would result in new impacts or increase the severity of previously analyzed impacts pertaining to soil erosion and loss of topsoil. Therefore, the Project would not require new mitigation measures or substantial changes to the SEIR as impacts remain the same.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The context and circumstances for the Project have remained the same and have not changed such that Project activities would result in a significant new impact or more severe impacts pertaining to soil erosion and loss of topsoil or require new mitigation. Thus, no substantial revisions to the SEIR would be required.

New information (which was not known and could not have been know at the time the EIR was certified) available?

There is no new information related to this threshold.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that the Project site is not located in proximity to a lake or ocean; therefore, no seiche- or tsunami-related impacts would occur. Additionally, mudflows are not expected to occur due to the Project site's relatively flat topography, the nature of the Project site's soils, and the type of improvements proposed for the Project site. Therefore, the SEIR determined no impacts related to this threshold.

The Project does not include any substantial changes that would further expose it to flood hazard, tsunami, or seiches. The current Project's smaller amount of development and amount of impervious surface would be within what was calculated for the overall Triangle Specific Plan in the SEIR. Thus, no new or more severe impacts would result that would require major revisions to the SEIR or new mitigation.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. There are no new water bodies in proximity to the Project site that did not exist when the SEIR was certified.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- PDFs 6-1, 6-2,
- SCs 6-1, 6-2, and 6-3; and

- MMs H-1, H-2, and H-3.

4.11 LAND USE AND PLANNING

Consistency Evaluation

Would the Project:

a) Physically divide an established community?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project which will require major revisions to the EIR?

The SEIR found that the Project site is surrounded by highways and urban land uses and would represent a continuation of existing urban development; therefore, implementation of the overall Triangle Specific Plan would not physically divide an established community.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. This would result in fewer daily trips than the trips that were evaluated for Phases 1A, 1B, and 1C within the SEIR (Claremont Law Group, Inc 2024).

Since the overall specific plan would have no impact related to this threshold, the Project would similarly have no impact.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. Several residential projects are being developed north of the Project Site; however, the Project has no potential to physically divide these residential areas. Therefore, existing conditions are similar to the conditions that existed when the SEIR was certified.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no substantial new information related to this threshold.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project which will require major revisions to the EIR?

The SEIR determined that implementation of The Triangle Specific Plan would be consistent with the applicable land use and planning-related goals and policies of local and regional regulatory and planning documents. The Triangle Specific Plan included discretionary actions including a General Plan Amendment, Specific Plan Amendment, and other approvals.

The current Project is consistent with the existing land use designation for the Project site and is being designed consistent with applicable design guidelines, etc. There are no substantial changes in the Project that would result in new or more severe impacts that would require major revisions to the SEIR and no new mitigation.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The Project is consistent with the existing land use designation for the Project site. There have not been any changes in the Project's context or circumstances such that a new or more severe impact would occur. Thus, no major revisions to the SEIR or new mitigation are required.

Based on the review of applicable documents, the Project would not result in new or more severe impacts due to a conflict with any policies and regulations that serve to reduce environmental impacts.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- SC 7-1.

4.12 MINERAL RESOURCES

Consistency Evaluation

Would the Project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that the Triangle Specific Plan would have no impacts related to mineral resources.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan.

Given that implementation of the overall specific plan would have no impact related to this threshold, it is presumed that this Project would similarly have no impact.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. There are no new mineral resource extraction sites in the Project vicinity according to online mapping maintained by the California Department of Conservation (DOC 2023b, 2023c).

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

There are no measures that are applicable to this resource topic.

4.13 NOISE

Consistency Evaluation

Would the Project:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that implementation of the Triangle Specific Plan would result in significant construction noise impacts that would be reduced to less than significant levels with mitigation that was incorporated into the Project. The SEIR determined that due to distance and the fact that no pile driving and blasting was proposed as part of the construction of the specific plan, that construction activities would not generate significant vibration levels to sensitive receptors in the study area.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan.

Therefore, the Project would result in less noise impacts when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No new construction methods are being proposed that would increase construction noise levels. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. There are no new sensitive receptors near the Project site that could be impacted by construction or operational noise levels. Several residential projects are being developed north of the Project Site; however, the Project would not result in substantial noise impacts to these receptors given the distance of these receptors from the Project site relative to receptors that were analyzed in the SEIR.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR reported that due to distance and the fact that no pile driving and blasting is expected to occur during construction, construction activities would not generate significant vibration levels to sensitive receptors in the study area. The SEIR determined that the Triangle Specific Plan would have less than significant impacts related to this threshold, and that no mitigation was required.

The Project has not substantially changed from what was evaluated in the SEIR. The Project would result in comparable or less vibration from construction compared to what was previously analyzed due to the limited amount of construction anticipated. There would be no new areas of heavy construction equipment use proposed as part of the Project that would bring vibration generating construction activities closer to offsite uses, and land uses would not be situated closer to sensitive receptors when compared to the approved Project. Construction and operations phase vibration would be less than what was disclosed in the SEIR. Consequently, there are no substantial changes proposed in Project that will require major revisions to the SEIR.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. There are no new structures near the Project site that would be impacted by vibration that would result from Project construction.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?

The Project site is not within an airport land use plan and is not located within two miles of an airport.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

There are no new airports in proximity to the Project site, nor does the Project involve any improvements that are any closer to existing airports.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- SCs 8-1, and 8-2; and
- MMs N-1, N-2, 8-1, 8-2, 8-3, and 8-4.

4.14 POPULATION AND HOUSING

Consistency Evaluation

Would the Project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that implementation of the Triangle Specific Plan would not involve the development of new residential units. Therefore, the specific plan was not expected to result in the generation of additional residents in the City. Potential indirect effects of the Project related to the employment opportunities from these uses would be accommodated from the local labor and were not anticipated to result in any significant impacts requiring mitigation.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within and adjacent to the Project site are similar to the conditions that were described in the SEIR. Several residential projects are being developed north of the Project Site; however, the Project has no potential to induce new growth in these areas beyond what is already occurring independently of the Project.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that since the Project site was vacant and undeveloped, that development of the Triangle Specific Plan would not result in the displacement of any existing housing and would not necessitate a need for the construction of replacement housing elsewhere. For this reason, no impacts associated with the displacement of existing housing would occur and no mitigation measures are required.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan.

Given that the overall Triangle Specific Plan project would have no impacts related to existing housing, the Project would similarly have no impacts. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. Several residential projects are being developed north of the Project Site; however, the Project would not remove any of this housing or otherwise necessitate the construction of replacement housing elsewhere.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

There are no measures that are applicable to this resource topic.

4.15 PUBLIC SERVICES

Consistency Evaluation

Would the Project:

a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

   i) **Fire protection?**

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that implementation of the Triangle Specific Plan would increase the demand for fire protection and emergency medical services; however, it would not result in the need for the construction of new or expanded facilities and that no physical environmental impacts would result. Less than significant impacts were anticipated with implementation of mitigation measures.

The current Project is constructing 279,500 square feet which is the equivalent or lesser than what was analyzed in Phase 1c of the SEIR. The Project is consistent with the Triangle Specific Plan and what was analyzed in the SEIR with regards to affecting fire protection services. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The Project site is not mapped as being susceptible for wildfire (CALFIRE 2023). No new vegetation has established that would constitute an increased fire risk from that which previously existed within the Project site at the time the SEIR was certified.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

ii) Police protection?

<u>No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR</u>

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that implementation of the Triangle Specific Plan would increase the demand for police protection; however, it would not result in the need for the construction of new or expanded facilities and that no physical environmental impacts would result. Less than significant impacts were anticipated with implementation of mitigation measures.

The current Project is constructing 279,500 square feet which is the equivalent or lesser than what was analyzed in Phase 1c of the SEIR. The Project is consistent with the Triangle Specific Plan and what was analyzed in the SEIR with regards to affecting fire protection services. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. Several residential projects are being developed north of the Project Site that would increase demand for public services. However, each of these developments would be required to pay development impact fees to ensure adequate public service levels of service are maintained.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

iii) Schools?

<u>No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR</u>

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that the Project would not involve the development of residential uses; therefore, no new students would be generated by implementation of the Triangle Specific Plan project. Likewise, the Project would not involve the development of residential uses and no new students would be generated by implementation of the Project. There would not be a need for the provision of new or altered school facilities. Although the Project would not generate new students, the Property Owner/Developer would be required to pay construction fees (also known as "developer's fees") pursuant to *California Government Code,* Section 65995. The payment of school mitigation impact fees is deemed to provide "full and complete mitigation of impacts" from the development of real property on school facilities (*California Government Code* §65995). No impacts would result and no mitigation measures are necessary.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Given that the overall specific plan would have no impacts related to this threshold, it is presumed that the current Project would similarly have no impacts.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The Project does not include the development of residential land uses, and thus, would not result in the direct generation of school-aged children. No changes in circumstances have occurred that would result in new significant impacts or increase the severity of previous impacts. Thus, no major revisions to the SEIR and new mitigation would be required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

iv) Parks?

v) Other public facilities?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that implementation of the Triangle Specific Plan does not involve the development of residential uses; therefore, there would be no associated increase in population and there would not be a substantial increase in the demand for parks, recreational facilities, and/or libraries. Therefore, the SEIR determined that there would not be a need for the provision of new or altered parks or libraries, nor would there be any physical impacts associated with the construction of such facilities. Therefore, the SEIR found that there would be less than significant impacts related to these thresholds with implementation of mitigation measures, including payment of in-lieu-fees.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in reduced demand for parks, recreational facilities, and libraries as was determined in the SEIR for the Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. Several residential projects are being developed north of the Project Site that would increase demand for parks, libraries, and other public facilities. However, each of these developments would be required to pay development impact fees to ensure adequate parks, libraries, and other public facilities are maintained and expanded to accommodate the additional population that would result from these developments.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- PDFs 9-1, 9-2, 9-3, 9-4, 9-5, and 9-6;
- SCs 9-1, 9-2, 9-3, and 9-4; and
- MMs PSU-1, PSU-2, PSU-3, and 9-1.

4.16 RECREATION

Consistency Evaluation

Would the Project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that implementation of the Triangle Specific Plan does not involve the development of residential uses; therefore, there would be no associated increase in population and there would not be a substantial increase in the demand for parks and recreational facilities. Therefore, the SEIR determined that there would not be a need for the provision of new or altered parks or recreational facilities, nor would there be any physical impacts associated with the construction of such facilities. Therefore, the SEIR found that there would be less than significant impacts related to these thresholds with implementation of mitigation measures, including payment of in-lieu-fees.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in reduced demand for parks and recreational facilities than was calculated in the SEIR for the Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. Several residential projects are being developed north of the Project Site that would increase demand for recreational facilities. However, each of these developments would be required to pay development impact fees to ensure adequate recreational facilities are maintained and expanded to accommodate the additional population that would result from these developments.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

There are no measures that are applicable to this resource topic.

4.17 TRANSPORTATION

Consistency Evaluation

Would the Project:

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

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

d) Result in inadequate emergency access?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that the Triangle Specific Plan would result in potentially significant direct Project impacts at seven study intersections related to Level of Service (LOS). The impacts would be less than significant at these intersections due to improvements that have already been made by others, payment of a Development Impact Fee and through implementation of mitigation measures identified in the SEIR. The Triangle Specific Plan was found to have potentially significant cumulative impacts at 13 study intersections. The impacts would be less than significant at four intersections due to improvements that have already been made by others, or payment of development impact fees. Also, implementation of the specific plan was found in the SEIR to have the potential to result in direct and cumulative impacts to the freeway mainline segments along I-15 and I-215 that would require mitigation.

A Trip Generation Memorandum was prepared for the Project, which provides updated trip generation for the Project's proposed land uses. Since the Project is a subset of the overall square footage of the Triangle Specific Plan, the Trip Generation Memorandum provides data that show that the Project would result in fewer overall daily trips when compared to the overall Triangle Specific Plan. Also, the Project's proposed uses would result in fewer daily trips than the trips that were evaluated for Phases 1A, 1B, and 1C within the SEIR (22,541 daily trips for Phase 1c of the Triangle Specific Plan as shown in the SEIR vs 19,248 daily trips for the Project). As such, there are no substantial changes to the Project that would require major revisions to the SEIR. Trip generation rates and a trip generation summary for the Project are provided in Table 4.17-1 and Table 4.17-2 respectively.

Table 4.17-1 – Trip Generation Rates

LAND USE	ITE CODE	UNITS[2]	PEAK HOUR TRIP RATES						DAILY
			AM			PM			
			IN	OUT	TOTAL	IN	OUT	TOTAL	
Drive-in Bank	912	TSF	5.77	4.18	9.95	10.51	10.51	21.02	100.35
Fast Casual Restaurant	930	TSF	0.72	0.71	1.43	6.9	5.65	12.55	97.14
Fine Dining Restaurant	931	TSF	0.37	0.37	0.74	5.23	2.57	7.8	83.84
High Turnover (Sit-Down) Restaurant	932	TSF	5.26	4.31	9.57	5.52	3.53	9.05	107.2
Fast-Food Restaurant w/ Drive-Through Window	934	TSF	22.75	21.86	44.61	17.18	15.85	33.03	467.48
Shopping Center (<40k)	822	TSF	1.42	0.94	2.36	3.3	3.29	6.59	54.45
Supermarket	850	TSF	2.29	1.53	3.82	4.71	4.53	9.24	106.78
Small Office Building (10k or less)	712	TSF	1.37	0.3	1.67	0.73	1.43	2.16	14.39
Health/Fitness Club	492	TSF	0.67	0.64	1.31	1.97	1.48	3.45	30
Outdoor Recreational Commercial	433	80 Bays	0.31	0.07	0.38	1.18	1.06	2.24	20.235

1 Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 11th Edition, 2021.

2 TSF = Thousand Square Feet

3 DATA = Trip Rates determined by Empirical Counts

Table 4.17-2 – Trip Generation Summary

					PEAK HOUR						
					AM			PM			
LAND USE	BUILDING	LAND USE CODE	QUANTITY	UNITS[1]	IN	OUT	TOTAL	IN	OUT	TOTAL	DAILY
Drive-in Bank	B-7 Bank	912	5.495	TSF	32	23	55	58	58	116	551
Pass-by (AM:29%, PM:35%, Daily:29%)					-9	-7	-16	-20	-20	-41	-160
Fast Casual Restaurant	B-8 Fast Food	930	7.404	TSF	5	5	10	51	42	93	719
Pass-by (AM:50%, PM:55%, Daily:50%)					-3	-3	-5	-28	-23	-51	-360
High Turnover (Sit-Down) Restaurant	B-11 Fast Food	932	7.5	TSF	39	32	71	41	26	67	804
Pass-by (AM:50%, PM:55%, Daily:50%)					-20	-16	-36	-23	-14	-37	-402
High Turnover (Sit-Down) Restaurant	B-12 Sit Down Restaurant	932	11.031	TSF	58	48	106	61	39	100	1,183
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-26	-17	-43	-509
Shopping Center (<40k)	B-B-1 Retail	822	1.998	TSF	3	2	5	7	7	14	109
Shopping Center (<40k)	B-B-2 Retail	822	3.5	TSF	5	3	8	12	12	24	191
Shopping Center (<40k)	B-B-3 Retail	822	4.55	TSF	6	4	10	15	15	30	248
Supermarket	B-B Supermarket	850	39.967	TSF	92	61	153	188	181	369	4,268
Pass-by (AM:0%, PM:24%, Daily:24%)					0	0	0	-45	-43	-89	-1,024
Shopping Center (<40k)	B-B-4 Retail	822	10	TSF	14	9	23	33	33	66	545
Shopping Center (<40k)	B-B-5 Retail	822	11.187	TSF	16	11	27	37	37	74	609
Shopping Center (<40k)	B-C-1 Retail	822	12.3	TSF	17	12	29	41	40	81	670
Shopping Center (<40k)	B-C Retail	822	12.413	TSF	18	12	30	41	41	82	676
Shopping Center (<40k)	B-D Retail	822	23.038	TSF	33	22	55	76	76	152	1,254
High Turnover (Sit-Down) Restaurant	B-1 Sit Down Restaurant	932	5.993	TSF	32	26	58	33	21	54	642
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-14	-9	-23	-276
Fine Dining Restaurant	B-2 Sit Down Restaurant	931	10.092	TSF	4	4	8	53	26	79	846
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-23	-11	-34	-364
Shopping Center (<40k)	B-3 Retail	822	5.818	TSF	8	5	13	19	19	38	317
High Turnover (Sit-Down) Restaurant	B-4 Sit Down Restaurant	932	8.744	TSF	46	38	84	48	31	79	937
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-21	-13	-34	-403
Shopping Center (<40k)	B-5 Retail	822	10.568	TSF	15	10	25	35	35	70	575
Fast-Food Restaurant w/ Drive-Through Window	B-6 Fast Food	934	6.744	TSF	153	147	300	116	107	223	3,153
Pass-by (AM:50%, PM:55%, Daily:50%)					-77	-74	-150	-64	-59	-123	-1,577
High Turnover (Sit-Down) Restaurant	B-A Arcade/Restaurant	932	16.441	TSF	86	71	157	91	58	149	1,762
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-39	-25	-64	-758
Shopping Center (<40k)	B-A-1 Retail	822	6.428	TSF	9	6	15	21	21	42	350
Small Office Building (10k or less)	B-A-3 Office	712	1.194	TSF	2	0	2	1	2	3	17
Shopping Center (<40k)	B-A-2 Retail	822	3.122	TSF	4	3	7	10	10	20	170
Fine Dining Restaurant	B-13 Sit Down Restaurant	931	8.046	TSF	3	3	6	42	21	63	675
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-18	-9	-27	-290
Fast-Food Restaurant w/ Drive-Through Window	B-14 Fast Food	934	4.28	TSF	97	94	191	74	68	142	2,001
Pass-by (AM:50%, PM:55%, Daily:50%)					-49	-47	-96	-41	-37	-78	-1,001
Health/Fitness Club	B-E Gym	492	41.001	TSF	27	26	53	81	61	142	1,230
Shopping Center (<40k)	B-E-1 Retail	822	4.612	TSF	7	4	11	15	15	30	251
Outdoor Recreational Commercial	Outdoor Recreational Commercial	433	80	Bays	25	5	31	94	85	179	1619
TOTAL					698	539	1,240	1,032	907	1,937	19,248

[1] TSF = Thousand Square Feet

Construction traffic and construction work within the roadway right-of-way for roadway improvements would contribute to congestion of the local roadways. However, this condition would be temporary in nature and would not represent a significant impact. Mitigation measures were also specified related to construction traffic.

The SEIR determined that implementation of the Triangle Specific Plan would not conflict with the Riverside County Congestion Management Program.

Also, the SEIR determined that with construction of the internal connector road and primary entry driveways, the Triangle Specific Plan would provide adequate emergency access.

As described in the SEIR, the specific plan would provide adequate pedestrian connectivity through the provision of a meandering sidewalk to access the Project site from Murrieta Hot Springs Road. Bicycle connectivity and amenities would also be provided for through implementation of project design features and mitigation measures.

As described in the SEIR, the specific plan would include roadway improvements that would be designed and constructed to satisfy all City requirements for street widths, corner radii, intersection control, and other related issues. Adherence to applicable City requirements would ensure the proposed development would not include any sharp curves or dangerous intersections. Therefore, no substantial increase in hazards due to a design feature would occur and no mitigation measures were determined to be necessary for the specific plan.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in fewer vehicular trips when compared to the overall Triangle Specific Plan that was analyzed in the SEIR.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

New development is occurring north of the Project site that would alter traffic patterns. Therefore, an updated traffic analysis was performed by Rick Engineering which accounts for the new development in the area and current traffic volumes.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR for the Triangle Specific Plan found that the specific plan would result in reductions in vehicle miles traveled (VMT), although this particular threshold was not included in the State CEQA guidelines at the time. Specifically, the SEIR stated that proposed development would create jobs in the retail, restaurant, entertainment and hotel sectors and would attract business and jobs that would help to improve the jobs/housing balance and reducing VMT.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in fewer VMT associated with the trips taken to/from the Project site. However, there would also be a smaller amount of VMT reductions associated with the new jobs that would be created in areas where a jobs/housing imbalance currently continues to exist.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

Effective July 1, 2020, CEQA's methodology for evaluating traffic impacts has shifted from an LOS analysis to a VMT analysis. While this does not constitute a change in the Project, it should be noted that, while the SEIR evaluated traffic impacts using VMT methodology, the air quality analysis in the SEIR did calculate the VMT associated with the Project.

There have not been substantial changes in circumstances since the approval of the SEIR. The City is suburban in nature. There have been no changes, such as the rerouting or deletion of a high-quality transit corridor that would change the traffic impact analysis. The overall number of trips, and consequently the VMT, associated with the Project would be less than what was previously evaluated in the SEIR; therefore, impacts associated with the Project would be less than what was previously addressed, and no major revisions to the SEIR are required.

New information (which was not known and could not have been known at the time the EIR was certified) available?

The passage of SB 743 required the evaluation of VMT in CEQA documents; however, this does not constitute new information pursuant to CEQA. Nonetheless, for information purposes, the Project would reduce the number of trips and associated VMT compared to the overall approved Triangle Specific Plan. Therefore, the Project would not result in any new or substantially greater impacts and no major revisions to the SEIR are required.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- PDFs 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-7, and 10-8; and
- MMs 10-1, 10-2, 10-3, and 10-4.

4.18 TRIBAL CULTURAL RESOURCES

Consistency Evaluation

Would the Project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?**

2. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project which will require major revisions to the EIR?

Tribal cultural resources was not an independent resource topic within the State CEQA Guidelines at the time the SEIR was certified. However, tribal cultural resources was evaluated as a part of the cultural resources that was conducted. The overall Triangle Specific Plan was found in the SEIR to have a less than significant impact related to cultural resources with implementation of mitigation measures. The SEIR determined implementation of the Triangle Specific Plan could impact unknown archaeological resources and/or human remains during grading and ground disturbance activities. However, the SEIR determined that with implementation of mitigation measures, the Project would have a less than significant impact related to this threshold.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. The Project would result in less ground disturbance when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. There are no new tribal cultural resources, or other cultural resources, known to occur within the Project site that were not known when the SEIR was certified. Updated tribal consultation was conducted by the City for the Project in 2024 pursuant to the requirements of Senate Bill 18; however, no substantial new information on the potential for tribal cultural resources in the Project site came from this consultation.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- SCs 4-1 and 4-2; and
- MMs CULT-1, 4-1, and 4-2.

4.19 UTILITIES AND SERVICE SYSTEMS

Consistency Evaluation

Would the Project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

Electricity and Natural Gas

The SEIR determined that development of The Triangle Specific Plan would generate new demand for electricity and natural gas on the Project site, requiring the installation of electrical and natural gas infrastructure; however, with implementation of project design features and mitigation measures there would be a less than significant impact related to electricity and natural gas.

Potable Water and Sewerage

The SEIR found that anticipated water demand and wastewater generation would require construction of water and wastewater infrastructure. With construction of required infrastructure for water and sewerage, it was determined that the Triangle Specific Plan would not exceed available capacity of the EMWD wastewater treatment facilities.

Wastewater Treatment

The SEIR determined that wastewater originating from the Project site would ultimately be treated by facilities owned and operated by the EMWD. The wastewater treatment requirements issued by the State Regional Water Quality Control Board (RWQCB) for EMWD's treatment plant were developed to ensure that adequate levels of treatment would be provided for the wastewater flows emanating from all land uses within its service area; therefore, the wastewater from the Project site would not cause the treatment plant to exceed these treatment requirements according to the SEIR. Therefore, the SEIR found that implementation of the specific plan would have no impacts and no mitigation would be required related to wastewater treatment.

Conclusion

The Project would result in less demands on public utilities given that the Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents only partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The building efficiency standards required of projects currently are more stringent than they were when the SEIR was certified..

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple years?

<u>**No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR**</u>

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR found that implementation of the Triangle Specific Plan would increase demand for EMWD water supply but that adequate water supply would be available to serve the development that would occur as a part of the specific plan.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in reduced water demands than the overall specific plan project that was evaluated in the SEIR.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The UWMP serves as the document that would address if the water supplier would have sufficient water supplies available to serve the projected demand during normal, dry and multiple years. The 2005 UWMP was the latest UWMP at the time the Triangle Specific Plan's SEIR was certified. Currently, the latest UWMP for EMWD is dated 2020 (EMWD 2020). The 2020 UWMP was developed using assumptions based on the land use designations for jurisdictions located within the UWMP boundaries. Given that the Project is consistent with the land use designations for the Project site, it is accounted for in the demand calculations in the 2020 UWMP. Therefore, there are no substantial changes in the circumstances of the Project that would require major revisions to the EIR.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

<u>**No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR**</u>

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR determined that wastewater originating from the Project site would ultimately be treated by facilities owned and operated by the EMWD. The wastewater treatment requirements issued by the California RWQCB for EMWD's treatment plant were developed to ensure that adequate levels of treatment would be provided for the wastewater flows emanating from all land uses within its service area; therefore, the wastewater from the Project site would not cause the treatment plant to exceed these treatment requirements according to the SEIR. Therefore, the SEIR found that implementation of the specific plan would have no impacts and no mitigation would be required related to wastewater treatment.

The Project would result in less demands on public utilities than the overall Triangle Specific Plan given that the Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. The building efficiency standards required of projects currently are more stringent than they were when the SEIR was certified; therefore, the regulatory requirements that are required of the Project would likely result in reduced demand for utilities than was previously anticipated for the overall project. For example, additional water efficiency requirements for indoor plumbing fixtures would lead to reductions in wastewater flows from the Project than what was originally assumed for the Triangle Specific Plan.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No New or More Severe Impacts/ No Changes or New Information Requiring Preparation of an EIR.

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR found that the solid waste generated by the Project would represent less than one percent of the daily permitted tonnage at the nearest landfill and would not exceed the landfill system's capacity but that implementation of project design features would further reduce the amount of solid waste for disposal.

The waste disposal service for the Project would be required to abide by the applicable waste reduction and recycling programs required under existing regulations (i.e., AB 939, AB 341, SB 1383, and AB 1826).

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in less construction and operational debris when compared to the overall approved specific plan.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. New regulations have been adopted since the SEIR was certified, which are noted above, that are implemented by the waste purveyor.

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

As outlined in the MMRP provided as Appendix B, the following are applicable to the Project:

- PDFs 9-1, 9-2, 9-3, 9-4, 9-5, and 9-6;
- SCs 9-1, 9-2, 9-3, and 9-4; and
- MMs PSU-1, PSU-2, PSU-3, and 9-1.

4.20 WILDFIRE

Consistency Evaluation

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

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No New or More Severe Impacts/No Changes or New Information Requiring Preparation of an EIR

Substantial changes proposed in Project, which will require major revisions to the EIR?

The SEIR did not specifically evaluate the topic of wildfire susceptibility; however, emergency response and impacts on public service providers including the fire department was evaluated in the SEIR for the overall Triangle Specific Plan. Less than significant impacts were determined with implementation of mitigation measures.

The Project represents the first development within the Specific Plan area and will construct 279,500 gsf of development, which represents partial implementation of the Specific Plan that was evaluated in the SEIR for The Triangle Specific Plan. Therefore, the Project would result in fewer vehicular trips and fewer buildings to respond to when compared to the overall Triangle Specific Plan that was analyzed in the SEIR. No changes above and beyond what was analyzed in the SEIR would result in significant new or more severe impacts requiring mitigation. Thus, major revisions of the SEIR are not required.

Substantial changes in the circumstances under which the Project is being undertaken that will require major revisions to the EIR?

The conditions within the Project site are similar to the conditions that were described in the SEIR. According to a review of the latest available mapping, the Project site is not located within a wildfire susceptibility zone (CALFIRE 2023).

New information (which was not known and could not have been known at the time the EIR was certified) available?

There is no new information related to this threshold.

Applicable Measures from the MMRP:

There are no measures that are applicable to this resource topic.

SECTION 5.0 CONCLUSIONS

As described in this Addendum, there is substantial evidence that (1) the current Project does not represent a substantial change from the overall Triangle Specific Plan evaluated in the SEIR; (2) there are no substantial changes with respect to the circumstances under which the Project is undertaken that would result in new significant or substantially more severe impacts; and (3) there is no new information of substantial importance, which was not known and could not have been known at the time the SEIR was certified as complete. The current Project would not have any new or substantially more severe impacts beyond what was evaluated within the SEIR. There are no new mitigation measures beyond those that were adopted at the time the SEIR was certified that would be required to further reduce Project impacts. Therefore, as summarized in this Addendum, none of the conditions in Section 21166 of the Public Resources Code apply and no subsequent or supplemental environmental impact report should be required.

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Appendix A

Site Plan

THE TRIANGLE

THE TRIANGLE
MURRIETA CA

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Appendix B

Mitigation Monitoring and Reporting Program (MMRP)

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

SECTION 1.0 INTRODUCTION

Section 21081.6 to the State of California Public Resources Code requires a lead or responsible agency that approves or carries out a project where an environmental impact report (EIR) has identified significant environmental effects to adopt a "reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects." The City of Murrieta is the Lead Agency for The Triangle Specific Plan project, and therefore is responsible for implementation of the Mitigation Monitoring and Reporting Program (MMRP). A Final Subsequent Environmental Impact Report (EIR) has been prepared for this project which addresses potential environmental impacts and, where appropriate, recommends measures to mitigate these impacts. As such, a mitigation reporting or monitoring program is required to ensure that adopted mitigation measures are implemented.

SECTION 2.0 PROJECT LOCATION AND DESCRIPTION

The project site is an approximate 64.3-acre, triangular-shaped property located in the City of Murrieta in Riverside County, California. The project site is bordered by Murrieta Hot Springs Road to the north, Interstate (I) 15 to the southwest, and I-215 to the east.

The proposed Triangle Specific Plan Project consists of approximately 1.77 million gross square feet of mixed-use development that features an open-air retail commercial district. Proposed uses include retail uses in one or more shopping areas that blend restaurants, a mix of small and large retail stores, entertainment uses, and possibly offices located above retail uses; mid- and high-rise professional office space, served by parking structures; and hospitality uses that may include hotel rooms, conference and meeting space, dining, and its own recreational amenities. The intensity of development proposed to be allowed with The Triangle Specific Plan is regulated by the maximum gross building area for the site, building heights, property setbacks and parking requirements.

SECTION 3.0 PROGRAM MANAGEMENT

The mitigation monitoring and reporting program (MMRP) for The Triangle Specific Plan Project will be in place through all phases of project approval. Enforcement of the MMRP will be the responsibility of a Project Manager at the City of Murrieta.

The policies and procedures for the MMRP described herein are intended to provide focused, yet flexible guidelines for monitoring the implementation of the Project Design Features (PDFs), Standard Conditions (SCs), and Mitigation Measures (MMs) discussed in the Final EIR. The applicant/developer of specific future projects will have the responsibility for implementing the measures, and the various City of Murrieta departments will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.

The attached MMRP Matrix lists each PDF, SC and MM, the party responsible for monitoring efforts, and the timing of implementation. The MMRP Matrix also provides a column for the PM to verify that a PDF, SC or MM has been completed. After each measure is verified for compliance/completion, no further action is required, pursuant to the MMRP, for the specific phase.

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
AESTHETICS						
PDF 1-1	Section 2.7 of The Triangle Specific Plan includes Landscape Development Standards which are described in Section 3, Project Description. The Landscape Development Standards address requirements for landscaped areas, pedestrian walkways, and open space within The Triangle. Development standards are identified specifically for pedestrian connectivity, pedestrian oriented open spaces, streetscapes and perimeter edges, parking lots. Additionally, development standards address reduced energy and water consumption associated with landscaping. The Triangle Design Guidelines outline landscape design criteria, including landscape palettes. Prior to approval of each Development Plan, the Community Development Department shall confirm that landscape plans are in conformance with the landscape requirements, as outlined in The Triangle Specific Plan and The Triangle Design Guidelines. The plans shall be certified by a licensed Landscape Architect or a licensed Landscape Contractor.	Prior to approval of each Development Plan	Community Development Department			
PDF 1-2	As identified in Section 2.7 of The Triangle Specific Plan and outlined in Section 3, Project Description, a minimum of 20 percent of the overall project area shall be landscaped area or open space, with a minimum of 15 percent of the area within each planning area reserved for open space use.	Prior to approval of each Development Plan	Community Development Department			
PDF 1-3	Graded slopes within the Caltrans right-of-way along the eastern and southwestern boundaries of the project site as shown on Exhibit 3-22, Off-site Impact Map, of the Draft EIR, would be restored to meet the requirements of Caltrans for Erosion Control and Highway Planting. Prior to initiation of grading, grading and landscape plans for this off-site area shall be subject to Caltrans review and approval.	Prior to initiation of grading permits	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
PDF 1-4	The Triangle Design Guidelines document the design criteria that shall be incorporated into all development within The Triangle and are described in Section 3, Project Description. The Design Guidelines shall be used with The Triangle Specific Plan to implement The Triangle. The key components of the Design Guidelines include: (1) Overall Planning Guidelines (design theme, site planning considerations, expression of corporate identity, building architectural elements, landscape design concept and exterior lighting palette); (2) Guidelines for Land Uses (architecture elevation treatment, landscape design concept and influences, plant palettes, and hardscape elements) and (3) Streetscapes. All elements of the built environment within the Specific Plan area shall conform to the Design Guidelines and shall incorporate appropriate thematic elements. Compliance with the Design Guidelines shall be verified by the Community Development Department prior to approval of each Development Plan.	Prior to approval of each Development Plan	Community Development Department			
PDF 1-5	Section 2.5.7 of The Triangle Specific Plan identifies the allowable building height for buildings within each planning area. Prior to approval of each Development Plan, the Community Development Department shall verify that allowable building heights (presented in Table 3-7 of Section 3, Project Description) are not exceeded: 100-feet in Planning Area 1, 200-feet in Planning Areas 2 and 3 and 280-feet in Planning Area 4.	Prior to approval of each Development Plan	Community Development Department			
PDF 1-6	Concurrent with submittal of each Development Plan, the Property Owner/Developer shall submit a Lighting Plan to the City of Murrieta Community Development Director and Building and Safety Department for review to demonstrate that the development standards identified in The Triangle Specific Plan as outlined in PDF 1-7 have been implemented. The Lighting Plan shall include the	Concurrent with submittal of each Development Plan	Community Development and Building and Safety Departments			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	location and type of all outdoor fixtures and the resulting light patterns, accompanied by manufacturers catalog cuts and drawings, a photometric analysis, and the hours of operation for the project's lights. The Community Development Director has the authority to approve, conditionally approve, or deny this Lighting Plan according to the same process identified in Section 4.3.1.2, Minor Conditional Use Permit, of The Triangle Specific Plan.					
PDF 1-7	Section 2.10, Exterior Lighting Development Standards, of The Triangle Specific Plan identifies the lighting design criteria for the proposed development, including landscape accent, parking lot, and public space lighting. Prior to approval of each Development Plan, the Community Development Department shall confirm that all lighting design is in conformance with the Exterior Lighting Development Standards included in *The Triangle Specific Plan*, as follows: • Concurrent with submittal of the Development Plan, a Conceptual Lighting Plan shall be submitted for City review. The Lighting Plan shall include the location and type of all outdoor fixtures and the resulting light patterns and the hours of operation for the project's lights. • Lighting throughout The Triangle shall be designed to complement the architectural style of adjacent structures, to enrich the environment in which it is located, and to provide a comfortable and safe space for visitors.	Prior to approval of each Development Plan	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	• Low pressure sodium (LPS) lights will be used only if other lower level lights cannot be used to serve the same purpose, as the LPS lamps' pigmentation favors an orange hue. If LPS lights are used, the use of low-watt wash lights shall be used in planter areas and pedestrian zones to mitigate the undesirable hue of the LPS lamps. • Exterior lighting on buildings or within the parking areas shall not blink or flash. • Neon lights shall be discouraged except where implemented as an integral element of a tenant's prototypical signage or identity. • Fixtures may be located on buildings, recessed in-ground, located above grade on poles or bollards, and in trees. • Parking area fixtures shall be of a consistent or related style throughout The Triangle, and shall be compatible in style with accent lighting in the project. • Pedestrian areas shall be illuminated so that pathways and gathering areas are highlighted. • Exceptions to the above requirements shall be as provided in the City Development Code.					
PDF 1-8	As required by Section 2.4.3, Color and Materials, of The Triangle Design Guidelines, the architectural colors shall be low reflectance, subtle, neutral and compliment natural earth tones. The use of high-intensity or fluorescent colors is prohibited, unless incorporated as part of an approved comprehensive sign program. Glazing shall be clear, tinted or non-reflective.	Prior to approval of each Development Plan	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
PDF 1-9	Section 2.8 of The Triangle Specific Plan identifies signage regulations as described in Section 3, Project Description. The location and type (principal identification, arrival identification, entrance gateway/tenant identification, and existing/new display signs [freeway oriented billboard]) of allowed signs are presented on Exhibit 3-13. The Property Owner/Developer shall submit a comprehensive, on-site and freeway-facing tenant identification sign program for The Triangle to the City as part of each Development Plan which shall reviewed according to the process as identified in Section 4 of The Triangle Specific Plan.	Prior to approval of each Development Plan	Community Development Department			
PDF 1-10	The Property Owner/Developer shall demonstrate to the City Engineer that any new electric or communication distribution lines or the relocation of existing overhead facilities in proximity to, and which would be visible from, scenic corridors shall be placed underground whenever feasible in accordance with Public Utilities Commission regulations.	Prior to approval of each Development Plan	Community Development Department And Engineering/Public Works Department			
SC 1-1	Development within the Specific Plan area shall adhere to all applicable City of Murrieta lighting requirements as outlined in Section 16.18.100 (Lighting) and Section 16.18.110 (Mount Palomar Lighting Standards), as they are presented in the City's Municipal Code. Section 16.18.110 outlines specific requirements for lamp sources and shielding within the Palomar Lighting Zone and requires non-exempt uses (such as those proposed with *The Triangle Specific Plan*) to submit a Lighting Plan to the City for approval. The Lighting Plan shall be approved prior to approval of each Building Plan.	Prior to approval of each Building Plan	Community Development Department And Building & Safety Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM 358-AES-1	Prior to site plan approval, the project proponent will demonstrate to the satisfaction of the City of Murrieta Community Development Director or his/her designee, that no lighting will create a safety hazard or nuisance to off-site vehicular traffic or adjacent land uses. Measures to mitigate potential effects involve building design, building setbacks and screening direct lighting so as to avoid safety and nuisance hazards.	Prior to site plan approval	Community Development Department			
AIR QUALITY						
PDF 2-1	As identified in Section 2.9 of *The Triangle Specific Plan,* all office buildings shall incorporate sustainable design features to demonstrate the equivalency to a certified project under the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Rating System for New Construction.	Prior to approval of each Development Plan	Community Development Department and Building & Safety Department			
PDF 2-2	As identified in Section 2.9 of *The Triangle Specific Plan,* a Travel Demand Management Plan shall be prepared concurrently with the Development Plan to identify potential means of reducing automobile trips to the site. This Plan shall document the steps to be taken to facilitate and encourage alternate modes of travel, such as cycling, carpooling, and alternate fuel vehicle charging stations. It will also address methods of reducing peak hour congestion such as flexible work hours.	Compliance with this PDF will accomplished through implementation of PDF 10-8 under Traffic and Circulation.	Community Development Department			
PDF 2-3	As identified in Section 2.9 of *The Triangle Specific Plan,* alternate modes of travel sustainability measures include the following: • Bicycle storage racks or lockers shall be provided within 100-feet of the entry to each office building in compliance with section 5.106.4 of the California 2010 Green Building Standards (*California Code of Regulations,* Title24, Part 11). If multiple building entries are provided, bicycle racks shall be located near each entry.	Compliance with this PDF will accomplished through implementation of PDFs 10-6 and 10-7 under Traffic and Circulation.	Community Development Department And Building & Safety Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	• Bicycle racks or lockers shall also be located throughout the retail area of The Triangle. • Bicycle spaces for employees shall be secure, enclosed spaces that are located in a key-accessed area and are illuminated at night. Bicycle spaces for visitors and customers shall include bicycle racks located in areas that are clearly visible from a primary building entrance, illuminated at night, and protected from damage from moving and parked vehicles. These racks shall include provision for securing bicycles in which the user may lock the frame and wheels. • The bus turnout and shelters located on Murrieta Hot Springs Road and the Internal Connector Road shall include a roof canopy, seating, and shade trees nearby to provide shelter for riders.					
SC 2-1	During construction of the project, the Property Owner/Developer and its contractors shall be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. The South Coast Air Quality Management District's (SCAQMD's) Rule 402 requires that air pollutant emissions not be a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Two options are presented in Rule 403: monitoring of particulate concentrations or active control. Monitoring involves a sampling network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented starting with the first day of construction. Relevant control measures	Verification prior to issuance of a grading permit Implementation during construction	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	from Rule 403 are identified in Appendix F of the Air Quality Assessment included in Appendix C. Specific Rule 403 regulatory requirements that are applicable to the project are as follows: • All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph), per SCAQMD guidelines, in order to limit fugitive dust emissions. • The Contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project are watered at least three times daily during dry weather. Implementation of this measure is estimated to reduce respirable particulate matter (PM10) and fine particulate matter (PM2.5) fugitive dust emissions by approximately 61 percent. • The Contractor shall ensure that traffic speeds on unpaved roads and project site areas are reduced to 15 mph or less to reduce PM10 and PM2.5 haul road fugitive dust emissions by approximately 44 percent.					
SC 2-2	In accordance with California Air Resources Board (CARB) requirements (Title 13, Chapter 10, Section 2485, Division 3 of the *California Code of Regulations*), heavy duty trucks accessing the site shall not idle for greater than five minutes at any location.	Verification prior to issuance of a grading permit Implementation during construction	Building and Safety Department And Engineering/Public Works Department (Inspections)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
SC 2-3	The Property Owner/Developer and its contractors shall minimize pollutant emissions by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for more than five minutes (per California law, see SC 2-2).	Verification prior to issuance of a grading permit Implementation during construction	Engineering/Public Works Department (during grading operations) and Building and Safety Department (during building construction)			
SC 2-4	In accordance with SCAQMD Rule 431.2, the Property Owner/Developer and its contractors shall ensure use of low-sulfur diesel fuel in construction equipment, as required by CARB (diesel fuel with sulfur content of 15 parts per million [ppm] by weight or less).	Verification prior to issuance of a grading permit Implementation during construction	Engineering/Public Works Department (during grading operations) and Building and Safety Department (during building construction)			
SC 2-5	The Property Owner/Developer and its contractors shall use architectural coatings that have an average volatile organic compound (VOC) content compliant with SCAQMD Rule 1113, which limits the VOC content of architectural coatings so that actual emissions do not exceed the allowable emissions.	Verification prior to issuance of a grading permit Implementation during construction	Building and Safety Department			
SC 2-6	In compliance with SCAQMD Rules 1186 (Certified Street Sweeper Compliance Testing) and 1186.1 (Less-Polluting Sweepers), the Property Owner/Developer and its contractors shall ensure that alternative fuel or otherwise less-polluting street sweepers are used on the project site to the maximum extent feasible.	Verification prior to issuance of a grading permit Implementation during construction	Engineering/Public Works Department			
SC 2-7	In compliance with Assembly Bill 13 and Section 6404.5 of the *California Labor Code,* smoking shall be prohibited in buildings to minimize exposure of building occupants to environmental tobacco smoke. Designated smoking areas shall be located at least 25 feet away from building entries, air intakes, and operable windows.	Prior to issuance of each Development Plan Prior to issuance of building permits	Building and Safety Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
SC 2-8	Bicycle storage racks or lockers will be provided within 100 feet of the entry to each office building in compliance with Section 5.106.4 of the California 2010 Green Building Standards (*California Code of Regulations,* Title 24, Part 11). If multiple building entries are provided, bicycle racks shall be located near each entry.	Prior to issuance of each Development Plan Prior to issuance of building permits	Building and Safety Department			
MM 2-1	Prior to issuance of each building permit, the Property Owner/Developer shall prepare an Architectural Coating Plan that indicates the VOC content of the coatings to be used and the rate of application. The Plan shall demonstrate that VOC emissions for painting of the proposed building, added to VOC emissions from any other on-site painting that would occur concurrently, would not exceed 65 pounds per day. This limit provides a ten pound per day margin for VOC emissions from sources other than architectural coatings. The Architectural Coating Plan shall be verified by the City of Murrieta Building and Safety Department.	Prior to the issuance of each building permit	Building and Safety Department			
MM 2-2	During construction activities, the Property Owner/Developer shall include the following language on the Contractor Specifications, which shall be verified by the City of Murrieta Building and Safety Department: “The Contractor shall utilize existing power sources (e.g., power poles) or clean-fuel generators rather than diesel- or gasoline-powered generators where feasible. The effectiveness of this measure to reduce emissions is not quantified by the SCAQMD”. Compliance by the contractor shall be confirmed by the Building and Safety Department during construction.	Verification prior to issuance of a grading permit Implementation during construction	Building and Safety Department And Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM 2-3	Prior to issuance of each building permit, the Property Owner/Developer shall demonstrate to the Community Development Department and the Building and Safety Department that proposed buildings include features that exceed minimum statewide energy requirements (i.e., 20 percent beyond Title 24). Implementation of these features shall be confirmed by the Community Development Department and the Building and Safety Department following completion of construction. At a minimum, these features may include, but not be limited to: • Use of low emission water heaters; • Use of central water heating systems; • Use of energy-efficient appliances; • Use of increased insulation; • Use of automated controls for air conditioners; • Use of energy-efficient parking lot lights; • Use of lighting controls and energy-efficient lighting.	Prior to the issuance of each building permit Verify implementation following construction	Community Development Department and the Building and Safety Department			
MM 2-4	Prior to the issuance of each occupancy permit, the Property Owner/Developer shall submit for approval to the Community Development Department a plan for the future building manager to provide educational information to all tenants and employees on the advantages of purchasing and using clean, “green” products including, but not limited to: (1) low VOC paints and cleaning products, (2) products made from recycled materials, and (3) products that can be recycled. The plan shall require the provision of this information to all tenants upon initial occupancy and to all new employees working within the development. Distribution of the material shall be repeated annually or more frequently.	Prior to the issuance of each occupancy permit	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
			Initials	Date	Remarks
BIOLOGICAL RESOURCES					

SC 3-1	Pursuant to the requirements Western Riverside Multiple Species Habitat Conservation Plan (MSHCP), the Property Owner/Developer shall follow guidelines for protection of biological resources during construction as outlined in Section 7.5.3 of the MSHCP and Standard Best Management Practices (BMPs) for construction as outlined in Appendix C of the MSHCP. These requirements include but are not limited to the following measures applicable to the project: • The Project will not affect any conserved habitat for fuel-modification purposes; • Plans for water pollution and erosion control will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and vegetation. Prior to construction commencement, the City will approve the pollution preservation plans; • Construction activities will be timed to consider seasonal requirements for breeding birds and migratory non-resident species. Habitat clearing will be avoided during species' active breeding season (March 1 to June 30); • Sediment and erosion-control measures will be implemented until such time that soils are determined to be stabilized successfully; • Silt fencing or other sediment-trapping materials will be installed at the downstream end of construction activities to minimize sediment transport off site; • The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre-existing access routes to the greatest extent possible; • Equipment storage, fueling, and staging areas will be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types. Those designated areas will be clearly marked and located in such a manner as to contain runoff;	Prior to issuance of a grading plan During construction	Community Development Department Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	• Exotic species removed during construction will be properly handled to prevent sprouting or regrowth; • Training of construction personnel will be provided; • Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices (BMPs); and • Waste, dirt, rubble, or trash will not be deposited in any conservation areas or any native habitat.					
SC 3-2	Prior to grading permit issuance or as identified by ordinance, the Property Owner/Developer shall pay the appropriate MSHCP Local Development Mitigation Fee amount as determined by the City, unless exempted by ordinance. The current fee is $6,597 per acre for commercial uses.	Prior to issuance of a grading permit	Engineering/Public Works Department			
MM 358-BIO-1	The Property Owner/Developer shall comply with Habitat Conservation Plan (HCP) policies established by the County of Riverside for the federally listed Endangered/State-listed Threatened Stephens' kangaroo rat. Interim Mitigation fees applicable to the proposed project ($500 per gross acre) shall be paid by the Property Owner/Developer.	Prior to issuance of a grading permit	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM 3-1	Prior to initiation of construction activities, the Property Owner/Developer shall retain a City-approved Biological Monitor for the project. The Biological Monitor shall ensure that all permit conditions are met, all mitigation measures are properly implemented, and that the project complies with all standard conditions and project design features. Beginning with the initiation of construction or grading activities, the Biological Monitor shall submit monthly status reports to the Community Development Department to demonstrate compliance with this measure.	Prior to initiation of construction or grading activities	Community Development Department			
MM 3-2	A focused survey for burrowing owl following the Burrowing Owl Survey Instructions for Western Riverside County shall be conducted during the breeding season (March 1 to August 31) prior to construction to confirm the absence of the species. Per MSHCP requirements and following specific direction of the USFWS and the CDFG in comments on the DBESP, if the focused surveys are not conducted 30 days prior to construction, a pre-construction survey for burrowing owl shall be conducted 30 days prior to construction to determine presence or absence at the time of construction. If burrowing owl is present during either the focused survey or the pre-construction survey, guidelines in Section 6.3.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) shall be followed to determine appropriate mitigation per the MSHCP requirements. Mitigation shall include: (1) protection of the burrowing owl if present during the breeding season (March 1 to August 31), and (2) active translocation during the non-breeding season (September 1 to February 28) to conserved habitat within the MSHCP Plan Area. The Property Owner/Developer shall submit written evidence that a focused survey has been completed during the breeding season and prior to construction and that, if necessary, a pre-	Prior to earth disturbance	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	construction survey for burrowing owls was performed within 30 days prior to earth disturbance. Evidence that any necessary mitigation requirements have been met shall be provided to the Community Development Department prior to issuance of a grading permit.					
MM 3-3	Prior to any ground-disturbing activities, the Property Owner/Developer shall submit copies of Contractor Specifications to the Engineering/Public Works (field inspection) Department that include the following requirements to protect nesting birds regulated by the Migratory Bird Treaty Act: "When feasible, vegetation removal activities shall be scheduled between July 1 and February 28 to avoid the nesting season. This will ensure that no active nests will be disturbed and that removal could proceed rapidly. If vegetation removal activities shall occur during the nesting season (March 1 to June 30), all suitable habitat shall be thoroughly surveyed for the presence of nesting birds by a qualified Biologist prior to removal. If any active nests are detected, the area shall be flagged, along with a 300-foot buffer area for non-listed species and a 500-foot buffer for listed species and raptors unless it is determined by a qualified biologist and approved by the regulatory agencies that a reduced buffer is appropriate. The buffer area shall be avoided until the nesting cycle is complete or until it is determined by the Monitoring Biologist that the nest has failed". In addition, a Biologist shall be present on the site to monitor the vegetation removal to ensure that nests not detected during the initial survey are not disturbed. The Biological Monitor shall provide written notification to the Community Development and Engineering (field inspection) Department that these requirements have been accomplished following completion of grading activities associated with each grading permit.	Prior to any ground-disturbing activities Monitoring during construction	Community Development Department Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM 3-4	Prior to the issuance of any grading permit and any ground-disturbing activities impacting jurisdictional areas, the Property Owner/Developer shall obtain and then provide the Department of Public Works with a copy of the executed Section 404 Permit obtained from the U.S. Army Corp of Engineers (USACE). The Property Owner/Developer is obligated to and shall comply with all conditions of the permit.	Prior to the issuance of any grading permit and any ground-disturbing activities Compliance verification during construction	Engineering/Public Works Department And Community Development Department			
MM 3-5	Prior to the issuance of any grading permit and any ground-disturbing activities, the Property Owner/Developer shall obtain and then provide the Department of Public Works with a copy of the Section 401 Water Quality Certification obtained from the Regional Water Quality Control Board (RWQCB). The Property Owner/Developer is obligated to and shall comply with all conditions of the Section 401 Water Quality Certification.	Prior to the issuance of any grading permit and any ground-disturbing activities	Engineering/Public Works Department And Community Development Department			
MM 3-6	Prior to the issuance of any grading permit and any ground-disturbing activities impacting jurisdictional areas, the Property Owner/Developer shall obtain and then provide the Department of Public Works with a copy the executed Streambed Alteration Agreement obtained from the California Department of Fish and Wildlife. The Property Owner/Developer is obligated to and shall comply with all conditions of the permit.	Prior to the issuance of any grading permit and any ground-disturbing activities Compliance verification during construction	Engineering/Public Works Department And Community Development Department			
MM 3-7	Prior to the issuance of a grading permit, the Property Owner/Developer shall demonstrate that impacts to 0.21 acres of MSHCP Riparian/Riverine Habitat (southern willow scrub, mule fat scrub, herbaceous wetland, disturbed wetland, and streambed) shall be mitigated consistent with creation and preservation acreage requirements outlined in Table 5.3-4 (0.21 acre of off-site creation and 0.37 acre of off-site preservation). The mitigation requirement shall be no less than this amount, and shall comply with	Prior to the issuance of a grading permit	Engineering/Public Works Department And Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	the mitigation requirements of the Section 404 Permit, Section 401 Water Quality Certification, and Streambed Alteration Agreement (refer to MMs 3-4 through 3-6). The provision of 0.58 acres of compensatory mitigation shall be completed at the Applicant-owned parcel with Specific Plan 310 located north of the proposed project site, north of Keller Road, east of Washington Street, and west of the San Diego Canal (APN 388-12-004 and 388-180-072; Figure 8 of the DBESP) within the same area as the project site. Documentation to be submitted to the Department of Public Works prior to issuance of a grading permit shall consist of a Riparian Habitat Mitigation Plan approved by the respective regulatory agencies for the 0.21-acre of off-site created habitat, and proof of preservation of 0.37-acre off-site. This site shall be conserved and deeded over to the appropriate conservation authority. If the applicant-owned Specific Plan 310 mitigation site described above is no longer available when the Property Owner/Developer is obtaining grading permits, then mitigation shall consist of creating and preserving Riparian/Riverine habitat at an alternate off-site mitigation site, as identified in the Property Owner/Developer's USACE and CDFG permit/agreement for the proposed project.					
CULTURAL RESOURCES						
~~SC 4-1~~	~~In the event that cultural resources (archaeological, historical, paleontological) resources are inadvertently unearthed during excavation and grading activities of any future development project, the contractor shall cease all earth-disturbing activities within a 100-meter radius of the area of discovery. If not already retained due to conditions present pursuant to Mitigation Measure 358-Cult-1 or MM 4-1, the~~	Prior to issuance of a grading permit During excavation and grading activities	Community Development Department Engineering/Public Works Department (Inspectors)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	~~project proponent shall retain a qualified professional (i.e., archaeologist, historian, architect, paleontologist, Native American Tribal monitor), subject to approval by the City of Murrieta to evaluate the significance of the find and appropriate course of action. If avoidance of the resources is not feasible, salvage operation requirements pursuant to Section 15064.5 of the CEQA Guidelines shall be followed and which shall take in to account tribal preferences and sensitivity concerns. After the find has been appropriately avoided or mitigated and cleared by the City, the Project cultural resources professional and, if applicable, the Native American monitor representing the Luiseño Indian Tribe, work in the area may resume. Pursuant to California Public Resources Code Section 21083.2(b), avoidance is the preferred method of preservation for archaeological resources. If the Developer, the project archaeologist and the Native American Monitor cannot agree on the significance or the mitigation for such resources, these issues will be presented to the Community Development Director for decision. The Community Development Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Luiseño Indian Tribe. Notwithstanding any other rights available under the law, the decision of the Community Development Director shall be appealable to the Planning Commission and/or City Council.~~ Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all ground disturbing activities. The Project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected					
MM CUL-1 (Formerly SC 4-1)						

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	archaeological resources are unearthed during Project construction. The Project archeologist and the Pechanga Tribe shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Pechanga Tribe shall make themselves available to provide the training on an as-needed basis;					

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
SC 4-2 MM CUL-2 (Formerly SC 4-2)	~~In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to State Health and Safety Code Section 7050.5, no further disturbance shall occur until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendant of the deceased Native American, who shall serve as consultant on how to proceed with the remains.~~ If human remains are found during ground disturbing activities, the State of California Health, and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be potentially Native American in origin, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall then make recommendations for the treatment and disposition within 48 hours of gaining access to the site.	During excavation and grading activities	Engineering/Public Works Department (Inspectors)			
SC CUL-3	At least thirty (30) days prior to submittal of the final grading plans to the Project Archaeologist will develop a Cultural Resources Monitoring Plan (“CRMP) for the treatment and mitigation of cultural resources discovered during Project development in consultation with Pechanga Tribe. Treatment of the newly discovered resource(s) will	Prior to the issuance of a grading permit	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	be consistent with the terms and provisions of the CRMP and may be amended by the parties as agreed upon. Prior to its finalization, the Project Archaeologist will circulate the draft CRMP to the City Planner and Pechanga Tribe for review and comment. The final document will include information provided by the tribe(s) concerning tribal methods and practices and other appropriate issues that may be relevant to culturally appropriate treatment of the resources. The involved parties will make good-faith efforts to incorporate the Tribe's comments. The City Planner will have final review and approval authority for the CRMP. If there are disagreements with the approval, a Project Issue Resolution (PIR) meeting will be facilitated. All parties are required to withhold public disclosure of information related to the treatment and mitigation of cultural resource(s) pursuant to the specific exemption set forth in CGC para. 6254(r). The CRMP will include/address each of the following: a) The parties entering into the CRMP, and their contact information. b) The Project schedule includes the frequency and location of monitoring of earthwork and ground disturbing activities and details regarding what types of construction-related activities will require monitoring. c) Roles and responsibilities of individuals of the CRMP d) The methods and protocols of recovery in the event of an inadvertent discovery, controlled grading, ESA fencing, etc.		Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	e) The protocols for the discovery of Human Remains and/or grave related items of cultural patrimony. f) Storage and recordation of any cultural resources g) Control grading exhibits and process					
SC CUL-4	Worker Environmental Awareness Program. All construction personnel and monitors who are not trained archaeologists or tribal cultural monitors shall be briefed regarding inadvertent discoveries prior to the start of construction activities. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide the construction personnel with brief review of the cultural sensitivity of the project and the surrounding area; what resources could be potentially identified during earthmoving activities; the requirements of the monitoring program; the protocols to follow during the construction of the project and explain the importance of and legal basis for the protection of significant archaeological and tribal cultural resources, and who to contact if and when the cultural resources are identified. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor, archaeological, and tribal cultural monitor(s).	During ground disturbance activities	Community Development Department Engineering/Public Works Department (Inspectors)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	e Prior to final inspection, the Project Archeologist is to submit two (2) copies of the Phase IV Cultural Resources Monitoring Report that complies with the Planning Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Planning Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Planning Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the Eastern Information Center (EIC) at the University of California Riverside (UCR) and one (1) copy shall be submitted to the Pechanga Cultural Resources Department.	Prior to the issuance of a grading permit	Community Development Department Engineering/Public Works Department (Inspectors)			
MM TCR-1 (Formerly MM 4-2)	Native American Monitoring. At least 30 days prior to issuance of a grading permit the applicant/owner/developer shall contact Pechanga Band of Indians with notification of the approximate commencement of ground-disturbing activities. The applicant/owner/developer shall secure agreements with the Pechanga Tribe for Tribal Monitoring. The agreement shall include, but not limited, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for the monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during ground disturbing activities. A copy of the signed agreement shall be provided to the City Planner and Building official prior to issuance of the first grading permit. The Native American Monitor has the authority to temporarily divert and stop earth moving activities in the event that suspected	Prior to the issuance of a grading permit	Community Development Department Engineering/Public Works Department (Inspectors)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	cultural resources are unearthed. The Native American Monitor(s) will be responsible for maintaining weekly monitoring logs, the Developer shall identify an individual on site to sign the weekly logs .					
MM TCR-2	Inadvertent Discovery Clause. If during ground disturbance activities, unique cultural resources are discovered, the following procedures shall be followed. Unique cultural resources are defined, for this measure only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Pechanga Band of Indians. All sacred sites area are to be avoided and preserved, Tribal cultural resources are excluded from the definition of unique cultural resources as those resources are defined by the tribal values ascribed to them by their Tribal Cultural Resources Inadvertent Discovery Clause. If during ground disturbance activities, unique cultural resources are discovered, the following procedures shall be followed. Unique cultural resources are defined, for this measure only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Pechanga Tribes. Tribal cultural resources are excluded from the definition of unique cultural resources as those resources are defined by the tribal values ascribed to them by their affiliated communities. Treatment of tribal cultural resources inadvertently discovered during the project's ground-disturbing activities shall be subject to the consultation process required by state law and AB 52. If unique resources are	During ground disturbance activities	Community Development Department Engineering/Public Works Department (Inspectors)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	discovered, the following measures shall be implemented: a) All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the Project Applicant, the Principal Investigator/Archaeologist, the Tribal Representative(s), and the Community Development Director to discuss the significance of the find. b) At the meeting, the significance of the discoveries shall be discussed and after consultation with the Tribal Representative(s) and the Principal Investigator/ Archaeologist, a decision shall be made, with the concurrence of the City Planner, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources. c) Further ground disturbance, including but not limited to grading, trenching etc., shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional Tribal Monitors if needed. d) Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Management Plan and Monitoring Agreements entered into with the Consulting Tribes. This may include					

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity as identified in Non-Disclosure of Reburial Condition/ Mitigation Measures. e) If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be prepared by the Principal Investigator/Archaeologist, in consultation with the Consulting Tribes, and shall be submitted to the City for their review and approval prior to implementation of the said plan. f) Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and cultural resources. If the Project Applicant and the Consulting Tribes cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the City Planner for decision. The City Community Development Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources, recommendations of the Principal Investigator/Archaeologist and shall take into account the cultural and religious principles and practices of the Consulting Tribes. Notwithstanding any other rights available under the law, the decision of the City Planner shall be appealable to the City Planning Commission and/or City					

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	Council. Evidence of compliance with this mitigation measure, if a significant archaeological resource is found, shall be provided to City of Murrieta upon the completion of a treatment plan and final report detailing the significance and treatment finding. The proposed improvements shall be submitted and approved by the City prior to construction and implemented during construction. A copy of all proposed engineered improvements shall be retained by the City in the project file. City staff shall verify that the current installed facilities comply with this requirement. The verification shall be retained in the project file.					
MM TCR-3	Final Disposition. In the event that Native American Cultural resources are identified during Project earthwork and ground-disturbing activities, the following procedures shall be carried out for final disposition; One or more of the following treatments, in order of preference, shall be employed in consultation with the Consulting Tribes. Evidence of such shall be provided to the City of Murrieta. 1. Preservation-In-Place of the cultural resources. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resource(s).	During grading operations	Community Development Department Engineering/Public Works Department (Inspectors)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	2. Reburial of the cultural resource(s) on the Project property. The Preservation Site(s) will be located within the Project site development envelope of the Project, outside of any known and identified cultural resource sites. The measures for reburial shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed, with an exception that sacred items, burial goods, and Native American human remains are excluded. Any reburial process shall be culturally appropriate. The listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV Report shall be filed with the City under confidential cover and not subject to Public Records Request. 3. If preservation in place or reburial is not feasible then the resources shall be curated in a culturally appropriate manner at a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the City. There					

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	shall be no destructive or invasive testing on sacred items, burial goods, and Native American human remains. Results concerning findings of any inadvertent discoveries shall be included in the Phase IV monitoring report. Evidence of compliance with this mitigation measure, if a significant archaeological resource is found, shall be provided to City of Murrieta upon the completion of a treatment plan and final report detailing the significance and treatment finding.					
MM TCR-4	Controlled Grading exhibit, Grading and Grubbing. Prior to grading permit issuance, control grading plan shall be prepared in consultation with the Pechanga Band of Indians, incorporating their knowledge of the area, including any potential sacred and ceremonial reburial sites. The Control grading area must be clearly identified in the grading plans and detailed in the note section of the plans. If additional potential areas of concern are identified by the Principal Investigator/Archaeologist and the Pechanga Band of Indians, these areas must also be specified during this process. The identified areas shall be inspected by the Principal Investigator/Archaeologist and a Pechanga Native American monitor prior to the commencement of grading to determine the extent of the controlled grading process. Other areas which may require controlled grading shall be determined by the Principal Investigator/Archaeologist and the Native American monitor(s) from the Pechanga Band of Indians based on the results and soil types identified during grading. Should any changes be	Prior to issuance of grading permit and eduring excavation and grading activities Add mitigation measure as a note to grading plan	Engineering/Public Works Department (Inspectors)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	needed, an updated exhibit will be produced and approved by all parties prior to any ground disturbance in the newly identified area.					
MM TCR-5	Human Remains. In the event that human remains are inadvertently encountered during construction activities, all work is to immediately stop, and no further disturbance shall occur in the area until the County Coroner has made the necessary findings as to origin. The remains and associated resources shall be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. No further excavation or disturbance of the Project site or any nearby (no less than 100 feet) area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to immediately notify the Native American Heritage Commission (NAHC). The NAHC must immediately notify those persons it believes to be the most likely descendant (MLD). The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.	Prior to the issuance of a grading permit and during all ground disturbance activities (grading, clear & grub, etc.) Add mitigation measure as a note to grading plan	Community Development Department Engineering/Public Works Department (Inspectors)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
MM TCR-6	Non-Disclosure. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).	At all Times Add mitigation measure as a note to Grading Plan	Community Development Department Engineering/Public Works Department (Inspectors)			
~~358-Cult-1~~ SC PAL-1 (Formerly 358-CUL-1)	Prior to the issuance of a grading permit, the Property Owner/Developer shall demonstrate to the satisfaction of the City of Murrieta Community Development Director that the following measures shall be implemented to prevent the destruction of paleontological resources: A. Prior to any excavation into undisturbed Pauba Formation deposits, a pre-construction meeting shall be conducted in which a qualified Paleontologist shall explain the procedures necessary to protect and safely remove potentially significant fossil materials for study and curation. B. A qualified Paleontologist shall be retained to perform inspections of the site and to salvage exposed fossils during excavation activities. The frequency of these inspections shall depend on fossil discovery, rock unit sensitivity, and the rate of excavation. In areas of HIGH sensitivity and the presence of fossils, monitoring shall be required full time.	Prior to the issuance of a grading permit	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	C. Should a resource(s) be encountered, the Paleontologist shall be allowed to divert or direct grading in the area of an exposed fossil in order to facilitate evaluation and, if necessary, salvage. D. Due to the small size of some of the potential fossils, it shall be necessary to collect matrix samples in Pleistocene fine-grained sediments for processing through fine screens. E. Regardless of the final degree of preservation, evaluation and treatment undertaken, recovered artifacts shall be housed at a curatorial facility in compliance with federal regulations (36 Code of Federal Regulations [CFR] 79). If these facilities that were offered the artifacts refuse the collection, the collection may be offered to the Murrieta Unified School District. F. Should a resource(s) be encountered, a report shall be prepared that contains an appended itemized inventory of specimens. This report and inventory shall be submitted to the City of Murrieta as Lead Agency, or their designee, and signifies completion of the program to mitigate impacts to paleontological resources. G. Should a resource(s) be encountered and prior to removal and/or salvage of the ~~archaeological/~~paleontological material, the Property Owner/Developer shall notify the Assistant Superintendent of the Murrieta School District of the discovery of such material.					

MM 4-1	A Native American Monitor and Qualified Archaeologist shall be present during any earth-moving construction activities. At least 30 days prior to issuance of grading permits, separate agreements between the Developer/Applicant and the Qualified Archaeologist and the Developer/Applicant and a Native American Monitor representing the Luiseño Indian Tribe shall be developed regarding prehistoric cultural resources and shall identify any monitoring requirements and treatment of cultural resources so as to meet both the requirements of CEQA and those of the Luiseño Indian Tribe. The agreements shall also address roles and responsibilities of the Native American Monitor and the Archaeologist. The Native American Monitor agreement shall also detail treatment and final disposition of any Native American cultural resources, sacred sites, and human remains discovered on the site. In compliance with SC 4-2, discovery and treatment of human remains shall be in compliance with State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. The executed agreements shall be provided to the City of Murrieta Community Development Director prior to issuance of a grading permit. If monitoring of Native American and/or other archaeological resources occurs during project construction, a report documenting monitoring activities conducted by the Qualified Archaeologist and Native American Monitor shall be submitted to the City of Murrieta within 60 days of completion of grading. This report shall document the type of cultural resources recovered and the disposition of such resources. If no cultural resources are identified during the monitoring activities, a letter report will be completed within 30 days of the completion of grading. It will document the type of monitoring activities conducted, report any problems or issues that occurred and state clearly that no resources were identified. All reports produced will be submitted to the City of Murrieta, Eastern Information Center and the appropriate tribe(s).	Monitoring agreement prior to issuance of grading permits Implementation during any earth-moving construction activities	Community Development Department Engineering/Public Works Department (Inspectors)			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
~~MM 4-2~~	~~Prior to issuance of any grading permit, the Engineering/Public Works Department shall confirm that the following note is included on Contractor Specifications: "Should any cultural/scientific resources be discovered during earth-moving activities, no further grading shall occur in the area of the discovery until the Community Development Director and/or Caltrans (for resources within Caltrans' right-of-way) is satisfied that adequate provisions are in place to evaluate and protect these resources." This condition and the approved provisions/ recommendations as determined in the agreement prepared under MM 4-1 and/or outlined in an Evaluation Plan, shall be incorporated on the cover sheet of the grading plan. Tribal and archaeological monitors shall be allowed to monitor all grading, excavation and groundbreaking activities, and shall also have the authority to temporarily stop and redirect grading activities.~~ ~~If potentially significant features or sites are discovered, an Evaluation Plan shall be developed by the Project archaeologist and a representative of Luiseño Indian Tribe and shall contain, at a minimum, a research design and field methodology designed to recover data amenable to testing the site's ability to yield answers to questions of interest to the public and/or scientific community. If a site is determined to be significant, data recovery excavations may be necessary unless the resource is avoided and preserved/protected in place. Evaluation shall be supervised by an individual or individuals that meet either the Secretary of the Interior's Professional Qualification Standards as a qualified Prehistoric Archaeologist, as a Historic Archaeologist (as applicable), and/or as a Registered Professional Archaeologist(s) with similar qualifications.~~	~~Prior to issuance of any grading permit~~ ~~Implementation during construction~~	~~Engineering/Public Works Department and Community Development Department~~ ~~Caltrans~~			
GEOLOGY AND SOILS						

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
SC 5-1	The City of Murrieta adopted the 2001 California Building Code (CBC) in its entirety, as set forth in Chapter 15.08 (Building Code) of the *Murrieta Municipal Code*. The Property Owner/Developer shall comply with the requirements of the 2010 CBC or the most recent building and seismic codes in effect at the time the grading plans are approved in addition to any applicable ordinances set forth by the City of Murrieta.	Prior to approval of grading and building plans	Engineering/Public Works (for grading) and Building and Safety Department (for building)			
SC 5-2	Prior to issuance of an encroachment permit by the California Department of Transportation (Caltrans), a Preliminary Geotechnical Report shall be submitted and approved by Caltrans for grading and/or earthwork within Caltrans' right-of-way. Corrective work within Caltrans' right-of-way shall be done in accordance with Caltrans standard specifications.	Prior to issuance of an encroachment permit by the Caltrans	Engineering/Public Works Department Caltrans			
SC 5-3	Prior to issuance of a Grading Permit for each future development project, a registered geologist or soils engineer shall prepare an area-specific Geologic Study, which shall be submitted to the Public Works or Building and Safety Department for approval. The Geologic Study shall specify the measures necessary to mitigate impacts related to fault rupture, groundshaking, landslides, liquefaction or dynamic settling, expansive or collapsible soils, lateral spreading, and other geologic and seismic hazards, if any. All recommendations in the Geologic Study shall be implemented during area preparation, grading, and construction.	Prior to issuance of a grading permit for each future development project	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
SC 5-4	Prior to issuance of any Grading Permit, Property Owner/Developer of future development projects shall comply with each of the recommendations detailed in the Geotechnical Study, and other such measure(s) as the City deems necessary to adequately mitigate potential seismic and geotechnical hazards.	Prior to issuance of any Grading Permit	Engineering/Public Works Department			
358-Geo-1	Prior to issuance of building permits, the Property Owner/Developer shall demonstrate that all structures and roadway improvements have been designed to resist expected levels of ground shaking. The most recent version of the California Building Code (CBC) outlines specific design requirements for structures based on expected potential ground acceleration, intended uses, and subsurface soils or bedrock conditions at the site. Prior to issuance of building permits, the Property Owner/Developer shall demonstrate that all structures have been designed in accordance with the most recent seismic standards in the CBC and seismic design parameters of the Structural Engineers Association of California. Roadways will be designed in accordance with seismic design provisions established by the California Department of Transportation to promote safety in the event of an earthquake.	Prior to issuance of building permits	Building and Safety Department			
358-Geo-2	Prior to issuance of a grading permit, the Property Owner/Developer shall prepare an Erosion Control Plan in accordance with requirements established by the City of Murrieta and the Regional Water Quality Control Board, San Diego. The Erosion Control Plan shall include control measures which are subject to approval by the City of Murrieta. All erosion control measures shall be implemented prior to and during the rainy season (October 15 to April 15).	Prior to issuance of a grading permit	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	**Date**	**Remarks**
358-Geo-3	Prior to issuance of a grading permit, the Property Owner/Developer shall incorporate the following as part of project grading plans upon approval by the City. “Unsuitable materials such as alluvium, topsoil and artificial fill will be excavated and removed or recompacted prior to placement of structural fills. Potentially liquefiable soils shall also be excavated.” The Property Owner/Developer is required to comply with all conditions of the permit as outlined on the grading plans; verification of completion of this requirement shall be completed by the City Engineering/Public Works Department during construction.	Prior to issuance of a grading permit Verification of completion during construction	Engineering/Public Works Department			
358-Geo-4	Prior to issuance of a grading permit, the Property Owner/Developer shall incorporate the following as part of project grading plans upon approval by the City. “Removal of compressible materials will be required in all areas of structural fill to minimize settlement potential.” The Property Owner/Developer is required to comply with all conditions of the grading permit as outlined on the grading plans; verification of completion of this requirement shall be completed by the City Engineering/Public Works Department during construction.	Prior to issuance of a grading permit Verification of completion during construction	Engineering/Public Works Department			
358-Geo-5	During grading operations, unsuitable materials such as colluviums, alluvium, topsoil, landslide debris and artificial fill shall be excavated and removed or recompacted prior to placement of structural fills. Site preparation, excavation and earthwork completion operations shall be performed under the observation and testing of a soils engineer.	During grading operations	Engineering/Public Works Department			
358-Geo-6	During grading operations, removal of colluvium/compressible materials will be required in all areas of structural fill to minimize settlement potential.	During grading operations	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
358-Geo-7	Prior to issuance of a grading permit, the Property Owner/Developer shall provide detailed grading plans prepared by a registered Geotechnical Engineer (in conformance with established City of Murrieta procedures) further defining project earthwork requirements. These plans shall be subject to the review and approval of the City of Murrieta. A geotechnical review of the detailed grading plans for the project shall also be required. Additional subsurface investigation shall be conducted during the subsequent planning to provide specific design requirements for the project area.	Prior to issuance of a grading permit	Engineering/Public Works Department			
358-Geo-8	All cut slopes adjacent to ungraded natural terrain and exceeding ten (10) feet in vertical height shall be contour graded incorporating the following grading techniques: a. The angle of the graded slope shall be gradually adjusted to the angle of the natural terrain. b. Angular forms shall be discouraged. The graded form shall reflect the natural rounded terrain. c. The toes and tops of slopes shall be rounded with curves with radii designed in proportion to the total height of the slopes where drainage and stability permit such rounding. d. Where cut and fill slopes exceed 300 feet in horizontal length, the horizontal contours of the slope shall be curved in a continuous, undulating fashion.	Prior to issuance of a grading permit	Engineering/Public Works Department			
MM 5-1	Recommendations from the *Preliminary Geotechnical Report* (Leighton Consulting 2008), the *Geotechnical Feasibility Report for the Proposed Below Grade Parking Structures* (Leighton 2012) and from the forthcoming design-level geotechnical studies shall be included in the	Prior to issuance of each grading permit	Engineering/Public Works Department Caltrans			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	Grading Plans and Building Design Specifications prior to issuance of each grading permit. Compliance with this requirement shall be verified by the City of Murrieta's Engineering/Public Works Department for construction activities under the jurisdiction of the City of Murrieta and by Caltrans for grading within Caltrans right-of-way. Based on the Preliminary Geotechnical Report, preliminary recommendations to be included in the project specifications are related to: site preparation, removal and recompaction, structural fills, utility trenches, shrinkage and bulking, slope stability (slope face compaction and finishing and slope landscaping), surface drainage and erosion, foundation design, floor slab design, footing setback, anticipated settlement, lateral earth pressures and resistance, concrete and metallic corrosion, and preliminary pavement section design.	Prior to issuance of building permits	Building & Safety Department			
MM 5-2	Prior to issuance of each grading permit, a note shall be added to the Grading Plan that states: "During grading operations and foundation installation, grading and earthwork shall be performed under the reasonably continuous observation and testing of a registered Geotechnical Engineer in order to achieve proper sub-grade preparation, selection of satisfactory materials, and placement and compaction of all structural fill. Site preparation, removal of unsuitable soils, approval of imported earth materials, fill placement, foundation installation and other site geotechnically-related operations shall be observed and tested by a registered Geotechnical Engineer. A Geotechnical Engineer shall review the project plans and specifications prior to release for bidding and construction to determine whether the geotechnical recommendations have been effectively implemented. Review of findings shall be reported	Prior to issuance of each grading permit	Engineering /Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	in writing to the Engineering/Public Works Department by the Geotechnical Engineer."					
MM 5-3	Prior to issuance of each grading permit that includes any utility improvements or other work in trenches on or off the project site, the Property Owner/Developer shall demonstrate to the City of Murrieta, and Caltrans for construction within Caltrans right-of-way, that appropriate geotechnical measures, as defined in the site-specific geotechnical investigation, have been included in the Contractor Specifications. These recommendations may include, but not be limited to, trench wall support; continuous monitoring of the shoring elements and existing ground surfaces in the adjacent area for movement; and off-site pavement rehabilitation, as needed.	Prior to issuance of each grading permit	Engineering/Public Works Department Caltrans			
HYDROLOGY AND WATER QUALITY						
PDF 6-1	As described in Section 3, Project Description, *The Triangle Specific Plan* identifies conceptual on-site drainage facilities (including on-site detention/ infiltration basins, streets, parking lots, storm drains, and culverts) and off-site storm drain connections (refer to Exhibit 5.6-1, Conceptual Drainage Plan). On-site drainage facilities shall be designed concurrent with Development Plans for The Triangle and shall be designed to accommodate any increase in runoff above the existing condition. The Property Owner/Developer shall construct all necessary storm drain and flood-control improvements and channelization in compliance with the City of Murrieta and the Riverside County Flood Control and Water Conservation District standards to provide 100-year flood protection.	Concurrent with Development Plans	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
PDF 6-2	In compliance with applicable regulatory requirements, including the Municipal Separate Storm Sewer System (MS4) permit, the project shall incorporate site design practices to reduce runoff and to promote a hydrologically functional project that mimics the natural hydrologic regime to the extent feasible. The proposed project includes non-structural/source-control Best Management Practices (BMPs) and structural/treatment-control BMPs. Non-structural/ source-control BMPs include using permeable paving materials; covering loading docks; connecting restaurant equipment wash areas to grease traps connected directly to the sewer; and implementing other similar measures. Structural/treatment-control BMPs planned for the site may include an underground combined detention/infiltration basin, landscape detention areas, and roof/loading docks filter units. Erosion-control measures shall also be implemented during and post construction.	Concurrent with Development Plans	Engineering/Public Works Department			
SC 6-1	Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, a Notice of Intent shall be prepared and submitted to the San Diego RWQCB providing notification and intent to comply with the State of California General Construction Permit. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable." All recommendations in the Plan shall be implemented during area preparation, grading, and construction. The Property	Prior to issuance of any grading or building permit	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	Owner/Developer shall comply with each of the recommendations detailed in the Study, and other such measure(s) as the City deems necessary to mitigate potential stormwater runoff impacts (General Plan EIR MM HYD-1).					
SC 6-2	Prior to issuance of any Grading Permit, future development projects shall prepare, to the satisfaction of the Director of Public Works and the City Engineer, a Water Quality Management Plan or Stormwater Mitigation Plan, which includes Best Management Practices (BMPs), in accordance with the Riverside County DAMP and the Murrieta WQMP. All recommendations in the Plan shall be implemented during post construction/operation phase. The Property Owner/Developer shall comply with each of the recommendations detailed in the Study, and other such measure(s) as the City deems necessary to mitigate potential water quality impacts (General Plan EIR MM HYD-2).	Prior to issuance of any Grading Permit	Engineering/Public Works Department			
SC 6-3	Prior to the issuance of a grading permit for construction within the Caltrans right-of-way, the Property Owner/Developer shall provide written evidence to the City of Murrieta Community Development and Engineering/Public Works Department from Caltrans that it is in compliance with (1) the requirements of the Caltrans Statewide NPDES Storm Water Permit (Order No. 99-06-DWQ, NPDES No. CAS000003, or the latest approved NPDES permit in effect at the time of the issuance of an Encroachment Permit by Caltrans); (2) the BMPs specified in the Caltrans Storm Water Management Plan; and (3) the requirements of the Construction General Permit (CGP) (NPDES No. CAS000002, Order No. 2009-0009-DWQ, or the latest approved CGP in effect at the time of issuance of an Encroachment Permit by Caltrans).	Prior to the issuance of a grading permit for construction within the Caltrans right-of-way	Engineering/Public Works Department and Community Development Department Caltrans			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
358-H-1	Prior to the issuance of any Development Plan permit, the Property Owner/Developer shall prepare a drainage plan which shall identify all drainage improvements proposed for the project area. These improvements shall be constructed in accordance with the guidelines and master drainage plans prepared by the Riverside County Flood Control and Water Conservation District and subject to review and approval by the City of Murrieta Engineering/Public Works Department.	Prior to the issuance of any Development Plan	Engineering/Public Works Department			
358-H-2	As a part of any Development Plan permit, detailed hydrology/drainage analysis will be conducted. This will address existing on-site drainage conditions and increased runoff flows associated with the proposed project. The detailed analysis shall demonstrate that proposed improvements will adequately handle project drainage, and that the proposed improvements are integrated and compatible with any adjoining drainage facilities as identified in the Murrieta Creek Area Drainage Plan. This report shall be submitted for review and approval by the Engineering/Public Works Department. As the overall plan is finalized, specific drainage improvements shall be subject to review and approval by the Riverside County Flood Control and Water Conservation District.	As part of any Development Plan submittal	Engineering/Public Works Department			
358-H-3	The Property Owner/Developer shall obtain encroachment permits from Caltrans for all proposed drainage connections located within Caltrans right-of-way and shall comply with the conditions of the permit.	Prior to the issuance of grading permits	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
LAND USE						
SC 7-1	The Property Owner/Developer shall obtain an Encroachment Permit from the California Department of Transportation prior to initiation of any activities in State right-of-way. Evidence that an Encroachment Permit has been obtained shall be submitted to the City of Murrieta Engineering/Public Works Department prior to issuance of a grading permit.	Prior to issuance of grading permits	Engineering/Public Works Department			
NOISE						
SC 8-1	Prior to approval of grading plans, the City Community Development Department shall verify that the plans include a note indicating that noise-generating project construction activities shall comply with construction-related noise standards identified in Section 16.30.130 of the City of Murrieta Municipal Code. These standards include the limitations on hours of construction and maximum allowed noise levels as specified on Table 5.8-4 of this EIR. The Contractor will be responsible for complying with the Murrieta Municipal Code during construction and compliance shall be verified by the Community Development Department.	Prior to approval of grading plans Compliance verification during construction	Community Development Department			
SC 8-2	The project shall comply with Sections 16.30.90 and 16.30.100 of the City of Murrieta Municipal Code which define exterior and interior noise level limits (refer to Tables 5.8-2 and 5.8-3). Noise sources, including but not limited to HVAC, loading docks, and emergency generators, shall be designed and located so that noise will not exceed the specified limits.	Prior to issuance of building permits	Community Development Department			
358-N-1	Truck access, parking area design, air conditioning/refrigeration units, emergency generators, loading docks, and other noise generating features shall be designed to the satisfaction of the City of Murrieta Community Development Department to minimize the potential noise impacts to on-site land uses.	Prior to approval of Development Plans	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	**Date**	**Remarks**
358-N-2	Prior to the issuance of building permits for hotel uses, the Property Owner/Developer shall submit, to the satisfaction of the City of Murrieta Community Development Department, a detailed acoustical analysis using architectural plans. This report shall describe and quantify the noise sources impacting the building(s), the amount of outdoor-to-indoor noise reduction provided in the architectural plans, and any upgrades required to meet the City's requirements for noise reduction and the State's 45 dBA CNEL Title 24 interior noise standard. The measures described in the report, when approved, shall be incorporated into the architectural plans for the buildings and implemented with building construction. These measures may include, but not be limited to (1) weather-stripped solid core exterior doors; (2) upgraded dual-glazed windows for all windows facing Murrieta Hot Springs Road, I-15, and/or I-215; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cutouts or openings. The Property Owner/Developer shall be responsible for the Contractor complying with all noise measures identified in the acoustical analysis and the City of Murrieta Community Development Department shall confirm that measures have been implemented, prior to issuance of occupancy permits.	Prior to the issuance of building permits for hotel uses Compliance verification prior to issuance of occupancy permits	Community Development Department			
MM 8-1	Prior to approval of grading plans and/or prior to issuance of building permits, plans shall include a note stating the following: "During all project site excavation and grading on site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The Construction Contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise-sensitive receptors nearest the	Prior to approval of grading plans and/or prior to issuance of building permits Compliance verification during construction	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	project site." The Contractor shall be required to comply with all noise measures identified on the grading plans and compliance shall be verified by the Community Development Department during construction.					
MM 8-2	Prior to approval of grading plans and/or prior to issuance of building permits, plans shall include a note stating the following: "The Construction Contractor shall locate equipment staging in areas that would create the greatest distance between construction-related noise sources and noise-sensitive receptors." The Contractor shall be required to comply with all noise measures identified on the grading plans and compliance shall be verified by the Community Development Department during construction.	Prior to approval of grading plans and/or prior to issuance of building permits Compliance verification during construction	Community Development Department			
MM 8-3	Prior to approval of grading plans and/or prior to issuance of building permits, plans shall include a note stating the following: "To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings. If the haul route passes residential dwellings or other sensitive receptors, or would create a noise disturbance across a residential or commercial property line, the Construction Contractor shall limit haul truck deliveries to between the hours of 7:00 AM and 7:00 PM Monday through Saturday." The Contractor shall be required to comply with all noise measures identified on the grading plans and compliance shall be verified by the Community Development Department during construction.	Prior to approval of grading plans and/or prior to issuance of building permits	Community Development Department			
MM 8-4	Prior to the issuance of building permits for each building other than hotels, the Property Owner/Developer shall submit, to the satisfaction of the City of Murrieta Community Development Department, a detailed acoustical analysis using architectural plans. This analysis shall describe and quantify the noise sources impacting the	Prior to the issuance of building permits for each building other than hotels	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	building(s), the amount of noise reduction provided in the architectural plans, and any upgrades required to comply with the City's standards for Land Use Compatibility for Community Noise Environments (Table 5.8-1).					
PUBLIC SERVICES AND UTILITIES						
PDF 9-1	As identified in Section 3.3.1 of *The Triangle Specific Plan,* and shown on Exhibit 3-17 in Section 3, Project Description, the proposed project includes the following improvements to the existing domestic water system to provide adequate water demand pressure and fire flow requirements to the future development. These lines shall be sized and installed per the recommendations of final engineering plans and the requirements of the Eastern Municipal Water District (EMWD) and City of Murrieta, as applicable: **On site** • A new 12-inch looped trunk line internal to the project site. New 10-inch and 12-inch lines would connect to the 12-inch looped trunk line for fire flow and 6-inch and 8-inch water lines would connect to the 12-inch looped trunk line to serve the project site. **Off site** • A separate 8-inch off-site water line would be constructed along Murrieta Hot Springs Road to provide a direct domestic water connection to the proposed hotel use(s) on the project site.	Prior to approval of each Development Plan Prior to issuance of grading and building permits	City of Murrieta Engineering/Public Works Department, Fire Department, and Building & Safety Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	**Date**	**Remarks**
PDF 9-2	As identified in Section 3.3.2 of *The Triangle Specific Plan* and as shown on Exhibit 3-17 in Section 3, Project Description, the proposed project includes the following wastewater improvements which shall be sized and installed per the recommendations of final engineering plans and the requirements of the EMWD and City of Murrieta, as applicable: **On site** • A 15-inch gravity sewer would extend from Murrieta Hot Springs Road onto the project site and connect to a new 10-inch sewer line that would collect wastewater flows from the project. • A new 18-inch gravity sewer line would extend west along Murrieta Hot Springs Road from the new 15-inch sewer line and connect to an 18-inch off-site sewer line at the project's northwest border.[1] **Off site** • The existing pump station along Monroe Avenue north of Medical Center Drive, the ten-inch force main that runs adjacent to the site along Murrieta Hot Springs Road and across I-215 to the east, and the ten-inch dry sewer along Monroe Avenue would be abandoned. • A gravity flow system consisting of a new 15-inch gravity sewer line would connect with the existing 10-inch gravity sewer line located within Monroe Avenue right-of-way between Medical Center Drive and Murrieta Hot Springs Road. The 15-inch sewer pipe would extend south onto the project site to collect wastewater flows from the project.	Prior to approval of each Development Plan	City of Murrieta Engineering/Public Works Department			
PDF 9-3	As identified in Section 2.9 of *The Triangle Specific Plan,* the Construction Management Plan	Prior to construction	Community Development			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	for the proposed project shall address recycling waste material during construction to achieve a minimum 50 percent diversion of construction waste from landfills.		Department and Building & Safety Department			
PDF 9-4	As stated in Section 2.9 of *The Triangle Specific Plan,* recycling receptacles shall be located adjacent to trash receptacles in casual seating and dining areas and in plazas and courtyards to provide the opportunity for consumer recycling at The Triangle.	Prior to approval of each Development Plan	Community Development Department			
PDF 9-5	As described in Section 3.4 of *The Triangle Specific Plan* and as shown on Exhibit 3-18 in Section 3, Project Description, the proposed project includes the following improvements to electric, natural gas, and telecommunications facilities which shall be sized and installed per the recommendations of final engineering plans and the requirements of Southern California Edison, Southern California Gas Company, Verizon, and the City of Murrieta, as applicable. Proposed utility backbone facilities and service lines shall be underground except for switching cabinets, transformers, and similar structures and those aboveground facilities shown on Exhibit 3-18. **On site** • A new 33,000 volt to 12,000 volt substation may be installed on the project site if determined necessary by SCE during final design. **Off site** • An existing two-inch gas line in Murrieta Hot Springs Road would be abandoned and replaced by a new four-inch plastic gas line in Murrieta Hot Springs Road.	Prior to approval of each Development Plan and prior to issuance of building permits	Engineering/Public Works Department			

1 The design and alignment of the off-site 18-inch gravity sewer located west of the project site was analyzed as a separate project in a Mitigated Negative Declaration as part of the City's Capital Improvement Program 8357, and was approved by the City in 2011.

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	• The existing SCE overhead facilities on Monroe Avenue would be placed underground and the overhead line removed from Murrieta hot Springs Road to Walsh Center Drive. The existing overhead 12-kilovolt (kV) line feeding across the I-15 to the intersection of Murrieta Hot Springs Road and Monroe Avenue would be removed. • The existing SCE overhead line crossing the I-15 at the south end of the project site would be removed once an on-site source of electricity has been provided. • Existing SCE underground street lights and other incidental facilities (including handholes, conduits, and service to others) on the south side of Murrieta Hot Springs Road would be relocated to facilitate the widening of the roadway. • The two SCE five-inch conduits would be extended from the existing vaults on the north side of Murrieta Hot Springs Road south to the project site to serve the proposed project. • The two Verizon four-inch conduits would be extended across Murrieta Hot Springs Road to the west (Monroe Avenue) and the east (Hancock Avenue) entrances of the project site.					
PDF 9-6	As stated in Section 2.10 of *The Triangle Specific Plan,* energy efficient fixtures (such as low-pressure sodium, compact fluorescents, light emitting diode (LED), and solar powered lights) shall be incorporated where possible.	Prior to approval of each Development Plan	Community Development Department			
SC 9-1	In compliance with Section 16.36.030 of the City of Murrieta Municipal Code, Non-Residential Public Facilities Development Impact Fee Required, prior to issuance of each building permit, the Property Owner/Developer shall be responsible for payment of the City's	Prior to issuance of each building permit	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
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	Development Impact Fees for each building in an amount established by City Council Resolution. The fees paid shall be that in effect at the time of issuance of the building permit.					
SC 9-2	The Property Owner/Developer shall comply with all applicable codes, ordinances and regulations, including the most current edition of the *California Fire Code* and the *City of Murrieta Municipal Code*, regarding fire prevention and suppression measures; fire hydrants; automatic fire extinguishing systems (including sprinklers); fire access; water availability; requirements for high rise structures; and other, similar requirements. Prior to issuance of building permits, the City of Murrieta Community Development Department and the Fire Department shall verify compliance with applicable codes and that appropriate fire safety measures are included in the project design. All such codes and measures shall be implemented prior to occupancy.	Prior to issuance of building permits	Community Development Department and Building & Safety Department, and the Fire Department			
SC 9-3	Prior to the issuance of each building permit, the Property Owner/Developer shall be required to demonstrate that the project meets the applicable Energy Efficiency Standards for Residential and Nonresidential Buildings (24 *California Code of Regulations* [CCR] Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.	Prior to issuance of each building permit	Building & Safety Department			
SC 9-4	Prior to the issuance of each building permit, the Property Owner/Developer shall be required to demonstrate that the Project meets the requirements California Green Building Standards (24 CCR 11), where applicable to the proposed project.	Prior to issuance of each building permit	Building & Safety Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

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MM 358-PSU-1	Passive solar heating techniques related to building orientation and design will be employed whenever feasible within the project. Passive systems involve orienting buildings properly to take advantage of sun and/or shade exposures, planting trees to reduce heat gain, providing adequate roof overhangs to reduce interior space cooling costs, ensuring that walls are properly insulated and installing simple heat storage systems. Compliance with this requirement shall be verified by the Community Development Department prior to approval of Development Plans.	Prior to approval of Development Plans	Community Development Department			
MM 358-PSU-2	Roofs and walls will be insulated to reduce heat flow in and out, depending on the indoor/outdoor temperatures. Light colors will be selected for the buildings to reflect more summer heat than would be the case with darker hues.	Prior to approval of Development Plans	Community Development Department			
MM 358-PSU-3	To reduce water consumption, the project will incorporate the following water conservation devises: Low volume toilets, flow reducing faucet aerators, pressure reducing valves, adequate pipe insulation to reduce water used before hot water reaches the equipment or fixtures, and drought resistant landscaping.	Prior to approval of Development Plans and building permits	Community Development Department and Building & Safety Department			
MM 9-1	Prior to issuance of occupancy permits, and in coordination with the City of Murrieta, the Property Owner/Developer shall implement security measures and design features to reduce the demand for police services. Additional security measures may include, but not be limited to: • Private security personnel staffed at the project site; • On-site security cameras that are monitored; • Increased lighting around facilities and parking lots;	Prior to approval of Development Plans	Community Development Department And Police Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
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	• Anti-graffiti measures; • On-site medical aide; and • On-site, private, plain-clothed store security in retail businesses or anti-theft electronic monitors. Evidence that security measures have been implemented to the satisfaction of the City shall be provided to the Community Development Department.					
TRAFFIC AND CIRCULATION						
PDF 10-1	The Triangle Specific Plan includes the following roadway improvements at the project driveways along Murrieta Hot Springs Road. These improvements shall be installed by the Property Owner/Developer as part of Phase 1a and shall be completed prior to issuance of Certificate of Occupancy permits for Phase 1a uses. <u>Driveway 1 (Monroe Avenue) at Murrieta Hot Springs Road</u> • Install northbound approach (2 left turn and 2 thru lanes) • Install southbound lanes (2 left turn and 2 thru lanes) • Install eastbound lanes (2 left turn, 4 thru, and 1 right turn lane) • Install westbound lanes (2 left turn and 4 thru lanes) • Install traffic signal <u>Driveway 2 at Murrieta Hot Springs Road</u> • Install 1 northbound right turn lane • Install 1 eastbound right turn lane with a minimum 200-foot pocket	Prior to issuance of Certificate of Occupancy permits for Phase 1a uses	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	• Install 4th westbound through lane <u>Driveway 3 (Hancock Avenue) at Murrieta Hot Springs Road</u> • Install northbound approach (2 left turn, 1 thru, 1 right turn, and 1 shared right-thru lane) • Restripe southbound approach (2 left turn and 2 thru lanes) • Install eastbound lanes (2 left turn, 4 thru and 1 right turn lanes) • Install westbound lanes (2 left turn, 4 thru [restriping right turn lane to a shared thru/right turn lane) • Install northbound right-turn overlap • Modify traffic signal					
PDF 10-2	The Triangle Specific Plan includes the following additional roadway improvements at the project Driveway 3 (Hancock Avenue) at Murrieta Hot Springs Road. These improvements shall be installed by the Property Owner/Developer as part of Phase 2 and shall be completed prior to issuance of Certificate of Occupancy permits for Phase 2 uses: • Modify northbound approach (2 left turn lanes, 1 thru lane and 2 right turn lanes) and install right turn overlap phasing • Modify southbound approach (2 left turn lanes, 1 right turn lane and 1 shared right-thru lane) • Modify the eastbound approach (2 left turn lanes, 4 thru lanes, and 1 right turn lane) • Modify westbound lanes (2 left turn, 3 thru lanes and 1 right-turn lane)	Prior to issuance of Certificate of Occupancy permits for Phase 2 uses	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
PDF 10-3	The Triangle Specific Plan includes the following additional roadway improvements at the project driveways along Murrieta Hot Springs Road. These improvements shall be installed by the Property Owner/Developer as part of Phase 3 and shall be completed prior to issuance of Certificate of Occupancy permits for Phase 3 uses: <u>Driveway 1 (Monroe Avenue) at Murrieta Hot Springs Road</u> • Modify northbound approach to provide 2 left turn lanes, 1 shared left/thru lane, and 1 thru-right turn lane • Modify southbound approach to provide 2 left turn lanes, 1 thru lane, 1 right turn lane, 1 shared right-thru lane <u>Driveway 3 (Hancock Avenue) at Murrieta Hot Springs Road</u> • Install northbound approach (1 additional thru lane) • Restripe southbound approach to include 2 left turn lanes, 1 thru lane, 1 right turn/thru lane	Prior to issuance of Certificate of Occupancy permits for Phase 3 uses	Engineering/Public Works Department			
PDF 10-4	As identified in Section 3.3.2 of the Project Description, an “internal connector road” shall be provided internal to The Triangle to provide through circulation connecting the primary entries. The internal connector road shall form either a loop road or a grid pattern of connections. A series of secondary driveways are planned to connect parking to the internal connector road; these drives shall include one or two lanes in each direction with a 10-foot raised median. The onsite circulation system for The Triangle shall be finalized prior to submittal of a Development Plan(s) for City review.	Prior to submittal of a Development Plans	Community Development Department, And Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
PDF 10-5	As identified in Section 3.3.2 of the Project Description, The Triangle Specific Plan includes a 6-foot meandering sidewalk along the southern side of Murrieta Hot Springs Road to provide pedestrian access to the three project entries. Internal pedestrian circulation consists of 6-foot sidewalks along the internal circulation road, 5-foot sidewalks along secondary drives, and 5-foot pathways that connect the planning area and uses within The Triangle. Marked crosswalks shall be provided at all street crossing to ensure pedestrian safety; mid-block crossings shall be prohibited on the internal connector road.	Prior to approval of each Development Plan	Community Development Department And Engineering/Public Works Department			
PDF 10-6	As identified in Section 3.3.2 of the Project Description and shown on Exhibit 3-5, a 5-foot on-street bicycle lane is planned for Murrieta Hot Springs to allow cyclists to access The Triangle. A 5-foot wide bike lane shall be provided either as an on-street lane on the internal connector road or in a multi-purpose path along one side of the internal collector road. The final design of the internal bike lane shall be shown on the Development Plan(s). Bicycle racks or lockers shall be located near office buildings and throughout the retail area of The Triangle. Bicycle spaces for employees shall be secure, enclosed spaces that are located in a key-accessed area and are illuminated at night. Bicycle spaces for visitors and customers shall include bicycle racks located in areas that are clearly visible from a primary building entrance, illuminated at night, and protected from damage from moving and parked vehicles. These racks shall include provision for securing bicycles in which the user may lock the frame and wheels.	Prior to approval of each Development Plan	Community Development Department And Engineering/Public Works Department			
PDF 10-7	As identified in Section 3.3.2 of the Project Description, a public transit stop with a bus turnout shall be provided on the south side of Murrieta Hot Springs Road just east of the Monroe Avenue intersection. The transit stop shall include a seating bench and passenger shade shelter.	Prior to approval of each Development Plan	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
PDF 10-8	As identified in Section 3.3.2 of the Project Description, a Travel Demand Management (TDM) Plan shall be prepared concurrently with each Development Plan to identify potential means of reducing automobile trips to the site. The TDM Plan shall document what steps will be taken to facilitate and encourage alternate modes of travel, such as cycling, carpooling, and alternate fuel vehicles charging stations.	Concurrent with each Development Plan	Community Development Department			
MM 10-1	***Existing Plus Project Condition – Direct Project Impacts*** Prior to issuance of the first building permit for Phase 1a, the Property Owner/Developer shall assure by permit and bond, the construction of the following improvements at the intersection of Hancock Avenue/Parkcrest Drive satisfactory to the City Engineer. • Install a traffic signal. • Modify the southbound approach from a shared left-through lane with an exclusive right turn lane to provide an exclusive left turn lane with a shared through-right turn lane. • Modify the westbound approach from a single approach lane to provide an exclusive left turn lane and a shared through-right lane.	Prior to issuance of the first building permit for Phase 1a	Engineering/Public Works Department			
MM 10-2	The property owner/developer shall contribute its fair-share cost for improvements in the City of Murrieta at the following intersections that are not required/conditioned to be constructed by other approved projects in the City. • Jefferson Road at Murrieta Hot Springs Road o Install northbound free right-turn lane	Prior to issuance of Certificate of Occupancy permits	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
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	- o Restripe westbound approach along Murrieta Hot Springs Road - o Modify traffic signal - Madison Avenue at Murrieta Hot Springs Road - o Restripe eastbound approach - o Modify traffic signal - Whitewood Drive at Murrieta Hot Springs Road - o Install westbound right-turn lane - I-15 Northbound Ramp at Murrieta Hot Springs Road - o Remove northbound free right and restripe the approach - o Install eastbound free right-turn lane - o Remove eastbound left-turn lane - o Install additional eastbound through lane - o Install additional westbound through lane - o Modify traffic signal - I-215 Southbound Ramps at Murrieta Hot Springs Road - o Install additional southbound lane - o Modify traffic signal Fair share payments shall be made to the City of Murrieta. Should the City adopt a Traffic Mitigation Fee Program for any of these improvements, the Property Owner/Developer’s mitigation fees shall be paid in accordance with that program in lieu of fair share payments. If a fee program is not					

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
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	adopted, the actual amount and timing of fair share payments, or other financial security for such fair share payments that may be approved by the City Traffic Engineer, shall be determined prior to issuance of building permits. The fair share amount shall be verified by the Department of Public Works prior to payment. Evidence of payment or timely compliance with an approved fair share shall be provided to the Department of Public Works prior to issuance of Certificate of Occupancy permits.					
MM 10-3	Prior to issuance of grading permits for development of any allowed uses under Phase 2 of The Triangle Specific Plan, planned improvements for the City of Temecula I-15/French Valley Parkway Improvements Project shall be complete or it shall be demonstrated that the improvement will be complete prior to issuance of grading permits. Should the Property Owner/Developer pursue development of Phase 2 prior to completion of these improvements, additional traffic analysis shall be required for the proposed development. Should it be determined through this traffic analysis that new significant impacts that are not addressed in this EIR would result, additional environmental review pursuant to CEQA would be required.	Prior to issuance of grading permits for development of any allowed uses under Phase 2 of The Triangle Specific Plan	Engineering/Public Works Department And Community Development Department			
MM 10-4	Prior to issuance of each grading permit, the Property Owner/Developer shall submit construction Traffic Control Plans to the City of Murrieta Engineering/Public Works Department, satisfactory to the City Engineer. The Traffic Control Plans shall describe traffic-controlling measures associated with project improvements to be implemented to manage traffic flow in all directions, including where utilities and other improvements are being implemented in existing roadways. The Traffic Control Plans shall include, but not be limited to, (1) identification of construction haul routes; (2) identification of site	Prior to issuance of each grading permit	Engineering/Public Works Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
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	emergency access points/routes; (3) phased duration and location of anticipated lane closures; (4) location of parking for the public and construction workers during construction phases; (5) use of flaggers; and (6) temporary routes for pedestrians and bicyclists to avoid construction activities. The contractor will be required to obtain a traffic control permit to minimize disruption to the traveling public during construction.					
GREENHOUSE GAS EMISSIONS						
PDF 11-1	As identified in Section 2.9 of *The Triangle Specific Plan*, all buildings in The Triangle shall be constructed in compliance with the CalGreen Code.	Prior to issuance of building permits	Building & Safety Department			
PDF 11-2	As identified in Section 2.9 of *The Triangle Specific Plan*, a construction Management Plan shall be prepared and implemented by the building contractor(s) to achieve a minimum 50 percent diversion of construction waste from landfills.	Compliance with this PDF will accomplished through implementation of PDF 9-3 under Public Services and Utilities.	Community Development Department			
PDF 11-3	As identified in Section 2.9 of *The Triangle Specific Plan,* all flat, non-visible portions of building roofs shall be cool colors that have a high solar reflectance and thermal emittance. These characteristics reflect light, thereby reducing heat transfer and furthering the ability to allow heat to escape from a surface once it has been absorbed.	Prior to approval of each Development Plan	Community Development Department			
PDF 11-4	As identified in Section 2.9 of *The Triangle Specific Plan,* signs shall be posted in the retail area limiting idling time for commercial vehicles to no more than five minutes.	Prior to approval of each Development Plan	Community Development Department			
PDF 11-5	As identified in Section 2.9 of *The Triangle Specific Plan*, recycling receptacles will be located adjacent to trash receptacles in casual seating and dining areas and in plazas and courtyards to provide the opportunity for consumer recycling at The Triangle.	Prior to approval of each Development Plan	Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
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PDF 11-6	As identified in Section 2.9 of *The Triangle Specific Plan,* heat islands shall be reduced to minimize the impact of thermal gradient differences between developed and undeveloped areas. This is achieved by including parkways along the south side of Murrieta Hot Springs Road and both sides of the Internal Connector Road, by requiring shade trees within large parking fields, and incorporating lighter colored paving materials for pathways, sidewalks, and gathering places.	Prior to approval of each Development Plan	Community Development Department			
PDF 11-7	As identified in Section 2.9 of *The Triangle Specific Plan,* a Leadership in Energy and Environmental Design (LEED) certified (or equivalent) professional shall be involved with all landscaping plans to promote a range of active and passive sustainable design measures and professional best practices.	Prior to approval of each Development Plan And Prior to issuance of landscape permits	Community Development Department			
PDF 11-8	As identified in Section 2.10 of *The Triangle Specific Plan,* energy efficient fixtures shall be incorporated where possible, such as low-pressure sodium, compact fluorescents, light emitting diode (LED), and solar powered lights.	Prior to approval of each Development Plan and building permits	City of Murrieta Community Development Department And Building & Safety Department			
PDF 11-9	As identified in Section 2.7.4 of *The Triangle Specific Plan,* careful plant selections and the latest technology for irrigation will be incorporated to reduce energy and water consumption. Elements will include (1) the use of evapotranspiration irrigation controllers, (2) the use of a minimum of 50 percent of low water use or drought tolerant plants for landscaping, and (3) the use of mowed turf only in spaces where it serves a functional purpose.	Prior to approval of each Development Plan and landscape permits	City of Murrieta Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
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MM 11-1	Prior to the issuance of each occupancy permit, the Applicant shall submit for approval to the City of Murrieta Community Development Department a plan for the future building manager to provide educational information to all tenants and employees on (1) water conservation; (2) energy conservation, including the use of energy-efficient lighting and the limiting of outdoor lighting; (3) mobile source emission reduction techniques, such as use of Transportation Demand Management (TDM) programs; alternative modes of transportation; and zero- or low-emission vehicles; and (4) recycling services. The plan shall require the provision of this information to all tenants upon initial occupancy and to all new employees working within the development. Distribution of the materials shall be repeated annually or more frequently.	Prior to the issuance of each occupancy permit The requirements of this MM shall be combined with the requirements identified in MM 2-4 under Air Quality (submittal of one plan to tenants and employees)	Community Development Department			
MM 11-2	The proposed project shall provide preferred parking and facilities for the charging of electric vehicles. Preferred parking for electric vehicles shall be provided at the rate of 1 preferred space per 100 total spaces (1 percent). The initial construction shall include the infrastructure to support multiple charging stations at each major parking location. At Phase 1a, one station shall be operational and thereafter the Property Owner/Developer shall provide one station at each major parking location. Further, the Property Owner/Developer shall conduct annual tenant surveys and activate additional stations to meet the demand.	Prior to the issuance of occupancy permits	Building & Safety Department And Community Development Department			

THE TRIANGLE SPECIFIC PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Monitoring Agency	Verification of Compliance		
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MM 11-3	Prior to the issuance of any building permit for a hotel, Class A office, or parking garage and prior to the issuance of each building permit after completion of 100,000 sf of development in the Specific Plan area, the Property Owner/ Developer shall submit plans for approval to the City of Murrieta Building Department that show the incorporation of renewable energy generation that provides a minimum of 10 percent of the estimated total electrical energy use of the planned development with the expectation that greater energy savings will be accomplished to the extent feasible.	Prior to the issuance of any building permit for a hotel, Class A office, or parking garage Prior to the issuance of each building permit after completion of 100,000 sf of development in the Specific Plan area	Building & Safety Department and Community Development Department			

Appendix C

Biological Site Reconnaissance Memorandum
Hernandez Environmental Services (January 2023)

Hernandez Environmental Services

Memorandum

Date: January 5, 2023

To: Saul Jaffe, Domenigoni-Barton Properties, LLC

From: Shawn Gatchel-Hernandez, Principal Regulatory Specialist

Subject: Site Reconnaissance for the Triangle Project

HES was contracted to conduct a site reconnaissance for the Triangle Project (Project) to provide an update on the Project site conditions. The Project site consists of approximately 64.3 acres located south of the intersection of Murrieta Hot Springs Road and Hancock Avenue in the southern portion of the City of Murrieta, within southwestern Riverside County, California (Figures 1 and 2). The Project consists of the development of the project site with a mixed-use development, including residential, restaurant, commercial/retail, theater/entertainment, hotel, and office uses.

Background

Biological assessments were previously conducted for the Project by BonTerra Consulting in 2007, 2008, and 2010. Focused burrowing owl surveys were conducted by BonTerra Consulting in 2007 and Helix Environmental Planning in 2020. Jurisdictional delineations were prepared for the Project by Helix Environmental Planning in 2010 and 2019.

The previous biological assessments found that the site contained disturbed buckwheat scrub, willow riparian scrub, mulefat scrub, individual Fremont cottonwood trees, ornamental, annual grassland/ruderal, ruderal, disturbed, and developed areas. The entire Project site was previously grubbed and detention basins were constructed. Ruderal and annual grassland/ruderal areas comprised the majority of the Project site. It was determined that the vegetation within the Project site provided low to moderate quality habitat for various wildlife species. No listed plant or wildlife species were found to occur on the Project site. The Project site was found to have the potential to support burrowing owl; however, focused surveys found that no burrowing owl were occupying the site at the time of surveys.

The jurisdictional delineation found that the Project site contained a small, unnamed tributary to Murrieta Creek that conveys runoff from I-215 across the southern corner of the site. The drainage entered the Project site along the southeastern boundary and

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meanders through the southern portion of the Project site for approximately 524 feet until it exited at the southern boundary. The drainage continued off-site for approximately 70 feet before it flowed into a culvert and continued under the I-15 Freeway and outlet 0.12 mile north of Monroe Avenue and continued for approximately a mile in storm drains until it connected to Murrieta Creek, which ultimately drains into the Santa Margarita River.

Existing Conditions and Results

HES conducted a site reconnaissance to document current Project site conditions on January 2, 2023. The ambient temperature at 8:30 AM was 47º Fahrenheit, cloudy, with winds ranging from zero to three miles per hour from the southeast. The purpose of the field survey was to document the existing habitat conditions. Representative site photographs were taken and are included within Appendix A.

The topography on the Project site slopes from north to the south. Elevations on the Project site range from approximately 1,112 feet above mean sea level (AMSL) near the northeastern corner to approximately 1,152 feet above AMSL near the northwestern corner. The Project site consists of vacant lands that appears have been previously graded. The site is regularly disturbed by weed abatement activities. A cleared dirt and gravel lot is located in the northwestern portion of the site. Gravel trails cross the site and several lined basins with lined spillways are scattered throughout. A disturbed, ephemeral drainage course crosses through the southeastern portion of the site. Surrounding land uses include Murrieta Hot Springs Road and a mixture of commercial developments to the north; the I-15 Freeway to the west and south; the I-215 Freeway to the east; a mixture of residential development and undeveloped land to the south.

Habitat Types

Four habitat types occur on the Project site: disturbed/developed areas, ruderal areas, disturbed buckwheat scrub habitat, and ephemeral drainage, as described below.

Disturbed/Developed Areas

The onsite disturbed/developed areas primarily occur within the northern and northwestern portions of the Project site. These areas are disturbed and unvegetated. They consist of a dirt and gravel lot, gravel trails, and lined basins and spillways.

Ruderal Areas

The Project site is dominated by ruderal areas that appear to be frequently mowed. Species observed in these areas include brome grasses (*Bromus sp.*), short-pod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), cudweed (*Lessingia filaginafolia*),

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western ragweed (*Ambrosia psilostachya*), telegraph weed (*Heterotheca grandiflora*), doveweed (*Croton setigerus*), and slender buckwheat (*Eriogonum gracile*).

Disturbed Buckwheat Scrub Habitat

Scattered disturbed buckwheat scrub habitat occurs throughout the site. Species observed within this habitat type include species such as California sagebrush (Artemisia californica), brittlebush (Encelia farinosa), and California buckwheat (Eriogonum fasciculatum, Russian thistle, brome grasses, and short-pod mustard.

Ephemeral Drainage

The onsite ephemeral drainage is disturbed by regular mowing. The drainage consists primarily of unvegetated streambed with a small patch of arroyo willow (*Salix lasiolepis*) thickets where the drainage enters the southeastern portion of the site. The drainage crosses through the southeastern portion of the site. The drainage continues off-site and continues under the I-15 Freeway and eventually connects to Murrieta Creek.

<u>Wildlife</u>

No sensitive plant or animal species were observed during the site reconnaissance. Animal species observed include red-tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), and California towhee (*Melozone crissalis*). The site does provide suitable habitat for burrowing owl; however, no burrowing owl or burrowing owl sign were observed during the site reconnaissance.

<u>Jurisdictional Waters</u>

The onsite ephemeral drainage and associated riparian vegetation are considered non-wetland Waters of the United States (WUS) and California Department of Fish and Wildlife (CDFW) jurisdiction. Further, the onsite drainage and associated riparian vegetation are considered Western Riverside County Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Riparian/Riverine areas. The onsite non-wetland WUS are regulated by the U.S. Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) under Sections 404 and 401 of the Clean Water Act. The onsite drainage and associated riparian vegetation are also regulated by CDFW under the Fish and Game Code Section 1602.

<u>Nesting Birds</u>

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit "take" of all birds and their active nests. The project site does have shrubs

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that can support nesting songbirds during the nesting bird season of February 1 through September 15.

Conclusion

Based on the results of the site reconnaissance, the current Project site conditions do not deviate substantially from those recorded during previous biological studies. The site continues to be maintained by weed abatement activities and is dominated by disturbed and ruderal habitats. However, the only tree species documented on the site were arroyo willow located at the southeastern Project site boundary. No sensitive plant or animal species were observed on the site. The onsite ephemeral drainage and associated riparian habitat are regulated by the USACE, RWQCB, CDFW, and the Western Riverside County MSHCP.

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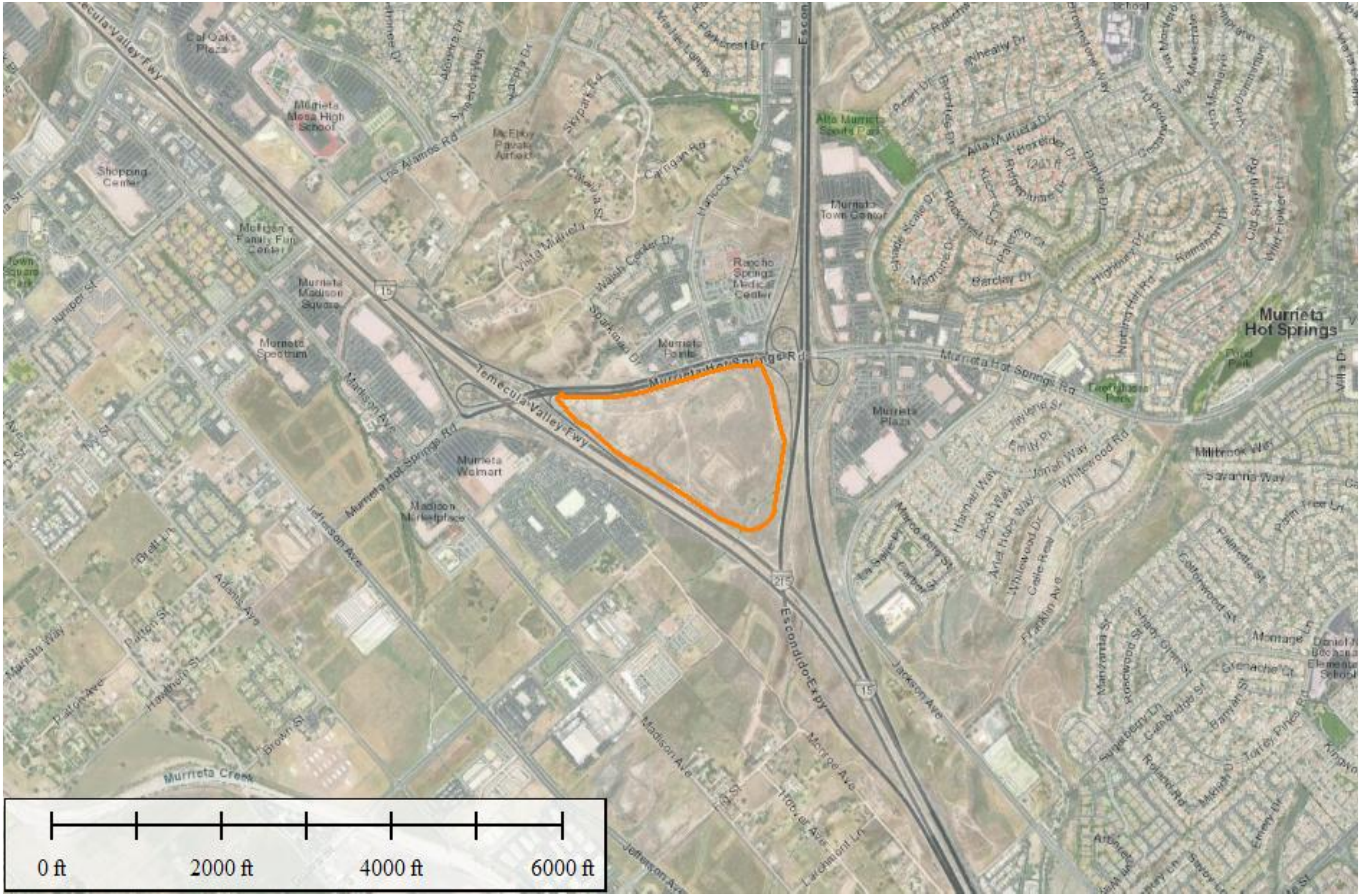

Figure 1

Location Map
The Triangle Project
City of Murrieta
Riverside County, California

Legend

Project Site Boundary

N

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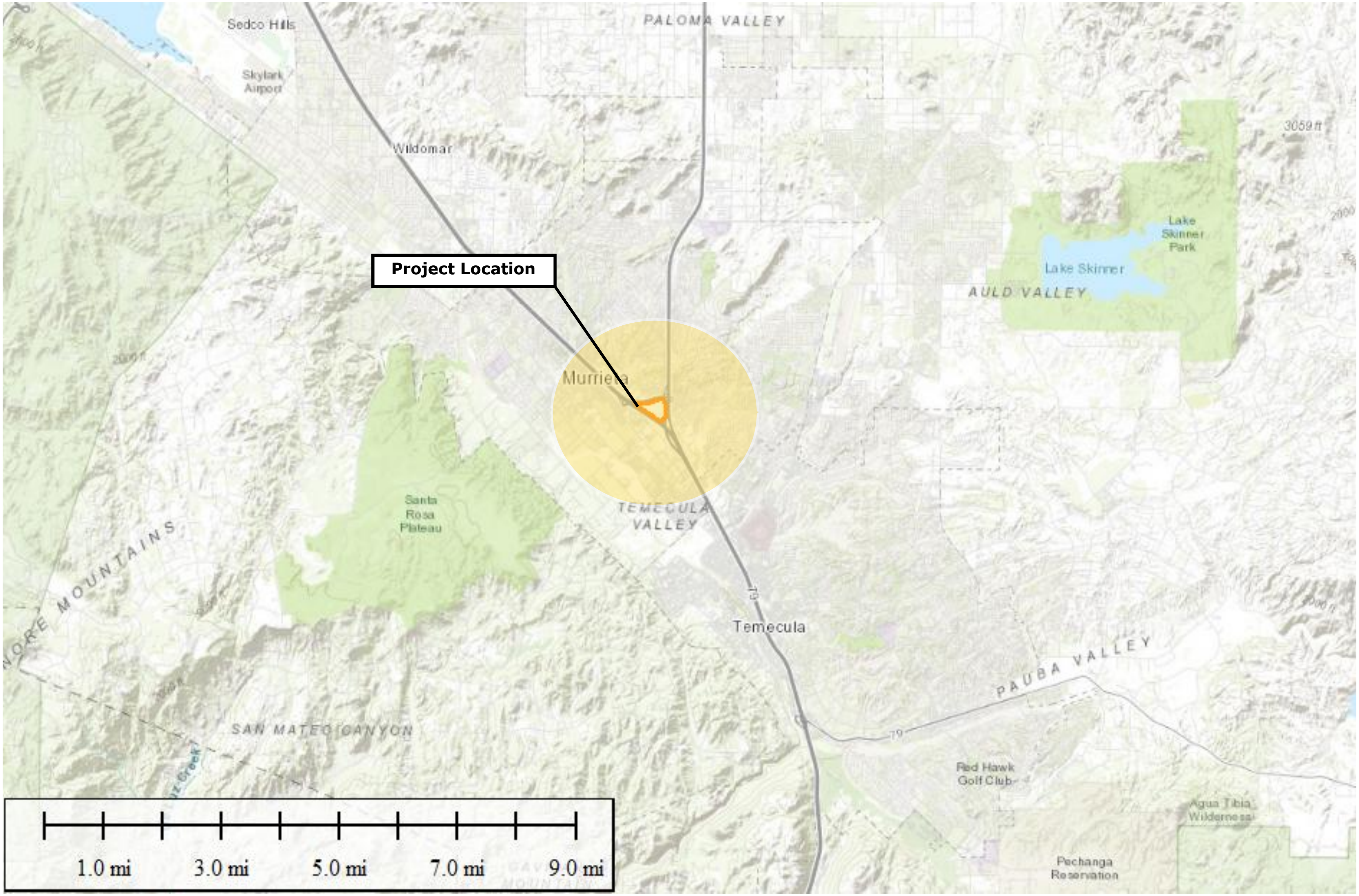

Figure 2

Vicinity Map
The Triangle Project
City of Murrieta
Riverside County, California

Legend

Project Site Boundary

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View of gravel trail and lined spillway.

View of lined basin.

View of ruderal areas and disturbed buckwheat scrub habitat.

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View of onsite ruderal areas.

View of ruderal areas and disturbed buckwheat scrub in the central portion of the site.

View of disturbed ephemeral drainage and patch of arroyo willows along the site boundary.

Hernandez Environmental Services

Appendix D

Climate Action Plan Consistency Checklist

CLIMATE ACTION PLAN CONSISTENCY CHECKLIST INTRODUCTION

The City of Murrieta has prepared a Climate Action Plan (CAP) that outlines actions that the City will undertake to achieve its proportional share of State greenhouse gas (GHG) emissions reductions. The purpose of the CAP Consistency Checklist (Checklist) is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

This Checklist contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible.

The Checklist may be periodically updated to incorporate new GHG reduction techniques, to comply with later amendments to the CAP, or to reflect changes in local, State, or federal laws, regulations, ordinances, and programs.

APPLICATION SUBMITTAL REQUIREMENTS

- The Checklist is required only for projects subject to CEQA review. The diagram below shows the context for the CAP Consistency Checklist within the planning review process framework.
- If required, the Checklist must be included in the project submittal package. Application materials and submittal procedures can be found on the City of Murrieta website here. This checklist is designed to assist the applicant in identifying the minimum CAP-related requirements specific to their project. However, it may be necessary to supplement the completed checklist with supporting materials, calculations or certifications, to demonstrate compliance with CAP requirements.
- The requirements in the Checklist will be included in the project's conditions of approval.
- The applicant must provide an explanation of how the proposed project will implement the requirements described herein to the satisfaction of the Planning Division.
- If a question in the Checklist is deemed not applicable to a project, an explanation must be provided to the satisfaction of the Planning Division.

Application Information

Contact Information

Project No./Name: The Shops at the Triangle

Property Address/APN: 910-390-001 through 910-390-003, 910-400-001 through 910-400-018, 910-390-008 through 910-390-022

Applicant Name/Co.: Saul Jaffe / Tres Estrellas, LLC

Contact Phone: (909) 445-9133 Contact Email: sjaffe@claremontlaw.com

Was a consultant retained to complete this checklist? ☐ Yes ☒ No If Yes, complete the following

Consultant Name: Contact Phone:

Company Name: Contact Email:

Project Information

1. What is the size of the project (acres)? 64
2. Identify all applicable proposed land uses:
   - ☐ Residential (indicate # of one- and two-family units):
   - ☐ Residential (indicate # of multi-family units):
   - ☒ Commercial (indicate total square footage): approximately 270,000 sq. ft.
   - ☐ Hotel (indicate # of rooms):
   - ☐ Industrial (indicate total square footage):
   - ☐ Other (describe):
4. Provide a brief description of the project proposed:

See Development Plan Application, Specific Plan and SEIR

CAP CONSISTENCY CHECKLIST QUESTIONS

STEP 1: LAND USE CONSISTENCY

The first step in determining CAP consistency for discretionary development is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the City to determine a project's consistency with the land use assumptions used in the CAP. Projects found not to be consistent with the CAP's land use assumptions will be subject to a project-specific analysis of GHG emissions' impact on the environment in accordance with the requirements of the CEQA. This may result in GHG-reducing mitigation measures applied as a condition of project approval, including where feasible the measures listed in Step 2 of this checklist.

Step 1: Land Use Consistency		
Checklist Item **(Check the appropriate box and provide explanation and supporting documentation for your answer)**	**Yes**	**No**
1. Are the proposed land uses in the project consistent with the existing General Plan land use and zoning designations? If "Yes", questions 2 below is not applicable and the project shall proceed to Step 2 of the checklist. If "No", proceed to Question 2 below.	☒	☐
2. If the proposed project is not consistent with the General Plan land use or zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations? If "Yes", attach to this checklist the estimated project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation. If the proposed project is determined to result in an equivalent or less GHG-intensive project when compared to the existing designations, proceed to Step 2 of the checklist. If "No", the applicant must conduct a full GHG impact analysis for the project as part of the CEQA process. The project shall incorporate each of the applicable measures identified in Step 2 to mitigate cumulative GHG emissions impacts.	☐ N/A	☐

STEP 2: CAP MEASURES CONSISTENCY

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable strategies and actions of the CAP. Step 2 only applies to development projects that involve permits that may require a certificate of occupancy from the Building Official.[1] All applicable Checklist questions must be answered "Yes", and documentation provided, where necessary, that substantiates how compliance would be achieved. For measures for which a "Yes" is indicated, the features must be demonstrated as part of the project's design and described. All applicable requirements in the Checklist will be included in the conditions of approval.

If any questions are marked with a "No", the project cannot be determined to be consistent with the CAP, and project specific GHG analysis would be required as part of the CEQA process. If any questions are marked "N/A" (meaning "not applicable"), a statement describing why the question is not applicable shall be provided to the satisfaction of the Planning Division or building official.

Step 2: CAP Strategies Consistency			
Checklist Item **(Check the appropriate box and provide explanation for your answer)**	**Yes**	**No**	**N/A**
1. Zero Net Energy Standards (Measure BE-3)			
a) For residential projects, would the project or a portion of the project be subject to building permitting (i.e., building permits issued) on or after January 1, 2023? b) For commercial projects or commercial portions of mixed-use projects, would the project or a portion of the project be subject to building permitting (i.e., building permits issued) on or after January 1, 2025? c) For industrial projects, would the project or a portion of the project be subject to building permitting (i.e., building permits issued) on or after January 1, 2025? If "Yes" to either a, b, or c, proceed to question d of this checklist requirement.	☐	☒	☐
d) Would the project or portions of the project permitted after January 1, 2023 for residential projects and after January 1, 2025 for nonresidential projects be designed and constructed to comply with the Zero Net Energy standard[2]?	☐	☐	☐
2. Construction Waste Diversion (Measure SW-2)			
a) For residential projects, recycle and/or salvage for reuse a minimum of 80 percent of the nonhazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4 of the California Code of Regulations, Title 24? b) For nonresidential projects, recycle and/or salvage for reuse a minimum of 80 percent of the nonhazardous construction and demolition waste in accordance with either Section 5.408.1.1, 5.408.1.2 or 5.408.1.3 of the California Code of Regulations, Title 24?	☒	☐	☐

[1] Actions that are not subject to Step 2 would include, for example: 1) discretionary map actions that do not propose specific development; 2) permits allowing wireless communication facilities; 3) special events permits; 4) conditional use permits that do not result in the use intensification or expansion of an existing building; and 5) non-building infrastructure projects such as roads and pipelines. Because such actions would not result in new occupancy buildings from which GHG emissions reductions could be achieved, the items contained in Step 2 would not be applicable.

[2] Although the City has not yet developed a Zero Net Energy standard, the City will develop such a standard prior to January 1, 2023, pursuant to Measure BE-3 in the CAP. For purposes of CAP compliance, all new residential projects that include phases for which building permitting would begin after January 1, 2023, compliance with zero net energy standard as stated herein must be included as a condition of approval and included as a mitigation measure in the project's environmental document (as applicable). For all new commercial projects, commercial portions of mixed-used projects, and industrial projects that include phases for which building permitting would begin after January 1, 2025, projects must demonstrate compliance with zero net energy standard. Such projects or phases thereof, to meet the zero net energy standard, must achieve a Total Energy Design Rating (Total EDR) and Energy Efficiency Design Rating (Efficiency EDR) of zero, consistent with the standards in Title 24, Part 6 of the California Code of Regulations, by the date established above for each land use type.

Step 2: CAP Strategies Consistency			
Checklist Item **(Check the appropriate box and provide explanation for your answer)**	**Yes**	**No**	**N/A**
3. Transportation Demand Management Program (Measure T-7)			
a) For the construction of nonresidential projects that would include 50 or more employees, would the project include a transportation demand management plan that meets requirements of Section 16.40 "Transportation Demand Management" of the City's Municipal Code and has been reviewed and approved by the City of Murrieta Public Works Department? Check "N/A" if the project is a residential project or if it would include 49 or fewer employees.	☒	☐	☐
4. Electric Vehicle Service Equipment (EVSE) (Measure T-2)[3]			
Checklist Requirement by Project Type: a) <u>One- and two-family dwellings and townhouses with attached private garages:</u> Would the required parking serving each new dwelling include Electric Vehicle Service Equipment (EVSE) to allow for electric vehicle charging by the resident(s)? b) <u>Multi-Family Residential Projects:</u> Would 6% of the total parking spaces required, or a minimum of two spaces, whichever is greater, include Electric Vehicle Service Equipment (EVSE) to allow for electric vehicle charging by the resident(s)? c) <u>Non-residential projects</u>: Would 3% of the total parking spaces required, or a minimum of two spaces, whichever is greater, include Electric Vehicle Service Equipment (EVSE) to allow for electric vehicle charging by the occupant(s)?	☒	☐	☐
5. Tree Planting (Measure LU-2)			
a) For residential and non-residential projects, would the project include the planting of new trees where required by Section 16.26 "Landscaping Standards and Water Efficient Landscaping" of the City's Municipal Code?	☒	☐	☐

[3] For the purpose of this Checklist, EVSE is defined by Article 625 of the California Electrical Code.

Appendix E

Focused Traffic Analysis
Rick Engineering Company (June 2023)

TRIANGLE PROJECT

FOCUSED TRAFFIC ANALYSIS

CITY OF MURRIETA, CA

JUNE 16, 2023

JOB NUMBER: 19843

RICK ENGINEERING COMPANY

rickengineering.com

TRIANGLE PROJECT
FOCUSED TRAFFIC ANALYSIS

CITY OF MURRIETA, CA

JUNE 16, 2023

PREPARED FOR:
CITY OF MURRIETA
1 TOWN SQUARE
MURRIETA, CA 92562

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PREPARED BY:

RICK
ENGINEERING COMPANY

1.0 BACKGROUND INFORMATION

1.1- INTRODUCTION

The following Focused Traffic Analysis has been prepared to analyze the impacts of the Triangle project and the adjacent nearby known pending and approved projects on Murrieta Hot Springs Road, between the I-15 and I-215 freeways. The project is located in the City of Murrieta, and is bound by Murrieta Hot Springs Road to the north, I-15 to the west, and I-215 to the east.

Exhibit 1 shows the project vicinity map, and can be found in **Attachment A**.

1.2- PROJECT DESCRIPTION

In coordination with City of Murrieta staff, the focused project study area, cumulative project list, project trip generation rates, and trip distribution assumptions were determined. The current proposed Triangle project proposes to construct approximately 285,000 sf of commercial development, including the following:

- 14,000 sf of fast-food restaurants with drive-throughs
- 16,000 sf of fast-food restaurants without drive-throughs
- 42,000 sf of high-turnover sit-down restaurants
- 211,000 sf of commercial retail uses
- 2,000 sf of general offices uses

For analysis purposes, this phase of development was assumed to occur by year 2025. (The above uses and sizes were obtained from the December 23,2022 Murrieta Trip Generation Evaluation, prepared by Trames Solutions, Inc. and submitted to the City as part of the DP-2022-2705 / TTM-2022-2706 application submittal).

Refer to **Exhibit 2** in Attachment A for the project site plan for the current proposed project.

The remainder of the Triangle project site was assumed to be constructed by year 2028. For analysis purposes, as it is currently unknown as to what the remainder of the project site will consist of, the full build uses and sizes assumed for the project were taken from the Triangle project's approved traffic study, prepared by Urban Crossroads, dated August 7, 2008.

2.0 ANALYSIS APPROACH AND METHODOLOGY

2.1- ANALYSIS APPROACH

The Focused Traffic Analysis was prepared based on the *City of Murrieta's Traffic Impact Analysis Preparation Guidelines*, dated March 2021.

The intersections and roadways within the project area were analyzed for the following alternatives and scenarios:

- Existing Traffic Conditions
- Existing + Ambient + Cumulative Traffic Conditions (2025) without Triangle Project, No Interchange Improvements
- Existing + Ambient + Cumulative Traffic Conditions (2025) with Triangle Project (Current Development Plan), No Interchange Improvements
- Existing + Ambient + Cumulative Traffic Conditions (2025) without Triangle Project, Dual Left-Turn Lanes at I-15 NB Ramps
- Existing + Ambient + Cumulative Traffic Conditions (2025) with Triangle Project (Current Development Plan), Dual Left-Turn Lanes at I-15 NB Ramps
- Existing + Ambient + Cumulative Traffic Conditions (2025) without Triangle Project, Free Right-Turn Loop Ramp at I-15 NB Ramps
- Existing + Ambient + Cumulative Traffic Conditions (2025) with Triangle Project (Current Development Plan), Free Right-Turn Loop Ramp at I-15 NB Ramps
- Existing + Ambient + Cumulative Traffic Conditions (2028) without Triangle Project, No Interchange Improvements
- Existing + Ambient + Cumulative Traffic Conditions (2028) with Triangle Project (Current Development Plan), No Interchange Improvements
- Existing + Ambient + Cumulative Traffic Conditions (2028) without Triangle Project, Dual Left-Turn Lanes at I-15 NB Ramps
- Existing + Ambient + Cumulative Traffic Conditions (2028) with Triangle Project (Current Development Plan), Dual Left-Turn Lanes at I-15 NB Ramps
- Existing + Ambient + Cumulative Traffic Conditions (2028) without Triangle Project, Free Right-Turn Loop Ramp at I-15 NB Ramps
- Existing + Ambient + Cumulative Traffic Conditions (2028) with Triangle Project (Current Development Plan), Free Right-Turn Loop Ramp at I-15 NB Ramps
- Buildout (2035) Traffic Conditions (Murrieta Hot Springs Rd/I-15 NB Ramps)

2.2- TRAFFIC ANALYSIS METHODOLOGY

Intersection Analysis Methodology

The Level of Service (LOS) for signalized intersections was calculated using the methodologies described in Chapter 19 of the 6th Edition Highway Capacity Manual (HCM 6). The LOS for signalized intersections is defined in terms of control delay, which is made up of several factors that relate to right-of-way control, geometrics and traffic volumes. The signalized intersection analysis also considers intersection spacing and coordination.

The LOS for two-way and all-way stop controlled intersections was calculated using the methodologies described in Chapters 20 and 21 of the 6th Edition HCM. The LOS for a two-way stop-controlled intersection is determined by the computed control delay for each minor street movement and major street left-turns, and not for the intersection as a whole. The LOS reported reflects the highest delay and associated LOS for an individual movement, typically occurring on the stop-controlled approach.

The computerized analysis of signalized and unsignalized intersection operations was performed utilizing the *Synchro 11* traffic analysis software. The *Synchro 11 s*oftware supports HCM 6 methodologies for signalized and stop controlled intersections and was utilized to produce the analysis results.

The criteria for the LOS grade designations is provided below. LOS provides a quick overview of how well an intersection is performing. Within the City of Murrieta, LOS D or better is considered acceptable for all signalized and unsignalized intersections during the peak hours.

LOS CRITERIA FOR INTERSECTIONS

LOS	Control Delay (sec/veh) Signalized Intersections	Control Delay (sec/veh) Unsignalized Intersections	Description
A	≤10	≤10	Operations with very low delay and most vehicles do not stop.
B	>10 and ≤20	>10 and ≤15	Operations with good progression but with some restricted movements.
C	>20 and ≤35	>15 and ≤25	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35 and ≤55	>25 and ≤35	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	>55 and ≤80	>35 and ≤50	Operations where there is significant delay, extensive queuing, and poor progression.
F	>80	>50	Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Source: 6th Edition Highway Capacity Manual.

Roadway Segment Analysis Methodology

Roadway segments were analyzed based on the volume-to-capacity (v/c) ratios and the City's daily LOS capacity thresholds per the General Plan Circulation Element. The analysis results provide a planning-level assessment of whether a segment is under, approaching, or over capacity, where LOS E represents capacity. The City of Murrieta considers LOS C or better to be acceptable for daily roadway segment operations. The below table presents the roadway segment capacity and LOS thresholds utilized by the City of Murrieta.

LOS CRITERIA FOR ROADWAY SEGMENTS

STREET CLASSIFICATION	LEVEL OF SERVICE (LOS)		
	C	D	E
Freeway (4 lanes)	61,200	68,900	76,500
Freeway (6 lanes)	94,000	105,800	117,500
Freeway (8 lanes)	128,400	144,500	160,500
Freeway (10 lanes)	160,500	180,500	200,600
Expressway (4 lanes)	32,700	36,800	40,900
Expressway (6 lanes)	49,000	55,200	61,300
Multi-Modal Corridor (4 lanes)	28,700	32,300	35,900
Multi-Modal Corridor (6 lanes)	43,100	48,500	53,900
Augmented Urban Arterial (8 lanes)	57,400	64,600	71,800
Urban Arterial (6 lanes)	43,100	48,500	53,900
Arterial (4 lanes)	28,700	32,300	35,900
Arterial (6 lanes)	43,100	48,500	53,900
Major (4 lanes)	27,300	30,700	34,100
Secondary (4 lanes)	20,700	23,300	25,900
Collector (2 lanes)	10,400	11,700	13,000

Source: City of Murrieta General Plan Circulation Element

3.0 EXISTING TRAFFIC CONDITIONS

3.1- EXISTING ROADWAY NETWORK

The following is a brief description of roadways and intersections within the project area, as identified in the City of Murrieta's General Plan Circulation Element.

Murrieta Hot Springs Road (between I-15 and I-215) is classified as an Augmented Urban Arterial. The roadway is currently constructed as an 8-lane divided roadway that generally traversed east-west. Class II bike lanes currently exist along both sides of the roadway, and the posted speed limit is 45 mph.

Refer to **Exhibit 3** in Attachment A that illustrates the existing conditions for the study intersections.

3.2- EXISTING TRAFFIC VOLUMES

Existing traffic volumes were obtained from the traffic study prepared for The Terraces at Murrieta traffic study. All counts were performed when area schools were in session, in November of 2021. The following intersections are included in this analysis:

1. Murrieta Hot Springs Road / I-15 SB (signalized)
2. Murrieta Hot Springs Road / I-15 NB (signalized)
3. Murrieta Hot Springs Road / Sparkman Court / Project Driveway 1 (unsignalized)
4. Murrieta Hot Springs Road / Project Driveway 2 (unsignalized) (future)
5. Murrieta Hot Springs Road / Hancock Avenue / Project Driveway 3 (signalized)
6. Murrieta Hot Springs Road / I-215 SB (signalized)
7. Murrieta Hot Springs Road / I-215 NB (signalized)

The following roadway segments were also analyzed:

1. Murrieta Hot Springs Road, between I-15 NB and Sparkman Court
2. Murrieta Hot Springs Road, between Sparkman Court and Hancock Avenue
3. Murrieta Hot Springs Road, between Hancock Avenue and I-215 SB

All traffic volume counts can be found in Appendix A of the traffic study prepared for The Terraces at Murrieta, dated June 1, 2023, prepared by Linscott, Law & Greenspan Engineers.

4.0 EXISTING TRAFFIC OPERATIONS

4.1- EXISTING TRAFFIC OPERATIONS (2021)

The existing intersection and roadway operations results are based on existing traffic volumes collected and existing intersection/ roadway geometry.

Exhibit 4 in Attachment A shows the existing traffic movement volumes and recorded segment ADTs within the project area.

Table 1 shows the studied intersections under the existing conditions. The project area intersections currently operate at an acceptable level of service, LOS D or better, with the exception of the following:

- Murrieta Hot Springs Road / Sparkman Court (LOS F, AM and PM peak hours)

Table 2 shows that the studied roadway segments currently operate at LOS C or better, with the exception of the following:

- Murrieta Hot Springs Road, between Hancock Avenue and I-215 SB- LOS D

4.2- EXISTING TRAFFIC CONDITIONS (2021) QUEUING

Table 3 shows the existing queuing for each of the movements at the study intersections.

The queuing analysis results showed that the 95th percentile queue length currently exceeds the available storage lengths at the following intersections:

- Murrieta Hot Springs Road / Sparkman Court (EB Left – PM peak hour)
- Murrieta Hot Springs Road / Hancock Avenue – Project Dwy 3 (SB Right – PM peak hour)

Refer to Attachment B for the capacity analysis and queuing printouts.

5.0 CUMULATIVE TRAFFIC

To determine the opening year traffic volumes in the study area for the traffic analysis, cumulative project traffic volumes were obtained from the traffic study prepared for The Terraces at Murrieta, dated May 23, 2023, prepared by Linscott, Law & Greenspan Engineers (LLG). This list was originally provide to LLG by the City. However, for the purposed of this analysis, the volumes for the Triangle project in the LLG's cumulative project list were removed, and the Triangle project traffic volumes from this analysis were then added to the cumulative project volumes shown in **Exhibit 5** (refer to Attachment A). Additionally, to account for any unknown cumulative projects that may occur by years 2025 and 2028, a 2% growth rate per year was applied to existing traffic volumes to adjust to the opening years.

6.0 PROJECT TRAFFIC

6.1- TRIP GENERATION

The traffic volumes expected to be generated by the project have been estimated by using the nationally published trip generation rates and recommendations from the *Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition*.

The proposed 285,000 sf Triangle project is estimated to generate a total of 20,144 ADT with 1,412 trips (787 inbound: 625 outbound) in the AM peak hour and 1,416 trips (732 inbound: 684 outbound) in the PM peak hour.

Table 4 shows a summary of the calculated trip generation for each filing of the project and can be found in Attachment B.

6.2- TRIP DISTRIBUTION/ASSIGNEMENT

The project site trip distribution percentages used in the Triangle project's approved traffic study, prepared by Urban Crossroads, dated August 7, 2008 were utilized in this analysis. Note that there are separate trip distribution percentages for the office and retail uses.

The project traffic volumes were assigned to the project area intersections and roadways based on the trip distribution percentages from the Urban Crossroads study.

Exhibits 6, 7, 8, 9 and **10** (Attachment A) for the trip distribution and project trip exhibits for Year 2025.

Exhibits 11, 12, 13, 14 and **15** (Attachment A) for the trip distribution and project trip exhibits for Year 2028.

7.0 2025 TRAFFIC CONDITIONS

7.1- EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2025)

Exhibit 16 (Attachment A) shows the Existing + Ambient + Cumulative Traffic Volumes for Year 2025.

Tables 5, **6** and **7** (Attachment B) show the intersection operations for all three project scenarios (No Interchange Improvements, EB Dual Left-Turn Lanes, and EB to NB Loop Ramp). As shown, all study intersections are anticipated to operate at LOS D or better, with the exception of the following:

- Murrieta Hot Springs Road / Sparkman Court (all scenarios) (LOS F – AM and PM peak hours)

Table 8 shows that the studied roadway segments currently are anticipated to operate at the following LOS:

- Murrieta Hot Springs Road, between I-15 and Sparkman Court – LOS E

- Murrieta Hot Springs Road, between Sparkman Court and Hancock Avenue – LOS D
- Murrieta Hot Springs Road, between Hancock Avenue and I-215 SB – LOS F

7.2- EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2025) QUEUING

Tables 9, **10** and **11** (Appendix B) show the anticipated queuing for each of the movements at the study intersections, for all three project scenarios (No Interchange Improvements, EB Dual Left-Turn Lanes, and EB to NB Loop Ramp).

The queuing analysis results showed that the 95th percentile queue length is expected to exceed the available storage lengths at the following intersections:

- Murrieta Hot Springs Road / I-15 SB Ramps (SB Left – PM peak hour)
- Murrieta Hot Springs Road / I-15 NB Ramps (EB Left – PM peak hour)
- Murrieta Hot Springs Road / Sparkman Court (EB Left – PM peak hour)
- Murrieta Hot Springs Road / Hancock Avenue (SB Right – AM & PM peak hours)
- Murrieta Hot Springs Road / I-215 SB Ramps (SB Left & Right–PM peak hour)

7.3- EXISTING + AMBIENT + CUMULATIVE + PROJECT TRAFFIC CONDITIONS (2025)

Exhibit 17 (Attachment A) shows the Existing + Ambient + Cumulative + Project Traffic Volumes for Year 2025.

Tables 5, 6 and 7 (Attachment B) show the intersection operations for all three project scenarios (No Interchange Improvements, EB Dual Left-Turn Lanes, and EB to NB Loop Ramp). As shown, all study intersections are anticipated to operate at LOS D or better, with the exception of the following:

- Murrieta Hot Springs Road / Project Driveway 2 (all scenarios) (LOS E – AM peak hour, LOS F – PM peak hour)

Note: the intersection of Murrieta Hot Springs Road / Sparkman Court/Project Dwy 1 is assumed to be signalized with Project conditions, therefore, operates at an acceptable level of service with project conditions.

Table 8 shows that the studied roadway segments currently are anticipated to operate at the following LOS:

- Murrieta Hot Springs Road, between I-15 and Sparkman Court– LOS F
- Murrieta Hot Springs Road, between Sparkman Court and Hancock Avenue – LOS F
- Murrieta Hot Springs Road, between Hancock Avenue and I-215 SB– LOS F

7.4- EXISTING + AMBIENT + CUMULATIVE + PROJECT TRAFFIC CONDITIONS (2025) QUEUING

Tables 9, 10 and 11 (Appendix B) show the anticipated queuing for each of the movements at the study intersections, for all three project scenarios (No Interchange Improvements, EB Dual Left-Turn Lanes, and EB to NB Loop Ramp).

The queuing analysis results showed that the 95th percentile queue length is expected to exceed the available storage lengths at the following intersections:

- Murrieta Hot Springs Road / I-15 SB Ramps (SB Left – PM peak hour)
- Murrieta Hot Springs Road / Sparkman Court/Project Dwy 1 (SB Right– AM & PM peak hours)
- Murrieta Hot Springs Road / I-215 SB Ramps (SB Left & Right–AM & PM peak hours)

8.0 2028 TRAFFIC CONDITIONS

8.1- EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2028)

Exhibit 18 (Attachment A) shows the Existing + Ambient + Cumulative Traffic Volumes for Year 2028.

Tables 12, 13 and **14** (Attachment B) show the intersection operations for all three project scenarios (No Interchange Improvements, EB Dual Left-Turn Lanes, and EB to NB Loop Ramp). As shown, all study intersections are anticipated to operate at LOS D or better, with the exception of the following:

- Murrieta Hot Springs Road / Project Driveway 2 (all with project scenarios) (LOS F – AM and PM peak hours)
- Murrieta Hot Springs Road / Hancock Avenue / Project Driveway 3 (all with project scenarios) (LOS E – PM peak hour)

Table 15 shows that the studied roadway segments currently are anticipated to operate at the following LOS:

- Murrieta Hot Springs Road, between I-15 and Sparkman Court– LOS F
- Murrieta Hot Springs Road, between Sparkman Court and Hancock Avenue– LOS E
- Murrieta Hot Springs Road, between Hancock Avenue and I-215 SB– LOS F

8.2- EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2028) QUEUING

Tables 16, 17 and **18** (Appendix B) show the anticipated queuing for each of the movements at the study intersections, for all three project scenarios (No Interchange Improvements, EB Dual Left-Turn Lanes, and EB to NB Loop Ramp).

The queuing analysis results showed that the 95th percentile queue length is expected to exceed the available storage lengths at the following intersections:

- Murrieta Hot Springs Road / I-15 SB Ramps (SB Left & Right – PM peak hour)
- Murrieta Hot Springs Road / I-15 NB Ramps (EB Left – PM peak hour)

- Murrieta Hot Springs Road / I-215 SB Ramps (SB Left & Right–PM peak hour)

8.3- EXISTING + AMBIENT + CUMULATIVE + PROJECT TRAFFIC CONDITIONS (2028)

Exhibit 19 (Attachment A) shows the Existing + Ambient + Cumulative + Project Traffic Volumes for Year 2028.

Tables 12, 13 and 14 (Attachment B) show the intersection operations for all three project scenarios (No Interchange Improvements, EB Dual Left-Turn Lanes, and EB to NB Loop Ramp). As shown, all study intersections are anticipated to operate at LOS D or better, with the exception of the following:

- Murrieta Hot Springs Road / Project Driveway 2 (all with project scenarios) (LOS F – AM and PM peak hours)
- Murrieta Hot Springs Road / Hancock Avenue / Project Driveway 3 (all with project scenarios) (LOS E – PM peak hour)

Table 15 shows that the studied roadway segments currently are anticipated to operate at the following LOS:

- Murrieta Hot Springs Road, between I-15 and Sparkman Court– LOS F
- Murrieta Hot Springs Road, between Sparkman Court and Hancock Avenue – LOS F
- Murrieta Hot Springs Road, between Hancock Avenue and I-215 SB– LOS F

8.4- EXISTING + AMBIENT + CUMULATIVE + PROJECT TRAFFIC CONDITIONS (2028) QUEUING

Tables 16, 17 and 18 (Appendix B) show the anticipated queuing for each of the movements at the study intersections, for all three project scenarios (No Interchange Improvements, EB Dual Left-Turn Lanes, and EB to NB Loop Ramp).

The queuing analysis results showed that the 95th percentile queue length is expected to exceed the available storage lengths at the following intersections:

- Murrieta Hot Springs Road / I-15 SB Ramps (SB Left & Right – AM & PM peak hours)
- Murrieta Hot Springs Road / I-15 NB Ramps (NB Left – PM peak hour)
- Murrieta Hot Springs Road / Sparkman Court/Project Dwy 1 (EB Right – PM peak hour, SB Right– AM & PM peak hours)
- Murrieta Hot Springs Road / Hancock Avenue/ Project Dwy 3 (EB Left & Right - PM peak hour, SB Right – AM & PM peak hours)
- Murrieta Hot Springs Road / I-215 SB Ramps (SB Left & Right–AM & PM peak hours)

9.0 TRIP GENERATION ALTERNATIVE

The current proposed plan by the applicant for the Triangle project shows 285,000 sf of retail, commercial, and office uses for the first phase of development. The development of the remainder of the project site is unknown at this time. For comparison purposes, 900 units of multi-family (mid-rise) housing was assumed for the remainder of the site. The following are the results of the trip generation comparison:

Previous Project

- Original Triangle Study: 38,739 veh/day

Current/Potential Full Build of Project

- Current Proposed Use (285,000 sf): 20,144 veh/day
- Remainder of site (900 units of Multi-Family): 4,086 veh/day
- Total: 24,230 veh/day

By assuming that the remainder of the site is developed with multi-family residential units, this results in approximately 14,509 fewer veh/day than was assumed in the original approved traffic study.

Table 19 shows the trip generation comparison table and can be found in Attachment B.

10.0 BUILDOUT ANALYSIS

10.1- BUILDOUT TRAFFIC CONDITIONS (2035)

Buildout analysis for the Year 2035 was conducted for the intersection of Murrieta Hot Springs Road / I-15 NB Ramps to verify if additional improvements are necessary at this intersection. The 2035 volumes were interpolated between the current existing 2021 traffic counts and City's general plan 2040 forecasted volumes which includes the full buildout of the Triangle project. Peak hour turning volumes for the 2035 conditions were estimated based on techniques described in the National Highway Cooperative Research Program (NCHRP) 255 report, *Highway Traffic Data for Urbanized Area Project Planning and Design, Chapter 8*. This essentially estimates future turn volumes utilizing existing turn volumes, existing ADT's and future ADT's. **Attachment E** contains the backup calculations and additional references.

Exhibit 20 (Attachment A) shows the Buildout Traffic Volumes at the intersection of Murrieta Hot Springs Road / I-15 NB Ramps for Year 2035.

Table 20 (Attachment B) shows the intersection operations for the No Interchange Improvements scenario. As shown, the study intersection is anticipated to operate at LOS D or better and it appears that the intersection functions adequately with no additional improvements.

10.2- BUILDOUT TRAFFIC CONDITIONS (2035) QUEUING

Tables 21 (Appendix B) shows the anticipated queuing for each of the movements at the study intersection and queuing appears to not exceed the available storage.

11.0 CONCLUSION AND RECOMMENDATIONS

This focused traffic analysis evaluated the impacts of the Triangle project and the adjacent nearby known pending and approved projects on Murrieta Hot Springs Road, between the I-15 and I-215 freeways.

Based on the results of the analysis, the following lane configurations are proposed in order to ensure an acceptable LOS:

Murrieta Hot Springs Road / Sparkman Court / Project Driveway 1

Approach	Control Type	Lane Configuration
Eastbound	Signal	2 left-turn lanes 4 through lanes 1 right-turn lane – (450’ min. storage)
Westbound		2 left-turn lanes 4 through lanes with shared right-turn lane
Northbound		2 left-turn lanes 2 through lanes with shared right-turn lane
Southbound		2 left-turn lanes 2 through lanes 1 right-turn lane – (300’ min. storage)

Murrieta Hot Springs Road / Hancock Avenue / Project Driveway 3

Approach	Control Type	Lane Configuration
Eastbound	Signal	2 left-turn lanes 4 through lanes 1 right-turn lane with overlap – (250’ min. storage)
Westbound		2 left-turn lanes 3 through lanes 1 right-turn lane with overlap
Northbound		2 left-turn lanes 1 through lane 2 right-turn lanes with overlap
Southbound		2 left-turn lanes 1 through lane 1 right-turn lane with overlap - (200’ min. storage)

Tables 22, 23, 24 & 25 (Attachment B) show the intersection operations and queuing results with recommendations for Year 2025 & 2028 study scenarios.

It should be noted that for all project scenarios for Year 2025 and Year 2028, acceptable LOS is anticipated at each of the signalized study intersections, with no additional improvements.

ATTACHMENTS

ATTACHMENT A

Exhibits

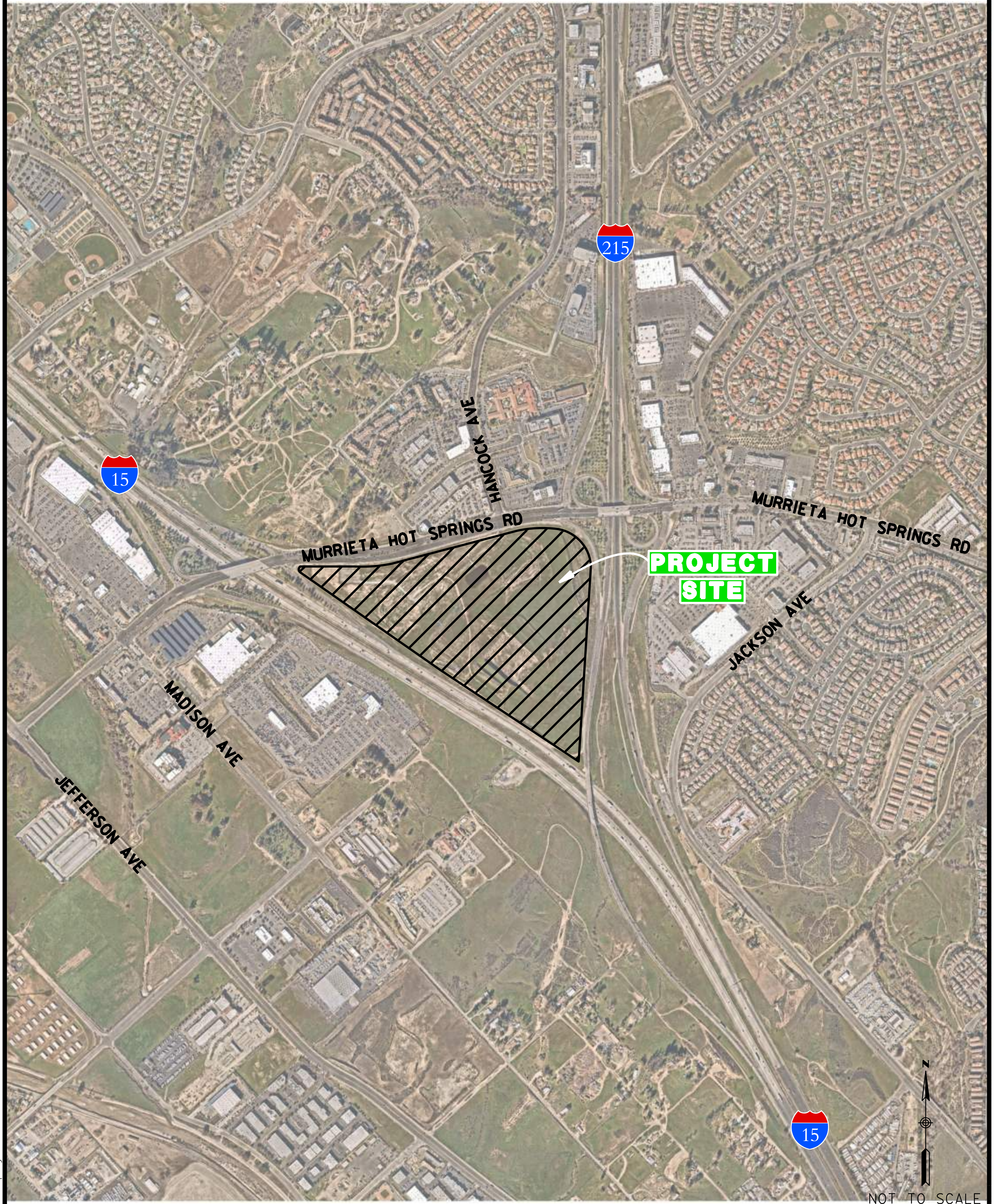

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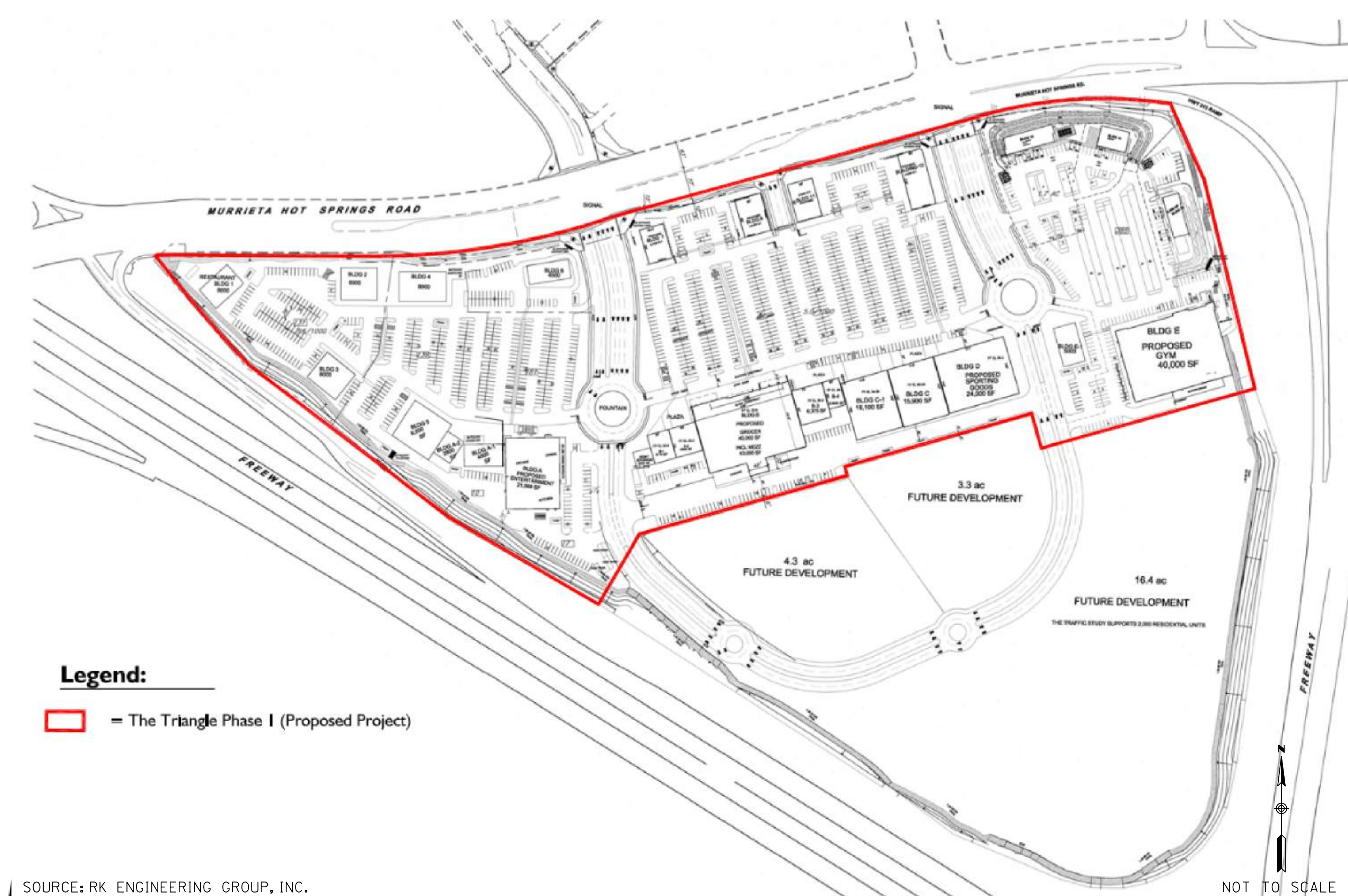
EXHIBIT 1

VICINITY MAP

TRIANGLE PROJECT TRAFFIC ANALYSIS



SOURCE: RK ENGINEERING GROUP, INC.

NOT TO SCALE

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EXHIBIT 2

PROJECT SITE PLAN

TRIANGLE PROJECT TRAFFIC ANALYSIS

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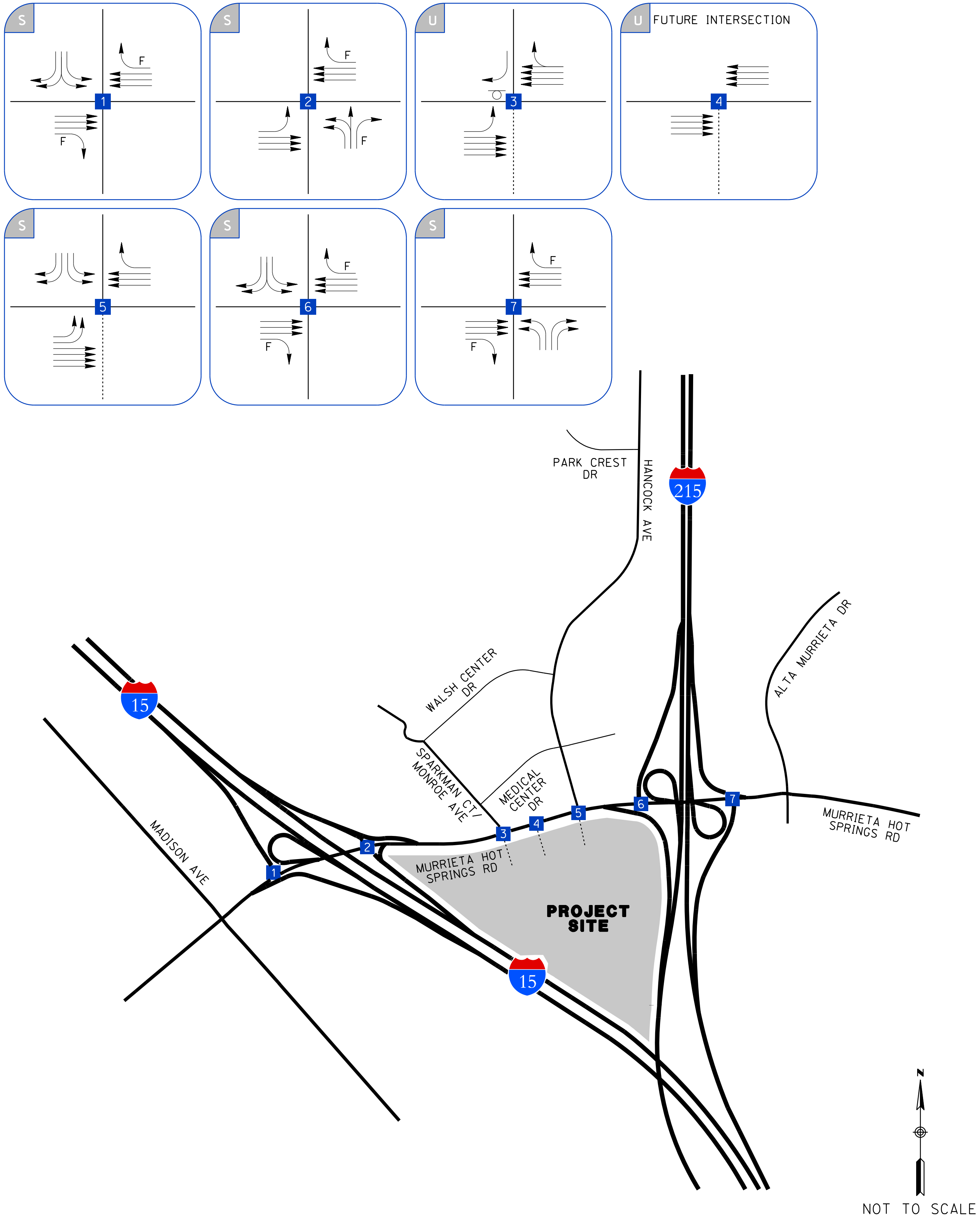

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EXHIBIT 3

EXISTING CONDITIONS

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER

S =SIGNALIZED

U =UNSIGNALIZED

=STOP CONTROL

=FUTURE DWY

F =FREE

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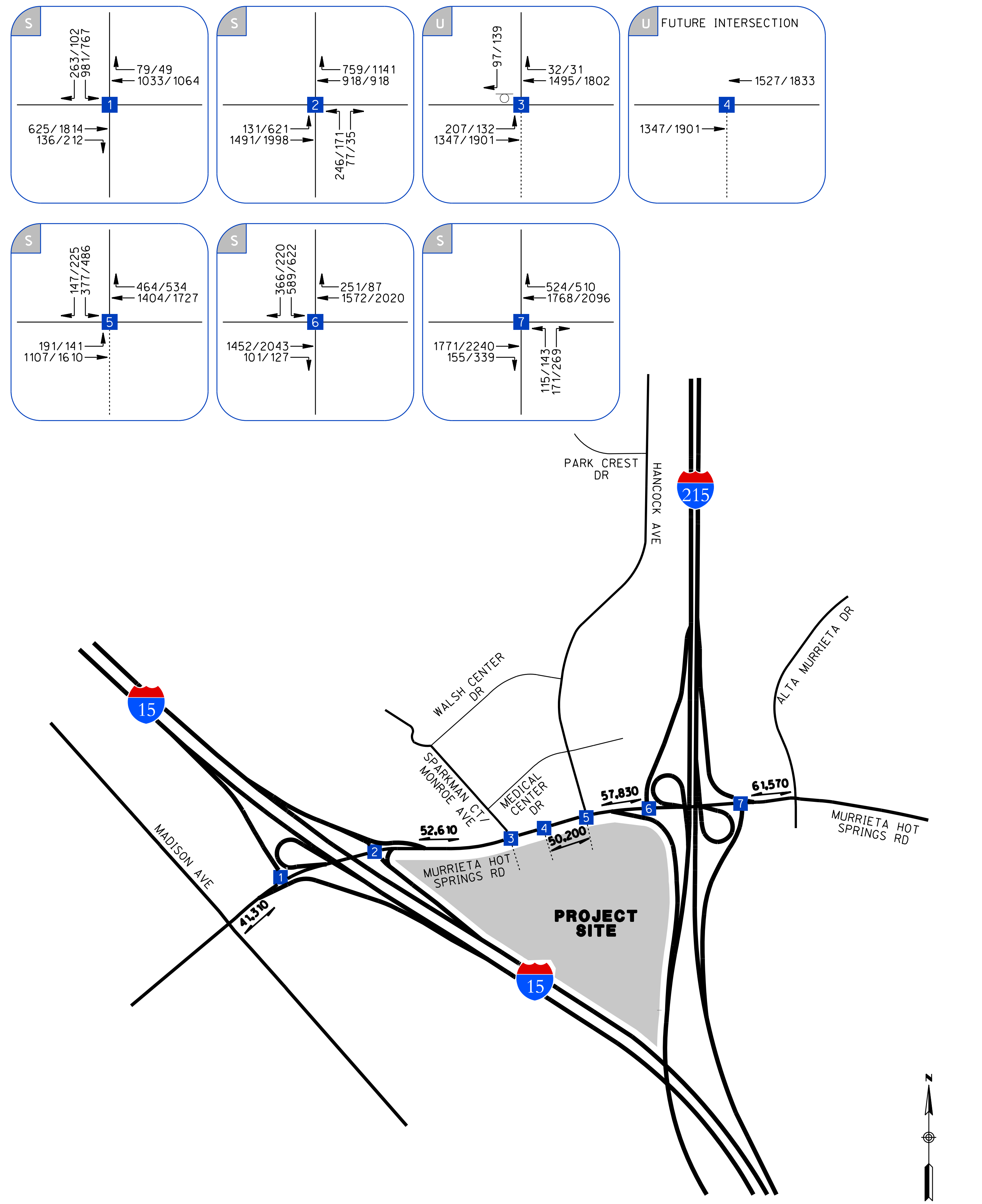

SOURCE: THE TERRACES AT MURRIETA, TIA, LLG DATED MAY 1, 2023

NOT TO SCALE

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EXHIBIT 4

EXISTING TRAFFIC VOLUMES (2021)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

- X =INTERSECTION NUMBER
- S =SIGNALIZED
- U =UNSIGNALIZED
- =STOP CONTROL
- =FUTURE DWY
- X,XXX = TWO-WAY ADT
- XX/XX = AM/PM PEAK HR VOLUMES

X CUMULATIVE PROJECT LIST

1. LOS ALAMOS COMMUNITY PLAN (DP-2014-490)
2. SIAL MEDICAL PLAZA (DP-2016-785)
3. WHITTAKER OFFICE COMPLEX (DP-02-474)
4. JEFFERSON AND IVY (DP-2017-1397)
5. DOWNTOWN MARKET PLACE (DP-2018-1741)
6. MAR VISTA BUSINESS PARK (DP-2018-7192)
7. MURRIETA TOWN SHOPPING CENTER (DP-2018-1802)
8. JEFEERSON AND FIG (DP-2019-1919)
9. HOTEL MURRIETA (DP-2019-2031)
10. HANCOCK CHILDREN'S CLINIC (DP-2020-2206)
11. RANCHO SPRINGS MEDICAL CENTER (DP-2020-2199)
12. JEFFERSON APARTMENTS (DP-2020-2170)
13. BEYOND FOOD MART (DP-2020-2171)
14. U-HAUL (DP-2021-2359)
15. THE TERRACES (2022-2518)
16. OMC MURRIETA MULTI-FAMILY (DP-2022-2605)
17. JEFFERSON MULTI-FAMILY PROJECT (DP-2022-2685)
18. MAKENA HANCOCK II PROJECT (DP-2022-2744)
19. VISTA MURRIETA APTS (DP-2022-2562)
20. LOS ALAMOS SS & RETAIL (DP-2022-2500)
21. MONAMOS APARTMENTS (DP-2021-2385)
22. JEFFERSON SOUTH APARTMENTS (DP-2022-2480)
23. 24960 ADAMS AVENUE (DP-2021-2311)
24. IVY HOUSE RESIDENTIAL (TTM-2021-2428)
25. SANDSTONE APTS (DP-2022-2601)
26. GIERSON RANCH (DP-2022-2551)

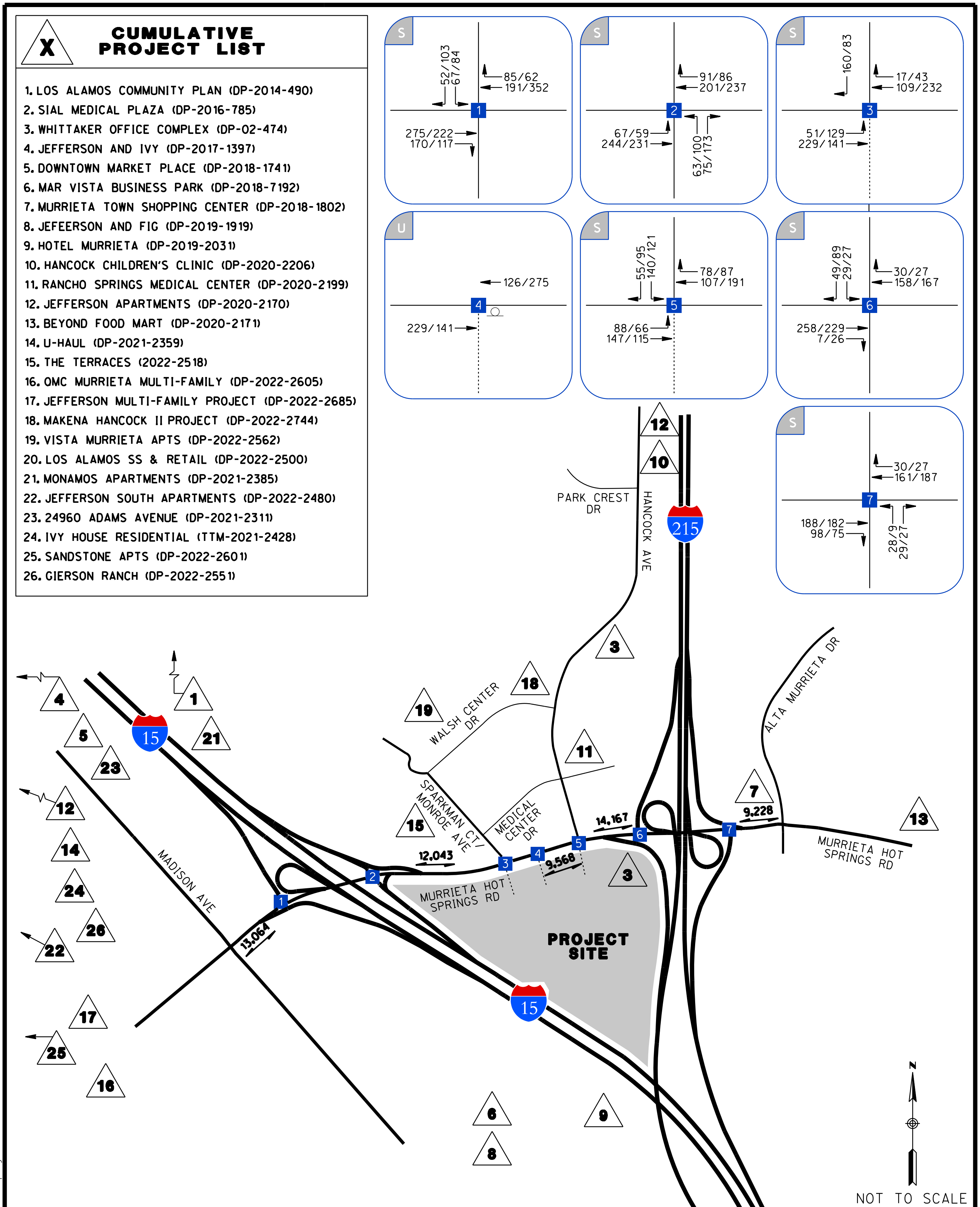

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EXHIBIT 5
CUMULATIVE PROJECT TRIP DISTRIBUTION AND VOLUMES

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
○ =STOP CONTROL
X,XXX = TWO-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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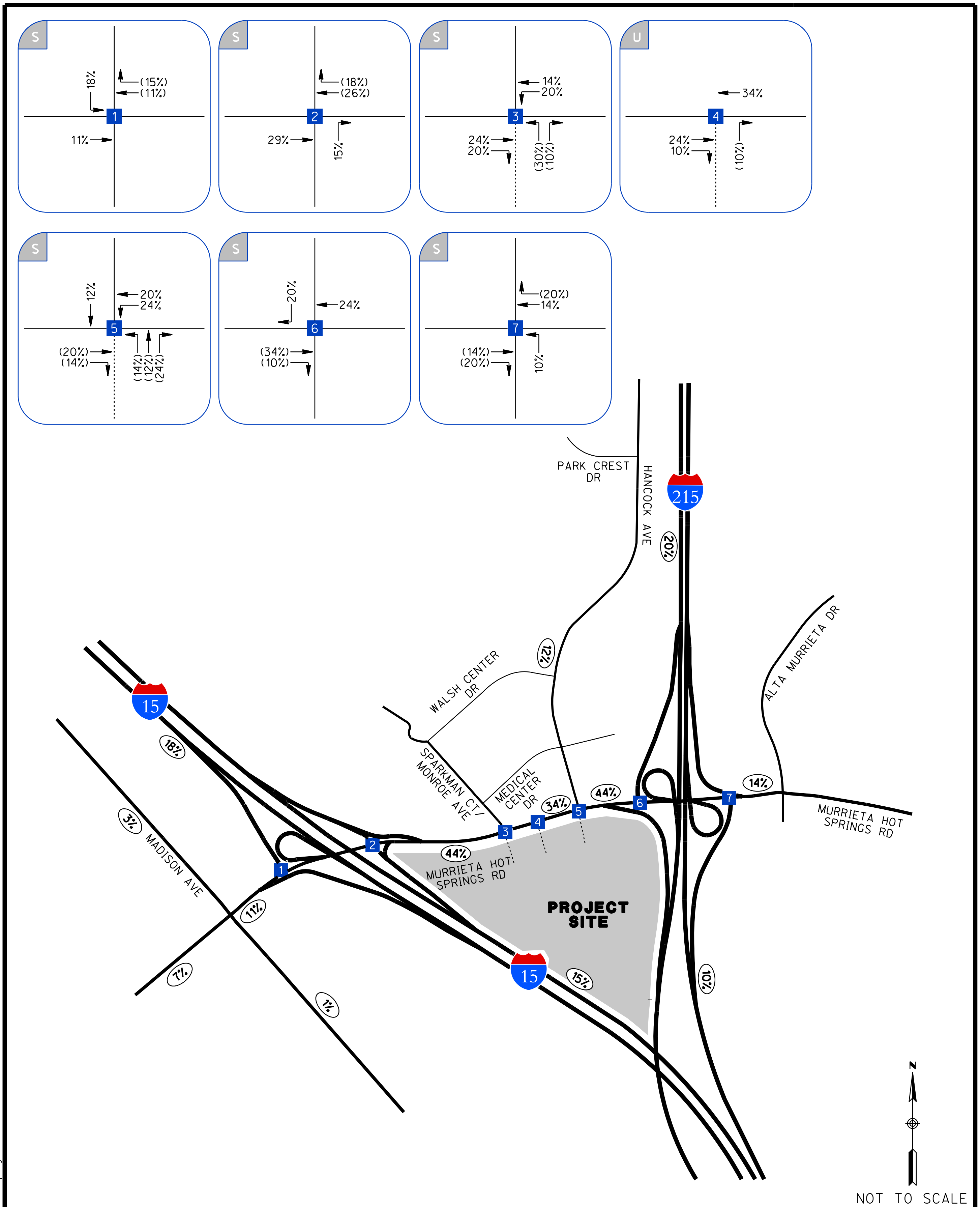

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EXHIBIT 6

PROJECT TRIP DISTRIBUTION
(COMMERCIAL 2025)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
XX% =PERCENT DISTRIBUTION
XX% =INBOUND PERCENT DISTRIBUTION
(XX%)=OUTBOUND PERCENT DISTRIBUTION

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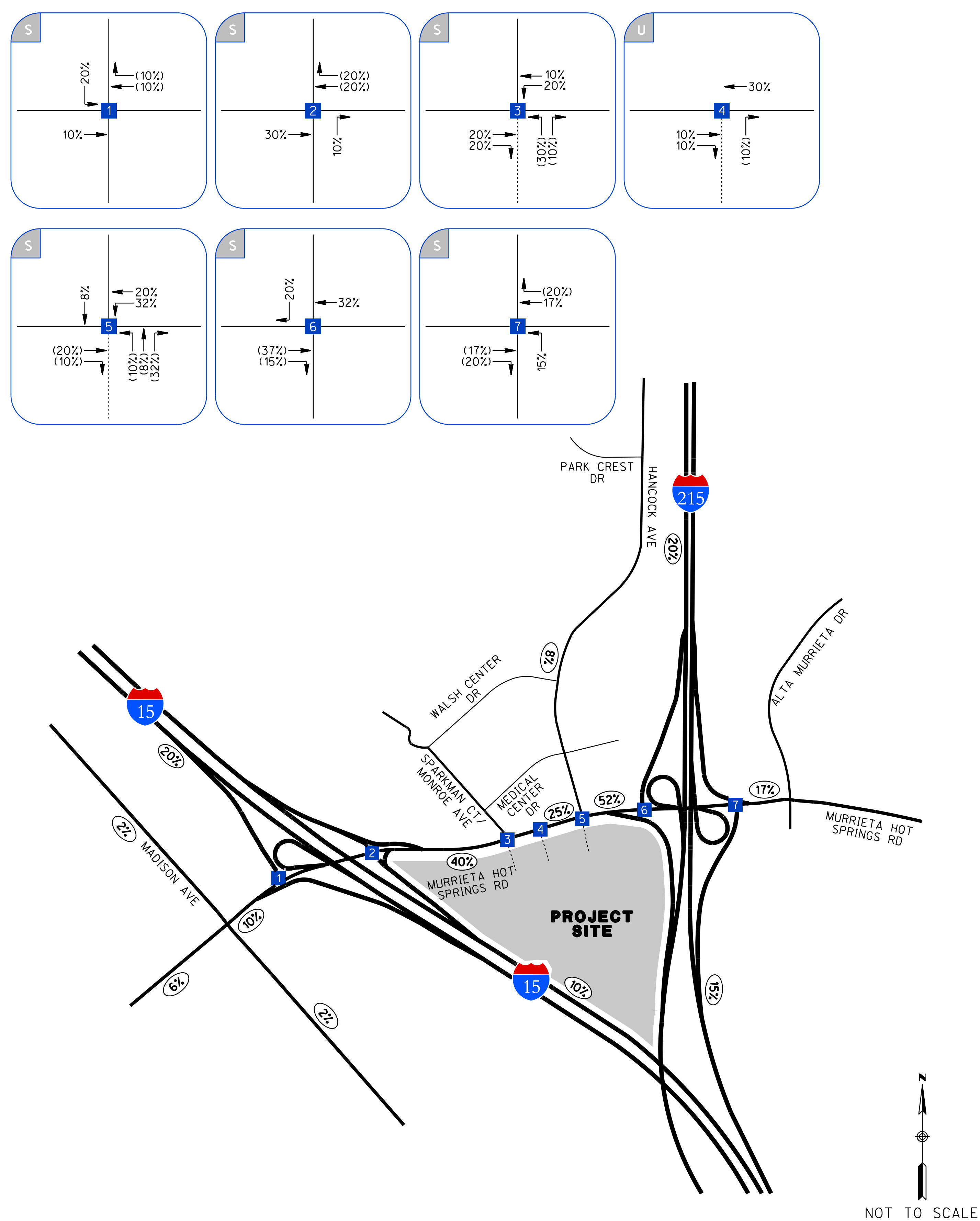

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EXHIBIT 7

PROJECT TRIP DISTRIBUTION
(OFFICE 2025)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER

S =SIGNALIZED

U =UNSIGNALIZED

XX% =PERCENT DISTRIBUTION

XX% =INBOUND PERCENT DISTRIBUTION

(XX%)=OUTBOUND PERCENT DISTRIBUTION

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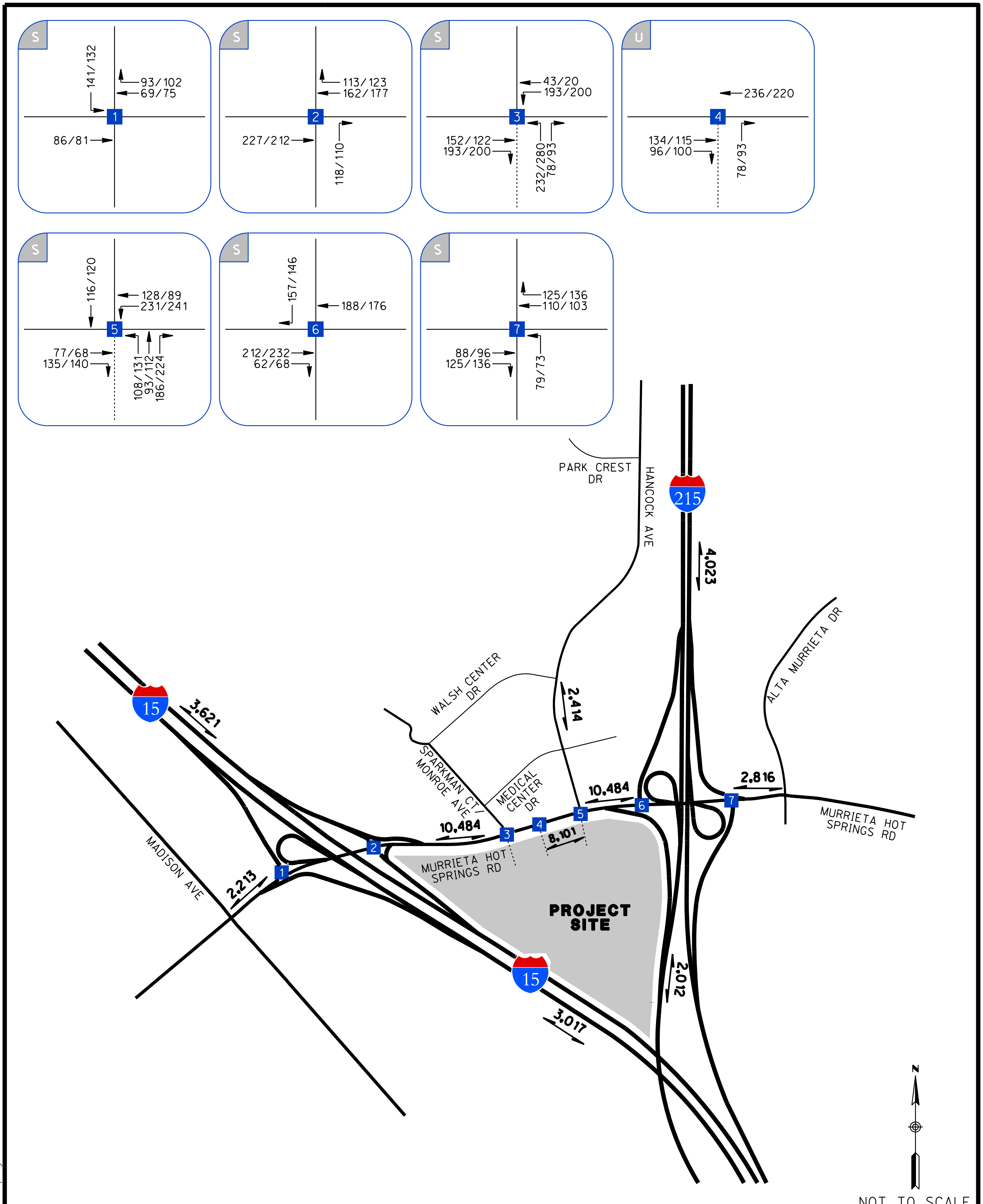

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EXHIBIT 8
PROJECT TRIP VOLUMES
(COMMERCIAL 2025)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL

X,XXX = TWO-WAY ADT
X,XXX = ONE-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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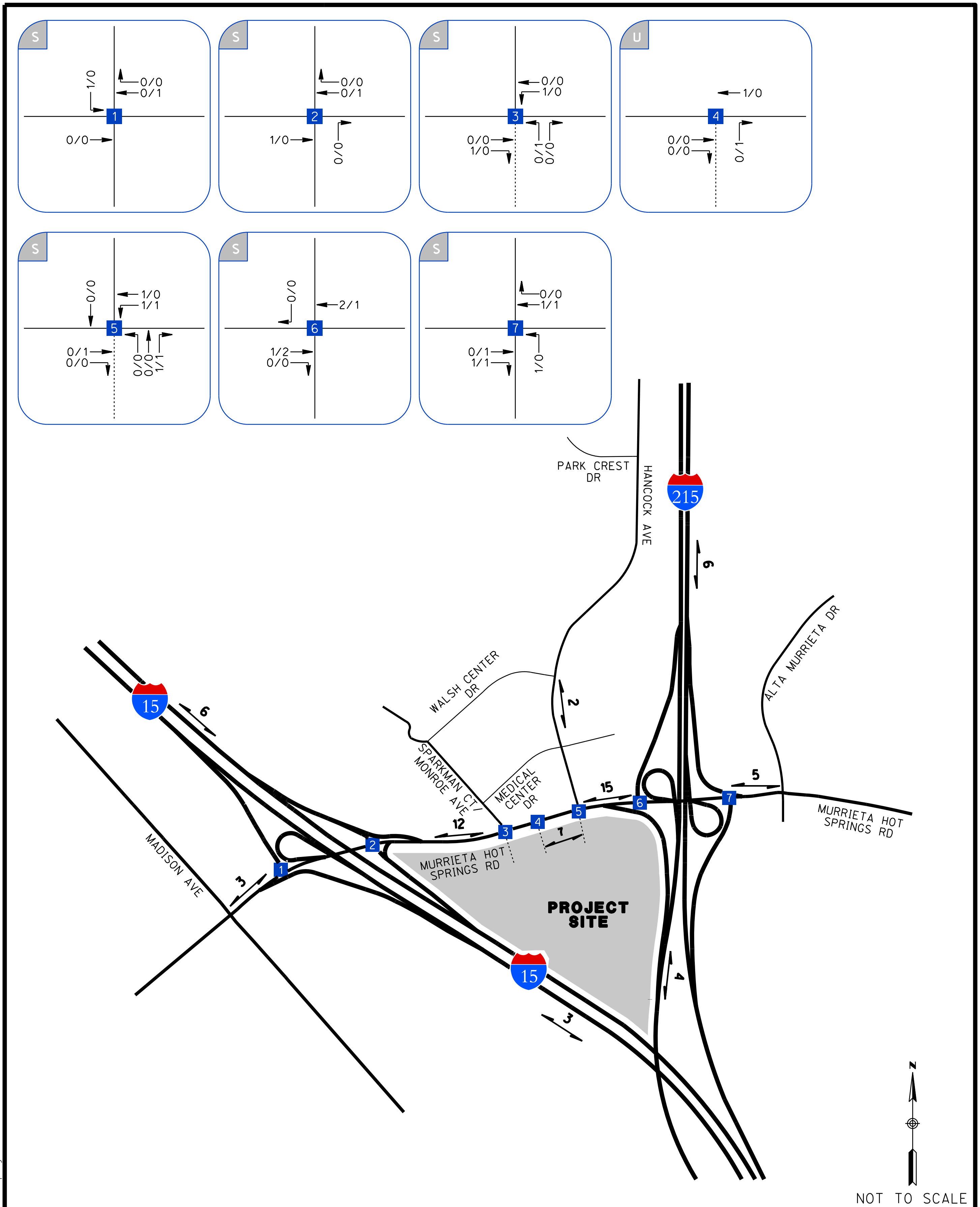

EXHIBIT 9

PROJECT TRIP VOLUMES
(OFFICE 2025)

TRIANGLE PROJECT TRAFFIC ANALYSIS

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LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL
X,XXX = TWO-WAY ADT
X,XXX = ONE-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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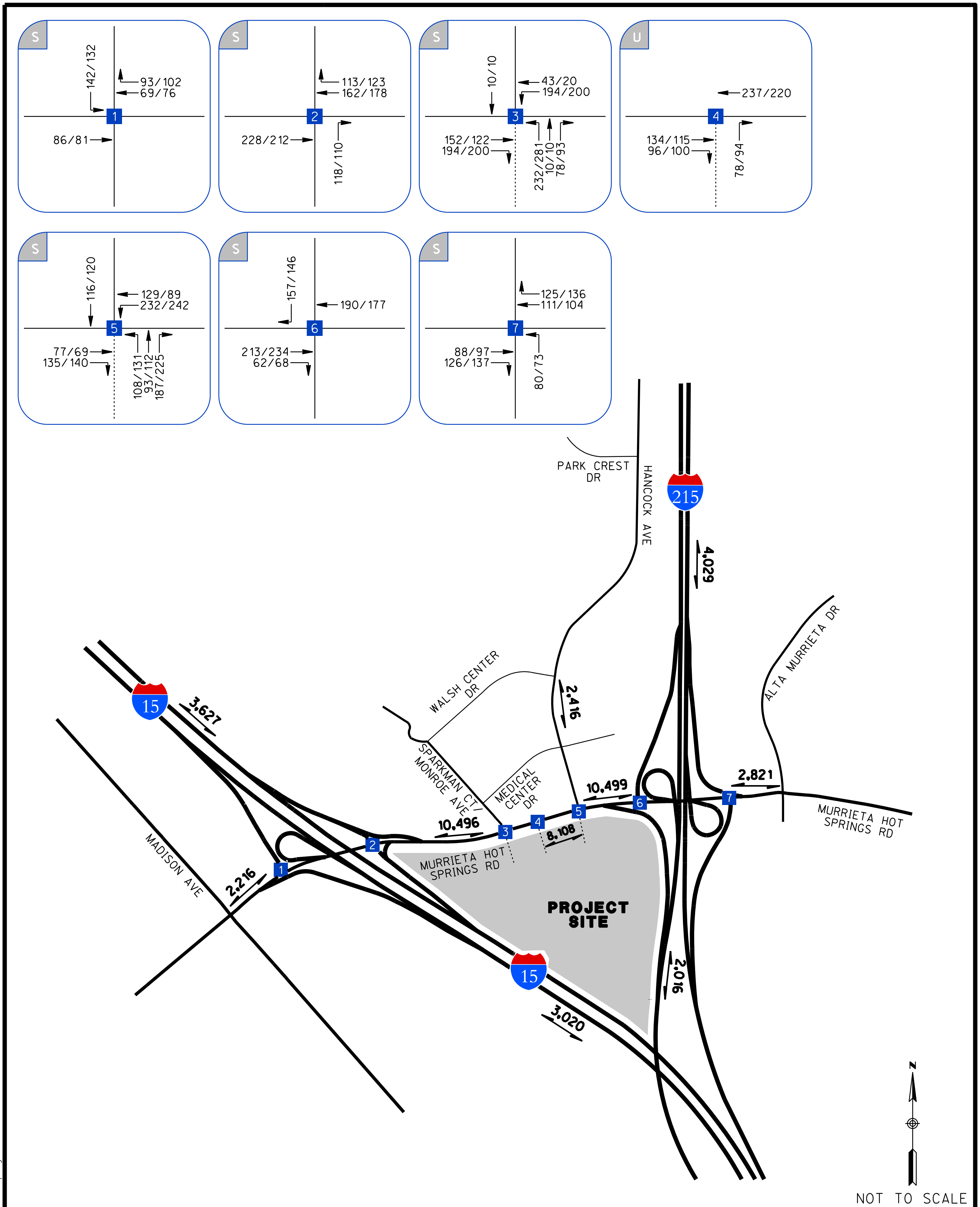

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EXHIBIT 10

PROJECT TRIP VOLUMES
(TOTAL 2025)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL
X,XXX = TWO-WAY ADT
X,XXX = ONE-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

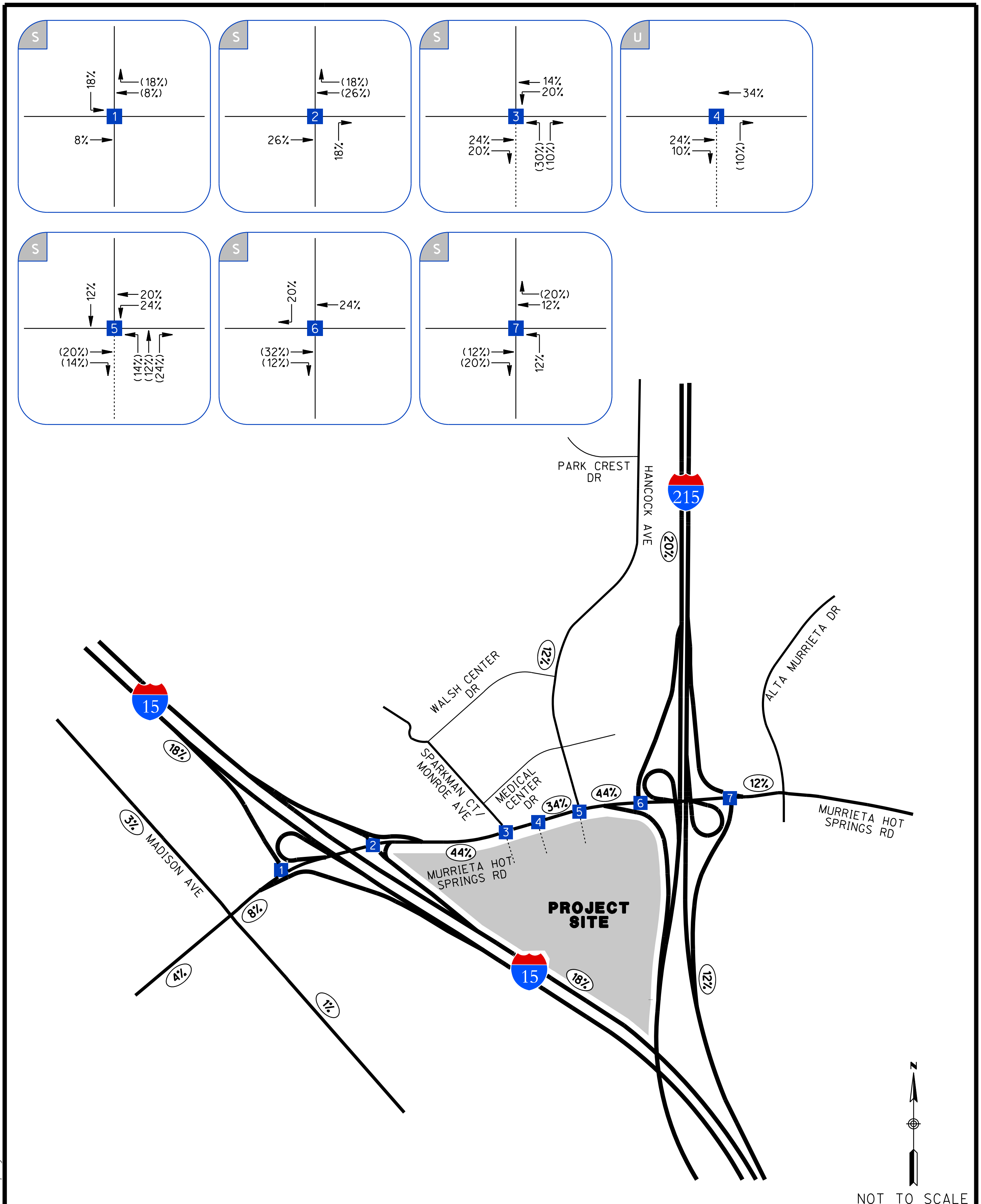

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EXHIBIT 11

PROJECT TRIP DISTRIBUTION - FULL BUILDOUT (COMMERCIAL 2028)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER

S =SIGNALIZED

U =UNSIGNALIZED

(XX%) =PERCENT DISTRIBUTION

XX% =INBOUND PERCENT DISTRIBUTION

(XX%)=OUTBOUND PERCENT DISTRIBUTION

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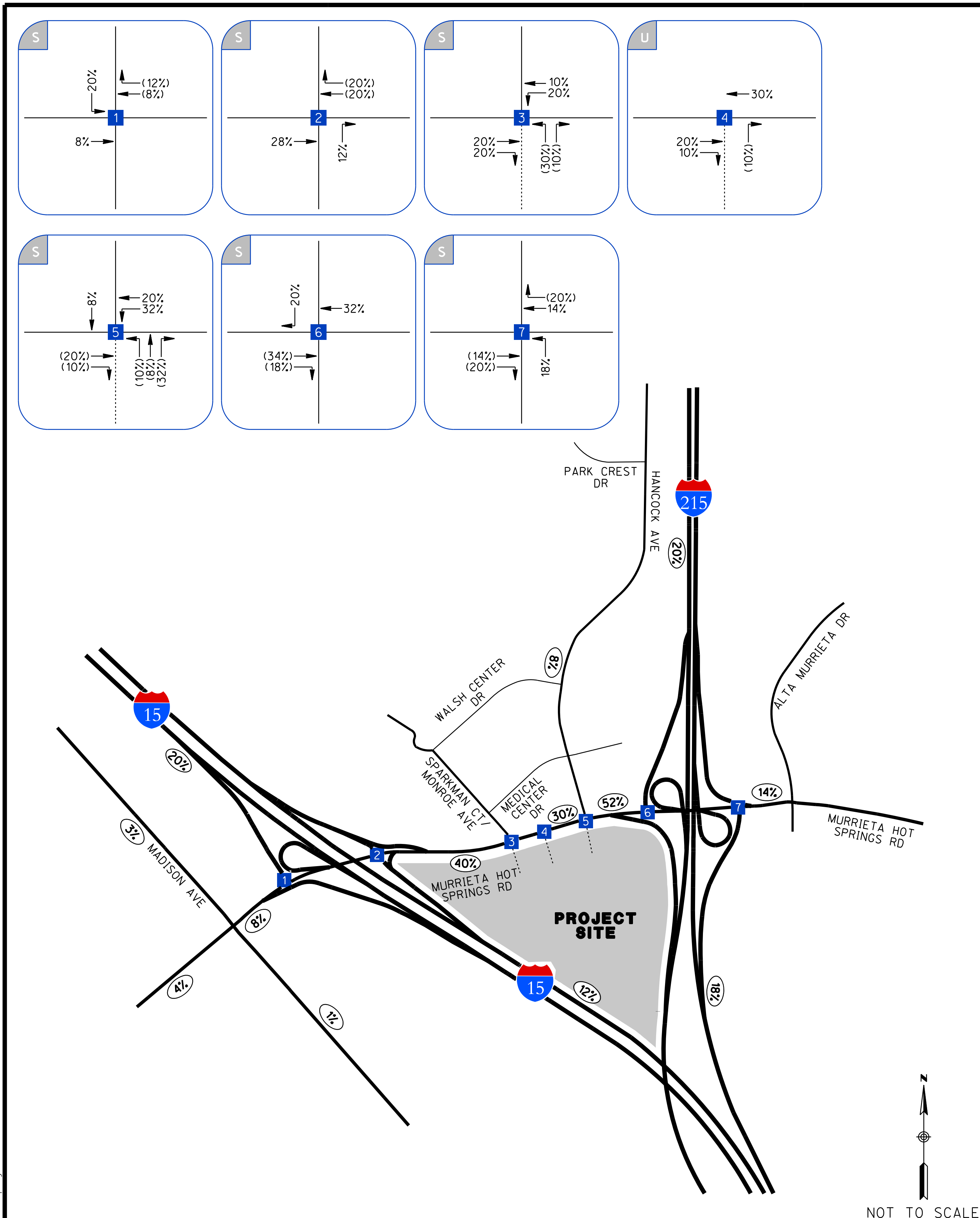

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EXHIBIT 12

PROJECT TRIP DISTRIBUTION-FULL BUILDOUT (OFFICE 2028)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER

S =SIGNALIZED

U =UNSIGNALIZED

XX% =PERCENT DISTRIBUTION

XX% =INBOUND PERCENT DISTRIBUTION

(XX%)=OUTBOUND PERCENT DISTRIBUTION

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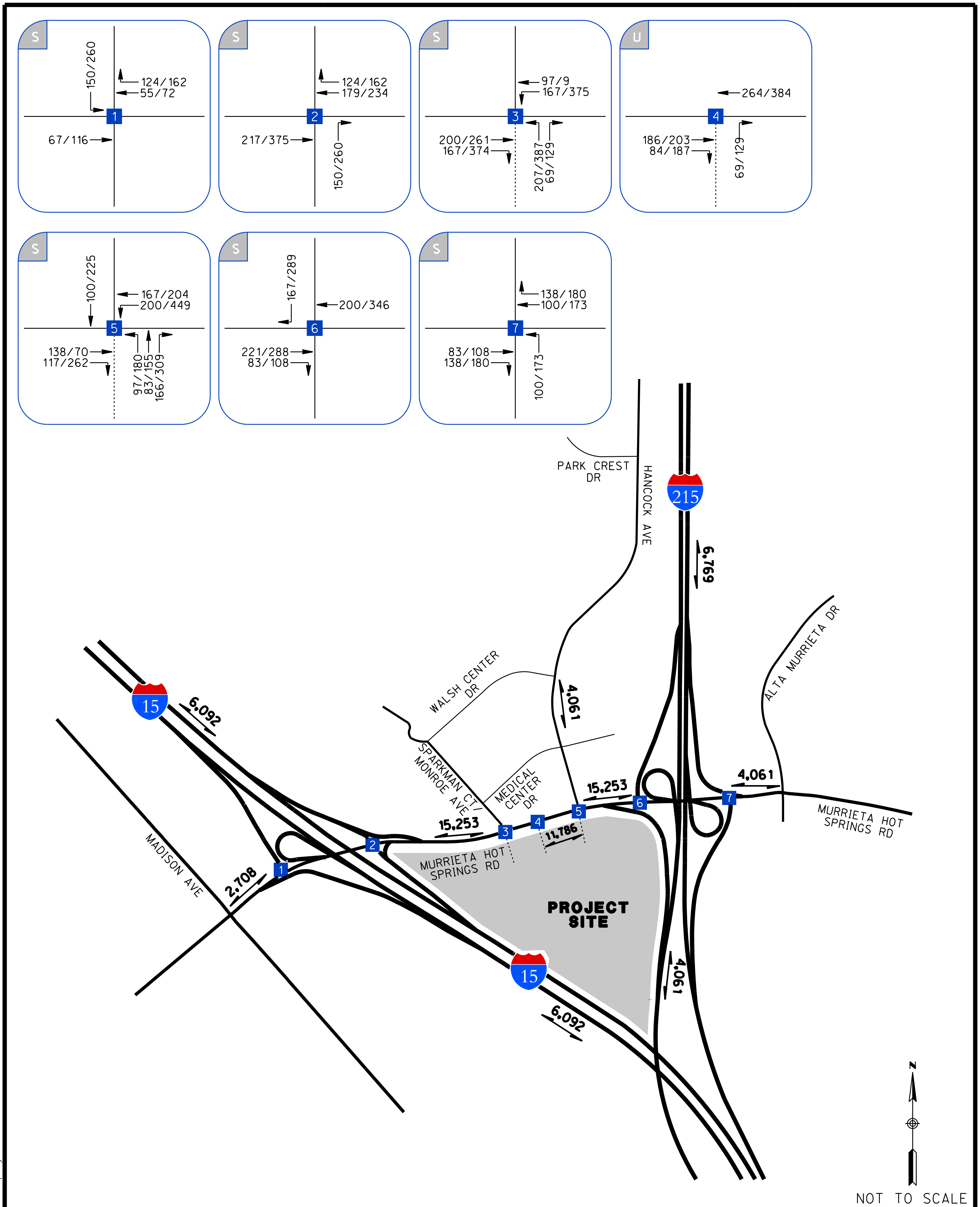

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EXHIBIT 13

PROJECT TRIP VOLUMES-FULL BUILDOUT (COMMERCIAL 2028)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL
X,XXX = TWO-WAY ADT
X,XXX = ONE-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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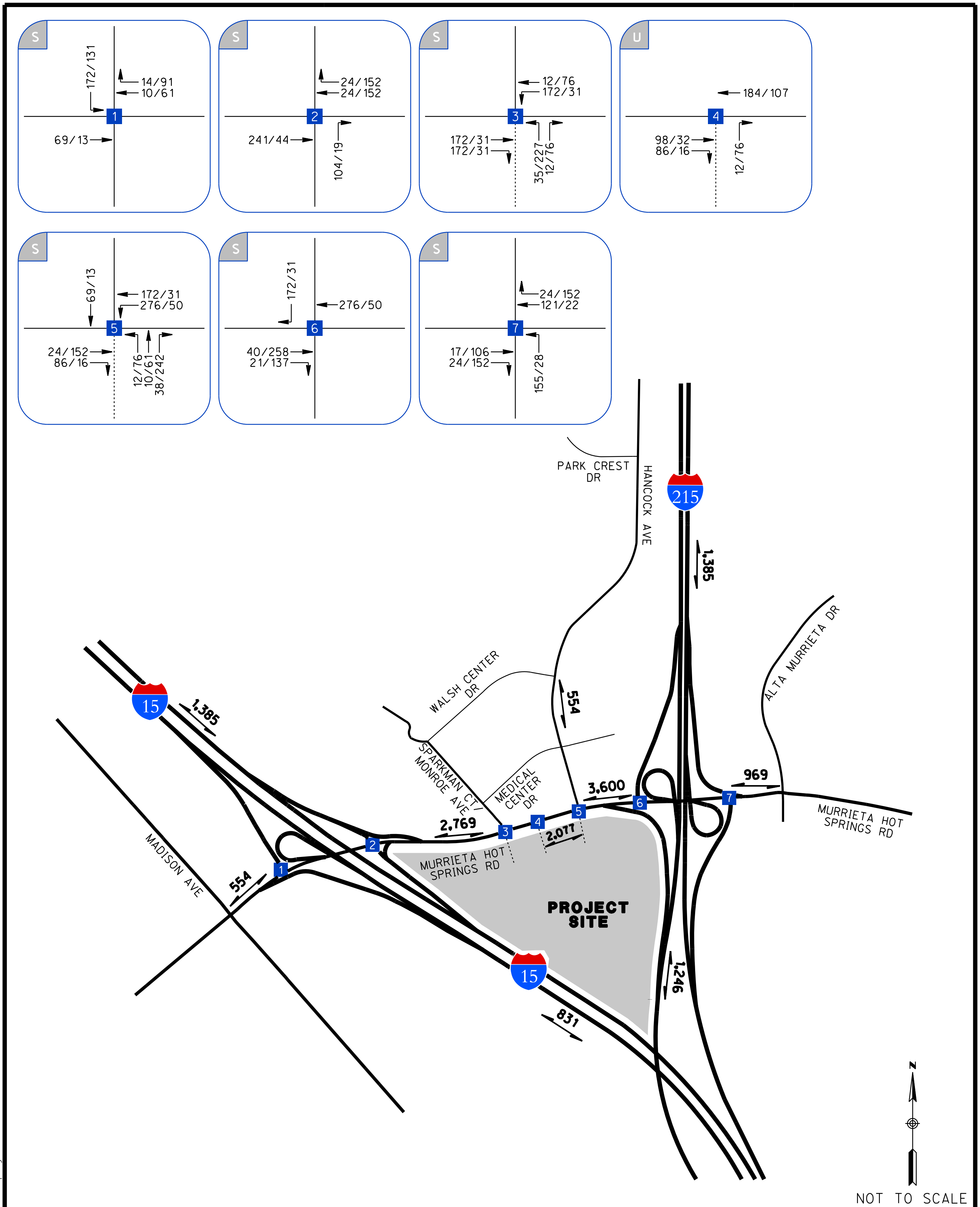

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EXHIBIT 14

PROJECT TRIP VOLUMES-FULL BUILDOUT (OFFICE 2028)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL
X,XXX = TWO-WAY ADT
X,XXX = ONE-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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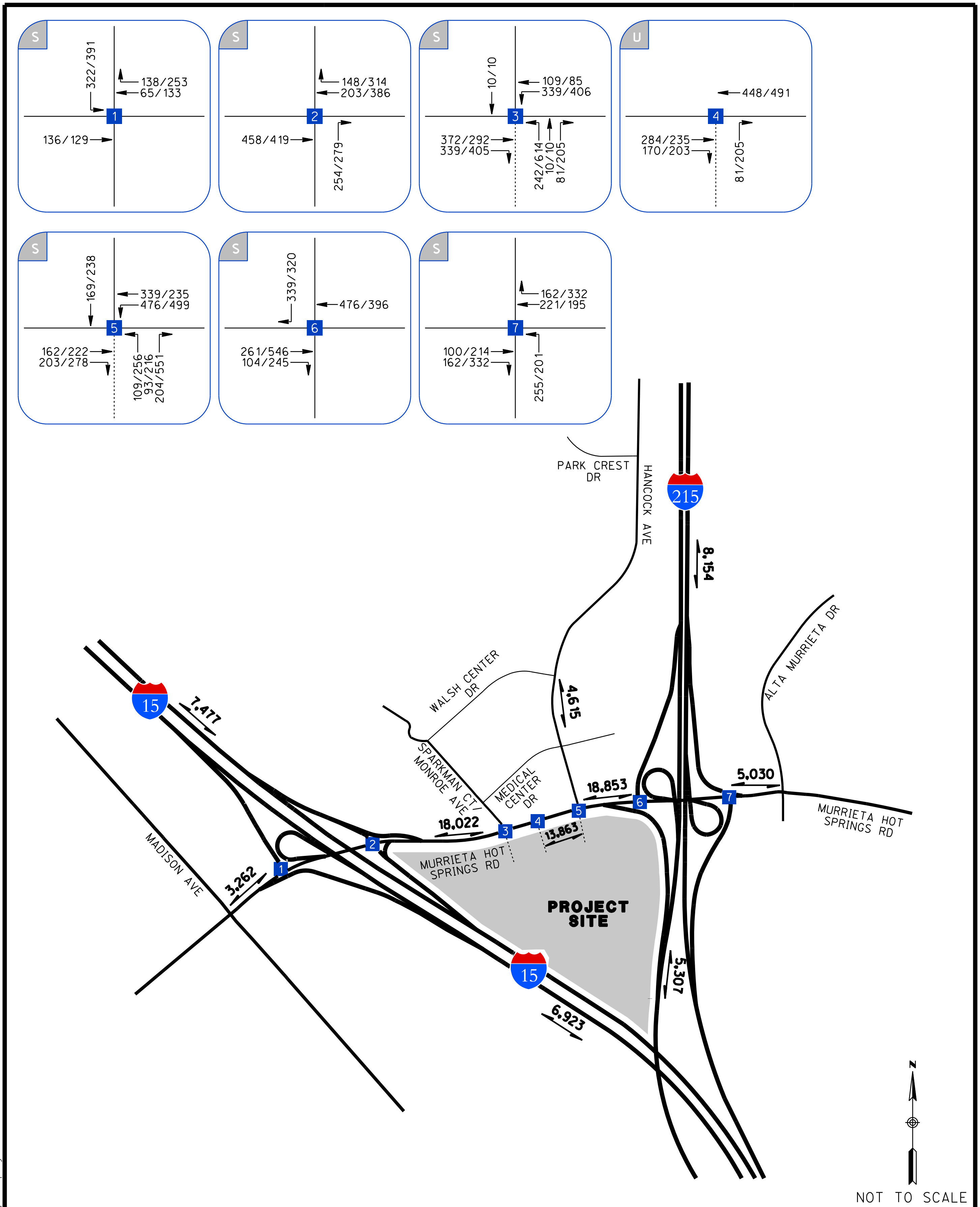

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EXHIBIT 15

PROJECT TRIP VOLUMES-FULL BUILDOUT (TOTAL 2028)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL
X,XXX = TWO-WAY ADT
X,XXX = ONE-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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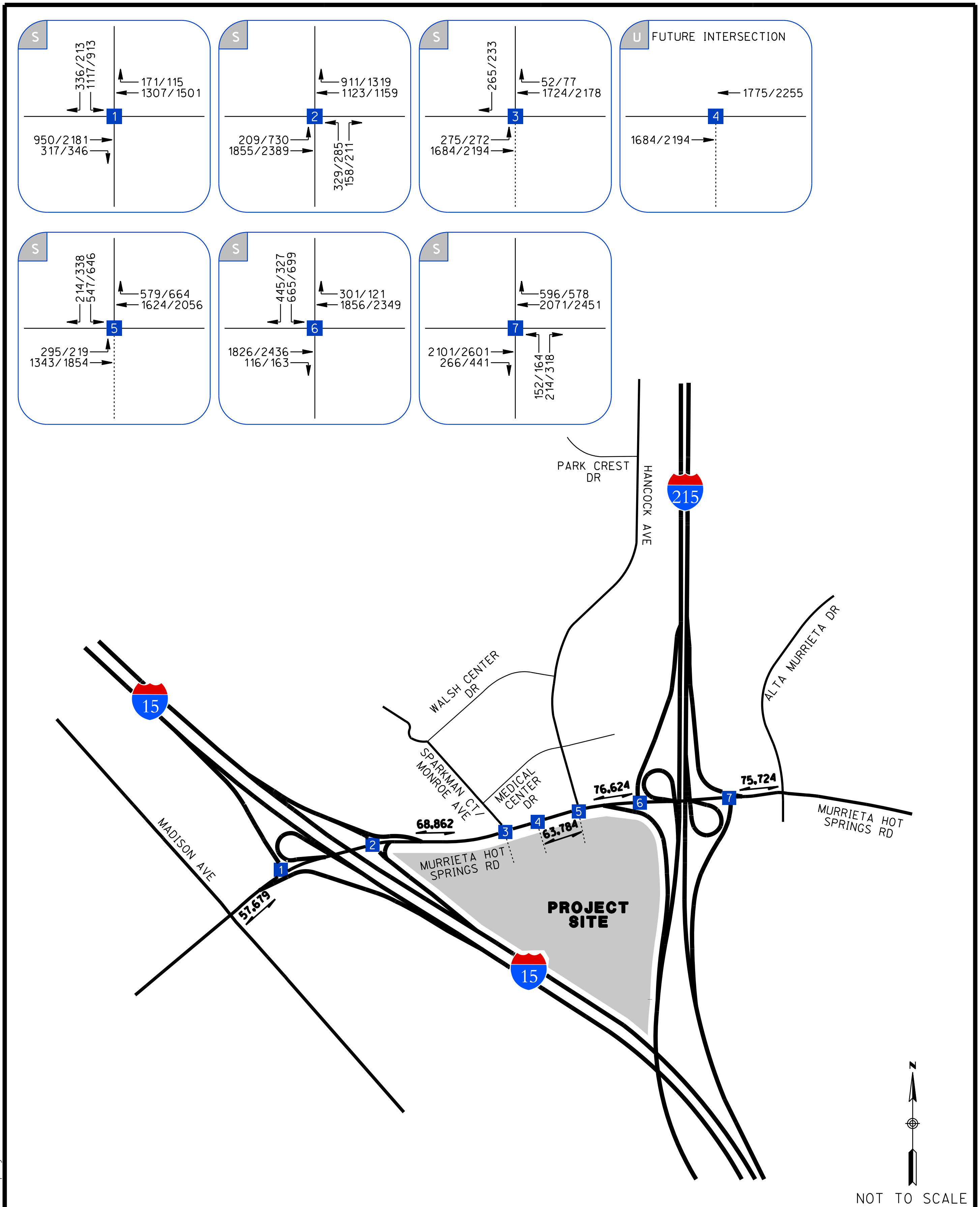

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EXHIBIT 16

EXISITNG + AMBIENT + CUMULATIVE
TRAFFIC CONDITIONS (2025)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL
=FUTURE DWY
X,XXX = TWO-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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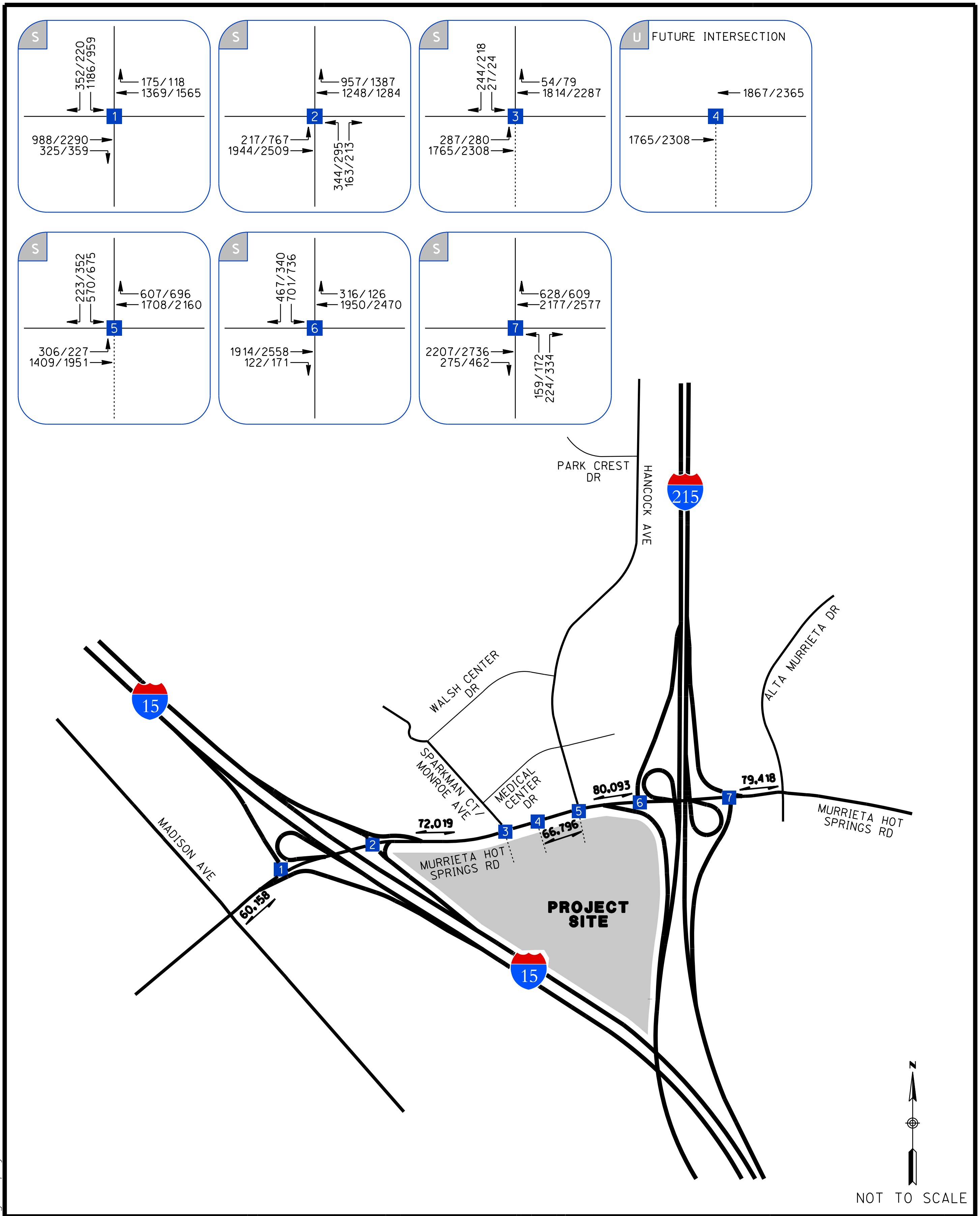

EXHIBIT 17

EXISITNG + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2028)

TRIANGLE PROJECT TRAFFIC ANALYSIS

RICK ENGINEERING COMPANY

LEGEND

X =INTERSECTION NUMBER

S =SIGNALIZED

U =UNSIGNALIZED

=STOP CONTROL

=FUTURE DWY

X,XXX = TWO-WAY ADT

XX/XX = AM/PM PEAK HR VOLUMES

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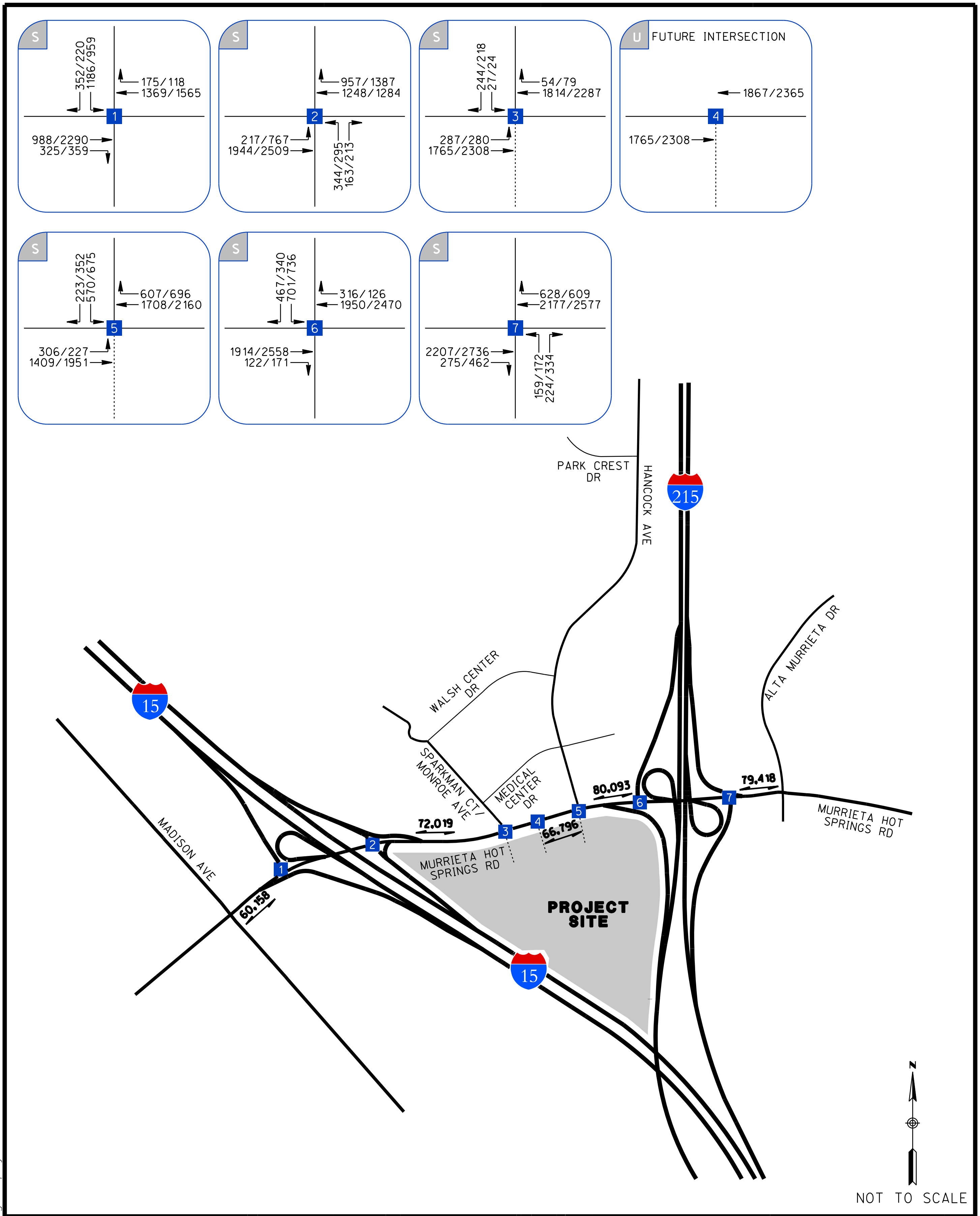

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EXHIBIT 18

EXISITNG + AMBIENT + CUMULATIVE
TRAFFIC CONDITIONS (2028)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL
=FUTURE DWY
X,XXX = TWO-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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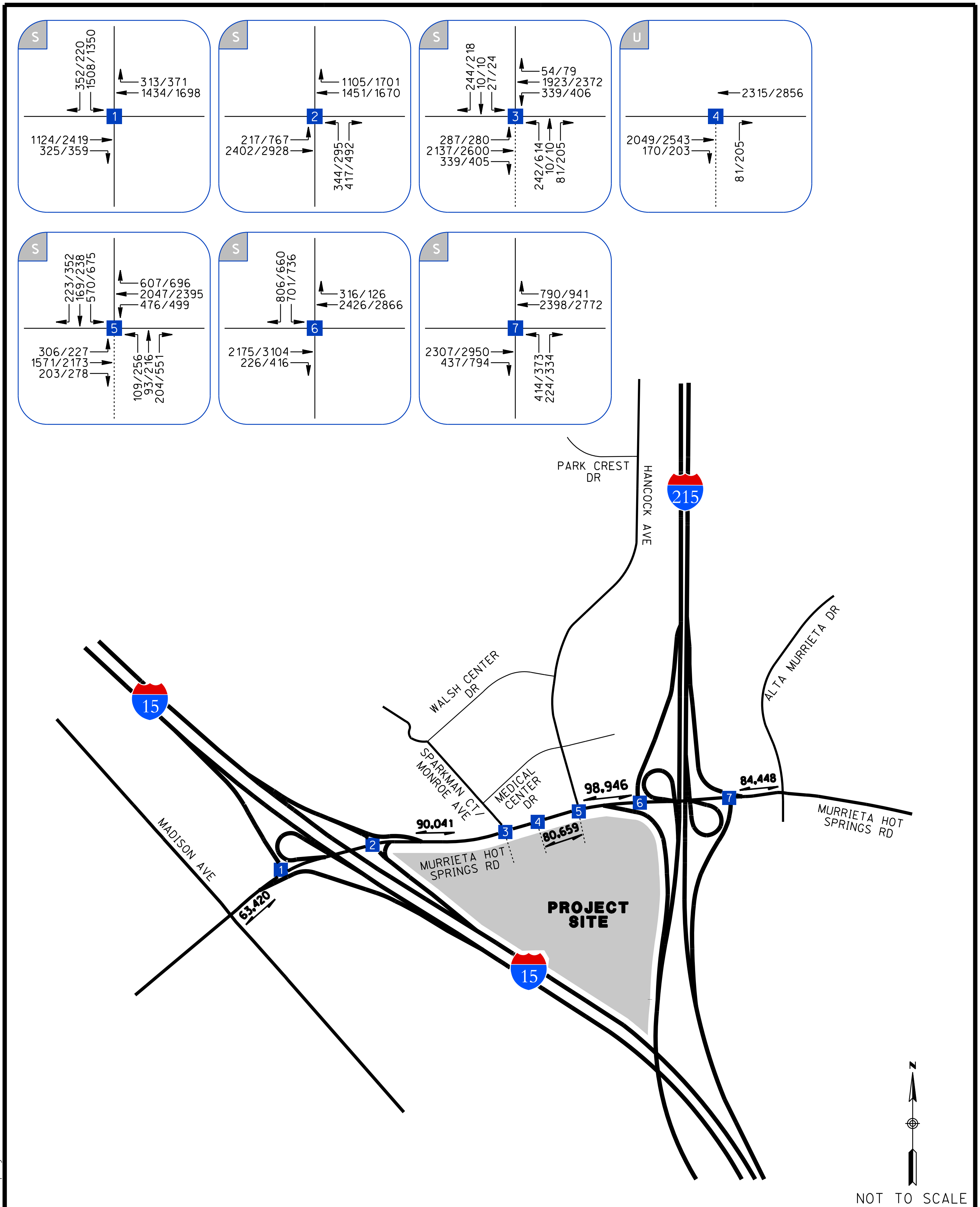

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EXHIBIT 19

EXISITNG + AMBIENT + CUMULATIVE + PROJECT TRAFFIC CONDITIONS (2028)

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

- X =INTERSECTION NUMBER
- S =SIGNALIZED
- U =UNSIGNALIZED
- =STOP CONTROL
- =FUTURE DWY
- X,XXX = TWO-WAY ADT
- XX/XX = AM/PM PEAK HR VOLUMES

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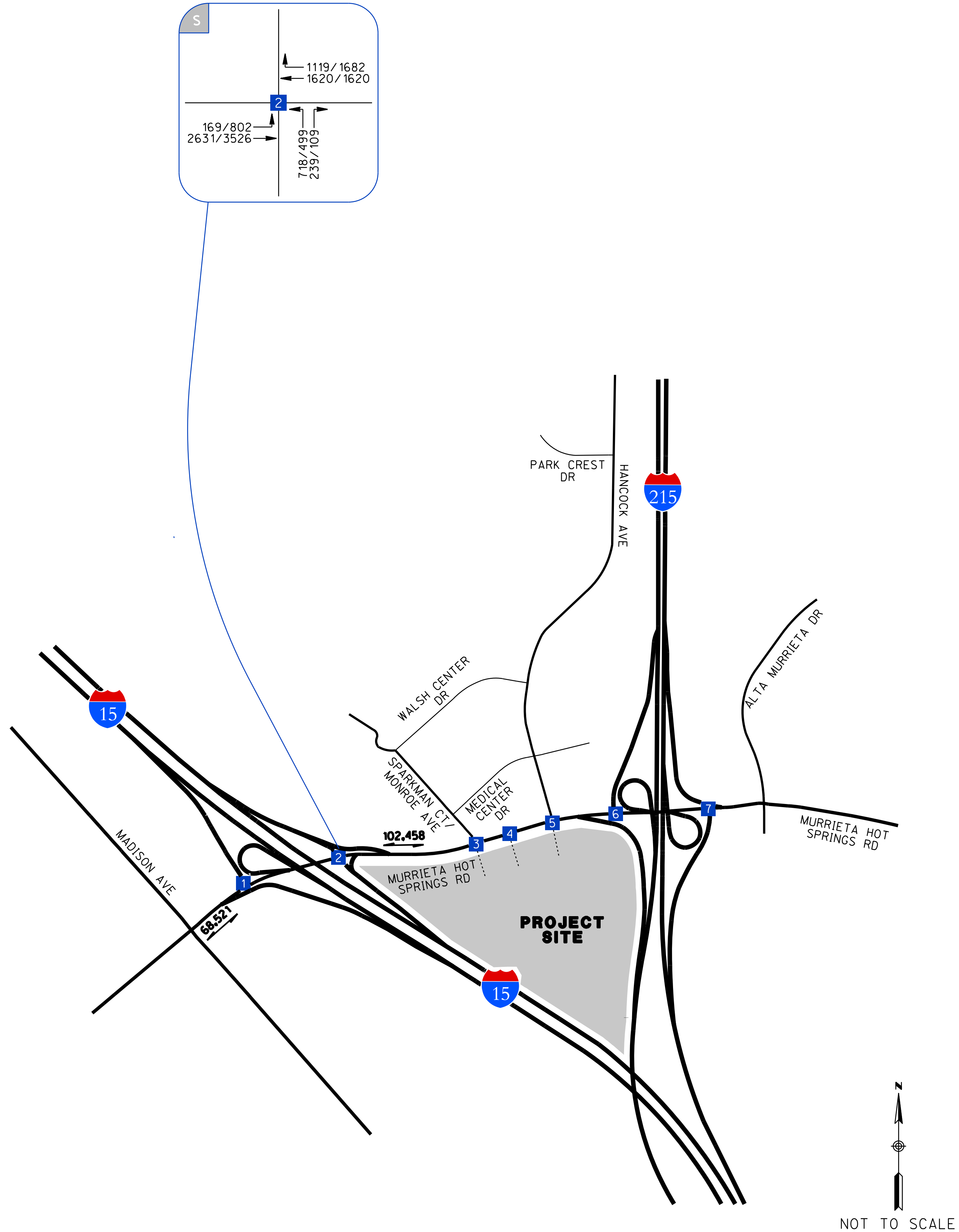

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EXHIBIT 20
BUILDOUT (2035) VOLUMES

TRIANGLE PROJECT TRAFFIC ANALYSIS

LEGEND

X =INTERSECTION NUMBER
S =SIGNALIZED
U =UNSIGNALIZED
=STOP CONTROL
=FUTURE DWY
X,XXX = TWO-WAY ADT
XX/XX = AM/PM PEAK HR VOLUMES

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ATTACHMENT B

Tables

TABLE 1
EXISTING INTERSECTION OPERATIONS
TRIANGLE FOCUSED TRAFFIC ANALYSIS

#	INTERSECTION	CONTROL	DIR.	EXISTING (2021)			
				AM Peak		PM Peak	
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	29.8	C	22.9	C
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	12.8	B	14.6	B
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	**>50**	**F**	**>50**	**F**
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	Future			
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	13.2	B	23.6	C
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	17.6	B	12.6	B
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	8.7	A	7.8	A

Footnotes:

Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 2
EXISTING ROADWAY SEGMENT OPERATIONS
TRIANGLE FOCUSED TRAFFIC ANALYSIS

#	ROADWAY SEGMENT	FUNCTIONAL CLASSIFICATION	CAPACITY (LOS E)[1]	EXISTING (2021)		
				ADT	V/C	LOS
1	Murrieta Hot Springs Rd between I-15 NB Ramps and Sparkman Ct.	Augmented Arterial (8-ln, divided)	71,800	52,610	0.73	C
2	Murrieta Hot Springs Rd between Sparkman Ct. and Hancock Avenue	Augmented Arterial (8-ln, divided)	71,800	50,200	0.70	B
3	Murrieta Hot Springs Rd between Hancock Avenue and I-215 SB Ramps	Augmented Arterial (8-ln, divided)	71,800	**57,830**	**0.81**	**D**

Footnotes:

[1]Source: City of Murrieta General Plan 2035 Draft SEIR (February 2020)

TABLE 3
EXISTING 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE[1]	EXISTING (2021) AM Peak QUEUE [2]	EXISTING (2021) PM Peak QUEUE [2]	NOTES
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	159	382	
			WB-T	3	N/A	108	105	
			SB-L	1	510	350	357	
			SB-LTR	1	N/A	320	323	
			SB-R	1	510	156	59	
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	140	465	
			EB-T	3	N/A	49	178	
			WB-T	3	N/A	92	124	
			NB-L	1	520	153	131	
			NB-LT	1	N/A	145	97	
			NB-R	1	490	0	0	Free movement
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	186	**249**	Exceeds available storage
			EB-T	4	N/A	72	1419	
			WB-TR	1	N/A	7	32	
			SB-R	1	N/A	94	114	
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	N/A	FUTURE			
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	200	118	304	Does not exceed 400' storage between 2 lanes
			EB-T	4	N/A	198	630	
			WB-T	3	N/A	203	200	
			WB-R	1	500	96	84	
			SB-L	2	150	187	220	Does not exceed 300' storage between 2 lanes
			SB-R	2	150	**328**	**324**	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	103	88	
			WB-T	3	N/A	178	163	
			SB-L	1	470	369	403	
			SB-LR	1	N/A	422	403	
			SB-R	1	470	279	93	
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	168	171	
			WB-T	3	N/A	122	130	
			NB-L	2	1000	107	126	
			NB-R	2	1000	124	154	

Footnotes:

[1] Storage lengths, in feet, based on existing storage per lane

[2] Queue is equal to the 95th percentile queue length, in feet, based on SimTraffic 10 software results. In cases where there are more than one lane, the highest number is reported in this table

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc., L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through movement group, LTR=Left-Through-Right lane movement group, etc.

TABLE 4

PROJECT TRIP GENERATION SUMMARY

TRIANGLE FOCUSED TRAFFIC ANALYSIS

285, 000 SF

LAND USE	ITE CODE	QUANTITY[6]		DWY Rate[2]	ADT[3]	AM PEAK HOUR						PM PEAK HOUR					
						Peak Hr Rate	SPLIT		VOLUMES			Peak Hr Rate	SPLIT		VOLUMES		
							IN	OUT	IN	OUT	TOTAL		IN	OUT	IN	OUT	TOTAL
Phase 1																	
Fast-Food Restaurant with Drive-Through Window	934	14	TSF[1]	467.48	6,545	44.61	51%	49%	319	306	625	33.03	52%	48%	240	222	462
Passby Trips (25%)[4]					-1,636				-80	-77	-156				-60	-55	-116
Fast-Food Restaurant without Drive-Through Window	933	16	TSF	450.59	7,209	43.18	58%	42%	401	290	691	33.21	50%	50%	266	266	531
Passby Trips (25%)[4]					-1,802				-100	-73	-173				-66	-66	-133
High Turnover (Sit-Down) Rest.	932	42	TSF	107.2	4,502	9.57	55%	45%	221	181	402	9.05	61%	39%	232	148	380
Passby Trips (25%, PM only)[4,7]					-95										-58	-37	-95
Commercial Retail (Shopping Center)	820	211	TSF	37.01	7,809	0.84	62%	38%	110	67	177	3.4	48%	52%	344	373	717
Passby Trips (25%, PM only)[4,7]					-179										-86	-93	-179
General Office Building (less than 10,000 sf)	712	2	TSF	14.39	29	1.67	82%	18%	3	1	3	2.16	34%	66%	1	3	4
Subtotal					**22,382**				**874**	**695**	**1569**				**813**	**760**	**1573**
Internal Trips (10%)[5,6]					**-2,238**				**-87**	**-69**	**-157**				**-81**	**-76**	**-157**
Total		**285**	**TSF**		**20,144**				**787**	**625**	**1412**				**732**	**684**	**1416**

[1]TSF = Thousand Square Feet

[2]Refer to ITE Trip Generation Manual, 11th Edition.

[3]ADT = Average Daily Traffic

[4]Passby reduction rates have been used to account for traffic that will access the site as an intermediate stop on the way to a primary destination.

[5]Internal Capture is the reduction of the overall traffic due to the compatability of land uses within the project site.

[6]Source: Murrieta Triangle Trip Generation Evaluation, prepared by Trames Solutions Inc. December 23, 2022

[7]ADT passby reduction is based on PM passby reduction only.

TABLE 5
2025 INTERSECTION OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
NO INTERCHANGE IMPROVEMENTS

#	INTERSECTION	CONTROL	DIR.	EXISTING + AMBIENT + CUMULATIVE (2025)				EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025)				INCREMENTAL DELAY (sec)		TRAFFIC EFFECT?
				AM Peak		PM Peak		AM Peak		PM Peak				
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	AM	PM	YES/NO
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	28.0	C	26.3	C	31.3	C	26.2	C	3.3	-0.1	NO
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	14.2	B	20.3	C	19.5	B	21.9	C	5.3	1.6	NO
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	**>50**	**F**	**>50**	**F**	-	-	-	-	-	-	-
		(S)	Overall	-	-	-	-	28.4	C	29.0	C	-	-	NO
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	Future				**37.0**	**E**	**97.1**	**F**	-	-	**YES**
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	16.0	B	31.0	C	26.7	C	44.8	D	10.7	13.8	NO
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	18.5	B	15.0	B	19.7	B	19.8	B	1.2	4.8	NO
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	10.0	B	8.9	A	10.7	B	13.8	B	0.7	4.9	NO

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 6
2025 INTERSECTION OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
EB DUAL LEFT TURNS AT I-15 NB RAMP

#	INTERSECTION	CONTROL	DIR.	EXISTING + AMBIENT + CUMULATIVE (2025)				EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025)				INCREMENTAL DELAY (sec)		TRAFFIC EFFECT?
				AM Peak		PM Peak		AM Peak		PM Peak				
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	AM	PM	YES/NO
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	28.0	C	26.3	C	28.8	C	22.6	C	0.8	-3.7	NO
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	14.2	B	20.3	C	18.8	B	18	B	4.6	-2.3	NO
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	**>50**	**F**	**>50**	**F**	-	-	-	-	-	-	-
		(S)	Overall	-	-	-	-	28.4	C	28.9	C	-	-	NO
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	**Future**				**37.0**	**E**	**97.1**	**F**	-	-	**YES**
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	16.0	B	31.0	C	26.7	C	44.8	D	10.7	13.8	NO
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	18.5	B	15.0	B	19.7	B	19.8	B	1.2	4.8	NO
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	10.0	B	8.9	A	10.7	B	13.8	B	0.7	4.9	NO

Footnotes:

Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 7
2025 INTERSECTION OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
EB FREE RIGHT TURN AND NO LEFT TURN AT I-15 NB RAMP

#	INTERSECTION	CONTROL	DIR.	EXISTING + AMBIENT + CUMULATIVE (2025)				EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025)				INCREMENTAL DELAY (sec)		TRAFFIC EFFECT?
				AM Peak		PM Peak		AM Peak		PM Peak				
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	AM	PM	YES/NO
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	28.0	C	26.3	C	28.8	C	28.8	C	0.8	2.5	NO
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	14.2	B	20.3	C	12.6	B	7	A	-1.6	-13.3	NO
3	Murrieta Hot Springs Rd/Sparkman	(OWSC)	EB-L	**>50**	**F**	**>50**	**F**	-	-	-	-	-	-	-
	Ct.-Monroe Ave-Proj Dwy 1	(S)	Overall	-	-	-	-	28.4	C	28.9	C	-	-	NO
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	Future				**37.0**	**E**	**97.1**	**F**	-	-	**YES**
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	16.0	B	31.0	C	26.7	C	44.8	D	10.7	13.8	NO
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	18.5	B	15.0	B	19.7	B	19.8	B	1.2	4.8	NO
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	10.0	B	8.9	A	10.7	B	13.8	B	0.7	4.9	NO

Footnotes:

Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 8
2025 ROADWAY SEGMENT OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS

#	ROADWAY SEGMENT	FUNCTIONAL CLASSIFICATION	CAPACITY (LOS E)[1]	EXISTING + AMBIENT + CUMULATIVE (2025)			EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025)			INCREASE	TRAFFIC EFFECT?
				ADT	V/C	LOS	ADT	V/C	LOS	V/C	YES/NO
1	Murrieta Hot Springs Rd between I-15 NB Ramps and Sparkman Ct.	Major Arterial (4-lane, divided)	71,800	**68,862**	**0.96**	**E**	**79,358**	**1.11**	**F**	0.15	NO
2	Murrieta Hot Springs Rd between Sparkman Ct. and Hancock Avenue	Augmented Arterial (8-ln, divided)	71,800	63,784	0.89	D	**71,892**	**1.00**	**F**	0.11	**YES**
3	Murrieta Hot Springs Rd between Hancock Avenue and I-215 SB	Augmented Arterial (8-ln, divided)	71,800	**76,624**	**1.07**	**F**	**87,123**	**1.21**	**F**	0.15	NO

Footnotes:

[1]Source: City of Murrieta General Plan 2035 Draft SEIR (February 2020)

TABLE 9
2025 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
NO INTERCHANGE IMPROVEMENTS

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	EXISTING + AMBIENT + CUMULATIVE (2025)		EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025)		NOTES
						AM Peak QUEUE [2]	PM Peak QUEUE [2]	AM Peak QUEUE [2]	PM Peak QUEUE [2]	
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	353	352	331	331	
			EB-R	1	N/A	N/A	N/A	N/A	94	
			WB-T	3	N/A	107	104	71	76	
			SB-L	1	510	418	**531**	486	**657**	Exceeds available storage
			SB-LTR	1	N/A	366	466	489	657	
			SB-R	1	510	303	366	361	**538**	Exceeds available storage
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	218	**563**	196	497	Exceeds available storage
			EB-T	3	N/A	156	601	152	570	
			WB-T	3	N/A	133	171	100	45	
			WB-R	1	N/A	414	31	N/A	N/A	
			NB-L	1	520	187	179	162	177	
			NB-LT	1	N/A	160	171	156	282	
			NB-R	1	490	0	113	294	465	
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	**217**	**228**	N/A	N/A	Exceeds available storage
			EB-T	4	N/A	297	791	N/A	N/A	
			WB-TR	1	N/A	27	24	N/A	N/A	
			SB-R	1	235	196	**249**	N/A	N/A	Exceeds available storage
		(S)	EB-L	2	310	N/A	N/A	153	146	
			EB-T	4	N/A	N/A	N/A	254	342	
			EB-R	1	320	N/A	N/A	16	25	
			WB-L	2	245	N/A	N/A	93	68	
			WB-T	3	N/A	N/A	N/A	157	108	
			WB-TR	1	N/A	N/A	N/A	181	132	
			NB-L	2	N/A	N/A	N/A	216	349	
			NB-T	1	N/A	N/A	N/A	32	10	
			NB-TR	1	N/A	N/A	N/A	58	44	
			SB-L	2	235	N/A	N/A	42	42	
			SB-T	2	N/A	N/A	N/A	190	376	
			SB-R	1	235	N/A	N/A	**265**	**314**	Exceeds available storage
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	EB-T	4	N/A	FUTURE		8	150	
			NB-R	1	N/A			43	61	
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	245	177	213	196	141	
			EB-T	4	N/A	224	301	220	349	
			EB-R	1	215	N/A	N/A	48	37	
			WB-L	2	200	N/A	N/A	95	56	
			WB-T	3	N/A	214	334	273	219	
			WB-R	1	500	114	128	94	97	
			NB-L	2	N/A	N/A	N/A	129	106	
			NB-T	1	N/A	N/A	N/A	134	163	
			NB-R	2	N/A	N/A	N/A	183	289	
			SB-L	2	150	176	177	175	175	Does not exceed 300' storage between 2 lanes
			SB-TR	1	N/A	N/A	N/A	289	298	
			SB-R	1	150	**365**	**318**	87	94	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	97	98	107	93	
			WB-T	3	N/A	161	154	113	134	
			SB-L	1	470	343	**992**	**957**	**851**	Exceeds available storage
			SB-LR	1	N/A	437	1007	955	961	
			SB-R	1	470	318	**637**	**640**	**662**	Exceeds available storage
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	153	174	170	185	
			WB-T	3	N/A	128	120	45	N/A	
			NB-L	2	1000	124	114	201	157	
			NB-R	2	1000	135	202	165	185	

TABLE 10
2025 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
EB DUAL LEFT TURNS AT I-15 NB RAMPS

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	EXISTING + AMBIENT + CUMULATIVE (2025)		EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025)		NOTES
						AM Peak QUEUE [2]	PM Peak QUEUE [2]	AM Peak QUEUE [2]	PM Peak QUEUE [2]	
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	353	352	309	335	
			EB-R	1	N/A	N/A	N/A	N/A	N/A	
			WB-T	3	N/A	107	104	52	56	
			SB-L	1	510	418	**531**	462	**571**	Exceeds available storage
			SB-LTR	1	N/A	366	466	474	495	
			SB-R	1	510	303	366	360	430	
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	218	**563**	120	291	Exceeds available storage
			EB-T	3	N/A	156	601	136	170	
			WB-T	3	N/A	133	171	152	132	
			WB-R	1	N/A	414	31	N/A	N/A	
			NB-L	1	520	187	179	176	178	
			NB-LT	1	N/A	160	171	186	164	
			NB-R	1	490	0	113	97	318	
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	**217**	**228**	N/A	N/A	Exceeds available storage
			EB-T	4	N/A	297	791	N/A	N/A	
			WB-TR	1	N/A	27	24	N/A	N/A	
			SB-R	1	N/A	196	249	N/A	N/A	
		(S)	EB-L	2	310	N/A	N/A	146	125	
			EB-T	4	N/A	N/A	N/A	240	323	
			EB-R	1	320	N/A	N/A	15	17	
			WB-L	2	245	N/A	N/A	105	101	
			WB-T	3	N/A	N/A	N/A	194	300	
			WB-TR	1	N/A	N/A	N/A	226	302	
			NB-L	2	N/A	N/A	N/A	187	298	
			NB-T	1	N/A	N/A	N/A	43	21	
			NB-TR	1	N/A	N/A	N/A	66	58	
			SB-L	2	235	N/A	N/A	37	26	
			SB-T	2	N/A	N/A	N/A	167	130	
			SB-R	1	235	N/A	N/A	**261**	228	Exceeds available storage
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	EB-T	4	N/A	FUTURE		14	66	
			NB-R	1	N/A			36	63	
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	245	177	213	214	197	
			EB-T	4	N/A	224	301	227	325	
			EB-R	1	215	N/A	N/A	45	49	
			WB-L	2	200	N/A	N/A	135	129	
			WB-T	3	N/A	214	334	309	319	
			WB-R	1	500	114	128	94	116	
			NB-L	2	N/A	N/A	N/A	101	121	
			NB-T	1	N/A	N/A	N/A	123	129	
			NB-R	2	N/A	N/A	N/A	162	164	
			SB-L	2	150	176	177	175	175	Does not exceed 300' storage between 2 lanes
			SB-TR	1	N/A	N/A	N/A	293	294	
			SB-R	1	150	**365**	**318**	124	152	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	97	98	89	91	
			WB-T	3	N/A	161	154	138	137	
			SB-L	1	470	343	992	930	841	Exceeds available storage
			SB-LR	1	N/A	437	1007	974	870	
			SB-R	1	470	318	**637**	**626**	**655**	Exceeds available storage
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	153	174	163	171	
			WB-T	3	N/A	128	120	111	122	
			NB-L	2	1000	124	114	181	188	
			NB-R	2	1000	135	202	181	186	

TABLE 11
2025 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
EB FREE RIGHT TURN AND NO LEFT TURNS AT I-15 NB RAMP

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	EXISTING + AMBIENT + CUMULATIVE (2025) AM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE (2025) PM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025) AM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025) PM Peak QUEUE [2]	NOTES
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	353	352	315	367	
			EB-R	1	N/A	N/A	N/A	54	252	
			WB-T	3	N/A	107	104	50	48	
			SB-L	1	510	418	**531**	486	**618**	Exceeds available storage
			SB-LTR	1	N/A	366	466	506	611	
			SB-R	1	510	303	366	404	**518**	Exceeds available storage
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	218	**563**	N/A	N/A	Exceeds available storage
			EB-T	3	N/A	156	601	209	22	
			WB-T	3	N/A	133	171	249	270	
			WB-R	1	N/A	414	31	N/A	N/A	
			NB-L	2	520	187	179	177	191	
			NB-LT	1	N/A	160	171	N/A	N/A	
			NB-R	1	490	0	113	215	234	
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	**217**	**228**	N/A	N/A	Exceeds available storage
			EB-T	4	N/A	297	791	N/A	N/A	
			WB-TR	1	N/A	27	24	N/A	N/A	
			SB-R	1	N/A	196	249	N/A	N/A	
		(S)	EB-L	2	310	N/A	N/A	160	N/A	
			EB-T	4	N/A	N/A	N/A	279	N/A	
			EB-R	1	320	N/A	N/A	37	N/A	
			WB-L	2	245	N/A	N/A	115	N/A	
			WB-T	3	N/A	N/A	N/A	193	N/A	
			WB-TR	1	N/A	N/A	N/A	206	263	
			NB-L	2	N/A	N/A	N/A	164	223	
			NB-T	1	N/A	N/A	N/A	23	N/A	
			NB-TR	1	N/A	N/A	N/A	86	79	
			SB-L	2	235	N/A	N/A	29	30	
			SB-T	2	N/A	N/A	N/A	86	165	
			SB-R	1	235	N/A	N/A	230	**255**	Exceeds available storage
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	EB-T	4	N/A	FUTURE		N/A	N/A	
			NB-R	1	N/A			43	57	
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	245	177	213	224	143	
			EB-T	4	N/A	224	301	180	229	
			EB-R	1	215	N/A	N/A	48	43	
			WB-L	2	200	N/A	N/A	133	178	
			WB-T	3	N/A	214	334	270	282	
			WB-R	1	500	114	128	96	127	
			NB-L	2	N/A	N/A	N/A	154	122	
			NB-T	1	N/A	N/A	N/A	132	141	
			NB-R	2	N/A	N/A	N/A	149	200	
			SB-L	2	150	176	177	175	175	Does not exceed 300' storage between 2 lanes
			SB-TR	1	N/A	N/A	N/A	295	292	
			SB-R	1	150	**365**	**318**	143	159	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	97	98	104	124	
			WB-T	3	N/A	161	154	169	166	
			SB-L	1	470	343	**992**	**1044**	**875**	Exceeds available storage
			SB-LR	1	N/A	437	1007	982	865	
			SB-R	1	470	318	**637**	**681**	**638**	Exceeds available storage
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	153	174	185	180	
			WB-T	3	N/A	128	120	123	124	
			NB-L	2	1000	124	114	178	132	
			NB-R	2	1000	135	202	168	182	

TABLE 12
2028 INTERSECTION OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
NO INTERCHANGE IMPROVEMENTS

#	INTERSECTION	CONTROL	DIR.	EXISTING + AMBIENT + CUMULATIVE (2028)				EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028)				INCREMENTAL DELAY (sec)		TRAFFIC EFFECT?
				AM Peak		PM Peak		AM Peak		PM Peak				
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	AM	PM	YES/NO
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	32.0	C	31.5	C	34.2	C	40.2	D	2.2	8.7	NO
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	19.4	B	24.1	C	19.9	B	25.5	C	0.5	1.4	NO
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	-	-	-	-	-	-	-	-	-	-	-
		(S)	Overall	12.2	B	17.3	B	29.7	C	54.2	D	17.5	36.9	NO
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	Future				**57.8**	**F**	**694.4**	**F**	-	-	**YES**
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	22.1	C	38.2	D	33.5	C	**71.4**	**E**	11.4	33.2	**YES**
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	18.4	B	18.0	B	21.4	C	32.7	C	3.0	14.7	NO
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	11.9	B	13.3	B	14.3	B	15.8	B	2.4	2.5	NO

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 13
2028 INTERSECTION OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
EB DUAL LEFT TURNS AT I-15 NB RAMP

#	INTERSECTION	CONTROL	DIR.	EXISTING + AMBIENT + CUMULATIVE (2028)				EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028)				INCREMENTAL DELAY (sec)		TRAFFIC EFFECT?
				AM Peak		PM Peak		AM Peak		PM Peak				
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	AM	PM	YES/NO
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	32.0	C	31.5	C	34.2	C	36	D	2.2	4.5	NO
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	19.4	B	24.1	C	18.7	B	18.4	B	-0.7	-5.7	NO
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	-	-	-	-	-	-	-	-	-	-	-
		(S)	Overall	12.2	B	17.3	B	29.7	C	45.2	D	17.5	27.9	NO
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	Future				**57.8**	**F**	**694.4**	**F**	-	-	**YES**
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	22.1	C	38.2	D	33.5	C	**74.6**	**E**	11.4	36.4	**YES**
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	18.4	B	18.0	B	21.4	B	32.7	C	3.0	14.7	NO
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	11.9	B	13.3	B	14.3	B	15.8	B	2.4	2.5	NO

Footnotes:

Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 14
2028 INTERSECTION OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
EB FREE RIGHT TURN AND NO LEFT TURN AT I-15 NB RAMP

#	INTERSECTION	CONTROL	DIR.	EXISTING + AMBIENT + CUMULATIVE (2028)				EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028)				INCREMENTAL DELAY (sec)		TRAFFIC EFFECT?
				AM Peak		PM Peak		AM Peak		PM Peak				
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	AM	PM	YES/NO
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	32.0	C	31.5	C	31.9	C	42.8	D	-0.1	11.3	NO
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	19.4	B	24.1	C	12.5	B	7.1	A	-6.9	-17.0	NO
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	-	-	-	-	-	-	-	-	-	-	-
		(S)	Overall	12.2	B	17.3	B	29.7	C	45.2	D	17.5	27.9	NO
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	**Future**				**57.8**	**F**	**694.4**	**F**	-	-	**YES**
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	22.1	C	38.2	D	33.5	C	**62.8**	**E**	11.4	24.6	**YES**
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	18.4	B	18.0	B	21.4	C	32.7	C	3.0	14.7	NO
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	11.9	B	13.3	B	14.3	B	15.8	B	2.4	2.5	NO

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM
[1] Delay is measured in seconds per vehicle.
[2] Level of Service
(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.
LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 15
2028 ROADWAY SEGMENT OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS

#	ROADWAY SEGMENT	FUNCTIONAL CLASSIFICATION	CAPACITY (LOS E)[1]	EXISTING + AMBIENT + CUMULATIVE (2028)			EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028)			INCREASE	TRAFFIC EFFECT?
				ADT	V/C	LOS	ADT	V/C	LOS	V/C	YES/NO
1	Murrieta Hot Springs Rd between I-15 NB Ramps and Sparkman Ct.	Major Arterial (4-lane, divided)	71,800	**72,019**	**1.00**	**F**	**90,041**	**1.254**	**F**	0.25	NO
2	Murrieta Hot Springs Rd between Sparkman Ct. and Hancock	Augmented Arterial (8-ln, divided)	71,800	**66,796**	**0.93**	**E**	**80,659**	**1.123**	**F**	0.19	NO
3	Murrieta Hot Springs Rd between Hancock Avenue and I-215 SB	Augmented Arterial (8-ln, divided)	71,800	**80,093**	**1.12**	**F**	**98,946**	**1.378**	**F**	0.26	NO

Footnotes:

[1]Source: City of Murrieta General Plan 2035 Draft SEIR (February 2020)

TABLE 16
2028 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
NO INTERCHANGE IMPROVEMENTS

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	EXISTING + AMBIENT + CUMULATIVE (2028)		EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028)		NOTES
						AM Peak QUEUE [2]	PM Peak QUEUE [2]	AM Peak QUEUE [2]	PM Peak QUEUE [2]	
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	328	335	314	373	
			EB-R	1	N/A	N/A	N/A	N/A	249	
			WB-T	3	N/A	83	68	70	77	
			SB-L	1	510	448	**663**	**549**	**588**	Exceeds available storage
			SB-LTR	1	N/A	413	664	588	589	
			SB-R	1	510	366	**561**	457	**544**	Exceeds available storage
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	234	**508**	207	472	Exceeds available storage
			EB-T	3	N/A	153	474	159	518	
			WB-T	3	N/A	71	47	135	185	
			WB-R	1	N/A	N/A	N/A	N/A	454	
			NB-L	1	520	165	175	186	**1357**	Exceeds available storage
			NB-LT	1	N/A	165	182	184	**1260**	Exceeds available storage
			NB-R	1	490	56	81	404	612	Free movement
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	N/A	N/A	N/A	N/A	
			EB-T	4	N/A	N/A	N/A	N/A	N/A	
			WB-TR	1	N/A	N/A	N/A	N/A	N/A	
			SB-R	1	N/A	N/A	N/A	N/A	N/A	
		(S)	EB-L	2	310	158	154	157	333	
			EB-T	4	N/A	131	239	259	1250	
			EB-R	1	320	N/A	N/A	36	**413**	Exceeds available storage
			WB-L	2	245	N/A	N/A	143	166	
			WB-T	3	N/A	111	87	196	282	
			WB-TR	1	N/A	154	103	218	336	
			NB-L	2	N/A	N/A	N/A	229	343	
			NB-T	1	N/A	N/A	N/A	34	257	
			NB-TR	1	N/A	N/A	N/A	82	226	
			SB-L	2	235	27	25	36	71	
			SB-T	2	N/A	136	N/A	297	307	
			SB-R	1	235	229	195	**288**	**261**	Exceeds available storage
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	EB-T	4	N/A	N/A	N/A	N/A	N/A	
			EB-R	1	150	N/A	N/A	N/A	N/A	
			NB-R	1	N/A	N/A	N/A	51	329	
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	245	205	136	230	305	
			EB-T	4	N/A	125	142	240	446	
			EB-R	1	215	N/A	N/A	59	**236**	Exceeds available storage
			WB-L	2	200	N/A	N/A	203	210	
			WB-T	3	N/A	245	219	283	290	
			WB-R	1	500	89	70	98	149	
			NB-L	2	N/A	N/A	N/A	88	282	
			NB-T	1	N/A	N/A	N/A	108	402	
			NB-R	2	N/A	N/A	N/A	140	411	
			SB-L	2	150	182	175	175	194	Does not exceed 300' storage between 2 lanes
			SB-TR	1	N/A	367	282	300	295	
			SB-R	1	150	69	95	**181**	**162**	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	107	108	98	101	
			WB-T	3	N/A	149	109	150	149	
			SB-L	1	470	398	**851**	**860**	**852**	Exceeds available storage
			SB-LR	1	N/A	492	853	856	862	
			SB-R	1	470	347	**669**	**638**	**599**	Exceeds available storage
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	172	186	187	191	
			WB-T	3	N/A	54	N/A	72	79	
			NB-L	2	1000	112	124	237	471	
			NB-R	2	1000	133	216	147	196	

TABLE 17
2028 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
EB DUAL LEFT TURNS AT I-15 NB RAMPS

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	EXISTING + AMBIENT + CUMULATIVE (2028)		EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028)		NOTES
						AM Peak	PM Peak	AM Peak	PM Peak	
						QUEUE [2]	QUEUE [2]	QUEUE [2]	QUEUE [2]	
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	328	335	328	344	
			EB-R	1	N/A	N/A	N/A	N/A	173	
			WB-T	3	N/A	83	68	53	56	
			SB-L	1	510	448	**663**	**643**	**602**	Exceeds available storage
			SB-LTR	1	N/A	413	664	650	607	
			SB-R	1	510	366	**561**	**516**	**561**	Exceeds available storage
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	234	508	127	298	
			EB-T	3	N/A	153	474	141	217	
			WB-T	3	N/A	71	47	161	160	
			WB-R	1	N/A	N/A	N/A	N/A	202	
			NB-L	1	520	165	175	178	**1313**	Exceeds available storage
			NB-LT	1	N/A	165	182	168	**1261**	Exceeds available storage
			NB-R	1	490	56	81	431	610	Free movement
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	N/A	N/A	N/A	N/A	
			EB-T	4	N/A	N/A	N/A	N/A	N/A	
			WB-TR	1	N/A	N/A	N/A	N/A	N/A	
			SB-R	1	N/A	N/A	N/A	N/A	N/A	
		(S)	EB-L	2	310	158	154	144	265	
			EB-T	4	N/A	131	239	281	546	
			EB-R	1	320	N/A	N/A	53	352	
			WB-L	2	245	N/A	N/A	149	161	
			WB-T	3	N/A	111	87	187	254	
			WB-TR	1	N/A	154	103	214	276	
			NB-L	2	N/A	N/A	N/A	208	321	
			NB-T	1	N/A	N/A	N/A	24	226	
			NB-TR	1	N/A	N/A	N/A	57	60	
			SB-L	2	235	27	25	48	51	
			SB-T	2	N/A	136	N/A	294	296	
			SB-R	1	235	229	195	**293**	**260**	Exceeds available storage
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	EB-T	4	N/A	N/A	N/A	13	259	
			EB-R	1	150	N/A	N/A	N/A	N/A	
			NB-R	1	N/A	N/A	N/A	71	319	
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	245	205	136	252	232	Does not exceed 490' storage between 2 lanes
			EB-T	4	N/A	125	142	253	456	
			EB-R	1	215	N/A	N/A	64	188	
			WB-L	2	200	N/A	N/A	215	211	
			WB-T	3	N/A	245	219	320	323	
			WB-R	1	500	89	70	86	131	
			NB-L	2	N/A	N/A	N/A	117	269	
			NB-T	1	N/A	N/A	N/A	132	392	
			NB-R	2	N/A	N/A	N/A	149	334	
			SB-L	2	150	182	175	176	175	Does not exceed 300' storage between 2 lanes
			SB-TR	1	N/A	367	282	302	295	
			SB-R	1	150	69	95	153	**187**	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	107	108	81	106	
			WB-T	3	N/A	149	109	125	136	
			SB-L	1	470	398	**851**	**863**	**855**	Exceeds available storage
			SB-LR	1	N/A	492	853	860	856	
			SB-R	1	470	347	**669**	**686**	**539**	Exceeds available storage
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	172	186	175	176	
			WB-T	3	N/A	54	N/A	114	99	
			NB-L	2	1000	112	124	247	244	
			NB-R	2	1000	133	216	162	217	

TABLE 18
2028 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
EB FREE RIGHT TURN AND NO LEFT TURNS AT I-15 NB RAMP

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	EXISTING + AMBIENT + CUMULATIVE (2028)		EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028)		NOTES
						AM Peak QUEUE [2]	PM Peak QUEUE [2]	AM Peak QUEUE [2]	PM Peak QUEUE [2]	
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	328	335	324	369	
			EB-R	1	N/A	N/A	N/A	115	239	
			WB-T	3	N/A	83	68	47	49	
			SB-L	1	510	448	**663**	**658**	**602**	Exceeds available storage
			SB-LTR	1	N/A	413	664	638	606	
			SB-R	1	510	366	**561**	**556**	**615**	Exceeds available storage
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	234	508	N/A	N/A	
			EB-T	3	N/A	153	474	316	239	
			EB-R	1	220	N/A	N/A	143	144	
			WB-T	3	N/A	71	47	185	342	
			WB-R	1	N/A	N/A	N/A	N/A	N/A	
			NB-L	1	520	165	175	218	194	
			NB-LT	1	N/A	165	182	N/A	N/A	
			NB-R	1	490	56	81	212	213	
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	N/A	N/A	N/A	N/A	
			EB-T	4	N/A	N/A	N/A	N/A	N/A	
			WB-TR	1	N/A	N/A	N/A	N/A	N/A	
			SB-R	1	N/A	N/A	N/A	N/A	N/A	
		(S)	EB-L	2	310	158	154	146	104	
			EB-T	4	N/A	131	239	283	308	
			EB-R	1	320	N/A	N/A	104	68	
			WB-L	2	245	N/A	N/A	156	167	
			WB-T	3	N/A	111	87	160	237	
			WB-TR	1	N/A	154	103	186	264	
			NB-L	2	N/A	N/A	N/A	163	353	
			NB-T	1	N/A	N/A	N/A	27	279	
			NB-TR	1	N/A	N/A	N/A	93	69	
			SB-L	2	235	27	25	71	30	
			SB-T	2	N/A	136	N/A	130	289	
			SB-R	1	235	229	195	247	**260**	Exceeds available storage
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	EB-T	4	N/A	N/A	N/A	129	N/A	
			EB-R	1	150	N/A	N/A	N/A	N/A	
			NB-R	1	N/A	N/A	N/A	192	107	
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	245	205	136	**319**	107	Exceeds available storage
			EB-T	4	N/A	125	142	468	245	
			EB-R	1	215	N/A	N/A	58	67	
			WB-L	2	200	N/A	N/A	216	204	
			WB-T	3	N/A	245	219	275	283	
			WB-R	1	500	89	70	98	133	
			NB-L	2	N/A	N/A	N/A	97	215	
			NB-T	1	N/A	N/A	N/A	135	364	
			NB-R	2	N/A	N/A	N/A	172	331	
			SB-L	2	150	**182**	**175**	**175**	**182**	Exceeds available storage
			SB-TR	1	N/A	367	282	297	295	
			SB-R	1	150	69	95	116	**175**	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	107	108	111	124	
			WB-T	3	N/A	149	109	154	158	
			SB-L	1	470	398	**851**	**864**	**851**	Exceeds available storage
			SB-LR	1	N/A	492	853	880	877	
			SB-R	1	470	347	**669**	**653**	**689**	Exceeds available storage
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	172	186	188	184	
			WB-T	3	N/A	54	N/A	110	114	
			NB-L	2	1000	112	124	220	180	
			NB-R	2	1000	133	216	157	177	

TABLE 19
PROJECT TRIP COMPARISON
TRIANGLE FOCUSED TRAFFIC ANALYSIS

LAND USE	ITE CODE	QUANTITY[6]		DWY Rate[2]	ADT[3]	AM PEAK HOUR						PM PEAK HOUR					
						Peak Hr Rate	SPLIT		VOLUMES			Peak Hr Rate	SPLIT		VOLUMES		
							IN	OUT	IN	OUT	TOTAL		IN	OUT	IN	OUT	TOTAL
Multifamily Housing (Mid-Rise)	221	900	DU	4.54	4,086	0.37	23%	77%	77	256	333	0.39	61%	39%	214	137	351
Total		900	**TSF**		**4,086**				**77**	**256**	**333**				**214**	**137**	**351**

Trip Generation A	Quantity		ADT
Focused Traffic Analysis	285,000	SF	20,144
Multifamily Housing	900	DU[1]	4,086
Total			**24,230**

Trip Generation B	Quantity		ADT
Original Triangle Study	NA	NA	38,739
Total			**38,739**

Trip Generation	ADT
Trip Generation A	24,230
Trip Generation B	38,739
Difference in Trips	-14,509

[1]DU= Dwelling Units

[2]Refer to ITE Trip Generation Manual, 11th Edition.

[3]ADT = Average Daily Traffic

[4]Passby reduction rates have been used to account for traffic that will access the site as an intermediate stop on the way to a primary destination.

[5]Internal Capture is the reduction of the overall traffic due to the compatibility of land uses within the project site.

[6]Source: Murrieta Triangle Trip Generation Evaluation, prepared by Trames Solutions Inc. December 23, 2022

TABLE 20
2035 INTERSECTION OPERATIONS
TRIANGLE FOCUSED TRAFFIC ANALYSIS

#	INTERSECTION	CONTROL	DIR.	BUILDOUT (2035)			
				AM Peak		PM Peak	
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	30.4	C	52.9	D

Footnotes:

Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized

TABLE 21
2035 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
NO INTERCHANGE IMPROVEMENTS

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	BUILDOUT (2035)		NOTES
						AM Peak	PM Peak	
						QUEUE [2]	QUEUE [2]	
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	201	523	Exceeds available storage, however, less than 25' and deemed acceptable
			EB-T	3	N/A	275	620	
			WB-T	3	N/A	85	138	
			WB-R	1	N/A	N/A	28	
			NB-L	1	520	306	405	
			NB-LT	1	N/A	292	402	
			NB-R	1	490	297	132	

Footnotes:

[1] Storage lengths, in feet, based on existing storage per lane

[2] Queue is equal to the 95th percentile queue length, in feet, based on SimTraffic 10 software results. In cases where there are more than one lane, the highest number is reported in this table

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through movement group, LTR=Left-Through-Right lane movement group, etc.

TABLE 22
2025 INTERSECTION OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
RECOMMENDATIONS

#	INTERSECTION	CONTROL	DIR.	EXISTING + AMBIENT + CUMULATIVE (2025)				EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025)				INCREMENTAL DELAY (sec)		TRAFFIC EFFECT?
				AM Peak		PM Peak		AM Peak		PM Peak				
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	AM	PM	YES/NO
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	28.0	C	26.3	C	31.3	C	26.2	C	3.3	-0.1	NO
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	14.2	B	20.3	C	19.5	B	21.9	C	5.3	1.6	NO
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	**>50**	**F**	**>50**	**F**	-	-	-	-	-	-	-
		(S)	Overall	-	-	-	-	28.4	C	29.0	C	-	-	-
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	**Future**				**37.0**	**E**	**97.1**	**F**	-	-	Yes
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	16.0	B	31.0	C	26.9	C	45.8	D	10.9	14.8	NO
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	18.5	B	15.0	B	19.7	B	19.8	B	1.2	4.8	NO
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	10.0	B	8.9	A	10.7	B	13.8	B	0.7	4.9	NO

Footnotes:

Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 23
2025 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
RECOMMENDATIONS

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	EXISTING + AMBIENT + CUMULATIVE (2025) AM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE (2025) PM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025) AM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE + PROJECT (2025) PM Peak QUEUE [2]	NOTES
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	353	352	306	331	
			EB-R	1	N/A	N/A	N/A	N/A	N/A	
			WB-T	3	N/A	107	104	67	78	
			SB-L	1	510	418	531	465	602	Exceeds available storage
			SB-LTR	1	N/A	366	466	510	539	
			SB-R	1	510	303	366	404	473	
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	218	563	189	468	Exceeds available storage
			EB-T	3	N/A	156	601	121	507	
			WB-T	3	N/A	133	171	135	147	
			WB-R	1	N/A	414	31	22	N/A	
			NB-L	1	520	187	179	170	165	
			NB-LT	1	N/A	160	171	185	230	
			NB-R	1	490	0	113	155	546	Free movement
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	217	228	N/A	N/A	
			EB-T	4	N/A	297	791	N/A	N/A	
			WB-TR	1	N/A	27	24	N/A	N/A	
			SB-R	1	N/A	196	249	N/A	N/A	
		(S)	EB-L	2	310	N/A	N/A	151	179	
			EB-T	4	N/A	N/A	N/A	229	335	
			EB-R	1	320	N/A	N/A	16	12	
			WB-L	2	245	N/A	N/A	109	84	
			WB-T	3	N/A	N/A	N/A	207	275	
			WB-TR	1	N/A	N/A	N/A	253	279	
			NB-L	2	N/A	N/A	N/A	191	330	
			NB-T	1	N/A	N/A	N/A	26	35	
			NB-TR	1	N/A	N/A	N/A	63	71	
			SB-L	2	235	N/A	N/A	32	38	
			SB-T	2	N/A	N/A	N/A	89	215	
			SB-R	1	235	N/A	N/A	**245**	**268**	Exceeds available storage
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	EB-T	4	N/A	FUTURE		N/A	307	
			NB-R	1	N/A			43	288	
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	245	177	213	173	151	
			EB-T	4	N/A	224	301	200	300	
			EB-R	1	215	N/A	N/A	38	52	
			WB-L	2	200	N/A	N/A	139	137	
			WB-T	3	N/A	214	334	275	285	
			WB-R	1	500	114	128	108	113	
			NB-L	2	N/A	N/A	N/A	106	114	
			NB-T	1	N/A	N/A	N/A	131	123	
			NB-R	2	N/A	N/A	N/A	207	275	
			SB-L	2	150	176	177	176	175	
			SB-T	1	N/A	N/A	N/A	305	275	
			SB-R	1	150	**365**	**318**	123	176	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	97	98	90	118	
			WB-T	3	N/A	161	154	156	147	
			SB-L	1	470	343	**992**	**935**	**848**	Exceeds available storage
			SB-LR	1	N/A	437	1007	903	861	
			SB-R	1	470	318	**637**	**643**	**675**	Exceeds available storage
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	153	174	174	183	
			WB-T	3	N/A	128	120	68	72	
			NB-L	2	1000	124	114	159	158	
			NB-R	2	1000	135	202	170	201	

TABLE 24
2028 INTERSECTION OPERATIONS SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
RECOMMENDATIONS

#	INTERSECTION	CONTROL	DIR.	EXISTING + AMBIENT + CUMULATIVE (2028)				EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028)				INCREMENTAL DELAY (sec)		TRAFFIC EFFECT?
				AM Peak		PM Peak		AM Peak		PM Peak				
				DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	DELAY [1]	LOS [2]	AM	PM	YES/NO
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	Overall	32.0	C	31.5	C	34.2	C	40.2	D	2.2	8.7	NO
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	Overall	19.4	B	24.1	C	19.9	B	25.5	C	0.5	1.4	NO
3	Murrieta Hot Springs Rd/Sparkman	(OWSC)	EB-L	-	-	-	-	-	-	-	-	-	-	-
	Ct.-Monroe Ave-Proj Dwy 1	(S)	Overall	12.2	B	17.3	B	29.7	C	45.4	D	17.5	28.1	NO
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	NB-R	**Future**				**57.8**	**F**	**694.4**	**F**	-	-	YES
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	Overall	22.1	C	38.2	D	33.9	C	53.1	D	11.8	14.9	NO
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	Overall	18.4	B	18.0	B	21.4	C	32.7	C	3.0	14.7	NO
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	Overall	11.9	B	13.3	B	14.3	B	15.8	B	2.4	2.5	NO

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 6th edition of the HCM

[1] Delay is measured in seconds per vehicle.

[2] Level of Service

(S)=Signalized, (TWSC)=Two-Way Stop Controlled, (OWSC)=One-Way Stop Controlled

NB=Northbound, WB=Westbound, etc.

L=Left-turn movement, T=Thru movement, R= Right-turn movement, etc.

LT=Left-Through lane, LTR=Left-Through-Right lane , etc.

TABLE 25
2028 95TH PERCENTILE QUEUE SUMMARY
TRIANGLE FOCUSED TRAFFIC ANALYSIS
RECOMMENDATIONS

#	INTERSECTION	CONTROL	DIR.	No. OF LANES	STORAGE [1]	EXISTING + AMBIENT + CUMULATIVE (2028) AM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE (2028) PM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028) AM Peak QUEUE [2]	EXISTING + AMBIENT + CUMULATIVE + PROJECT (2028) PM Peak QUEUE [2]	NOTES
1	Murrieta Hot Springs Rd/I-15 SB Ramps	(S)	EB-T	3	N/A	328	335	305	328	
			EB-R	1	N/A	N/A	N/A	N/A	139	
			WB-T	3	N/A	83	68	74	63	
			SB-L	1	510	448	**663**	**620**	**598**	Exceeds available storage
			SB-LTR	1	N/A	413	664	628	598	
			SB-R	1	510	366	**561**	**526**	**545**	Exceeds available storage
2	Murrieta Hot Springs Rd/I-15 NB Ramps	(S)	EB-L	1	500	234	508	207	493	
			EB-T	3	N/A	153	474	192	591	
			WB-T	3	N/A	71	47	143	74	
			WB-R	1	N/A	N/A	N/A	N/A	N/A	
			NB-L	1	520	165	175	212	**1304**	Exceeds available storage
			NB-LT	1	N/A	165	182	191	**1265**	Exceeds available storage
			NB-R	1	490	56	81	510	610	Free movement
3	Murrieta Hot Springs Rd/Sparkman Ct.-Monroe Ave-Proj Dwy 1	(OWSC)	EB-L	1	170	N/A	N/A	N/A	N/A	
			EB-T	4	N/A	N/A	N/A	N/A	N/A	
			WB-TR	1	N/A	N/A	N/A	N/A	N/A	
			SB-R	1	N/A	N/A	N/A	N/A	N/A	
		(S)	EB-L	2	310	158	154	157	153	
			EB-T	4	N/A	131	239	274	304	
			EB-R	1	320	N/A	N/A	21	53	
			WB-L	2	245	N/A	N/A	137	103	
			WB-T	3	N/A	111	87	173	104	
			WB-TR	1	N/A	154	103	216	121	
			NB-L	2	N/A	N/A	N/A	235	324	
			NB-T	1	N/A	N/A	N/A	44	136	
			NB-TR	1	N/A	N/A	N/A	98	69	
			SB-L	2	235	27	25	31	30	
			SB-T	2	N/A	136	N/A	190	302	
			SB-R	1	235	229	195	258	260	Exceeds available storage
4	Murrieta Hot Springs Rd/Proj Dwy 2	(OWSC)	EB-T	4	N/A	N/A	N/A	41	94	
			EB-R	1	150	N/A	N/A	N/A	N/A	
			NB-R	1	N/A	N/A	N/A	59	113	
5	Murrieta Hot Springs Rd/Hancock Avenue-Proj Dwy 3	(S)	EB-L	2	245	205	136	278	162	
			EB-T	4	N/A	125	142	273	360	
			EB-R	1	215	N/A	N/A	63	131	
			WB-L	2	200	N/A	N/A	180	72	
			WB-T	3	N/A	245	219	270	229	
			WB-R	1	500	89	70	87	78	
			NB-L	2	N/A	N/A	N/A	108	244	
			NB-T	1	N/A	N/A	N/A	97	403	
			NB-R	2	N/A	N/A	N/A	164	343	
			SB-L	2	150	182	175	176	176	
			SB-T	1	N/A	367	282	289	297	
			SB-R	1	150	69	95	135	**160**	Exceeds available storage
6	Murrieta Hot Springs Rd/I-215 SB Ramps	(S)	EB-T	3	N/A	107	108	103	135	
			WB-T	3	N/A	149	109	152	145	
			SB-L	1	470	398	**851**	**862**	**865**	Exceeds available storage
			SB-LR	1	N/A	492	853	860	851	
			SB-R	1	470	347	**669**	**652**	**664**	Exceeds available storage
7	Murrieta Hot Springs Rd/I-215 NB Ramps	(S)	EB-T	3	N/A	172	186	183	176	
			WB-T	3	N/A	54	N/A	81	N/A	
			NB-L	2	1000	112	124	258	208	
			NB-R	2	1000	133	216	171	202	

ATTACHMENT C

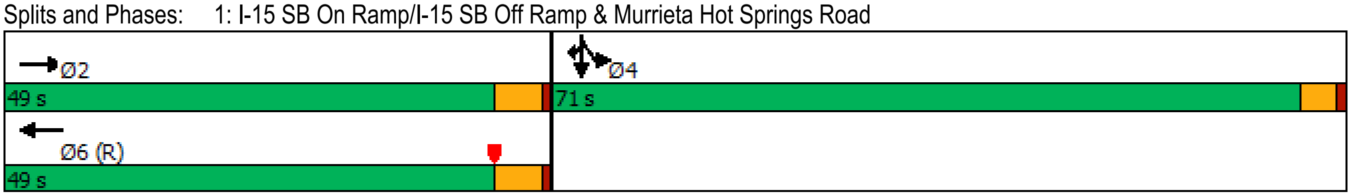
Synchro

EXISTING TRAFFIC CONDITIONS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	625	136	1033	981	0	263
Future Volume (vph)	625	136	1033	981	0	263
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	49.0		49.0	71.0	71.0	71.0
Total Split (%)	40.8%		40.8%	59.2%	59.2%	59.2%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	43.7	120.0	43.7	66.8	66.8	66.8
Actuated g/C Ratio	0.36	1.00	0.36	0.56	0.56	0.56
v/c Ratio	0.36	0.09	0.59	0.54	0.59	0.30
Control Delay	28.6	0.1	34.6	19.5	20.0	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.6	0.1	34.6	19.5	20.0	14.0
LOS	C	A	C	B	B	B
Approach Delay	23.5		34.6		18.6	
Approach LOS	C		C		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 25.3	Intersection LOS: C
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	625	136	0	1033	0	0	0	0	981	0	263
Future Volume (veh/h)	0	625	136	0	1033	0	0	0	0	981	0	263
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	665	0	0	1099	0				1131	0	187
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1859		0	1859	0				2062	0	882
Arrive On Green	0.00	0.36	0.00	0.00	0.12	0.00				0.56	0.00	0.56
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	665	0	0	1099	0				1131	0	187
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	11.4	0.0	0.0	24.5	0.0				23.4	0.0	7.1
Cycle Q Clear(g_c), s	0.0	11.4	0.0	0.0	24.5	0.0				23.4	0.0	7.1
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1859		0	1859	0				2062	0	882
V/C Ratio(X)	0.00	0.36		0.00	0.59	0.00				0.55	0.00	0.21
Avail Cap(c_a), veh/h	0	1859		0	1859	0				2062	0	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.90	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.9	0.0	0.0	44.3	0.0				17.0	0.0	13.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	1.4	0.0				1.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	0.0	0.0	11.3	0.0				10.0	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	28.0	0.0	0.0	45.7	0.0				18.0	0.0	13.9
LnGrp LOS	A	C		A	D	A				B	A	B
Approach Vol, veh/h		665			1099						1318	
Approach Delay, s/veh		28.0			45.7						17.4	
Approach LOS		C			D						B	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		49.0		71.0		49.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		43.7		* 67		43.7						
Max Q Clear Time (g_c+I1), s		13.4		25.4		26.5						
Green Ext Time (p_c), s		3.1		8.7		5.0						
Intersection Summary												
HCM 6th Ctrl Delay			29.8									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

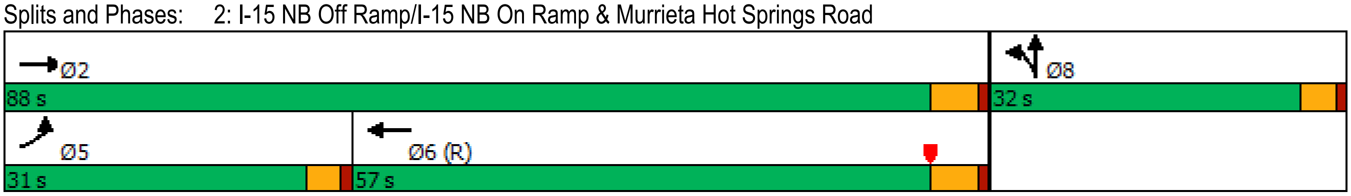
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	131	1491	918	759	246	0	77
Future Volume (vph)	131	1491	918	759	246	0	77
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	31.0	88.0	57.0		32.0	32.0	
Total Split (%)	25.8%	73.3%	47.5%		26.7%	26.7%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	14.9	95.5	76.5	120.0	15.0	15.0	120.0
Actuated g/C Ratio	0.12	0.80	0.64	1.00	0.12	0.12	1.00
v/c Ratio	0.65	0.40	0.31	0.52	0.63	0.64	0.05
Control Delay	57.8	2.4	8.0	7.1	62.8	63.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.8	2.4	8.0	7.1	62.8	63.0	0.1
LOS	E	A	A	A	E	E	A
Approach Delay		6.9	7.6			47.9	
Approach LOS		A	A			D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 10.9 Intersection LOS: B
Intersection Capacity Utilization 45.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	1491	0	0	918	759	246	0	77	0	0	0
Future Volume (veh/h)	131	1491	0	0	918	759	246	0	77	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	142	1621	0	0	998	0	267	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	173	3519	0	0	2853		351	0				
Arrive On Green	0.10	0.69	0.00	0.00	1.00	0.00	0.10	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	142	1621	0	0	998	0	267	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	9.4	17.3	0.0	0.0	0.0	0.0	8.8	0.0	0.0			
Cycle Q Clear(g_c), s	9.4	17.3	0.0	0.0	0.0	0.0	8.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	173	3519	0	0	2853		351	0				
V/C Ratio(X)	0.82	0.46	0.00	0.00	0.35		0.76	0.00				
Avail Cap(c_a), veh/h	401	3519	0	0	2853		825	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	53.1	8.5	0.0	0.0	0.0	0.0	52.7	0.0	0.0			
Incr Delay (d2), s/veh	9.2	0.4	0.0	0.0	0.3	0.0	3.4	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	4.5	5.5	0.0	0.0	0.1	0.0	4.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.4	8.9	0.0	0.0	0.3	0.0	56.1	0.0	0.0			
LnGrp LOS	E	A	A	A	A		E	A				
Approach Vol, veh/h		1763			998			267				
Approach Delay, s/veh		13.2			0.3			56.1				
Approach LOS		B			A			E				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		88.0			15.7	72.3		16.0				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		82.7			27.0	51.7		27.8				
Max Q Clear Time (g_c+I1), s		19.3			11.4	2.0		10.8				
Green Ext Time (p_c), s		11.0			0.4	5.2		1.1				

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

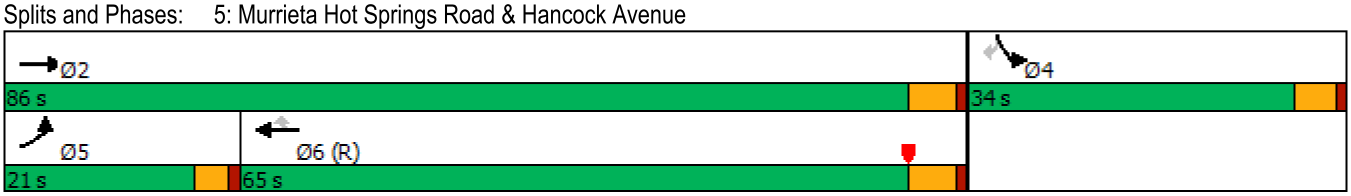
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	191	1107	1404	464	377	147
Future Volume (vph)	191	1107	1404	464	377	147
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.0	15.3	38.3	38.3	14.9	14.9
Total Split (s)	21.0	86.0	65.0	65.0	34.0	34.0
Total Split (%)	17.5%	71.7%	54.2%	54.2%	28.3%	28.3%
Yellow Time (s)	3.0	4.3	4.3	4.3	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	5.3	4.9	4.9
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	Max	Max
Act Effct Green (s)	12.9	80.7	63.8	63.8	29.1	29.1
Actuated g/C Ratio	0.11	0.67	0.53	0.53	0.24	0.24
v/c Ratio	0.59	0.28	0.57	0.49	0.52	0.32
Control Delay	73.8	10.8	23.0	3.2	42.2	7.5
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	73.8	10.8	23.0	3.3	42.2	7.5
LOS	E	B	C	A	D	A
Approach Delay		20.1	18.1		32.5	
Approach LOS		C	B		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: Murrieta Hot Springs Road & Hancock Avenue



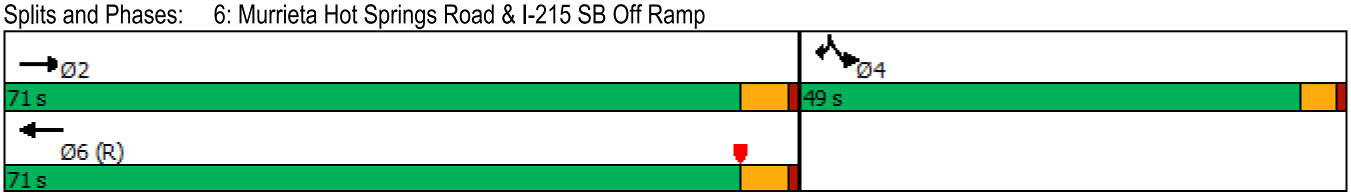
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	191	1107	1404	464	377	147
Future Volume (veh/h)	191	1107	1404	464	377	147
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	1178	1494	494	401	156
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	270	3917	2540	789	838	384
Arrive On Green	0.08	0.61	1.00	1.00	0.24	0.24
Sat Flow, veh/h	3456	6696	5274	1585	3456	1585
Grp Volume(v), veh/h	203	1178	1494	494	401	156
Grp Sat Flow(s),veh/h/ln	1728	1609	1702	1585	1728	1585
Q Serve(g_s), s	6.9	10.5	0.4	0.5	11.9	9.9
Cycle Q Clear(g_c), s	6.9	10.5	0.4	0.5	11.9	9.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	270	3917	2540	789	838	384
V/C Ratio(X)	0.75	0.30	0.59	0.63	0.48	0.41
Avail Cap(c_a), veh/h	490	4327	2540	789	838	384
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	11.2	0.2	0.2	38.9	38.2
Incr Delay (d2), s/veh	4.2	0.0	1.0	3.7	2.0	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	3.1	3.4	0.3	0.9	5.2	9.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.4	11.3	1.2	3.9	40.9	41.3
LnGrp LOS	E	B	A	A	D	D
Approach Vol, veh/h		1381	1988		557	
Approach Delay, s/veh		18.2	1.8		41.0	
Approach LOS		B	A		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		78.4		34.0	13.4	65.0
Change Period (Y+Rc), s		5.3		4.9	4.0	5.3
Max Green Setting (Gmax), s		80.7		29.1	17.0	59.7
Max Q Clear Time (g_c+I1), s		12.5		13.9	8.9	2.5
Green Ext Time (p_c), s		6.6		2.3	0.5	14.6

Intersection Summary		
HCM 6th Ctrl Delay		13.2
HCM 6th LOS		B

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	1452	1572	589	366
Future Volume (vph)	1452	1572	589	366
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	71.0	71.0	49.0	49.0
Total Split (%)	59.2%	59.2%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	78.9	78.9	31.6	31.8
Actuated g/C Ratio	0.66	0.66	0.26	0.26
v/c Ratio	0.48	0.52	0.70	0.75
Control Delay	10.0	16.9	42.6	48.9
Queue Delay	0.1	0.0	0.0	0.0
Total Delay	10.1	16.9	42.6	48.9
LOS	B	B	D	D
Approach Delay	10.1	16.9	44.6	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 21.1	Intersection LOS: C
Intersection Capacity Utilization 95.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1452	1572	0	589	366
Future Volume (veh/h)	0	1452	1572	0	589	366
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	1545	1672	0	674	339
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2796	2796	0	934	418
Arrive On Green	0.00	0.55	1.00	0.00	0.25	0.25
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	1545	1672	0	674	339
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	23.6	0.0	0.0	20.0	23.2
Cycle Q Clear(g_c), s	0.0	23.6	0.0	0.0	20.0	23.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2796	2796	0	934	418
V/C Ratio(X)	0.00	0.55	0.60	0.00	0.72	0.81
Avail Cap(c_a), veh/h	0	2796	2796	0	1383	618
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	17.6	0.0	0.0	41.0	42.1
Incr Delay (d2), s/veh	0.0	0.8	1.0	0.0	1.1	5.1
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	8.7	0.2	0.0	9.2	10.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	18.4	1.0	0.0	42.1	47.2
LnGrp LOS	A	B	A	A	D	D
Approach Vol, veh/h		1545	1672		1013	
Approach Delay, s/veh		18.4	1.0		43.8	
Approach LOS		B	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		71.0		34.4		71.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		65.7		* 45		65.7
Max Q Clear Time (g_c+I1), s		25.6		25.2		2.0
Green Ext Time (p_c), s		9.7		5.0		11.6

Intersection Summary			
HCM 6th Ctrl Delay			17.6
HCM 6th LOS			B

Notes

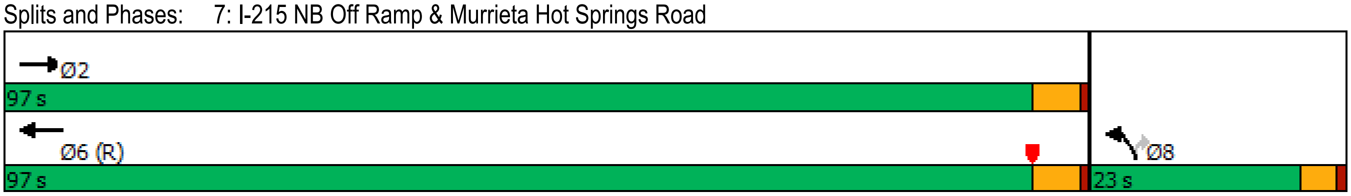
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	1771	1768	115	171
Future Volume (vph)	1771	1768	115	171
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	19.2%	19.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	91.7	91.7	18.8	18.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.49	0.49	0.20	0.33
Control Delay	3.1	5.7	45.1	26.9
Queue Delay	0.0	0.1	0.0	0.0
Total Delay	3.1	5.8	45.1	26.9
LOS	A	A	D	C
Approach Delay	3.1	5.8	34.2	
Approach LOS	A	A	C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 6.7	Intersection LOS: A
Intersection Capacity Utilization 50.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1771	0	0	1768	115	171
Future Volume (veh/h)	1771	0	0	1768	115	171
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	1826	0	0	1823	119	176
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3902	0	0	3902	563	455
Arrive On Green	0.76	0.00	0.00	0.76	0.16	0.16
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	1826	0	0	1823	119	176
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	15.8	0.0	0.0	15.7	3.5	6.5
Cycle Q Clear(g_c), s	15.8	0.0	0.0	15.7	3.5	6.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3902	0	0	3902	563	455
V/C Ratio(X)	0.47	0.00	0.00	0.47	0.21	0.39
Avail Cap(c_a), veh/h	3902	0	0	3902	563	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.2	0.0	0.0	5.2	44.1	45.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.4	0.9	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	4.2	1.6	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.6	0.0	0.0	5.6	45.0	47.9
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	1826			1823	295	
Approach Delay, s/veh	5.6			5.6	46.7	
Approach LOS	A			A	D	

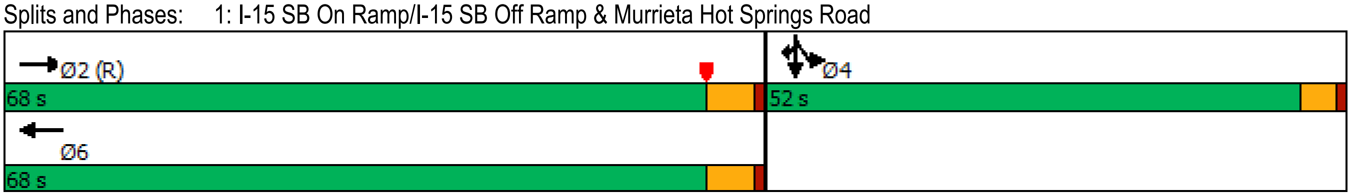
Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	97.0	97.0	23.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	91.7	91.7	18.8
Max Q Clear Time (g_c+I1), s	17.8	17.7	8.5
Green Ext Time (p_c), s	13.8	13.8	1.0

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1814	212	1064	767	0	102
Future Volume (vph)	1814	212	1064	767	0	102
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	68.0		68.0	52.0	52.0	52.0
Total Split (%)	56.7%		56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max		None	Max	Max	Max
Act Effct Green (s)	62.7	120.0	62.7	47.8	47.8	47.8
Actuated g/C Ratio	0.52	1.00	0.52	0.40	0.40	0.40
v/c Ratio	0.73	0.14	0.43	0.59	0.63	0.16
Control Delay	24.3	0.2	19.8	32.5	32.8	11.4
Queue Delay	0.4	0.0	0.0	0.0	0.0	0.0
Total Delay	24.7	0.2	19.8	32.5	32.8	11.4
LOS	C	A	B	C	C	B
Approach Delay	22.1		19.8		30.4	
Approach LOS	C		B		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 23.3	Intersection LOS: C
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1814	212	0	1064	0	0	0	0	767	0	102
Future Volume (veh/h)	0	1814	212	0	1064	0	0	0	0	767	0	102
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1951	0	0	1144	0				859	0	73
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2668		0	2668	0				1476	0	631
Arrive On Green	0.00	0.52	0.00	0.00	0.52	0.00				0.40	0.00	0.40
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1951	0	0	1144	0				859	0	73
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	35.4	0.0	0.0	16.5	0.0				21.8	0.0	3.5
Cycle Q Clear(g_c), s	0.0	35.4	0.0	0.0	16.5	0.0				21.8	0.0	3.5
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2668		0	2668	0				1476	0	631
V/C Ratio(X)	0.00	0.73		0.00	0.43	0.00				0.58	0.00	0.12
Avail Cap(c_a), veh/h	0	2668		0	2668	0				1476	0	631
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	0.33	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.1	0.0	0.0	17.6	0.0				28.3	0.0	22.8
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.1	0.0				1.7	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
%ile BackOfQ(50%),veh/ln	0.0	13.1	0.0	0.0	6.1	0.0				9.9	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.7	0.0	0.0	17.7	0.0				30.0	0.0	23.1
LnGrp LOS	A	C		A	B	A				C	A	C
Approach Vol, veh/h		1951			1144						932	
Approach Delay, s/veh		22.7			17.7						29.4	
Approach LOS		C			B						C	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		68.0		52.0		68.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		62.7		* 48		62.7						
Max Q Clear Time (g_c+I1), s		37.4		23.8		18.5						
Green Ext Time (p_c), s		12.0		5.0		6.3						

Intersection Summary			
HCM 6th Ctrl Delay			22.9
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

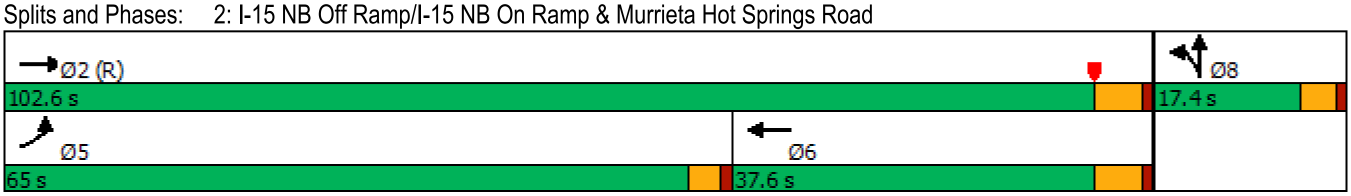
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	621	1998	918	1141	171	0	35
Future Volume (vph)	621	1998	918	1141	171	0	35
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	65.0	102.6	37.6		17.4	17.4	
Total Split (%)	54.2%	85.5%	31.3%		14.5%	14.5%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	C-Max	Max		None	None	
Act Effct Green (s)	51.5	98.9	43.4	120.0	11.6	11.6	120.0
Actuated g/C Ratio	0.43	0.82	0.36	1.00	0.10	0.10	1.00
v/c Ratio	0.85	0.50	0.52	0.75	0.55	0.55	0.02
Control Delay	50.0	2.1	28.4	15.8	64.5	64.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.0	2.1	28.4	15.8	64.5	64.5	0.0
LOS	D	A	C	B	E	E	A
Approach Delay		13.5	21.4			53.7	
Approach LOS		B	C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow, Master Intersection	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 18.5	Intersection LOS: B
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	621	1998	0	0	918	1141	171	0	35	0	0	0
Future Volume (veh/h)	621	1998	0	0	918	1141	171	0	35	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	647	2081	0	0	956	0	178	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	666	4277	0	0	2198		296	0				
Arrive On Green	0.75	1.00	0.00	0.00	0.43	0.00	0.08	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	647	2081	0	0	956	0	178	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	40.2	0.0	0.0	0.0	15.7	0.0	5.8	0.0	0.0			
Cycle Q Clear(g_c), s	40.2	0.0	0.0	0.0	15.7	0.0	5.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	666	4277	0	0	2198		296	0				
V/C Ratio(X)	0.97	0.49	0.00	0.00	0.44		0.60	0.00				
Avail Cap(c_a), veh/h	905	4277	0	0	2198		392	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.5	0.0	0.0	0.0	24.0	0.0	53.1	0.0	0.0			
Incr Delay (d2), s/veh	19.9	0.4	0.0	0.0	0.6	0.0	2.0	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	9.0	0.2	0.0	0.0	6.2	0.0	2.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	0.4	0.0	0.0	24.6	0.0	55.1	0.0	0.0			
LnGrp LOS	C	A	A	A	C		E	A				
Approach Vol, veh/h		2728			956			178				
Approach Delay, s/veh		8.5			24.6			55.1				
Approach LOS		A			C			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		105.8			48.9	56.9		14.2				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		97.3			61.0	32.3		13.2				
Max Q Clear Time (g_c+I1), s		2.0			42.2	17.7		7.8				
Green Ext Time (p_c), s		18.6			2.7	4.0		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			14.6									
HCM 6th LOS			B									

Notes

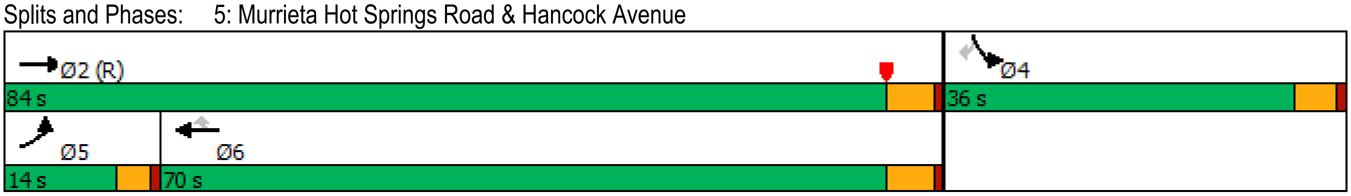
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	141	1610	1727	534	486	225
Future Volume (vph)	141	1610	1727	534	486	225
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.0	15.3	38.3	38.3	14.9	14.9
Total Split (s)	14.0	84.0	70.0	70.0	36.0	36.0
Total Split (%)	11.7%	70.0%	58.3%	58.3%	30.0%	30.0%
Yellow Time (s)	3.0	4.3	4.3	4.3	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	5.3	4.9	4.9
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?						
Recall Mode	None	C-Max	None	None	Max	Max
Act Effct Green (s)	9.5	78.7	65.2	65.2	31.1	31.1
Actuated g/C Ratio	0.08	0.66	0.54	0.54	0.26	0.26
v/c Ratio	0.60	0.43	0.70	0.54	0.64	0.48
Control Delay	68.7	13.7	21.8	3.0	43.5	17.5
Queue Delay	0.0	0.0	0.2	0.3	0.0	0.0
Total Delay	68.7	13.7	21.9	3.3	43.5	17.5
LOS	E	B	C	A	D	B
Approach Delay		18.1	17.5		35.3	
Approach LOS		B	B		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 64.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Murrieta Hot Springs Road & Hancock Avenue



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	141	1610	1727	534	486	225
Future Volume (veh/h)	141	1610	1727	534	486	225
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	1750	1877	580	528	245
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	4220	2866	890	896	411
Arrive On Green	0.04	0.44	0.56	0.56	0.26	0.26
Sat Flow, veh/h	3456	6696	5274	1585	3456	1585
Grp Volume(v), veh/h	153	1750	1877	580	528	245
Grp Sat Flow(s),veh/h/ln	1728	1609	1702	1585	1728	1585
Q Serve(g_s), s	5.3	22.4	30.6	30.4	16.0	16.3
Cycle Q Clear(g_c), s	5.3	22.4	30.6	30.4	16.0	16.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	211	4220	2866	890	896	411
V/C Ratio(X)	0.72	0.41	0.65	0.65	0.59	0.60
Avail Cap(c_a), veh/h	288	4220	2866	890	896	411
HCM Platoon Ratio	0.67	0.67	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	56.5	17.8	18.3	18.2	38.9	39.0
Incr Delay (d2), s/veh	5.7	0.3	0.5	1.7	2.8	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	8.8	11.1	10.6	7.1	14.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.2	18.1	18.8	19.9	41.7	45.2
LnGrp LOS	E	B	B	B	D	D
Approach Vol, veh/h		1903	2457		773	
Approach Delay, s/veh		21.7	19.1		42.8	
Approach LOS		C	B		D	

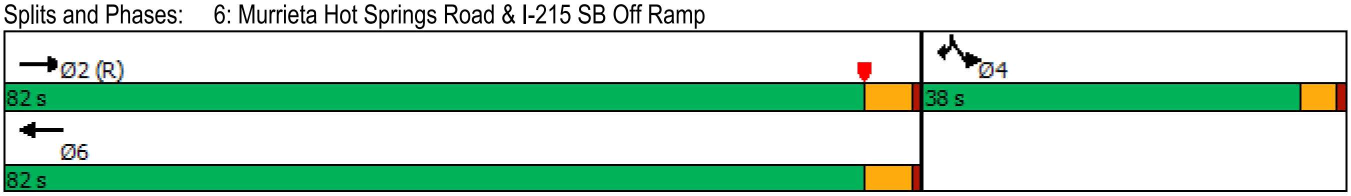
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		84.0		36.0	11.3	72.7
Change Period (Y+Rc), s		5.3		4.9	4.0	5.3
Max Green Setting (Gmax), s		78.7		31.1	10.0	64.7
Max Q Clear Time (g_c+I1), s		24.4		18.3	7.3	32.6
Green Ext Time (p_c), s		12.4		3.1	0.1	17.4

Intersection Summary						
HCM 6th Ctrl Delay			23.6			
HCM 6th LOS			C			

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2043	2020	622	220
Future Volume (vph)	2043	2020	622	220
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	82.0	82.0	38.0	38.0
Total Split (%)	68.3%	68.3%	31.7%	31.7%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	Max	None	None
Act Effct Green (s)	82.4	82.4	28.1	28.3
Actuated g/C Ratio	0.69	0.69	0.23	0.24
v/c Ratio	0.64	0.64	0.77	0.57
Control Delay	14.1	14.6	48.9	43.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.1	14.7	48.9	43.9
LOS	B	B	D	D
Approach Delay	14.1	14.7	47.7	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 20.1	Intersection LOS: C
Intersection Capacity Utilization 111.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2043	2020	0	622	220
Future Volume (veh/h)	0	2043	2020	0	622	220
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2173	2149	0	662	234
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3597	3597	0	801	359
Arrive On Green	0.00	1.00	0.70	0.00	0.22	0.22
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2173	2149	0	662	234
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	0.0	25.8	0.0	20.5	15.5
Cycle Q Clear(g_c), s	0.0	0.0	25.8	0.0	20.5	15.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3597	3597	0	801	359
V/C Ratio(X)	0.00	0.60	0.60	0.00	0.83	0.65
Avail Cap(c_a), veh/h	0	3597	3597	0	1044	467
HCM Platoon Ratio	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	9.0	0.0	44.9	42.8
Incr Delay (d2), s/veh	0.0	0.8	0.7	0.0	4.3	2.0
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	0.3	8.0	0.0	9.8	6.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	0.8	9.8	0.0	49.2	44.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h		2173	2149		896	
Approach Delay, s/veh		0.8	9.8		48.0	
Approach LOS		A	A		D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	89.8	30.2	89.8
Change Period (Y+Rc), s	5.3	* 4.2	5.3
Max Green Setting (Gmax), s	76.7	* 34	76.7
Max Q Clear Time (g_c+I1), s	2.0	22.5	27.8
Green Ext Time (p_c), s	20.1	3.5	18.0

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

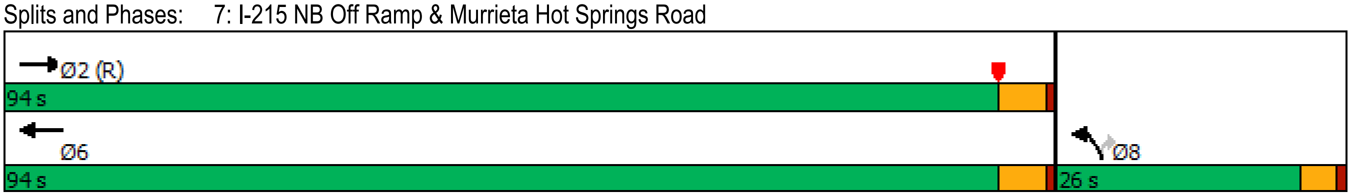
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2240	2096	143	269
Future Volume (vph)	2240	2096	143	269
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	94.0	94.0	26.0	26.0
Total Split (%)	78.3%	78.3%	21.7%	21.7%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	None	Max	Max
Act Effct Green (s)	88.7	88.7	21.8	21.8
Actuated g/C Ratio	0.74	0.74	0.18	0.18
v/c Ratio	0.66	0.62	0.22	0.52
Control Delay	4.6	11.4	42.9	44.6
Queue Delay	1.8	0.3	0.0	0.0
Total Delay	6.4	11.7	42.9	44.7
LOS	A	B	D	D
Approach Delay	6.4	11.7	44.0	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 12.0	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2240	0	0	2096	143	269
Future Volume (veh/h)	2240	0	0	2096	143	269
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2409	0	0	2254	154	289
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3774	0	0	3774	653	527
Arrive On Green	1.00	0.00	0.00	0.74	0.18	0.18
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2409	0	0	2254	154	289
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	0.0	0.0	0.0	24.7	4.4	10.9
Cycle Q Clear(g_c), s	0.0	0.0	0.0	24.7	4.4	10.9
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3774	0	0	3774	653	527
V/C Ratio(X)	0.64	0.00	0.00	0.60	0.24	0.55
Avail Cap(c_a), veh/h	3774	0	0	3774	653	527
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	7.3	42.0	44.6
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.3	0.8	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	7.0	2.0	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.8	0.0	0.0	7.6	42.8	48.7
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	2409			2254	443	
Approach Delay, s/veh	0.8			7.6	46.7	
Approach LOS	A			A	D	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	94.0	94.0	26.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	88.7	88.7	21.8
Max Q Clear Time (g_c+I1), s	2.0	26.7	12.9
Green Ext Time (p_c), s	26.5	21.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	197	129	144	100	119	104	396	349	319
Average Queue (ft)	71	56	34	87	80	82	268	246	47
95th Queue (ft)	159	120	100	97	102	108	350	320	156
Link Distance (ft)	608	608	608	77	77	77	566	566	
Upstream Blk Time (%)				26	22	13			
Queuing Penalty (veh)				89	75	44			
Storage Bay Dist (ft)									480
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT
Maximum Queue (ft)	149	77	72	61	110	54	166	151	163
Average Queue (ft)	90	14	10	7	16	9	22	117	89
95th Queue (ft)	140	49	41	30	61	35	92	153	145
Link Distance (ft)		563	563	563	1211	1211	1211	925	925
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	500								
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 3: Murrieta Hot Springs Road & Sparkman CT

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	R
Maximum Queue (ft)	190	219	22	115
Average Queue (ft)	123	7	1	49
95th Queue (ft)	186	72	7	94
Link Distance (ft)		1211	254	288
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	170			
Storage Blk Time (%)	2			
Queuing Penalty (veh)	7			

Intersection: 5: Murrieta Hot Springs Road & Hancock Avenue

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	R	L	L
Maximum Queue (ft)	128	141	132	162	186	75	128	200	228	122	162	174
Average Queue (ft)	66	78	74	100	130	30	57	101	151	59	130	161
95th Queue (ft)	111	118	121	147	198	63	117	167	203	96	187	187
Link Distance (ft)			414	414	414	414	335	335	335	335		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200	200									150	150
Storage Blk Time (%)											1	19
Queuing Penalty (veh)											2	27

Intersection: 5: Murrieta Hot Springs Road & Hancock Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	302
Average Queue (ft)	155
95th Queue (ft)	328
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	75	98	116	139	202	165	538	483	429
Average Queue (ft)	65	72	80	106	125	143	229	310	116
95th Queue (ft)	93	85	103	162	178	162	369	422	279
Link Distance (ft)	61	61	61	124	124	124	835	835	
Upstream Blk Time (%)	14	17	22	6	12	35			
Queuing Penalty (veh)	66	80	107	29	65	182			
Storage Bay Dist (ft)									470
Storage Blk Time (%)								0	
Queuing Penalty (veh)								0	

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	143	161	166	111	138	141	84	133	131	77
Average Queue (ft)	74	79	110	90	97	103	27	58	74	40
95th Queue (ft)	149	159	168	111	122	122	61	107	124	75
Link Distance (ft)	138	138	138	83	83	83	1043	1043		
Upstream Blk Time (%)	2	3	8	10	12	30				
Queuing Penalty (veh)	14	16	48	60	73	179				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 1164

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	407	370	336	106	97	87	373	367	121
Average Queue (ft)	187	165	145	60	38	36	262	216	22
95th Queue (ft)	382	337	282	105	88	80	357	323	59
Link Distance (ft)	608	608	608	77	77	77	566	566	
Upstream Blk Time (%)				7	3	1			
Queuing Penalty (veh)				26	12	4			
Storage Bay Dist (ft)									480
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT
Maximum Queue (ft)	514	439	117	202	64	74	106	165	118
Average Queue (ft)	352	48	40	49	20	11	30	80	54
95th Queue (ft)	465	178	100	124	56	41	80	131	97
Link Distance (ft)		563	563	563	1211	1211	1211	925	925
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	500								
Storage Blk Time (%)	0								
Queuing Penalty (veh)	2								

Intersection: 3: Murrieta Hot Springs Road & Sparkman CT

Movement	EB	EB	EB	EB	EB	WB	SB
Directions Served	L	T	T	T	T	TR	R
Maximum Queue (ft)	195	1262	1277	1237	1214	95	152
Average Queue (ft)	170	808	816	844	759	4	59
95th Queue (ft)	249	1440	1419	1414	1354	32	114
Link Distance (ft)		1211	1211	1211	1211	254	288
Upstream Blk Time (%)		3	3	3	1		
Queuing Penalty (veh)		17	15	13	6		
Storage Bay Dist (ft)	170						
Storage Blk Time (%)	0	62					
Queuing Penalty (veh)	0	81					

Intersection: 5: Murrieta Hot Springs Road & Hancock Avenue

Movement	EB	EB	EB	EB	EB	EB	B4	B4	B4	B4	WB	WB
Directions Served	L	L	T	T	T	T	T	T	T	T	T	T
Maximum Queue (ft)	96	225	522	523	510	503	342	311	327	343	135	204
Average Queue (ft)	51	159	491	486	492	424	277	274	279	220	51	88
95th Queue (ft)	82	304	506	504	506	630	309	292	305	389	103	155
Link Distance (ft)			414	414	414	414	254	254	254	254	335	335
Upstream Blk Time (%)			69	88	98	46	40	53	74	29		
Queuing Penalty (veh)			328	420	464	220	192	254	353	137		
Storage Bay Dist (ft)	200	200										
Storage Blk Time (%)		0	62									
Queuing Penalty (veh)		0	87									

Intersection: 5: Murrieta Hot Springs Road & Hancock Avenue

Movement	WB	WB	SB	SB	SB
Directions Served	T	R	L	L	R
Maximum Queue (ft)	210	92	162	174	339
Average Queue (ft)	145	57	145	174	306
95th Queue (ft)	200	84	220	176	324
Link Distance (ft)	335	335			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			150	150	
Storage Blk Time (%)			3	82	2
Queuing Penalty (veh)			6	185	8

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	97	98	77	139	158	187	408	420	155
Average Queue (ft)	75	75	74	80	106	143	237	304	44
95th Queue (ft)	88	84	76	126	157	163	344	403	93
Link Distance (ft)	61	61	61	124	124	124	835	835	
Upstream Blk Time (%)	42	48	54	1	7	29			
Queuing Penalty (veh)	286	325	365	9	45	193			
Storage Bay Dist (ft)									470
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	174	199	182	118	138	129	116	132	157	145
Average Queue (ft)	146	149	151	88	99	104	40	74	109	80
95th Queue (ft)	158	171	171	130	127	125	89	126	154	132
Link Distance (ft)	138	138	138	83	83	83	1043	1043		
Upstream Blk Time (%)	46	44	48	11	15	22				
Queuing Penalty (veh)	340	330	356	75	107	156				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 5419

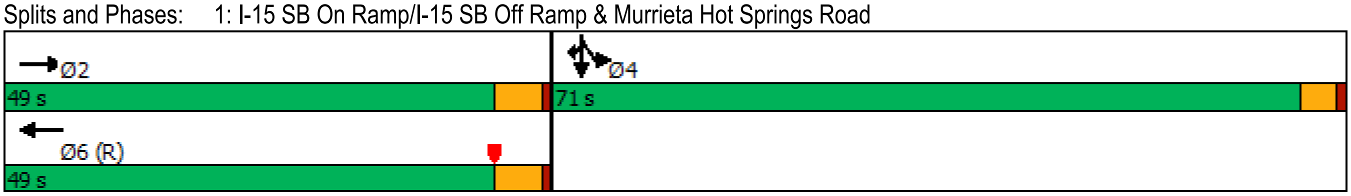
EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2025) WITHOUT TRIANGLE PROJECT
NO INTERCHANGE IMPROVEMENTS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	950	317	1307	1117	0	336
Future Volume (vph)	950	317	1307	1117	0	336
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	49.0		49.0	71.0	71.0	71.0
Total Split (%)	40.8%		40.8%	59.2%	59.2%	59.2%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	43.7	120.0	43.7	66.8	66.8	66.8
Actuated g/C Ratio	0.36	1.00	0.36	0.56	0.56	0.56
v/c Ratio	0.55	0.21	0.75	0.62	0.67	0.38
Control Delay	31.6	0.3	37.8	21.4	22.7	15.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	0.3	37.8	21.4	22.7	15.5
LOS	C	A	D	C	C	B
Approach Delay	23.8		37.8		20.7	
Approach LOS	C		D		C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 27.2 Intersection LOS: C
Intersection Capacity Utilization 93.0% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	950	317	0	1307	0	0	0	0	1117	0	336
Future Volume (veh/h)	0	950	317	0	1307	0	0	0	0	1117	0	336
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1011	0	0	1390	0				1299	0	238
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1859		0	1859	0				2062	0	882
Arrive On Green	0.00	0.36	0.00	0.00	0.36	0.00				0.56	0.00	0.56
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1011	0	0	1390	0				1299	0	238
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	18.8	0.0	0.0	28.5	0.0				28.7	0.0	9.4
Cycle Q Clear(g_c), s	0.0	18.8	0.0	0.0	28.5	0.0				28.7	0.0	9.4
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1859		0	1859	0				2062	0	882
V/C Ratio(X)	0.00	0.54		0.00	0.75	0.00				0.63	0.00	0.27
Avail Cap(c_a), veh/h	0	1859		0	1859	0				2062	0	882
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	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	30.2	0.0	0.0	33.3	0.0				18.2	0.0	13.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	2.8	0.0				1.5	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	7.5	0.0	0.0	11.7	0.0				12.3	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.6	0.0	0.0	36.1	0.0				19.6	0.0	14.6
LnGrp LOS	A	C		A	D	A				B	A	B
Approach Vol, veh/h		1011			1390						1537	
Approach Delay, s/veh		30.6			36.1						18.9	
Approach LOS		C			D						B	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		49.0		71.0		49.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		43.7		* 67		43.7						
Max Q Clear Time (g_c+I1), s		20.8		30.7		30.5						
Green Ext Time (p_c), s		4.9		10.7		5.7						

Intersection Summary		
HCM 6th Ctrl Delay		28.0
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	209	1855	1123	911	329	0	158
Future Volume (vph)	209	1855	1123	911	329	0	158
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	35.0	88.0	53.0		32.0	32.0	
Total Split (%)	29.2%	73.3%	44.2%		26.7%	26.7%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	20.7	92.5	67.8	120.0	18.0	18.0	120.0
Actuated g/C Ratio	0.17	0.77	0.56	1.00	0.15	0.15	1.00
v/c Ratio	0.75	0.51	0.43	0.63	0.71	0.71	0.11
Control Delay	54.4	3.7	16.8	9.4	63.3	63.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.4	3.7	16.8	9.4	63.3	63.3	0.1
LOS	D	A	B	A	E	E	A
Approach Delay		8.9	13.5			42.8	
Approach LOS		A	B			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 55

Control Type: Actuated-Coordinated

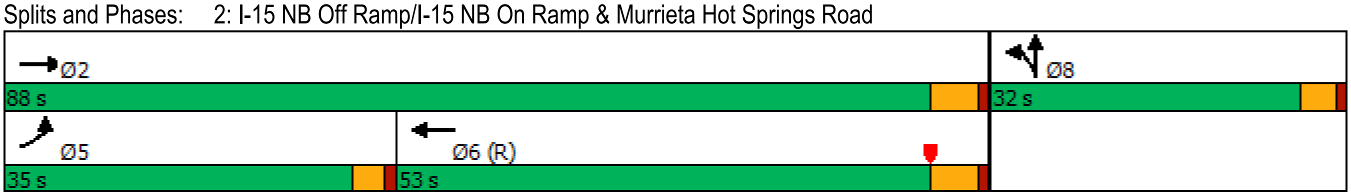
Maximum v/c Ratio: 0.75

Intersection Signal Delay: 14.5 Intersection LOS: B

Intersection Capacity Utilization 53.6% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	1855	0	0	1123	911	329	0	158	0	0	0
Future Volume (veh/h)	209	1855	0	0	1123	911	329	0	158	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	227	2016	0	0	1221	0	358	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	261	3519	0	0	2600		449	0				
Arrive On Green	0.15	0.69	0.00	0.00	1.00	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	227	2016	0	0	1221	0	358	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	15.0	24.3	0.0	0.0	0.0	0.0	11.7	0.0	0.0			
Cycle Q Clear(g_c), s	15.0	24.3	0.0	0.0	0.0	0.0	11.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	261	3519	0	0	2600		449	0				
V/C Ratio(X)	0.87	0.57	0.00	0.00	0.47		0.80	0.00				
Avail Cap(c_a), veh/h	460	3519	0	0	2600		825	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	50.1	9.6	0.0	0.0	0.0	0.0	51.0	0.0	0.0			
Incr Delay (d2), s/veh	8.6	0.7	0.0	0.0	0.6	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	7.1	7.8	0.0	0.0	0.1	0.0	5.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	10.3	0.0	0.0	0.6	0.0	54.2	0.0	0.0			
LnGrp LOS	E	B	A	A	A		D	A				
Approach Vol, veh/h		2243			1221			358				
Approach Delay, s/veh		15.2			0.6			54.2				
Approach LOS		B			A			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		88.0			21.6	66.4		19.3				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		82.7			31.0	47.7		27.8				
Max Q Clear Time (g_c+I1), s		26.3			17.0	2.0		13.7				
Green Ext Time (p_c), s		16.4			0.7	6.9		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			B									

Notes

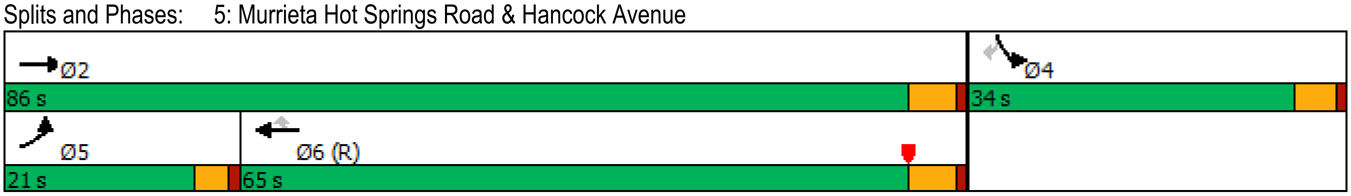
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	295	1343	1624	579	547	214
Future Volume (vph)	295	1343	1624	579	547	214
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.0	15.3	38.3	38.3	14.9	14.9
Total Split (s)	21.0	86.0	65.0	65.0	34.0	34.0
Total Split (%)	17.5%	71.7%	54.2%	54.2%	28.3%	28.3%
Yellow Time (s)	3.0	4.3	4.3	4.3	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	5.3	4.9	4.9
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	Max	Max
Act Effct Green (s)	15.7	80.7	61.0	61.0	29.1	29.1
Actuated g/C Ratio	0.13	0.67	0.51	0.51	0.24	0.24
v/c Ratio	0.75	0.34	0.69	0.58	0.75	0.42
Control Delay	73.6	12.2	16.4	2.1	49.1	7.2
Queue Delay	0.0	0.0	0.2	0.3	0.0	0.0
Total Delay	73.6	12.2	16.6	2.4	49.1	7.2
LOS	E	B	B	A	D	A
Approach Delay		23.2	12.9		37.3	
Approach LOS		C	B		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 20.6	Intersection LOS: C
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Murrieta Hot Springs Road & Hancock Avenue



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	295	1343	1624	579	547	214
Future Volume (veh/h)	295	1343	1624	579	547	214
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1429	1728	616	582	228
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	380	4123	2540	789	838	384
Arrive On Green	0.11	0.64	1.00	1.00	0.24	0.24
Sat Flow, veh/h	3456	6696	5274	1585	3456	1585
Grp Volume(v), veh/h	314	1429	1728	616	582	228
Grp Sat Flow(s),veh/h/ln	1728	1609	1702	1585	1728	1585
Q Serve(g_s), s	10.7	12.3	0.6	1.0	18.4	15.3
Cycle Q Clear(g_c), s	10.7	12.3	0.6	1.0	18.4	15.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	380	4123	2540	789	838	384
V/C Ratio(X)	0.83	0.35	0.68	0.78	0.69	0.59
Avail Cap(c_a), veh/h	490	4327	2540	789	838	384
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	10.0	0.2	0.2	41.4	40.2
Incr Delay (d2), s/veh	8.8	0.1	1.5	7.6	4.7	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	3.9	0.4	1.7	8.3	14.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	61.1	10.0	1.6	7.7	46.1	46.8
LnGrp LOS	E	B	A	A	D	D
Approach Vol, veh/h		1743	2344		810	
Approach Delay, s/veh		19.2	3.2		46.3	
Approach LOS		B	A		D	

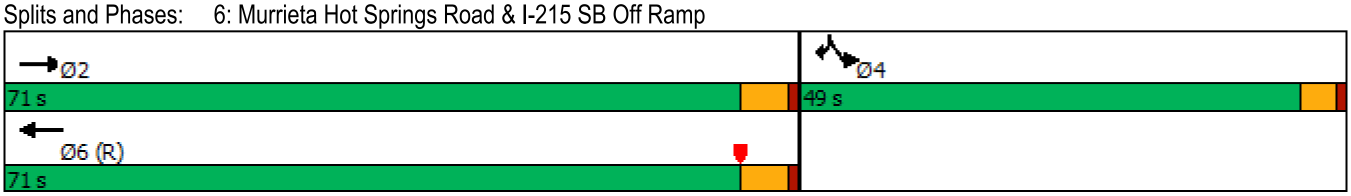
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.2		34.0	17.2	65.0
Change Period (Y+Rc), s		5.3		4.9	4.0	5.3
Max Green Setting (Gmax), s		80.7		29.1	17.0	59.7
Max Q Clear Time (g_c+I1), s		14.3		20.4	12.7	3.0
Green Ext Time (p_c), s		8.9		2.6	0.5	20.0

Intersection Summary						
HCM 6th Ctrl Delay			16.0			
HCM 6th LOS			B			

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	1826	1856	665	445
Future Volume (vph)	1826	1856	665	445
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	71.0	71.0	49.0	49.0
Total Split (%)	59.2%	59.2%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	74.3	74.3	36.2	36.4
Actuated g/C Ratio	0.62	0.62	0.30	0.30
v/c Ratio	0.64	0.65	0.72	0.78
Control Delay	15.8	12.8	40.2	48.9
Queue Delay	0.1	0.0	0.0	0.0
Total Delay	15.8	12.8	40.2	48.9
LOS	B	B	D	D
Approach Delay	15.8	12.8	42.9	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 21.0	Intersection LOS: C
Intersection Capacity Utilization 112.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1826	1856	0	665	445
Future Volume (veh/h)	0	1826	1856	0	665	445
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	1943	1974	0	781	393
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2796	2796	0	1060	474
Arrive On Green	0.00	0.55	1.00	0.00	0.29	0.29
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	1943	1974	0	781	393
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	33.4	0.0	0.0	22.9	26.8
Cycle Q Clear(g_c), s	0.0	33.4	0.0	0.0	22.9	26.8
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2796	2796	0	1060	474
V/C Ratio(X)	0.00	0.70	0.71	0.00	0.74	0.83
Avail Cap(c_a), veh/h	0	2796	2796	0	1383	618
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.8	0.0	0.0	38.8	40.0
Incr Delay (d2), s/veh	0.0	1.5	1.5	0.0	1.5	7.2
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	12.4	0.4	0.0	10.6	11.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	21.3	1.5	0.0	40.3	47.2
LnGrp LOS	A	C	A	A	D	D
Approach Vol, veh/h		1943	1974		1174	
Approach Delay, s/veh		21.3	1.5		42.6	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		71.0		38.5		71.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		65.7		* 45		65.7
Max Q Clear Time (g_c+I1), s		35.4		28.8		2.0
Green Ext Time (p_c), s		12.9		5.6		16.0

Intersection Summary		
HCM 6th Ctrl Delay		18.5
HCM 6th LOS		B

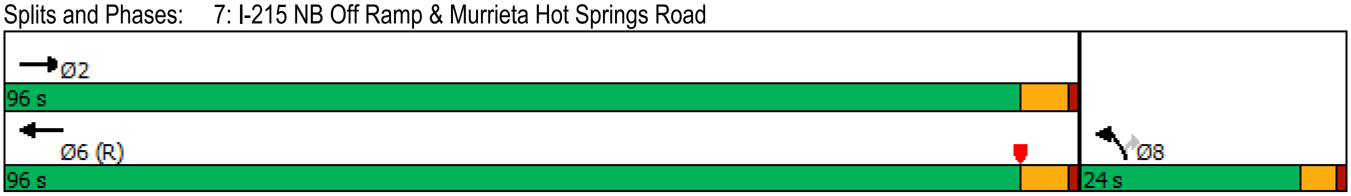
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2101	2071	152	214
Future Volume (vph)	2101	2071	152	214
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	96.0	96.0	24.0	24.0
Total Split (%)	80.0%	80.0%	20.0%	20.0%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	90.7	90.7	19.8	19.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.58	0.57	0.25	0.42
Control Delay	3.1	7.1	44.9	39.6
Queue Delay	0.0	0.7	0.0	0.0
Total Delay	3.1	7.8	44.9	39.6
LOS	A	A	D	D
Approach Delay	3.1	7.8	41.8	
Approach LOS	A	A	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2101	0	0	2071	152	214
Future Volume (veh/h)	2101	0	0	2071	152	214
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2166	0	0	2135	157	221
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3859	0	0	3859	593	479
Arrive On Green	0.76	0.00	0.00	0.76	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2166	0	0	2135	157	221
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	21.6	0.0	0.0	21.1	4.6	8.3
Cycle Q Clear(g_c), s	21.6	0.0	0.0	21.1	4.6	8.3
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3859	0	0	3859	593	479
V/C Ratio(X)	0.56	0.00	0.00	0.55	0.26	0.46
Avail Cap(c_a), veh/h	3859	0	0	3859	593	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.2	0.0	0.0	6.1	43.7	45.3
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.6	1.1	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	6.0	0.0	0.0	5.8	2.1	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.8	0.0	0.0	6.7	44.8	48.5
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	2166			2135	378	
Approach Delay, s/veh	6.8			6.7	47.0	
Approach LOS	A			A	D	

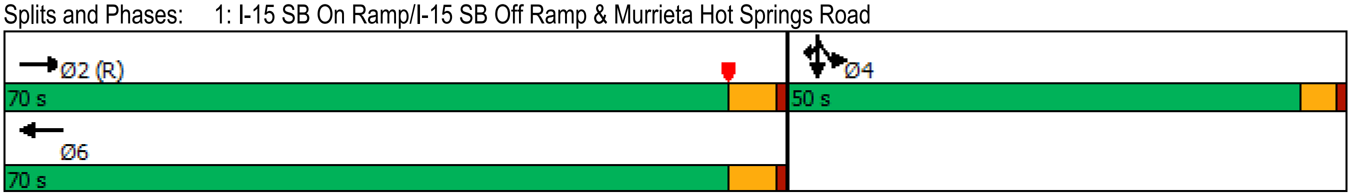
Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	96.0	96.0	24.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	90.7	90.7	19.8
Max Q Clear Time (g_c+I1), s	23.6	23.1	10.3
Green Ext Time (p_c), s	19.7	19.1	1.3

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	B

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2181	346	1501	913	0	213
Future Volume (vph)	2181	346	1501	913	0	213
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	70.0		70.0	50.0	50.0	50.0
Total Split (%)	58.3%		58.3%	41.7%	41.7%	41.7%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max		None	Max	Max	Max
Act Effct Green (s)	64.7	120.0	64.7	45.8	45.8	45.8
Actuated g/C Ratio	0.54	1.00	0.54	0.38	0.38	0.38
v/c Ratio	0.86	0.23	0.59	0.73	0.81	0.35
Control Delay	27.7	0.3	22.9	39.4	43.3	25.7
Queue Delay	2.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.7	0.3	22.9	39.4	43.3	25.7
LOS	C	A	C	D	D	C
Approach Delay	25.7		22.9		38.7	
Approach LOS	C		C		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 27.7	Intersection LOS: C
Intersection Capacity Utilization 112.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2181	346	0	1501	0	0	0	0	913	0	213
Future Volume (veh/h)	0	2181	346	0	1501	0	0	0	0	913	0	213
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2345	0	0	1614	0				1053	0	153
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2753		0	2753	0				1414	0	605
Arrive On Green	0.00	0.54	0.00	0.00	0.54	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2345	0	0	1614	0				1053	0	153
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	47.0	0.0	0.0	25.6	0.0				29.5	0.0	7.9
Cycle Q Clear(g_c), s	0.0	47.0	0.0	0.0	25.6	0.0				29.5	0.0	7.9
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2753		0	2753	0				1414	0	605
V/C Ratio(X)	0.00	0.85		0.00	0.59	0.00				0.74	0.00	0.25
Avail Cap(c_a), veh/h	0	2753		0	2753	0				1414	0	605
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	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.6	0.0	0.0	18.6	0.0				32.0	0.0	25.4
Incr Delay (d2), s/veh	0.0	3.6	0.0	0.0	0.3	0.0				3.6	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	18.0	0.0	0.0	9.4	0.0				13.7	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.1	0.0	0.0	19.0	0.0				35.6	0.0	26.4
LnGrp LOS	A	C		A	B	A				D	A	C
Approach Vol, veh/h		2345			1614						1206	
Approach Delay, s/veh		27.1			19.0						34.5	
Approach LOS		C			B						C	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		70.0		50.0		70.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		64.7		* 46		64.7						
Max Q Clear Time (g_c+I1), s		49.0		31.5		27.6						
Green Ext Time (p_c), s		11.1		5.6		10.2						
Intersection Summary												
HCM 6th Ctrl Delay			26.3									
HCM 6th LOS			C									

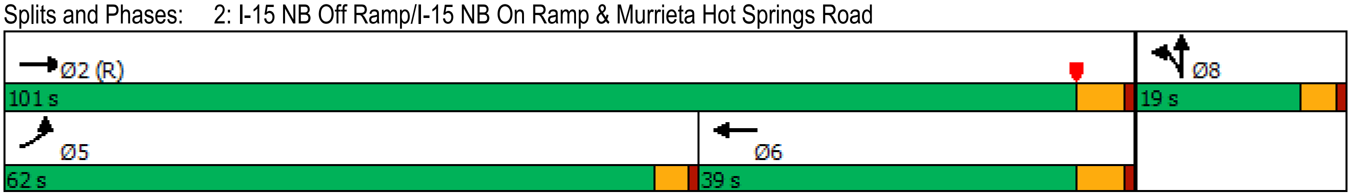
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	730	2389	1159	1319	285	0	211
Future Volume (vph)	730	2389	1159	1319	285	0	211
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	62.0	101.0	39.0		19.0	19.0	
Total Split (%)	51.7%	84.2%	32.5%		15.8%	15.8%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	C-Max	Max		None	None	
Act Effct Green (s)	55.3	96.8	37.4	120.0	13.7	13.7	120.0
Actuated g/C Ratio	0.46	0.81	0.31	1.00	0.11	0.11	1.00
v/c Ratio	0.93	0.61	0.76	0.87	0.77	0.78	0.14
Control Delay	51.6	3.3	42.2	20.2	77.2	77.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	3.3	42.2	20.2	77.2	77.8	0.2
LOS	D	A	D	C	E	E	A
Approach Delay		14.6	30.5			44.6	
Approach LOS		B	C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 23.5	Intersection LOS: C
Intersection Capacity Utilization 82.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	730	2389	0	0	1159	1319	285	0	211	0	0	0
Future Volume (veh/h)	730	2389	0	0	1159	1319	285	0	211	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	760	2489	0	0	1207	0	297	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	738	4183	0	0	1898		362	0				
Arrive On Green	0.83	1.00	0.00	0.00	0.37	0.00	0.10	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	760	2489	0	0	1207	0	297	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	49.7	0.0	0.0	0.0	23.3	0.0	9.8	0.0	0.0			
Cycle Q Clear(g_c), s	49.7	0.0	0.0	0.0	23.3	0.0	9.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	738	4183	0	0	1898		362	0				
V/C Ratio(X)	1.03	0.60	0.00	0.00	0.64		0.82	0.00				
Avail Cap(c_a), veh/h	861	4183	0	0	1898		439	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	10.3	0.0	0.0	0.0	31.0	0.0	52.8	0.0	0.0			
Incr Delay (d2), s/veh	37.9	0.6	0.0	0.0	1.6	0.0	10.0	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	11.7	0.2	0.0	0.0	9.4	0.0	4.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.2	0.6	0.0	0.0	32.7	0.0	62.8	0.0	0.0			
LnGrp LOS	F	A	A	A	C		E	A				
Approach Vol, veh/h		3249			1207			297				
Approach Delay, s/veh		11.8			32.7			62.8				
Approach LOS		B			C			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		103.6			55.7	47.9		16.4				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		95.7			58.0	33.7		14.8				
Max Q Clear Time (g_c+I1), s		2.0			51.7	25.3		11.8				
Green Ext Time (p_c), s		29.2			2.0	3.8		0.4				

Intersection Summary			
HCM 6th Ctrl Delay			20.3
HCM 6th LOS			C

Notes

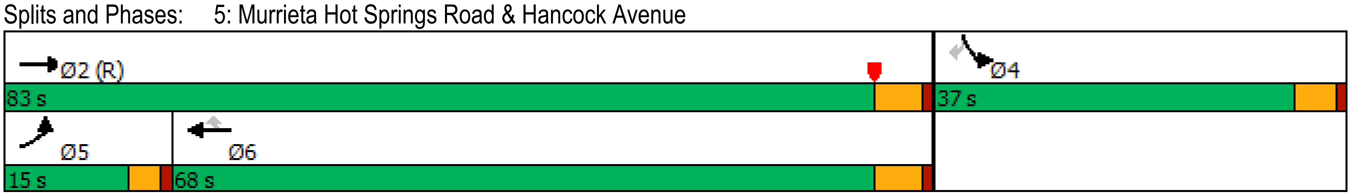
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	219	1854	2056	664	646	338
Future Volume (vph)	219	1854	2056	664	646	338
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.0	15.3	38.3	38.3	14.9	14.9
Total Split (s)	15.0	83.0	68.0	68.0	37.0	37.0
Total Split (%)	12.5%	69.2%	56.7%	56.7%	30.8%	30.8%
Yellow Time (s)	3.0	4.3	4.3	4.3	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	5.3	4.9	4.9
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?						
Recall Mode	None	C-Max	None	None	Max	Max
Act Effct Green (s)	10.9	77.7	62.8	62.8	32.1	32.1
Actuated g/C Ratio	0.09	0.65	0.52	0.52	0.27	0.27
v/c Ratio	0.82	0.50	0.87	0.68	0.82	0.69
Control Delay	79.3	13.6	19.1	2.9	50.3	28.9
Queue Delay	0.0	0.1	1.2	0.7	0.0	0.0
Total Delay	79.3	13.7	20.3	3.6	50.3	28.9
LOS	E	B	C	A	D	C
Approach Delay		20.6	16.2		43.0	
Approach LOS		C	B		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 22.3	Intersection LOS: C
Intersection Capacity Utilization 76.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Murrieta Hot Springs Road & Hancock Avenue



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	219	1854	2056	664	646	338
Future Volume (veh/h)	219	1854	2056	664	646	338
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	238	2015	2235	722	702	367
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	295	4166	2700	838	924	424
Arrive On Green	0.06	0.43	0.53	0.53	0.27	0.27
Sat Flow, veh/h	3456	6696	5274	1585	3456	1585
Grp Volume(v), veh/h	238	2015	2235	722	702	367
Grp Sat Flow(s),veh/h/ln	1728	1609	1702	1585	1728	1585
Q Serve(g_s), s	8.2	26.9	44.0	47.3	22.4	26.5
Cycle Q Clear(g_c), s	8.2	26.9	44.0	47.3	22.4	26.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	295	4166	2700	838	924	424
V/C Ratio(X)	0.81	0.48	0.83	0.86	0.76	0.87
Avail Cap(c_a), veh/h	317	4166	2700	838	924	424
HCM Platoon Ratio	0.67	0.67	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	55.6	19.6	23.7	24.5	40.4	41.9
Incr Delay (d2), s/veh	13.4	0.4	2.3	9.1	5.8	20.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	10.6	16.7	18.2	10.1	23.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	69.0	20.0	26.0	33.6	46.2	62.3
LnGrp LOS	E	C	C	C	D	E
Approach Vol, veh/h		2253	2957		1069	
Approach Delay, s/veh		25.2	27.8		51.8	
Approach LOS		C	C		D	

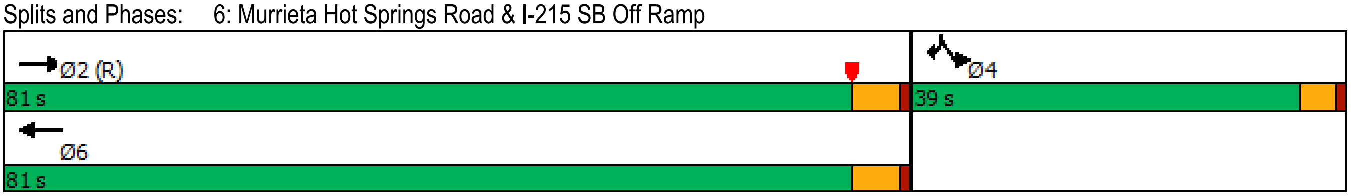
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		83.0		37.0	14.2	68.8
Change Period (Y+Rc), s		5.3		4.9	4.0	5.3
Max Green Setting (Gmax), s		77.7		32.1	11.0	62.7
Max Q Clear Time (g_c+I1), s		28.9		28.5	10.2	49.3
Green Ext Time (p_c), s		15.9		1.8	0.1	11.2

Intersection Summary			
HCM 6th Ctrl Delay			31.0
HCM 6th LOS			C

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2436	2349	699	327
Future Volume (vph)	2436	2349	699	327
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	81.0	81.0	39.0	39.0
Total Split (%)	67.5%	67.5%	32.5%	32.5%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	Max	None	None
Act Effct Green (s)	79.4	79.4	31.1	31.3
Actuated g/C Ratio	0.66	0.66	0.26	0.26
v/c Ratio	0.80	0.77	0.80	0.78
Control Delay	18.7	9.9	47.7	54.0
Queue Delay	0.0	0.2	0.0	0.0
Total Delay	18.7	10.1	47.7	54.0
LOS	B	B	D	D
Approach Delay	18.7	10.1	49.5	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 20.7	Intersection LOS: C
Intersection Capacity Utilization 129.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2436	2349	0	699	327
Future Volume (veh/h)	0	2436	2349	0	699	327
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2591	2499	0	744	348
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3435	3435	0	919	412
Arrive On Green	0.00	1.00	0.67	0.00	0.25	0.25
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2591	2499	0	744	348
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	0.0	37.6	0.0	22.7	24.1
Cycle Q Clear(g_c), s	0.0	0.0	37.6	0.0	22.7	24.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3435	3435	0	919	412
V/C Ratio(X)	0.00	0.75	0.73	0.00	0.81	0.85
Avail Cap(c_a), veh/h	0	3435	3435	0	1074	481
HCM Platoon Ratio	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	12.6	0.0	42.4	42.8
Incr Delay (d2), s/veh	0.0	1.6	1.4	0.0	4.1	11.6
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	0.5	12.4	0.0	10.8	11.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	1.6	14.0	0.0	46.5	54.4
LnGrp LOS	A	A	B	A	D	D
Approach Vol, veh/h		2591	2499		1092	
Approach Delay, s/veh		1.6	14.0		49.1	
Approach LOS		A	B		D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	86.0	34.0	86.0
Change Period (Y+Rc), s	5.3	* 4.2	5.3
Max Green Setting (Gmax), s	75.7	* 35	75.7
Max Q Clear Time (g_c+I1), s	2.0	26.1	39.6
Green Ext Time (p_c), s	30.6	3.7	20.7

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

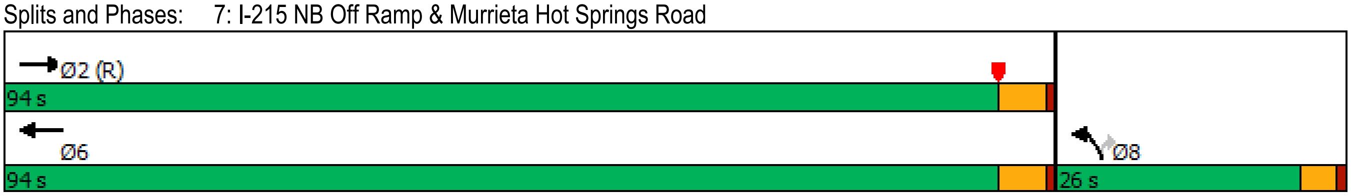
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2601	2451	164	318
Future Volume (vph)	2601	2451	164	318
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	94.0	94.0	26.0	26.0
Total Split (%)	78.3%	78.3%	21.7%	21.7%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	None	Max	Max
Act Effct Green (s)	88.7	88.7	21.8	21.8
Actuated g/C Ratio	0.74	0.74	0.18	0.18
v/c Ratio	0.77	0.73	0.26	0.62
Control Delay	5.6	10.3	43.3	49.6
Queue Delay	0.1	2.6	0.0	0.0
Total Delay	5.7	12.9	43.3	49.6
LOS	A	B	D	D
Approach Delay	5.7	12.9	47.5	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2601	0	0	2451	164	318
Future Volume (veh/h)	2601	0	0	2451	164	318
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2797	0	0	2635	176	342
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3774	0	0	3774	653	527
Arrive On Green	1.00	0.00	0.00	0.74	0.18	0.18
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2797	0	0	2635	176	342
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	0.0	0.0	0.0	33.4	5.1	13.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	33.4	5.1	13.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3774	0	0	3774	653	527
V/C Ratio(X)	0.74	0.00	0.00	0.70	0.27	0.65
Avail Cap(c_a), veh/h	3774	0	0	3774	653	527
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.4	42.2	45.5
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.6	1.0	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	9.6	2.3	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	1.3	0.0	0.0	9.0	43.3	51.6
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	2797			2635	518	
Approach Delay, s/veh	1.3			9.0	48.8	
Approach LOS	A			A	D	

Timer - Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		94.0				94.0		26.0
Change Period (Y+Rc), s		5.3				5.3		4.2
Max Green Setting (Gmax), s		88.7				88.7		21.8
Max Q Clear Time (g_c+I1), s		2.0				35.4		15.1
Green Ext Time (p_c), s		39.2				27.9		1.5

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	319	281	148	107	138	118	434	370	310
Average Queue (ft)	254	182	63	86	85	80	320	285	150
95th Queue (ft)	353	268	147	100	107	105	418	366	303
Link Distance (ft)				77	77	77	566	566	
Upstream Blk Time (%)				27	32	15			
Queuing Penalty (veh)				119	141	64			
Storage Bay Dist (ft)									480
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	T	T	R	L	LT
Maximum Queue (ft)	266	166	172	106	110	138	135	1256	201	180
Average Queue (ft)	147	89	60	18	32	49	61	42	136	110
95th Queue (ft)	218	156	130	63	93	120	133	414	187	160
Link Distance (ft)		563	563	563	1211	1211	1211	1211	925	925
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500									
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 3: Murrieta Hot Springs Road & Sparkman CT

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	R
Maximum Queue (ft)	194	331	75	262
Average Queue (ft)	159	84	4	121
95th Queue (ft)	217	297	27	196
Link Distance (ft)		1211	254	288
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	170			
Storage Blk Time (%)	19			
Queuing Penalty (veh)	79			

Intersection: 5: Murrieta Hot Springs Road & Hancock Avenue

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	R	L	L
Maximum Queue (ft)	176	224	233	240	230	75	147	190	243	140	162	175
Average Queue (ft)	110	117	109	144	165	30	50	109	159	71	159	174
95th Queue (ft)	161	177	181	203	224	70	125	172	214	114	168	176
Link Distance (ft)			414	414	414	414	335	335	335	335		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200	200									150	150
Storage Blk Time (%)		0	0								5	53
Queuing Penalty (veh)		0	1								11	114

Intersection: 5: Murrieta Hot Springs Road & Hancock Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	350
Average Queue (ft)	299
95th Queue (ft)	365
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	2

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	74	98	96	140	159	164	387	494	473
Average Queue (ft)	71	78	77	102	112	139	260	315	145
95th Queue (ft)	75	97	92	149	161	151	343	437	318
Link Distance (ft)	61	61	61	124	124	124	835	835	
Upstream Blk Time (%)	19	24	24	4	8	36			
Queuing Penalty (veh)	114	147	144	25	48	223			
Storage Bay Dist (ft)									470
Storage Blk Time (%)								0	0
Queuing Penalty (veh)								1	0

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	138	150	160	98	120	117	87	152	174	169
Average Queue (ft)	70	88	94	70	70	97	38	70	76	20
95th Queue (ft)	127	153	153	119	128	104	71	124	135	72
Link Distance (ft)	138	138	138	83	83	83	1043	1043		
Upstream Blk Time (%)	0	1	1	7	7	30				
Queuing Penalty (veh)	1	4	8	45	46	209				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 1547

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	338	319	319	108	114	94	582	550	354
Average Queue (ft)	321	272	175	86	82	71	383	333	195
95th Queue (ft)	329	352	306	104	104	102	531	466	366
Link Distance (ft)				77	77	77	566	566	
Upstream Blk Time (%)				19	20	10	1	0	
Queuing Penalty (veh)				95	99	50	0	0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								1	
Queuing Penalty (veh)								1	

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	525	625	563	160	130	192	194	74	197	169	173
Average Queue (ft)	437	239	138	78	55	81	96	4	143	120	24
95th Queue (ft)	563	601	379	154	110	150	171	31	179	171	113
Link Distance (ft)		563	563	563	1211	1211	1211	1211	925	925	
Upstream Blk Time (%)		3	0								
Queuing Penalty (veh)		27	1								
Storage Bay Dist (ft)	500										585
Storage Blk Time (%)	8										
Queuing Penalty (veh)	63										

Intersection: 3: Murrieta Hot Springs Road & Sparkman CT

Movement	EB	EB	EB	EB	WB	SB
Directions Served	L	T	T	T	TR	R
Maximum Queue (ft)	195	1070	1005	727	59	303
Average Queue (ft)	179	341	145	24	4	134
95th Queue (ft)	228	791	594	239	24	249
Link Distance (ft)		1211	1211	1211	254	288
Upstream Blk Time (%)						4
Queuing Penalty (veh)						0
Storage Bay Dist (ft)	170					
Storage Blk Time (%)	50					
Queuing Penalty (veh)	275					

Intersection: 5: Murrieta Hot Springs Road & Hancock Avenue

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	R	L	L
Maximum Queue (ft)	209	224	358	294	321	192	201	302	355	200	162	175
Average Queue (ft)	110	121	190	215	236	49	67	147	234	72	156	174
95th Queue (ft)	198	213	272	280	301	139	148	242	334	128	177	175
Link Distance (ft)			414	414	414	414	335	335	335	335		
Upstream Blk Time (%)									1			
Queuing Penalty (veh)									3			
Storage Bay Dist (ft)	200	200									150	150
Storage Blk Time (%)	2	4	1								3	51
Queuing Penalty (veh)	9	17	2								9	174

Intersection: 5: Murrieta Hot Springs Road & Hancock Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	339
Average Queue (ft)	304
95th Queue (ft)	318
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	8
Queuing Penalty (veh)	49

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	90	119	99	138	161	151	874	874	495
Average Queue (ft)	71	79	75	86	102	138	564	596	296
95th Queue (ft)	81	98	89	136	154	149	992	1007	637
Link Distance (ft)	61	61	61	124	124	124	835	835	
Upstream Blk Time (%)	15	22	26	2	5	32	14	26	
Queuing Penalty (veh)	121	179	215	16	40	250	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								35	2
Queuing Penalty (veh)								57	10

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	146	164	189	116	122	137	69	128	192	201
Average Queue (ft)	110	119	120	78	79	98	38	72	143	107
95th Queue (ft)	171	174	170	120	120	111	71	114	196	202
Link Distance (ft)	138	138	138	83	83	83	1043	1043		
Upstream Blk Time (%)	4	3	4	9	7	26				
Queuing Penalty (veh)	35	28	37	73	58	210				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

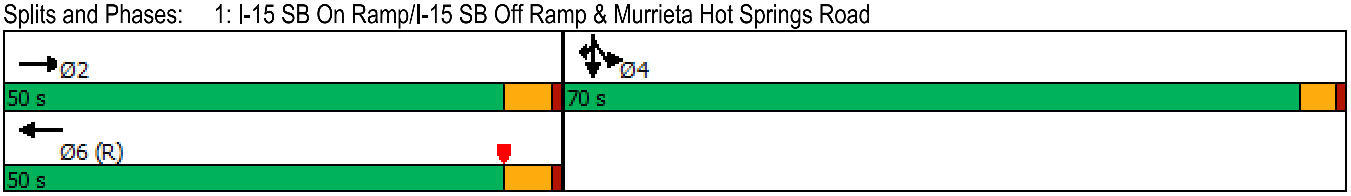
Zone wide Queuing Penalty: 2204

EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2025) WITH TRIANGLE PROJECT (CURRENT DEVELOPMENT PLAN), NO INTERCHANGE IMPROVEMENTS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1036	317	1376	1259	0	336
Future Volume (vph)	1036	317	1376	1259	0	336
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	50.0		50.0	70.0	70.0	70.0
Total Split (%)	41.7%		41.7%	58.3%	58.3%	58.3%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	44.7	120.0	44.7	65.8	65.8	65.8
Actuated g/C Ratio	0.37	1.00	0.37	0.55	0.55	0.55
v/c Ratio	0.58	0.21	0.77	0.71	0.76	0.38
Control Delay	31.7	0.3	37.6	25.0	27.3	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.7	0.3	37.6	25.0	27.3	16.1
LOS	C	A	D	C	C	B
Approach Delay	24.3		37.6		24.2	
Approach LOS	C		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 28.5	Intersection LOS: C
Intersection Capacity Utilization 102.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1036	317	0	1376	0	0	0	0	1259	0	336
Future Volume (veh/h)	0	1036	317	0	1376	0	0	0	0	1259	0	336
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1102	0	0	1464	0				1450	0	238
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1902		0	1902	0				2032	0	869
Arrive On Green	0.00	0.37	0.00	0.00	0.25	0.00				0.55	0.00	0.55
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1102	0	0	1464	0				1450	0	238
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	20.7	0.0	0.0	32.0	0.0				34.9	0.0	9.6
Cycle Q Clear(g_c), s	0.0	20.7	0.0	0.0	32.0	0.0				34.9	0.0	9.6
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1902		0	1902	0				2032	0	869
V/C Ratio(X)	0.00	0.58		0.00	0.77	0.00				0.71	0.00	0.27
Avail Cap(c_a), veh/h	0	1902		0	1902	0				2032	0	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	30.1	0.0	0.0	40.2	0.0				20.1	0.0	14.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	3.1	0.0				2.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.2	0.0	0.0	14.2	0.0				15.1	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.6	0.0	0.0	43.3	0.0				22.3	0.0	15.2
LnGrp LOS	A	C		A	D	A				C	A	B
Approach Vol, veh/h		1102			1464						1688	
Approach Delay, s/veh		30.6			43.3						21.3	
Approach LOS		C			D						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.0		70.0		50.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		44.7		* 66		44.7						
Max Q Clear Time (g_c+I1), s		22.7		36.9		34.0						
Green Ext Time (p_c), s		5.4		11.6		5.4						

Intersection Summary			
HCM 6th Ctrl Delay			31.3
HCM 6th LOS			C

Notes

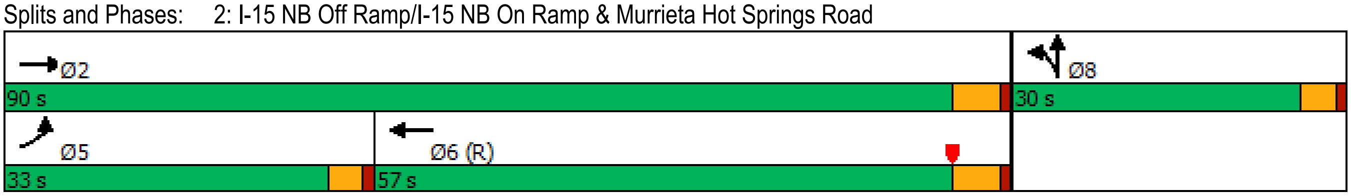
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	209	2083	1285	1024	329	0	276
Future Volume (vph)	209	2083	1285	1024	329	0	276
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	33.0	90.0	57.0		30.0	30.0	
Total Split (%)	27.5%	75.0%	47.5%		25.0%	25.0%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	20.6	92.5	67.9	120.0	18.0	18.0	120.0
Actuated g/C Ratio	0.17	0.77	0.57	1.00	0.15	0.15	1.00
v/c Ratio	0.75	0.58	0.49	0.70	0.71	0.71	0.19
Control Delay	57.2	3.9	20.7	13.0	63.4	63.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	3.9	20.7	13.0	63.4	63.4	0.3
LOS	E	A	C	B	E	E	A
Approach Delay		8.8	17.3			34.6	
Approach LOS		A	B			C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 15.6 Intersection LOS: B
Intersection Capacity Utilization 57.3% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	2083	0	0	1285	1024	329	0	276	0	0	0
Future Volume (veh/h)	209	2083	0	0	1285	1024	329	0	276	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	227	2264	0	0	1397	0	358	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	261	3604	0	0	2687		446	0				
Arrive On Green	0.15	0.71	0.00	0.00	0.53	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	227	2264	0	0	1397	0	358	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	15.0	28.1	0.0	0.0	21.4	0.0	11.7	0.0	0.0			
Cycle Q Clear(g_c), s	15.0	28.1	0.0	0.0	21.4	0.0	11.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	261	3604	0	0	2687		446	0				
V/C Ratio(X)	0.87	0.63	0.00	0.00	0.52		0.80	0.00				
Avail Cap(c_a), veh/h	430	3604	0	0	2687		766	0				
HCM Platoon Ratio	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	0.00	0.00	0.53	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	50.1	9.3	0.0	0.0	18.5	0.0	51.0	0.0	0.0			
Incr Delay (d2), s/veh	10.3	0.8	0.0	0.0	0.4	0.0	3.4	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	7.2	8.8	0.0	0.0	7.9	0.0	5.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	10.2	0.0	0.0	18.9	0.0	54.4	0.0	0.0			
LnGrp LOS	E	B	A	A	B		D	A				
Approach Vol, veh/h		2491			1397			358				
Approach Delay, s/veh		14.7			18.9			54.4				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		90.0			21.6	68.4		19.2				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		84.7			29.0	51.7		25.8				
Max Q Clear Time (g_c+I1), s		30.1			17.0	23.4		13.7				
Green Ext Time (p_c), s		20.6			0.6	7.8		1.3				

Intersection Summary		
HCM 6th Ctrl Delay		19.5
HCM 6th LOS		B

Notes

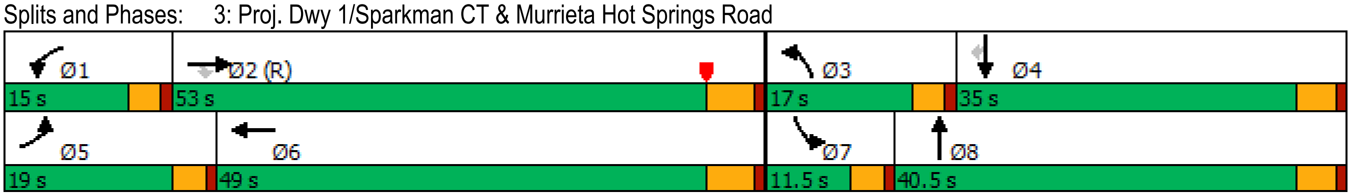
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	275	1836	194	194	1767	232	10	27	10	265
Future Volume (vph)	275	1836	194	194	1767	232	10	27	10	265
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	19.0	53.0	53.0	15.0	49.0	17.0	40.5	11.5	35.0	35.0
Total Split (%)	15.8%	44.2%	44.2%	12.5%	40.8%	14.2%	33.8%	9.6%	29.2%	29.2%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	C-Max	None	Max	None	Max	None	Max	Max
Act Effct Green (s)	14.0	48.1	48.1	10.6	44.7	12.4	40.7	7.1	31.0	31.0
Actuated g/C Ratio	0.12	0.40	0.40	0.09	0.37	0.10	0.34	0.06	0.26	0.26
v/c Ratio	0.72	0.75	0.28	0.69	0.81	0.71	0.09	0.14	0.01	0.68
Control Delay	56.7	29.1	4.8	77.5	19.9	63.9	8.3	55.1	33.7	50.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.7	29.1	4.8	77.5	19.9	63.9	8.3	55.1	33.7	50.0
LOS	E	C	A	E	B	E	A	E	C	D
Approach Delay		30.3			25.6		48.6		49.9	
Approach LOS		C			C		D		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 30.8	Intersection LOS: C
Intersection Capacity Utilization 61.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

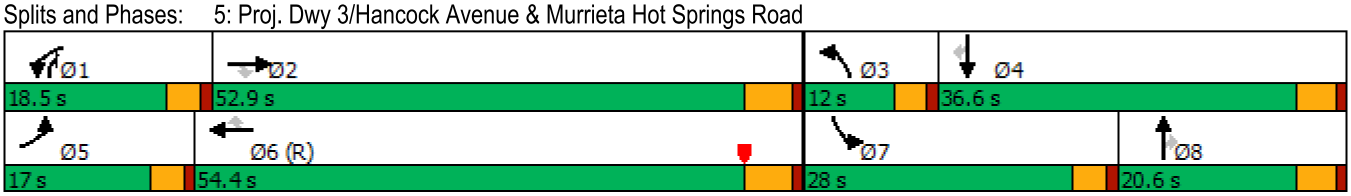


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	275	1836	194	194	1767	52	232	10	78	27	10	265
Future Volume (veh/h)	275	1836	194	194	1767	52	232	10	78	27	10	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	1933	211	211	1860	55	252	11	85	28	11	279
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	2773	683	265	2629	78	311	547	488	122	900	402
Arrive On Green	0.10	0.43	0.43	0.15	0.81	0.81	0.09	0.31	0.31	0.04	0.25	0.25
Sat Flow, veh/h	3456	6434	1585	3456	6470	191	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	289	1933	211	211	1387	528	252	11	85	28	11	279
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1836	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.8	29.3	10.5	7.1	15.2	15.2	8.6	0.5	4.7	0.9	0.3	19.1
Cycle Q Clear(g_c), s	9.8	29.3	10.5	7.1	15.2	15.2	8.6	0.5	4.7	0.9	0.3	19.1
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	2773	683	265	1961	746	311	547	488	122	900	402
V/C Ratio(X)	0.83	0.70	0.31	0.80	0.71	0.71	0.81	0.02	0.17	0.23	0.01	0.69
Avail Cap(c_a), veh/h	432	2773	683	317	1961	746	374	547	488	216	900	402
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	27.8	22.4	49.9	8.1	8.1	53.6	28.9	30.4	56.3	33.6	40.6
Incr Delay (d2), s/veh	8.8	1.2	1.0	11.4	2.2	5.6	10.7	0.1	0.8	0.9	0.0	9.5
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	4.6	10.9	4.1	3.2	3.0	4.1	4.2	0.2	1.9	0.4	0.1	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	29.0	23.4	61.3	10.3	13.7	64.3	29.0	31.1	57.2	33.6	50.1
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	C	D
Approach Vol, veh/h		2433			2126			348			318	
Approach Delay, s/veh		32.4			16.2			55.1			50.2	
Approach LOS		C			B			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	57.0	14.8	35.0	16.1	54.1	8.2	41.5				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	11.0	47.7	13.0	30.4	15.0	43.7	7.5	35.9				
Max Q Clear Time (g_c+I1), s	9.1	31.3	10.6	21.1	11.8	17.2	2.9	6.7				
Green Ext Time (p_c), s	0.1	12.0	0.2	0.7	0.3	14.8	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			28.4									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	1420	135	232	1753	579	108	93	187	547	116	214
Future Volume (vph)	295	1420	135	232	1753	579	108	93	187	547	116	214
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	17.0	52.9	52.9	18.5	54.4	54.4	12.0	20.6	18.5	28.0	36.6	36.6
Total Split (%)	14.2%	44.1%	44.1%	15.4%	45.3%	45.3%	10.0%	17.2%	15.4%	23.3%	30.5%	30.5%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	13.0	48.9	48.9	13.2	49.1	49.1	7.8	16.0	33.8	24.0	32.2	32.2
Actuated g/C Ratio	0.11	0.41	0.41	0.11	0.41	0.41	0.06	0.13	0.28	0.20	0.27	0.27
v/c Ratio	0.90	0.60	0.20	0.67	0.93	0.68	0.53	0.41	0.24	0.91	0.40	0.32
Control Delay	95.5	14.9	1.4	67.8	32.0	4.3	63.2	53.2	17.9	66.5	35.2	6.9
Queue Delay	0.0	0.0	0.0	0.0	4.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.5	14.9	1.4	67.8	36.0	4.6	63.2	53.2	17.9	66.5	35.2	6.9
LOS	F	B	A	E	D	A	E	D	B	E	D	A
Approach Delay		26.7			31.8			39.0			49.6	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 33.4	Intersection LOS: C
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	1420	135	232	1753	579	108	93	187	547	116	214
Future Volume (veh/h)	295	1420	135	232	1753	579	108	93	187	547	116	214
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1511	147	252	1865	616	117	101	203	582	202	177
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	2733	673	309	2089	649	198	232	595	713	499	423
Arrive On Green	0.21	0.85	0.85	0.18	0.82	0.82	0.06	0.12	0.12	0.20	0.27	0.27
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	314	1511	147	252	1865	616	117	101	203	582	202	177
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	10.5	8.0	2.1	8.4	29.5	38.0	4.0	6.0	7.4	18.7	10.7	11.1
Cycle Q Clear(g_c), s	10.5	8.0	2.1	8.4	29.5	38.0	4.0	6.0	7.4	18.7	10.7	11.1
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	363	2733	673	309	2089	649	198	232	595	713	499	423
V/C Ratio(X)	0.87	0.55	0.22	0.82	0.89	0.95	0.59	0.44	0.34	0.82	0.41	0.42
Avail Cap(c_a), veh/h	374	2733	673	418	2089	649	230	249	621	713	499	423
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	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	46.6	5.8	5.3	48.3	9.1	9.9	55.2	48.7	40.1	45.9	36.2	36.3
Incr Delay (d2), s/veh	18.3	0.2	0.2	8.9	6.3	25.0	3.0	1.3	0.3	10.0	2.4	3.0
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	4.9	1.7	0.7	3.6	4.7	8.1	1.8	2.9	2.6	9.2	5.2	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.9	6.0	5.5	57.2	15.5	34.8	58.2	50.0	40.4	55.9	38.6	39.4
LnGrp LOS	E	A	A	E	B	C	E	D	D	E	D	D
Approach Vol, veh/h		1972			2733			421			961	
Approach Delay, s/veh		15.4			23.7			47.6			49.2	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	56.3	10.9	36.6	16.6	54.4	28.0	19.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	14.5	47.6	8.0	32.0	13.0	49.1	24.0	16.0
Max Q Clear Time (g_c+I1), s	10.4	10.0	6.0	13.1	12.5	40.0	20.7	9.4
Green Ext Time (p_c), s	0.3	10.1	0.1	1.8	0.1	7.2	0.9	0.7

Intersection Summary	
HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

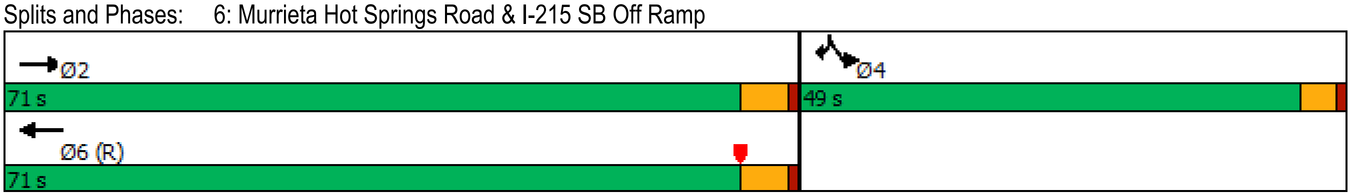
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2039	2046	665	602
Future Volume (vph)	2039	2046	665	602
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	71.0	71.0	49.0	49.0
Total Split (%)	59.2%	59.2%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	70.9	70.9	39.6	39.8
Actuated g/C Ratio	0.59	0.59	0.33	0.33
v/c Ratio	0.75	0.75	0.76	0.82
Control Delay	15.4	18.1	39.7	50.1
Queue Delay	0.0	0.3	0.0	0.0
Total Delay	15.4	18.5	39.7	50.1
LOS	B	B	D	D
Approach Delay	15.4	18.5	42.9	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 122.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2039	2046	0	665	602
Future Volume (veh/h)	0	2039	2046	0	665	602
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2169	2177	0	885	449
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2796	2796	0	1178	527
Arrive On Green	0.00	0.55	1.00	0.00	0.32	0.32
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2169	2177	0	885	449
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	40.1	0.0	0.0	25.7	30.6
Cycle Q Clear(g_c), s	0.0	40.1	0.0	0.0	25.7	30.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2796	2796	0	1178	527
V/C Ratio(X)	0.00	0.78	0.78	0.00	0.75	0.85
Avail Cap(c_a), veh/h	0	2796	2796	0	1383	618
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	0.0	0.0	36.7	38.2
Incr Delay (d2), s/veh	0.0	2.2	2.2	0.0	2.0	9.8
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	15.1	0.6	0.0	11.9	13.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	23.5	2.2	0.0	38.7	48.0
LnGrp LOS	A	C	A	A	D	D
Approach Vol, veh/h		2169	2177		1334	
Approach Delay, s/veh		23.5	2.2		41.8	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		71.0		42.3		71.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		65.7		* 45		65.7
Max Q Clear Time (g_c+I1), s		42.1		32.6		2.0
Green Ext Time (p_c), s		13.3		5.6		19.7

Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

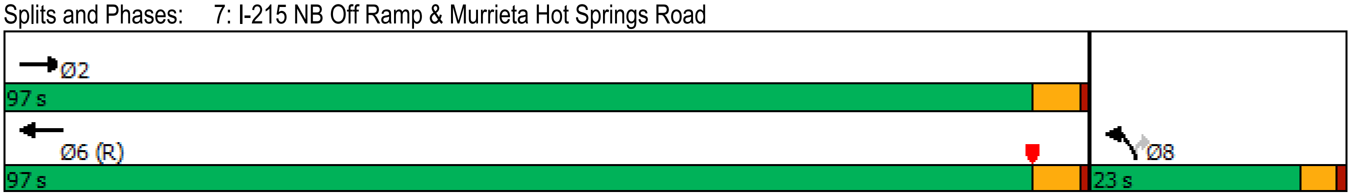
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2189	2182	232	214
Future Volume (vph)	2189	2182	232	214
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	19.2%	19.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	91.7	91.7	18.8	18.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.61	0.61	0.41	0.46
Control Delay	7.2	7.1	48.0	42.8
Queue Delay	0.0	1.0	0.0	0.0
Total Delay	7.2	8.1	48.0	42.8
LOS	A	A	D	D
Approach Delay	7.2	8.1	45.5	
Approach LOS	A	A	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

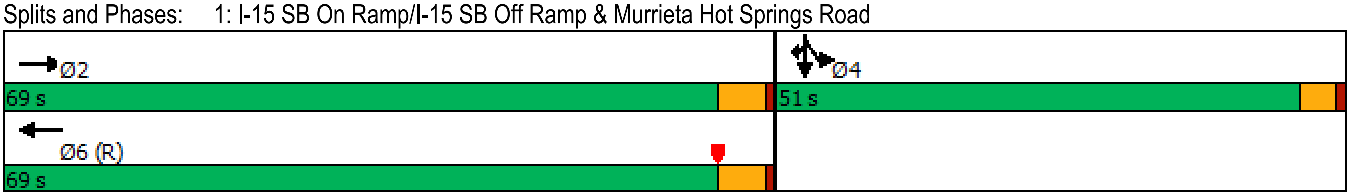


Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	2189	0	0	2182	232	214		
Future Volume (veh/h)	2189	0	0	2182	232	214		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach	No			No	No			
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945		
Adj Flow Rate, veh/h	2304	0	0	2297	244	225		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	3902	0	0	3902	563	455		
Arrive On Green	0.76	0.00	0.00	0.76	0.16	0.16		
Sat Flow, veh/h	5443	0	0	5443	3594	2901		
Grp Volume(v), veh/h	2304	0	0	2297	244	225		
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451		
Q Serve(g_s), s	23.3	0.0	0.0	23.1	7.4	8.5		
Cycle Q Clear(g_c), s	23.3	0.0	0.0	23.1	7.4	8.5		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	3902	0	0	3902	563	455		
V/C Ratio(X)	0.59	0.00	0.00	0.59	0.43	0.50		
Avail Cap(c_a), veh/h	3902	0	0	3902	563	455		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	6.1	0.0	0.0	6.1	45.8	46.3		
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.7	2.4	3.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	6.3	3.5	3.3		
Unsig. Movement Delay, s/veh								
LnGrp Delay(d),s/veh	6.7	0.0	0.0	6.7	48.2	50.1		
LnGrp LOS	A	A	A	A	D	D		
Approach Vol, veh/h	2304			2297	469			
Approach Delay, s/veh	6.7			6.7	49.1			
Approach LOS	A			A	D			
Timer - Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		97.0				97.0		23.0
Change Period (Y+Rc), s		5.3				5.3		4.2
Max Green Setting (Gmax), s		91.7				91.7		18.8
Max Q Clear Time (g_c+I1), s		25.3				25.1		10.5
Green Ext Time (p_c), s		22.5				22.4		1.5
Intersection Summary								
HCM 6th Ctrl Delay			10.7					
HCM 6th LOS			B					

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2262	346	1577	1045	0	213
Future Volume (vph)	2262	346	1577	1045	0	213
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	69.0		69.0	51.0	51.0	51.0
Total Split (%)	57.5%		57.5%	42.5%	42.5%	42.5%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	63.7	120.0	63.7	46.8	46.8	46.8
Actuated g/C Ratio	0.53	1.00	0.53	0.39	0.39	0.39
v/c Ratio	0.90	0.23	0.63	0.82	0.90	0.34
Control Delay	31.1	0.3	21.5	44.1	51.8	25.0
Queue Delay	13.9	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	0.3	21.5	44.1	51.8	25.0
LOS	D	A	C	D	D	C
Approach Delay	39.1		21.5		44.5	
Approach LOS	D		C		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 35.3	Intersection LOS: D
Intersection Capacity Utilization 121.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2262	346	0	1577	0	0	0	0	1045	0	213
Future Volume (veh/h)	0	2262	346	0	1577	0	0	0	0	1045	0	213
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2432	0	0	1696	0				1195	0	153
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2710		0	2710	0				1445	0	618
Arrive On Green	0.00	0.53	0.00	0.00	0.71	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2432	0	0	1696	0				1195	0	153
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	51.2	0.0	0.0	21.0	0.0				34.8	0.0	7.8
Cycle Q Clear(g_c), s	0.0	51.2	0.0	0.0	21.0	0.0				34.8	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2710		0	2710	0				1445	0	618
V/C Ratio(X)	0.00	0.90		0.00	0.63	0.00				0.83	0.00	0.25
Avail Cap(c_a), veh/h	0	2710		0	2710	0				1445	0	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.2	0.0	0.0	11.4	0.0				33.0	0.0	24.7
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.0	1.1	0.0				5.6	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	19.8	0.0	0.0	5.7	0.0				16.5	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.7	0.0	0.0	12.5	0.0				38.5	0.0	25.7
LnGrp LOS	A	C		A	B	A				D	A	C
Approach Vol, veh/h		2432			1696						1348	
Approach Delay, s/veh		29.7			12.5						37.1	
Approach LOS		C			B						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		69.0		51.0		69.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		63.7		* 47		63.7						
Max Q Clear Time (g_c+I1), s		53.2		36.8		23.0						
Green Ext Time (p_c), s		8.3		5.1		11.3						
Intersection Summary												
HCM 6th Ctrl Delay			26.2									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

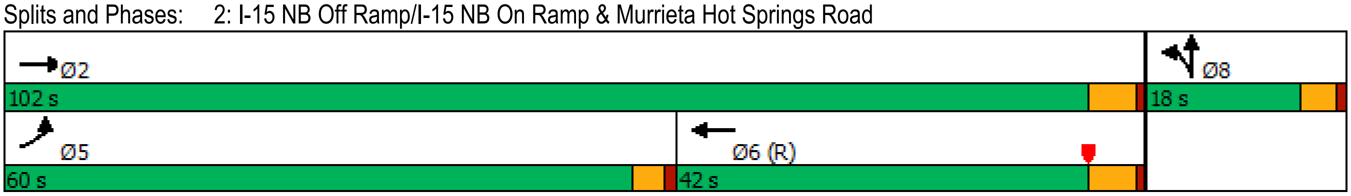
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	730	2601	1337	1442	285	0	321
Future Volume (vph)	730	2601	1337	1442	285	0	321
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	60.0	102.0	42.0		18.0	18.0	
Total Split (%)	50.0%	85.0%	35.0%		15.0%	15.0%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	54.3	97.3	39.1	120.0	13.2	13.2	120.0
Actuated g/C Ratio	0.45	0.81	0.33	1.00	0.11	0.11	1.00
v/c Ratio	0.95	0.66	0.84	0.95	0.80	0.81	0.21
Control Delay	53.6	3.6	36.4	31.7	82.5	83.2	0.3
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	3.7	36.4	31.7	82.5	83.2	0.3
LOS	D	A	D	C	F	F	A
Approach Delay		14.6	34.0			39.2	
Approach LOS		B	C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 24.8	Intersection LOS: C
Intersection Capacity Utilization 85.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	730	2601	0	0	1337	1442	285	0	321	0	0	0
Future Volume (veh/h)	730	2601	0	0	1337	1442	285	0	321	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	760	2709	0	0	1393	0	297	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	790	4115	0	0	1681		359	0				
Arrive On Green	0.44	0.81	0.00	0.00	0.55	0.00	0.10	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	760	2709	0	0	1393	0	297	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	49.7	26.3	0.0	0.0	27.1	0.0	9.8	0.0	0.0			
Cycle Q Clear(g_c), s	49.7	26.3	0.0	0.0	27.1	0.0	9.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	790	4115	0	0	1681		359	0				
V/C Ratio(X)	0.96	0.66	0.00	0.00	0.83		0.83	0.00				
Avail Cap(c_a), veh/h	831	4115	0	0	1681		410	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.44	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	32.4	4.8	0.0	0.0	24.2	0.0	52.9	0.0	0.0			
Incr Delay (d2), s/veh	22.0	0.8	0.0	0.0	2.2	0.0	11.9	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	24.7	6.0	0.0	0.0	8.1	0.0	5.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.4	5.7	0.0	0.0	26.4	0.0	64.8	0.0	0.0			
LnGrp LOS	D	A	A	A	C		E	A				
Approach Vol, veh/h		3469			1393			297				
Approach Delay, s/veh		16.3			26.4			64.8				
Approach LOS		B			C			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		102.0			57.2	44.8		16.3				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		96.7			56.0	36.7		13.8				
Max Q Clear Time (g_c+I1), s		28.3			51.7	29.1		11.8				
Green Ext Time (p_c), s		33.0			1.5	4.0		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			21.9									
HCM 6th LOS			C									

Notes

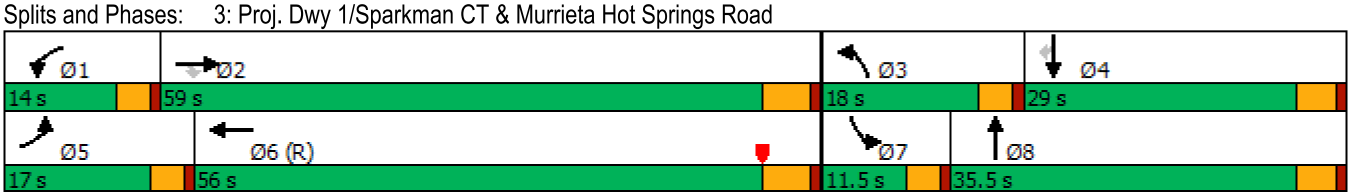
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	272	2316	200	200	2198	281	10	23	10	233
Future Volume (vph)	272	2316	200	200	2198	281	10	23	10	233
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	17.0	59.0	59.0	14.0	56.0	18.0	35.5	11.5	29.0	29.0
Total Split (%)	14.2%	49.2%	49.2%	11.7%	46.7%	15.0%	29.6%	9.6%	24.2%	24.2%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	12.6	53.9	53.9	9.8	51.1	13.4	35.7	7.1	25.0	25.0
Actuated g/C Ratio	0.10	0.45	0.45	0.08	0.43	0.11	0.30	0.06	0.21	0.21
v/c Ratio	0.77	0.82	0.25	0.73	0.86	0.75	0.11	0.11	0.01	0.72
Control Delay	62.2	27.6	3.5	68.8	20.9	64.7	8.6	54.8	38.4	58.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.2	27.6	3.5	68.8	20.9	64.7	8.6	54.8	38.4	58.2
LOS	E	C	A	E	C	E	A	D	D	E
Approach Delay		29.3			24.8		49.6		57.2	
Approach LOS		C			C		D		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 30.0	Intersection LOS: C
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

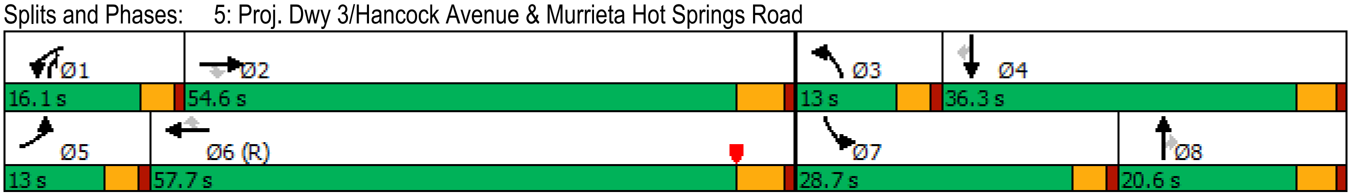


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	2316	200	200	2198	77	281	10	93	23	10	233
Future Volume (veh/h)	272	2316	200	200	2198	77	281	10	93	23	10	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	278	2363	204	204	2243	79	287	10	95	23	10	238
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	2879	709	256	2731	96	346	484	431	108	723	322
Arrive On Green	0.10	0.45	0.45	0.15	0.85	0.85	0.10	0.27	0.27	0.03	0.20	0.20
Sat Flow, veh/h	3456	6434	1585	3456	6429	226	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	278	2363	204	204	1683	639	287	10	95	23	10	238
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1830	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.5	38.5	9.8	6.8	20.8	20.9	9.8	0.5	5.6	0.8	0.3	16.9
Cycle Q Clear(g_c), s	9.5	38.5	9.8	6.8	20.8	20.9	9.8	0.5	5.6	0.8	0.3	16.9
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	2879	709	256	2050	777	346	484	431	108	723	322
V/C Ratio(X)	0.83	0.82	0.29	0.80	0.82	0.82	0.83	0.02	0.22	0.21	0.01	0.74
Avail Cap(c_a), veh/h	374	2879	709	288	2050	777	403	484	431	216	723	322
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	28.9	21.0	50.2	6.8	6.8	53.0	32.0	33.8	56.7	38.2	44.8
Incr Delay (d2), s/veh	10.5	2.1	0.8	13.0	3.8	9.5	12.0	0.1	1.2	1.0	0.0	14.1
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	4.5	14.3	3.8	3.2	3.2	4.9	4.8	0.2	2.3	0.4	0.1	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.7	31.1	21.8	63.2	10.6	16.3	65.0	32.0	35.0	57.7	38.2	58.9
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	D	E
Approach Vol, veh/h		2845			2526			392			271	
Approach Delay, s/veh		33.6			16.3			56.9			58.0	
Approach LOS		C			B			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	59.0	16.0	29.0	15.6	56.3	7.7	37.3				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	10.0	53.7	14.0	24.4	13.0	50.7	7.5	30.9				
Max Q Clear Time (g_c+I1), s	8.8	40.5	11.8	18.9	11.5	22.9	2.8	7.6				
Green Ext Time (p_c), s	0.1	11.4	0.2	0.4	0.1	19.0	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			29.0									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1923	140	242	2145	664	131	112	225	646	120	338
Future Volume (vph)	219	1923	140	242	2145	664	131	112	225	646	120	338
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	13.0	54.6	54.6	16.1	57.7	57.7	13.0	20.6	16.1	28.7	36.3	36.3
Total Split (%)	10.8%	45.5%	45.5%	13.4%	48.1%	48.1%	10.8%	17.2%	13.4%	23.9%	30.3%	30.3%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	9.0	49.6	49.6	11.8	52.4	52.4	8.7	16.0	32.4	24.7	32.0	32.0
Actuated g/C Ratio	0.08	0.41	0.41	0.10	0.44	0.44	0.07	0.13	0.27	0.21	0.27	0.27
v/c Ratio	0.99	0.82	0.21	0.78	1.09	0.78	0.57	0.49	0.30	1.07	0.55	0.48
Control Delay	118.5	14.1	1.5	70.1	69.5	6.5	63.3	55.7	22.0	99.3	37.1	16.4
Queue Delay	0.0	0.0	0.0	0.0	5.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.5	14.1	1.5	70.1	75.4	7.5	63.3	55.7	22.0	99.3	37.1	16.4
LOS	F	B	A	E	E	A	E	E	C	F	D	B
Approach Delay		23.3			60.2			41.6			69.4	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 48.2	Intersection LOS: D
Intersection Capacity Utilization 89.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	1923	140	242	2145	664	131	112	225	646	120	338
Future Volume (veh/h)	219	1923	140	242	2145	664	131	112	225	646	120	338
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	238	2090	152	263	2332	722	142	122	245	702	308	248
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	2706	667	315	2230	692	200	217	578	733	494	419
Arrive On Green	0.08	0.42	0.42	0.18	0.87	0.87	0.06	0.12	0.12	0.21	0.26	0.26
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	238	2090	152	263	2332	722	142	122	245	702	308	248
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	8.2	33.5	7.4	8.8	52.4	52.4	4.8	7.4	9.2	23.4	17.4	16.4
Cycle Q Clear(g_c), s	8.2	33.5	7.4	8.8	52.4	52.4	4.8	7.4	9.2	23.4	17.4	16.4
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	259	2706	667	315	2230	692	200	217	578	733	494	419
V/C Ratio(X)	0.92	0.77	0.23	0.84	1.05	1.04	0.71	0.56	0.42	0.96	0.62	0.59
Avail Cap(c_a), veh/h	259	2706	667	348	2230	692	259	249	626	733	494	419
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	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	55.1	29.8	22.3	48.2	7.6	7.6	55.5	50.1	41.3	47.1	38.9	38.5
Incr Delay (d2), s/veh	34.9	1.4	0.2	14.9	32.4	46.0	6.2	2.3	0.5	24.3	5.8	6.0
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	4.7	12.5	2.8	4.0	9.5	11.6	2.3	3.6	3.2	12.7	8.7	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.0	31.3	22.5	63.1	40.0	53.6	61.7	52.4	41.8	71.4	44.7	44.6
LnGrp LOS	F	C	C	E	F	F	E	D	D	E	D	D
Approach Vol, veh/h		2480			3317			509			1258	
Approach Delay, s/veh		36.4			44.8			49.9			59.6	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	55.8	10.9	36.3	13.0	57.7	28.7	18.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	12.1	49.3	9.0	31.7	9.0	52.4	24.7	16.0
Max Q Clear Time (g_c+I1), s	10.8	35.5	6.8	19.4	10.2	54.4	25.4	11.2
Green Ext Time (p_c), s	0.1	9.4	0.1	2.3	0.0	0.0	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	44.8
HCM 6th LOS	D

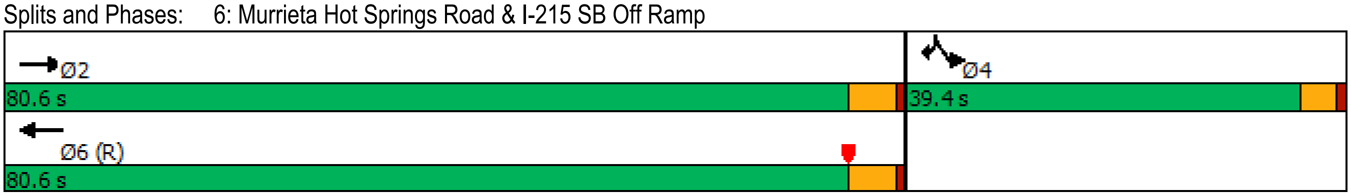
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2670	2526	699	473
Future Volume (vph)	2670	2526	699	473
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	80.6	80.6	39.4	39.4
Total Split (%)	67.2%	67.2%	32.8%	32.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	76.9	76.9	33.6	33.8
Actuated g/C Ratio	0.64	0.64	0.28	0.28
v/c Ratio	0.90	0.85	0.82	0.89
Control Delay	18.7	14.7	47.5	64.5
Queue Delay	0.0	17.1	0.0	0.0
Total Delay	18.7	31.8	47.5	64.5
LOS	B	C	D	E
Approach Delay	18.7	31.8	52.8	
Approach LOS	B	C	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 30.2	Intersection LOS: C
Intersection Capacity Utilization 139.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2670	2526	0	699	473
Future Volume (veh/h)	0	2670	2526	0	699	473
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2840	2687	0	826	416
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3204	3204	0	1034	463
Arrive On Green	0.00	0.63	1.00	0.00	0.28	0.28
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2840	2687	0	826	416
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	56.0	0.0	0.0	24.8	29.1
Cycle Q Clear(g_c), s	0.0	56.0	0.0	0.0	24.8	29.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3204	3204	0	1034	463
V/C Ratio(X)	0.00	0.89	0.84	0.00	0.80	0.90
Avail Cap(c_a), veh/h	0	3204	3204	0	1087	486
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	18.8	0.0	0.0	40.1	41.5
Incr Delay (d2), s/veh	0.0	4.1	2.8	0.0	4.1	18.9
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	20.1	0.8	0.0	11.8	14.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	22.8	2.8	0.0	44.3	60.5
LnGrp LOS	A	C	A	A	D	E
Approach Vol, veh/h		2840	2687		1242	
Approach Delay, s/veh		22.8	2.8		49.7	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		80.6		37.7		80.6
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		75.3		* 35		75.3
Max Q Clear Time (g_c+I1), s		58.0		31.1		2.0
Green Ext Time (p_c), s		14.2		2.3		33.3

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

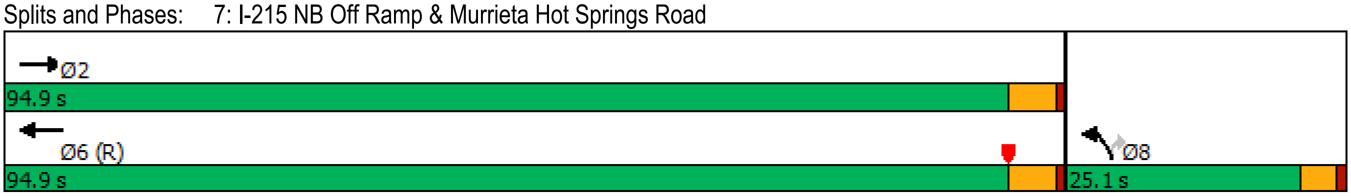
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2698	2555	237	318
Future Volume (vph)	2698	2555	237	318
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	94.9	94.9	25.1	25.1
Total Split (%)	79.1%	79.1%	20.9%	20.9%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	89.6	89.6	20.9	20.9
Actuated g/C Ratio	0.75	0.75	0.17	0.17
v/c Ratio	0.79	0.75	0.39	0.65
Control Delay	8.4	10.4	45.9	51.5
Queue Delay	0.2	4.8	0.0	0.0
Total Delay	8.6	15.1	45.9	51.5
LOS	A	B	D	D
Approach Delay	8.6	15.1	49.1	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 15.4	Intersection LOS: B
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2698	0	0	2555	237	318
Future Volume (veh/h)	2698	0	0	2555	237	318
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2901	0	0	2747	255	342
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3813	0	0	3813	626	505
Arrive On Green	0.75	0.00	0.00	0.75	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2901	0	0	2747	255	342
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	40.0	0.0	0.0	35.4	7.6	13.2
Cycle Q Clear(g_c), s	40.0	0.0	0.0	35.4	7.6	13.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3813	0	0	3813	626	505
V/C Ratio(X)	0.76	0.00	0.00	0.72	0.41	0.68
Avail Cap(c_a), veh/h	3813	0	0	3813	626	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	0.0	0.0	8.3	44.0	46.4
Incr Delay (d2), s/veh	1.5	0.0	0.0	1.2	2.0	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	0.0	0.0	10.1	3.6	5.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.4	0.0	0.0	9.5	46.0	53.5
LnGrp LOS	B	A	A	A	D	D
Approach Vol, veh/h	2901			2747	597	
Approach Delay, s/veh	10.4			9.5	50.3	
Approach LOS	B			A	D	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	94.9	94.9	25.1
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	89.6	89.6	20.9
Max Q Clear Time (g_c+I1), s	42.0	37.4	15.2
Green Ext Time (p_c), s	31.2	29.9	1.5

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	294	289	239	72	82	68	582	582	474
Average Queue (ft)	238	158	78	46	52	39	343	361	211
95th Queue (ft)	331	265	163	66	71	62	486	489	361
Link Distance (ft)				48	48	48	566	566	
Upstream Blk Time (%)				16	15	5	0	0	
Queuing Penalty (veh)				75	70	24	0	0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								0	0
Queuing Penalty (veh)								1	0

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	204	178	131	156	113	139	203	186	176	375
Average Queue (ft)	131	82	23	23	14	21	26	118	103	104
95th Queue (ft)	196	152	71	82	61	85	100	162	156	294
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	158	173	232	266	249	211	28	108	109	62	105	300
Average Queue (ft)	70	91	161	165	148	128	3	32	46	23	34	65
95th Queue (ft)	139	153	233	254	229	206	16	83	93	56	79	157
Link Distance (ft)			1082	1082	1082	1082				271	271	271
Upstream Blk Time (%)												0
Queuing Penalty (veh)												2
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	222	158	245	49	69	28	55	39	284	260
Average Queue (ft)	74	89	140	10	29	2	15	5	36	188
95th Queue (ft)	181	142	216	32	58	11	42	24	190	265
Link Distance (ft)	271	275	275	275	275			269	269	
Upstream Blk Time (%)									2	1
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)										5
Queuing Penalty (veh)										0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	NB
Directions Served	T	T	R
Maximum Queue (ft)	22	24	64
Average Queue (ft)	1	1	24
95th Queue (ft)	7	8	43
Link Distance (ft)	271	271	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	194	202	208	248	250	64	60	140	144	246	230	280
Average Queue (ft)	129	143	79	113	129	18	22	21	43	63	137	196
95th Queue (ft)	192	196	169	202	220	49	48	71	95	178	205	272
Link Distance (ft)			307	307	307	307				240	240	240
Upstream Blk Time (%)										0	0	1
Queuing Penalty (veh)										0	0	9
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)										0		
Queuing Penalty (veh)										0		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	122	136	118	174	218	25	162	175	312	144
Average Queue (ft)	54	78	44	72	105	6	160	174	277	35
95th Queue (ft)	94	129	91	134	183	24	168	175	289	87
Link Distance (ft)	240	311	311	311	311	311				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							4	65	3	0
Queuing Penalty (veh)							12	213	18	0

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	91	98	121	114	141	140	866	861	495
Average Queue (ft)	72	76	82	56	62	96	667	741	417
95th Queue (ft)	82	89	107	119	125	147	957	955	640
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	25	32	37	1	2	11	12	26	
Queuing Penalty (veh)	172	221	255	8	14	74	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								49	0
Queuing Penalty (veh)								148	2

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	164	162	174	52	31	54	104	278	177	162
Average Queue (ft)	119	120	120	7	5	11	66	111	107	43
95th Queue (ft)	170	162	161	29	24	45	106	201	165	103
Link Distance (ft)	144	144	144	15	15	15	1042	1042		
Upstream Blk Time (%)	3	1	2	3	3	6				
Queuing Penalty (veh)	20	9	15	22	19	45				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 1449

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (ft)	331	294	294	285	70	80	69	601	630	505
Average Queue (ft)	298	232	167	9	45	43	24	503	476	329
95th Queue (ft)	313	331	289	94	70	76	57	657	657	538
Link Distance (ft)					48	48	48	566	566	
Upstream Blk Time (%)					8	7	4	18	15	
Queuing Penalty (veh)					43	37	19	0	0	
Storage Bay Dist (ft)										480
Storage Blk Time (%)									18	0
Queuing Penalty (veh)									19	2

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	472	505	473	188	54	89	78	187	452	452
Average Queue (ft)	401	280	113	87	6	11	14	129	129	250
95th Queue (ft)	497	570	295	176	27	45	45	177	282	465
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)	1	2	0							
Queuing Penalty (veh)	0	22	1							
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)	1	2								
Queuing Penalty (veh)	10	15								

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	120	154	280	312	400	285	67	88	89	38	97	138
Average Queue (ft)	66	92	168	193	235	165	4	19	32	13	30	50
95th Queue (ft)	120	146	255	270	342	270	25	51	68	33	66	108
Link Distance (ft)			1082	1082	1082	1082				271	271	271
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	T	T	R
Maximum Queue (ft)	174	290	327	26	62	75	39	303	260
Average Queue (ft)	72	135	273	1	13	13	7	142	197
95th Queue (ft)	132	277	349	10	44	42	26	376	314
Link Distance (ft)	271	275	275	275	275		269	269	
Upstream Blk Time (%)		2	75					26	20
Queuing Penalty (veh)		0	0					0	0
Storage Bay Dist (ft)						235			235
Storage Blk Time (%)								3	37
Queuing Penalty (veh)								7	2

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	NB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	115	297	247	245	65
Average Queue (ft)	7	28	24	11	35
95th Queue (ft)	45	150	123	88	61
Link Distance (ft)	271	271	271	271	288
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		1			
Storage Bay Dist (ft)					
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	140	152	306	338	356	345	49	45	62	117	168	250
Average Queue (ft)	85	102	155	202	226	48	13	7	23	70	99	159
95th Queue (ft)	140	141	271	325	349	180	37	28	56	118	155	219
Link Distance (ft)			307	307	307	307				240	240	240
Upstream Blk Time (%)			0	2	6	2						0
Queuing Penalty (veh)			0	13	38	15						2
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)			3									
Queuing Penalty (veh)			7									

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	146	92	155	224	322	45	162	175	312	123
Average Queue (ft)	57	57	56	92	155	5	158	174	281	40
95th Queue (ft)	97	92	106	163	289	24	171	175	298	94
Link Distance (ft)	240	311	311	311	311	311				
Upstream Blk Time (%)					1					
Queuing Penalty (veh)					0					
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							3	63	5	
Queuing Penalty (veh)							13	288	41	

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	117	113	140	92	79	141	861	879	495
Average Queue (ft)	74	77	90	38	36	82	843	845	429
95th Queue (ft)	89	93	123	80	76	134	851	861	662
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	26	29	33			2	57	84	
Queuing Penalty (veh)	227	262	292			14	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								72	2
Queuing Penalty (veh)								169	13

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	NB	NB	NB	NB
Directions Served	T	T	T	L	L	R	R
Maximum Queue (ft)	181	184	191	116	175	241	206
Average Queue (ft)	149	146	139	60	98	146	90
95th Queue (ft)	176	171	185	104	157	198	185
Link Distance (ft)	144	144	144	1042	1042		
Upstream Blk Time (%)	9	5	6				
Queuing Penalty (veh)	83	44	53				
Storage Bay Dist (ft)						1000	1000
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

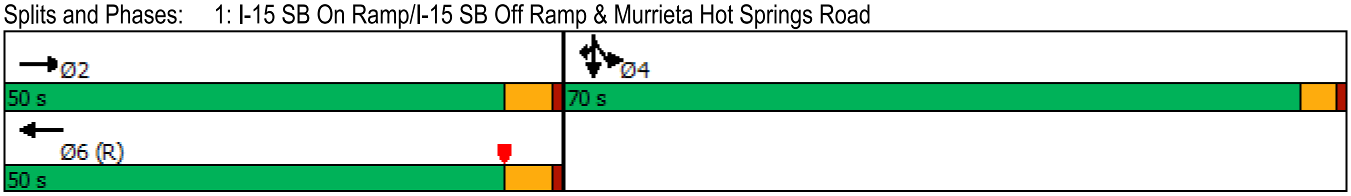
Zone wide Queuing Penalty: 1753

EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2025) WITH TRIANGLE PROJECT (CURRENT DEVELOPMENT PLAN), DUAL LEFT-TURN LANES AT I-15 NB RAMPS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1036	317	1376	1259	0	336
Future Volume (vph)	1036	317	1376	1259	0	336
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	50.0		50.0	70.0	70.0	70.0
Total Split (%)	41.7%		41.7%	58.3%	58.3%	58.3%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	44.7	120.0	44.7	65.8	65.8	65.8
Actuated g/C Ratio	0.37	1.00	0.37	0.55	0.55	0.55
v/c Ratio	0.58	0.21	0.77	0.71	0.76	0.38
Control Delay	31.7	0.3	40.6	25.0	27.3	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.7	0.3	40.6	25.0	27.3	16.1
LOS	C	A	D	C	C	B
Approach Delay	24.3		40.6		24.2	
Approach LOS	C		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 29.5	Intersection LOS: C
Intersection Capacity Utilization 102.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1036	317	0	1376	0	0	0	0	1259	0	336
Future Volume (veh/h)	0	1036	317	0	1376	0	0	0	0	1259	0	336
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1102	0	0	1464	0				1450	0	238
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1902		0	1902	0				2032	0	869
Arrive On Green	0.00	0.37	0.00	0.00	0.37	0.00				0.55	0.00	0.55
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1102	0	0	1464	0				1450	0	238
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	20.7	0.0	0.0	30.3	0.0				34.9	0.0	9.6
Cycle Q Clear(g_c), s	0.0	20.7	0.0	0.0	30.3	0.0				34.9	0.0	9.6
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1902		0	1902	0				2032	0	869
V/C Ratio(X)	0.00	0.58		0.00	0.77	0.00				0.71	0.00	0.27
Avail Cap(c_a), veh/h	0	1902		0	1902	0				2032	0	869
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	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	30.1	0.0	0.0	33.1	0.0				20.1	0.0	14.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	3.1	0.0				2.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.2	0.0	0.0	12.4	0.0				15.1	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.6	0.0	0.0	36.2	0.0				22.3	0.0	15.2
LnGrp LOS	A	C		A	D	A				C	A	B
Approach Vol, veh/h		1102			1464						1688	
Approach Delay, s/veh		30.6			36.2						21.3	
Approach LOS		C			D						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.0		70.0		50.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		44.7		* 66		44.7						
Max Q Clear Time (g_c+I1), s		22.7		36.9		32.3						
Green Ext Time (p_c), s		5.4		11.6		5.8						

Intersection Summary	
HCM 6th Ctrl Delay	28.8
HCM 6th LOS	C

Notes

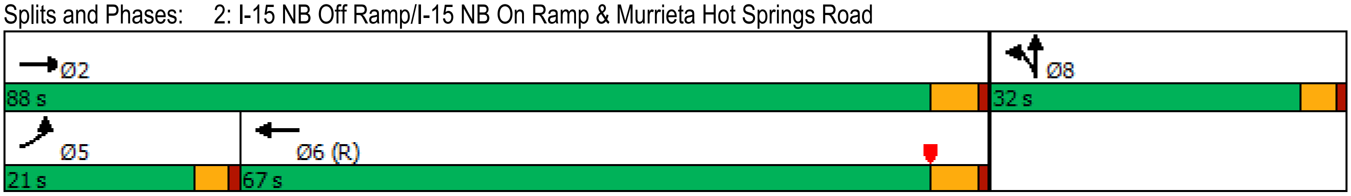
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	209	2083	1285	1024	329	0	276
Future Volume (vph)	209	2083	1285	1024	329	0	276
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	21.0	88.0	67.0		32.0	32.0	
Total Split (%)	17.5%	73.3%	55.8%		26.7%	26.7%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	13.2	92.5	75.3	120.0	18.0	18.0	120.0
Actuated g/C Ratio	0.11	0.77	0.63	1.00	0.15	0.15	1.00
v/c Ratio	0.60	0.58	0.44	0.70	0.71	0.71	0.19
Control Delay	56.1	3.9	16.6	13.0	63.3	63.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.1	3.9	16.6	13.0	63.3	63.3	0.3
LOS	E	A	B	B	E	E	A
Approach Delay		8.7	15.0			34.6	
Approach LOS		A	B			C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 14.5 Intersection LOS: B
Intersection Capacity Utilization 57.3% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	2083	0	0	1285	1024	329	0	276	0	0	0
Future Volume (veh/h)	209	2083	0	0	1285	1024	329	0	276	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	227	2264	0	0	1397	0	358	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	294	3519	0	0	2914		449	0				
Arrive On Green	0.09	0.69	0.00	0.00	0.57	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	3456	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	227	2264	0	0	1397	0	358	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	7.7	29.7	0.0	0.0	19.4	0.0	11.7	0.0	0.0			
Cycle Q Clear(g_c), s	7.7	29.7	0.0	0.0	19.4	0.0	11.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	294	3519	0	0	2914		449	0				
V/C Ratio(X)	0.77	0.64	0.00	0.00	0.48		0.80	0.00				
Avail Cap(c_a), veh/h	490	3519	0	0	2914		825	0				
HCM Platoon Ratio	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	0.00	0.00	0.53	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	53.7	10.4	0.0	0.0	15.2	0.0	51.0	0.0	0.0			
Incr Delay (d2), s/veh	4.3	0.9	0.0	0.0	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	3.4	9.5	0.0	0.0	7.0	0.0	5.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.0	11.3	0.0	0.0	15.5	0.0	54.2	0.0	0.0			
LnGrp LOS	E	B	A	A	B		D	A				
Approach Vol, veh/h		2491			1397			358				
Approach Delay, s/veh		15.6			15.5			54.2				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		88.0			14.2	73.8		19.3				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		82.7			17.0	61.7		27.8				
Max Q Clear Time (g_c+I1), s		31.7			9.7	21.4		13.7				
Green Ext Time (p_c), s		20.2			0.5	8.3		1.4				

Intersection Summary		
HCM 6th Ctrl Delay		18.8
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

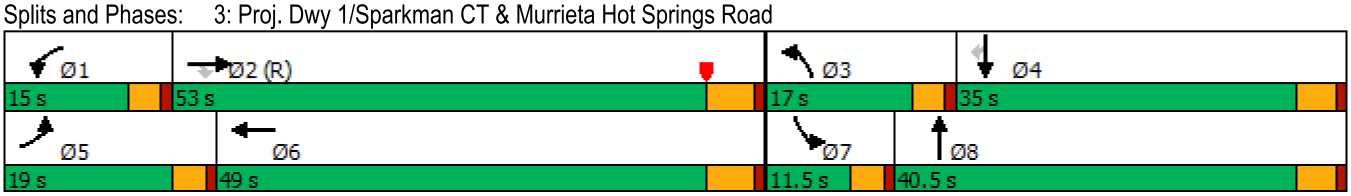
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	275	1836	194	194	1767	232	10	27	10	265
Future Volume (vph)	275	1836	194	194	1767	232	10	27	10	265
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	19.0	53.0	53.0	15.0	49.0	17.0	40.5	11.5	35.0	35.0
Total Split (%)	15.8%	44.2%	44.2%	12.5%	40.8%	14.2%	33.8%	9.6%	29.2%	29.2%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	C-Max	None	Max	None	Max	None	Max	Max
Act Effct Green (s)	14.0	48.1	48.1	10.6	44.7	12.4	40.7	7.1	31.0	31.0
Actuated g/C Ratio	0.12	0.40	0.40	0.09	0.37	0.10	0.34	0.06	0.26	0.26
v/c Ratio	0.72	0.75	0.28	0.69	0.81	0.71	0.09	0.14	0.01	0.68
Control Delay	56.7	29.1	4.8	77.5	19.9	63.9	8.3	55.1	33.7	50.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.7	29.1	4.8	77.5	19.9	63.9	8.3	55.1	33.7	50.0
LOS	E	C	A	E	B	E	A	E	C	D
Approach Delay		30.3			25.6		48.6		49.9	
Approach LOS		C			C		D		D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 30.8 Intersection LOS: C
Intersection Capacity Utilization 61.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	275	1836	194	194	1767	52	232	10	78	27	10	265
Future Volume (veh/h)	275	1836	194	194	1767	52	232	10	78	27	10	265
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	1933	211	211	1860	55	252	11	85	28	11	279
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	2773	683	265	2629	78	311	547	488	122	900	402
Arrive On Green	0.10	0.43	0.43	0.15	0.81	0.81	0.09	0.31	0.31	0.04	0.25	0.25
Sat Flow, veh/h	3456	6434	1585	3456	6470	191	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	289	1933	211	211	1387	528	252	11	85	28	11	279
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1836	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.8	29.3	10.5	7.1	15.2	15.2	8.6	0.5	4.7	0.9	0.3	19.1
Cycle Q Clear(g_c), s	9.8	29.3	10.5	7.1	15.2	15.2	8.6	0.5	4.7	0.9	0.3	19.1
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	2773	683	265	1961	746	311	547	488	122	900	402
V/C Ratio(X)	0.83	0.70	0.31	0.80	0.71	0.71	0.81	0.02	0.17	0.23	0.01	0.69
Avail Cap(c_a), veh/h	432	2773	683	317	1961	746	374	547	488	216	900	402
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	27.8	22.4	49.9	8.1	8.1	53.6	28.9	30.4	56.3	33.6	40.6
Incr Delay (d2), s/veh	8.8	1.2	1.0	11.4	2.2	5.6	10.7	0.1	0.8	0.9	0.0	9.5
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	4.6	10.9	4.1	3.2	3.0	4.1	4.2	0.2	1.9	0.4	0.1	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	29.0	23.4	61.3	10.3	13.7	64.3	29.0	31.1	57.2	33.6	50.1
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	C	D
Approach Vol, veh/h		2433			2126			348			318	
Approach Delay, s/veh		32.4			16.2			55.1			50.2	
Approach LOS		C			B			E			D	

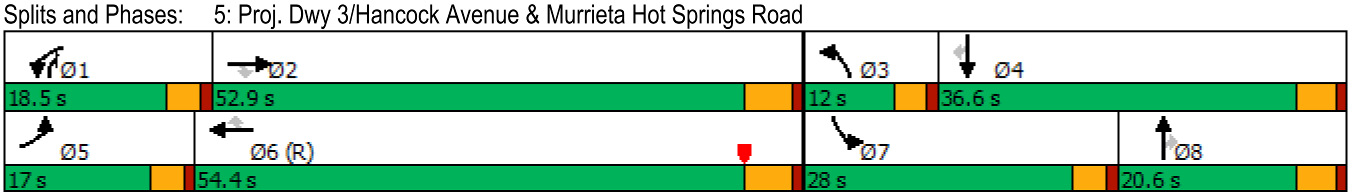
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	57.0	14.8	35.0	16.1	54.1	8.2	41.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	11.0	47.7	13.0	30.4	15.0	43.7	7.5	35.9
Max Q Clear Time (g_c+I1), s	9.1	31.3	10.6	21.1	11.8	17.2	2.9	6.7
Green Ext Time (p_c), s	0.1	12.0	0.2	0.7	0.3	14.8	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	1420	135	232	1753	579	108	93	187	547	116	214
Future Volume (vph)	295	1420	135	232	1753	579	108	93	187	547	116	214
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	17.0	52.9	52.9	18.5	54.4	54.4	12.0	20.6	18.5	28.0	36.6	36.6
Total Split (%)	14.2%	44.1%	44.1%	15.4%	45.3%	45.3%	10.0%	17.2%	15.4%	23.3%	30.5%	30.5%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	13.0	48.9	48.9	13.2	49.1	49.1	7.8	16.0	33.8	24.0	32.2	32.2
Actuated g/C Ratio	0.11	0.41	0.41	0.11	0.41	0.41	0.06	0.13	0.28	0.20	0.27	0.27
v/c Ratio	0.90	0.60	0.20	0.67	0.93	0.68	0.53	0.41	0.24	0.91	0.40	0.32
Control Delay	95.5	14.9	1.4	67.9	32.0	4.3	63.2	53.2	17.9	66.5	35.2	6.9
Queue Delay	0.0	0.0	0.0	0.0	4.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.5	14.9	1.4	67.9	36.0	4.6	63.2	53.2	17.9	66.5	35.2	6.9
LOS	F	B	A	E	D	A	E	D	B	E	D	A
Approach Delay		26.7			31.8			39.0			49.6	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 33.4	Intersection LOS: C
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	1420	135	232	1753	579	108	93	187	547	116	214
Future Volume (veh/h)	295	1420	135	232	1753	579	108	93	187	547	116	214
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1511	147	252	1865	616	117	101	203	582	202	177
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	2733	673	309	2089	649	198	232	595	713	499	423
Arrive On Green	0.21	0.85	0.85	0.18	0.82	0.82	0.06	0.12	0.12	0.20	0.27	0.27
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	314	1511	147	252	1865	616	117	101	203	582	202	177
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	10.5	8.0	2.1	8.4	29.5	38.0	4.0	6.0	7.4	18.7	10.7	11.1
Cycle Q Clear(g_c), s	10.5	8.0	2.1	8.4	29.5	38.0	4.0	6.0	7.4	18.7	10.7	11.1
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	363	2733	673	309	2089	649	198	232	595	713	499	423
V/C Ratio(X)	0.87	0.55	0.22	0.82	0.89	0.95	0.59	0.44	0.34	0.82	0.41	0.42
Avail Cap(c_a), veh/h	374	2733	673	418	2089	649	230	249	621	713	499	423
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	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	46.6	5.8	5.3	48.3	9.1	9.9	55.2	48.7	40.1	45.9	36.2	36.3
Incr Delay (d2), s/veh	18.3	0.2	0.2	8.9	6.3	25.0	3.0	1.3	0.3	10.0	2.4	3.0
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	4.9	1.7	0.7	3.6	4.7	8.1	1.8	2.9	2.6	9.2	5.2	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.9	6.0	5.5	57.2	15.5	34.8	58.2	50.0	40.4	55.9	38.6	39.4
LnGrp LOS	E	A	A	E	B	C	E	D	D	E	D	D
Approach Vol, veh/h		1972			2733			421			961	
Approach Delay, s/veh		15.4			23.7			47.6			49.2	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	56.3	10.9	36.6	16.6	54.4	28.0	19.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	14.5	47.6	8.0	32.0	13.0	49.1	24.0	16.0
Max Q Clear Time (g_c+I1), s	10.4	10.0	6.0	13.1	12.5	40.0	20.7	9.4
Green Ext Time (p_c), s	0.3	10.1	0.1	1.8	0.1	7.2	0.9	0.7

Intersection Summary	
HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

Notes

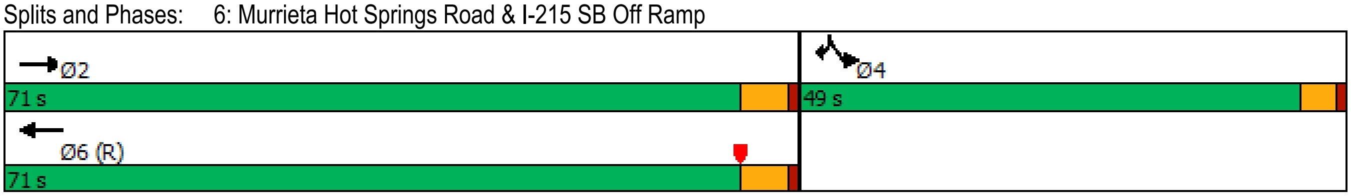
User approved volume balancing among the lanes for turning movement.

6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2039	2046	665	602
Future Volume (vph)	2039	2046	665	602
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	71.0	71.0	49.0	49.0
Total Split (%)	59.2%	59.2%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	70.9	70.9	39.6	39.8
Actuated g/C Ratio	0.59	0.59	0.33	0.33
v/c Ratio	0.75	0.75	0.76	0.82
Control Delay	15.4	18.1	39.7	50.1
Queue Delay	0.0	0.3	0.0	0.0
Total Delay	15.4	18.5	39.7	50.1
LOS	B	B	D	D
Approach Delay	15.4	18.5	42.9	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 122.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2039	2046	0	665	602
Future Volume (veh/h)	0	2039	2046	0	665	602
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2169	2177	0	885	449
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2796	2796	0	1178	527
Arrive On Green	0.00	0.55	1.00	0.00	0.32	0.32
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2169	2177	0	885	449
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	40.1	0.0	0.0	25.7	30.6
Cycle Q Clear(g_c), s	0.0	40.1	0.0	0.0	25.7	30.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2796	2796	0	1178	527
V/C Ratio(X)	0.00	0.78	0.78	0.00	0.75	0.85
Avail Cap(c_a), veh/h	0	2796	2796	0	1383	618
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	0.0	0.0	36.7	38.2
Incr Delay (d2), s/veh	0.0	2.2	2.2	0.0	2.0	9.8
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	15.1	0.6	0.0	11.9	13.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	23.5	2.2	0.0	38.7	48.0
LnGrp LOS	A	C	A	A	D	D
Approach Vol, veh/h		2169	2177		1334	
Approach Delay, s/veh		23.5	2.2		41.8	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		71.0		42.3		71.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		65.7		* 45		65.7
Max Q Clear Time (g_c+I1), s		42.1		32.6		2.0
Green Ext Time (p_c), s		13.3		5.6		19.7

Intersection Summary			
HCM 6th Ctrl Delay			19.7
HCM 6th LOS			B

Notes

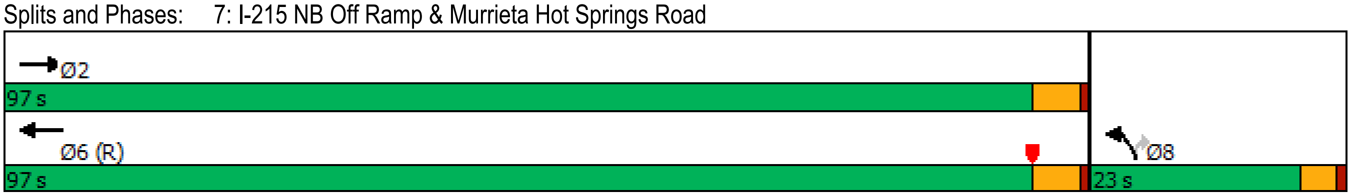
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2189	2182	232	214
Future Volume (vph)	2189	2182	232	214
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	19.2%	19.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	91.7	91.7	18.8	18.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.61	0.61	0.41	0.46
Control Delay	7.2	7.1	48.0	42.8
Queue Delay	0.1	1.0	0.0	0.0
Total Delay	7.2	8.1	48.0	42.8
LOS	A	A	D	D
Approach Delay	7.2	8.1	45.5	
Approach LOS	A	A	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2189	0	0	2182	232	214
Future Volume (veh/h)	2189	0	0	2182	232	214
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2304	0	0	2297	244	225
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3902	0	0	3902	563	455
Arrive On Green	0.76	0.00	0.00	0.76	0.16	0.16
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2304	0	0	2297	244	225
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	23.3	0.0	0.0	23.1	7.4	8.5
Cycle Q Clear(g_c), s	23.3	0.0	0.0	23.1	7.4	8.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3902	0	0	3902	563	455
V/C Ratio(X)	0.59	0.00	0.00	0.59	0.43	0.50
Avail Cap(c_a), veh/h	3902	0	0	3902	563	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.1	0.0	0.0	6.1	45.8	46.3
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.7	2.4	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	6.3	3.5	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.7	0.0	0.0	6.7	48.2	50.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	2304			2297	469	
Approach Delay, s/veh	6.7			6.7	49.1	
Approach LOS	A			A	D	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	97.0	97.0	23.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	91.7	91.7	18.8
Max Q Clear Time (g_c+I1), s	25.3	25.1	10.5
Green Ext Time (p_c), s	22.5	22.4	1.5

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

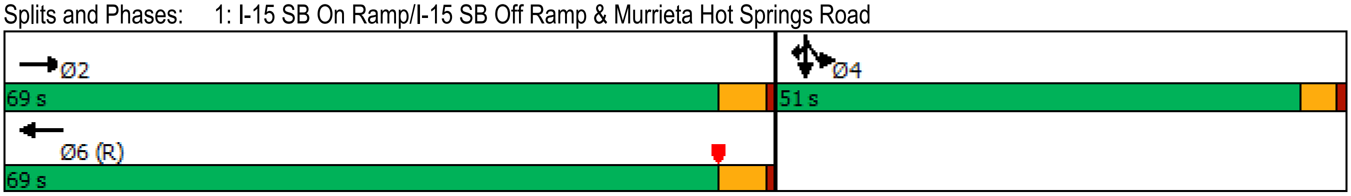
Timings — Timing Plan: Ex + Amb+ Cuml + Proj (2025) PM

1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road — 06/08/2023

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2262	346	1577	1045	0	213
Future Volume (vph)	2262	346	1577	1045	0	213
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	69.0		69.0	51.0	51.0	51.0
Total Split (%)	57.5%		57.5%	42.5%	42.5%	42.5%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	63.7	120.0	63.7	46.8	46.8	46.8
Actuated g/C Ratio	0.53	1.00	0.53	0.39	0.39	0.39
v/c Ratio	0.90	0.23	0.63	0.82	0.90	0.34
Control Delay	31.1	0.3	18.4	44.1	51.8	25.0
Queue Delay	13.9	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	0.3	18.4	44.1	51.8	25.0
LOS	D	A	B	D	D	C
Approach Delay	39.1		18.4		44.5	
Approach LOS	D		B		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 34.4	Intersection LOS: C
Intersection Capacity Utilization 121.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2262	346	0	1577	0	0	0	0	1045	0	213
Future Volume (veh/h)	0	2262	346	0	1577	0	0	0	0	1045	0	213
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2432	0	0	1696	0				1195	0	153
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2710		0	2710	0				1445	0	618
Arrive On Green	0.00	0.53	0.00	0.00	1.00	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2432	0	0	1696	0				1195	0	153
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	51.2	0.0	0.0	0.0	0.0				34.8	0.0	7.8
Cycle Q Clear(g_c), s	0.0	51.2	0.0	0.0	0.0	0.0				34.8	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2710		0	2710	0				1445	0	618
V/C Ratio(X)	0.00	0.90		0.00	0.63	0.00				0.83	0.00	0.25
Avail Cap(c_a), veh/h	0	2710		0	2710	0				1445	0	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.2	0.0	0.0	0.0	0.0				33.0	0.0	24.7
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.0	1.1	0.0				5.6	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	19.8	0.0	0.0	0.3	0.0				16.5	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.7	0.0	0.0	1.1	0.0				38.5	0.0	25.7
LnGrp LOS	A	C		A	A	A				D	A	C
Approach Vol, veh/h		2432			1696						1348	
Approach Delay, s/veh		29.7			1.1						37.1	
Approach LOS		C			A						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		69.0		51.0		69.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		63.7		* 47		63.7						
Max Q Clear Time (g_c+I1), s		53.2		36.8		2.0						
Green Ext Time (p_c), s		8.3		5.1		11.9						

Intersection Summary		
HCM 6th Ctrl Delay		22.6
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

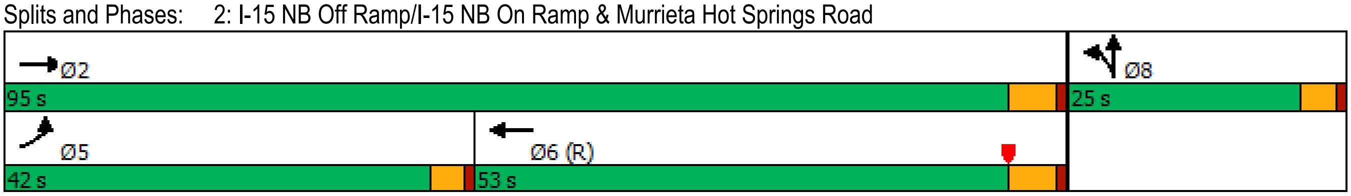
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	730	2601	1337	1442	285	0	321
Future Volume (vph)	730	2601	1337	1442	285	0	321
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	42.0	95.0	53.0		25.0	25.0	
Total Split (%)	35.0%	79.2%	44.2%		20.8%	20.8%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	32.2	94.8	58.6	120.0	15.7	15.7	120.0
Actuated g/C Ratio	0.27	0.79	0.49	1.00	0.13	0.13	1.00
v/c Ratio	0.83	0.67	0.56	0.95	0.68	0.68	0.21
Control Delay	48.6	4.6	22.7	31.7	64.5	64.8	0.3
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	4.7	22.7	31.7	64.5	64.8	0.3
LOS	D	A	C	C	E	E	A
Approach Delay		14.3	27.4			30.6	
Approach LOS		B	C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 21.2	Intersection LOS: C
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	730	2601	0	0	1337	1442	285	0	321	0	0	0
Future Volume (veh/h)	730	2601	0	0	1337	1442	285	0	321	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	760	2709	0	0	1393	0	297	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	866	3817	0	0	2367		376	0				
Arrive On Green	0.25	0.75	0.00	0.00	0.77	0.00	0.11	0.00	0.00			
Sat Flow, veh/h	3456	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	760	2709	0	0	1393	0	297	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	25.4	34.2	0.0	0.0	13.6	0.0	9.8	0.0	0.0			
Cycle Q Clear(g_c), s	25.4	34.2	0.0	0.0	13.6	0.0	9.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	866	3817	0	0	2367		376	0				
V/C Ratio(X)	0.88	0.71	0.00	0.00	0.59		0.79	0.00				
Avail Cap(c_a), veh/h	1094	3817	0	0	2367		618	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.44	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	43.2	8.1	0.0	0.0	8.8	0.0	52.4	0.0	0.0			
Incr Delay (d2), s/veh	6.9	1.1	0.0	0.0	0.5	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	11.3	9.8	0.0	0.0	3.3	0.0	4.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	9.3	0.0	0.0	9.3	0.0	56.1	0.0	0.0			
LnGrp LOS	D	A	A	A	A		E	A				
Approach Vol, veh/h		3469			1393			297				
Approach Delay, s/veh		18.2			9.3			56.1				
Approach LOS		B			A			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		95.0			34.1	60.9		16.8				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		89.7			38.0	47.7		20.8				
Max Q Clear Time (g_c+I1), s		36.2			27.4	15.6		11.8				
Green Ext Time (p_c), s		29.5			2.7	8.0		0.9				

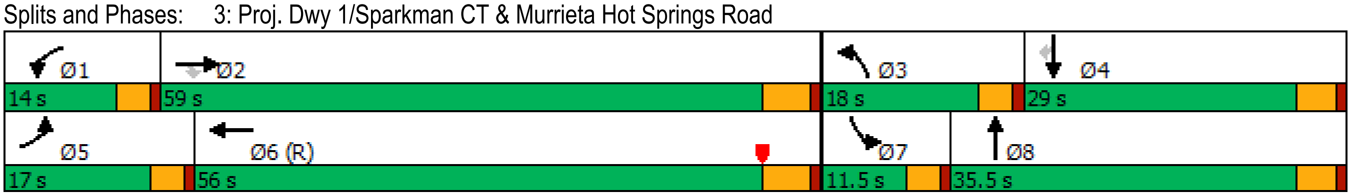
Intersection Summary		
HCM 6th Ctrl Delay		18.0
HCM 6th LOS		B

Notes
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	272	2316	200	200	2198	281	10	23	10	233
Future Volume (vph)	272	2316	200	200	2198	281	10	23	10	233
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	17.0	59.0	59.0	14.0	56.0	18.0	35.5	11.5	29.0	29.0
Total Split (%)	14.2%	49.2%	49.2%	11.7%	46.7%	15.0%	29.6%	9.6%	24.2%	24.2%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	12.6	53.9	53.9	9.8	51.1	13.4	35.7	7.1	25.0	25.0
Actuated g/C Ratio	0.10	0.45	0.45	0.08	0.43	0.11	0.30	0.06	0.21	0.21
v/c Ratio	0.77	0.82	0.25	0.73	0.86	0.75	0.11	0.11	0.01	0.72
Control Delay	64.7	26.7	2.9	68.8	20.9	64.7	8.6	54.8	38.4	58.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.7	26.7	2.9	68.8	20.9	64.7	8.6	54.8	38.4	58.2
LOS	E	C	A	E	C	E	A	D	D	E
Approach Delay		28.7			24.8		49.6		57.2	
Approach LOS		C			C		D		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 29.7	Intersection LOS: C
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	2316	200	200	2198	77	281	10	93	23	10	233
Future Volume (veh/h)	272	2316	200	200	2198	77	281	10	93	23	10	233
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	278	2363	204	204	2243	79	287	10	95	23	10	238
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	2879	709	256	2731	96	346	484	431	108	723	322
Arrive On Green	0.10	0.45	0.45	0.15	0.85	0.85	0.10	0.27	0.27	0.03	0.20	0.20
Sat Flow, veh/h	3456	6434	1585	3456	6429	226	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	278	2363	204	204	1683	639	287	10	95	23	10	238
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1830	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.5	38.5	9.8	6.8	20.8	20.9	9.8	0.5	5.6	0.8	0.3	16.9
Cycle Q Clear(g_c), s	9.5	38.5	9.8	6.8	20.8	20.9	9.8	0.5	5.6	0.8	0.3	16.9
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	2879	709	256	2050	777	346	484	431	108	723	322
V/C Ratio(X)	0.83	0.82	0.29	0.80	0.82	0.82	0.83	0.02	0.22	0.21	0.01	0.74
Avail Cap(c_a), veh/h	374	2879	709	288	2050	777	403	484	431	216	723	322
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	28.9	21.0	50.2	6.8	6.8	53.0	32.0	33.8	56.7	38.2	44.8
Incr Delay (d2), s/veh	10.2	2.1	0.8	13.0	3.8	9.5	12.0	0.1	1.2	1.0	0.0	14.1
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	4.5	14.3	3.8	3.2	3.2	4.9	4.8	0.2	2.3	0.4	0.1	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	31.0	21.8	63.2	10.6	16.3	65.0	32.0	35.0	57.7	38.2	58.9
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	D	E
Approach Vol, veh/h		2845			2526			392			271	
Approach Delay, s/veh		33.5			16.3			56.9			58.0	
Approach LOS		C			B			E			E	

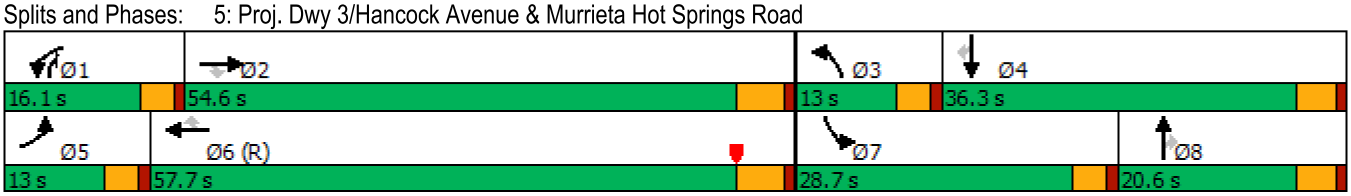
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	59.0	16.0	29.0	15.6	56.3	7.7	37.3
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	10.0	53.7	14.0	24.4	13.0	50.7	7.5	30.9
Max Q Clear Time (g_c+I1), s	8.8	40.5	11.8	18.9	11.5	22.9	2.8	7.6
Green Ext Time (p_c), s	0.1	11.4	0.2	0.4	0.1	19.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1923	140	242	2145	664	131	112	225	646	120	338
Future Volume (vph)	219	1923	140	242	2145	664	131	112	225	646	120	338
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	13.0	54.6	54.6	16.1	57.7	57.7	13.0	20.6	16.1	28.7	36.3	36.3
Total Split (%)	10.8%	45.5%	45.5%	13.4%	48.1%	48.1%	10.8%	17.2%	13.4%	23.9%	30.3%	30.3%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	9.0	49.6	49.6	11.8	52.4	52.4	8.7	16.0	32.4	24.7	32.0	32.0
Actuated g/C Ratio	0.08	0.41	0.41	0.10	0.44	0.44	0.07	0.13	0.27	0.21	0.27	0.27
v/c Ratio	0.99	0.82	0.21	0.78	1.09	0.78	0.57	0.49	0.30	1.07	0.55	0.48
Control Delay	118.6	14.1	1.5	70.2	69.5	6.5	63.3	55.7	22.0	99.3	37.1	16.4
Queue Delay	0.0	0.0	0.0	0.0	5.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.6	14.1	1.5	70.2	75.3	7.5	63.3	55.7	22.0	99.3	37.1	16.4
LOS	F	B	A	E	E	A	E	E	C	F	D	B
Approach Delay		23.3			60.2			41.6			69.4	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 48.2	Intersection LOS: D
Intersection Capacity Utilization 89.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	1923	140	242	2145	664	131	112	225	646	120	338
Future Volume (veh/h)	219	1923	140	242	2145	664	131	112	225	646	120	338
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	238	2090	152	263	2332	722	142	122	245	702	308	248
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	2706	667	315	2230	692	200	217	578	733	494	419
Arrive On Green	0.08	0.42	0.42	0.18	0.87	0.87	0.06	0.12	0.12	0.21	0.26	0.26
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	238	2090	152	263	2332	722	142	122	245	702	308	248
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	8.2	33.5	7.4	8.8	52.4	52.4	4.8	7.4	9.2	23.4	17.4	16.4
Cycle Q Clear(g_c), s	8.2	33.5	7.4	8.8	52.4	52.4	4.8	7.4	9.2	23.4	17.4	16.4
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	259	2706	667	315	2230	692	200	217	578	733	494	419
V/C Ratio(X)	0.92	0.77	0.23	0.84	1.05	1.04	0.71	0.56	0.42	0.96	0.62	0.59
Avail Cap(c_a), veh/h	259	2706	667	348	2230	692	259	249	626	733	494	419
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	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	55.1	29.8	22.3	48.2	7.6	7.6	55.5	50.1	41.3	47.1	38.9	38.5
Incr Delay (d2), s/veh	34.9	1.4	0.2	14.9	32.4	46.0	6.2	2.3	0.5	24.3	5.8	6.0
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	4.7	12.5	2.8	4.0	9.5	11.6	2.3	3.6	3.2	12.7	8.7	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.0	31.3	22.5	63.1	40.0	53.6	61.7	52.4	41.8	71.4	44.7	44.6
LnGrp LOS	F	C	C	E	F	F	E	D	D	E	D	D
Approach Vol, veh/h		2480			3317			509			1258	
Approach Delay, s/veh		36.4			44.8			49.9			59.6	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	55.8	10.9	36.3	13.0	57.7	28.7	18.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	12.1	49.3	9.0	31.7	9.0	52.4	24.7	16.0
Max Q Clear Time (g_c+I1), s	10.8	35.5	6.8	19.4	10.2	54.4	25.4	11.2
Green Ext Time (p_c), s	0.1	9.4	0.1	2.3	0.0	0.0	0.0	0.7

Intersection Summary		
HCM 6th Ctrl Delay		44.8
HCM 6th LOS		D

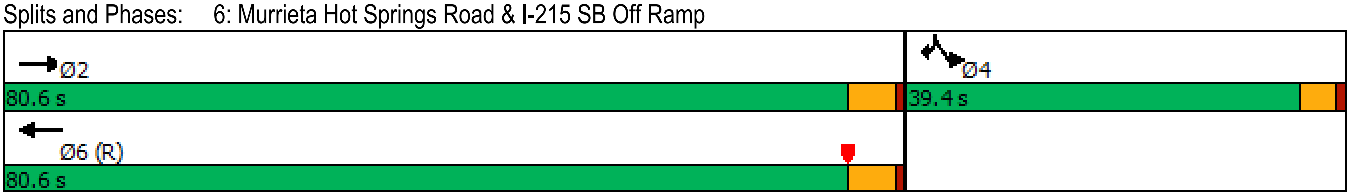
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2670	2526	699	473
Future Volume (vph)	2670	2526	699	473
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	80.6	80.6	39.4	39.4
Total Split (%)	67.2%	67.2%	32.8%	32.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	76.9	76.9	33.6	33.8
Actuated g/C Ratio	0.64	0.64	0.28	0.28
v/c Ratio	0.90	0.85	0.82	0.89
Control Delay	18.7	14.8	47.5	64.5
Queue Delay	0.0	17.1	0.0	0.0
Total Delay	18.7	31.8	47.5	64.5
LOS	B	C	D	E
Approach Delay	18.7	31.8	52.8	
Approach LOS	B	C	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 30.2	Intersection LOS: C
Intersection Capacity Utilization 139.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2670	2526	0	699	473
Future Volume (veh/h)	0	2670	2526	0	699	473
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2840	2687	0	826	416
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3204	3204	0	1034	463
Arrive On Green	0.00	0.63	1.00	0.00	0.28	0.28
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2840	2687	0	826	416
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	56.0	0.0	0.0	24.8	29.1
Cycle Q Clear(g_c), s	0.0	56.0	0.0	0.0	24.8	29.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3204	3204	0	1034	463
V/C Ratio(X)	0.00	0.89	0.84	0.00	0.80	0.90
Avail Cap(c_a), veh/h	0	3204	3204	0	1087	486
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	18.8	0.0	0.0	40.1	41.5
Incr Delay (d2), s/veh	0.0	4.1	2.8	0.0	4.1	18.9
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	20.1	0.8	0.0	11.8	14.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	22.8	2.8	0.0	44.3	60.5
LnGrp LOS	A	C	A	A	D	E
Approach Vol, veh/h		2840	2687		1242	
Approach Delay, s/veh		22.8	2.8		49.7	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		80.6		37.7		80.6
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		75.3		* 35		75.3
Max Q Clear Time (g_c+I1), s		58.0		31.1		2.0
Green Ext Time (p_c), s		14.2		2.3		33.3

Intersection Summary		
HCM 6th Ctrl Delay		19.8
HCM 6th LOS		B

Notes

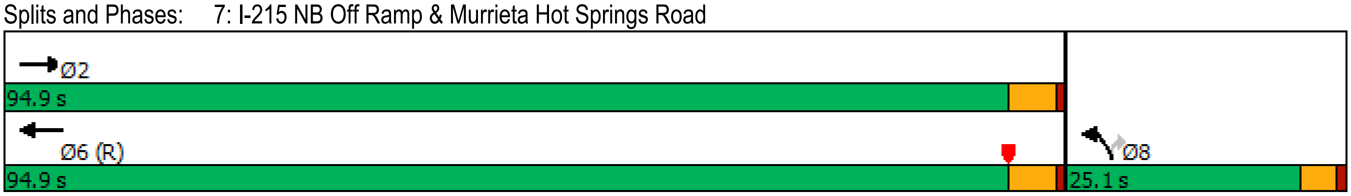
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2698	2555	237	318
Future Volume (vph)	2698	2555	237	318
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	94.9	94.9	25.1	25.1
Total Split (%)	79.1%	79.1%	20.9%	20.9%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	89.6	89.6	20.9	20.9
Actuated g/C Ratio	0.75	0.75	0.17	0.17
v/c Ratio	0.79	0.75	0.39	0.65
Control Delay	8.4	10.4	45.9	51.5
Queue Delay	0.2	4.8	0.0	0.0
Total Delay	8.6	15.1	45.9	51.5
LOS	A	B	D	D
Approach Delay	8.6	15.1	49.1	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 15.3	Intersection LOS: B
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2698	0	0	2555	237	318
Future Volume (veh/h)	2698	0	0	2555	237	318
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2901	0	0	2747	255	342
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3813	0	0	3813	626	505
Arrive On Green	0.75	0.00	0.00	0.75	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2901	0	0	2747	255	342
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	40.0	0.0	0.0	35.4	7.6	13.2
Cycle Q Clear(g_c), s	40.0	0.0	0.0	35.4	7.6	13.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3813	0	0	3813	626	505
V/C Ratio(X)	0.76	0.00	0.00	0.72	0.41	0.68
Avail Cap(c_a), veh/h	3813	0	0	3813	626	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	0.0	0.0	8.3	44.0	46.4
Incr Delay (d2), s/veh	1.5	0.0	0.0	1.2	2.0	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	0.0	0.0	10.1	3.6	5.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.4	0.0	0.0	9.5	46.0	53.5
LnGrp LOS	B	A	A	A	D	D
Approach Vol, veh/h	2901			2747	597	
Approach Delay, s/veh	10.4			9.5	50.3	
Approach LOS	B			A	D	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	94.9	94.9	25.1
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	89.6	89.6	20.9
Max Q Clear Time (g_c+I1), s	42.0	37.4	15.2
Green Ext Time (p_c), s	31.2	29.9	1.5

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	296	290	205	47	48	60	569	582	426
Average Queue (ft)	224	146	65	44	36	31	319	329	206
95th Queue (ft)	309	241	147	47	46	52	462	474	360
Link Distance (ft)				33	33	33	566	566	
Upstream Blk Time (%)				26	24	13	0	1	
Queuing Penalty (veh)				117	111	58	0	0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								1	
Queuing Penalty (veh)								2	

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	125	118	177	137	46	131	233	174	200	236	172
Average Queue (ft)	64	82	63	26	10	41	64	68	126	117	18
95th Queue (ft)	107	120	136	83	33	106	152	147	176	186	97
Link Distance (ft)			461	461	461	1082	1082	1082	1225	1225	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500	500									585
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	120	154	271	253	248	206	30	102	123	101	164	239
Average Queue (ft)	71	93	159	163	161	128	4	51	65	40	85	129
95th Queue (ft)	122	146	231	240	229	208	15	90	105	87	152	194
Link Distance (ft)			1082	1082	1082	1082				279	279	279
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	248	174	198	66	86	25	53	17	284	260
Average Queue (ft)	149	91	119	12	34	2	13	2	29	188
95th Queue (ft)	226	147	187	43	66	9	37	12	167	261
Link Distance (ft)	279	262	262	262	262			269	269	
Upstream Blk Time (%)									1	1
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									0	7
Queuing Penalty (veh)									1	0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	NB
Directions Served	T	R
Maximum Queue (ft)	42	42
Average Queue (ft)	1	21
95th Queue (ft)	14	36
Link Distance (ft)	279	288
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	244	251	194	219	244	88	49	136	140	275	322	300
Average Queue (ft)	137	141	85	122	141	22	21	76	92	114	183	248
95th Queue (ft)	214	213	168	209	227	59	45	124	135	220	300	309
Link Distance (ft)			310	310	310	310				276	276	276
Upstream Blk Time (%)										0	1	2
Queuing Penalty (veh)										1	5	15
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)	0	1								0		
Queuing Penalty (veh)	0	3								0		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	120	111	91	134	208	22	162	175	300	172
Average Queue (ft)	54	60	47	70	91	5	160	174	280	42
95th Queue (ft)	94	101	95	123	162	19	167	175	293	124
Link Distance (ft)	276	301	301	301	301	301				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							5	63	3	0
Queuing Penalty (veh)							17	209	19	0

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	75	98	116	117	138	124	854	839	495
Average Queue (ft)	71	77	75	99	101	111	649	735	409
95th Queue (ft)	74	94	89	130	138	127	930	974	626
Link Distance (ft)	60	60	60	100	100	100	824	824	
Upstream Blk Time (%)	29	35	39	18	18	38	5	13	
Queuing Penalty (veh)	196	240	267	122	124	261	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								50	0
Queuing Penalty (veh)								150	2

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	164	150	154	96	105	120	107	216	196	159
Average Queue (ft)	110	106	107	63	50	89	61	106	112	54
95th Queue (ft)	163	155	149	99	103	111	98	181	181	137
Link Distance (ft)	130	130	130	72	72	72	1042	1042		
Upstream Blk Time (%)	3	2	2	9	6	35				
Queuing Penalty (veh)	25	15	17	66	41	257				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 2341

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	332	314	296	69	56	37	582	516	418
Average Queue (ft)	299	247	178	42	34	14	444	390	258
95th Queue (ft)	313	335	293	56	51	33	571	495	430
Link Distance (ft)				33	33	33	566	566	
Upstream Blk Time (%)				10	10	1	1		
Queuing Penalty (veh)				55	52	5	0		
Storage Bay Dist (ft)									480
Storage Blk Time (%)								0	
Queuing Penalty (veh)								0	

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	313	311	203	131	226	105	141	143	191	172	327
Average Queue (ft)	203	231	81	75	87	54	72	73	118	96	134
95th Queue (ft)	280	291	142	132	170	101	126	132	178	164	318
Link Distance (ft)			461	461	461	1082	1082	1082	1225	1225	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500	500									585
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	119	137	348	320	372	292	44	103	108	102	240	315
Average Queue (ft)	65	82	181	198	217	164	4	46	63	27	79	194
95th Queue (ft)	103	125	276	286	323	261	17	88	101	69	164	300
Link Distance (ft)			1082	1082	1082	1082				279	279	279
Upstream Blk Time (%)												1
Queuing Penalty (veh)												9
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)			0									
Queuing Penalty (veh)			1									

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	327	275	284	24	64	6	34	17	284	260
Average Queue (ft)	234	142	267	6	22	1	9	1	18	152
95th Queue (ft)	302	256	298	21	58	3	26	8	130	228
Link Distance (ft)	279	262	262	262	262			269	269	
Upstream Blk Time (%)	6	0	48						1	0
Queuing Penalty (veh)	35	0	0						0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									2	4
Queuing Penalty (veh)									4	0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	NB
Directions Served	T	T	T	T	T	R
Maximum Queue (ft)	88	150	30	80	97	83
Average Queue (ft)	4	13	1	4	9	34
95th Queue (ft)	32	66	10	29	46	63
Link Distance (ft)	279	279	279	310	310	288
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	192	201	225	310	369	324	72	106	223	285	326	309
Average Queue (ft)	115	117	153	201	222	49	19	48	71	184	222	275
95th Queue (ft)	187	197	229	288	325	174	49	96	129	269	300	319
Link Distance (ft)			310	310	310	310				276	276	276
Upstream Blk Time (%)				0	4	1				0	1	7
Queuing Penalty (veh)				0	23	9				1	11	53
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)										1		
Queuing Penalty (veh)										3		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	149	134	132	157	178	56	162	175	313	175
Average Queue (ft)	64	51	72	81	105	14	161	174	280	67
95th Queue (ft)	116	99	121	129	164	40	167	175	294	152
Link Distance (ft)	276	301	301	301	301	301				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							6	62	3	0
Queuing Penalty (veh)							25	283	27	1

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	74	93	98	118	136	146	843	887	495
Average Queue (ft)	71	73	77	98	98	114	839	848	443
95th Queue (ft)	75	80	91	130	137	134	841	870	655
Link Distance (ft)	60	60	60	100	100	100	824	824	
Upstream Blk Time (%)	26	29	32	14	12	37	59	85	
Queuing Penalty (veh)	235	260	286	115	104	312	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								74	1
Queuing Penalty (veh)								175	3

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	166	168	168	97	84	189	124	195	189	165
Average Queue (ft)	139	138	125	57	48	87	73	122	139	108
95th Queue (ft)	160	155	171	91	98	122	116	188	186	177
Link Distance (ft)	130	130	130	72	72	72	1042	1042		
Upstream Blk Time (%)	10	7	7	7	6	32				
Queuing Penalty (veh)	89	67	60	59	54	275				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

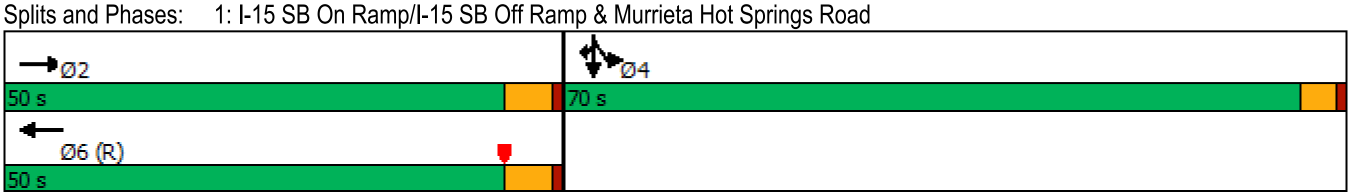
Zone wide Queuing Penalty: 2690

EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2025) WITH TRIANGLE PROJECT (CURRENT DEVELOPMENT PLAN), FREE RIGHT-TURN LOOP RAMP AT I-15 NB RAMPS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1036	317	1376	1259	0	336
Future Volume (vph)	1036	317	1376	1259	0	336
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	50.0		50.0	70.0	70.0	70.0
Total Split (%)	41.7%		41.7%	58.3%	58.3%	58.3%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	44.7	120.0	44.7	65.8	65.8	65.8
Actuated g/C Ratio	0.37	1.00	0.37	0.55	0.55	0.55
v/c Ratio	0.58	0.21	0.77	0.71	0.76	0.38
Control Delay	31.7	0.3	43.7	25.0	27.3	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.7	0.3	43.7	25.0	27.3	16.1
LOS	C	A	D	C	C	B
Approach Delay	24.3		43.7		24.2	
Approach LOS	C		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 30.5	Intersection LOS: C
Intersection Capacity Utilization 102.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1036	317	0	1376	0	0	0	0	1259	0	336
Future Volume (veh/h)	0	1036	317	0	1376	0	0	0	0	1259	0	336
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1102	0	0	1464	0				1450	0	238
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1902		0	1902	0				2032	0	869
Arrive On Green	0.00	0.37	0.00	0.00	0.37	0.00				0.55	0.00	0.55
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1102	0	0	1464	0				1450	0	238
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	20.7	0.0	0.0	30.3	0.0				34.9	0.0	9.6
Cycle Q Clear(g_c), s	0.0	20.7	0.0	0.0	30.3	0.0				34.9	0.0	9.6
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1902		0	1902	0				2032	0	869
V/C Ratio(X)	0.00	0.58		0.00	0.77	0.00				0.71	0.00	0.27
Avail Cap(c_a), veh/h	0	1902		0	1902	0				2032	0	869
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	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	30.1	0.0	0.0	33.1	0.0				20.1	0.0	14.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	3.1	0.0				2.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.2	0.0	0.0	12.4	0.0				15.1	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.6	0.0	0.0	36.2	0.0				22.3	0.0	15.2
LnGrp LOS	A	C		A	D	A				C	A	B
Approach Vol, veh/h		1102			1464						1688	
Approach Delay, s/veh		30.6			36.2						21.3	
Approach LOS		C			D						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.0		70.0		50.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		44.7		* 66		44.7						
Max Q Clear Time (g_c+I1), s		22.7		36.9		32.3						
Green Ext Time (p_c), s		5.4		11.6		5.8						

Intersection Summary			
HCM 6th Ctrl Delay			28.8
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

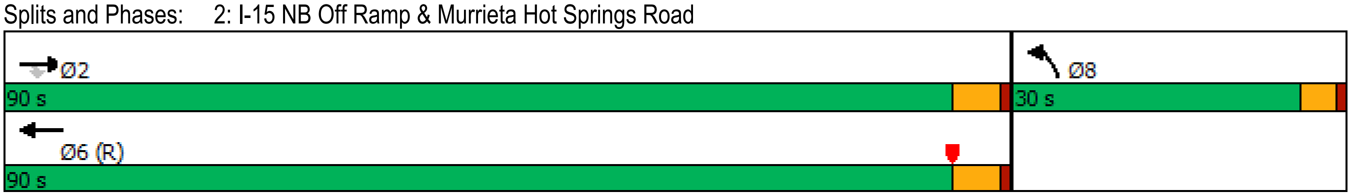
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	2083	209	2309	329	276
Future Volume (vph)	2083	209	2309	329	276
Turn Type	NA	Perm	NA	Prot	Free
Protected Phases	2		6	8	
Permitted Phases		2			Free
Detector Phase	2	2	6	8	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	
Minimum Split (s)	22.3	22.3	15.3	14.2	
Total Split (s)	90.0	90.0	90.0	30.0	
Total Split (%)	75.0%	75.0%	75.0%	25.0%	
Yellow Time (s)	4.3	4.3	4.3	3.2	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.3	5.3	5.3	4.2	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Max	Max	C-Max	None	
Act Effct Green (s)	92.7	92.7	92.7	17.8	120.0
Actuated g/C Ratio	0.77	0.77	0.77	0.15	1.00
v/c Ratio	0.58	0.18	0.51	0.71	0.19
Control Delay	3.4	0.4	6.1	56.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.4	0.4	6.2	56.2	0.3
LOS	A	A	A	E	A
Approach Delay	3.1		6.2	30.7	
Approach LOS	A		A	C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 7.7 Intersection LOS: A
Intersection Capacity Utilization 57.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: I-15 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2083	209	0	2309	329	276
Future Volume (veh/h)	2083	209	0	2309	329	276
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	2264	0	0	2510	358	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	3604		0	4541	443	
Arrive On Green	0.71	0.00	0.00	0.71	0.13	0.00
Sat Flow, veh/h	5274	1585	0	6958	3456	1585
Grp Volume(v), veh/h	2264	0	0	2510	358	0
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1585
Q Serve(g_s), s	28.1	0.0	0.0	22.6	12.1	0.0
Cycle Q Clear(g_c), s	28.1	0.0	0.0	22.6	12.1	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3604		0	4541	443	
V/C Ratio(X)	0.63		0.00	0.55	0.81	
Avail Cap(c_a), veh/h	3604		0	4541	743	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.53	1.00	0.00
Uniform Delay (d), s/veh	9.3	0.0	0.0	8.5	50.9	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.3	3.6	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	8.8	0.0	0.0	6.5	5.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.2	0.0	0.0	8.8	54.4	0.0
LnGrp LOS	B		A	A	D	
Approach Vol, veh/h	2264			2510	358	
Approach Delay, s/veh	10.2			8.8	54.4	
Approach LOS	B			A	D	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	90.0	90.0	19.6
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	84.7	84.7	25.8
Max Q Clear Time (g_c+I1), s	30.1	24.6	14.1
Green Ext Time (p_c), s	20.6	26.5	1.3

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

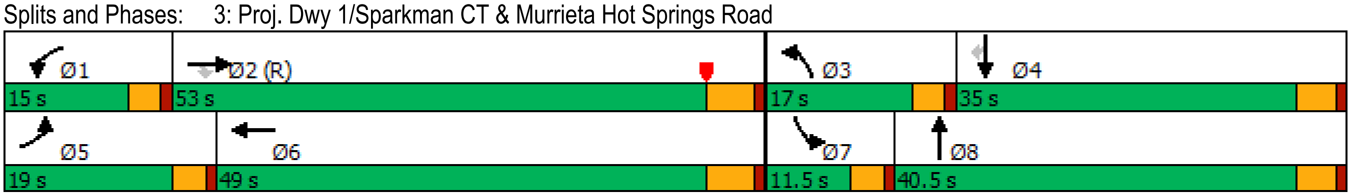
Notes

Unsignalized Delay for [NBR, EBR, WBT] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	275	1836	194	194	1767	232	10	27	10	265
Future Volume (vph)	275	1836	194	194	1767	232	10	27	10	265
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	19.0	53.0	53.0	15.0	49.0	17.0	40.5	11.5	35.0	35.0
Total Split (%)	15.8%	44.2%	44.2%	12.5%	40.8%	14.2%	33.8%	9.6%	29.2%	29.2%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	C-Max	None	Max	None	Max	None	Max	Max
Act Effct Green (s)	14.0	48.1	48.1	10.6	44.7	12.4	40.7	7.1	31.0	31.0
Actuated g/C Ratio	0.12	0.40	0.40	0.09	0.37	0.10	0.34	0.06	0.26	0.26
v/c Ratio	0.72	0.75	0.28	0.69	0.81	0.71	0.09	0.14	0.01	0.68
Control Delay	55.5	29.8	5.5	77.5	19.9	63.9	8.3	55.1	33.7	50.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	29.8	5.5	77.5	19.9	63.9	8.3	55.1	33.7	50.0
LOS	E	C	A	E	B	E	A	E	C	D
Approach Delay		30.8			25.6		48.6		49.9	
Approach LOS		C			C		D		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 31.0	Intersection LOS: C
Intersection Capacity Utilization 61.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



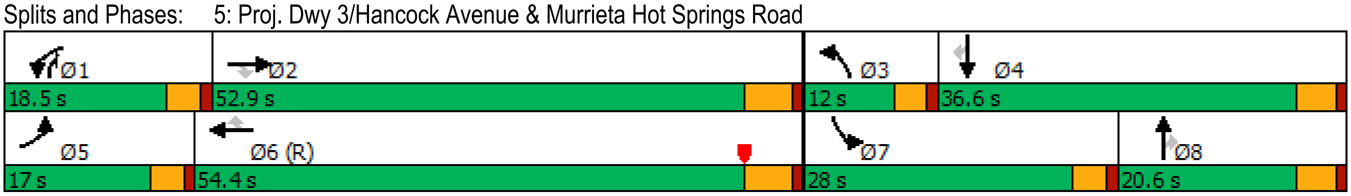
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	275	1836	194	194	1767	52	232	10	78	27	10	265
Future Volume (veh/h)	275	1836	194	194	1767	52	232	10	78	27	10	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	1933	211	211	1860	55	252	11	85	28	11	279
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	2773	683	265	2629	78	311	547	488	122	900	402
Arrive On Green	0.10	0.43	0.43	0.15	0.81	0.81	0.09	0.31	0.31	0.04	0.25	0.25
Sat Flow, veh/h	3456	6434	1585	3456	6470	191	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	289	1933	211	211	1387	528	252	11	85	28	11	279
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1836	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.8	29.3	10.5	7.1	15.2	15.2	8.6	0.5	4.7	0.9	0.3	19.1
Cycle Q Clear(g_c), s	9.8	29.3	10.5	7.1	15.2	15.2	8.6	0.5	4.7	0.9	0.3	19.1
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	2773	683	265	1961	746	311	547	488	122	900	402
V/C Ratio(X)	0.83	0.70	0.31	0.80	0.71	0.71	0.81	0.02	0.17	0.23	0.01	0.69
Avail Cap(c_a), veh/h	432	2773	683	317	1961	746	374	547	488	216	900	402
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	27.8	22.4	49.9	8.1	8.1	53.6	28.9	30.4	56.3	33.6	40.6
Incr Delay (d2), s/veh	8.8	1.2	1.0	11.4	2.2	5.6	10.7	0.1	0.8	0.9	0.0	9.5
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	4.6	10.9	4.1	3.2	3.0	4.1	4.2	0.2	1.9	0.4	0.1	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	29.0	23.4	61.3	10.3	13.7	64.3	29.0	31.1	57.2	33.6	50.1
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	C	D
Approach Vol, veh/h		2433			2126			348			318	
Approach Delay, s/veh		32.4			16.2			55.1			50.2	
Approach LOS		C			B			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	57.0	14.8	35.0	16.1	54.1	8.2	41.5				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	11.0	47.7	13.0	30.4	15.0	43.7	7.5	35.9				
Max Q Clear Time (g_c+I1), s	9.1	31.3	10.6	21.1	11.8	17.2	2.9	6.7				
Green Ext Time (p_c), s	0.1	12.0	0.2	0.7	0.3	14.8	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			28.4									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	1420	135	232	1753	579	108	93	187	547	116	214
Future Volume (vph)	295	1420	135	232	1753	579	108	93	187	547	116	214
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	17.0	52.9	52.9	18.5	54.4	54.4	12.0	20.6	18.5	28.0	36.6	36.6
Total Split (%)	14.2%	44.1%	44.1%	15.4%	45.3%	45.3%	10.0%	17.2%	15.4%	23.3%	30.5%	30.5%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	13.0	48.9	48.9	13.2	49.1	49.1	7.8	16.0	33.8	24.0	32.2	32.2
Actuated g/C Ratio	0.11	0.41	0.41	0.11	0.41	0.41	0.06	0.13	0.28	0.20	0.27	0.27
v/c Ratio	0.90	0.60	0.20	0.67	0.93	0.68	0.53	0.41	0.24	0.91	0.40	0.32
Control Delay	95.5	14.9	1.4	67.8	32.0	4.3	63.2	53.2	17.9	66.5	35.2	6.9
Queue Delay	0.0	0.0	0.0	0.0	4.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.5	14.9	1.4	67.8	36.0	4.6	63.2	53.2	17.9	66.5	35.2	6.9
LOS	F	B	A	E	D	A	E	D	B	E	D	A
Approach Delay		26.7			31.8			39.0			49.6	
Approach LOS		C			C			D			D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 33.4 Intersection LOS: C
Intersection Capacity Utilization 81.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	1420	135	232	1753	579	108	93	187	547	116	214
Future Volume (veh/h)	295	1420	135	232	1753	579	108	93	187	547	116	214
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1511	147	252	1865	616	117	101	203	582	202	177
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	2733	673	309	2089	649	198	232	595	713	499	423
Arrive On Green	0.21	0.85	0.85	0.18	0.82	0.82	0.06	0.12	0.12	0.20	0.27	0.27
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	314	1511	147	252	1865	616	117	101	203	582	202	177
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	10.5	8.0	2.1	8.4	29.5	38.0	4.0	6.0	7.4	18.7	10.7	11.1
Cycle Q Clear(g_c), s	10.5	8.0	2.1	8.4	29.5	38.0	4.0	6.0	7.4	18.7	10.7	11.1
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	363	2733	673	309	2089	649	198	232	595	713	499	423
V/C Ratio(X)	0.87	0.55	0.22	0.82	0.89	0.95	0.59	0.44	0.34	0.82	0.41	0.42
Avail Cap(c_a), veh/h	374	2733	673	418	2089	649	230	249	621	713	499	423
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	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	46.6	5.8	5.3	48.3	9.1	9.9	55.2	48.7	40.1	45.9	36.2	36.3
Incr Delay (d2), s/veh	18.3	0.2	0.2	8.9	6.3	25.0	3.0	1.3	0.3	10.0	2.4	3.0
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	4.9	1.7	0.7	3.6	4.7	8.1	1.8	2.9	2.6	9.2	5.2	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.9	6.0	5.5	57.2	15.5	34.8	58.2	50.0	40.4	55.9	38.6	39.4
LnGrp LOS	E	A	A	E	B	C	E	D	D	E	D	D
Approach Vol, veh/h		1972			2733			421			961	
Approach Delay, s/veh		15.4			23.7			47.6			49.2	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	56.3	10.9	36.6	16.6	54.4	28.0	19.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	14.5	47.6	8.0	32.0	13.0	49.1	24.0	16.0
Max Q Clear Time (g_c+I1), s	10.4	10.0	6.0	13.1	12.5	40.0	20.7	9.4
Green Ext Time (p_c), s	0.3	10.1	0.1	1.8	0.1	7.2	0.9	0.7

Intersection Summary	
HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

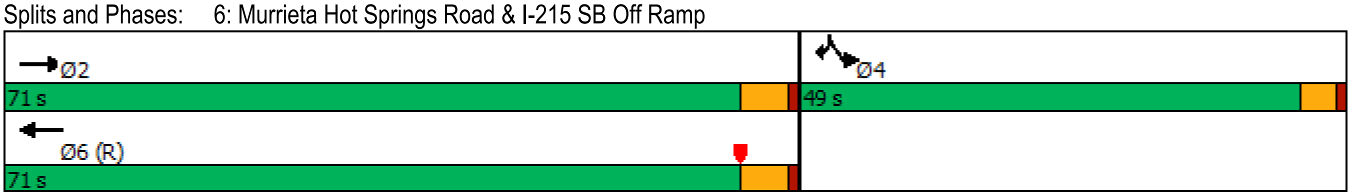
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2039	2046	665	602
Future Volume (vph)	2039	2046	665	602
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	71.0	71.0	49.0	49.0
Total Split (%)	59.2%	59.2%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	70.9	70.9	39.6	39.8
Actuated g/C Ratio	0.59	0.59	0.33	0.33
v/c Ratio	0.75	0.75	0.76	0.82
Control Delay	15.3	18.1	39.7	50.1
Queue Delay	0.0	0.3	0.0	0.0
Total Delay	15.3	18.5	39.7	50.1
LOS	B	B	D	D
Approach Delay	15.3	18.5	42.9	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 122.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2039	2046	0	665	602
Future Volume (veh/h)	0	2039	2046	0	665	602
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2169	2177	0	885	449
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2796	2796	0	1178	527
Arrive On Green	0.00	0.55	1.00	0.00	0.32	0.32
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2169	2177	0	885	449
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	40.1	0.0	0.0	25.7	30.6
Cycle Q Clear(g_c), s	0.0	40.1	0.0	0.0	25.7	30.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2796	2796	0	1178	527
V/C Ratio(X)	0.00	0.78	0.78	0.00	0.75	0.85
Avail Cap(c_a), veh/h	0	2796	2796	0	1383	618
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	0.0	0.0	36.7	38.2
Incr Delay (d2), s/veh	0.0	2.2	2.2	0.0	2.0	9.8
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	15.1	0.6	0.0	11.9	13.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	23.5	2.2	0.0	38.7	48.0
LnGrp LOS	A	C	A	A	D	D
Approach Vol, veh/h		2169	2177		1334	
Approach Delay, s/veh		23.5	2.2		41.8	
Approach LOS		C	A		D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	71.0	42.3	71.0
Change Period (Y+Rc), s	5.3	* 4.2	5.3
Max Green Setting (Gmax), s	65.7	* 45	65.7
Max Q Clear Time (g_c+I1), s	42.1	32.6	2.0
Green Ext Time (p_c), s	13.3	5.6	19.7

Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

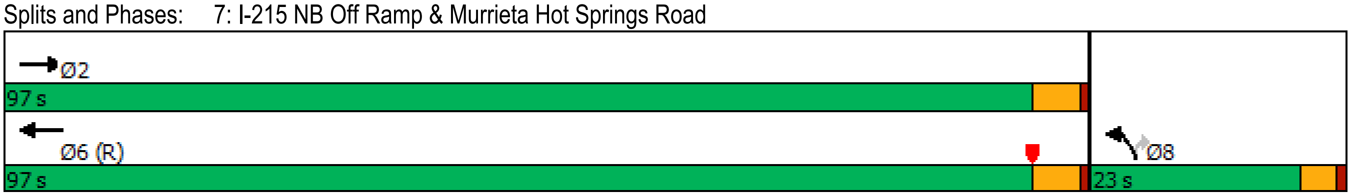
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2189	2182	232	214
Future Volume (vph)	2189	2182	232	214
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	19.2%	19.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	91.7	91.7	18.8	18.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.61	0.61	0.41	0.46
Control Delay	7.1	7.1	48.0	42.8
Queue Delay	0.1	1.0	0.0	0.0
Total Delay	7.2	8.1	48.0	42.8
LOS	A	A	D	D
Approach Delay	7.2	8.1	45.5	
Approach LOS	A	A	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2189	0	0	2182	232	214
Future Volume (veh/h)	2189	0	0	2182	232	214
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2304	0	0	2297	244	225
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3902	0	0	3902	563	455
Arrive On Green	0.76	0.00	0.00	0.76	0.16	0.16
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2304	0	0	2297	244	225
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	23.3	0.0	0.0	23.1	7.4	8.5
Cycle Q Clear(g_c), s	23.3	0.0	0.0	23.1	7.4	8.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3902	0	0	3902	563	455
V/C Ratio(X)	0.59	0.00	0.00	0.59	0.43	0.50
Avail Cap(c_a), veh/h	3902	0	0	3902	563	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.1	0.0	0.0	6.1	45.8	46.3
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.7	2.4	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	6.3	3.5	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.7	0.0	0.0	6.7	48.2	50.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	2304			2297	469	
Approach Delay, s/veh	6.7			6.7	49.1	
Approach LOS	A			A	D	

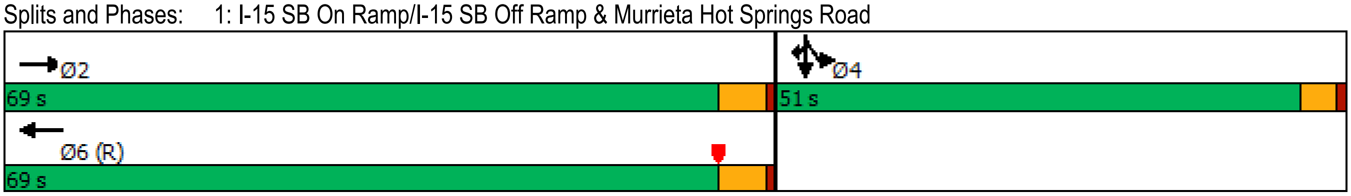
Timer - Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		97.0				97.0		23.0
Change Period (Y+Rc), s		5.3				5.3		4.2
Max Green Setting (Gmax), s		91.7				91.7		18.8
Max Q Clear Time (g_c+I1), s		25.3				25.1		10.5
Green Ext Time (p_c), s		22.5				22.4		1.5

Intersection Summary		
HCM 6th Ctrl Delay		10.7
HCM 6th LOS		B

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2262	346	1577	1045	0	213
Future Volume (vph)	2262	346	1577	1045	0	213
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	69.0		69.0	51.0	51.0	51.0
Total Split (%)	57.5%		57.5%	42.5%	42.5%	42.5%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	63.7	120.0	63.7	46.8	46.8	46.8
Actuated g/C Ratio	0.53	1.00	0.53	0.39	0.39	0.39
v/c Ratio	0.90	0.23	0.63	0.82	0.90	0.34
Control Delay	31.1	0.3	26.8	44.1	51.8	25.0
Queue Delay	8.3	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	0.3	26.8	44.1	51.8	25.0
LOS	D	A	C	D	D	C
Approach Delay	34.3		26.8		44.5	
Approach LOS	C		C		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 34.5	Intersection LOS: C
Intersection Capacity Utilization 121.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2262	346	0	1577	0	0	0	0	1045	0	213
Future Volume (veh/h)	0	2262	346	0	1577	0	0	0	0	1045	0	213
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2432	0	0	1696	0				1195	0	153
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2710		0	2710	0				1445	0	618
Arrive On Green	0.00	0.53	0.00	0.00	0.53	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2432	0	0	1696	0				1195	0	153
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	51.2	0.0	0.0	28.0	0.0				34.8	0.0	7.8
Cycle Q Clear(g_c), s	0.0	51.2	0.0	0.0	28.0	0.0				34.8	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2710		0	2710	0				1445	0	618
V/C Ratio(X)	0.00	0.90		0.00	0.63	0.00				0.83	0.00	0.25
Avail Cap(c_a), veh/h	0	2710		0	2710	0				1445	0	618
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	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.2	0.0	0.0	19.8	0.0				33.0	0.0	24.7
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.0	1.1	0.0				5.6	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	19.8	0.0	0.0	10.5	0.0				16.5	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.7	0.0	0.0	20.9	0.0				38.5	0.0	25.7
LnGrp LOS	A	C		A	C	A				D	A	C
Approach Vol, veh/h		2432			1696						1348	
Approach Delay, s/veh		29.7			20.9						37.1	
Approach LOS		C			C						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		69.0		51.0		69.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		63.7		* 47		63.7						
Max Q Clear Time (g_c+I1), s		53.2		36.8		30.0						
Green Ext Time (p_c), s		8.3		5.1		10.8						

Intersection Summary		
HCM 6th Ctrl Delay		28.8
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

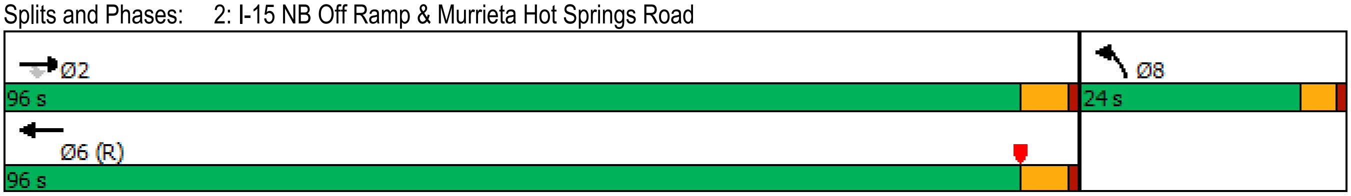
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	2601	730	2779	285	321
Future Volume (vph)	2601	730	2779	285	321
Turn Type	NA	Perm	NA	Prot	Free
Protected Phases	2		6	8	
Permitted Phases		2			Free
Detector Phase	2	2	6	8	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	
Minimum Split (s)	22.3	22.3	15.3	14.2	
Total Split (s)	96.0	96.0	96.0	24.0	
Total Split (%)	80.0%	80.0%	80.0%	20.0%	
Yellow Time (s)	4.3	4.3	4.3	3.2	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.3	5.3	5.3	4.2	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Max	Max	C-Max	None	
Act Effct Green (s)	94.9	94.9	94.9	15.6	120.0
Actuated g/C Ratio	0.79	0.79	0.79	0.13	1.00
v/c Ratio	0.67	0.54	0.57	0.67	0.21
Control Delay	6.7	1.8	5.3	57.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	6.7	1.8	5.3	57.0	0.3
LOS	A	A	A	E	A
Approach Delay	5.6		5.3	27.0	
Approach LOS	A		A	C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 7.4	Intersection LOS: A
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2601	730	0	2779	285	321
Future Volume (veh/h)	2601	730	0	2779	285	321
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	2709	0	0	2895	297	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	3859		0	4863	371	
Arrive On Green	0.76	0.00	0.00	1.00	0.11	0.00
Sat Flow, veh/h	5274	1585	0	6958	3456	1585
Grp Volume(v), veh/h	2709	0	0	2895	297	0
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1585
Q Serve(g_s), s	33.1	0.0	0.0	0.0	10.1	0.0
Cycle Q Clear(g_c), s	33.1	0.0	0.0	0.0	10.1	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3859		0	4863	371	
V/C Ratio(X)	0.70		0.00	0.60	0.80	
Avail Cap(c_a), veh/h	3859		0	4863	570	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.44	1.00	0.00
Uniform Delay (d), s/veh	7.6	0.0	0.0	0.0	52.3	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.2	4.6	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	9.2	0.0	0.0	0.1	4.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.7	0.0	0.0	0.2	56.9	0.0
LnGrp LOS	A		A	A	E	
Approach Vol, veh/h	2709			2895	297	
Approach Delay, s/veh	8.7			0.2	56.9	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	96.0	96.0	17.1
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	90.7	90.7	19.8
Max Q Clear Time (g_c+I1), s	35.1	2.0	12.1
Green Ext Time (p_c), s	30.1	43.2	0.8

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Notes

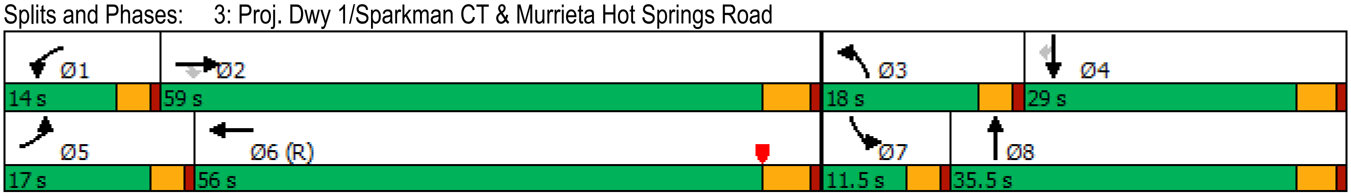
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBT] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	272	2316	200	200	2198	281	10	23	10	233
Future Volume (vph)	272	2316	200	200	2198	281	10	23	10	233
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	17.0	59.0	59.0	14.0	56.0	18.0	35.5	11.5	29.0	29.0
Total Split (%)	14.2%	49.2%	49.2%	11.7%	46.7%	15.0%	29.6%	9.6%	24.2%	24.2%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	12.6	53.9	53.9	9.8	51.1	13.4	35.7	7.1	25.0	25.0
Actuated g/C Ratio	0.10	0.45	0.45	0.08	0.43	0.11	0.30	0.06	0.21	0.21
v/c Ratio	0.77	0.82	0.25	0.73	0.86	0.75	0.11	0.11	0.01	0.72
Control Delay	60.8	26.4	3.8	68.8	20.9	64.7	8.6	54.8	38.4	58.2
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.8	26.5	3.8	68.8	20.9	64.7	8.6	54.8	38.4	58.2
LOS	E	C	A	E	C	E	A	D	D	E
Approach Delay		28.2			24.8		49.6		57.2	
Approach LOS		C			C		D		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 29.5	Intersection LOS: C
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

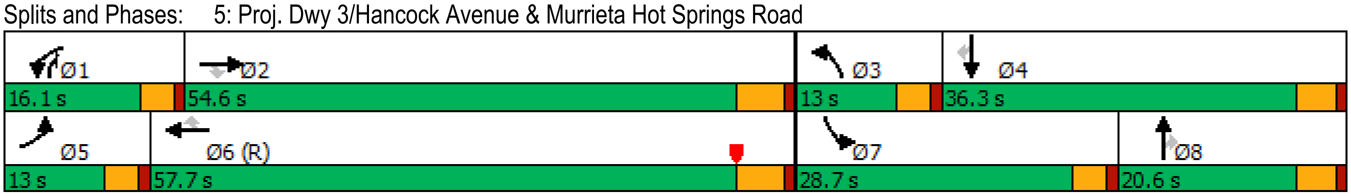


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	2316	200	200	2198	77	281	10	93	23	10	233
Future Volume (veh/h)	272	2316	200	200	2198	77	281	10	93	23	10	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	278	2363	204	204	2243	79	287	10	95	23	10	238
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	2879	709	256	2731	96	346	484	431	108	723	322
Arrive On Green	0.10	0.45	0.45	0.15	0.85	0.85	0.10	0.27	0.27	0.03	0.20	0.20
Sat Flow, veh/h	3456	6434	1585	3456	6429	226	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	278	2363	204	204	1683	639	287	10	95	23	10	238
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1830	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.5	38.5	9.8	6.8	20.8	20.9	9.8	0.5	5.6	0.8	0.3	16.9
Cycle Q Clear(g_c), s	9.5	38.5	9.8	6.8	20.8	20.9	9.8	0.5	5.6	0.8	0.3	16.9
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	2879	709	256	2050	777	346	484	431	108	723	322
V/C Ratio(X)	0.83	0.82	0.29	0.80	0.82	0.82	0.83	0.02	0.22	0.21	0.01	0.74
Avail Cap(c_a), veh/h	374	2879	709	288	2050	777	403	484	431	216	723	322
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	28.9	21.0	50.2	6.8	6.8	53.0	32.0	33.8	56.7	38.2	44.8
Incr Delay (d2), s/veh	10.2	2.1	0.8	13.0	3.8	9.5	12.0	0.1	1.2	1.0	0.0	14.1
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	4.5	14.3	3.8	3.2	3.2	4.9	4.8	0.2	2.3	0.4	0.1	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	31.0	21.8	63.2	10.6	16.3	65.0	32.0	35.0	57.7	38.2	58.9
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	D	E
Approach Vol, veh/h		2845			2526			392			271	
Approach Delay, s/veh		33.5			16.3			56.9			58.0	
Approach LOS		C			B			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	59.0	16.0	29.0	15.6	56.3	7.7	37.3				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	10.0	53.7	14.0	24.4	13.0	50.7	7.5	30.9				
Max Q Clear Time (g_c+I1), s	8.8	40.5	11.8	18.9	11.5	22.9	2.8	7.6				
Green Ext Time (p_c), s	0.1	11.4	0.2	0.4	0.1	19.0	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			28.9									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1923	140	242	2145	664	131	112	225	646	120	338
Future Volume (vph)	219	1923	140	242	2145	664	131	112	225	646	120	338
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	13.0	54.6	54.6	16.1	57.7	57.7	13.0	20.6	16.1	28.7	36.3	36.3
Total Split (%)	10.8%	45.5%	45.5%	13.4%	48.1%	48.1%	10.8%	17.2%	13.4%	23.9%	30.3%	30.3%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	9.0	49.6	49.6	11.8	52.4	52.4	8.7	16.0	32.4	24.7	32.0	32.0
Actuated g/C Ratio	0.08	0.41	0.41	0.10	0.44	0.44	0.07	0.13	0.27	0.21	0.27	0.27
v/c Ratio	0.99	0.82	0.21	0.78	1.09	0.78	0.57	0.49	0.30	1.07	0.55	0.48
Control Delay	118.6	14.1	1.5	70.1	69.5	6.5	63.3	55.7	22.0	99.3	37.1	16.4
Queue Delay	0.0	0.0	0.0	0.0	5.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.6	14.1	1.5	70.1	75.4	7.5	63.3	55.7	22.0	99.3	37.1	16.4
LOS	F	B	A	E	E	A	E	E	C	F	D	B
Approach Delay		23.3			60.2			41.6			69.4	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 48.2	Intersection LOS: D
Intersection Capacity Utilization 89.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	1923	140	242	2145	664	131	112	225	646	120	338
Future Volume (veh/h)	219	1923	140	242	2145	664	131	112	225	646	120	338
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	238	2090	152	263	2332	722	142	122	245	702	308	248
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	2706	667	315	2230	692	200	217	578	733	494	419
Arrive On Green	0.08	0.42	0.42	0.18	0.87	0.87	0.06	0.12	0.12	0.21	0.26	0.26
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	238	2090	152	263	2332	722	142	122	245	702	308	248
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	8.2	33.5	7.4	8.8	52.4	52.4	4.8	7.4	9.2	23.4	17.4	16.4
Cycle Q Clear(g_c), s	8.2	33.5	7.4	8.8	52.4	52.4	4.8	7.4	9.2	23.4	17.4	16.4
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	259	2706	667	315	2230	692	200	217	578	733	494	419
V/C Ratio(X)	0.92	0.77	0.23	0.84	1.05	1.04	0.71	0.56	0.42	0.96	0.62	0.59
Avail Cap(c_a), veh/h	259	2706	667	348	2230	692	259	249	626	733	494	419
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	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	55.1	29.8	22.3	48.2	7.6	7.6	55.5	50.1	41.3	47.1	38.9	38.5
Incr Delay (d2), s/veh	34.9	1.4	0.2	14.9	32.4	46.0	6.2	2.3	0.5	24.3	5.8	6.0
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	4.7	12.5	2.8	4.0	9.5	11.6	2.3	3.6	3.2	12.7	8.7	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.0	31.3	22.5	63.1	40.0	53.6	61.7	52.4	41.8	71.4	44.7	44.6
LnGrp LOS	F	C	C	E	F	F	E	D	D	E	D	D
Approach Vol, veh/h		2480			3317			509			1258	
Approach Delay, s/veh		36.4			44.8			49.9			59.6	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	55.8	10.9	36.3	13.0	57.7	28.7	18.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	12.1	49.3	9.0	31.7	9.0	52.4	24.7	16.0
Max Q Clear Time (g_c+I1), s	10.8	35.5	6.8	19.4	10.2	54.4	25.4	11.2
Green Ext Time (p_c), s	0.1	9.4	0.1	2.3	0.0	0.0	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	44.8
HCM 6th LOS	D

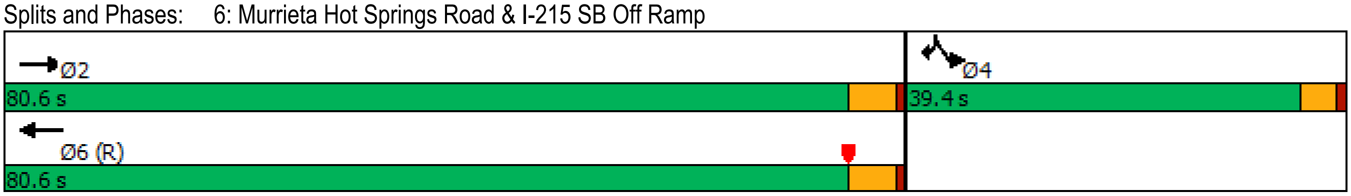
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2670	2526	699	473
Future Volume (vph)	2670	2526	699	473
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	80.6	80.6	39.4	39.4
Total Split (%)	67.2%	67.2%	32.8%	32.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	76.9	76.9	33.6	33.8
Actuated g/C Ratio	0.64	0.64	0.28	0.28
v/c Ratio	0.90	0.85	0.82	0.89
Control Delay	18.7	14.8	47.5	64.5
Queue Delay	0.0	17.1	0.0	0.0
Total Delay	18.7	31.8	47.5	64.5
LOS	B	C	D	E
Approach Delay	18.7	31.8	52.8	
Approach LOS	B	C	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 30.2	Intersection LOS: C
Intersection Capacity Utilization 139.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2670	2526	0	699	473
Future Volume (veh/h)	0	2670	2526	0	699	473
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2840	2687	0	826	416
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3204	3204	0	1034	463
Arrive On Green	0.00	0.63	1.00	0.00	0.28	0.28
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2840	2687	0	826	416
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	56.0	0.0	0.0	24.8	29.1
Cycle Q Clear(g_c), s	0.0	56.0	0.0	0.0	24.8	29.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3204	3204	0	1034	463
V/C Ratio(X)	0.00	0.89	0.84	0.00	0.80	0.90
Avail Cap(c_a), veh/h	0	3204	3204	0	1087	486
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	18.8	0.0	0.0	40.1	41.5
Incr Delay (d2), s/veh	0.0	4.1	2.8	0.0	4.1	18.9
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	20.1	0.8	0.0	11.8	14.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	22.8	2.8	0.0	44.3	60.5
LnGrp LOS	A	C	A	A	D	E
Approach Vol, veh/h		2840	2687		1242	
Approach Delay, s/veh		22.8	2.8		49.7	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		80.6		37.7		80.6
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		75.3		* 35		75.3
Max Q Clear Time (g_c+I1), s		58.0		31.1		2.0
Green Ext Time (p_c), s		14.2		2.3		33.3

Intersection Summary			
HCM 6th Ctrl Delay			19.8
HCM 6th LOS			B

Notes

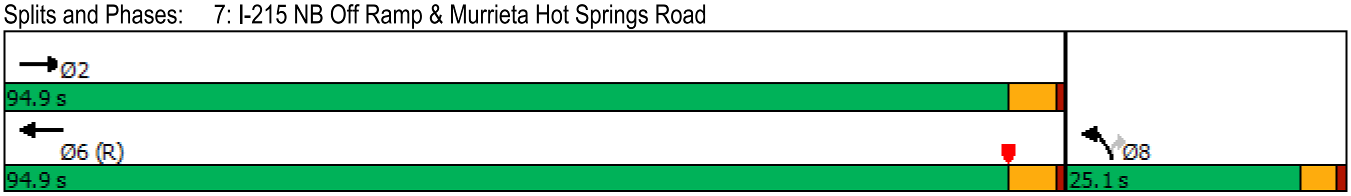
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2698	2555	237	318
Future Volume (vph)	2698	2555	237	318
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	94.9	94.9	25.1	25.1
Total Split (%)	79.1%	79.1%	20.9%	20.9%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	89.6	89.6	20.9	20.9
Actuated g/C Ratio	0.75	0.75	0.17	0.17
v/c Ratio	0.79	0.75	0.39	0.65
Control Delay	8.4	10.4	45.9	51.5
Queue Delay	0.2	4.8	0.0	0.0
Total Delay	8.6	15.1	45.9	51.5
LOS	A	B	D	D
Approach Delay	8.6	15.1	49.1	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 15.3	Intersection LOS: B
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Volume (veh/h)	2698	0	0	2555	237	318	
Future Volume (veh/h)	2698	0	0	2555	237	318	
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	
Work Zone On Approach	No			No	No		
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945	
Adj Flow Rate, veh/h	2901	0	0	2747	255	342	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Percent Heavy Veh, %	2	0	0	2	2	2	
Cap, veh/h	3813	0	0	3813	626	505	
Arrive On Green	0.75	0.00	0.00	0.75	0.17	0.17	
Sat Flow, veh/h	5443	0	0	5443	3594	2901	
Grp Volume(v), veh/h	2901	0	0	2747	255	342	
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451	
Q Serve(g_s), s	40.0	0.0	0.0	35.4	7.6	13.2	
Cycle Q Clear(g_c), s	40.0	0.0	0.0	35.4	7.6	13.2	
Prop In Lane		0.00	0.00		1.00	1.00	
Lane Grp Cap(c), veh/h	3813	0	0	3813	626	505	
V/C Ratio(X)	0.76	0.00	0.00	0.72	0.41	0.68	
Avail Cap(c_a), veh/h	3813	0	0	3813	626	505	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	8.9	0.0	0.0	8.3	44.0	46.4	
Incr Delay (d2), s/veh	1.5	0.0	0.0	1.2	2.0	7.1	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	11.5	0.0	0.0	10.1	3.6	5.3	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	10.4	0.0	0.0	9.5	46.0	53.5	
LnGrp LOS	B	A	A	A	D	D	
Approach Vol, veh/h	2901			2747	597		
Approach Delay, s/veh	10.4			9.5	50.3		
Approach LOS	B			A	D		
Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		94.9				94.9	25.1
Change Period (Y+Rc), s		5.3				5.3	4.2
Max Green Setting (Gmax), s		89.6				89.6	20.9
Max Q Clear Time (g_c+I1), s		42.0				37.4	15.2
Green Ext Time (p_c), s		31.2				29.9	1.5
Intersection Summary							
HCM 6th Ctrl Delay			13.8				
HCM 6th LOS			B				

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (ft)	302	280	256	81	57	74	40	577	581	488
Average Queue (ft)	242	179	158	14	44	36	25	329	357	206
95th Queue (ft)	315	262	253	54	49	50	45	486	506	404
Link Distance (ft)					32	32	32	566	566	
Upstream Blk Time (%)					27	24	8	0	0	
Queuing Penalty (veh)					124	111	37	0	0	
Storage Bay Dist (ft)										480
Storage Blk Time (%)									1	0
Queuing Penalty (veh)									1	0

Intersection: 2: I-15 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	T	T	T	T	L	L	R
Maximum Queue (ft)	285	275	243	119	140	188	277	151	201	194
Average Queue (ft)	122	107	107	44	76	83	163	104	136	127
95th Queue (ft)	206	195	209	109	141	154	249	148	177	215
Link Distance (ft)	457	457	457	529	529	529	529	187	187	187
Upstream Blk Time (%)									1	4
Queuing Penalty (veh)									2	9
Storage Bay Dist (ft)										
Storage Blk Time (%)			0							
Queuing Penalty (veh)			1							

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	149	226	356	295	276	227	75	114	125	170	208	265
Average Queue (ft)	56	86	191	199	174	144	9	56	74	53	81	104
95th Queue (ft)	117	160	276	279	260	229	37	106	115	121	160	193
Link Distance (ft)			529	529	529	529				265	265	265
Upstream Blk Time (%)												0
Queuing Penalty (veh)												2
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)			0									
Queuing Penalty (veh)			1									

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	215	142	197	28	112	6	34	17	261	247
Average Queue (ft)	119	79	108	6	40	0	11	3	9	167
95th Queue (ft)	206	126	164	23	86	2	29	13	86	230
Link Distance (ft)	265	281	281	281	281			269	269	
Upstream Blk Time (%)									0	
Queuing Penalty (veh)									0	
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									0	2
Queuing Penalty (veh)									1	0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	WB	NB
Directions Served	T	R
Maximum Queue (ft)	30	64
Average Queue (ft)	1	21
95th Queue (ft)	10	43
Link Distance (ft)	318	288
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	249	250	170	190	183	73	53	138	139	244	273	257
Average Queue (ft)	145	153	86	110	118	18	18	65	85	144	198	224
95th Queue (ft)	214	224	155	175	180	52	48	120	133	248	270	266
Link Distance (ft)			318	318	318	318				235	235	235
Upstream Blk Time (%)										0	1	4
Queuing Penalty (veh)										2	5	27
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)	0	1								0		
Queuing Penalty (veh)	0	3								1		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	140	194	146	152	172	41	162	175	314	175
Average Queue (ft)	62	73	47	76	85	8	160	174	281	54
95th Queue (ft)	96	154	103	132	149	27	171	175	295	143
Link Distance (ft)	235	295	295	295	295	295				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							5	65	3	0
Queuing Penalty (veh)							15	214	17	0

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	96	98	116	138	180	144	872	867	495
Average Queue (ft)	73	75	83	119	125	130	768	808	413
95th Queue (ft)	83	88	104	151	169	143	1044	982	681
Link Distance (ft)	68	68	68	122	122	122	833	833	
Upstream Blk Time (%)	29	34	39	11	15	36	31	54	
Queuing Penalty (veh)	197	233	268	74	102	246	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								60	2
Queuing Penalty (veh)								180	14

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	164	156	184	208	125	125	159	213	182	139
Average Queue (ft)	111	110	121	78	72	85	86	104	108	45
95th Queue (ft)	155	164	185	123	116	105	136	178	168	120
Link Distance (ft)	148	148	148	65	65	65	1041	1041		
Upstream Blk Time (%)	1	1	2	15	13	42				
Queuing Penalty (veh)	10	5	17	105	98	304				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 2428

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (ft)	302	302	350	298	46	32	50	618	630	505
Average Queue (ft)	178	248	307	72	38	21	14	578	589	490
95th Queue (ft)	287	367	326	252	48	42	35	618	611	518
Link Distance (ft)					32	32	32	566	566	
Upstream Blk Time (%)					6	3	1	26	81	
Queuing Penalty (veh)					33	16	6	0	0	
Storage Bay Dist (ft)										480
Storage Blk Time (%)									79	1
Queuing Penalty (veh)									83	9

Intersection: 2: I-15 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	R	T	T	T	T	L	L	R
Maximum Queue (ft)	221	210	274	245	138	225	268	341	176	199	224
Average Queue (ft)	132	124	129	16	63	103	171	256	101	137	160
95th Queue (ft)	193	212	222	117	127	181	270	320	160	191	234
Link Distance (ft)	457	457	457		529	529	529	529	187	187	187
Upstream Blk Time (%)									0	2	16
Queuing Penalty (veh)									0	3	32
Storage Bay Dist (ft)				220							
Storage Blk Time (%)			1	0							
Queuing Penalty (veh)			4	0							

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	132	135	253	276	259	215	87	129	144	153	258	273
Average Queue (ft)	46	61	165	187	179	149	10	59	81	76	150	197
95th Queue (ft)	98	113	239	261	245	225	44	105	129	138	229	251
Link Distance (ft)			529	529	529	529				265	265	265
Upstream Blk Time (%)											0	0
Queuing Penalty (veh)											0	1
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	273	183	248	49	86	6	36	17	284	260
Average Queue (ft)	207	107	155	15	45	0	11	3	28	176
95th Queue (ft)	263	168	223	39	79	3	30	13	165	255
Link Distance (ft)	265	281	281	281	281			269	269	
Upstream Blk Time (%)	1								1	1
Queuing Penalty (veh)	7								0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									1	4
Queuing Penalty (veh)									3	0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	WB	WB	NB
Directions Served	T	T	R
Maximum Queue (ft)	20	31	64
Average Queue (ft)	1	1	32
95th Queue (ft)	7	10	57
Link Distance (ft)	318	318	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	157	154	190	234	253	162	51	212	224	259	286	278
Average Queue (ft)	96	102	86	130	151	28	16	77	99	195	229	243
95th Queue (ft)	140	143	172	209	229	83	43	141	178	272	282	271
Link Distance (ft)			318	318	318	318				235	235	235
Upstream Blk Time (%)									0	2	4	10
Queuing Penalty (veh)									0	11	30	77
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)								0	1	4		
Queuing Penalty (veh)								0	9	9		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	153	149	117	155	226	183	162	175	301	175
Average Queue (ft)	74	67	53	89	121	13	158	174	280	67
95th Queue (ft)	127	122	102	141	200	69	175	175	292	159
Link Distance (ft)	235	295	295	295	295	295				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							3	63	4	0
Queuing Penalty (veh)							14	287	30	2

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	93	114	145	141	159	187	896	885	495
Average Queue (ft)	73	76	91	114	124	136	854	851	454
95th Queue (ft)	79	91	124	160	166	162	875	865	638
Link Distance (ft)	68	68	68	122	122	122	833	833	
Upstream Blk Time (%)	23	28	32	13	17	35	60	83	
Queuing Penalty (veh)	204	251	289	112	145	292	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								75	2
Queuing Penalty (veh)								177	12

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	179	185	166	174	124	163	108	146	216	163
Average Queue (ft)	144	142	130	79	80	87	61	83	137	98
95th Queue (ft)	178	180	172	124	116	119	97	132	182	174
Link Distance (ft)	148	148	148	65	65	65	1041	1041		
Upstream Blk Time (%)	6	3	2	17	21	34				
Queuing Penalty (veh)	52	26	19	147	177	289				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

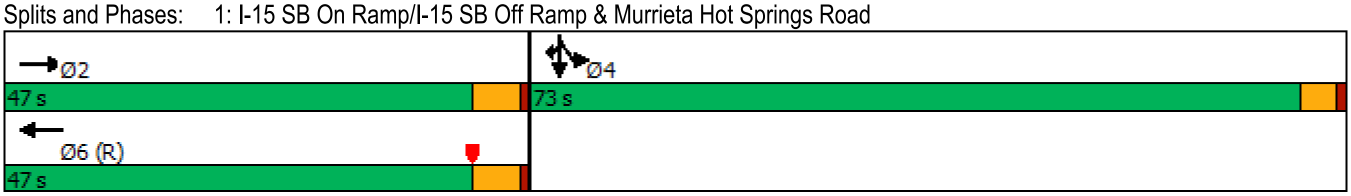
Zone wide Queuing Penalty: 2857

EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2028) WITHOUT TRIANGLE PROJECT, NO INTERCHANGE IMPROVEMENTS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	988	325	1369	1186	0	352
Future Volume (vph)	988	325	1369	1186	0	352
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	47.0		47.0	73.0	73.0	73.0
Total Split (%)	39.2%		39.2%	60.8%	60.8%	60.8%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	41.7	120.0	41.7	68.8	68.8	68.8
Actuated g/C Ratio	0.35	1.00	0.35	0.57	0.57	0.57
v/c Ratio	0.59	0.22	0.82	0.64	0.69	0.39
Control Delay	33.9	0.3	40.3	20.8	22.4	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.9	0.3	40.3	20.8	22.4	14.7
LOS	C	A	D	C	C	B
Approach Delay	25.6		40.3		20.2	
Approach LOS	C		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 28.4	Intersection LOS: C
Intersection Capacity Utilization 97.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	988	325	0	1369	0	0	0	0	1186	0	352
Future Volume (veh/h)	0	988	325	0	1369	0	0	0	0	1186	0	352
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1051	0	0	1456	0				1378	0	249
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1774		0	1774	0				2124	0	909
Arrive On Green	0.00	0.35	0.00	0.00	0.23	0.00				0.57	0.00	0.57
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1051	0	0	1456	0				1378	0	249
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	20.3	0.0	0.0	32.5	0.0				30.3	0.0	9.5
Cycle Q Clear(g_c), s	0.0	20.3	0.0	0.0	32.5	0.0				30.3	0.0	9.5
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1774		0	1774	0				2124	0	909
V/C Ratio(X)	0.00	0.59		0.00	0.82	0.00				0.65	0.00	0.27
Avail Cap(c_a), veh/h	0	1774		0	1774	0				2124	0	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	32.2	0.0	0.0	42.5	0.0				17.4	0.0	13.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	4.4	0.0				1.5	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.1	0.0	0.0	14.6	0.0				12.9	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.7	0.0	0.0	46.9	0.0				18.9	0.0	13.7
LnGrp LOS	A	C		A	D	A				B	A	B
Approach Vol, veh/h		1051			1456						1627	
Approach Delay, s/veh		32.7			46.9						18.1	
Approach LOS		C			D						B	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		47.0		73.0		47.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		41.7		* 69		41.7						
Max Q Clear Time (g_c+I1), s		22.3		32.3		34.5						
Green Ext Time (p_c), s		4.9		11.8		4.1						

Intersection Summary			
HCM 6th Ctrl Delay			32.0
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	217	1944	1248	957	344	0	163
Future Volume (vph)	217	1944	1248	957	344	0	163
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	32.0	91.0	59.0		29.0	29.0	
Total Split (%)	26.7%	75.8%	49.2%		24.2%	24.2%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	21.1	92.0	66.9	120.0	18.5	18.5	120.0
Actuated g/C Ratio	0.18	0.77	0.56	1.00	0.15	0.15	1.00
v/c Ratio	0.76	0.54	0.48	0.66	0.72	0.72	0.11
Control Delay	54.6	4.0	20.0	9.6	63.8	63.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	4.0	20.0	9.6	63.8	63.8	0.1
LOS	D	A	B	A	E	E	A
Approach Delay		9.1	15.5			43.3	
Approach LOS		A	B			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 55

Control Type: Actuated-Coordinated

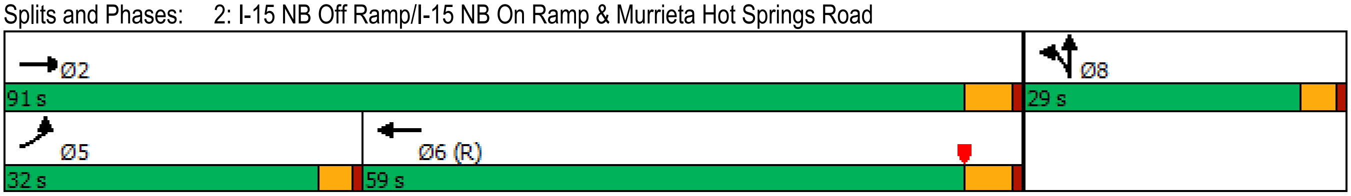
Maximum v/c Ratio: 0.76

Intersection Signal Delay: 15.6 Intersection LOS: B

Intersection Capacity Utilization 56.9% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	1944	0	0	1248	957	344	0	163	0	0	0
Future Volume (veh/h)	217	1944	0	0	1248	957	344	0	163	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	236	2113	0	0	1357	0	374	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	269	3647	0	0	2705		461	0				
Arrive On Green	0.15	0.71	0.00	0.00	0.53	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	236	2113	0	0	1357	0	374	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	15.6	24.2	0.0	0.0	20.4	0.0	12.3	0.0	0.0			
Cycle Q Clear(g_c), s	15.6	24.2	0.0	0.0	20.4	0.0	12.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	269	3647	0	0	2705		461	0				
V/C Ratio(X)	0.88	0.58	0.00	0.00	0.50		0.81	0.00				
Avail Cap(c_a), veh/h	416	3647	0	0	2705		736	0				
HCM Platoon Ratio	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	0.00	0.00	0.71	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	49.8	8.4	0.0	0.0	18.1	0.0	50.8	0.0	0.0			
Incr Delay (d2), s/veh	12.5	0.7	0.0	0.0	0.5	0.0	3.7	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	7.7	7.4	0.0	0.0	7.6	0.0	5.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	9.0	0.0	0.0	18.6	0.0	54.5	0.0	0.0			
LnGrp LOS	E	A	A	A	B		D	A				
Approach Vol, veh/h		2349			1357			374				
Approach Delay, s/veh		14.4			18.6			54.5				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		91.0			22.1	68.9		19.7				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		85.7			28.0	53.7		24.8				
Max Q Clear Time (g_c+I1), s		26.2			17.6	22.4		14.3				
Green Ext Time (p_c), s		18.2			0.6	7.6		1.3				

Intersection Summary			
HCM 6th Ctrl Delay			19.4
HCM 6th LOS			B

Notes

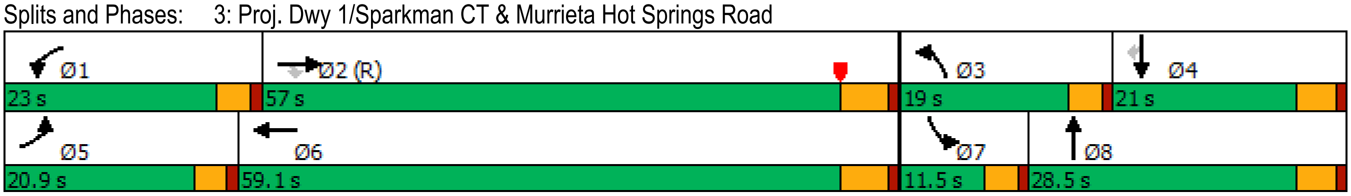
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	SBL	SBR	Ø1	Ø3	Ø8
Lane Configurations								
Traffic Volume (vph)	287	1765	1814	27	244			
Future Volume (vph)	287	1765	1814	27	244			
Turn Type	Prot	NA	NA	Prot	Perm			
Protected Phases	5	2	6	7		1	3	8
Permitted Phases					4			
Detector Phase	5	2	6	7	4			
Switch Phase								
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	20.6	11.5	11.5	20.6
Total Split (s)	20.9	57.0	59.1	11.5	21.0	23.0	19.0	28.5
Total Split (%)	17.4%	47.5%	49.3%	9.6%	17.5%	19%	16%	24%
Yellow Time (s)	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	5.3	5.3	4.0	4.6			
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	C-Max	Max	None	Max	None	None	Max
Act Effct Green (s)	15.1	74.7	55.6	7.1	35.4			
Actuated g/C Ratio	0.13	0.62	0.46	0.06	0.30			
v/c Ratio	0.70	0.47	0.66	0.14	0.55			
Control Delay	59.8	11.4	9.4	55.1	41.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0			
Total Delay	59.8	11.4	9.4	55.1	41.0			
LOS	E	B	A	E	D			
Approach Delay		18.1	9.4					
Approach LOS		B	A					

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 15.8	Intersection LOS: B
Intersection Capacity Utilization 55.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	1765	0	0	1814	54	0	0	0	27	0	244
Future Volume (veh/h)	287	1765	0	0	1814	54	0	0	0	27	0	244
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	302	1858	0	0	1909	57	0	0	0	28	0	257
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	4180	1030	3	3301	99	3	708	0	122	952	425
Arrive On Green	0.11	0.65	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.04	0.00	0.27
Sat Flow, veh/h	3456	6434	1585	3456	6468	193	3456	3647	0	3456	3554	1585
Grp Volume(v), veh/h	302	1858	0	0	1424	542	0	0	0	28	0	257
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1836	1728	1777	0	1728	1777	1585
Q Serve(g_s), s	10.3	17.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	17.0
Cycle Q Clear(g_c), s	10.3	17.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	17.0
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	366	4180	1030	3	2463	937	3	708	0	122	952	425
V/C Ratio(X)	0.83	0.44	0.00	0.00	0.58	0.58	0.00	0.00	0.00	0.23	0.00	0.61
Avail Cap(c_a), veh/h	487	4180	1030	547	2463	937	432	708	0	216	952	425
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	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	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.6	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.3	0.0	38.4
Incr Delay (d2), s/veh	7.3	0.3	0.0	0.0	1.0	2.6	0.0	0.0	0.0	0.9	0.0	6.3
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	4.7	5.4	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.4	0.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.9	10.7	0.0	0.0	1.0	2.6	0.0	0.0	0.0	57.2	0.0	44.7
LnGrp LOS	E	B	A	A	A	A	A	A	A	E	A	D
Approach Vol, veh/h		2160			1966			0			285	
Approach Delay, s/veh		17.5			1.4			0.0			45.9	
Approach LOS		B			A						D	

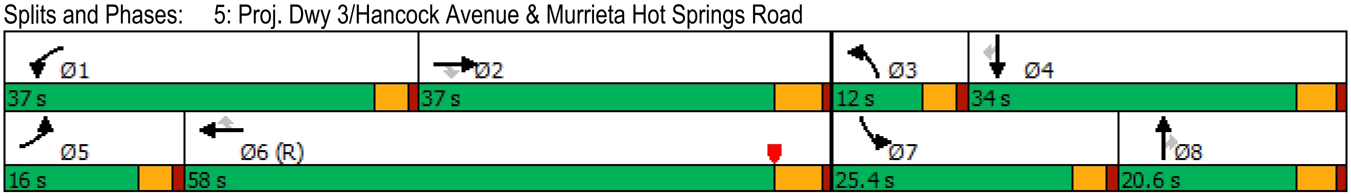
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	83.3	0.0	36.7	16.7	66.5	8.2	28.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	19.0	51.7	15.0	16.4	16.9	53.8	7.5	23.9
Max Q Clear Time (g_c+I1), s	0.0	19.1	0.0	19.0	12.3	2.0	2.9	0.0
Green Ext Time (p_c), s	0.0	17.3	0.0	0.0	0.4	20.9	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		12.2
HCM 6th LOS		B

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	SBR	Ø1	Ø3	Ø8
Lane Configurations										
Traffic Volume (vph)	306	1409	1708	607	570	0	223			
Future Volume (vph)	306	1409	1708	607	570	0	223			
Turn Type	Prot	NA	NA	Perm	Prot	NA	Perm			
Protected Phases	5	2	6		7	4		1	3	8
Permitted Phases				6			4			
Detector Phase	5	2	6	6	7	4	4			
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	10.0	7.0	10.0	10.0	7.0	7.0	10.0
Minimum Split (s)	11.0	15.3	38.3	38.3	14.9	14.9	14.9	11.5	11.0	20.6
Total Split (s)	16.0	37.0	58.0	58.0	25.4	34.0	34.0	37.0	12.0	20.6
Total Split (%)	13.3%	30.8%	48.3%	48.3%	21.2%	28.3%	28.3%	31%	10%	17%
Yellow Time (s)	3.0	4.3	4.3	4.3	3.0	3.6	3.6	3.0	3.0	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	5.3	5.3	5.3	4.0	4.6	4.6			
Lead/Lag	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	C-Max	C-Max	Max	Max	Max	None	None	None
Act Effct Green (s)	12.0	68.7	52.7	52.7	42.0	41.4	41.4			
Actuated g/C Ratio	0.10	0.57	0.44	0.44	0.35	0.34	0.34			
v/c Ratio	1.02	0.42	0.84	0.67	0.54	0.16	0.17			
Control Delay	120.1	8.3	25.2	4.3	33.5	0.5	0.5			
Queue Delay	0.0	0.0	0.9	0.5	0.0	0.0	0.0			
Total Delay	120.1	8.3	26.1	4.8	33.5	0.5	0.5			
LOS	F	A	C	A	C	A	A			
Approach Delay		28.3	20.5			24.2				
Approach LOS		C	C			C				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 23.9	Intersection LOS: C
Intersection Capacity Utilization 69.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1409	0	0	1708	607	0	0	0	570	0	223
Future Volume (veh/h)	306	1409	0	0	1708	607	0	0	0	570	0	223
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	326	1499	0	0	1817	646	0	0	0	606	0	237
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	3683	907	3	2242	696	3	62	93	635	0	777
Arrive On Green	0.20	1.00	0.00	0.00	0.88	0.88	0.00	0.00	0.00	0.18	0.00	0.25
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	0	3170
Grp Volume(v), veh/h	326	1499	0	0	1817	646	0	0	0	606	0	237
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	0	1585
Q Serve(g_s), s	11.2	0.0	0.0	0.0	18.0	32.2	0.0	0.0	0.0	20.2	0.0	7.3
Cycle Q Clear(g_c), s	11.2	0.0	0.0	0.0	18.0	32.2	0.0	0.0	0.0	20.2	0.0	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	346	3683	907	3	2242	696	3	62	93	635	0	777
V/C Ratio(X)	0.94	0.41	0.00	0.00	0.81	0.93	0.00	0.00	0.00	0.95	0.00	0.31
Avail Cap(c_a), veh/h	346	3683	907	950	2242	696	230	249	372	635	0	777
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.7	0.0	0.0	0.0	5.2	6.1	0.0	0.0	0.0	48.8	0.0	37.0
Incr Delay (d2), s/veh	33.9	0.1	0.0	0.0	3.3	20.4	0.0	0.0	0.0	26.0	0.0	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	5.8	0.0	0.0	0.0	2.8	6.4	0.0	0.0	0.0	11.2	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.6	0.1	0.0	0.0	8.5	26.5	0.0	0.0	0.0	74.8	0.0	38.0
LnGrp LOS	F	A	A	A	A	C	A	A	A	E	A	D
Approach Vol, veh/h		1825			2463			0			843	
Approach Delay, s/veh		14.6			13.2			0.0			64.5	
Approach LOS		B			B						E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	74.0	0.0	34.0	16.0	58.0	25.4	8.6
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	33.0	31.7	8.0	29.4	12.0	52.7	21.4	16.0
Max Q Clear Time (g_c+I1), s	0.0	2.0	0.0	9.3	13.2	34.2	22.2	0.0
Green Ext Time (p_c), s	0.0	8.7	0.0	1.1	0.0	12.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

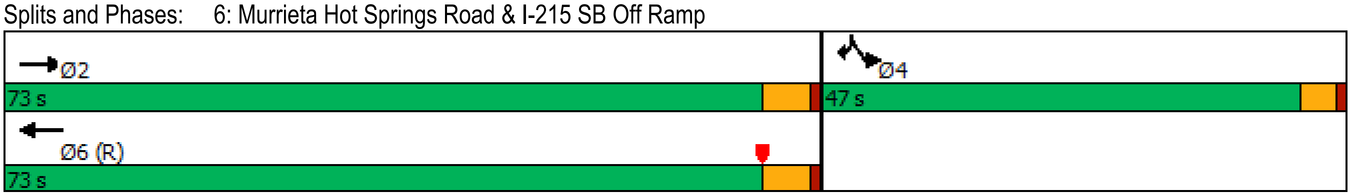
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	1914	1950	701	467
Future Volume (vph)	1914	1950	701	467
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	73.0	73.0	47.0	47.0
Total Split (%)	60.8%	60.8%	39.2%	39.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	73.5	73.5	37.0	37.2
Actuated g/C Ratio	0.61	0.61	0.31	0.31
v/c Ratio	0.68	0.69	0.74	0.81
Control Delay	13.7	11.8	40.6	50.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.7	11.9	40.6	50.5
LOS	B	B	D	D
Approach Delay	13.7	11.9	43.7	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 20.0	Intersection LOS: B
Intersection Capacity Utilization 117.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1914	1950	0	701	467
Future Volume (veh/h)	0	1914	1950	0	701	467
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2036	2074	0	823	414
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2881	2881	0	1096	490
Arrive On Green	0.00	0.56	1.00	0.00	0.30	0.30
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2036	2074	0	823	414
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	34.7	0.0	0.0	24.1	28.3
Cycle Q Clear(g_c), s	0.0	34.7	0.0	0.0	24.1	28.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2881	2881	0	1096	490
V/C Ratio(X)	0.00	0.71	0.72	0.00	0.75	0.84
Avail Cap(c_a), veh/h	0	2881	2881	0	1321	591
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.0	0.0	0.0	38.3	39.6
Incr Delay (d2), s/veh	0.0	1.5	1.6	0.0	2.0	9.3
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	12.8	0.4	0.0	11.2	12.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	20.4	1.6	0.0	40.3	48.9
LnGrp LOS	A	C	A	A	D	D
Approach Vol, veh/h		2036	2074		1237	
Approach Delay, s/veh		20.4	1.6		43.1	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		73.0		39.7		73.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		67.7		* 43		67.7
Max Q Clear Time (g_c+I1), s		36.7		30.3		2.0
Green Ext Time (p_c), s		14.0		5.2		17.8

Intersection Summary			
HCM 6th Ctrl Delay			18.4
HCM 6th LOS			B

Notes

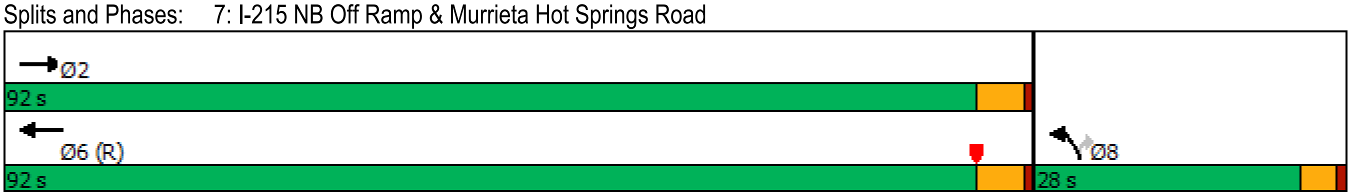
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2207	2177	159	224
Future Volume (vph)	2207	2177	159	224
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	92.0	92.0	28.0	28.0
Total Split (%)	76.7%	76.7%	23.3%	23.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	86.7	86.7	23.8	23.8
Actuated g/C Ratio	0.72	0.72	0.20	0.20
v/c Ratio	0.65	0.65	0.22	0.39
Control Delay	5.4	9.7	41.3	39.7
Queue Delay	0.0	1.4	0.0	0.0
Total Delay	5.4	11.2	41.3	39.7
LOS	A	B	D	D
Approach Delay	5.4	11.2	40.4	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.8	Intersection LOS: B
Intersection Capacity Utilization 58.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2207	0	0	2177	159	224
Future Volume (veh/h)	2207	0	0	2177	159	224
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2323	0	0	2292	167	236
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3689	0	0	3689	713	575
Arrive On Green	0.72	0.00	0.00	0.72	0.20	0.20
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2323	0	0	2292	167	236
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	27.8	0.0	0.0	27.1	4.7	8.5
Cycle Q Clear(g_c), s	27.8	0.0	0.0	27.1	4.7	8.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3689	0	0	3689	713	575
V/C Ratio(X)	0.63	0.00	0.00	0.62	0.23	0.41
Avail Cap(c_a), veh/h	3689	0	0	3689	713	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	0.0	0.0	8.4	40.4	42.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.8	0.8	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	0.0	8.2	2.2	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.3	0.0	0.0	9.2	41.2	44.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	2323			2292	403	
Approach Delay, s/veh	9.3			9.2	42.9	
Approach LOS	A			A	D	

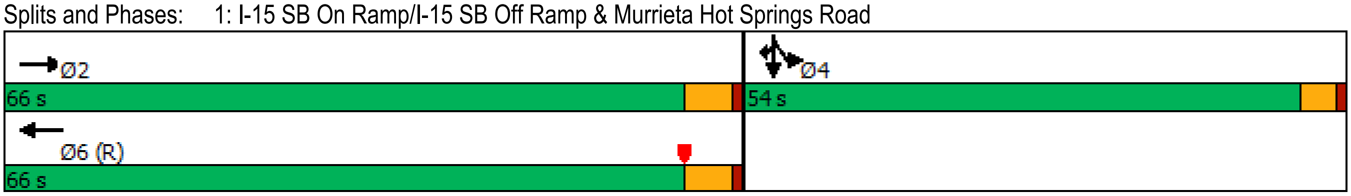
Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	92.0	92.0	28.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	86.7	86.7	23.8
Max Q Clear Time (g_c+I1), s	29.8	29.1	10.5
Green Ext Time (p_c), s	22.0	21.5	1.6

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2290	359	1565	959	0	220
Future Volume (vph)	2290	359	1565	959	0	220
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	66.0		66.0	54.0	54.0	54.0
Total Split (%)	55.0%		55.0%	45.0%	45.0%	45.0%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	60.7	120.0	60.7	49.8	49.8	49.8
Actuated g/C Ratio	0.51	1.00	0.51	0.42	0.42	0.42
v/c Ratio	0.96	0.24	0.65	0.71	0.78	0.33
Control Delay	39.0	0.4	19.6	35.4	38.6	23.1
Queue Delay	26.5	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	0.4	19.6	35.4	38.6	23.1
LOS	E	A	B	D	D	C
Approach Delay	56.6		19.6		34.7	
Approach LOS	E		B		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 41.1	Intersection LOS: D
Intersection Capacity Utilization 117.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2290	359	0	1565	0	0	0	0	959	0	220
Future Volume (veh/h)	0	2290	359	0	1565	0	0	0	0	959	0	220
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2462	0	0	1683	0				1105	0	158
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2583		0	2583	0				1538	0	658
Arrive On Green	0.00	0.51	0.00	0.00	0.51	0.00				0.41	0.00	0.41
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2462	0	0	1683	0				1105	0	158
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	55.2	0.0	0.0	29.2	0.0				29.8	0.0	7.8
Cycle Q Clear(g_c), s	0.0	55.2	0.0	0.0	29.2	0.0				29.8	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2583		0	2583	0				1538	0	658
V/C Ratio(X)	0.00	0.95		0.00	0.65	0.00				0.72	0.00	0.24
Avail Cap(c_a), veh/h	0	2583		0	2583	0				1538	0	658
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	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.3	0.0	0.0	21.9	0.0				29.3	0.0	22.8
Incr Delay (d2), s/veh	0.0	9.2	0.0	0.0	1.3	0.0				2.9	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	22.6	0.0	0.0	11.1	0.0				13.7	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	37.5	0.0	0.0	23.1	0.0				32.2	0.0	23.7
LnGrp LOS	A	D		A	C	A				C	A	C
Approach Vol, veh/h		2462			1683						1263	
Approach Delay, s/veh		37.5			23.1						31.1	
Approach LOS		D			C						C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		66.0		54.0		66.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		60.7		* 50		60.7
Max Q Clear Time (g_c+I1), s		57.2		31.8		31.2
Green Ext Time (p_c), s		3.1		6.6		10.3

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

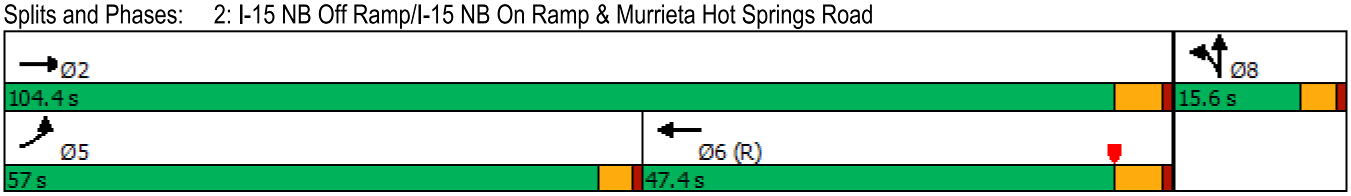
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	767	2509	1284	1387	295	0	213
Future Volume (vph)	767	2509	1284	1387	295	0	213
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	57.0	104.4	47.4		15.6	15.6	
Total Split (%)	47.5%	87.0%	39.5%		13.0%	13.0%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	53.0	99.1	42.1	120.0	11.4	11.4	120.0
Actuated g/C Ratio	0.44	0.83	0.35	1.00	0.10	0.10	1.00
v/c Ratio	1.02	0.62	0.75	0.91	0.96	0.97	0.14
Control Delay	74.6	3.6	29.5	29.5	116.6	118.1	0.2
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	74.6	3.7	29.5	29.5	116.6	118.1	0.2
LOS	E	A	C	C	F	F	A
Approach Delay		20.3	29.5			68.2	
Approach LOS		C	C			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 27.9	Intersection LOS: C
Intersection Capacity Utilization 86.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	767	2509	0	0	1284	1387	295	0	213	0	0	0
Future Volume (veh/h)	767	2509	0	0	1284	1387	295	0	213	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	799	2614	0	0	1338	0	307	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	787	4217	0	0	1791		338	0				
Arrive On Green	0.44	0.83	0.00	0.00	0.59	0.00	0.09	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	799	2614	0	0	1338	0	307	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	53.0	21.9	0.0	0.0	23.2	0.0	10.2	0.0	0.0			
Cycle Q Clear(g_c), s	53.0	21.9	0.0	0.0	23.2	0.0	10.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	787	4217	0	0	1791		338	0				
V/C Ratio(X)	1.02	0.62	0.00	0.00	0.75		0.91	0.00				
Avail Cap(c_a), veh/h	787	4217	0	0	1791		338	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.50	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	33.5	3.7	0.0	0.0	20.9	0.0	53.8	0.0	0.0			
Incr Delay (d2), s/veh	36.0	0.7	0.0	0.0	1.5	0.0	27.0	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	29.1	4.3	0.0	0.0	6.5	0.0	5.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	4.4	0.0	0.0	22.4	0.0	80.7	0.0	0.0			
LnGrp LOS	F	A	A	A	C		F	A				
Approach Vol, veh/h		3413			1338			307				
Approach Delay, s/veh		19.7			22.4			80.7				
Approach LOS		B			C			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		104.4			57.0	47.4		15.6				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		99.1			53.0	42.1		11.4				
Max Q Clear Time (g_c+I1), s		23.9			55.0	25.2		12.2				
Green Ext Time (p_c), s		31.4			0.0	6.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			24.1
HCM 6th LOS			C

Notes

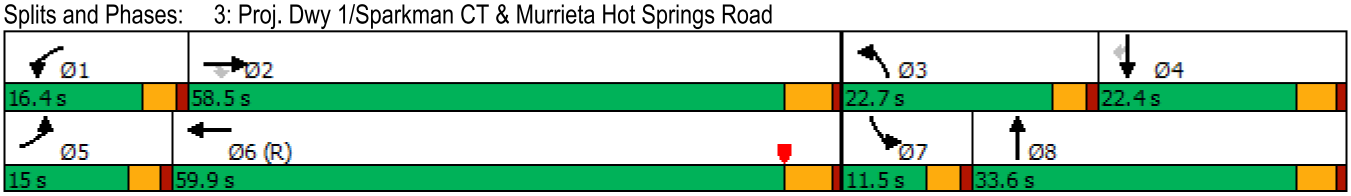
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	SBL	SBR	Ø1	Ø3	Ø8
Lane Configurations								
Traffic Volume (vph)	280	2308	2287	24	218			
Future Volume (vph)	280	2308	2287	24	218			
Turn Type	Prot	NA	NA	Prot	Perm			
Protected Phases	5	2	6	7		1	3	8
Permitted Phases					4			
Detector Phase	5	2	6	7	4			
Switch Phase								
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	20.6	11.5	11.5	20.6
Total Split (s)	15.0	58.5	59.9	11.5	22.4	16.4	22.7	33.6
Total Split (%)	12.5%	48.8%	49.9%	9.6%	18.7%	14%	19%	28%
Yellow Time (s)	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	5.3	5.3	4.0	4.6			
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	C-Max	None	Max	None	None	Max
Act Effct Green (s)	11.0	69.6	54.6	7.1	40.5			
Actuated g/C Ratio	0.09	0.58	0.46	0.06	0.34			
v/c Ratio	0.91	0.63	0.83	0.12	0.42			
Control Delay	77.4	17.3	14.2	54.9	33.6			
Queue Delay	0.0	0.0	0.0	0.0	0.0			
Total Delay	77.4	17.3	14.2	54.9	33.6			
LOS	E	B	B	D	C			
Approach Delay		23.8	14.2					
Approach LOS		C	B					

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 20.0	Intersection LOS: C
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	2308	0	0	2287	79	0	0	0	24	0	218
Future Volume (veh/h)	280	2308	0	0	2287	79	0	0	0	24	0	218
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	2355	0	0	2334	81	0	0	0	24	0	222
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	3732	919	3	2927	101	3	859	0	111	1091	487
Arrive On Green	0.09	0.58	0.00	0.00	0.91	0.91	0.00	0.00	0.00	0.03	0.00	0.31
Sat Flow, veh/h	3456	6434	1585	3456	6433	223	3456	3647	0	3456	3554	1585
Grp Volume(v), veh/h	286	2355	0	0	1750	665	0	0	0	24	0	222
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1830	1728	1777	0	1728	1777	1585
Q Serve(g_s), s	9.8	29.1	0.0	0.0	14.3	14.3	0.0	0.0	0.0	0.8	0.0	13.5
Cycle Q Clear(g_c), s	9.8	29.1	0.0	0.0	14.3	14.3	0.0	0.0	0.0	0.8	0.0	13.5
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	3732	919	3	2196	833	3	859	0	111	1091	487
V/C Ratio(X)	0.90	0.63	0.00	0.00	0.80	0.80	0.00	0.00	0.00	0.22	0.00	0.46
Avail Cap(c_a), veh/h	317	3732	919	357	2196	833	539	859	0	216	1091	487
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.0	16.7	0.0	0.0	3.6	3.6	0.0	0.0	0.0	56.6	0.0	33.5
Incr Delay (d2), s/veh	22.9	0.6	0.0	0.0	3.1	7.9	0.0	0.0	0.0	1.0	0.0	3.1
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	5.2	9.9	0.0	0.0	2.1	3.5	0.0	0.0	0.0	0.4	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.9	17.3	0.0	0.0	6.7	11.5	0.0	0.0	0.0	57.6	0.0	36.6
LnGrp LOS	E	B	A	A	A	B	A	A	A	E	A	D
Approach Vol, veh/h		2641			2415			0			246	
Approach Delay, s/veh		23.8			8.0			0.0			38.6	
Approach LOS		C			A						D	

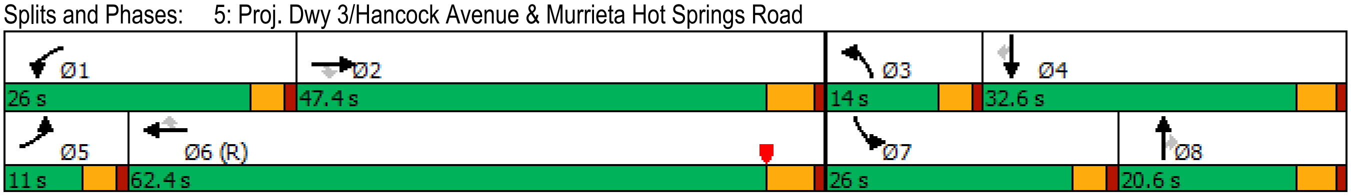
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	74.9	0.0	41.5	15.0	59.9	7.9	33.6
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	12.4	53.2	18.7	17.8	11.0	54.6	7.5	29.0
Max Q Clear Time (g_c+I1), s	0.0	31.1	0.0	15.5	11.8	16.3	2.8	0.0
Green Ext Time (p_c), s	0.0	17.3	0.0	0.2	0.0	24.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	SBR	Ø1	Ø3	Ø8
Lane Configurations										
Traffic Volume (vph)	227	1951	2160	696	675	0	352			
Future Volume (vph)	227	1951	2160	696	675	0	352			
Turn Type	Prot	NA	NA	Perm	Prot	NA	Perm			
Protected Phases	5	2	6		7	4		1	3	8
Permitted Phases				6			4			
Detector Phase	5	2	6	6	7	4	4			
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	10.0	7.0	10.0	10.0	7.0	7.0	10.0
Minimum Split (s)	11.0	15.3	38.3	38.3	14.9	14.9	14.9	11.5	11.0	20.6
Total Split (s)	11.0	47.4	62.4	62.4	26.0	32.6	32.6	26.0	14.0	20.6
Total Split (%)	9.2%	39.5%	52.0%	52.0%	21.7%	27.2%	27.2%	22%	12%	17%
Yellow Time (s)	3.0	4.3	4.3	4.3	3.0	3.6	3.6	3.0	3.0	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	5.3	5.3	5.3	4.0	4.6	4.6			
Lead/Lag	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	C-Max	C-Max	Max	Max	Max	None	None	None
Act Effct Green (s)	7.0	68.1	57.1	57.1	42.6	42.0	42.0			
Actuated g/C Ratio	0.06	0.57	0.48	0.48	0.36	0.35	0.35			
v/c Ratio	1.33	0.60	1.00	0.76	0.65	0.28	0.28			
Control Delay	232.0	7.7	38.0	6.0	35.6	1.6	1.6			
Queue Delay	0.0	0.0	22.9	1.3	0.0	0.0	0.0			
Total Delay	232.0	7.7	60.8	7.4	35.6	1.6	1.6			
LOS	F	A	E	A	D	A	A			
Approach Delay		31.1	47.8			23.9				
Approach LOS		C	D			C				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.33	
Intersection Signal Delay: 37.8	Intersection LOS: D
Intersection Capacity Utilization 79.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	1951	0	0	2160	696	0	0	0	675	0	352
Future Volume (veh/h)	227	1951	0	0	2160	696	0	0	0	675	0	352
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	2121	0	0	2348	757	0	0	0	734	0	383
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	3651	900	3	2430	754	3	31	46	653	0	740
Arrive On Green	0.06	0.57	0.00	0.00	0.95	0.95	0.00	0.00	0.00	0.18	0.00	0.23
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	0	3170
Grp Volume(v), veh/h	247	2121	0	0	2348	757	0	0	0	734	0	383
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	0	1585
Q Serve(g_s), s	7.0	25.5	0.0	0.0	33.2	57.1	0.0	0.0	0.0	22.0	0.0	12.6
Cycle Q Clear(g_c), s	7.0	25.5	0.0	0.0	33.2	57.1	0.0	0.0	0.0	22.0	0.0	12.6
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	202	3651	900	3	2430	754	3	31	46	653	0	740
V/C Ratio(X)	1.23	0.58	0.00	0.00	0.97	1.00	0.00	0.00	0.00	1.12	0.00	0.52
Avail Cap(c_a), veh/h	202	3651	900	634	2430	754	288	249	372	653	0	740
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.5	16.7	0.0	0.0	2.3	2.9	0.0	0.0	0.0	49.0	0.0	40.1
Incr Delay (d2), s/veh	137.3	0.2	0.0	0.0	11.9	33.7	0.0	0.0	0.0	74.4	0.0	2.6
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	6.8	8.7	0.0	0.0	3.7	8.1	0.0	0.0	0.0	16.4	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	193.8	17.0	0.0	0.0	14.2	36.6	0.0	0.0	0.0	123.4	0.0	42.7
LnGrp LOS	F	B	A	A	B	F	A	A	A	F	A	D
Approach Vol, veh/h		2368			3105			0			1117	
Approach Delay, s/veh		35.4			19.7			0.0			95.7	
Approach LOS		D			B						F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	73.4	0.0	32.6	11.0	62.4	26.0	6.6
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	22.0	42.1	10.0	28.0	7.0	57.1	22.0	16.0
Max Q Clear Time (g_c+I1), s	0.0	27.5	0.0	14.6	9.0	59.1	24.0	0.0
Green Ext Time (p_c), s	0.0	9.5	0.0	1.6	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	38.2
HCM 6th LOS	D

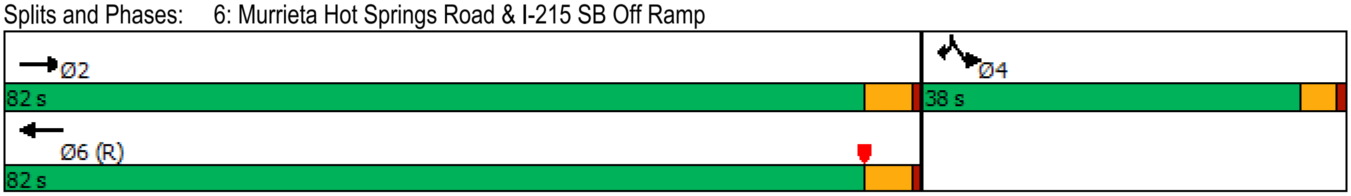
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2558	2470	736	340
Future Volume (vph)	2558	2470	736	340
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	82.0	82.0	38.0	38.0
Total Split (%)	68.3%	68.3%	31.7%	31.7%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	79.2	79.2	31.3	31.5
Actuated g/C Ratio	0.66	0.66	0.26	0.26
v/c Ratio	0.84	0.81	0.83	0.80
Control Delay	14.0	11.6	49.6	56.3
Queue Delay	0.0	1.8	0.0	0.0
Total Delay	14.0	13.3	49.6	56.3
LOS	B	B	D	E
Approach Delay	14.0	13.3	51.5	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 135.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2558	2470	0	736	340
Future Volume (veh/h)	0	2558	2470	0	736	340
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2721	2628	0	783	362
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3264	3264	0	938	420
Arrive On Green	0.00	0.64	1.00	0.00	0.25	0.25
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2721	2628	0	783	362
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	49.4	0.0	0.0	24.0	25.2
Cycle Q Clear(g_c), s	0.0	49.4	0.0	0.0	24.0	25.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3264	3264	0	938	420
V/C Ratio(X)	0.00	0.83	0.81	0.00	0.84	0.86
Avail Cap(c_a), veh/h	0	3264	3264	0	1044	467
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.7	0.0	0.0	42.4	42.7
Incr Delay (d2), s/veh	0.0	2.7	2.2	0.0	5.5	14.1
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	17.3	0.7	0.0	11.6	11.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	19.4	2.2	0.0	48.0	56.8
LnGrp LOS	A	B	A	A	D	E
Approach Vol, veh/h		2721	2628		1145	
Approach Delay, s/veh		19.4	2.2		50.8	
Approach LOS		B	A		D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		82.0		34.6		82.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		76.7		* 34		76.7
Max Q Clear Time (g_c+I1), s		51.4		27.2		2.0
Green Ext Time (p_c), s		18.4		3.2		31.8
Intersection Summary						
HCM 6th Ctrl Delay			18.0			
HCM 6th LOS			B			

Notes

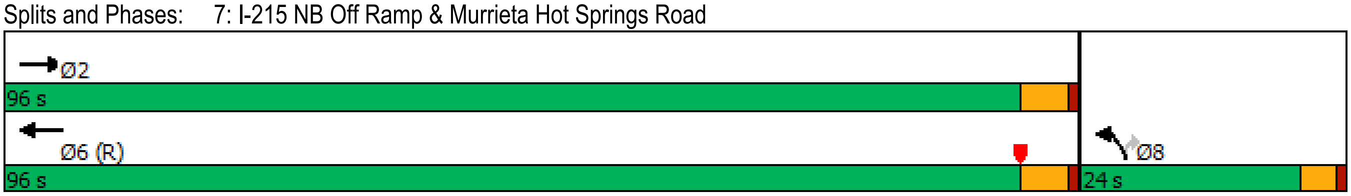
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2736	2577	172	334
Future Volume (vph)	2736	2577	172	334
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	96.0	96.0	24.0	24.0
Total Split (%)	80.0%	80.0%	20.0%	20.0%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	90.7	90.7	19.8	19.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.79	0.75	0.30	0.72
Control Delay	5.7	9.8	45.5	55.5
Queue Delay	0.2	4.3	0.0	0.0
Total Delay	5.9	14.1	45.5	55.5
LOS	A	B	D	E
Approach Delay	5.9	14.1	52.1	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 13.5	Intersection LOS: B
Intersection Capacity Utilization 72.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2736	0	0	2577	172	334
Future Volume (veh/h)	2736	0	0	2577	172	334
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2942	0	0	2771	185	359
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3859	0	0	3859	593	479
Arrive On Green	0.76	0.00	0.00	0.76	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2942	0	0	2771	185	359
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	39.8	0.0	0.0	34.8	5.4	14.1
Cycle Q Clear(g_c), s	39.8	0.0	0.0	34.8	5.4	14.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3859	0	0	3859	593	479
V/C Ratio(X)	0.76	0.00	0.00	0.72	0.31	0.75
Avail Cap(c_a), veh/h	3859	0	0	3859	593	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.4	0.0	0.0	7.8	44.1	47.7
Incr Delay (d2), s/veh	1.5	0.0	0.0	1.2	1.4	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	0.0	9.7	2.5	5.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.9	0.0	0.0	9.0	45.5	58.1
LnGrp LOS	A	A	A	A	D	E
Approach Vol, veh/h	2942			2771	544	
Approach Delay, s/veh	9.9			9.0	53.8	
Approach LOS	A			A	D	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	96.0	96.0	24.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	90.7	90.7	19.8
Max Q Clear Time (g_c+I1), s	41.8	36.8	16.1
Green Ext Time (p_c), s	32.5	30.9	1.0

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	318	294	170	72	101	63	479	416	366
Average Queue (ft)	273	193	68	48	57	48	335	309	173
95th Queue (ft)	328	291	154	70	83	64	448	413	366
Link Distance (ft)				48	48	48	566	566	
Upstream Blk Time (%)				22	24	15			
Queuing Penalty (veh)				102	108	68			
Storage Bay Dist (ft)									480
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	246	163	111	41	62	107	122	175	181	134
Average Queue (ft)	148	89	50	6	6	19	21	127	112	8
95th Queue (ft)	234	153	95	24	29	64	71	165	165	56
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	TR	L	L
Maximum Queue (ft)	139	202	131	144	141	106	63	132	147	162	28	34
Average Queue (ft)	83	106	67	71	78	34	9	18	43	65	4	8
95th Queue (ft)	131	158	118	117	131	86	37	65	111	154	18	27
Link Distance (ft)			1082	1082	1082	1082	271	271	271	271		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310									235	235
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	284	260
Average Queue (ft)	19	174
95th Queue (ft)	136	229
Link Distance (ft)	269	
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		235
Storage Blk Time (%)		1
Queuing Penalty (veh)		0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	R	L	L
Maximum Queue (ft)	214	225	175	115	114	47	214	194	263	107	162	175
Average Queue (ft)	133	144	56	63	63	12	48	109	180	50	148	172
95th Queue (ft)	200	205	125	115	102	38	147	173	245	89	182	180
Link Distance (ft)			307	307	307	307	240	240	240	240		
Upstream Blk Time (%)									1			
Queuing Penalty (veh)									3			
Storage Bay Dist (ft)	245	245									150	150
Storage Blk Time (%)		0					0				2	33
Queuing Penalty (veh)		0					0				4	73

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	SB	SB
Directions Served	TR	R
Maximum Queue (ft)	275	100
Average Queue (ft)	241	30
95th Queue (ft)	367	69
Link Distance (ft)		
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)	0	
Queuing Penalty (veh)	1	

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	96	96	118	113	126	126	484	538	488
Average Queue (ft)	74	74	84	41	44	87	293	356	165
95th Queue (ft)	88	83	107	94	105	149	398	492	347
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	20	22	23	0	2	16			
Queuing Penalty (veh)	129	139	147	2	10	103			
Storage Bay Dist (ft)									470
Storage Blk Time (%)								1	0
Queuing Penalty (veh)								3	0

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	157	178	180	67	54	54	80	128	134	120
Average Queue (ft)	94	113	102	14	11	17	35	67	88	31
95th Queue (ft)	145	162	172	46	41	54	72	112	133	81
Link Distance (ft)	144	144	144	15	15	15	1042	1042		
Upstream Blk Time (%)	1	2	2	7	6	12				
Queuing Penalty (veh)	9	13	16	50	41	89				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 1112

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	342	294	294	51	63	52	619	582	505
Average Queue (ft)	298	218	157	30	32	19	551	513	343
95th Queue (ft)	313	335	276	59	68	53	663	664	561
Link Distance (ft)				48	48	48	566	566	
Upstream Blk Time (%)				4	3	3	50	20	
Queuing Penalty (veh)				18	18	14	0	0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								24	0
Queuing Penalty (veh)								26	2

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	473	531	473	152	50	65	78	211	227	161
Average Queue (ft)	452	421	180	68	3	7	13	131	120	14
95th Queue (ft)	508	677	474	132	19	35	47	175	182	81
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)	9	10	0							
Queuing Penalty (veh)	0	112	1							
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)	9	10								
Queuing Penalty (veh)	78	79								

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	TR	L	L
Maximum Queue (ft)	143	169	196	227	290	193	40	119	133	112	25	34
Average Queue (ft)	78	101	83	114	148	68	2	17	42	59	1	8
95th Queue (ft)	129	154	149	197	239	144	15	59	87	103	9	25
Link Distance (ft)			1082	1082	1082	1082	271	271	271	271		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310									235	235
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	201
Average Queue (ft)	126
95th Queue (ft)	195
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	235
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	R	L	L
Maximum Queue (ft)	145	146	131	139	155	67	84	147	232	70	162	175
Average Queue (ft)	85	101	62	87	98	17	36	83	147	36	159	174
95th Queue (ft)	131	136	123	136	142	51	73	127	219	70	170	175
Link Distance (ft)			307	307	307	307	240	240	240	240		
Upstream Blk Time (%)									0			
Queuing Penalty (veh)									0			
Storage Bay Dist (ft)	245	245									150	150
Storage Blk Time (%)											3	50
Queuing Penalty (veh)											10	177

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	SB	SB
Directions Served	TR	R
Maximum Queue (ft)	294	109
Average Queue (ft)	276	59
95th Queue (ft)	282	95
Link Distance (ft)		
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	95	96	121	53	54	118	861	861	495
Average Queue (ft)	73	74	82	32	34	51	841	844	369
95th Queue (ft)	80	85	108	52	68	109	851	853	669
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	17	22	29			0	50	86	
Queuing Penalty (veh)	145	190	245			2	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								76	2
Queuing Penalty (veh)								130	12

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	NB	NB	NB	NB
Directions Served	T	T	T	L	L	R	R
Maximum Queue (ft)	163	173	161	116	130	233	189
Average Queue (ft)	120	128	124	46	79	164	119
95th Queue (ft)	177	186	176	85	124	216	195
Link Distance (ft)	144	144	144	1042	1042		
Upstream Blk Time (%)	3	4	4				
Queuing Penalty (veh)	31	35	35				
Storage Bay Dist (ft)						1000	1000
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

Zone wide Queuing Penalty: 1363

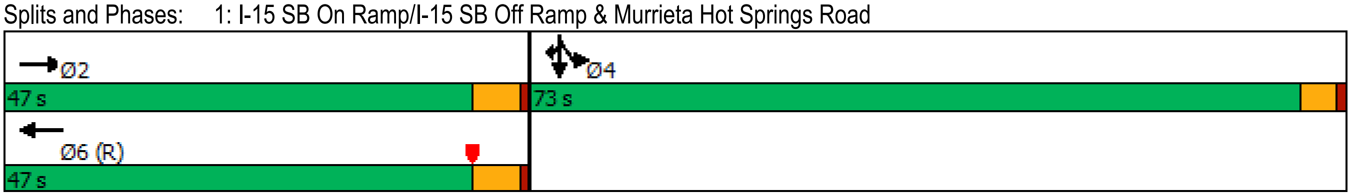
EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2028) WITH TRIANGLE PROJECT (CURRENT DEVELOPMENT PLAN), NO INTERCHANGE IMPROVEMENTS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1124	325	1434	1508	0	352
Future Volume (vph)	1124	325	1434	1508	0	352
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	47.0		47.0	73.0	73.0	73.0
Total Split (%)	39.2%		39.2%	60.8%	60.8%	60.8%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	41.7	120.0	41.7	68.8	68.8	68.8
Actuated g/C Ratio	0.35	1.00	0.35	0.57	0.57	0.57
v/c Ratio	0.68	0.22	0.86	0.80	0.89	0.39
Control Delay	35.8	0.3	37.5	27.4	34.9	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	0.3	37.5	27.4	34.9	14.7
LOS	D	A	D	C	C	B
Approach Delay	27.8		37.5		28.3	
Approach LOS	C		D		C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 31.0 Intersection LOS: C
Intersection Capacity Utilization 113.0% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1124	325	0	1434	0	0	0	0	1508	0	352
Future Volume (veh/h)	0	1124	325	0	1434	0	0	0	0	1508	0	352
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1196	0	0	1526	0				1720	0	249
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1774		0	1774	0				2124	0	909
Arrive On Green	0.00	0.35	0.00	0.00	0.23	0.00				0.57	0.00	0.57
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1196	0	0	1526	0				1720	0	249
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	24.0	0.0	0.0	34.4	0.0				44.4	0.0	9.5
Cycle Q Clear(g_c), s	0.0	24.0	0.0	0.0	34.4	0.0				44.4	0.0	9.5
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1774		0	1774	0				2124	0	909
V/C Ratio(X)	0.00	0.67		0.00	0.86	0.00				0.81	0.00	0.27
Avail Cap(c_a), veh/h	0	1774		0	1774	0				2124	0	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	33.4	0.0	0.0	43.2	0.0				20.4	0.0	13.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	5.7	0.0				3.5	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	9.6	0.0	0.0	15.7	0.0				19.2	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.4	0.0	0.0	48.9	0.0				23.9	0.0	13.7
LnGrp LOS	A	C		A	D	A				C	A	B
Approach Vol, veh/h		1196			1526						1969	
Approach Delay, s/veh		34.4			48.9						22.6	
Approach LOS		C			D						C	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		47.0		73.0		47.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		41.7		* 69		41.7						
Max Q Clear Time (g_c+I1), s		26.0		46.4		36.4						
Green Ext Time (p_c), s		5.3		12.7		3.3						
Intersection Summary												
HCM 6th Ctrl Delay			34.2									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

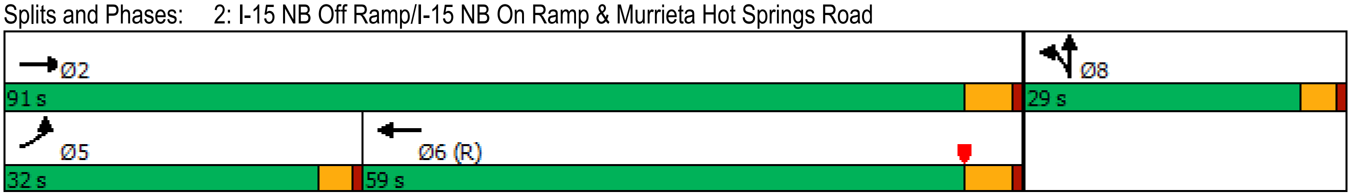
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	217	2402	1451	1105	344	0	417
Future Volume (vph)	217	2402	1451	1105	344	0	417
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	32.0	91.0	59.0		29.0	29.0	
Total Split (%)	26.7%	75.8%	49.2%		24.2%	24.2%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	21.1	92.0	66.9	120.0	18.5	18.5	120.0
Actuated g/C Ratio	0.18	0.77	0.56	1.00	0.15	0.15	1.00
v/c Ratio	0.76	0.67	0.56	0.76	0.72	0.72	0.29
Control Delay	57.8	4.5	19.6	13.7	63.8	63.8	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.8	4.5	19.6	13.7	63.8	63.8	0.5
LOS	E	A	B	B	E	E	A
Approach Delay		8.9	17.1			29.1	
Approach LOS		A	B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	2402	0	0	1451	1105	344	0	417	0	0	0
Future Volume (veh/h)	217	2402	0	0	1451	1105	344	0	417	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	236	2611	0	0	1577	0	374	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	269	3647	0	0	2705		461	0				
Arrive On Green	0.15	0.71	0.00	0.00	0.53	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	236	2611	0	0	1577	0	374	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	15.6	35.9	0.0	0.0	25.2	0.0	12.3	0.0	0.0			
Cycle Q Clear(g_c), s	15.6	35.9	0.0	0.0	25.2	0.0	12.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	269	3647	0	0	2705		461	0				
V/C Ratio(X)	0.88	0.72	0.00	0.00	0.58		0.81	0.00				
Avail Cap(c_a), veh/h	416	3647	0	0	2705		736	0				
HCM Platoon Ratio	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	0.00	0.00	0.55	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	49.8	10.0	0.0	0.0	19.2	0.0	50.8	0.0	0.0			
Incr Delay (d2), s/veh	12.5	1.2	0.0	0.0	0.5	0.0	3.7	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	7.7	11.0	0.0	0.0	9.3	0.0	5.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	11.3	0.0	0.0	19.7	0.0	54.5	0.0	0.0			
LnGrp LOS	E	B	A	A	B		D	A				
Approach Vol, veh/h		2847			1577			374				
Approach Delay, s/veh		15.5			19.7			54.5				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		91.0			22.1	68.9		19.7				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		85.7			28.0	53.7		24.8				
Max Q Clear Time (g_c+I1), s		37.9			17.6	27.2		14.3				
Green Ext Time (p_c), s		26.0			0.6	9.0		1.3				

Intersection Summary		
HCM 6th Ctrl Delay		19.9
HCM 6th LOS		B

Notes

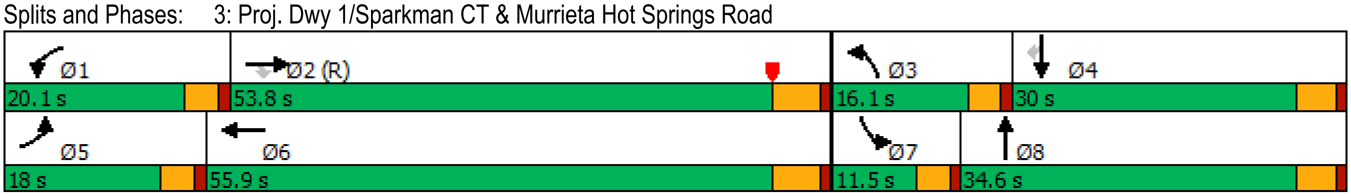
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	287	2137	339	339	1923	242	10	27	10	244
Future Volume (vph)	287	2137	339	339	1923	242	10	27	10	244
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	18.0	53.8	53.8	20.1	55.9	16.1	34.6	11.5	30.0	30.0
Total Split (%)	15.0%	44.8%	44.8%	16.8%	46.6%	13.4%	28.8%	9.6%	25.0%	25.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	C-Max	None	Max	None	Max	None	Max	Max
Act Effct Green (s)	13.6	49.0	49.0	15.6	51.0	11.8	34.8	7.1	25.7	25.7
Actuated g/C Ratio	0.11	0.41	0.41	0.13	0.42	0.10	0.29	0.06	0.21	0.21
v/c Ratio	0.78	0.86	0.43	0.82	0.77	0.78	0.10	0.14	0.01	0.76
Control Delay	65.8	34.3	4.7	74.1	17.9	69.0	9.4	55.1	37.6	60.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.8	34.3	4.7	74.1	17.9	69.0	9.4	55.1	37.6	60.0
LOS	E	C	A	E	B	E	A	E	D	E
Approach Delay		33.8			26.4		52.7		58.7	
Approach LOS		C			C		D		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

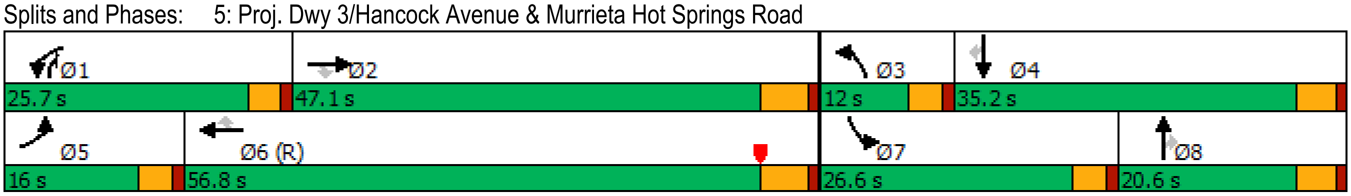


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	2137	339	339	1923	54	242	10	81	27	10	244
Future Volume (veh/h)	287	2137	339	339	1923	54	242	10	81	27	10	244
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	302	2249	368	368	2024	57	263	11	88	28	11	257
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	2738	675	419	2870	81	319	477	426	122	752	336
Arrive On Green	0.10	0.43	0.43	0.24	0.89	0.89	0.09	0.27	0.27	0.04	0.21	0.21
Sat Flow, veh/h	3456	6434	1585	3456	6481	182	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	302	2249	368	368	1507	574	263	11	88	28	11	257
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1838	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	10.3	37.0	20.8	12.3	11.4	11.4	9.0	0.5	5.2	0.9	0.3	18.3
Cycle Q Clear(g_c), s	10.3	37.0	20.8	12.3	11.4	11.4	9.0	0.5	5.2	0.9	0.3	18.3
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	2738	675	419	2137	814	319	477	426	122	752	336
V/C Ratio(X)	0.84	0.82	0.55	0.88	0.71	0.71	0.82	0.02	0.21	0.23	0.01	0.77
Avail Cap(c_a), veh/h	403	2738	675	464	2137	814	348	477	426	216	752	336
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	30.4	25.8	44.6	4.5	4.5	53.5	32.3	34.0	56.3	37.4	44.5
Incr Delay (d2), s/veh	10.6	2.2	2.4	16.2	2.0	5.1	13.9	0.1	1.1	0.9	0.0	15.3
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	13.9	8.2	5.4	2.0	3.0	4.5	0.2	2.1	0.4	0.1	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	32.7	28.2	60.8	6.5	9.6	67.4	32.4	35.1	57.2	37.4	59.8
LnGrp LOS	E	C	C	E	A	A	E	C	D	E	D	E
Approach Vol, veh/h		2919			2449			362			296	
Approach Delay, s/veh		35.3			15.3			58.5			58.8	
Approach LOS		D			B			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.6	56.4	15.1	30.0	16.5	58.4	8.2	36.8				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	16.1	48.5	12.1	25.4	14.0	50.6	7.5	30.0				
Max Q Clear Time (g_c+I1), s	14.3	39.0	11.0	20.3	12.3	13.4	2.9	7.2				
Green Ext Time (p_c), s	0.3	8.4	0.1	0.4	0.2	19.8	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			29.7									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	1571	203	476	2047	607	109	93	204	570	169	223
Future Volume (vph)	306	1571	203	476	2047	607	109	93	204	570	169	223
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	16.0	47.1	47.1	25.7	56.8	56.8	12.0	20.6	25.7	26.6	35.2	35.2
Total Split (%)	13.3%	39.3%	39.3%	21.4%	47.3%	47.3%	10.0%	17.2%	21.4%	22.2%	29.3%	29.3%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	12.0	42.6	42.6	20.9	51.5	51.5	7.8	16.0	41.5	22.6	30.8	30.8
Actuated g/C Ratio	0.10	0.36	0.36	0.17	0.43	0.43	0.06	0.13	0.35	0.19	0.26	0.26
v/c Ratio	1.02	0.76	0.32	0.86	1.03	0.72	0.53	0.41	0.22	1.00	0.50	0.38
Control Delay	112.5	16.8	2.5	62.2	47.4	4.0	63.3	53.2	16.0	86.6	41.1	7.1
Queue Delay	0.0	0.0	0.0	0.0	27.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.5	16.8	2.5	62.2	74.7	4.5	63.3	53.2	16.0	86.6	41.1	7.1
LOS	F	B	A	E	E	A	E	D	B	F	D	A
Approach Delay		29.5			59.2			37.2			61.4	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 48.8	Intersection LOS: D
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1571	203	476	2047	607	109	93	204	570	169	223
Future Volume (veh/h)	306	1571	203	476	2047	607	109	93	204	570	169	223
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	326	1671	221	517	2178	646	118	101	222	606	224	210
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	2347	578	568	2191	680	198	232	804	671	477	404
Arrive On Green	0.20	0.73	0.73	0.33	0.86	0.86	0.06	0.12	0.12	0.19	0.26	0.26
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	326	1671	221	517	2178	646	118	101	222	606	224	210
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	11.2	17.5	6.3	17.2	49.4	37.5	4.0	6.0	7.4	20.0	12.2	13.7
Cycle Q Clear(g_c), s	11.2	17.5	6.3	17.2	49.4	37.5	4.0	6.0	7.4	20.0	12.2	13.7
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	346	2347	578	568	2191	680	198	232	804	671	477	404
V/C Ratio(X)	0.94	0.71	0.38	0.91	0.99	0.95	0.60	0.44	0.28	0.90	0.47	0.52
Avail Cap(c_a), veh/h	346	2347	578	625	2191	680	230	249	830	671	477	404
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	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	47.7	12.7	11.2	39.4	8.3	7.5	55.2	48.7	33.0	47.6	37.8	38.4
Incr Delay (d2), s/veh	33.9	1.0	0.4	16.6	17.8	24.2	3.1	1.3	0.2	17.8	3.3	4.7
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	5.8	3.7	1.9	7.0	6.7	7.5	1.8	2.9	2.5	10.4	6.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.6	13.7	11.6	56.0	26.2	31.7	58.3	50.0	33.2	65.4	41.1	43.1
LnGrp LOS	F	B	B	E	C	C	E	D	C	E	D	D
Approach Vol, veh/h		2218			3341			441			1040	
Approach Delay, s/veh		23.5			31.9			43.8			55.7	
Approach LOS		C			C			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.7	49.1	10.9	35.2	16.0	56.8	26.6	19.5				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	21.7	41.8	8.0	30.6	12.0	51.5	22.6	16.0				
Max Q Clear Time (g_c+I1), s	19.2	19.5	6.0	15.7	13.2	51.4	22.0	9.4				
Green Ext Time (p_c), s	0.5	10.1	0.1	1.9	0.0	0.1	0.2	0.8				

Intersection Summary		
HCM 6th Ctrl Delay		33.5
HCM 6th LOS		C

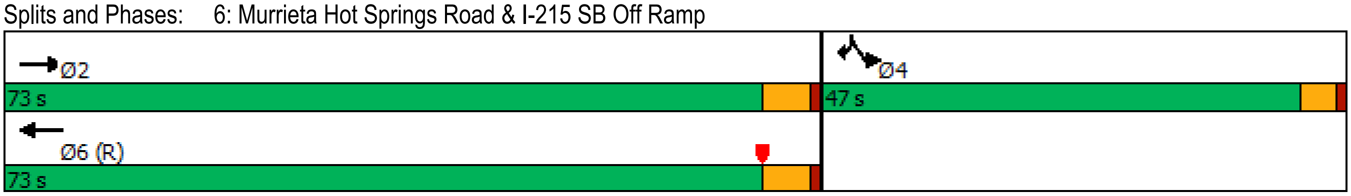
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2175	2426	701	806
Future Volume (vph)	2175	2426	701	806
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	73.0	73.0	47.0	47.0
Total Split (%)	60.8%	60.8%	39.2%	39.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	68.5	68.5	42.0	42.2
Actuated g/C Ratio	0.57	0.57	0.35	0.35
v/c Ratio	0.82	0.92	0.86	0.94
Control Delay	20.0	25.2	43.9	63.5
Queue Delay	0.0	26.1	0.0	0.0
Total Delay	20.0	51.3	43.9	63.5
LOS	B	D	D	E
Approach Delay	20.0	51.3	50.1	
Approach LOS	B	D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 39.8	Intersection LOS: D
Intersection Capacity Utilization 140.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2175	2426	0	701	806
Future Volume (veh/h)	0	2175	2426	0	701	806
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2314	2581	0	1047	534
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2881	2881	0	1291	577
Arrive On Green	0.00	0.56	1.00	0.00	0.35	0.35
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2314	2581	0	1047	534
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	43.3	0.0	0.0	30.8	37.4
Cycle Q Clear(g_c), s	0.0	43.3	0.0	0.0	30.8	37.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2881	2881	0	1291	577
V/C Ratio(X)	0.00	0.80	0.90	0.00	0.81	0.93
Avail Cap(c_a), veh/h	0	2881	2881	0	1321	591
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.8	0.0	0.0	35.5	37.5
Incr Delay (d2), s/veh	0.0	2.5	4.9	0.0	3.9	20.4
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	16.2	1.3	0.0	14.4	18.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	23.3	4.9	0.0	39.4	57.9
LnGrp LOS	A	C	A	A	D	E
Approach Vol, veh/h		2314	2581		1581	
Approach Delay, s/veh		23.3	4.9		45.6	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		73.0		46.0		73.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		67.7		* 43		67.7
Max Q Clear Time (g_c+I1), s		45.3		39.4		2.0
Green Ext Time (p_c), s		14.0		2.4		29.1

Intersection Summary			
HCM 6th Ctrl Delay			21.4
HCM 6th LOS			C

Notes

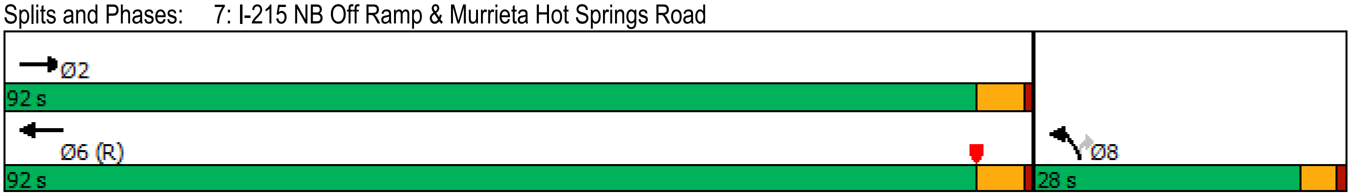
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2307	2398	414	224
Future Volume (vph)	2307	2398	414	224
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	92.0	92.0	28.0	28.0
Total Split (%)	76.7%	76.7%	23.3%	23.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	86.7	86.7	23.8	23.8
Actuated g/C Ratio	0.72	0.72	0.20	0.20
v/c Ratio	0.68	0.71	0.58	0.39
Control Delay	8.8	10.9	47.2	40.5
Queue Delay	0.1	3.0	0.0	0.0
Total Delay	8.8	13.9	47.2	40.5
LOS	A	B	D	D
Approach Delay	8.8	13.9	44.9	
Approach LOS	A	B	D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 15.4 — Intersection LOS: B
Intersection Capacity Utilization 66.1% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2307	0	0	2398	414	224
Future Volume (veh/h)	2307	0	0	2398	414	224
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2428	0	0	2524	436	236
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3689	0	0	3689	713	575
Arrive On Green	0.72	0.00	0.00	0.72	0.20	0.20
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2428	0	0	2524	436	236
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	30.2	0.0	0.0	32.6	13.3	8.5
Cycle Q Clear(g_c), s	30.2	0.0	0.0	32.6	13.3	8.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3689	0	0	3689	713	575
V/C Ratio(X)	0.66	0.00	0.00	0.68	0.61	0.41
Avail Cap(c_a), veh/h	3689	0	0	3689	713	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	0.0	9.1	43.9	42.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.0	3.9	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	0.0	0.0	9.9	6.3	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.7	0.0	0.0	10.2	47.8	44.1
LnGrp LOS	A	A	A	B	D	D
Approach Vol, veh/h	2428			2524	672	
Approach Delay, s/veh	9.7			10.2	46.5	
Approach LOS	A			B	D	

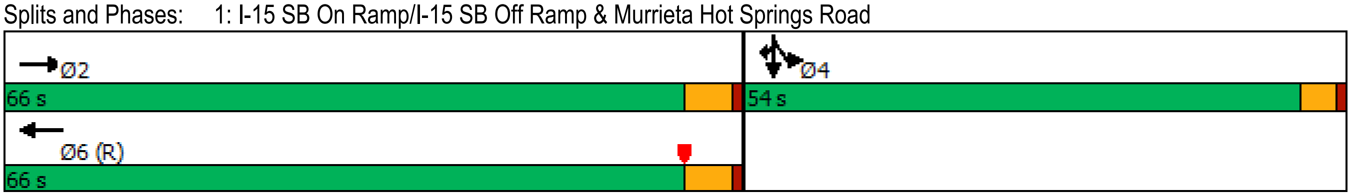
Timer - Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		92.0				92.0		28.0
Change Period (Y+Rc), s		5.3				5.3		4.2
Max Green Setting (Gmax), s		86.7				86.7		23.8
Max Q Clear Time (g_c+I1), s		32.2				34.6		15.3
Green Ext Time (p_c), s		23.8				25.3		2.2

Intersection Summary			
HCM 6th Ctrl Delay			14.3
HCM 6th LOS			B

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2419	359	1698	1350	0	220
Future Volume (vph)	2419	359	1698	1350	0	220
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	66.0		66.0	54.0	54.0	54.0
Total Split (%)	55.0%		55.0%	45.0%	45.0%	45.0%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	60.7	120.0	60.7	49.8	49.8	49.8
Actuated g/C Ratio	0.51	1.00	0.51	0.42	0.42	0.42
v/c Ratio	1.01	0.24	0.71	1.00	1.08	0.33
Control Delay	50.4	0.4	22.6	67.6	91.9	23.1
Queue Delay	34.8	0.0	0.0	0.0	0.0	0.0
Total Delay	85.2	0.4	22.6	67.6	91.9	23.1
LOS	F	A	C	E	F	C
Approach Delay	74.2		22.6		72.6	
Approach LOS	E		C		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 59.3	Intersection LOS: E
Intersection Capacity Utilization 138.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2419	359	0	1698	0	0	0	0	1350	0	220
Future Volume (veh/h)	0	2419	359	0	1698	0	0	0	0	1350	0	220
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2601	0	0	1826	0				1526	0	158
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2583		0	2583	0				1538	0	658
Arrive On Green	0.00	0.51	0.00	0.00	0.67	0.00				0.41	0.00	0.41
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2601	0	0	1826	0				1526	0	158
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	60.7	0.0	0.0	26.8	0.0				49.2	0.0	7.8
Cycle Q Clear(g_c), s	0.0	60.7	0.0	0.0	26.8	0.0				49.2	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2583		0	2583	0				1538	0	658
V/C Ratio(X)	0.00	1.01		0.00	0.71	0.00				0.99	0.00	0.24
Avail Cap(c_a), veh/h	0	2583		0	2583	0				1538	0	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	29.6	0.0	0.0	14.1	0.0				34.9	0.0	22.8
Incr Delay (d2), s/veh	0.0	19.4	0.0	0.0	1.7	0.0				21.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	27.1	0.0	0.0	7.6	0.0				26.1	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	49.1	0.0	0.0	15.7	0.0				56.1	0.0	23.7
LnGrp LOS	A	F		A	B	A				E	A	C
Approach Vol, veh/h		2601			1826						1684	
Approach Delay, s/veh		49.1			15.7						53.1	
Approach LOS		D			B						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		66.0		54.0		66.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		60.7		* 50		60.7						
Max Q Clear Time (g_c+I1), s		62.7		51.2		28.8						
Green Ext Time (p_c), s		0.0		0.0		11.9						

Intersection Summary		
HCM 6th Ctrl Delay		40.2
HCM 6th LOS		D

Notes

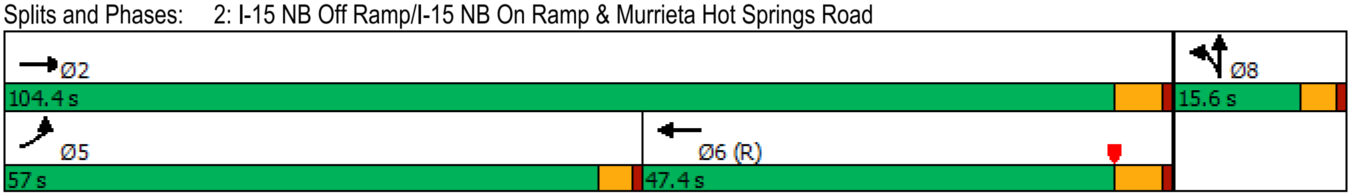
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	767	2928	1670	1701	295	0	492
Future Volume (vph)	767	2928	1670	1701	295	0	492
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	57.0	104.4	47.4		15.6	15.6	
Total Split (%)	47.5%	87.0%	39.5%		13.0%	13.0%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	53.0	99.1	42.1	120.0	11.4	11.4	120.0
Actuated g/C Ratio	0.44	0.83	0.35	1.00	0.10	0.10	1.00
v/c Ratio	1.02	0.73	0.98	1.12	0.96	0.97	0.32
Control Delay	65.2	3.9	43.0	81.3	116.6	118.1	0.5
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	4.1	43.0	81.3	116.6	118.1	0.5
LOS	E	A	D	F	F	F	A
Approach Delay		16.8	62.3			44.3	
Approach LOS		B	E			D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.12
Intersection Signal Delay: 39.1 Intersection LOS: D
Intersection Capacity Utilization 94.3% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	767	2928	0	0	1670	1701	295	0	492	0	0	0
Future Volume (veh/h)	767	2928	0	0	1670	1701	295	0	492	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	799	3050	0	0	1740	0	307	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	787	4217	0	0	1791		338	0				
Arrive On Green	0.44	0.83	0.00	0.00	0.59	0.00	0.09	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	799	3050	0	0	1740	0	307	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	53.0	31.0	0.0	0.0	39.3	0.0	10.2	0.0	0.0			
Cycle Q Clear(g_c), s	53.0	31.0	0.0	0.0	39.3	0.0	10.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	787	4217	0	0	1791		338	0				
V/C Ratio(X)	1.02	0.72	0.00	0.00	0.97		0.91	0.00				
Avail Cap(c_a), veh/h	787	4217	0	0	1791		338	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.26	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	33.5	4.5	0.0	0.0	24.3	0.0	53.8	0.0	0.0			
Incr Delay (d2), s/veh	36.0	1.1	0.0	0.0	6.0	0.0	27.0	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	29.1	6.1	0.0	0.0	11.6	0.0	5.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	5.6	0.0	0.0	30.3	0.0	80.7	0.0	0.0			
LnGrp LOS	F	A	A	A	C		F	A				
Approach Vol, veh/h		3849			1740			307				
Approach Delay, s/veh		18.9			30.3			80.7				
Approach LOS		B			C			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		104.4			57.0	47.4		15.6				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		99.1			53.0	42.1		11.4				
Max Q Clear Time (g_c+I1), s		33.0			55.0	41.3		12.2				
Green Ext Time (p_c), s		41.9			0.0	0.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		25.5
HCM 6th LOS		C

Notes

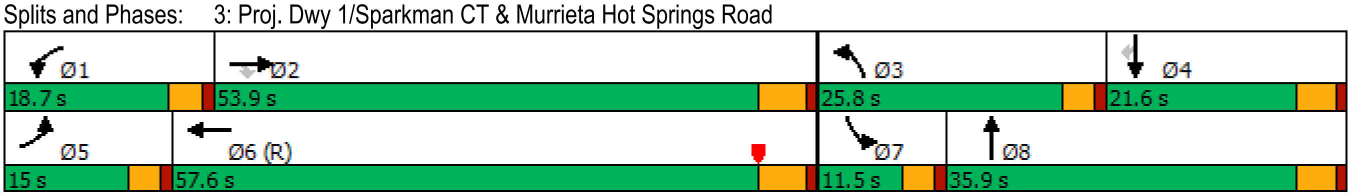
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	280	2600	405	406	2372	614	10	24	10	218
Future Volume (vph)	280	2600	405	406	2372	614	10	24	10	218
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	15.0	53.9	53.9	18.7	57.6	25.8	35.9	11.5	21.6	21.6
Total Split (%)	12.5%	44.9%	44.9%	15.6%	48.0%	21.5%	29.9%	9.6%	18.0%	18.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	11.0	48.6	48.6	14.7	52.3	21.8	36.1	7.1	17.0	17.0
Actuated g/C Ratio	0.09	0.40	0.40	0.12	0.44	0.18	0.30	0.06	0.14	0.14
v/c Ratio	0.91	1.02	0.48	0.99	0.90	1.01	0.21	0.12	0.02	0.99
Control Delay	78.8	54.0	5.3	93.3	36.9	86.7	5.9	54.9	44.6	109.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.8	54.0	5.3	93.3	36.9	86.7	5.9	54.9	44.6	109.8
LOS	E	D	A	F	D	F	A	D	D	F
Approach Delay		50.1			44.9		65.8		102.1	
Approach LOS		D			D		E		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 51.7	Intersection LOS: D
Intersection Capacity Utilization 85.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	2600	405	406	2372	79	614	10	205	24	10	218
Future Volume (veh/h)	280	2600	405	406	2372	79	614	10	205	24	10	218
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	2653	413	414	2420	81	627	10	209	24	10	222
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	2606	642	423	2808	94	628	517	462	111	503	225
Arrive On Green	0.09	0.40	0.40	0.12	0.44	0.44	0.18	0.29	0.29	0.03	0.14	0.14
Sat Flow, veh/h	3456	6434	1585	3456	6442	215	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	286	2653	413	414	1812	689	627	10	209	24	10	222
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1832	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.8	48.6	25.2	14.3	40.7	40.8	21.8	0.5	12.9	0.8	0.3	16.8
Cycle Q Clear(g_c), s	9.8	48.6	25.2	14.3	40.7	40.8	21.8	0.5	12.9	0.8	0.3	16.8
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	2606	642	423	2103	798	628	517	462	111	503	225
V/C Ratio(X)	0.90	1.02	0.64	0.98	0.86	0.86	1.00	0.02	0.45	0.22	0.02	0.99
Avail Cap(c_a), veh/h	317	2606	642	423	2103	798	628	517	462	216	503	225
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)	0.69	0.69	0.69	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	35.7	28.7	52.5	30.6	30.6	49.1	30.3	34.7	56.6	44.3	51.4
Incr Delay (d2), s/veh	20.9	19.4	3.4	37.8	4.9	11.9	35.6	0.1	3.2	1.0	0.1	57.2
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	5.1	21.3	10.1	8.3	15.7	19.5	12.4	0.2	5.4	0.4	0.1	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.9	55.1	32.1	90.3	35.5	42.5	84.7	30.4	37.9	57.6	44.4	108.6
LnGrp LOS	E	F	C	F	D	D	F	C	D	E	D	F
Approach Vol, veh/h		3352			2915			846			256	
Approach Delay, s/veh		54.0			45.0			72.5			101.3	
Approach LOS		D			D			E			F	

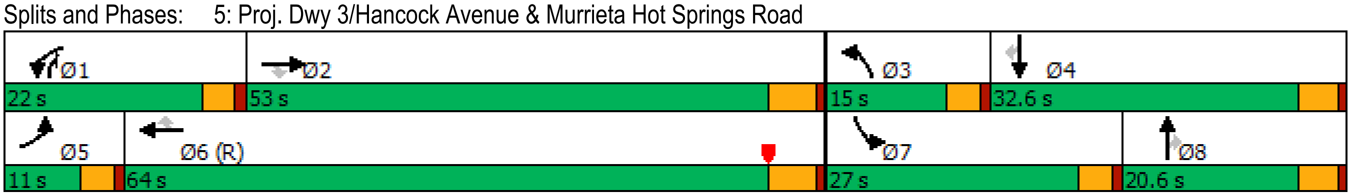
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	53.9	25.8	21.6	15.0	57.6	7.9	39.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	14.7	48.6	21.8	17.0	11.0	52.3	7.5	31.3
Max Q Clear Time (g_c+I1), s	16.3	50.6	23.8	18.8	11.8	42.8	2.8	14.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	8.3	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	54.2
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	227	2173	278	499	2395	696	256	216	551	675	238	352
Future Volume (vph)	227	2173	278	499	2395	696	256	216	551	675	238	352
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.0	38.3	38.3	11.0	20.6	11.0	11.0	14.6	14.6
Total Split (s)	11.0	53.0	53.0	22.0	64.0	64.0	15.0	20.6	22.0	27.0	32.6	32.6
Total Split (%)	9.0%	43.2%	43.2%	17.9%	52.2%	52.2%	12.2%	16.8%	17.9%	22.0%	26.6%	26.6%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Min	C-Min	None	None	None	Min	Min	Min
Act Effct Green (s)	7.0	47.7	47.7	18.0	58.7	58.7	11.0	16.0	38.6	23.0	28.0	28.0
Actuated g/C Ratio	0.06	0.39	0.39	0.15	0.48	0.48	0.09	0.13	0.31	0.19	0.23	0.23
v/c Ratio	1.36	0.98	0.41	1.08	1.11	0.79	0.90	0.97	0.64	1.22	0.85	0.70
Control Delay	235.1	51.4	10.5	111.0	86.1	15.4	87.0	103.2	33.7	156.3	64.1	34.7
Queue Delay	0.0	0.0	0.0	0.0	0.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	235.1	51.4	10.5	111.0	86.4	16.5	87.0	103.2	33.7	156.3	64.1	34.7
LOS	F	D	B	F	F	B	F	F	C	F	E	C
Approach Delay		62.8			76.3			61.7			106.8	
Approach LOS		E			E			E			F	

Intersection Summary	
Cycle Length: 122.6	
Actuated Cycle Length: 122.6	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.36	
Intersection Signal Delay: 74.8	Intersection LOS: E
Intersection Capacity Utilization 98.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	2173	278	499	2395	696	256	216	551	675	238	352
Future Volume (veh/h)	227	2173	278	499	2395	696	256	216	551	675	238	352
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	2362	302	542	2603	757	278	235	599	734	352	321
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	2495	615	506	2437	756	309	243	771	666	426	361
Arrive On Green	0.06	0.39	0.39	0.15	0.48	0.48	0.09	0.13	0.13	0.19	0.23	0.23
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	247	2362	302	542	2603	757	278	235	599	734	352	321
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	7.0	43.7	17.7	18.0	58.7	58.7	9.8	15.4	16.0	23.0	22.0	24.1
Cycle Q Clear(g_c), s	7.0	43.7	17.7	18.0	58.7	58.7	9.8	15.4	16.0	23.0	22.0	24.1
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	197	2495	615	506	2437	756	309	243	771	666	426	361
V/C Ratio(X)	1.26	0.95	0.49	1.07	1.07	1.00	0.90	0.97	0.78	1.10	0.83	0.89
Avail Cap(c_a), veh/h	197	2495	615	506	2437	756	309	243	771	666	426	361
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	58.0	36.4	28.5	52.5	32.2	32.2	55.5	53.2	41.0	50.0	45.2	46.0
Incr Delay (d2), s/veh	149.7	8.6	0.6	60.6	39.6	32.9	27.4	48.0	5.0	66.1	12.6	22.8
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	7.1	17.7	6.8	11.8	31.2	28.6	5.4	10.5	8.9	16.2	11.6	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	207.7	45.0	29.1	113.1	71.8	65.1	82.8	101.3	46.0	116.1	57.8	68.8
LnGrp LOS	F	D	C	F	F	F	F	F	D	F	E	E
Approach Vol, veh/h		2911			3902			1112			1407	
Approach Delay, s/veh		57.2			76.2			66.9			90.7	
Approach LOS		E			E			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	53.0	15.0	32.6	11.0	64.0	27.0	20.6				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	18.0	47.7	11.0	28.0	7.0	58.7	23.0	16.0				
Max Q Clear Time (g_c+I1), s	20.0	45.7	11.8	26.1	9.0	60.7	25.0	18.0				
Green Ext Time (p_c), s	0.0	1.9	0.0	0.7	0.0	0.0	0.0	0.0				

Intersection Summary			
HCM 6th Ctrl Delay			71.4
HCM 6th LOS			E

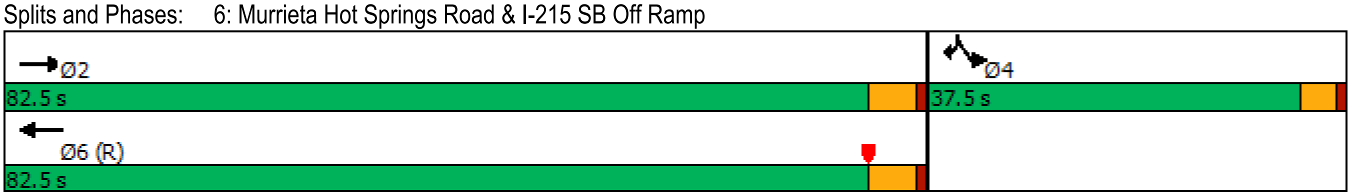
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	3104	2866	736	660
Future Volume (vph)	3104	2866	736	660
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	82.5	82.5	37.5	37.5
Total Split (%)	68.8%	68.8%	31.3%	31.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	77.2	77.2	33.3	33.5
Actuated g/C Ratio	0.64	0.64	0.28	0.28
v/c Ratio	1.04	0.96	0.99	1.10
Control Delay	51.3	23.0	69.0	112.8
Queue Delay	23.7	1.0	0.0	0.0
Total Delay	75.0	24.1	69.0	112.8
LOS	E	C	E	F
Approach Delay	75.0	24.1	82.9	
Approach LOS	E	C	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 56.7	Intersection LOS: E
Intersection Capacity Utilization 157.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3104	2866	0	736	660
Future Volume (veh/h)	0	3104	2866	0	736	660
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	3302	3049	0	976	495
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3285	3285	0	1028	460
Arrive On Green	0.00	0.64	1.00	0.00	0.28	0.28
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	3302	3049	0	976	495
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	77.2	0.0	0.0	31.0	33.5
Cycle Q Clear(g_c), s	0.0	77.2	0.0	0.0	31.0	33.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3285	3285	0	1028	460
V/C Ratio(X)	0.00	1.01	0.93	0.00	0.95	1.08
Avail Cap(c_a), veh/h	0	3285	3285	0	1028	460
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	0.0	0.0	42.5	43.3
Incr Delay (d2), s/veh	0.0	17.0	6.0	0.0	17.2	63.7
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	30.8	1.8	0.0	16.5	21.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	38.4	6.0	0.0	59.7	107.0
LnGrp LOS	A	F	A	A	E	F
Approach Vol, veh/h		3302	3049		1471	
Approach Delay, s/veh		38.4	6.0		75.6	
Approach LOS		D	A		E	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	82.5	37.5	82.5
Change Period (Y+Rc), s	5.3	* 4.2	5.3
Max Green Setting (Gmax), s	77.2	* 33	77.2
Max Q Clear Time (g_c+I1), s	79.2	35.5	2.0
Green Ext Time (p_c), s	0.0	0.0	45.1

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Notes

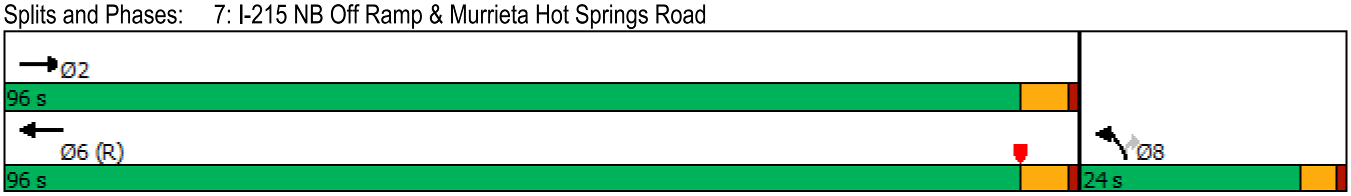
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2950	2772	373	334
Future Volume (vph)	2950	2772	373	334
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	96.0	96.0	24.0	24.0
Total Split (%)	80.0%	80.0%	20.0%	20.0%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	90.7	90.7	19.8	19.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.85	0.80	0.64	0.73
Control Delay	6.4	11.3	52.2	56.3
Queue Delay	0.6	11.8	0.0	0.0
Total Delay	7.0	23.1	52.2	56.3
LOS	A	C	D	E
Approach Delay	7.0	23.1	54.1	
Approach LOS	A	C	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↰↰	↱↱
Traffic Volume (veh/h)	2950	0	0	2772	373	334
Future Volume (veh/h)	2950	0	0	2772	373	334
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	3172	0	0	2981	401	359
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3859	0	0	3859	593	479
Arrive On Green	0.76	0.00	0.00	0.76	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	3172	0	0	2981	401	359
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	48.1	0.0	0.0	41.1	12.6	14.1
Cycle Q Clear(g_c), s	48.1	0.0	0.0	41.1	12.6	14.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3859	0	0	3859	593	479
V/C Ratio(X)	0.82	0.00	0.00	0.77	0.68	0.75
Avail Cap(c_a), veh/h	3859	0	0	3859	593	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	0.0	0.0	8.6	47.1	47.7
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.6	6.1	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.0	0.0	11.5	6.1	5.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	0.0	0.0	10.2	53.2	58.1
LnGrp LOS	B	A	A	B	D	E
Approach Vol, veh/h	3172			2981	760	
Approach Delay, s/veh	11.5			10.2	55.5	
Approach LOS	B			B	E	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	96.0	96.0	24.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	90.7	90.7	19.8
Max Q Clear Time (g_c+I1), s	50.1	43.1	16.1
Green Ext Time (p_c), s	31.7	32.6	1.4

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	294	255	279	71	78	67	582	582	494
Average Queue (ft)	221	147	95	52	59	50	401	440	299
95th Queue (ft)	314	232	207	59	70	63	549	588	457
Link Distance (ft)				48	48	48	566	566	
Upstream Blk Time (%)				35	34	21	1	4	
Queuing Penalty (veh)				167	161	101	0	0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								5	0
Queuing Penalty (veh)								9	1

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	269	184	111	189	114	172	144	191	179	458
Average Queue (ft)	133	82	37	44	49	64	71	136	129	242
95th Queue (ft)	207	159	89	128	106	146	135	186	184	404
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	151	200	252	270	295	269	50	139	175	108	182	224
Average Queue (ft)	80	96	162	182	179	155	11	86	99	38	68	109
95th Queue (ft)	145	157	234	251	259	248	36	130	143	85	134	196
Link Distance (ft)			1082	1082	1082	1082				271	271	271
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	224	167	280	49	112	28	55	58	284	260
Average Queue (ft)	133	94	144	12	38	2	13	9	84	205
95th Queue (ft)	218	141	229	34	82	11	36	32	297	288
Link Distance (ft)	271	275	275	275	275			269	269	
Upstream Blk Time (%)			0						6	2
Queuing Penalty (veh)			0						0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									3	13
Queuing Penalty (veh)									7	1

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	NB
Directions Served	R
Maximum Queue (ft)	64
Average Queue (ft)	29
95th Queue (ft)	51
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	246	250	195	232	255	105	72	189	224	259	264	262
Average Queue (ft)	143	148	111	142	160	28	30	118	141	129	157	210
95th Queue (ft)	224	230	185	214	240	68	59	180	203	245	252	283
Link Distance (ft)			307	307	307	307				240	240	240
Upstream Blk Time (%)									0	2	0	3
Queuing Penalty (veh)									0	12	3	25
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)	1	1						0	0	2		
Queuing Penalty (veh)	5	4						0	1	10		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	152	94	111	154	191	25	162	175	312	175
Average Queue (ft)	57	51	44	58	80	10	159	174	282	89
95th Queue (ft)	98	80	88	108	140	30	168	175	300	181
Link Distance (ft)	240	311	311	311	311	311				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							6	62	11	0
Queuing Penalty (veh)							22	244	76	1

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	95	97	115	133	158	156	883	866	495
Average Queue (ft)	73	75	78	117	123	122	845	845	444
95th Queue (ft)	80	88	98	128	150	135	860	856	638
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	28	34	36	20	19	37	52	86	
Queuing Penalty (veh)	205	247	262	161	158	298	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								68	0
Queuing Penalty (veh)								273	3

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	213	180	160	73	76	80	235	258	156	157
Average Queue (ft)	144	151	125	34	32	48	133	169	91	47
95th Queue (ft)	187	179	162	58	50	72	199	237	147	115
Link Distance (ft)	144	144	144	15	15	15	1042	1042		
Upstream Blk Time (%)	7	6	3	19	19	36				
Queuing Penalty (veh)	51	48	23	150	149	290				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 3169

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (ft)	318	295	331	294	53	61	48	600	606	505
Average Queue (ft)	273	274	264	58	35	38	26	582	582	478
95th Queue (ft)	373	324	354	249	66	77	58	588	589	544
Link Distance (ft)					48	48	48	566	566	
Upstream Blk Time (%)					13	12	5	55	51	
Queuing Penalty (veh)					76	68	30	0	0	
Storage Bay Dist (ft)										480
Storage Blk Time (%)									59	1
Queuing Penalty (veh)									65	8

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	469	514	471	480	216	274	296	1076	1251	1270	610
Average Queue (ft)	391	196	129	218	77	86	92	63	1204	1251	610
95th Queue (ft)	472	518	340	443	171	180	185	454	1357	1260	612
Link Distance (ft)		473	473	473	1082	1082	1082	1082	1236	1236	
Upstream Blk Time (%)	1	1	0	2				0	37	100	
Queuing Penalty (veh)	0	14	1	30				1	0	0	
Storage Bay Dist (ft)	500										585
Storage Blk Time (%)	1	1								2	100
Queuing Penalty (veh)	6	9								8	146

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	113	334	997	1009	1081	1134	345	193	186	177	248	284
Average Queue (ft)	61	148	332	368	475	563	150	103	109	56	104	174
95th Queue (ft)	99	333	700	743	975	1250	413	166	164	133	202	282
Link Distance (ft)			1082	1082	1082	1082				271	271	271
Upstream Blk Time (%)					0	28						1
Queuing Penalty (veh)					0	239						5
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)			14			22	0					
Queuing Penalty (veh)			39			87	1					

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	316	290	309	289	290	30	81	39	321	260
Average Queue (ft)	230	216	292	64	67	2	23	6	290	260
95th Queue (ft)	336	342	303	257	226	12	71	21	307	261
Link Distance (ft)	271	275	275	275	275			269	269	
Upstream Blk Time (%)	6	10	94	7	2				92	70
Queuing Penalty (veh)	44	0	0	0	0				0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									0	97
Queuing Penalty (veh)									0	5

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	WB	NB
Directions Served	T	T	T	T	R	T	R
Maximum Queue (ft)	298	294	318	314	250	143	340
Average Queue (ft)	127	164	180	147	41	23	307
95th Queue (ft)	318	335	346	336	194	91	329
Link Distance (ft)	271	271	271	271		307	288
Upstream Blk Time (%)	8	7	13	10			100
Queuing Penalty (veh)	54	51	89	70			0
Storage Bay Dist (ft)					150		
Storage Blk Time (%)				17			
Queuing Penalty (veh)				35			

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	124	270	339	378	357	372	240	209	224	248	295	276
Average Queue (ft)	77	145	276	316	324	288	97	134	147	176	211	239
95th Queue (ft)	119	305	362	347	345	446	236	198	210	256	286	290
Link Distance (ft)			307	307	307	307				240	240	240
Upstream Blk Time (%)			21	27	43	27			0	1	3	17
Queuing Penalty (veh)			147	184	295	188			0	9	31	153
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)		0	28			1	0	0	2	2		
Queuing Penalty (veh)		0	64			4	1	1	13	11		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	166	206	326	345	326	350	162	174	323	175
Average Queue (ft)	85	104	156	300	322	314	156	171	278	70
95th Queue (ft)	149	182	282	402	359	411	178	194	295	162
Link Distance (ft)	240	311	311	311	311	311				
Upstream Blk Time (%)			0	29	82	67				
Queuing Penalty (veh)			0	0	0	0				
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							8	63	15	0
Queuing Penalty (veh)							47	370	129	1

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	75	95	120	120	147	143	861	879	495
Average Queue (ft)	57	75	80	115	109	121	840	846	463
95th Queue (ft)	94	86	101	129	149	131	852	862	599
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	15	24	28	13	9	34	62	93	
Queuing Penalty (veh)	157	244	287	124	90	321	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								85	0
Queuing Penalty (veh)								280	2

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	179	170	187	54	53	75	510	582	216	176
Average Queue (ft)	139	127	115	33	25	53	192	240	142	96
95th Queue (ft)	191	172	189	52	44	79	398	471	196	174
Link Distance (ft)	144	144	144	15	15	15	1042	1042		
Upstream Blk Time (%)	7	2	3	17	12	33				
Queuing Penalty (veh)	67	19	29	154	115	305				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

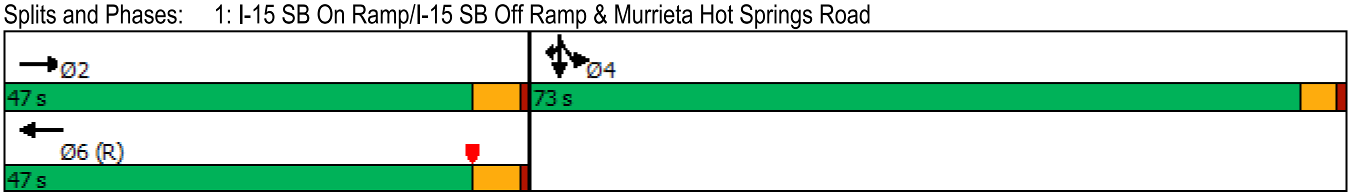
Zone wide Queuing Penalty: 5028

EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2028) WITH TRIANGLE PROJECT (CURRENT DEVELOPMENT PLAN), DUAL LEFT-TURN LANES AT I-15 NB RAMPS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1124	325	1434	1508	0	352
Future Volume (vph)	1124	325	1434	1508	0	352
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	47.0		47.0	73.0	73.0	73.0
Total Split (%)	39.2%		39.2%	60.8%	60.8%	60.8%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	41.7	120.0	41.7	68.8	68.8	68.8
Actuated g/C Ratio	0.35	1.00	0.35	0.57	0.57	0.57
v/c Ratio	0.68	0.22	0.86	0.80	0.89	0.39
Control Delay	35.8	0.3	40.8	27.4	34.9	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	0.3	40.8	27.4	34.9	14.7
LOS	D	A	D	C	C	B
Approach Delay	27.8		40.8		28.3	
Approach LOS	C		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 31.9	Intersection LOS: C
Intersection Capacity Utilization 113.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1124	325	0	1434	0	0	0	0	1508	0	352
Future Volume (veh/h)	0	1124	325	0	1434	0	0	0	0	1508	0	352
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1196	0	0	1526	0				1720	0	249
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1774		0	1774	0				2124	0	909
Arrive On Green	0.00	0.35	0.00	0.00	0.23	0.00				0.57	0.00	0.57
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1196	0	0	1526	0				1720	0	249
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	24.0	0.0	0.0	34.4	0.0				44.4	0.0	9.5
Cycle Q Clear(g_c), s	0.0	24.0	0.0	0.0	34.4	0.0				44.4	0.0	9.5
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1774		0	1774	0				2124	0	909
V/C Ratio(X)	0.00	0.67		0.00	0.86	0.00				0.81	0.00	0.27
Avail Cap(c_a), veh/h	0	1774		0	1774	0				2124	0	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	33.4	0.0	0.0	43.2	0.0				20.4	0.0	13.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	5.7	0.0				3.5	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	9.6	0.0	0.0	15.7	0.0				19.2	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.4	0.0	0.0	48.9	0.0				23.9	0.0	13.7
LnGrp LOS	A	C		A	D	A				C	A	B
Approach Vol, veh/h		1196			1526						1969	
Approach Delay, s/veh		34.4			48.9						22.6	
Approach LOS		C			D						C	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		47.0		73.0		47.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		41.7		* 69		41.7						
Max Q Clear Time (g_c+I1), s		26.0		46.4		36.4						
Green Ext Time (p_c), s		5.3		12.7		3.3						
Intersection Summary												
HCM 6th Ctrl Delay			34.2									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

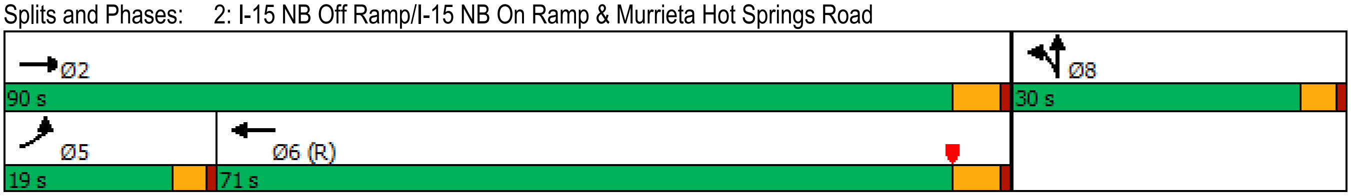
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	217	2402	1451	1105	344	0	417
Future Volume (vph)	217	2402	1451	1105	344	0	417
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	19.0	90.0	71.0		30.0	30.0	
Total Split (%)	15.8%	75.0%	59.2%		25.0%	25.0%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	13.2	92.0	74.8	120.0	18.5	18.5	120.0
Actuated g/C Ratio	0.11	0.77	0.62	1.00	0.15	0.15	1.00
v/c Ratio	0.63	0.67	0.50	0.76	0.72	0.72	0.29
Control Delay	57.3	4.5	15.5	13.7	63.4	63.4	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	4.6	15.5	13.7	63.4	63.4	0.5
LOS	E	A	B	B	E	E	A
Approach Delay		8.9	14.8			28.9	
Approach LOS		A	B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 14.0	Intersection LOS: B
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

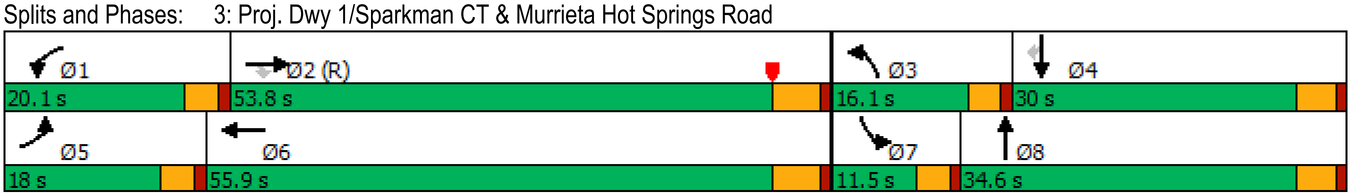


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	2402	0	0	1451	1105	344	0	417	0	0	0
Future Volume (veh/h)	217	2402	0	0	1451	1105	344	0	417	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	236	2611	0	0	1577	0	374	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	300	3604	0	0	2990		463	0				
Arrive On Green	0.09	0.71	0.00	0.00	0.59	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	3456	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	236	2611	0	0	1577	0	374	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	8.0	36.9	0.0	0.0	22.2	0.0	12.2	0.0	0.0			
Cycle Q Clear(g_c), s	8.0	36.9	0.0	0.0	22.2	0.0	12.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	300	3604	0	0	2990		463	0				
V/C Ratio(X)	0.79	0.72	0.00	0.00	0.53		0.81	0.00				
Avail Cap(c_a), veh/h	432	3604	0	0	2990		766	0				
HCM Platoon Ratio	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	0.00	0.00	0.55	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	53.7	10.6	0.0	0.0	14.9	0.0	50.7	0.0	0.0			
Incr Delay (d2), s/veh	6.0	1.3	0.0	0.0	0.4	0.0	3.4	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	3.7	11.6	0.0	0.0	7.9	0.0	5.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	11.9	0.0	0.0	15.3	0.0	54.1	0.0	0.0			
LnGrp LOS	E	B	A	A	B		D	A				
Approach Vol, veh/h		2847			1577			374				
Approach Delay, s/veh		15.9			15.3			54.1				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		90.0			14.4	75.6		19.8				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		84.7			15.0	65.7		25.8				
Max Q Clear Time (g_c+I1), s		38.9			10.0	24.2		14.2				
Green Ext Time (p_c), s		25.4			0.4	10.0		1.3				
Intersection Summary												
HCM 6th Ctrl Delay			18.7									
HCM 6th LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	287	2137	339	339	1923	242	10	27	10	244
Future Volume (vph)	287	2137	339	339	1923	242	10	27	10	244
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	18.0	53.8	53.8	20.1	55.9	16.1	34.6	11.5	30.0	30.0
Total Split (%)	15.0%	44.8%	44.8%	16.8%	46.6%	13.4%	28.8%	9.6%	25.0%	25.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	C-Max	None	Max	None	Max	None	Max	Max
Act Effct Green (s)	13.6	49.0	49.0	15.6	51.0	11.8	34.8	7.1	25.7	25.7
Actuated g/C Ratio	0.11	0.41	0.41	0.13	0.42	0.10	0.29	0.06	0.21	0.21
v/c Ratio	0.78	0.86	0.43	0.82	0.77	0.78	0.10	0.14	0.01	0.76
Control Delay	65.9	34.3	4.7	74.1	17.9	69.0	9.4	55.1	37.6	60.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	34.3	4.7	74.1	17.9	69.0	9.4	55.1	37.6	60.0
LOS	E	C	A	E	B	E	A	E	D	E
Approach Delay		33.8			26.4		52.7		58.7	
Approach LOS		C			C		D		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



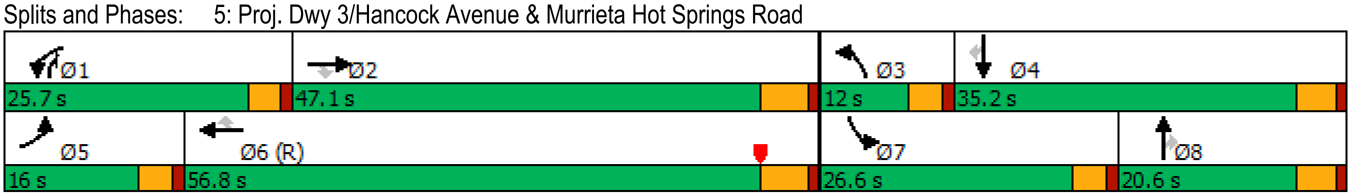
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	2137	339	339	1923	54	242	10	81	27	10	244
Future Volume (veh/h)	287	2137	339	339	1923	54	242	10	81	27	10	244
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	302	2249	368	368	2024	57	263	11	88	28	11	257
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	2738	675	419	2870	81	319	477	426	122	752	336
Arrive On Green	0.10	0.43	0.43	0.24	0.89	0.89	0.09	0.27	0.27	0.04	0.21	0.21
Sat Flow, veh/h	3456	6434	1585	3456	6481	182	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	302	2249	368	368	1507	574	263	11	88	28	11	257
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1838	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	10.3	37.0	20.8	12.3	11.4	11.4	9.0	0.5	5.2	0.9	0.3	18.3
Cycle Q Clear(g_c), s	10.3	37.0	20.8	12.3	11.4	11.4	9.0	0.5	5.2	0.9	0.3	18.3
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	2738	675	419	2137	814	319	477	426	122	752	336
V/C Ratio(X)	0.84	0.82	0.55	0.88	0.71	0.71	0.82	0.02	0.21	0.23	0.01	0.77
Avail Cap(c_a), veh/h	403	2738	675	464	2137	814	348	477	426	216	752	336
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	30.4	25.8	44.6	4.5	4.5	53.5	32.3	34.0	56.3	37.4	44.5
Incr Delay (d2), s/veh	10.5	2.2	2.4	16.2	2.0	5.1	13.9	0.1	1.1	0.9	0.0	15.3
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	13.9	8.2	5.4	2.0	3.0	4.5	0.2	2.1	0.4	0.1	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.2	32.6	28.2	60.8	6.5	9.6	67.4	32.4	35.1	57.2	37.4	59.8
LnGrp LOS	E	C	C	E	A	A	E	C	D	E	D	E
Approach Vol, veh/h		2919			2449			362			296	
Approach Delay, s/veh		35.2			15.3			58.5			58.8	
Approach LOS		D			B			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.6	56.4	15.1	30.0	16.5	58.4	8.2	36.8				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	16.1	48.5	12.1	25.4	14.0	50.6	7.5	30.0				
Max Q Clear Time (g_c+I1), s	14.3	39.0	11.0	20.3	12.3	13.4	2.9	7.2				
Green Ext Time (p_c), s	0.3	8.4	0.1	0.4	0.2	19.8	0.0	0.5				

Intersection Summary			
HCM 6th Ctrl Delay			29.7
HCM 6th LOS			C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	1571	203	476	2047	607	109	93	204	570	169	223
Future Volume (vph)	306	1571	203	476	2047	607	109	93	204	570	169	223
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	16.0	47.1	47.1	25.7	56.8	56.8	12.0	20.6	25.7	26.6	35.2	35.2
Total Split (%)	13.3%	39.3%	39.3%	21.4%	47.3%	47.3%	10.0%	17.2%	21.4%	22.2%	29.3%	29.3%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	12.0	42.6	42.6	20.9	51.5	51.5	7.8	16.0	41.5	22.6	30.8	30.8
Actuated g/C Ratio	0.10	0.36	0.36	0.17	0.43	0.43	0.06	0.13	0.35	0.19	0.26	0.26
v/c Ratio	1.02	0.76	0.32	0.86	1.03	0.72	0.53	0.41	0.22	1.00	0.50	0.38
Control Delay	112.5	16.8	2.5	62.2	47.4	4.0	63.3	53.2	16.0	86.6	41.1	7.1
Queue Delay	0.0	0.0	0.0	0.0	27.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.5	16.8	2.5	62.2	74.7	4.6	63.3	53.2	16.0	86.6	41.1	7.1
LOS	F	B	A	E	E	A	E	D	B	F	D	A
Approach Delay		29.5			59.2			37.2			61.4	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 48.8	Intersection LOS: D
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1571	203	476	2047	607	109	93	204	570	169	223
Future Volume (veh/h)	306	1571	203	476	2047	607	109	93	204	570	169	223
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	326	1671	221	517	2178	646	118	101	222	606	224	210
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	2347	578	568	2191	680	198	232	804	671	477	404
Arrive On Green	0.20	0.73	0.73	0.33	0.86	0.86	0.06	0.12	0.12	0.19	0.26	0.26
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	326	1671	221	517	2178	646	118	101	222	606	224	210
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	11.2	17.5	6.3	17.2	49.4	37.5	4.0	6.0	7.4	20.0	12.2	13.7
Cycle Q Clear(g_c), s	11.2	17.5	6.3	17.2	49.4	37.5	4.0	6.0	7.4	20.0	12.2	13.7
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	346	2347	578	568	2191	680	198	232	804	671	477	404
V/C Ratio(X)	0.94	0.71	0.38	0.91	0.99	0.95	0.60	0.44	0.28	0.90	0.47	0.52
Avail Cap(c_a), veh/h	346	2347	578	625	2191	680	230	249	830	671	477	404
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	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	47.7	12.7	11.2	39.4	8.3	7.5	55.2	48.7	33.0	47.6	37.8	38.4
Incr Delay (d2), s/veh	33.9	1.0	0.4	16.6	17.8	24.2	3.1	1.3	0.2	17.8	3.3	4.7
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	5.8	3.7	1.9	7.0	6.7	7.5	1.8	2.9	2.5	10.4	6.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.6	13.7	11.6	56.0	26.2	31.7	58.3	50.0	33.2	65.4	41.1	43.1
LnGrp LOS	F	B	B	E	C	C	E	D	C	E	D	D
Approach Vol, veh/h		2218			3341			441			1040	
Approach Delay, s/veh		23.5			31.9			43.8			55.7	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	49.1	10.9	35.2	16.0	56.8	26.6	19.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	21.7	41.8	8.0	30.6	12.0	51.5	22.6	16.0
Max Q Clear Time (g_c+I1), s	19.2	19.5	6.0	15.7	13.2	51.4	22.0	9.4
Green Ext Time (p_c), s	0.5	10.1	0.1	1.9	0.0	0.1	0.2	0.8

Intersection Summary	
HCM 6th Ctrl Delay	33.5
HCM 6th LOS	C

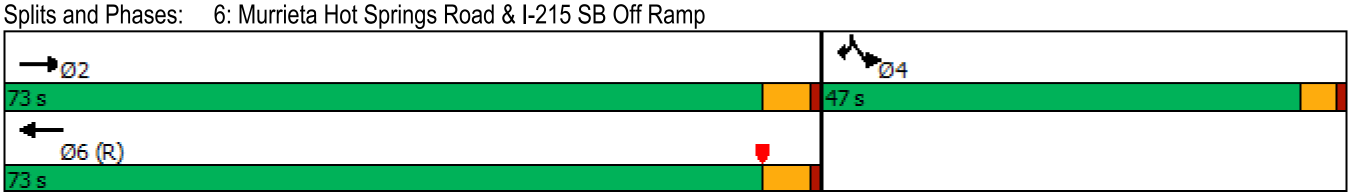
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2175	2426	701	806
Future Volume (vph)	2175	2426	701	806
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	73.0	73.0	47.0	47.0
Total Split (%)	60.8%	60.8%	39.2%	39.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	68.5	68.5	42.0	42.2
Actuated g/C Ratio	0.57	0.57	0.35	0.35
v/c Ratio	0.82	0.92	0.86	0.94
Control Delay	20.0	25.3	43.9	63.5
Queue Delay	0.0	26.1	0.0	0.0
Total Delay	20.0	51.3	43.9	63.5
LOS	C	D	D	E
Approach Delay	20.0	51.3	50.1	
Approach LOS	C	D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 39.9	Intersection LOS: D
Intersection Capacity Utilization 140.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2175	2426	0	701	806
Future Volume (veh/h)	0	2175	2426	0	701	806
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2314	2581	0	1047	534
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2881	2881	0	1291	577
Arrive On Green	0.00	0.56	1.00	0.00	0.35	0.35
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2314	2581	0	1047	534
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	43.3	0.0	0.0	30.8	37.4
Cycle Q Clear(g_c), s	0.0	43.3	0.0	0.0	30.8	37.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2881	2881	0	1291	577
V/C Ratio(X)	0.00	0.80	0.90	0.00	0.81	0.93
Avail Cap(c_a), veh/h	0	2881	2881	0	1321	591
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.8	0.0	0.0	35.5	37.5
Incr Delay (d2), s/veh	0.0	2.5	4.9	0.0	3.9	20.4
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	16.2	1.3	0.0	14.4	18.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	23.3	4.9	0.0	39.4	57.9
LnGrp LOS	A	C	A	A	D	E
Approach Vol, veh/h		2314	2581		1581	
Approach Delay, s/veh		23.3	4.9		45.6	
Approach LOS		C	A		D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		73.0		46.0		73.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		67.7		* 43		67.7
Max Q Clear Time (g_c+I1), s		45.3		39.4		2.0
Green Ext Time (p_c), s		14.0		2.4		29.1
Intersection Summary						
HCM 6th Ctrl Delay			21.4			
HCM 6th LOS			C			

Notes

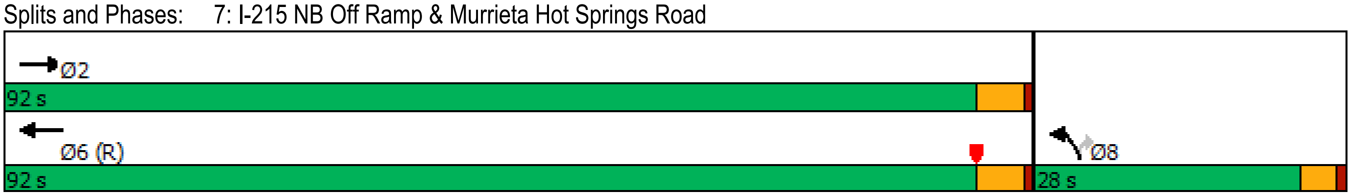
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2307	2398	414	224
Future Volume (vph)	2307	2398	414	224
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	92.0	92.0	28.0	28.0
Total Split (%)	76.7%	76.7%	23.3%	23.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	86.7	86.7	23.8	23.8
Actuated g/C Ratio	0.72	0.72	0.20	0.20
v/c Ratio	0.68	0.71	0.58	0.39
Control Delay	8.7	10.9	47.2	40.5
Queue Delay	0.1	3.0	0.0	0.0
Total Delay	8.8	13.9	47.2	40.5
LOS	A	B	D	D
Approach Delay	8.8	13.9	44.9	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.4	Intersection LOS: B
Intersection Capacity Utilization 123.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2307	0	0	2398	414	224
Future Volume (veh/h)	2307	0	0	2398	414	224
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2428	0	0	2524	436	236
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3689	0	0	3689	713	575
Arrive On Green	0.72	0.00	0.00	0.72	0.20	0.20
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2428	0	0	2524	436	236
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	30.2	0.0	0.0	32.6	13.3	8.5
Cycle Q Clear(g_c), s	30.2	0.0	0.0	32.6	13.3	8.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3689	0	0	3689	713	575
V/C Ratio(X)	0.66	0.00	0.00	0.68	0.61	0.41
Avail Cap(c_a), veh/h	3689	0	0	3689	713	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	0.0	9.1	43.9	42.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.0	3.9	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	0.0	0.0	9.9	6.3	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.7	0.0	0.0	10.2	47.8	44.1
LnGrp LOS	A	A	A	B	D	D
Approach Vol, veh/h	2428			2524	672	
Approach Delay, s/veh	9.7			10.2	46.5	
Approach LOS	A			B	D	

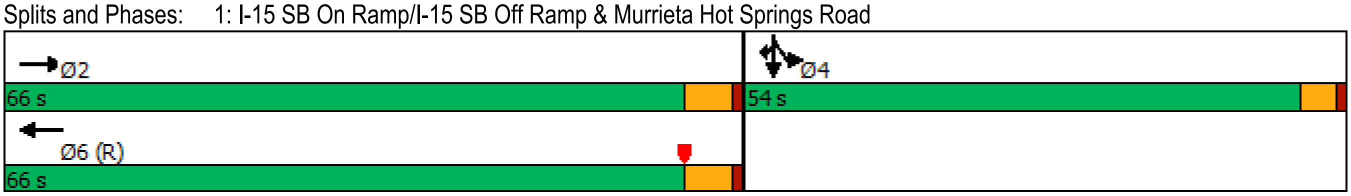
Timer - Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		92.0				92.0		28.0
Change Period (Y+Rc), s		5.3				5.3		4.2
Max Green Setting (Gmax), s		86.7				86.7		23.8
Max Q Clear Time (g_c+I1), s		32.2				34.6		15.3
Green Ext Time (p_c), s		23.8				25.3		2.2

Intersection Summary			
HCM 6th Ctrl Delay			14.3
HCM 6th LOS			B

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2419	359	1698	1350	0	220
Future Volume (vph)	2419	359	1698	1350	0	220
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	66.0		66.0	54.0	54.0	54.0
Total Split (%)	55.0%		55.0%	45.0%	45.0%	45.0%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	60.7	120.0	60.7	49.8	49.8	49.8
Actuated g/C Ratio	0.51	1.00	0.51	0.42	0.42	0.42
v/c Ratio	1.01	0.24	0.71	1.00	1.08	0.33
Control Delay	50.4	0.4	18.6	67.6	91.9	23.1
Queue Delay	34.8	0.0	0.0	0.0	0.0	0.0
Total Delay	85.2	0.4	18.6	67.6	91.9	23.1
LOS	F	A	B	E	F	C
Approach Delay	74.2		18.6		72.6	
Approach LOS	E		B		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 58.2	Intersection LOS: E
Intersection Capacity Utilization 138.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2419	359	0	1698	0	0	0	0	1350	0	220
Future Volume (veh/h)	0	2419	359	0	1698	0	0	0	0	1350	0	220
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2601	0	0	1826	0				1526	0	158
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2583		0	2583	0				1538	0	658
Arrive On Green	0.00	0.51	0.00	0.00	1.00	0.00				0.41	0.00	0.41
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2601	0	0	1826	0				1526	0	158
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	60.7	0.0	0.0	0.0	0.0				49.2	0.0	7.8
Cycle Q Clear(g_c), s	0.0	60.7	0.0	0.0	0.0	0.0				49.2	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2583		0	2583	0				1538	0	658
V/C Ratio(X)	0.00	1.01		0.00	0.71	0.00				0.99	0.00	0.24
Avail Cap(c_a), veh/h	0	2583		0	2583	0				1538	0	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	29.6	0.0	0.0	0.0	0.0				34.9	0.0	22.8
Incr Delay (d2), s/veh	0.0	19.4	0.0	0.0	1.7	0.0				21.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	27.1	0.0	0.0	0.4	0.0				26.1	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	49.1	0.0	0.0	1.7	0.0				56.1	0.0	23.7
LnGrp LOS	A	F		A	A	A				E	A	C
Approach Vol, veh/h		2601			1826						1684	
Approach Delay, s/veh		49.1			1.7						53.1	
Approach LOS		D			A						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		66.0		54.0		66.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		60.7		* 50		60.7						
Max Q Clear Time (g_c+I1), s		62.7		51.2		2.0						
Green Ext Time (p_c), s		0.0		0.0		13.6						

Intersection Summary			
HCM 6th Ctrl Delay			36.0
HCM 6th LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

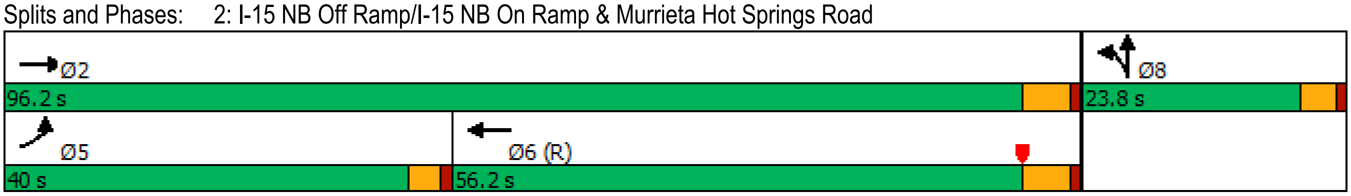
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	767	2928	1670	1701	295	0	492
Future Volume (vph)	767	2928	1670	1701	295	0	492
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	40.0	96.2	56.2		23.8	23.8	
Total Split (%)	33.3%	80.2%	46.8%		19.8%	19.8%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	32.7	94.8	58.2	120.0	15.7	15.7	120.0
Actuated g/C Ratio	0.27	0.79	0.48	1.00	0.13	0.13	1.00
v/c Ratio	0.86	0.76	0.71	1.12	0.70	0.70	0.32
Control Delay	46.4	5.9	24.7	80.9	66.4	66.8	0.5
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	46.4	6.1	24.7	80.9	66.4	66.8	0.5
LOS	D	A	C	F	E	E	A
Approach Delay		14.5	53.1			25.3	
Approach LOS		B	D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 32.1	Intersection LOS: C
Intersection Capacity Utilization 73.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	767	2928	0	0	1670	1701	295	0	492	0	0	0
Future Volume (veh/h)	767	2928	0	0	1670	1701	295	0	492	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	799	3050	0	0	1740	0	307	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	894	3868	0	0	2376		384	0				
Arrive On Green	0.26	0.76	0.00	0.00	0.78	0.00	0.11	0.00	0.00			
Sat Flow, veh/h	3456	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	799	3050	0	0	1740	0	307	0	0			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	26.7	43.2	0.0	0.0	21.1	0.0	10.1	0.0	0.0			
Cycle Q Clear(g_c), s	26.7	43.2	0.0	0.0	21.1	0.0	10.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	894	3868	0	0	2376		384	0				
V/C Ratio(X)	0.89	0.79	0.00	0.00	0.73		0.80	0.00				
Avail Cap(c_a), veh/h	1037	3868	0	0	2376		582	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.26	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	42.9	8.8	0.0	0.0	9.5	0.0	52.3	0.0	0.0			
Incr Delay (d2), s/veh	9.1	1.7	0.0	0.0	0.5	0.0	4.6	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	12.1	12.0	0.0	0.0	4.1	0.0	4.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.0	10.5	0.0	0.0	10.0	0.0	56.9	0.0	0.0			
LnGrp LOS	D	B	A	A	B		E	A				
Approach Vol, veh/h		3849			1740			307				
Approach Delay, s/veh		19.1			10.0			56.9				
Approach LOS		B			B			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		96.2			35.1	61.1		17.1				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		90.9			36.0	50.9		19.6				
Max Q Clear Time (g_c+I1), s		45.2			28.7	23.1		12.1				
Green Ext Time (p_c), s		32.8			2.3	10.6		0.8				

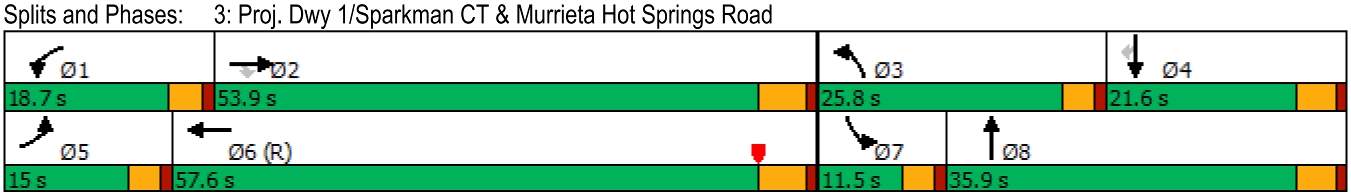
Intersection Summary		
HCM 6th Ctrl Delay		18.4
HCM 6th LOS		B

Notes
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	280	2600	405	406	2372	614	10	24	10	218
Future Volume (vph)	280	2600	405	406	2372	614	10	24	10	218
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	15.0	53.9	53.9	18.7	57.6	25.8	35.9	11.5	21.6	21.6
Total Split (%)	12.5%	44.9%	44.9%	15.6%	48.0%	21.5%	29.9%	9.6%	18.0%	18.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	11.0	48.6	48.6	14.7	52.3	21.8	36.1	7.1	17.0	17.0
Actuated g/C Ratio	0.09	0.40	0.40	0.12	0.44	0.18	0.30	0.06	0.14	0.14
v/c Ratio	0.91	1.02	0.48	0.99	0.90	1.01	0.21	0.12	0.02	0.99
Control Delay	82.4	52.2	4.4	77.2	22.3	86.7	5.9	54.9	44.6	109.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.4	52.2	4.4	77.2	22.3	86.7	5.9	54.9	44.6	109.8
LOS	F	D	A	E	C	F	A	D	D	F
Approach Delay		48.9			30.1		65.8		102.1	
Approach LOS		D			C		E		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 45.2	Intersection LOS: D
Intersection Capacity Utilization 85.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

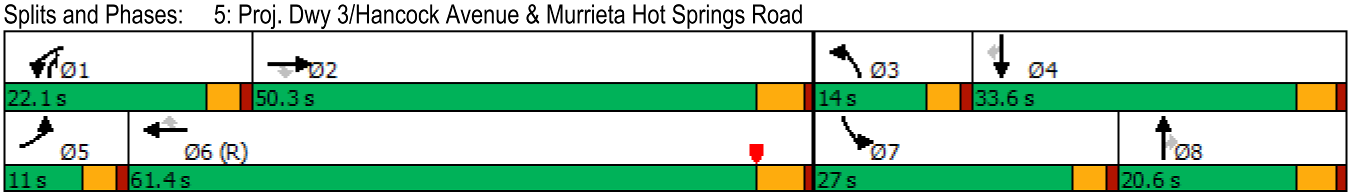


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	2600	405	406	2372	79	614	10	205	24	10	218
Future Volume (veh/h)	280	2600	405	406	2372	79	614	10	205	24	10	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	2653	413	414	2420	81	627	10	209	24	10	222
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	2606	642	423	2808	94	628	517	462	111	503	225
Arrive On Green	0.09	0.40	0.40	0.25	0.87	0.87	0.18	0.29	0.29	0.03	0.14	0.14
Sat Flow, veh/h	3456	6434	1585	3456	6442	215	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	286	2653	413	414	1812	689	627	10	209	24	10	222
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1832	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.8	48.6	25.2	14.3	23.2	23.4	21.8	0.5	12.9	0.8	0.3	16.8
Cycle Q Clear(g_c), s	9.8	48.6	25.2	14.3	23.2	23.4	21.8	0.5	12.9	0.8	0.3	16.8
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	2606	642	423	2103	798	628	517	462	111	503	225
V/C Ratio(X)	0.90	1.02	0.64	0.98	0.86	0.86	1.00	0.02	0.45	0.22	0.02	0.99
Avail Cap(c_a), veh/h	317	2606	642	423	2103	798	628	517	462	216	503	225
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	35.7	28.7	45.1	5.8	5.8	49.1	30.3	34.7	56.6	44.3	51.4
Incr Delay (d2), s/veh	20.0	19.0	3.2	37.8	4.9	11.9	35.6	0.1	3.2	1.0	0.1	57.2
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	5.0	21.2	10.0	7.3	3.3	5.2	12.4	0.2	5.4	0.4	0.1	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	54.7	31.9	83.0	10.8	17.8	84.7	30.4	37.9	57.6	44.4	108.6
LnGrp LOS	E	F	C	F	B	B	F	C	D	E	D	F
Approach Vol, veh/h		3352			2915			846			256	
Approach Delay, s/veh		53.5			22.7			72.5			101.3	
Approach LOS		D			C			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.7	53.9	25.8	21.6	15.0	57.6	7.9	39.5				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	14.7	48.6	21.8	17.0	11.0	52.3	7.5	31.3				
Max Q Clear Time (g_c+I1), s	16.3	50.6	23.8	18.8	11.8	25.4	2.8	14.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	20.0	0.0	1.2				
Intersection Summary												
HCM 6th Ctrl Delay			45.2									
HCM 6th LOS			D									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	227	2173	278	499	2395	696	256	216	551	675	238	352
Future Volume (vph)	227	2173	278	499	2395	696	256	216	551	675	238	352
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	11.0	50.3	50.3	22.1	61.4	61.4	14.0	20.6	22.1	27.0	33.6	33.6
Total Split (%)	9.2%	41.9%	41.9%	18.4%	51.2%	51.2%	11.7%	17.2%	18.4%	22.5%	28.0%	28.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	7.0	45.0	45.0	18.1	56.1	56.1	10.0	16.0	38.7	23.0	29.0	29.0
Actuated g/C Ratio	0.06	0.38	0.38	0.15	0.47	0.47	0.08	0.13	0.32	0.19	0.24	0.24
v/c Ratio	1.33	1.02	0.42	1.05	1.13	0.80	0.97	0.95	0.62	1.20	0.81	0.67
Control Delay	213.9	39.2	4.9	90.0	86.4	5.6	101.6	97.1	32.0	145.4	57.1	31.5
Queue Delay	0.0	13.6	0.0	0.0	0.2	1.5	0.0	0.0	48.8	0.0	0.0	0.0
Total Delay	213.9	52.8	4.9	90.0	86.6	7.1	101.6	97.1	80.9	145.4	57.1	31.5
LOS	F	D	A	F	F	A	F	F	F	F	E	C
Approach Delay		61.5			71.7			89.5			98.5	
Approach LOS		E			E			F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.33	
Intersection Signal Delay: 74.6	Intersection LOS: E
Intersection Capacity Utilization 98.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

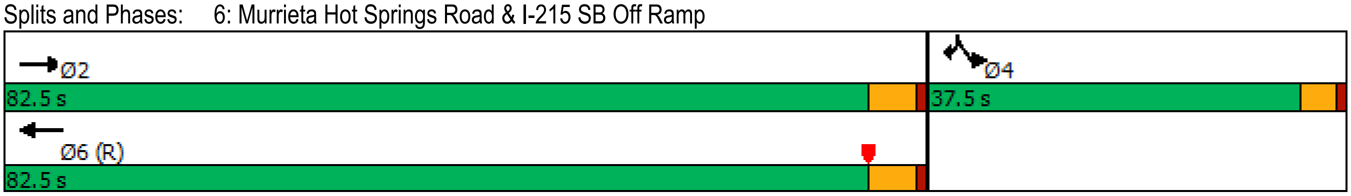


HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	3104	2866	736	660
Future Volume (vph)	3104	2866	736	660
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	82.5	82.5	37.5	37.5
Total Split (%)	68.8%	68.8%	31.3%	31.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	77.2	77.2	33.3	33.5
Actuated g/C Ratio	0.64	0.64	0.28	0.28
v/c Ratio	1.04	0.96	0.99	1.10
Control Delay	44.4	23.1	69.0	112.8
Queue Delay	0.0	43.5	0.0	0.0
Total Delay	44.4	66.5	69.0	112.8
LOS	D	E	E	F
Approach Delay	44.4	66.5	82.9	
Approach LOS	D	E	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 60.3	Intersection LOS: E
Intersection Capacity Utilization 157.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3104	2866	0	736	660
Future Volume (veh/h)	0	3104	2866	0	736	660
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	3302	3049	0	976	495
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3285	3285	0	1028	460
Arrive On Green	0.00	0.64	1.00	0.00	0.28	0.28
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	3302	3049	0	976	495
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	77.2	0.0	0.0	31.0	33.5
Cycle Q Clear(g_c), s	0.0	77.2	0.0	0.0	31.0	33.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3285	3285	0	1028	460
V/C Ratio(X)	0.00	1.01	0.93	0.00	0.95	1.08
Avail Cap(c_a), veh/h	0	3285	3285	0	1028	460
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	0.0	0.0	42.5	43.3
Incr Delay (d2), s/veh	0.0	17.0	6.0	0.0	17.2	63.7
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	30.8	1.8	0.0	16.5	21.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	38.4	6.0	0.0	59.7	107.0
LnGrp LOS	A	F	A	A	E	F
Approach Vol, veh/h		3302	3049		1471	
Approach Delay, s/veh		38.4	6.0		75.6	
Approach LOS		D	A		E	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	82.5	37.5	82.5
Change Period (Y+Rc), s	5.3	* 4.2	5.3
Max Green Setting (Gmax), s	77.2	* 33	77.2
Max Q Clear Time (g_c+I1), s	79.2	35.5	2.0
Green Ext Time (p_c), s	0.0	0.0	45.1

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

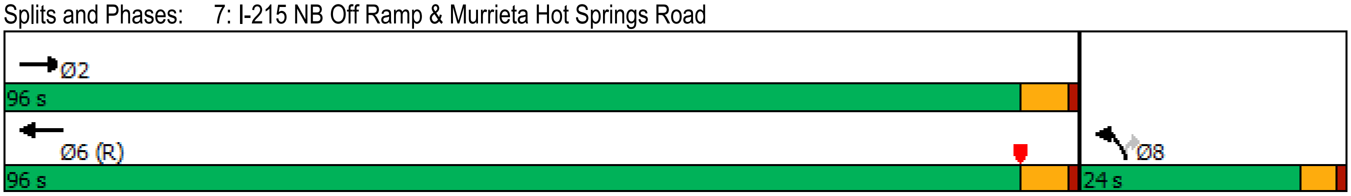
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2950	2772	373	334
Future Volume (vph)	2950	2772	373	334
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	96.0	96.0	24.0	24.0
Total Split (%)	80.0%	80.0%	20.0%	20.0%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	90.7	90.7	19.8	19.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.85	0.80	0.64	0.73
Control Delay	6.8	11.3	52.2	56.3
Queue Delay	0.7	11.8	0.0	0.0
Total Delay	7.5	23.1	52.2	56.3
LOS	A	C	D	E
Approach Delay	7.5	23.1	54.1	
Approach LOS	A	C	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2950	0	0	2772	373	334
Future Volume (veh/h)	2950	0	0	2772	373	334
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	3172	0	0	2981	401	359
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3859	0	0	3859	593	479
Arrive On Green	0.76	0.00	0.00	0.76	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	3172	0	0	2981	401	359
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	48.1	0.0	0.0	41.1	12.6	14.1
Cycle Q Clear(g_c), s	48.1	0.0	0.0	41.1	12.6	14.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3859	0	0	3859	593	479
V/C Ratio(X)	0.82	0.00	0.00	0.77	0.68	0.75
Avail Cap(c_a), veh/h	3859	0	0	3859	593	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	0.0	0.0	8.6	47.1	47.7
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.6	6.1	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.0	0.0	11.5	6.1	5.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	0.0	0.0	10.2	53.2	58.1
LnGrp LOS	B	A	A	B	D	E
Approach Vol, veh/h	3172			2981	760	
Approach Delay, s/veh	11.5			10.2	55.5	
Approach LOS	B			B	E	

Timer - Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		96.0				96.0		24.0
Change Period (Y+Rc), s		5.3				5.3		4.2
Max Green Setting (Gmax), s		90.7				90.7		19.8
Max Q Clear Time (g_c+I1), s		50.1				43.1		16.1
Green Ext Time (p_c), s		31.7				32.6		1.4

Intersection Summary		
HCM 6th Ctrl Delay		15.8
HCM 6th LOS		B

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	309	253	229	46	52	52	582	582	505
Average Queue (ft)	245	174	93	42	36	35	444	493	356
95th Queue (ft)	328	251	184	47	46	53	643	650	516
Link Distance (ft)				33	33	33	566	566	
Upstream Blk Time (%)				31	28	13	2	7	
Queuing Penalty (veh)				146	133	64	0	0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								9	0
Queuing Penalty (veh)								16	1

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	148	162	146	125	187	135	137	173	194	179	464
Average Queue (ft)	54	77	83	49	46	43	66	71	122	118	220
95th Queue (ft)	108	127	141	109	126	102	133	161	178	168	431
Link Distance (ft)			461	461	461	1082	1082	1082	1225	1225	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500	500									585
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	171	176	280	271	357	261	70	159	166	89	164	240
Average Queue (ft)	75	96	165	193	197	170	18	91	103	29	64	111
95th Queue (ft)	134	144	243	260	281	245	53	144	149	71	130	187
Link Distance (ft)			1082	1082	1082	1082				279	279	279
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	253	182	217	24	66	6	55	39	284	260
Average Queue (ft)	125	96	129	8	28	1	17	9	84	213
95th Queue (ft)	214	161	208	24	57	3	48	30	294	293
Link Distance (ft)	279	262	262	262	262			269	269	
Upstream Blk Time (%)									4	6
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									0	13
Queuing Penalty (veh)									0	1

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	NB
Directions Served	T	T	R
Maximum Queue (ft)	32	40	103
Average Queue (ft)	1	1	34
95th Queue (ft)	10	13	71
Link Distance (ft)	279	279	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	257	270	332	260	276	107	74	212	224	298	314	310
Average Queue (ft)	158	166	146	163	177	37	34	136	149	125	166	233
95th Queue (ft)	248	252	232	231	253	82	64	194	215	242	272	320
Link Distance (ft)			310	310	310	310				276	276	276
Upstream Blk Time (%)			2							0	1	2
Queuing Penalty (veh)			9							1	4	17
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)	1	4	0					0	3	1		
Queuing Penalty (veh)	3	16	0					1	24	3		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	119	135	89	178	176	43	162	175	313	175
Average Queue (ft)	47	66	48	73	92	8	159	174	282	65
95th Queue (ft)	86	117	80	132	149	29	172	176	302	153
Link Distance (ft)	276	301	301	301	301	301				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							5	65	3	0
Queuing Penalty (veh)							18	253	18	1

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	73	93	96	117	138	122	887	876	495
Average Queue (ft)	71	73	74	109	106	112	844	844	427
95th Queue (ft)	75	80	81	121	125	125	863	860	686
Link Distance (ft)	60	60	60	100	100	100	824	824	
Upstream Blk Time (%)	31	36	37	26	21	37	52	85	
Queuing Penalty (veh)	221	258	272	212	168	299	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								71	1
Queuing Penalty (veh)								285	4

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	155	160	167	97	96	139	252	292	173	137
Average Queue (ft)	135	137	133	70	55	87	140	179	100	45
95th Queue (ft)	152	154	175	94	102	114	209	247	162	114
Link Distance (ft)	130	130	130	72	72	72	1042	1042		
Upstream Blk Time (%)	10	8	9	16	8	37				
Queuing Penalty (veh)	75	61	68	127	64	299				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 3140

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (ft)	314	314	327	296	46	48	40	606	630	505
Average Queue (ft)	293	262	275	29	30	25	18	587	586	473
95th Queue (ft)	331	344	341	173	56	49	44	602	607	561
Link Distance (ft)					33	33	33	566	566	
Upstream Blk Time (%)					8	7	4	52	53	
Queuing Penalty (veh)					43	40	22	0	0	
Storage Bay Dist (ft)										480
Storage Blk Time (%)									57	1
Queuing Penalty (veh)									63	6

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	295	339	135	154	216	163	178	185	613	1240	1264	610
Average Queue (ft)	201	224	76	77	138	69	80	78	20	1213	1247	610
95th Queue (ft)	281	298	138	138	217	142	155	160	202	1313	1261	610
Link Distance (ft)			461	461	461	1082	1082	1082	1082	1225	1225	
Upstream Blk Time (%)										31	99	
Queuing Penalty (veh)										0	0	
Storage Bay Dist (ft)	500	500										585
Storage Blk Time (%)											3	99
Queuing Penalty (veh)											13	145

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	123	335	433	453	493	757	345	167	176	109	171	273
Average Queue (ft)	59	112	259	294	327	335	121	96	108	38	99	175
95th Queue (ft)	110	265	363	399	440	546	352	155	161	91	166	254
Link Distance (ft)			1082	1082	1082	1082				279	279	279
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)			3			8	0					
Queuing Penalty (veh)			8			33	0					

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	286	277	296	267	111	6	77	18	306	260
Average Queue (ft)	207	219	279	53	17	0	16	4	286	260
95th Queue (ft)	276	321	289	226	60	2	51	14	296	260
Link Distance (ft)	279	262	262	262	262			269	269	
Upstream Blk Time (%)	0	16	92	7					90	65
Queuing Penalty (veh)	2	0	0	0					0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)										98
Queuing Penalty (veh)										5

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	NB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	323	322	306	282	304
Average Queue (ft)	54	85	100	77	196
95th Queue (ft)	214	259	257	241	319
Link Distance (ft)	279	279	279	279	288
Upstream Blk Time (%)	0	0	0	0	7
Queuing Penalty (veh)	0	2	1	2	0
Storage Bay Dist (ft)					
Storage Blk Time (%)				3	
Queuing Penalty (veh)				5	

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	166	270	319	357	372	367	240	198	224	325	327	300
Average Queue (ft)	105	138	254	306	321	278	80	127	144	175	217	255
95th Queue (ft)	171	232	331	345	371	456	188	190	211	288	318	323
Link Distance (ft)			310	310	310	310				276	276	276
Upstream Blk Time (%)			3	12	36	30				0	2	6
Queuing Penalty (veh)			22	84	249	206				2	19	50
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)			15			7		0	1	1		
Queuing Penalty (veh)			33			19		0	6	6		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	187	230	316	316	353	364	162	174	313	175
Average Queue (ft)	69	96	135	259	318	318	159	174	280	81
95th Queue (ft)	131	205	269	392	331	334	169	175	295	187
Link Distance (ft)	276	301	301	301	301	301				
Upstream Blk Time (%)			0	20	99	88				
Queuing Penalty (veh)			0	0	0	0				
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							3	64	11	0
Queuing Penalty (veh)							16	375	90	2

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	74	93	121	118	134	125	863	876	495
Average Queue (ft)	71	73	84	106	103	112	843	842	478
95th Queue (ft)	74	82	106	131	136	127	855	856	539
Link Distance (ft)	60	60	60	100	100	100	824	824	
Upstream Blk Time (%)	28	29	33	14	12	31	56	88	
Queuing Penalty (veh)	287	302	338	136	115	300	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								77	0
Queuing Penalty (veh)								253	3

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	164	165	166	89	98	100	198	316	263	183
Average Queue (ft)	143	136	127	70	64	82	118	162	144	91
95th Queue (ft)	161	166	176	90	99	99	186	244	217	175
Link Distance (ft)	130	130	130	72	72	72	1042	1042		
Upstream Blk Time (%)	11	7	5	11	7	26				
Queuing Penalty (veh)	109	68	46	106	68	240				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 3944

EXISTING + AMBIENT + CUMULATIVE TRAFFIC CONDITIONS (2028) WITH TRIANGLE PROJECT (CURRENT DEVELOPMENT PLAN), FREE RIGHT-TURN LOOP RAMP AT I-15 NB RAMPS

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1124	325	1434	1508	0	352
Future Volume (vph)	1124	325	1434	1508	0	352
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	47.0		47.0	73.0	73.0	73.0
Total Split (%)	39.2%		39.2%	60.8%	60.8%	60.8%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	41.7	120.0	41.7	68.8	68.8	68.8
Actuated g/C Ratio	0.35	1.00	0.35	0.57	0.57	0.57
v/c Ratio	0.68	0.22	0.86	0.80	0.89	0.39
Control Delay	35.8	0.3	46.5	27.4	34.9	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	0.3	46.5	27.4	34.9	14.7
LOS	D	A	D	C	C	B
Approach Delay	27.8		46.5		28.3	
Approach LOS	C		D		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

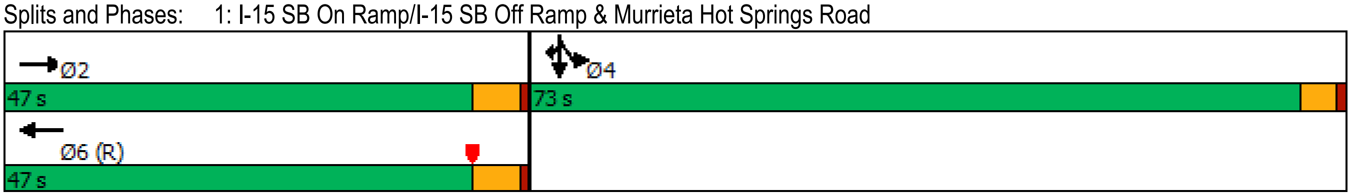
Maximum v/c Ratio: 0.89

Intersection Signal Delay: 33.7 Intersection LOS: C

Intersection Capacity Utilization 113.0% ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1124	325	0	1434	0	0	0	0	1508	0	352
Future Volume (veh/h)	0	1124	325	0	1434	0	0	0	0	1508	0	352
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1196	0	0	1526	0				1720	0	249
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1774		0	1774	0				2124	0	909
Arrive On Green	0.00	0.35	0.00	0.00	0.35	0.00				0.57	0.00	0.57
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1196	0	0	1526	0				1720	0	249
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	24.0	0.0	0.0	33.4	0.0				44.4	0.0	9.5
Cycle Q Clear(g_c), s	0.0	24.0	0.0	0.0	33.4	0.0				44.4	0.0	9.5
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1774		0	1774	0				2124	0	909
V/C Ratio(X)	0.00	0.67		0.00	0.86	0.00				0.81	0.00	0.27
Avail Cap(c_a), veh/h	0	1774		0	1774	0				2124	0	909
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	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	33.4	0.0	0.0	36.4	0.0				20.4	0.0	13.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	5.7	0.0				3.5	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	9.6	0.0	0.0	14.1	0.0				19.2	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.4	0.0	0.0	42.1	0.0				23.9	0.0	13.7
LnGrp LOS	A	C		A	D	A				C	A	B
Approach Vol, veh/h		1196			1526						1969	
Approach Delay, s/veh		34.4			42.1						22.6	
Approach LOS		C			D						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		47.0		73.0		47.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		41.7		* 69		41.7						
Max Q Clear Time (g_c+I1), s		26.0		46.4		35.4						
Green Ext Time (p_c), s		5.3		12.7		3.8						

Intersection Summary			
HCM 6th Ctrl Delay			31.9
HCM 6th LOS			C

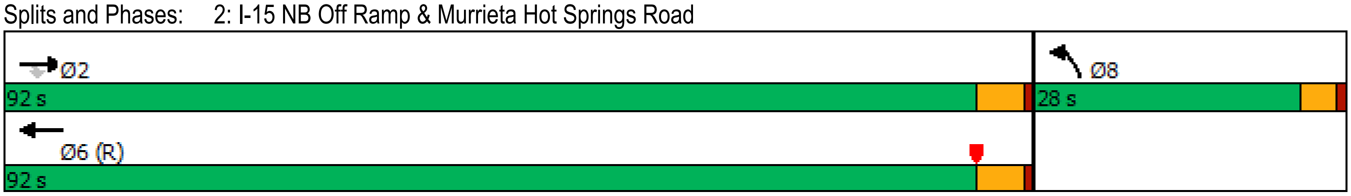
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	2402	217	2556	344	417
Future Volume (vph)	2402	217	2556	344	417
Turn Type	NA	Perm	NA	Prot	Free
Protected Phases	2		6	8	
Permitted Phases		2			Free
Detector Phase	2	2	6	8	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	
Minimum Split (s)	22.3	22.3	15.3	14.2	
Total Split (s)	92.0	92.0	92.0	28.0	
Total Split (%)	76.7%	76.7%	76.7%	23.3%	
Yellow Time (s)	4.3	4.3	4.3	3.2	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.3	5.3	5.3	4.2	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Max	Max	C-Max	None	
Act Effct Green (s)	92.2	92.2	92.2	18.3	120.0
Actuated g/C Ratio	0.77	0.77	0.77	0.15	1.00
v/c Ratio	0.67	0.19	0.56	0.72	0.29
Control Delay	7.2	1.4	6.3	56.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.2	1.4	6.3	56.1	0.5
LOS	A	A	A	E	A
Approach Delay	6.7		6.3	25.6	
Approach LOS	A		A	C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 9.0	Intersection LOS: A
Intersection Capacity Utilization 64.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2402	217	0	2556	344	417
Future Volume (veh/h)	2402	217	0	2556	344	417
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	2611	0	0	2778	374	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	3689		0	4649	456	
Arrive On Green	0.72	0.00	0.00	0.72	0.13	0.00
Sat Flow, veh/h	5274	1585	0	6958	3456	1585
Grp Volume(v), veh/h	2611	0	0	2778	374	0
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1585
Q Serve(g_s), s	34.8	0.0	0.0	25.3	12.6	0.0
Cycle Q Clear(g_c), s	34.8	0.0	0.0	25.3	12.6	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3689		0	4649	456	
V/C Ratio(X)	0.71		0.00	0.60	0.82	
Avail Cap(c_a), veh/h	3689		0	4649	685	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.55	1.00	0.00
Uniform Delay (d), s/veh	9.5	0.0	0.0	8.1	50.7	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.3	4.9	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	10.6	0.0	0.0	7.1	5.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.6	0.0	0.0	8.4	55.6	0.0
LnGrp LOS	B		A	A	E	
Approach Vol, veh/h	2611			2778	374	
Approach Delay, s/veh	10.6			8.4	55.6	
Approach LOS	B			A	E	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	92.0	92.0	20.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	86.7	86.7	23.8
Max Q Clear Time (g_c+I1), s	36.8	27.3	14.6
Green Ext Time (p_c), s	26.5	32.7	1.2

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

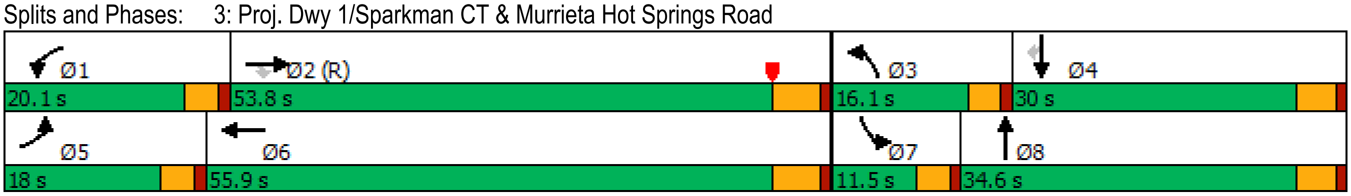
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBT] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	287	2137	339	339	1923	242	10	27	10	244
Future Volume (vph)	287	2137	339	339	1923	242	10	27	10	244
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	18.0	53.8	53.8	20.1	55.9	16.1	34.6	11.5	30.0	30.0
Total Split (%)	15.0%	44.8%	44.8%	16.8%	46.6%	13.4%	28.8%	9.6%	25.0%	25.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	C-Max	None	Max	None	Max	None	Max	Max
Act Effct Green (s)	13.6	49.0	49.0	15.6	51.0	11.8	34.8	7.1	25.7	25.7
Actuated g/C Ratio	0.11	0.41	0.41	0.13	0.42	0.10	0.29	0.06	0.21	0.21
v/c Ratio	0.78	0.86	0.43	0.82	0.77	0.78	0.10	0.14	0.01	0.76
Control Delay	62.0	34.7	5.6	74.1	17.9	69.0	9.4	55.1	37.6	60.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.0	34.7	5.6	74.1	17.9	69.0	9.4	55.1	37.6	60.0
LOS	E	C	A	E	B	E	A	E	D	E
Approach Delay		33.9			26.4		52.7		58.7	
Approach LOS		C			C		D		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 33.2	Intersection LOS: C
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	2137	339	339	1923	54	242	10	81	27	10	244
Future Volume (veh/h)	287	2137	339	339	1923	54	242	10	81	27	10	244
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	302	2249	368	368	2024	57	263	11	88	28	11	257
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	2738	675	419	2870	81	319	477	426	122	752	336
Arrive On Green	0.10	0.43	0.43	0.24	0.89	0.89	0.09	0.27	0.27	0.04	0.21	0.21
Sat Flow, veh/h	3456	6434	1585	3456	6481	182	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	302	2249	368	368	1507	574	263	11	88	28	11	257
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1838	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	10.3	37.0	20.8	12.3	11.4	11.4	9.0	0.5	5.2	0.9	0.3	18.3
Cycle Q Clear(g_c), s	10.3	37.0	20.8	12.3	11.4	11.4	9.0	0.5	5.2	0.9	0.3	18.3
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	2738	675	419	2137	814	319	477	426	122	752	336
V/C Ratio(X)	0.84	0.82	0.55	0.88	0.71	0.71	0.82	0.02	0.21	0.23	0.01	0.77
Avail Cap(c_a), veh/h	403	2738	675	464	2137	814	348	477	426	216	752	336
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	30.4	25.8	44.6	4.5	4.5	53.5	32.3	34.0	56.3	37.4	44.5
Incr Delay (d2), s/veh	10.6	2.2	2.4	16.2	2.0	5.1	13.9	0.1	1.1	0.9	0.0	15.3
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	13.9	8.2	5.4	2.0	3.0	4.5	0.2	2.1	0.4	0.1	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	32.7	28.2	60.8	6.5	9.6	67.4	32.4	35.1	57.2	37.4	59.8
LnGrp LOS	E	C	C	E	A	A	E	C	D	E	D	E
Approach Vol, veh/h		2919			2449			362			296	
Approach Delay, s/veh		35.3			15.3			58.5			58.8	
Approach LOS		D			B			E			E	

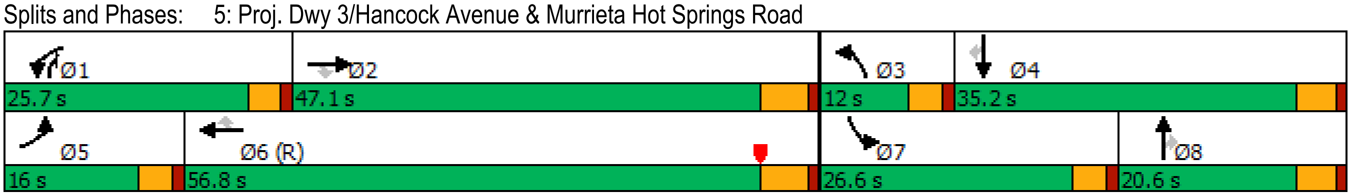
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	56.4	15.1	30.0	16.5	58.4	8.2	36.8
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	16.1	48.5	12.1	25.4	14.0	50.6	7.5	30.0
Max Q Clear Time (g_c+I1), s	14.3	39.0	11.0	20.3	12.3	13.4	2.9	7.2
Green Ext Time (p_c), s	0.3	8.4	0.1	0.4	0.2	19.8	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	29.7
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	1571	203	476	2047	607	109	93	204	570	169	223
Future Volume (vph)	306	1571	203	476	2047	607	109	93	204	570	169	223
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	16.0	47.1	47.1	25.7	56.8	56.8	12.0	20.6	25.7	26.6	35.2	35.2
Total Split (%)	13.3%	39.3%	39.3%	21.4%	47.3%	47.3%	10.0%	17.2%	21.4%	22.2%	29.3%	29.3%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	12.0	42.6	42.6	20.9	51.5	51.5	7.8	16.0	41.5	22.6	30.8	30.8
Actuated g/C Ratio	0.10	0.36	0.36	0.17	0.43	0.43	0.06	0.13	0.35	0.19	0.26	0.26
v/c Ratio	1.02	0.76	0.32	0.86	1.03	0.72	0.53	0.41	0.22	1.00	0.50	0.38
Control Delay	112.7	15.4	2.4	62.2	47.4	4.0	63.3	53.2	16.0	86.6	41.1	7.1
Queue Delay	0.0	0.0	0.0	0.0	27.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.7	15.4	2.4	62.2	74.7	4.5	63.3	53.2	16.0	86.6	41.1	7.1
LOS	F	B	A	E	E	A	E	D	B	F	D	A
Approach Delay		28.4			59.2			37.2			61.4	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 48.4	Intersection LOS: D
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1571	203	476	2047	607	109	93	204	570	169	223
Future Volume (veh/h)	306	1571	203	476	2047	607	109	93	204	570	169	223
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	326	1671	221	517	2178	646	118	101	222	606	224	210
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	2347	578	568	2191	680	198	232	804	671	477	404
Arrive On Green	0.20	0.73	0.73	0.33	0.86	0.86	0.06	0.12	0.12	0.19	0.26	0.26
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	326	1671	221	517	2178	646	118	101	222	606	224	210
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	11.2	17.5	6.3	17.2	49.4	37.5	4.0	6.0	7.4	20.0	12.2	13.7
Cycle Q Clear(g_c), s	11.2	17.5	6.3	17.2	49.4	37.5	4.0	6.0	7.4	20.0	12.2	13.7
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	346	2347	578	568	2191	680	198	232	804	671	477	404
V/C Ratio(X)	0.94	0.71	0.38	0.91	0.99	0.95	0.60	0.44	0.28	0.90	0.47	0.52
Avail Cap(c_a), veh/h	346	2347	578	625	2191	680	230	249	830	671	477	404
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	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	47.7	12.7	11.2	39.4	8.3	7.5	55.2	48.7	33.0	47.6	37.8	38.4
Incr Delay (d2), s/veh	33.9	1.0	0.4	16.6	17.8	24.2	3.1	1.3	0.2	17.8	3.3	4.7
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	5.8	3.7	1.9	7.0	6.7	7.5	1.8	2.9	2.5	10.4	6.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.6	13.7	11.6	56.0	26.2	31.7	58.3	50.0	33.2	65.4	41.1	43.1
LnGrp LOS	F	B	B	E	C	C	E	D	C	E	D	D
Approach Vol, veh/h		2218			3341			441			1040	
Approach Delay, s/veh		23.5			31.9			43.8			55.7	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	49.1	10.9	35.2	16.0	56.8	26.6	19.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	21.7	41.8	8.0	30.6	12.0	51.5	22.6	16.0
Max Q Clear Time (g_c+I1), s	19.2	19.5	6.0	15.7	13.2	51.4	22.0	9.4
Green Ext Time (p_c), s	0.5	10.1	0.1	1.9	0.0	0.1	0.2	0.8

Intersection Summary	
HCM 6th Ctrl Delay	33.5
HCM 6th LOS	C

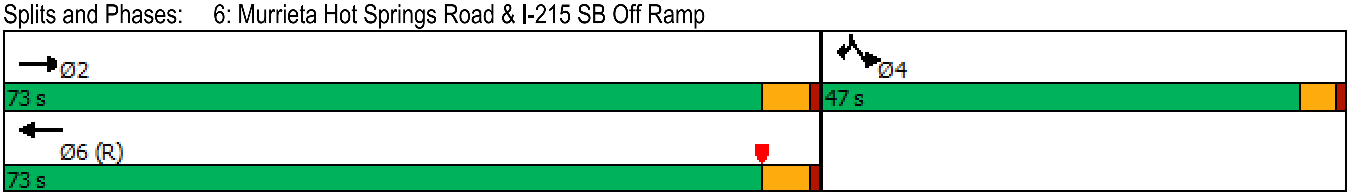
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2175	2426	701	806
Future Volume (vph)	2175	2426	701	806
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	73.0	73.0	47.0	47.0
Total Split (%)	60.8%	60.8%	39.2%	39.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	68.5	68.5	42.0	42.2
Actuated g/C Ratio	0.57	0.57	0.35	0.35
v/c Ratio	0.82	0.92	0.86	0.94
Control Delay	20.4	25.3	43.9	63.5
Queue Delay	0.0	26.1	0.0	0.0
Total Delay	20.4	51.3	43.9	63.5
LOS	C	D	D	E
Approach Delay	20.4	51.3	50.1	
Approach LOS	C	D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 40.0	Intersection LOS: D
Intersection Capacity Utilization 140.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2175	2426	0	701	806
Future Volume (veh/h)	0	2175	2426	0	701	806
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2314	2581	0	1047	534
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2881	2881	0	1291	577
Arrive On Green	0.00	0.56	1.00	0.00	0.35	0.35
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2314	2581	0	1047	534
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	43.3	0.0	0.0	30.8	37.4
Cycle Q Clear(g_c), s	0.0	43.3	0.0	0.0	30.8	37.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2881	2881	0	1291	577
V/C Ratio(X)	0.00	0.80	0.90	0.00	0.81	0.93
Avail Cap(c_a), veh/h	0	2881	2881	0	1321	591
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.8	0.0	0.0	35.5	37.5
Incr Delay (d2), s/veh	0.0	2.5	4.9	0.0	3.9	20.4
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	16.2	1.3	0.0	14.4	18.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	23.3	4.9	0.0	39.4	57.9
LnGrp LOS	A	C	A	A	D	E
Approach Vol, veh/h		2314	2581		1581	
Approach Delay, s/veh		23.3	4.9		45.6	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		73.0		46.0		73.0
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		67.7		* 43		67.7
Max Q Clear Time (g_c+I1), s		45.3		39.4		2.0
Green Ext Time (p_c), s		14.0		2.4		29.1

Intersection Summary		
HCM 6th Ctrl Delay		21.4
HCM 6th LOS		C

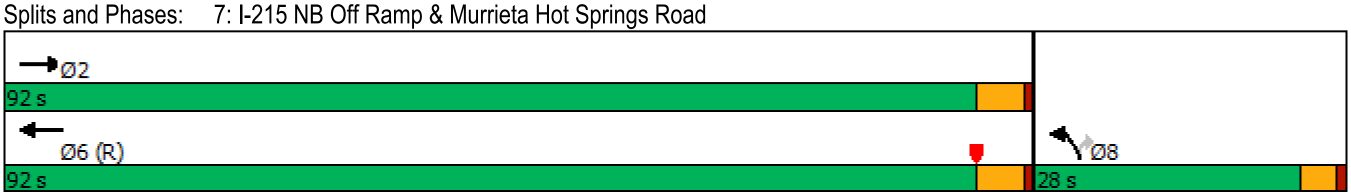
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2307	2398	414	224
Future Volume (vph)	2307	2398	414	224
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	92.0	92.0	28.0	28.0
Total Split (%)	76.7%	76.7%	23.3%	23.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	86.7	86.7	23.8	23.8
Actuated g/C Ratio	0.72	0.72	0.20	0.20
v/c Ratio	0.68	0.71	0.58	0.39
Control Delay	8.7	10.9	47.2	40.5
Queue Delay	0.1	3.0	0.0	0.0
Total Delay	8.8	13.9	47.2	40.5
LOS	A	B	D	D
Approach Delay	8.8	13.9	44.9	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.4	Intersection LOS: B
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2307	0	0	2398	414	224
Future Volume (veh/h)	2307	0	0	2398	414	224
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2428	0	0	2524	436	236
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3689	0	0	3689	713	575
Arrive On Green	0.72	0.00	0.00	0.72	0.20	0.20
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2428	0	0	2524	436	236
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	30.2	0.0	0.0	32.6	13.3	8.5
Cycle Q Clear(g_c), s	30.2	0.0	0.0	32.6	13.3	8.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3689	0	0	3689	713	575
V/C Ratio(X)	0.66	0.00	0.00	0.68	0.61	0.41
Avail Cap(c_a), veh/h	3689	0	0	3689	713	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	0.0	9.1	43.9	42.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.0	3.9	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	0.0	0.0	9.9	6.3	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.7	0.0	0.0	10.2	47.8	44.1
LnGrp LOS	A	A	A	B	D	D
Approach Vol, veh/h	2428			2524	672	
Approach Delay, s/veh	9.7			10.2	46.5	
Approach LOS	A			B	D	

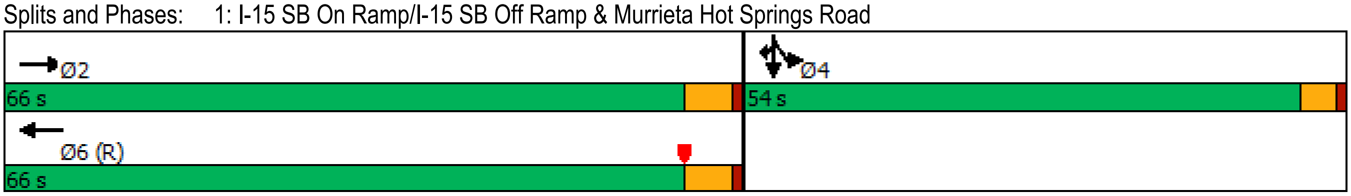
Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	92.0	92.0	28.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	86.7	86.7	23.8
Max Q Clear Time (g_c+I1), s	32.2	34.6	15.3
Green Ext Time (p_c), s	23.8	25.3	2.2

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2419	359	1698	1350	0	220
Future Volume (vph)	2419	359	1698	1350	0	220
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	66.0		66.0	54.0	54.0	54.0
Total Split (%)	55.0%		55.0%	45.0%	45.0%	45.0%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	60.7	120.0	60.7	49.8	49.8	49.8
Actuated g/C Ratio	0.51	1.00	0.51	0.42	0.42	0.42
v/c Ratio	1.01	0.24	0.71	1.00	1.08	0.33
Control Delay	50.4	0.4	28.6	67.6	91.9	23.1
Queue Delay	31.5	0.0	0.0	0.0	0.0	0.0
Total Delay	81.9	0.4	28.6	67.6	91.9	23.1
LOS	F	A	C	E	F	C
Approach Delay	71.3		28.6		72.6	
Approach LOS	E		C		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 59.7	Intersection LOS: E
Intersection Capacity Utilization 138.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2419	359	0	1698	0	0	0	0	1350	0	220
Future Volume (veh/h)	0	2419	359	0	1698	0	0	0	0	1350	0	220
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2601	0	0	1826	0				1526	0	158
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2583		0	2583	0				1538	0	658
Arrive On Green	0.00	0.51	0.00	0.00	0.51	0.00				0.41	0.00	0.41
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2601	0	0	1826	0				1526	0	158
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	60.7	0.0	0.0	33.0	0.0				49.2	0.0	7.8
Cycle Q Clear(g_c), s	0.0	60.7	0.0	0.0	33.0	0.0				49.2	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2583		0	2583	0				1538	0	658
V/C Ratio(X)	0.00	1.01		0.00	0.71	0.00				0.99	0.00	0.24
Avail Cap(c_a), veh/h	0	2583		0	2583	0				1538	0	658
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	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	29.6	0.0	0.0	22.8	0.0				34.9	0.0	22.8
Incr Delay (d2), s/veh	0.0	19.4	0.0	0.0	1.7	0.0				21.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	27.1	0.0	0.0	12.6	0.0				26.1	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	49.1	0.0	0.0	24.5	0.0				56.1	0.0	23.7
LnGrp LOS	A	F		A	C	A				E	A	C
Approach Vol, veh/h		2601			1826						1684	
Approach Delay, s/veh		49.1			24.5						53.1	
Approach LOS		D			C						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		66.0		54.0		66.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		60.7		* 50		60.7						
Max Q Clear Time (g_c+I1), s		62.7		51.2		35.0						
Green Ext Time (p_c), s		0.0		0.0		11.0						

Intersection Summary			
HCM 6th Ctrl Delay			42.8
HCM 6th LOS			D

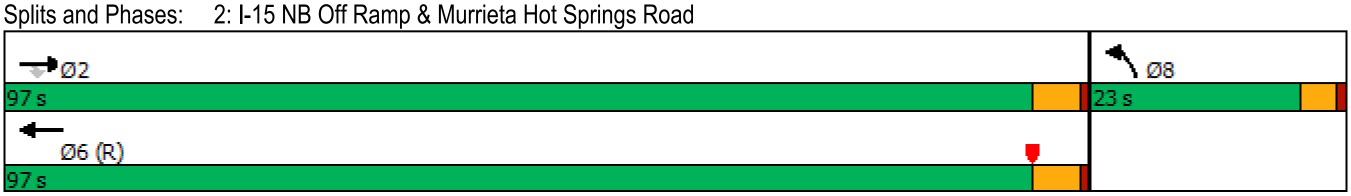
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	2928	767	3371	295	492
Future Volume (vph)	2928	767	3371	295	492
Turn Type	NA	Perm	NA	Prot	Free
Protected Phases	2		6	8	
Permitted Phases		2			Free
Detector Phase	2	2	6	8	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	
Minimum Split (s)	22.3	22.3	15.3	14.2	
Total Split (s)	97.0	97.0	97.0	23.0	
Total Split (%)	80.8%	80.8%	80.8%	19.2%	
Yellow Time (s)	4.3	4.3	4.3	3.2	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.3	5.3	5.3	4.2	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Max	Max	C-Max	None	
Act Effct Green (s)	94.9	94.9	94.9	15.6	120.0
Actuated g/C Ratio	0.79	0.79	0.79	0.13	1.00
v/c Ratio	0.76	0.56	0.69	0.69	0.32
Control Delay	8.2	1.5	6.2	57.9	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	8.2	1.5	6.2	57.9	0.5
LOS	A	A	A	E	A
Approach Delay	6.8		6.2	22.0	
Approach LOS	A		A	C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 8.1	Intersection LOS: A
Intersection Capacity Utilization 72.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2928	767	0	3371	295	492
Future Volume (veh/h)	2928	767	0	3371	295	492
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	3050	0	0	3511	307	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	3902		0	4917	379	
Arrive On Green	0.76	0.00	0.00	1.00	0.11	0.00
Sat Flow, veh/h	5274	1585	0	6958	3456	1585
Grp Volume(v), veh/h	3050	0	0	3511	307	0
Grp Sat Flow(s),veh/h/ln	1702	1585	0	1609	1728	1585
Q Serve(g_s), s	42.0	0.0	0.0	0.0	10.4	0.0
Cycle Q Clear(g_c), s	42.0	0.0	0.0	0.0	10.4	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3902		0	4917	379	
V/C Ratio(X)	0.78		0.00	0.71	0.81	
Avail Cap(c_a), veh/h	3902		0	4917	541	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.26	1.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	0.0	0.0	52.2	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.2	6.1	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	11.5	0.0	0.0	0.1	4.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.9	0.0	0.0	0.2	58.3	0.0
LnGrp LOS	A		A	A	E	
Approach Vol, veh/h	3050			3511	307	
Approach Delay, s/veh	9.9			0.2	58.3	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	97.0	97.0	17.4
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	91.7	91.7	18.8
Max Q Clear Time (g_c+I1), s	44.0	2.0	12.4
Green Ext Time (p_c), s	33.8	67.4	0.7

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Notes

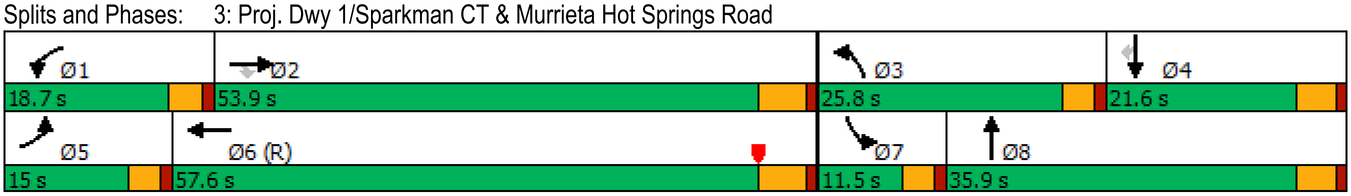
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBT] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	280	2600	405	406	2372	614	10	24	10	218
Future Volume (vph)	280	2600	405	406	2372	614	10	24	10	218
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	15.0	53.9	53.9	18.7	57.6	25.8	35.9	11.5	21.6	21.6
Total Split (%)	12.5%	44.9%	44.9%	15.6%	48.0%	21.5%	29.9%	9.6%	18.0%	18.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	11.0	48.6	48.6	14.7	52.3	21.8	36.1	7.1	17.0	17.0
Actuated g/C Ratio	0.09	0.40	0.40	0.12	0.44	0.18	0.30	0.06	0.14	0.14
v/c Ratio	0.91	1.02	0.48	0.99	0.90	1.01	0.21	0.12	0.02	0.99
Control Delay	78.9	51.5	5.8	77.2	22.3	86.7	5.9	54.9	44.6	109.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.9	51.5	5.8	77.2	22.3	86.7	5.9	54.9	44.6	109.8
LOS	E	D	A	E	C	F	A	D	D	F
Approach Delay		48.2			30.1		65.8		102.1	
Approach LOS		D			C		E		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 44.9	Intersection LOS: D
Intersection Capacity Utilization 85.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	2600	405	406	2372	79	614	10	205	24	10	218
Future Volume (veh/h)	280	2600	405	406	2372	79	614	10	205	24	10	218
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	2653	413	414	2420	81	627	10	209	24	10	222
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	2606	642	423	2808	94	628	517	462	111	503	225
Arrive On Green	0.09	0.40	0.40	0.25	0.87	0.87	0.18	0.29	0.29	0.03	0.14	0.14
Sat Flow, veh/h	3456	6434	1585	3456	6442	215	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	286	2653	413	414	1812	689	627	10	209	24	10	222
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1832	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.8	48.6	25.2	14.3	23.2	23.4	21.8	0.5	12.9	0.8	0.3	16.8
Cycle Q Clear(g_c), s	9.8	48.6	25.2	14.3	23.2	23.4	21.8	0.5	12.9	0.8	0.3	16.8
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	2606	642	423	2103	798	628	517	462	111	503	225
V/C Ratio(X)	0.90	1.02	0.64	0.98	0.86	0.86	1.00	0.02	0.45	0.22	0.02	0.99
Avail Cap(c_a), veh/h	317	2606	642	423	2103	798	628	517	462	216	503	225
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	35.7	28.7	45.1	5.8	5.8	49.1	30.3	34.7	56.6	44.3	51.4
Incr Delay (d2), s/veh	20.2	19.1	3.3	37.8	4.9	11.9	35.6	0.1	3.2	1.0	0.1	57.2
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	5.0	21.2	10.0	7.3	3.3	5.2	12.4	0.2	5.4	0.4	0.1	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.2	54.8	32.0	83.0	10.8	17.8	84.7	30.4	37.9	57.6	44.4	108.6
LnGrp LOS	E	F	C	F	B	B	F	C	D	E	D	F
Approach Vol, veh/h		3352			2915			846			256	
Approach Delay, s/veh		53.6			22.7			72.5			101.3	
Approach LOS		D			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	53.9	25.8	21.6	15.0	57.6	7.9	39.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	14.7	48.6	21.8	17.0	11.0	52.3	7.5	31.3
Max Q Clear Time (g_c+I1), s	16.3	50.6	23.8	18.8	11.8	25.4	2.8	14.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	20.0	0.0	1.2

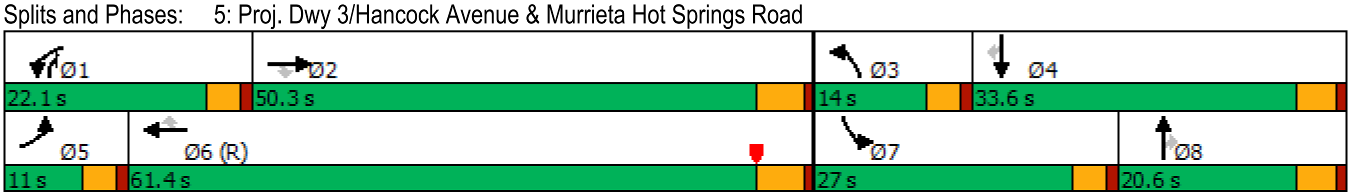
Intersection Summary	
HCM 6th Ctrl Delay	45.2
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	227	2173	278	499	2395	696	256	216	551	675	238	352
Future Volume (vph)	227	2173	278	499	2395	696	256	216	551	675	238	352
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	11.0	50.3	50.3	22.1	61.4	61.4	14.0	20.6	22.1	27.0	33.6	33.6
Total Split (%)	9.2%	41.9%	41.9%	18.4%	51.2%	51.2%	11.7%	17.2%	18.4%	22.5%	28.0%	28.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	7.0	45.0	45.0	18.1	56.1	56.1	10.0	16.0	38.7	23.0	29.0	29.0
Actuated g/C Ratio	0.06	0.38	0.38	0.15	0.47	0.47	0.08	0.13	0.32	0.19	0.24	0.24
v/c Ratio	1.33	1.02	0.42	1.05	1.13	0.80	0.97	0.95	0.62	1.20	0.81	0.67
Control Delay	213.8	39.2	4.9	90.0	86.4	5.6	101.6	97.1	32.0	145.4	57.1	31.5
Queue Delay	0.0	14.0	0.0	0.0	0.2	1.5	0.0	0.0	45.0	0.0	0.0	0.0
Total Delay	213.8	53.2	4.9	90.0	86.6	7.1	101.6	97.1	77.1	145.4	57.1	31.5
LOS	F	D	A	F	F	A	F	F	E	F	E	C
Approach Delay		61.8			71.6			87.5			98.5	
Approach LOS		E			E			F			F	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay: 74.4 Intersection LOS: E
Intersection Capacity Utilization 98.3% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	2173	278	499	2395	696	256	216	551	675	238	352
Future Volume (veh/h)	227	2173	278	499	2395	696	256	216	551	675	238	352
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	2362	302	542	2603	757	278	235	599	734	352	321
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	2413	594	521	2387	741	288	249	793	683	452	383
Arrive On Green	0.06	0.38	0.38	0.30	0.94	0.94	0.08	0.13	0.13	0.19	0.24	0.24
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3563	1870	1585
Grp Volume(v), veh/h	247	2362	302	542	2603	757	278	235	599	734	352	321
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1781	1870	1585
Q Serve(g_s), s	7.0	43.5	17.7	18.1	56.1	56.1	9.6	14.9	16.0	23.0	21.1	23.1
Cycle Q Clear(g_c), s	7.0	43.5	17.7	18.1	56.1	56.1	9.6	14.9	16.0	23.0	21.1	23.1
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	202	2413	594	521	2387	741	288	249	793	683	452	383
V/C Ratio(X)	1.23	0.98	0.51	1.04	1.09	1.02	0.97	0.94	0.76	1.07	0.78	0.84
Avail Cap(c_a), veh/h	202	2413	594	521	2387	741	288	249	793	683	452	383
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	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	56.5	37.0	29.0	41.9	3.9	3.9	54.8	51.5	39.2	48.5	42.5	43.3
Incr Delay (d2), s/veh	137.3	13.7	0.7	50.1	48.4	38.6	43.5	41.4	4.2	56.4	12.5	19.2
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	6.8	18.4	6.8	9.7	12.1	9.4	5.9	9.8	8.5	15.4	11.2	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	193.8	50.7	29.7	92.0	52.3	42.5	98.3	92.9	43.3	104.9	55.0	62.5
LnGrp LOS	F	D	C	F	F	F	F	F	D	F	D	E
Approach Vol, veh/h		2911			3902			1112			1407	
Approach Delay, s/veh		60.7			55.9			67.5			82.7	
Approach LOS		E			E			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.1	50.3	14.0	33.6	11.0	61.4	27.0	20.6				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	18.1	45.0	10.0	29.0	7.0	56.1	23.0	16.0				
Max Q Clear Time (g_c+I1), s	20.1	45.5	11.6	25.1	9.0	58.1	25.0	18.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			62.8									
HCM 6th LOS			E									

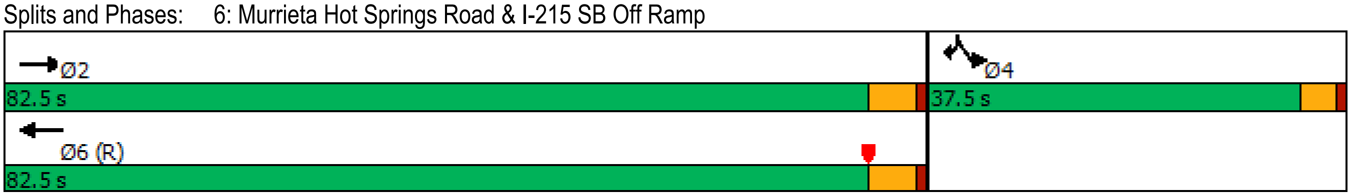
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	3104	2866	736	660
Future Volume (vph)	3104	2866	736	660
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	82.5	82.5	37.5	37.5
Total Split (%)	68.8%	68.8%	31.3%	31.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	77.2	77.2	33.3	33.5
Actuated g/C Ratio	0.64	0.64	0.28	0.28
v/c Ratio	1.04	0.96	0.99	1.10
Control Delay	44.3	23.1	69.0	112.8
Queue Delay	0.0	43.5	0.0	0.0
Total Delay	44.3	66.5	69.0	112.8
LOS	D	E	E	F
Approach Delay	44.3	66.5	82.9	
Approach LOS	D	E	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 60.3	Intersection LOS: E
Intersection Capacity Utilization 157.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3104	2866	0	736	660
Future Volume (veh/h)	0	3104	2866	0	736	660
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	3302	3049	0	976	495
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3285	3285	0	1028	460
Arrive On Green	0.00	0.64	1.00	0.00	0.28	0.28
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	3302	3049	0	976	495
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	77.2	0.0	0.0	31.0	33.5
Cycle Q Clear(g_c), s	0.0	77.2	0.0	0.0	31.0	33.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3285	3285	0	1028	460
V/C Ratio(X)	0.00	1.01	0.93	0.00	0.95	1.08
Avail Cap(c_a), veh/h	0	3285	3285	0	1028	460
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	0.0	0.0	42.5	43.3
Incr Delay (d2), s/veh	0.0	17.0	6.0	0.0	17.2	63.7
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	30.8	1.8	0.0	16.5	21.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	38.4	6.0	0.0	59.7	107.0
LnGrp LOS	A	F	A	A	E	F
Approach Vol, veh/h		3302	3049		1471	
Approach Delay, s/veh		38.4	6.0		75.6	
Approach LOS		D	A		E	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	82.5	37.5	82.5
Change Period (Y+Rc), s	5.3	* 4.2	5.3
Max Green Setting (Gmax), s	77.2	* 33	77.2
Max Q Clear Time (g_c+I1), s	79.2	35.5	2.0
Green Ext Time (p_c), s	0.0	0.0	45.1

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Notes

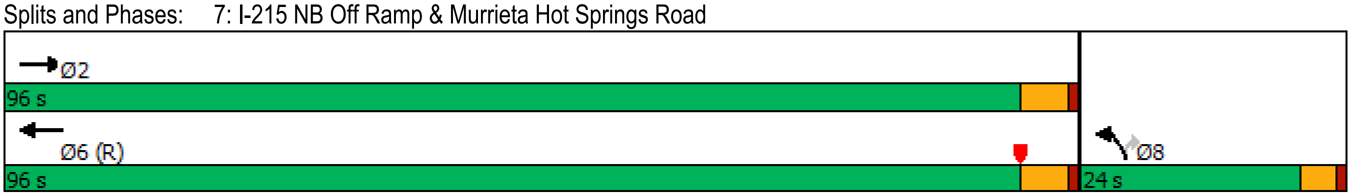
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2950	2772	373	334
Future Volume (vph)	2950	2772	373	334
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	96.0	96.0	24.0	24.0
Total Split (%)	80.0%	80.0%	20.0%	20.0%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	90.7	90.7	19.8	19.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.85	0.80	0.64	0.73
Control Delay	6.8	11.3	52.2	56.3
Queue Delay	0.7	11.8	0.0	0.0
Total Delay	7.5	23.1	52.2	56.3
LOS	A	C	D	E
Approach Delay	7.5	23.1	54.1	
Approach LOS	A	C	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↰↰	↱↱
Traffic Volume (veh/h)	2950	0	0	2772	373	334
Future Volume (veh/h)	2950	0	0	2772	373	334
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	3172	0	0	2981	401	359
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3859	0	0	3859	593	479
Arrive On Green	0.76	0.00	0.00	0.76	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	3172	0	0	2981	401	359
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	48.1	0.0	0.0	41.1	12.6	14.1
Cycle Q Clear(g_c), s	48.1	0.0	0.0	41.1	12.6	14.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3859	0	0	3859	593	479
V/C Ratio(X)	0.82	0.00	0.00	0.77	0.68	0.75
Avail Cap(c_a), veh/h	3859	0	0	3859	593	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	0.0	0.0	8.6	47.1	47.7
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.6	6.1	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.0	0.0	11.5	6.1	5.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	0.0	0.0	10.2	53.2	58.1
LnGrp LOS	B	A	A	B	D	E
Approach Vol, veh/h	3172			2981	760	
Approach Delay, s/veh	11.5			10.2	55.5	
Approach LOS	B			B	E	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	96.0	96.0	24.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	90.7	90.7	19.8
Max Q Clear Time (g_c+I1), s	50.1	43.1	16.1
Green Ext Time (p_c), s	31.7	32.6	1.4

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (ft)	308	302	302	302	46	54	58	618	606	505
Average Queue (ft)	252	199	209	19	44	36	33	542	576	431
95th Queue (ft)	324	281	310	115	47	46	46	658	638	556
Link Distance (ft)					32	32	32	566	566	
Upstream Blk Time (%)					37	33	21	12	30	
Queuing Penalty (veh)					177	160	102	0	0	
Storage Bay Dist (ft)										480
Storage Blk Time (%)									32	0
Queuing Penalty (veh)									57	4

Intersection: 2: I-15 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	R	T	T	T	T	L	L	R
Maximum Queue (ft)	268	274	345	244	142	194	198	245	193	206	222
Average Queue (ft)	155	137	210	24	62	81	106	144	115	135	198
95th Queue (ft)	254	244	316	143	121	154	185	225	167	218	212
Link Distance (ft)	457	457	457		529	529	529	529	187	187	187
Upstream Blk Time (%)									0	6	70
Queuing Penalty (veh)									0	16	179
Storage Bay Dist (ft)				220							
Storage Blk Time (%)			5	0							
Queuing Penalty (veh)			10	0							

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	164	177	276	257	297	288	161	175	186	118	149	185
Average Queue (ft)	71	98	206	207	193	181	38	93	103	47	74	101
95th Queue (ft)	123	146	283	268	267	282	104	145	156	101	136	160
Link Distance (ft)			529	529	529	529				265	265	265
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	224	161	178	28	115	24	96	59	284	260
Average Queue (ft)	107	109	101	9	46	1	24	6	18	169
95th Queue (ft)	186	154	163	27	93	9	71	28	130	247
Link Distance (ft)	265	281	281	281	281			269	269	
Upstream Blk Time (%)									0	0
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									0	1
Queuing Penalty (veh)									0	0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	NB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	141	256	269	48	250
Average Queue (ft)	47	17	9	2	71
95th Queue (ft)	129	102	89	16	192
Link Distance (ft)	265	265	265	265	288
Upstream Blk Time (%)		0	0		
Queuing Penalty (veh)		0	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	257	270	373	352	302	201	75	210	224	258	285	269
Average Queue (ft)	236	246	247	173	157	34	27	142	157	166	195	219
95th Queue (ft)	297	319	468	326	258	102	58	199	216	264	275	265
Link Distance (ft)			318	318	318	318				235	235	235
Upstream Blk Time (%)			31	0	0				0	1	1	3
Queuing Penalty (veh)			167	2	0				0	11	9	25
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)	18	46	4			0		0	2	2		
Queuing Penalty (veh)	72	180	14			0		2	14	11		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	106	156	68	178	189	36	162	174	314	173
Average Queue (ft)	62	50	34	76	99	6	158	174	281	40
95th Queue (ft)	98	97	62	135	172	22	169	175	297	116
Link Distance (ft)	235	295	295	295	295	295				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							6	66	2	0
Queuing Penalty (veh)							22	258	10	1

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	94	112	120	142	161	142	885	894	495
Average Queue (ft)	73	76	84	127	133	128	851	857	418
95th Queue (ft)	80	91	111	150	154	141	864	880	653
Link Distance (ft)	68	68	68	122	122	122	833	833	
Upstream Blk Time (%)	26	33	38	21	20	32	55	82	
Queuing Penalty (veh)	189	242	273	171	164	262	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								67	2
Queuing Penalty (veh)								271	14

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	178	184	180	117	119	120	213	238	168	129
Average Queue (ft)	135	142	128	77	67	87	152	157	99	34
95th Queue (ft)	184	185	188	100	103	110	206	220	157	95
Link Distance (ft)	148	148	148	65	65	65	1041	1041		
Upstream Blk Time (%)	5	5	5	18	13	36				
Queuing Penalty (veh)	39	36	35	141	104	286				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 3730

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (ft)	302	302	339	302	46	46	47	582	618	505
Average Queue (ft)	126	234	309	59	40	32	18	573	588	476
95th Queue (ft)	246	369	326	239	49	46	41	602	606	615
Link Distance (ft)					32	32	32	566	566	
Upstream Blk Time (%)					7	5	2	21	91	
Queuing Penalty (veh)					40	31	12	0	0	
Storage Bay Dist (ft)										480
Storage Blk Time (%)									88	1
Queuing Penalty (veh)									97	11

Intersection: 2: I-15 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	R	T	T	T	T	L	L	R
Maximum Queue (ft)	199	182	312	245	111	195	283	332	133	201	221
Average Queue (ft)	83	73	129	24	49	94	169	248	87	122	200
95th Queue (ft)	155	154	239	144	99	158	256	342	133	194	213
Link Distance (ft)	457	457	457		529	529	529	529	187	187	187
Upstream Blk Time (%)										2	63
Queuing Penalty (veh)										5	165
Storage Bay Dist (ft)				220							
Storage Blk Time (%)			1	0							
Queuing Penalty (veh)			6	0							

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	89	134	234	266	524	298	103	176	178	178	209	246
Average Queue (ft)	28	58	132	153	172	188	21	112	120	85	135	180
95th Queue (ft)	68	104	198	227	308	279	68	158	167	159	197	237
Link Distance (ft)			529	529	529	529				265	265	265
Upstream Blk Time (%)					0							0
Queuing Penalty (veh)					0							0
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	268	296	335	292	74	5	56	38	299	260
Average Queue (ft)	186	232	300	75	26	0	9	6	285	260
95th Queue (ft)	264	353	316	279	69	2	30	22	289	260
Link Distance (ft)	265	281	281	281	281			269	269	
Upstream Blk Time (%)	0	17	92	11					87	65
Queuing Penalty (veh)	2	0	0	0					0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)										98
Queuing Penalty (veh)										5

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	WB	NB
Directions Served	T	R
Maximum Queue (ft)	41	109
Average Queue (ft)	1	67
95th Queue (ft)	14	107
Link Distance (ft)	318	288
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	108	115	180	258	288	117	98	200	224	278	278	280
Average Queue (ft)	66	70	81	145	170	48	38	138	143	195	212	228
95th Queue (ft)	103	107	158	208	245	95	67	197	204	272	274	283
Link Distance (ft)			318	318	318	318				235	235	235
Upstream Blk Time (%)									0	1	2	6
Queuing Penalty (veh)									0	10	19	55
Storage Bay Dist (ft)	245	245					215	200	200			
Storage Blk Time (%)								0	0	3		
Queuing Penalty (veh)								0	2	13		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	TR	R
Maximum Queue (ft)	209	227	294	334	347	347	162	175	301	175
Average Queue (ft)	69	122	136	237	312	314	158	173	282	78
95th Queue (ft)	133	196	215	364	331	330	174	182	295	175
Link Distance (ft)	235	295	295	295	295	295				
Upstream Blk Time (%)			0	15	87	79				
Queuing Penalty (veh)			0	0	0	0				
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							3	58	17	0
Queuing Penalty (veh)							18	340	144	5

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	95	118	141	152	162	185	850	896	495
Average Queue (ft)	73	79	88	127	132	135	848	855	386
95th Queue (ft)	82	99	124	147	157	158	851	877	689
Link Distance (ft)	68	68	68	122	122	122	833	833	
Upstream Blk Time (%)	18	25	30	13	15	29	49	90	
Queuing Penalty (veh)	189	262	313	127	139	277	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								79	0
Queuing Penalty (veh)								260	2

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	162	176	188	100	97	145	191	193	181	167
Average Queue (ft)	137	133	115	76	72	84	117	126	133	84
95th Queue (ft)	181	184	161	89	96	114	176	180	177	169
Link Distance (ft)	148	148	148	65	65	65	1041	1041		
Upstream Blk Time (%)	4	2	1	16	13	25				
Queuing Penalty (veh)	39	24	10	145	119	231				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

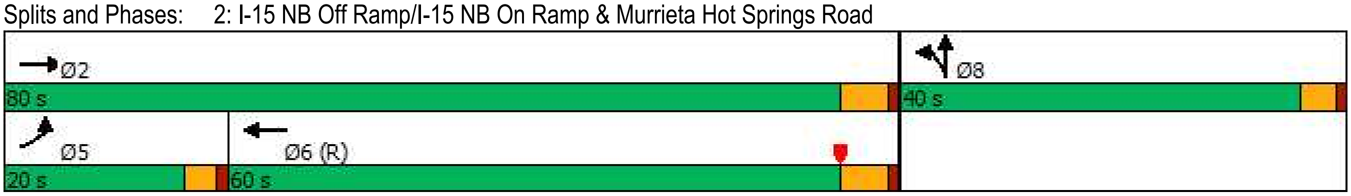
Zone wide Queuing Penalty: 3119

BUILDOUT (2035) TRAFFIC CONDITIONS
(MURRIETA HOT SPRINGS RD/I-15 NB RAMPS)

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	169	2631	1620	1119	718	3	239
Future Volume (vph)	169	2631	1620	1119	718	3	239
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	20.0	80.0	60.0		40.0	40.0	
Total Split (%)	16.7%	66.7%	50.0%		33.3%	33.3%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	15.5	78.4	58.9	120.0	32.1	32.1	120.0
Actuated g/C Ratio	0.13	0.65	0.49	1.00	0.27	0.27	1.00
v/c Ratio	0.81	0.86	0.71	0.77	0.87	0.87	0.16
Control Delay	68.4	14.4	24.6	13.2	61.7	62.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.4	14.4	24.6	13.2	61.7	62.2	0.2
LOS	E	B	C	B	E	E	A
Approach Delay		17.6	19.9			46.6	
Approach LOS		B	B			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 22.9	Intersection LOS: C
Intersection Capacity Utilization 78.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	2631	0	0	1620	1119	718	3	239	0	0	0
Future Volume (veh/h)	169	2631	0	0	1620	1119	718	3	239	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	184	2860	0	0	1761	0	782	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	212	3179	0	0	2402		890	0				
Arrive On Green	0.12	0.62	0.00	0.00	0.47	0.00	0.25	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	184	2860	0	0	1761	0	782	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	12.2	57.7	0.0	0.0	33.5	0.0	25.3	0.0	0.0			
Cycle Q Clear(g_c), s	12.2	57.7	0.0	0.0	33.5	0.0	25.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	212	3179	0	0	2402		890	0				
V/C Ratio(X)	0.87	0.90	0.00	0.00	0.73		0.88	0.00				
Avail Cap(c_a), veh/h	238	3179	0	0	2402		1063	0				
HCM Platoon Ratio	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	0.00	0.00	0.55	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	52.0	19.4	0.0	0.0	25.7	0.0	43.3	0.0	0.0			
Incr Delay (d2), s/veh	25.6	4.6	0.0	0.0	1.1	0.0	7.5	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	6.8	21.0	0.0	0.0	12.9	0.0	12.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.5	24.1	0.0	0.0	26.8	0.0	50.8	0.0	0.0			
LnGrp LOS	E	C	A	A	C		D	A				
Approach Vol, veh/h		3044			1761			782				
Approach Delay, s/veh		27.3			26.8			50.8				
Approach LOS		C			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		80.0			18.3	61.7		34.2				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		74.7			16.0	54.7		35.8				
Max Q Clear Time (g_c+I1), s		59.7			14.2	35.5		27.3				
Green Ext Time (p_c), s		12.6			0.1	9.2		2.7				

Intersection Summary		
HCM 6th Ctrl Delay		30.4
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

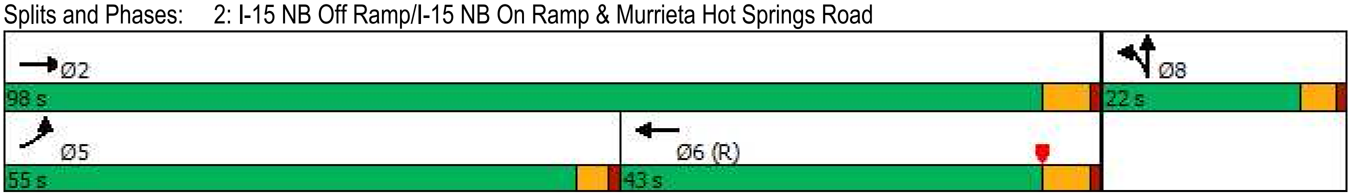
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	802	3526	1620	1682	499	0	109
Future Volume (vph)	802	3526	1620	1682	499	0	109
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	55.0	98.0	43.0		22.0	22.0	
Total Split (%)	45.8%	81.7%	35.8%		18.3%	18.3%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	51.0	92.7	37.7	120.0	17.8	17.8	120.0
Actuated g/C Ratio	0.42	0.77	0.31	1.00	0.15	0.15	1.00
v/c Ratio	1.16	0.98	1.10	1.15	1.09	1.09	0.07
Control Delay	116.4	14.8	85.6	96.5	130.5	130.5	0.1
Queue Delay	0.0	3.2	0.0	0.0	0.0	0.0	0.0
Total Delay	116.4	18.1	85.6	96.5	130.5	130.5	0.1
LOS	F	B	F	F	F	F	A
Approach Delay		36.3	91.1			107.1	
Approach LOS		D	F			F	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.16
Intersection Signal Delay: 63.5 Intersection LOS: E
Intersection Capacity Utilization 100.8% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	802	3526	0	0	1620	1682	499	0	109	0	0	0
Future Volume (veh/h)	802	3526	0	0	1620	1682	499	0	109	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	872	3833	0	0	1761	0	542	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	757	3944	0	0	1604		528	0				
Arrive On Green	0.43	0.77	0.00	0.00	0.52	0.00	0.15	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	872	3833	0	0	1761	0	542	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	51.0	82.2	0.0	0.0	37.7	0.0	17.8	0.0	0.0			
Cycle Q Clear(g_c), s	51.0	82.2	0.0	0.0	37.7	0.0	17.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	757	3944	0	0	1604		528	0				
V/C Ratio(X)	1.15	0.97	0.00	0.00	1.10		1.03	0.00				
Avail Cap(c_a), veh/h	757	3944	0	0	1604		528	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.26	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	34.5	12.5	0.0	0.0	28.5	0.0	51.1	0.0	0.0			
Incr Delay (d2), s/veh	83.1	9.1	0.0	0.0	47.1	0.0	45.8	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	38.0	24.1	0.0	0.0	18.1	0.0	11.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	117.6	21.6	0.0	0.0	75.6	0.0	96.9	0.0	0.0			
LnGrp LOS	F	C	A	A	F		F	A				
Approach Vol, veh/h		4705			1761			542				
Approach Delay, s/veh		39.4			75.6			96.9				
Approach LOS		D			E			F				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		98.0			55.0	43.0		22.0				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		92.7			51.0	37.7		17.8				
Max Q Clear Time (g_c+I1), s		84.2			53.0	39.7		19.8				
Green Ext Time (p_c), s		8.3			0.0	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			52.9
HCM 6th LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	251	315	354	372	74	108	128	311	311	291
Average Queue (ft)	123	173	157	166	22	31	30	237	227	130
95th Queue (ft)	201	273	275	319	61	85	79	306	292	297
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

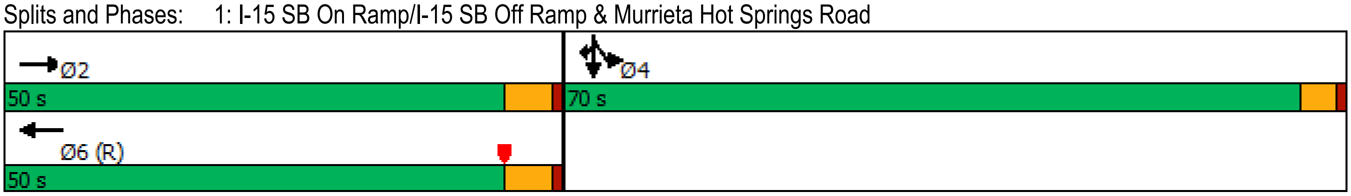
Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	473	529	473	483	123	151	160	78	428	416	155
Average Queue (ft)	427	416	265	287	54	71	74	4	303	291	33
95th Queue (ft)	523	620	485	476	115	138	131	28	405	402	132
Link Distance (ft)		473	473	473	1082	1082	1082	1082	1236	1236	
Upstream Blk Time (%)	7	11	0	1							
Queuing Penalty (veh)	0	133	2	14							
Storage Bay Dist (ft)	500										585
Storage Blk Time (%)	7	11									
Queuing Penalty (veh)	83	85									

RECOMMENDATIONS / MITIGATION

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1036	317	1376	1259	0	336
Future Volume (vph)	1036	317	1376	1259	0	336
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	50.0		50.0	70.0	70.0	70.0
Total Split (%)	41.7%		41.7%	58.3%	58.3%	58.3%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	44.7	120.0	44.7	65.8	65.8	65.8
Actuated g/C Ratio	0.37	1.00	0.37	0.55	0.55	0.55
v/c Ratio	0.58	0.21	0.77	0.71	0.76	0.38
Control Delay	31.7	0.3	37.6	25.0	27.3	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.7	0.3	37.6	25.0	27.3	16.1
LOS	C	A	D	C	C	B
Approach Delay	24.3		37.6		24.2	
Approach LOS	C		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 28.5	Intersection LOS: C
Intersection Capacity Utilization 102.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1036	317	0	1376	0	0	0	0	1259	0	336
Future Volume (veh/h)	0	1036	317	0	1376	0	0	0	0	1259	0	336
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1102	0	0	1464	0				1450	0	238
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1902		0	1902	0				2032	0	869
Arrive On Green	0.00	0.37	0.00	0.00	0.25	0.00				0.55	0.00	0.55
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1102	0	0	1464	0				1450	0	238
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	20.7	0.0	0.0	32.0	0.0				34.9	0.0	9.6
Cycle Q Clear(g_c), s	0.0	20.7	0.0	0.0	32.0	0.0				34.9	0.0	9.6
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1902		0	1902	0				2032	0	869
V/C Ratio(X)	0.00	0.58		0.00	0.77	0.00				0.71	0.00	0.27
Avail Cap(c_a), veh/h	0	1902		0	1902	0				2032	0	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	30.1	0.0	0.0	40.2	0.0				20.1	0.0	14.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	3.1	0.0				2.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.2	0.0	0.0	14.2	0.0				15.1	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.6	0.0	0.0	43.3	0.0				22.3	0.0	15.2
LnGrp LOS	A	C		A	D	A				C	A	B
Approach Vol, veh/h		1102			1464						1688	
Approach Delay, s/veh		30.6			43.3						21.3	
Approach LOS		C			D						C	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.0		70.0		50.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		44.7		* 66		44.7						
Max Q Clear Time (g_c+I1), s		22.7		36.9		34.0						
Green Ext Time (p_c), s		5.4		11.6		5.4						
Intersection Summary												
HCM 6th Ctrl Delay			31.3									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

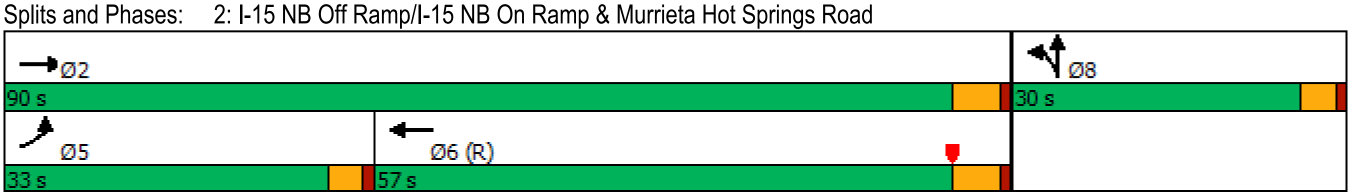
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	209	2083	1285	1024	329	0	276
Future Volume (vph)	209	2083	1285	1024	329	0	276
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	33.0	90.0	57.0		30.0	30.0	
Total Split (%)	27.5%	75.0%	47.5%		25.0%	25.0%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	20.6	92.5	67.9	120.0	18.0	18.0	120.0
Actuated g/C Ratio	0.17	0.77	0.57	1.00	0.15	0.15	1.00
v/c Ratio	0.75	0.58	0.49	0.70	0.71	0.71	0.19
Control Delay	57.2	3.9	20.8	13.0	63.4	63.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	3.9	20.8	13.0	63.4	63.4	0.3
LOS	E	A	C	B	E	E	A
Approach Delay		8.8	17.3			34.6	
Approach LOS		A	B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 15.6	Intersection LOS: B
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	2083	0	0	1285	1024	329	0	276	0	0	0
Future Volume (veh/h)	209	2083	0	0	1285	1024	329	0	276	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	227	2264	0	0	1397	0	358	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	261	3604	0	0	2687		446	0				
Arrive On Green	0.15	0.71	0.00	0.00	0.53	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	227	2264	0	0	1397	0	358	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	15.0	28.1	0.0	0.0	21.4	0.0	11.7	0.0	0.0			
Cycle Q Clear(g_c), s	15.0	28.1	0.0	0.0	21.4	0.0	11.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	261	3604	0	0	2687		446	0				
V/C Ratio(X)	0.87	0.63	0.00	0.00	0.52		0.80	0.00				
Avail Cap(c_a), veh/h	430	3604	0	0	2687		766	0				
HCM Platoon Ratio	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	0.00	0.00	0.53	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	50.1	9.3	0.0	0.0	18.5	0.0	51.0	0.0	0.0			
Incr Delay (d2), s/veh	10.3	0.8	0.0	0.0	0.4	0.0	3.4	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	7.2	8.8	0.0	0.0	7.9	0.0	5.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	10.2	0.0	0.0	18.9	0.0	54.4	0.0	0.0			
LnGrp LOS	E	B	A	A	B		D	A				
Approach Vol, veh/h		2491			1397			358				
Approach Delay, s/veh		14.7			18.9			54.4				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		90.0			21.6	68.4		19.2				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		84.7			29.0	51.7		25.8				
Max Q Clear Time (g_c+I1), s		30.1			17.0	23.4		13.7				
Green Ext Time (p_c), s		20.6			0.6	7.8		1.3				

Intersection Summary		
HCM 6th Ctrl Delay		19.5
HCM 6th LOS		B

Notes

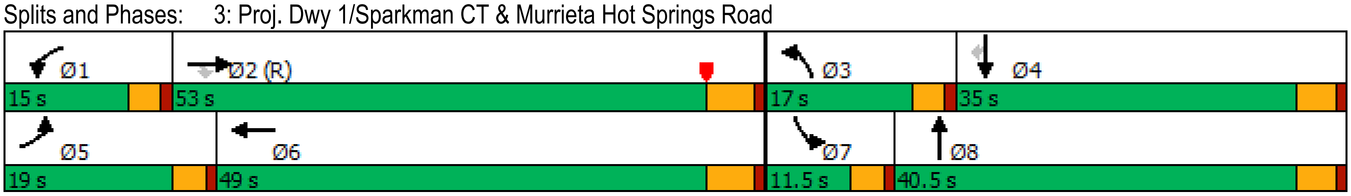
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	275	1836	194	194	1767	232	10	27	10	265
Future Volume (vph)	275	1836	194	194	1767	232	10	27	10	265
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	19.0	53.0	53.0	15.0	49.0	17.0	40.5	11.5	35.0	35.0
Total Split (%)	15.8%	44.2%	44.2%	12.5%	40.8%	14.2%	33.8%	9.6%	29.2%	29.2%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	C-Max	None	Max	None	Max	None	Max	Max
Act Effct Green (s)	14.0	48.1	48.1	10.6	44.7	12.4	40.7	7.1	31.0	31.0
Actuated g/C Ratio	0.12	0.40	0.40	0.09	0.37	0.10	0.34	0.06	0.26	0.26
v/c Ratio	0.72	0.75	0.28	0.69	0.81	0.71	0.09	0.14	0.01	0.68
Control Delay	56.7	29.1	4.8	78.1	19.5	63.9	8.3	55.1	33.7	50.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.7	29.1	4.8	78.1	19.5	63.9	8.3	55.1	33.7	50.0
LOS	E	C	A	E	B	E	A	E	C	D
Approach Delay		30.3			25.3		48.6		49.9	
Approach LOS		C			C		D		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 30.7	Intersection LOS: C
Intersection Capacity Utilization 61.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	275	1836	194	194	1767	52	232	10	78	27	10	265
Future Volume (veh/h)	275	1836	194	194	1767	52	232	10	78	27	10	265
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	1933	211	211	1860	55	252	11	85	28	11	279
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	2773	683	265	2629	78	311	547	488	122	900	402
Arrive On Green	0.10	0.43	0.43	0.15	0.81	0.81	0.09	0.31	0.31	0.04	0.25	0.25
Sat Flow, veh/h	3456	6434	1585	3456	6470	191	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	289	1933	211	211	1387	528	252	11	85	28	11	279
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1836	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.8	29.3	10.5	7.1	15.2	15.2	8.6	0.5	4.7	0.9	0.3	19.1
Cycle Q Clear(g_c), s	9.8	29.3	10.5	7.1	15.2	15.2	8.6	0.5	4.7	0.9	0.3	19.1
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	2773	683	265	1961	746	311	547	488	122	900	402
V/C Ratio(X)	0.83	0.70	0.31	0.80	0.71	0.71	0.81	0.02	0.17	0.23	0.01	0.69
Avail Cap(c_a), veh/h	432	2773	683	317	1961	746	374	547	488	216	900	402
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	27.8	22.4	49.9	8.1	8.1	53.6	28.9	30.4	56.3	33.6	40.6
Incr Delay (d2), s/veh	8.8	1.2	1.0	11.4	2.2	5.6	10.7	0.1	0.8	0.9	0.0	9.5
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	4.6	10.9	4.1	3.2	3.0	4.1	4.2	0.2	1.9	0.4	0.1	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	29.0	23.4	61.3	10.3	13.7	64.3	29.0	31.1	57.2	33.6	50.1
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	C	D
Approach Vol, veh/h		2433			2126			348			318	
Approach Delay, s/veh		32.4			16.2			55.1			50.2	
Approach LOS		C			B			E			D	

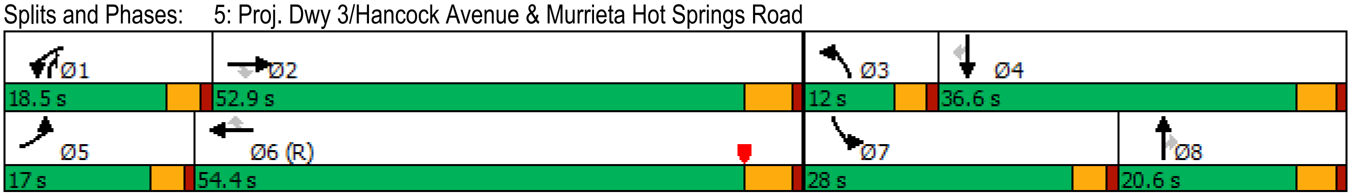
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	57.0	14.8	35.0	16.1	54.1	8.2	41.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	11.0	47.7	13.0	30.4	15.0	43.7	7.5	35.9
Max Q Clear Time (g_c+I1), s	9.1	31.3	10.6	21.1	11.8	17.2	2.9	6.7
Green Ext Time (p_c), s	0.1	12.0	0.2	0.7	0.3	14.8	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	1420	135	232	1753	579	108	93	187	547	116	214
Future Volume (vph)	295	1420	135	232	1753	579	108	93	187	547	116	214
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	17.0	52.9	52.9	18.5	54.4	54.4	12.0	20.6	18.5	28.0	36.6	36.6
Total Split (%)	14.2%	44.1%	44.1%	15.4%	45.3%	45.3%	10.0%	17.2%	15.4%	23.3%	30.5%	30.5%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	13.0	48.9	48.9	13.2	49.1	49.1	7.8	16.0	33.8	24.0	32.2	32.2
Actuated g/C Ratio	0.11	0.41	0.41	0.11	0.41	0.41	0.06	0.13	0.28	0.20	0.27	0.27
v/c Ratio	0.90	0.60	0.20	0.67	0.93	0.68	0.53	0.41	0.24	0.91	0.25	0.40
Control Delay	95.5	14.9	1.4	67.8	32.0	4.3	63.2	53.2	17.9	66.5	36.2	7.3
Queue Delay	0.0	0.0	0.0	0.0	4.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.5	14.9	1.4	67.8	36.0	4.6	63.2	53.2	17.9	66.5	36.2	7.3
LOS	F	B	A	E	D	A	E	D	B	E	D	A
Approach Delay		26.7			31.8			39.0			48.0	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 33.2	Intersection LOS: C
Intersection Capacity Utilization 76.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	1420	135	232	1753	579	108	93	187	547	116	214
Future Volume (veh/h)	295	1420	135	232	1753	579	108	93	187	547	116	214
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1511	147	252	1865	616	117	101	203	582	126	228
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	2733	673	309	2089	649	198	232	595	691	499	423
Arrive On Green	0.21	0.85	0.85	0.18	0.82	0.82	0.06	0.12	0.12	0.20	0.27	0.27
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3456	1870	1585
Grp Volume(v), veh/h	314	1511	147	252	1865	616	117	101	203	582	126	228
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1728	1870	1585
Q Serve(g_s), s	10.5	8.0	2.1	8.4	29.5	38.0	4.0	6.0	7.4	19.4	6.4	14.8
Cycle Q Clear(g_c), s	10.5	8.0	2.1	8.4	29.5	38.0	4.0	6.0	7.4	19.4	6.4	14.8
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	363	2733	673	309	2089	649	198	232	595	691	499	423
V/C Ratio(X)	0.87	0.55	0.22	0.82	0.89	0.95	0.59	0.44	0.34	0.84	0.25	0.54
Avail Cap(c_a), veh/h	374	2733	673	418	2089	649	230	249	621	691	499	423
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	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	46.6	5.8	5.3	48.3	9.1	9.9	55.2	48.7	40.1	46.2	34.6	37.7
Incr Delay (d2), s/veh	18.3	0.2	0.2	8.9	6.3	25.0	3.0	1.3	0.3	11.9	1.2	4.9
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	4.9	1.7	0.7	3.6	4.7	8.1	1.8	2.9	2.6	9.4	3.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.9	6.0	5.5	57.2	15.5	34.8	58.2	50.0	40.4	58.1	35.8	42.6
LnGrp LOS	E	A	A	E	B	C	E	D	D	E	D	D
Approach Vol, veh/h		1972			2733			421			936	
Approach Delay, s/veh		15.4			23.7			47.6			51.3	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	56.3	10.9	36.6	16.6	54.4	28.0	19.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	14.5	47.6	8.0	32.0	13.0	49.1	24.0	16.0
Max Q Clear Time (g_c+I1), s	10.4	10.0	6.0	16.8	12.5	40.0	21.4	9.4
Green Ext Time (p_c), s	0.3	10.1	0.1	1.5	0.1	7.2	0.8	0.7

Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C

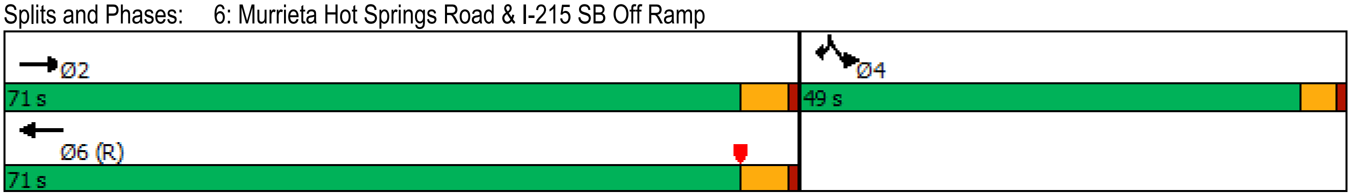
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2039	2046	665	602
Future Volume (vph)	2039	2046	665	602
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	71.0	71.0	49.0	49.0
Total Split (%)	59.2%	59.2%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	70.9	70.9	39.6	39.8
Actuated g/C Ratio	0.59	0.59	0.33	0.33
v/c Ratio	0.75	0.75	0.76	0.82
Control Delay	15.4	18.1	39.7	50.1
Queue Delay	0.0	0.3	0.0	0.0
Total Delay	15.4	18.5	39.7	50.1
LOS	B	B	D	D
Approach Delay	15.4	18.5	42.9	
Approach LOS	B	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 122.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2039	2046	0	665	602
Future Volume (veh/h)	0	2039	2046	0	665	602
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2169	2177	0	885	449
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2796	2796	0	1178	527
Arrive On Green	0.00	0.55	1.00	0.00	0.32	0.32
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2169	2177	0	885	449
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	40.1	0.0	0.0	25.7	30.6
Cycle Q Clear(g_c), s	0.0	40.1	0.0	0.0	25.7	30.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2796	2796	0	1178	527
V/C Ratio(X)	0.00	0.78	0.78	0.00	0.75	0.85
Avail Cap(c_a), veh/h	0	2796	2796	0	1383	618
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	0.0	0.0	36.7	38.2
Incr Delay (d2), s/veh	0.0	2.2	2.2	0.0	2.0	9.8
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	15.1	0.6	0.0	11.9	13.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	23.5	2.2	0.0	38.7	48.0
LnGrp LOS	A	C	A	A	D	D
Approach Vol, veh/h		2169	2177		1334	
Approach Delay, s/veh		23.5	2.2		41.8	
Approach LOS		C	A		D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	71.0	42.3	71.0
Change Period (Y+Rc), s	5.3	* 4.2	5.3
Max Green Setting (Gmax), s	65.7	* 45	65.7
Max Q Clear Time (g_c+I1), s	42.1	32.6	2.0
Green Ext Time (p_c), s	13.3	5.6	19.7

Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

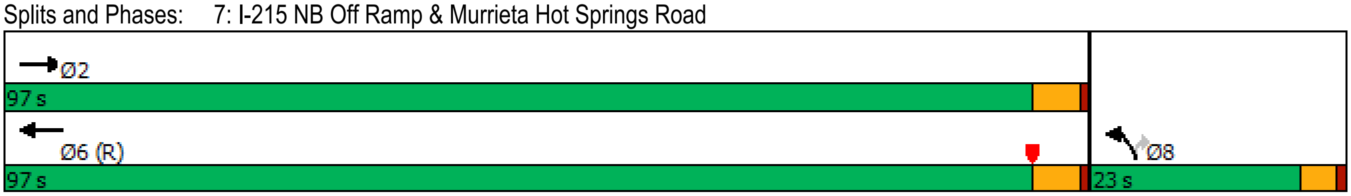
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2189	2182	232	214
Future Volume (vph)	2189	2182	232	214
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	19.2%	19.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	91.7	91.7	18.8	18.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.61	0.61	0.41	0.46
Control Delay	7.2	7.1	48.0	42.8
Queue Delay	0.0	1.0	0.0	0.0
Total Delay	7.2	8.1	48.0	42.8
LOS	A	A	D	D
Approach Delay	7.2	8.1	45.5	
Approach LOS	A	A	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2189	0	0	2182	232	214
Future Volume (veh/h)	2189	0	0	2182	232	214
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2304	0	0	2297	244	225
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3902	0	0	3902	563	455
Arrive On Green	0.76	0.00	0.00	0.76	0.16	0.16
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2304	0	0	2297	244	225
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	23.3	0.0	0.0	23.1	7.4	8.5
Cycle Q Clear(g_c), s	23.3	0.0	0.0	23.1	7.4	8.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3902	0	0	3902	563	455
V/C Ratio(X)	0.59	0.00	0.00	0.59	0.43	0.50
Avail Cap(c_a), veh/h	3902	0	0	3902	563	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.1	0.0	0.0	6.1	45.8	46.3
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.7	2.4	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	6.3	3.5	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.7	0.0	0.0	6.7	48.2	50.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	2304			2297	469	
Approach Delay, s/veh	6.7			6.7	49.1	
Approach LOS	A			A	D	

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		97.0				97.0	23.0
Change Period (Y+Rc), s		5.3				5.3	4.2
Max Green Setting (Gmax), s		91.7				91.7	18.8
Max Q Clear Time (g_c+I1), s		25.3				25.1	10.5
Green Ext Time (p_c), s		22.5				22.4	1.5

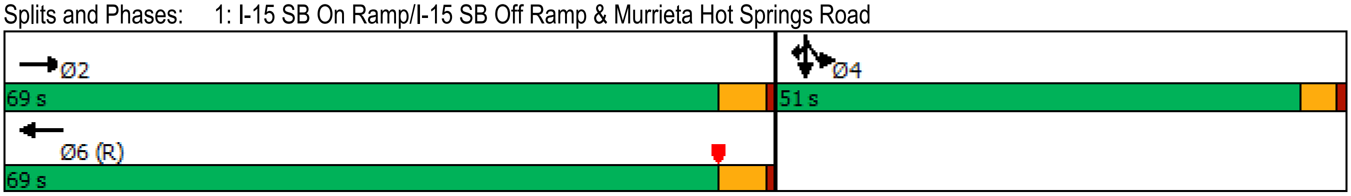
Intersection Summary			
HCM 6th Ctrl Delay			10.7
HCM 6th LOS			B

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2262	346	1577	1045	0	213
Future Volume (vph)	2262	346	1577	1045	0	213
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	69.0		69.0	51.0	51.0	51.0
Total Split (%)	57.5%		57.5%	42.5%	42.5%	42.5%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	63.7	120.0	63.7	46.8	46.8	46.8
Actuated g/C Ratio	0.53	1.00	0.53	0.39	0.39	0.39
v/c Ratio	0.90	0.23	0.63	0.82	0.90	0.34
Control Delay	31.1	0.3	21.5	44.1	51.8	25.0
Queue Delay	13.9	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	0.3	21.5	44.1	51.8	25.0
LOS	D	A	C	D	D	C
Approach Delay	39.1		21.5		44.5	
Approach LOS	D		C		D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 35.3 Intersection LOS: D
Intersection Capacity Utilization 121.4% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2262	346	0	1577	0	0	0	0	1045	0	213
Future Volume (veh/h)	0	2262	346	0	1577	0	0	0	0	1045	0	213
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2432	0	0	1696	0				1195	0	153
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2710		0	2710	0				1445	0	618
Arrive On Green	0.00	0.53	0.00	0.00	0.71	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2432	0	0	1696	0				1195	0	153
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	51.2	0.0	0.0	21.0	0.0				34.8	0.0	7.8
Cycle Q Clear(g_c), s	0.0	51.2	0.0	0.0	21.0	0.0				34.8	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2710		0	2710	0				1445	0	618
V/C Ratio(X)	0.00	0.90		0.00	0.63	0.00				0.83	0.00	0.25
Avail Cap(c_a), veh/h	0	2710		0	2710	0				1445	0	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.2	0.0	0.0	11.4	0.0				33.0	0.0	24.7
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.0	1.1	0.0				5.6	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	19.8	0.0	0.0	5.7	0.0				16.5	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.7	0.0	0.0	12.5	0.0				38.5	0.0	25.7
LnGrp LOS	A	C		A	B	A				D	A	C
Approach Vol, veh/h		2432			1696						1348	
Approach Delay, s/veh		29.7			12.5						37.1	
Approach LOS		C			B						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		69.0		51.0		69.0						
Change Period (Y+Rc), s		5.3		* 4.2		5.3						
Max Green Setting (Gmax), s		63.7		* 47		63.7						
Max Q Clear Time (g_c+I1), s		53.2		36.8		23.0						
Green Ext Time (p_c), s		8.3		5.1		11.3						

Intersection Summary			
HCM 6th Ctrl Delay			26.2
HCM 6th LOS			C

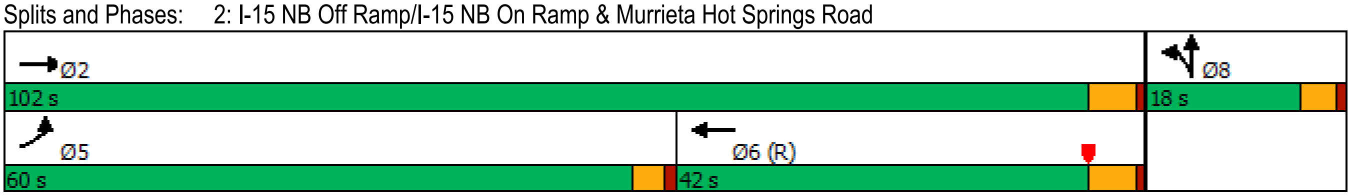
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	730	2601	1337	1442	285	0	321
Future Volume (vph)	730	2601	1337	1442	285	0	321
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	60.0	102.0	42.0		18.0	18.0	
Total Split (%)	50.0%	85.0%	35.0%		15.0%	15.0%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	54.3	97.3	39.1	120.0	13.2	13.2	120.0
Actuated g/C Ratio	0.45	0.81	0.33	1.00	0.11	0.11	1.00
v/c Ratio	0.95	0.66	0.84	0.95	0.80	0.81	0.21
Control Delay	53.6	3.6	36.4	31.7	82.5	83.2	0.3
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	3.7	36.4	31.7	82.5	83.2	0.3
LOS	D	A	D	C	F	F	A
Approach Delay		14.6	33.9			39.2	
Approach LOS		B	C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 24.8	Intersection LOS: C
Intersection Capacity Utilization 85.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	730	2601	0	0	1337	1442	285	0	321	0	0	0
Future Volume (veh/h)	730	2601	0	0	1337	1442	285	0	321	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	760	2709	0	0	1393	0	297	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	790	4115	0	0	1681		359	0				
Arrive On Green	0.44	0.81	0.00	0.00	0.55	0.00	0.10	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	760	2709	0	0	1393	0	297	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	49.7	26.3	0.0	0.0	27.1	0.0	9.8	0.0	0.0			
Cycle Q Clear(g_c), s	49.7	26.3	0.0	0.0	27.1	0.0	9.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	790	4115	0	0	1681		359	0				
V/C Ratio(X)	0.96	0.66	0.00	0.00	0.83		0.83	0.00				
Avail Cap(c_a), veh/h	831	4115	0	0	1681		410	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.44	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	32.4	4.8	0.0	0.0	24.2	0.0	52.9	0.0	0.0			
Incr Delay (d2), s/veh	22.0	0.8	0.0	0.0	2.2	0.0	11.9	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	24.7	6.0	0.0	0.0	8.1	0.0	5.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.4	5.7	0.0	0.0	26.4	0.0	64.8	0.0	0.0			
LnGrp LOS	D	A	A	A	C		E	A				
Approach Vol, veh/h		3469			1393			297				
Approach Delay, s/veh		16.3			26.4			64.8				
Approach LOS		B			C			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		102.0			57.2	44.8		16.3				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		96.7			56.0	36.7		13.8				
Max Q Clear Time (g_c+I1), s		28.3			51.7	29.1		11.8				
Green Ext Time (p_c), s		33.0			1.5	4.0		0.3				

Intersection Summary			
HCM 6th Ctrl Delay			21.9
HCM 6th LOS			C

Notes

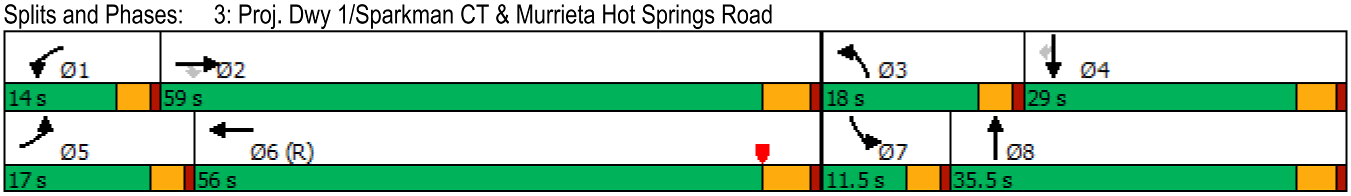
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	272	2316	200	200	2198	281	10	23	10	233
Future Volume (vph)	272	2316	200	200	2198	281	10	23	10	233
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	17.0	59.0	59.0	14.0	56.0	18.0	35.5	11.5	29.0	29.0
Total Split (%)	14.2%	49.2%	49.2%	11.7%	46.7%	15.0%	29.6%	9.6%	24.2%	24.2%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	12.6	53.9	53.9	9.8	51.1	13.4	35.7	7.1	25.0	25.0
Actuated g/C Ratio	0.10	0.45	0.45	0.08	0.43	0.11	0.30	0.06	0.21	0.21
v/c Ratio	0.77	0.82	0.25	0.73	0.86	0.75	0.11	0.11	0.01	0.72
Control Delay	62.2	27.6	3.5	65.8	20.4	64.7	8.6	54.8	38.4	58.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.2	27.6	3.5	65.8	20.4	64.7	8.6	54.8	38.4	58.2
LOS	E	C	A	E	C	E	A	D	D	E
Approach Delay		29.3			24.0		49.6		57.2	
Approach LOS		C			C		D		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 29.7	Intersection LOS: C
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	2316	200	200	2198	77	281	10	93	23	10	233
Future Volume (veh/h)	272	2316	200	200	2198	77	281	10	93	23	10	233
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	278	2363	204	204	2243	79	287	10	95	23	10	238
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	2879	709	256	2731	96	346	484	431	108	723	322
Arrive On Green	0.10	0.45	0.45	0.15	0.85	0.85	0.10	0.27	0.27	0.03	0.20	0.20
Sat Flow, veh/h	3456	6434	1585	3456	6429	226	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	278	2363	204	204	1683	639	287	10	95	23	10	238
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1830	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.5	38.5	9.8	6.8	20.8	20.9	9.8	0.5	5.6	0.8	0.3	16.9
Cycle Q Clear(g_c), s	9.5	38.5	9.8	6.8	20.8	20.9	9.8	0.5	5.6	0.8	0.3	16.9
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	2879	709	256	2050	777	346	484	431	108	723	322
V/C Ratio(X)	0.83	0.82	0.29	0.80	0.82	0.82	0.83	0.02	0.22	0.21	0.01	0.74
Avail Cap(c_a), veh/h	374	2879	709	288	2050	777	403	484	431	216	723	322
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	28.9	21.0	50.2	6.8	6.8	53.0	32.0	33.8	56.7	38.2	44.8
Incr Delay (d2), s/veh	10.5	2.1	0.8	13.0	3.8	9.5	12.0	0.1	1.2	1.0	0.0	14.1
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	4.5	14.3	3.8	3.2	3.2	4.9	4.8	0.2	2.3	0.4	0.1	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.7	31.1	21.8	63.2	10.6	16.3	65.0	32.0	35.0	57.7	38.2	58.9
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	D	E
Approach Vol, veh/h		2845			2526			392			271	
Approach Delay, s/veh		33.6			16.3			56.9			58.0	
Approach LOS		C			B			E			E	

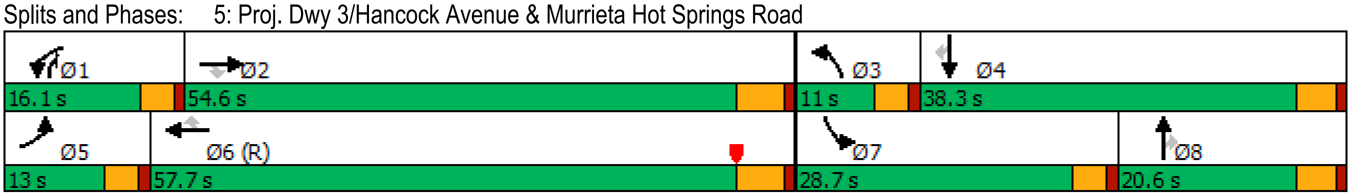
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	59.0	16.0	29.0	15.6	56.3	7.7	37.3
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	10.0	53.7	14.0	24.4	13.0	50.7	7.5	30.9
Max Q Clear Time (g_c+I1), s	8.8	40.5	11.8	18.9	11.5	22.9	2.8	7.6
Green Ext Time (p_c), s	0.1	11.4	0.2	0.4	0.1	19.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	29.0
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1923	140	242	2145	664	131	112	225	646	120	338
Future Volume (vph)	219	1923	140	242	2145	664	131	112	225	646	120	338
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	13.0	54.6	54.6	16.1	57.7	57.7	11.0	20.6	16.1	28.7	38.3	38.3
Total Split (%)	10.8%	45.5%	45.5%	13.4%	48.1%	48.1%	9.2%	17.2%	13.4%	23.9%	31.9%	31.9%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	9.0	49.6	49.6	11.8	52.4	52.4	7.0	16.0	32.4	24.7	33.7	33.7
Actuated g/C Ratio	0.08	0.41	0.41	0.10	0.44	0.44	0.06	0.13	0.27	0.21	0.28	0.28
v/c Ratio	0.99	0.82	0.21	0.78	1.09	0.78	0.71	0.49	0.30	1.07	0.25	0.68
Control Delay	118.5	14.1	1.5	70.1	69.5	6.5	75.1	55.7	22.0	99.3	35.0	28.8
Queue Delay	0.0	0.0	0.0	0.0	5.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.5	14.1	1.5	70.1	75.4	7.5	75.1	55.7	22.0	99.3	35.0	28.8
LOS	F	B	A	E	E	A	E	E	C	F	C	C
Approach Delay		23.3			60.2			44.9			70.7	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 48.6	Intersection LOS: D
Intersection Capacity Utilization 84.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	1923	140	242	2145	664	131	112	225	646	120	338
Future Volume (veh/h)	219	1923	140	242	2145	664	131	112	225	646	120	338
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	238	2090	152	263	2332	722	142	122	245	702	130	367
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	2706	667	315	2230	692	200	248	625	711	525	445
Arrive On Green	0.08	0.42	0.42	0.18	0.87	0.87	0.06	0.13	0.13	0.21	0.28	0.28
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3456	1870	1585
Grp Volume(v), veh/h	238	2090	152	263	2332	722	142	122	245	702	130	367
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1728	1870	1585
Q Serve(g_s), s	8.2	33.5	7.4	8.8	52.4	52.4	4.8	7.3	9.0	24.3	6.4	26.0
Cycle Q Clear(g_c), s	8.2	33.5	7.4	8.8	52.4	52.4	4.8	7.3	9.0	24.3	6.4	26.0
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	259	2706	667	315	2230	692	200	248	625	711	525	445
V/C Ratio(X)	0.92	0.77	0.23	0.84	1.05	1.04	0.71	0.49	0.39	0.99	0.25	0.82
Avail Cap(c_a), veh/h	259	2706	667	348	2230	692	202	249	626	711	525	445
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	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	55.1	29.8	22.3	48.2	7.6	7.6	55.5	48.3	39.6	47.5	33.4	40.4
Incr Delay (d2), s/veh	34.9	1.4	0.2	14.9	32.4	46.0	11.0	1.5	0.4	30.7	1.1	15.8
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	4.7	12.5	2.8	4.0	9.5	11.6	2.4	3.5	3.1	13.3	3.1	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.0	31.3	22.5	63.1	40.0	53.6	66.5	49.8	40.0	78.2	34.5	56.2
LnGrp LOS	F	C	C	E	F	F	E	D	D	E	C	E
Approach Vol, veh/h		2480			3317			509			1199	
Approach Delay, s/veh		36.4			44.8			49.7			66.7	
Approach LOS		D			D			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	55.8	10.9	38.3	13.0	57.7	28.7	20.5				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	12.1	49.3	7.0	33.7	9.0	52.4	24.7	16.0				
Max Q Clear Time (g_c+I1), s	10.8	35.5	6.8	28.0	10.2	54.4	26.3	11.0				
Green Ext Time (p_c), s	0.1	9.4	0.0	1.2	0.0	0.0	0.0	0.8				
Intersection Summary												
HCM 6th Ctrl Delay			45.8									
HCM 6th LOS			D									

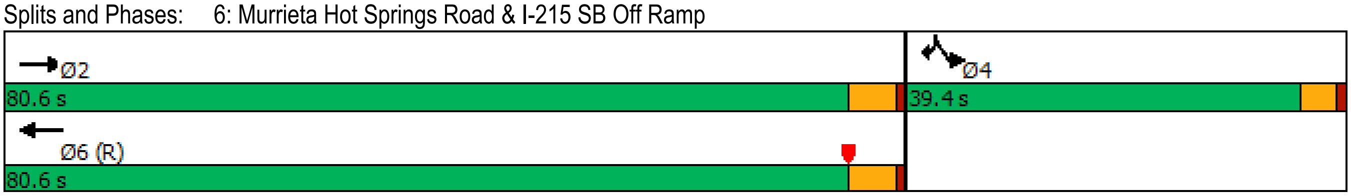
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2670	2526	699	473
Future Volume (vph)	2670	2526	699	473
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	80.6	80.6	39.4	39.4
Total Split (%)	67.2%	67.2%	32.8%	32.8%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	76.9	76.9	33.6	33.8
Actuated g/C Ratio	0.64	0.64	0.28	0.28
v/c Ratio	0.90	0.85	0.82	0.89
Control Delay	18.7	14.7	47.5	64.5
Queue Delay	0.0	17.1	0.0	0.0
Total Delay	18.7	31.8	47.5	64.5
LOS	B	C	D	E
Approach Delay	18.7	31.8	52.8	
Approach LOS	B	C	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 30.2	Intersection LOS: C
Intersection Capacity Utilization 139.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2670	2526	0	699	473
Future Volume (veh/h)	0	2670	2526	0	699	473
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2840	2687	0	826	416
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3204	3204	0	1034	463
Arrive On Green	0.00	0.63	1.00	0.00	0.28	0.28
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2840	2687	0	826	416
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	56.0	0.0	0.0	24.8	29.1
Cycle Q Clear(g_c), s	0.0	56.0	0.0	0.0	24.8	29.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3204	3204	0	1034	463
V/C Ratio(X)	0.00	0.89	0.84	0.00	0.80	0.90
Avail Cap(c_a), veh/h	0	3204	3204	0	1087	486
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	18.8	0.0	0.0	40.1	41.5
Incr Delay (d2), s/veh	0.0	4.1	2.8	0.0	4.1	18.9
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	20.1	0.8	0.0	11.8	14.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	22.8	2.8	0.0	44.3	60.5
LnGrp LOS	A	C	A	A	D	E
Approach Vol, veh/h		2840	2687		1242	
Approach Delay, s/veh		22.8	2.8		49.7	
Approach LOS		C	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		80.6		37.7		80.6
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		75.3		* 35		75.3
Max Q Clear Time (g_c+I1), s		58.0		31.1		2.0
Green Ext Time (p_c), s		14.2		2.3		33.3

Intersection Summary		
HCM 6th Ctrl Delay		19.8
HCM 6th LOS		B

Notes

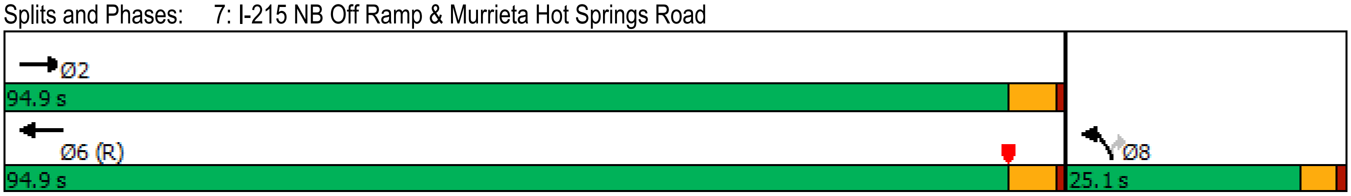
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2698	2555	237	318
Future Volume (vph)	2698	2555	237	318
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	94.9	94.9	25.1	25.1
Total Split (%)	79.1%	79.1%	20.9%	20.9%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	89.6	89.6	20.9	20.9
Actuated g/C Ratio	0.75	0.75	0.17	0.17
v/c Ratio	0.79	0.75	0.39	0.65
Control Delay	8.4	10.4	45.9	51.5
Queue Delay	0.2	4.8	0.0	0.0
Total Delay	8.6	15.1	45.9	51.5
LOS	A	B	D	D
Approach Delay	8.6	15.1	49.1	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 15.4	Intersection LOS: B
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2698	0	0	2555	237	318
Future Volume (veh/h)	2698	0	0	2555	237	318
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2901	0	0	2747	255	342
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3813	0	0	3813	626	505
Arrive On Green	0.75	0.00	0.00	0.75	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2901	0	0	2747	255	342
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	40.0	0.0	0.0	35.4	7.6	13.2
Cycle Q Clear(g_c), s	40.0	0.0	0.0	35.4	7.6	13.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3813	0	0	3813	626	505
V/C Ratio(X)	0.76	0.00	0.00	0.72	0.41	0.68
Avail Cap(c_a), veh/h	3813	0	0	3813	626	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	0.0	0.0	8.3	44.0	46.4
Incr Delay (d2), s/veh	1.5	0.0	0.0	1.2	2.0	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	0.0	0.0	10.1	3.6	5.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.4	0.0	0.0	9.5	46.0	53.5
LnGrp LOS	B	A	A	A	D	D
Approach Vol, veh/h	2901			2747	597	
Approach Delay, s/veh	10.4			9.5	50.3	
Approach LOS	B			A	D	

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		94.9				94.9	25.1
Change Period (Y+Rc), s		5.3				5.3	4.2
Max Green Setting (Gmax), s		89.6				89.6	20.9
Max Q Clear Time (g_c+I1), s		42.0				37.4	15.2
Green Ext Time (p_c), s		31.2				29.9	1.5

Intersection Summary			
HCM 6th Ctrl Delay			13.8
HCM 6th LOS			B

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	294	240	153	53	63	83	494	580	440
Average Queue (ft)	224	154	50	51	58	46	328	368	235
95th Queue (ft)	306	249	106	53	61	67	465	510	404
Link Distance (ft)				48	48	48	566	566	
Upstream Blk Time (%)				30	28	10		0	
Queuing Penalty (veh)				139	129	48		0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								1	
Queuing Penalty (veh)								1	

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	R	L	LT	R
Maximum Queue (ft)	231	137	162	157	109	164	143	67	173	199	181
Average Queue (ft)	123	70	33	16	46	64	69	2	117	120	43
95th Queue (ft)	189	121	93	68	102	130	135	22	170	185	155
Link Distance (ft)		473	473	473	1082	1082	1082	1082	1236	1236	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500										585
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	135	180	228	238	242	207	26	110	121	119	172	235
Average Queue (ft)	60	86	158	169	159	119	3	48	66	29	82	131
95th Queue (ft)	118	151	229	229	226	195	16	95	109	74	150	207
Link Distance (ft)			1082	1082	1082	1082				271	271	271
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	271	157	234	27	71	6	55	17	271	259
Average Queue (ft)	181	91	114	8	30	0	10	5	9	164
95th Queue (ft)	253	142	191	26	63	2	32	18	89	245
Link Distance (ft)	271	275	275	275	275			269	269	
Upstream Blk Time (%)	0								0	0
Queuing Penalty (veh)	2								0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)										2
Queuing Penalty (veh)										0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	WB	NB
Directions Served	T	R
Maximum Queue (ft)	31	45
Average Queue (ft)	1	27
95th Queue (ft)	10	43
Link Distance (ft)	307	288
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	179	181	140	203	218	91	50	176	167	232	261	273
Average Queue (ft)	119	129	75	110	128	16	18	61	82	121	178	234
95th Queue (ft)	163	173	128	174	200	54	38	139	133	226	264	275
Link Distance (ft)			307	307	307	307				240	240	240
Upstream Blk Time (%)										0	0	4
Queuing Penalty (veh)										1	3	27
Storage Bay Dist (ft)	245	245					215	300	300			
Storage Blk Time (%)										0		
Queuing Penalty (veh)										0		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	T	R
Maximum Queue (ft)	166	134	120	134	263	24	162	175	323	175
Average Queue (ft)	55	55	49	76	99	4	159	174	282	58
95th Queue (ft)	108	106	92	131	207	19	171	176	305	123
Link Distance (ft)	240	311	311	311	311	311				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							6	64	1	1
Queuing Penalty (veh)							19	211	8	9

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	75	117	98	138	160	139	842	861	495
Average Queue (ft)	72	76	77	105	116	121	772	820	433
95th Queue (ft)	75	92	90	143	156	131	935	903	643
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	27	33	37	9	14	37	16	30	
Queuing Penalty (veh)	182	223	253	63	95	254	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								63	0
Queuing Penalty (veh)								188	2

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	160	162	166	52	71	77	149	177	200	144
Average Queue (ft)	114	114	124	26	26	46	65	102	118	61
95th Queue (ft)	169	174	168	44	54	68	116	159	170	140
Link Distance (ft)	144	144	144	15	15	15	1042	1042		
Upstream Blk Time (%)	3	2	3	15	12	33				
Queuing Penalty (veh)	20	17	20	110	87	242				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 2352

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	331	314	294	74	85	65	582	582	505
Average Queue (ft)	297	253	210	52	56	41	431	387	259
95th Queue (ft)	311	331	328	61	78	68	602	539	473
Link Distance (ft)				48	48	48	566	566	
Upstream Blk Time (%)				22	18	10	2	1	
Queuing Penalty (veh)				114	93	52	0	0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								2	0
Queuing Penalty (veh)								2	0

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	459	530	473	223	160	152	180	171	446	526
Average Queue (ft)	386	211	128	102	57	73	85	120	116	329
95th Queue (ft)	468	507	344	198	120	141	147	165	230	546
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)	0	1	0							
Queuing Penalty (veh)	0	6	1							
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)	0	1								
Queuing Penalty (veh)	0	4								

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	121	334	342	294	339	318	27	106	84	84	250	305
Average Queue (ft)	70	98	186	215	245	180	2	40	56	30	97	176
95th Queue (ft)	109	179	278	295	335	276	12	84	83	67	188	275
Link Distance (ft)			1082	1082	1082	1082				271	271	271
Upstream Blk Time (%)												1
Queuing Penalty (veh)												4
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)			0			0						
Queuing Penalty (veh)			0			0						

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	284	225	290	49	89	6	55	39	284	260
Average Queue (ft)	222	103	212	9	31	0	13	7	46	180
95th Queue (ft)	279	186	330	35	71	2	38	25	215	268
Link Distance (ft)	271	275	275	275	275			269	269	
Upstream Blk Time (%)	3		24						2	1
Queuing Penalty (veh)	16		0						0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									1	4
Queuing Penalty (veh)									3	0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	WB	WB	NB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	40	136	31	118	83
Average Queue (ft)	1	11	1	6	38
95th Queue (ft)	13	61	10	43	66
Link Distance (ft)	271	271	307	307	288
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	186	197	227	303	309	319	66	121	239	247	280	287
Average Queue (ft)	93	103	158	196	218	65	28	49	72	148	198	253
95th Queue (ft)	141	151	216	273	300	202	52	100	137	241	285	281
Link Distance (ft)			307	307	307	307				240	240	240
Upstream Blk Time (%)				0	1	0			0	0	2	12
Queuing Penalty (veh)				0	7	1			0	1	17	88
Storage Bay Dist (ft)	245	245					215	300	300			
Storage Blk Time (%)			0			3			0	0		
Queuing Penalty (veh)			0			4			0	0		

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	T	R
Maximum Queue (ft)	164	92	115	136	320	48	162	175	275	175
Average Queue (ft)	64	54	68	76	157	14	159	174	275	97
95th Queue (ft)	113	84	114	123	275	41	177	175	275	176
Link Distance (ft)	240	311	311	311	311	311				
Upstream Blk Time (%)					1					
Queuing Penalty (veh)					0					
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							5	62	0	4
Queuing Penalty (veh)							25	282	1	32

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	76	112	121	120	147	145	861	879	495
Average Queue (ft)	73	77	90	91	93	124	842	846	395
95th Queue (ft)	75	93	118	132	147	133	848	861	675
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	26	29	34	4	7	37	50	88	
Queuing Penalty (veh)	233	259	299	32	57	313	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								76	0
Queuing Penalty (veh)								179	1

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	181	164	187	52	52	77	123	173	201	186
Average Queue (ft)	151	148	140	31	29	49	56	101	146	97
95th Queue (ft)	181	170	183	44	50	72	104	158	201	181
Link Distance (ft)	144	144	144	15	15	15	1042	1042		
Upstream Blk Time (%)	11	5	5	18	15	28				
Queuing Penalty (veh)	95	49	42	151	130	243				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

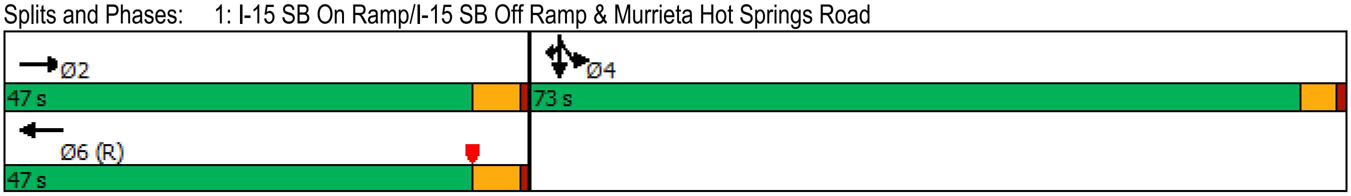
Zone Summary

Zone wide Queuing Penalty: 2838

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1124	325	1434	1508	0	352
Future Volume (vph)	1124	325	1434	1508	0	352
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	47.0		47.0	73.0	73.0	73.0
Total Split (%)	39.2%		39.2%	60.8%	60.8%	60.8%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	41.7	120.0	41.7	68.8	68.8	68.8
Actuated g/C Ratio	0.35	1.00	0.35	0.57	0.57	0.57
v/c Ratio	0.68	0.22	0.86	0.80	0.89	0.39
Control Delay	35.8	0.3	37.6	27.4	34.9	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	0.3	37.6	27.4	34.9	14.7
LOS	D	A	D	C	C	B
Approach Delay	27.8		37.6		28.3	
Approach LOS	C		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 31.0	Intersection LOS: C
Intersection Capacity Utilization 113.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1124	325	0	1434	0	0	0	0	1508	0	352
Future Volume (veh/h)	0	1124	325	0	1434	0	0	0	0	1508	0	352
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	1196	0	0	1526	0				1720	0	249
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	1774		0	1774	0				2124	0	909
Arrive On Green	0.00	0.35	0.00	0.00	0.23	0.00				0.57	0.00	0.57
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	1196	0	0	1526	0				1720	0	249
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	24.0	0.0	0.0	34.4	0.0				44.4	0.0	9.5
Cycle Q Clear(g_c), s	0.0	24.0	0.0	0.0	34.4	0.0				44.4	0.0	9.5
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1774		0	1774	0				2124	0	909
V/C Ratio(X)	0.00	0.67		0.00	0.86	0.00				0.81	0.00	0.27
Avail Cap(c_a), veh/h	0	1774		0	1774	0				2124	0	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	33.4	0.0	0.0	43.2	0.0				20.4	0.0	13.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	5.7	0.0				3.5	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	9.6	0.0	0.0	15.7	0.0				19.2	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.4	0.0	0.0	48.9	0.0				23.9	0.0	13.7
LnGrp LOS	A	C		A	D	A				C	A	B
Approach Vol, veh/h		1196			1526						1969	
Approach Delay, s/veh		34.4			48.9						22.6	
Approach LOS		C			D						C	

Timer - Assigned Phs		2		4		6			
Phs Duration (G+Y+Rc), s		47.0		73.0		47.0			
Change Period (Y+Rc), s		5.3		* 4.2		5.3			
Max Green Setting (Gmax), s		41.7		* 69		41.7			
Max Q Clear Time (g_c+I1), s		26.0		46.4		36.4			
Green Ext Time (p_c), s		5.3		12.7		3.3			

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

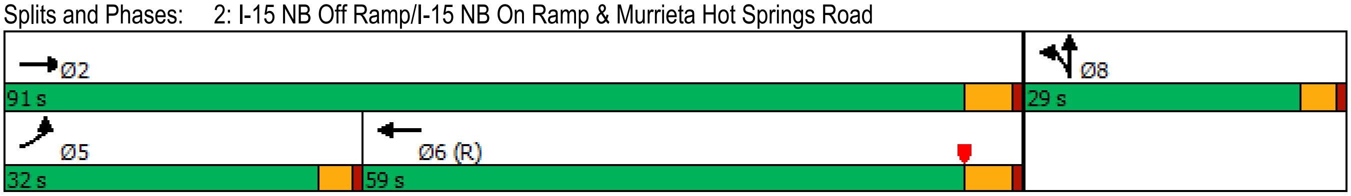
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	217	2402	1451	1105	344	0	417
Future Volume (vph)	217	2402	1451	1105	344	0	417
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	32.0	91.0	59.0		29.0	29.0	
Total Split (%)	26.7%	75.8%	49.2%		24.2%	24.2%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	21.1	92.0	66.9	120.0	18.5	18.5	120.0
Actuated g/C Ratio	0.18	0.77	0.56	1.00	0.15	0.15	1.00
v/c Ratio	0.76	0.67	0.56	0.76	0.72	0.72	0.29
Control Delay	57.8	4.5	19.7	13.7	63.8	63.8	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.8	4.5	19.7	13.7	63.8	63.8	0.5
LOS	E	A	B	B	E	E	A
Approach Delay		8.9	17.1			29.1	
Approach LOS		A	B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	2402	0	0	1451	1105	344	0	417	0	0	0
Future Volume (veh/h)	217	2402	0	0	1451	1105	344	0	417	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	236	2611	0	0	1577	0	374	0	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	269	3647	0	0	2705		461	0				
Arrive On Green	0.15	0.71	0.00	0.00	0.53	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	236	2611	0	0	1577	0	374	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	15.6	35.9	0.0	0.0	25.2	0.0	12.3	0.0	0.0			
Cycle Q Clear(g_c), s	15.6	35.9	0.0	0.0	25.2	0.0	12.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	269	3647	0	0	2705		461	0				
V/C Ratio(X)	0.88	0.72	0.00	0.00	0.58		0.81	0.00				
Avail Cap(c_a), veh/h	416	3647	0	0	2705		736	0				
HCM Platoon Ratio	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	0.00	0.00	0.55	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	49.8	10.0	0.0	0.0	19.2	0.0	50.8	0.0	0.0			
Incr Delay (d2), s/veh	12.5	1.2	0.0	0.0	0.5	0.0	3.7	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	7.7	11.0	0.0	0.0	9.3	0.0	5.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	11.3	0.0	0.0	19.7	0.0	54.5	0.0	0.0			
LnGrp LOS	E	B	A	A	B		D	A				
Approach Vol, veh/h		2847			1577			374				
Approach Delay, s/veh		15.5			19.7			54.5				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		91.0			22.1	68.9		19.7				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		85.7			28.0	53.7		24.8				
Max Q Clear Time (g_c+I1), s		37.9			17.6	27.2		14.3				
Green Ext Time (p_c), s		26.0			0.6	9.0		1.3				

Intersection Summary			
HCM 6th Ctrl Delay			19.9
HCM 6th LOS			B

Notes

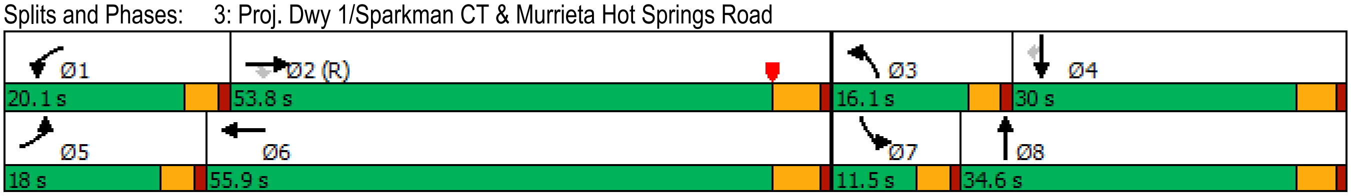
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	287	2137	339	339	1923	242	10	27	10	244
Future Volume (vph)	287	2137	339	339	1923	242	10	27	10	244
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	18.0	53.8	53.8	20.1	55.9	16.1	34.6	11.5	30.0	30.0
Total Split (%)	15.0%	44.8%	44.8%	16.8%	46.6%	13.4%	28.8%	9.6%	25.0%	25.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	C-Max	None	Max	None	Max	None	Max	Max
Act Effct Green (s)	13.6	49.0	49.0	15.6	51.0	11.8	34.8	7.1	25.7	25.7
Actuated g/C Ratio	0.11	0.41	0.41	0.13	0.42	0.10	0.29	0.06	0.21	0.21
v/c Ratio	0.78	0.86	0.43	0.82	0.77	0.78	0.10	0.14	0.01	0.76
Control Delay	65.8	34.3	4.7	74.2	17.8	69.0	9.4	55.1	37.6	60.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.8	34.3	4.7	74.2	17.8	69.0	9.4	55.1	37.6	60.0
LOS	E	C	A	E	B	E	A	E	D	E
Approach Delay		33.8			26.2		52.7		58.7	
Approach LOS		C			C		D		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	2137	339	339	1923	54	242	10	81	27	10	244
Future Volume (veh/h)	287	2137	339	339	1923	54	242	10	81	27	10	244
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	302	2249	368	368	2024	57	263	11	88	28	11	257
Peak Hour Factor	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.92	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	2738	675	419	2870	81	319	477	426	122	752	336
Arrive On Green	0.10	0.43	0.43	0.24	0.89	0.89	0.09	0.27	0.27	0.04	0.21	0.21
Sat Flow, veh/h	3456	6434	1585	3456	6481	182	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	302	2249	368	368	1507	574	263	11	88	28	11	257
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1838	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	10.3	37.0	20.8	12.3	11.4	11.4	9.0	0.5	5.2	0.9	0.3	18.3
Cycle Q Clear(g_c), s	10.3	37.0	20.8	12.3	11.4	11.4	9.0	0.5	5.2	0.9	0.3	18.3
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	2738	675	419	2137	814	319	477	426	122	752	336
V/C Ratio(X)	0.84	0.82	0.55	0.88	0.71	0.71	0.82	0.02	0.21	0.23	0.01	0.77
Avail Cap(c_a), veh/h	403	2738	675	464	2137	814	348	477	426	216	752	336
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	30.4	25.8	44.6	4.5	4.5	53.5	32.3	34.0	56.3	37.4	44.5
Incr Delay (d2), s/veh	10.6	2.2	2.4	16.2	2.0	5.1	13.9	0.1	1.1	0.9	0.0	15.3
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	13.9	8.2	5.4	2.0	3.0	4.5	0.2	2.1	0.4	0.1	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	32.7	28.2	60.8	6.5	9.6	67.4	32.4	35.1	57.2	37.4	59.8
LnGrp LOS	E	C	C	E	A	A	E	C	D	E	D	E
Approach Vol, veh/h		2919			2449			362			296	
Approach Delay, s/veh		35.3			15.3			58.5			58.8	
Approach LOS		D			B			E			E	

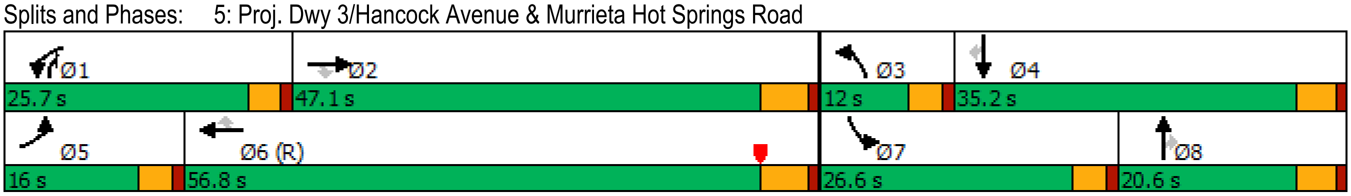
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	56.4	15.1	30.0	16.5	58.4	8.2	36.8
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	16.1	48.5	12.1	25.4	14.0	50.6	7.5	30.0
Max Q Clear Time (g_c+I1), s	14.3	39.0	11.0	20.3	12.3	13.4	2.9	7.2
Green Ext Time (p_c), s	0.3	8.4	0.1	0.4	0.2	19.8	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	29.7
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	1571	203	476	2047	607	109	93	204	570	169	223
Future Volume (vph)	306	1571	203	476	2047	607	109	93	204	570	169	223
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	10.0
Minimum Split (s)	11.0	15.3	15.3	11.5	38.3	38.3	11.0	20.6	11.5	14.9	14.9	14.9
Total Split (s)	16.0	47.1	47.1	25.7	56.8	56.8	12.0	20.6	25.7	26.6	35.2	35.2
Total Split (%)	13.3%	39.3%	39.3%	21.4%	47.3%	47.3%	10.0%	17.2%	21.4%	22.2%	29.3%	29.3%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	4.3	3.0	3.6	3.0	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	5.3	4.0	4.6	4.0	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Max	C-Max	None	None	None	Max	Max	Max
Act Effct Green (s)	12.0	42.6	42.6	20.9	51.5	51.5	7.8	16.0	41.5	22.6	30.8	30.8
Actuated g/C Ratio	0.10	0.36	0.36	0.17	0.43	0.43	0.06	0.13	0.35	0.19	0.26	0.26
v/c Ratio	1.02	0.76	0.32	0.86	1.03	0.72	0.53	0.41	0.22	1.00	0.38	0.43
Control Delay	112.5	16.8	2.5	62.2	47.4	4.0	63.3	53.2	16.0	86.6	39.8	9.9
Queue Delay	0.0	0.0	0.0	0.0	27.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.5	16.8	2.5	62.2	74.7	4.5	63.3	53.2	16.0	86.6	39.8	9.9
LOS	F	B	A	E	E	A	E	D	B	F	D	A
Approach Delay		29.5			59.2			37.2			60.5	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 48.6	Intersection LOS: D
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1571	203	476	2047	607	109	93	204	570	169	223
Future Volume (veh/h)	306	1571	203	476	2047	607	109	93	204	570	169	223
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	326	1671	221	517	2178	646	118	101	222	606	184	237
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	2347	578	568	2191	680	198	232	804	651	477	404
Arrive On Green	0.20	0.73	0.73	0.33	0.86	0.86	0.06	0.12	0.12	0.19	0.26	0.26
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3456	1870	1585
Grp Volume(v), veh/h	326	1671	221	517	2178	646	118	101	222	606	184	237
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1728	1870	1585
Q Serve(g_s), s	11.2	17.5	6.3	17.2	49.4	37.5	4.0	6.0	7.4	20.7	9.8	15.7
Cycle Q Clear(g_c), s	11.2	17.5	6.3	17.2	49.4	37.5	4.0	6.0	7.4	20.7	9.8	15.7
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	346	2347	578	568	2191	680	198	232	804	651	477	404
V/C Ratio(X)	0.94	0.71	0.38	0.91	0.99	0.95	0.60	0.44	0.28	0.93	0.39	0.59
Avail Cap(c_a), veh/h	346	2347	578	625	2191	680	230	249	830	651	477	404
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	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	47.7	12.7	11.2	39.4	8.3	7.5	55.2	48.7	33.0	47.9	36.9	39.2
Incr Delay (d2), s/veh	33.9	1.0	0.4	16.6	17.8	24.2	3.1	1.3	0.2	21.9	2.4	6.1
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	5.8	3.7	1.9	7.0	6.7	7.5	1.8	2.9	2.5	10.8	4.7	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.6	13.7	11.6	56.0	26.2	31.7	58.3	50.0	33.2	69.8	39.3	45.3
LnGrp LOS	F	B	B	E	C	C	E	D	C	E	D	D
Approach Vol, veh/h		2218			3341			441			1027	
Approach Delay, s/veh		23.5			31.9			43.8			58.7	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	49.1	10.9	35.2	16.0	56.8	26.6	19.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	21.7	41.8	8.0	30.6	12.0	51.5	22.6	16.0
Max Q Clear Time (g_c+I1), s	19.2	19.5	6.0	17.7	13.2	51.4	22.7	9.4
Green Ext Time (p_c), s	0.5	10.1	0.1	1.7	0.0	0.1	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	33.9
HCM 6th LOS	C

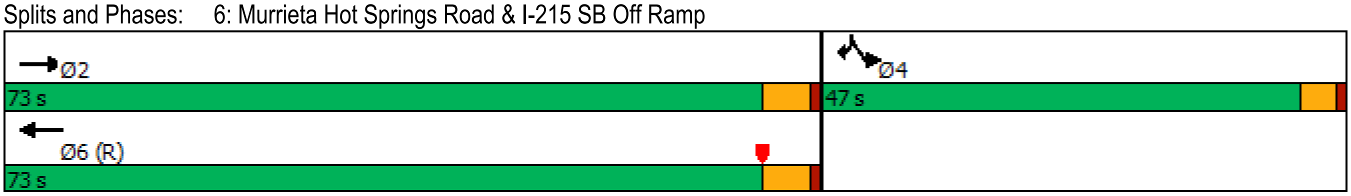
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	2175	2426	701	806
Future Volume (vph)	2175	2426	701	806
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	73.0	73.0	47.0	47.0
Total Split (%)	60.8%	60.8%	39.2%	39.2%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	68.5	68.5	42.0	42.2
Actuated g/C Ratio	0.57	0.57	0.35	0.35
v/c Ratio	0.82	0.92	0.86	0.94
Control Delay	20.0	25.2	43.9	63.5
Queue Delay	0.0	26.1	0.0	0.0
Total Delay	20.0	51.3	43.9	63.5
LOS	B	D	D	E
Approach Delay	20.0	51.3	50.1	
Approach LOS	B	D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 39.8	Intersection LOS: D
Intersection Capacity Utilization 140.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2175	2426	0	701	806
Future Volume (veh/h)	0	2175	2426	0	701	806
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	2314	2581	0	1047	534
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2881	2881	0	1291	577
Arrive On Green	0.00	0.56	1.00	0.00	0.35	0.35
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	2314	2581	0	1047	534
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	43.3	0.0	0.0	30.8	37.4
Cycle Q Clear(g_c), s	0.0	43.3	0.0	0.0	30.8	37.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2881	2881	0	1291	577
V/C Ratio(X)	0.00	0.80	0.90	0.00	0.81	0.93
Avail Cap(c_a), veh/h	0	2881	2881	0	1321	591
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.8	0.0	0.0	35.5	37.5
Incr Delay (d2), s/veh	0.0	2.5	4.9	0.0	3.9	20.4
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	16.2	1.3	0.0	14.4	18.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	23.3	4.9	0.0	39.4	57.9
LnGrp LOS	A	C	A	A	D	E
Approach Vol, veh/h		2314	2581		1581	
Approach Delay, s/veh		23.3	4.9		45.6	
Approach LOS		C	A		D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	73.0	46.0	73.0
Change Period (Y+Rc), s	5.3	* 4.2	5.3
Max Green Setting (Gmax), s	67.7	* 43	67.7
Max Q Clear Time (g_c+I1), s	45.3	39.4	2.0
Green Ext Time (p_c), s	14.0	2.4	29.1

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Notes

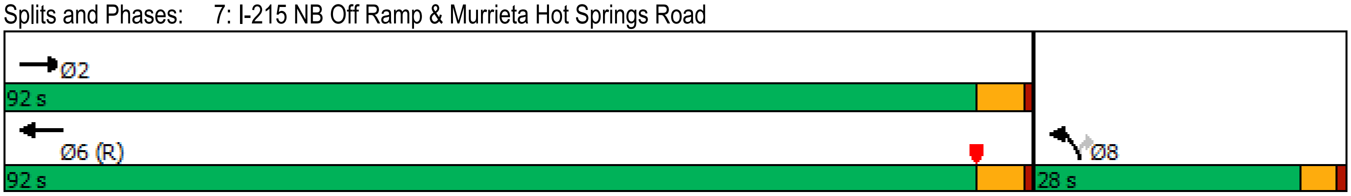
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2307	2398	414	224
Future Volume (vph)	2307	2398	414	224
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	92.0	92.0	28.0	28.0
Total Split (%)	76.7%	76.7%	23.3%	23.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	86.7	86.7	23.8	23.8
Actuated g/C Ratio	0.72	0.72	0.20	0.20
v/c Ratio	0.68	0.71	0.58	0.39
Control Delay	8.8	10.9	47.2	40.5
Queue Delay	0.1	3.0	0.0	0.0
Total Delay	8.8	13.9	47.2	40.5
LOS	A	B	D	D
Approach Delay	8.8	13.9	44.9	
Approach LOS	A	B	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.4	Intersection LOS: B
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2307	0	0	2398	414	224
Future Volume (veh/h)	2307	0	0	2398	414	224
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	2428	0	0	2524	436	236
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3689	0	0	3689	713	575
Arrive On Green	0.72	0.00	0.00	0.72	0.20	0.20
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	2428	0	0	2524	436	236
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	30.2	0.0	0.0	32.6	13.3	8.5
Cycle Q Clear(g_c), s	30.2	0.0	0.0	32.6	13.3	8.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3689	0	0	3689	713	575
V/C Ratio(X)	0.66	0.00	0.00	0.68	0.61	0.41
Avail Cap(c_a), veh/h	3689	0	0	3689	713	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	0.0	9.1	43.9	42.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.0	3.9	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	0.0	0.0	9.9	6.3	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.7	0.0	0.0	10.2	47.8	44.1
LnGrp LOS	A	A	A	B	D	D
Approach Vol, veh/h	2428			2524	672	
Approach Delay, s/veh	9.7			10.2	46.5	
Approach LOS	A			B	D	

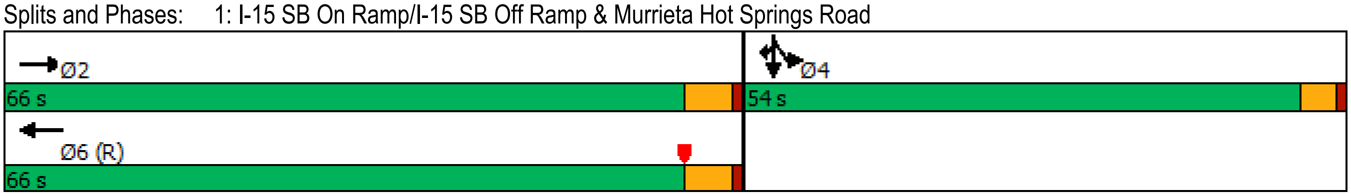
Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	92.0	92.0	28.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	86.7	86.7	23.8
Max Q Clear Time (g_c+I1), s	32.2	34.6	15.3
Green Ext Time (p_c), s	23.8	25.3	2.2

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2419	359	1698	1350	0	220
Future Volume (vph)	2419	359	1698	1350	0	220
Turn Type	NA	Free	NA	Split	NA	Prot
Protected Phases	2		6	4	4	4
Permitted Phases		Free				
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0
Minimum Split (s)	15.3		29.3	14.6	14.6	14.6
Total Split (s)	66.0		66.0	54.0	54.0	54.0
Total Split (%)	55.0%		55.0%	45.0%	45.0%	45.0%
Yellow Time (s)	4.3		4.3	3.2	3.2	3.2
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3		5.3	4.2	4.2	4.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	Max	Max	Max
Act Effct Green (s)	60.7	120.0	60.7	49.8	49.8	49.8
Actuated g/C Ratio	0.51	1.00	0.51	0.42	0.42	0.42
v/c Ratio	1.01	0.24	0.71	1.00	1.08	0.33
Control Delay	50.4	0.4	22.0	67.6	91.9	23.1
Queue Delay	34.8	0.0	0.0	0.0	0.0	0.0
Total Delay	85.2	0.4	22.0	67.6	91.9	23.1
LOS	F	A	C	E	F	C
Approach Delay	74.2		22.0		72.6	
Approach LOS	E		C		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 59.1	Intersection LOS: E
Intersection Capacity Utilization 138.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2419	359	0	1698	0	0	0	0	1350	0	220
Future Volume (veh/h)	0	2419	359	0	1698	0	0	0	0	1350	0	220
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1945	1870	1870
Adj Flow Rate, veh/h	0	2601	0	0	1826	0				1526	0	158
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	2583		0	2583	0				1538	0	658
Arrive On Green	0.00	0.51	0.00	0.00	0.67	0.00				0.41	0.00	0.41
Sat Flow, veh/h	0	5274	1585	0	5443	0				3705	0	1585
Grp Volume(v), veh/h	0	2601	0	0	1826	0				1526	0	158
Grp Sat Flow(s),veh/h/ln	0	1702	1585	0	1702	0				1853	0	1585
Q Serve(g_s), s	0.0	60.7	0.0	0.0	26.8	0.0				49.2	0.0	7.8
Cycle Q Clear(g_c), s	0.0	60.7	0.0	0.0	26.8	0.0				49.2	0.0	7.8
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2583		0	2583	0				1538	0	658
V/C Ratio(X)	0.00	1.01		0.00	0.71	0.00				0.99	0.00	0.24
Avail Cap(c_a), veh/h	0	2583		0	2583	0				1538	0	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	29.6	0.0	0.0	14.1	0.0				34.9	0.0	22.8
Incr Delay (d2), s/veh	0.0	19.4	0.0	0.0	1.7	0.0				21.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	27.1	0.0	0.0	7.6	0.0				26.1	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	49.1	0.0	0.0	15.7	0.0				56.1	0.0	23.7
LnGrp LOS	A	F		A	B	A				E	A	C
Approach Vol, veh/h		2601			1826						1684	
Approach Delay, s/veh		49.1			15.7						53.1	
Approach LOS		D			B						D	

Timer - Assigned Phs		2		4		6			
Phs Duration (G+Y+Rc), s		66.0		54.0		66.0			
Change Period (Y+Rc), s		5.3		* 4.2		5.3			
Max Green Setting (Gmax), s		60.7		* 50		60.7			
Max Q Clear Time (g_c+I1), s		62.7		51.2		28.8			
Green Ext Time (p_c), s		0.0		0.0		11.9			

Intersection Summary			
HCM 6th Ctrl Delay			40.2
HCM 6th LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

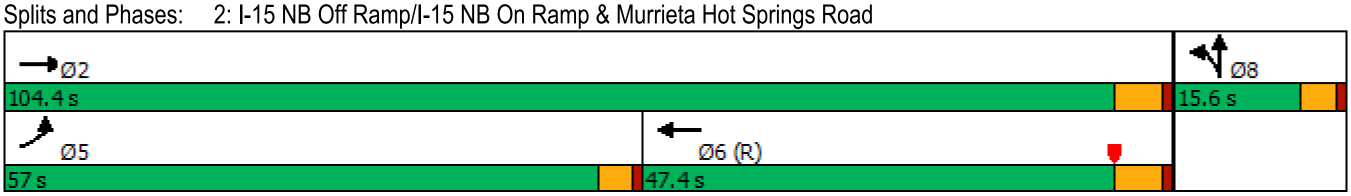
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	767	2928	1670	1701	295	0	492
Future Volume (vph)	767	2928	1670	1701	295	0	492
Turn Type	Prot	NA	NA	Free	Split	NA	Free
Protected Phases	5	2	6		8	8	
Permitted Phases				Free			Free
Detector Phase	5	2	6		8	8	
Switch Phase							
Minimum Initial (s)	7.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.3	15.3		14.2	14.2	
Total Split (s)	57.0	104.4	47.4		15.6	15.6	
Total Split (%)	47.5%	87.0%	39.5%		13.0%	13.0%	
Yellow Time (s)	3.0	4.3	4.3		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.3	5.3		4.2	4.2	
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?							
Recall Mode	None	Max	C-Max		None	None	
Act Effct Green (s)	53.0	99.1	42.1	120.0	11.4	11.4	120.0
Actuated g/C Ratio	0.44	0.83	0.35	1.00	0.10	0.10	1.00
v/c Ratio	1.02	0.73	0.98	1.12	0.96	0.97	0.32
Control Delay	65.2	3.9	44.2	80.9	116.6	118.1	0.5
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	4.1	44.2	80.9	116.6	118.1	0.5
LOS	E	A	D	F	F	F	A
Approach Delay		16.8	62.7			44.3	
Approach LOS		B	E			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 39.3	Intersection LOS: D
Intersection Capacity Utilization 94.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	767	2928	0	0	1670	1701	295	0	492	0	0	0
Future Volume (veh/h)	767	2928	0	0	1670	1701	295	0	492	0	0	0
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			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	799	3050	0	0	1740	0	307	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	787	4217	0	0	1791		338	0				
Arrive On Green	0.44	0.83	0.00	0.00	0.59	0.00	0.09	0.00	0.00			
Sat Flow, veh/h	1781	5274	0	0	5274	1585	3563	0	1585			
Grp Volume(v), veh/h	799	3050	0	0	1740	0	307	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1702	1585	1781	0	1585			
Q Serve(g_s), s	53.0	31.0	0.0	0.0	39.3	0.0	10.2	0.0	0.0			
Cycle Q Clear(g_c), s	53.0	31.0	0.0	0.0	39.3	0.0	10.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	787	4217	0	0	1791		338	0				
V/C Ratio(X)	1.02	0.72	0.00	0.00	0.97		0.91	0.00				
Avail Cap(c_a), veh/h	787	4217	0	0	1791		338	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.26	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	33.5	4.5	0.0	0.0	24.3	0.0	53.8	0.0	0.0			
Incr Delay (d2), s/veh	36.0	1.1	0.0	0.0	6.0	0.0	27.0	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	29.1	6.1	0.0	0.0	11.6	0.0	5.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	5.6	0.0	0.0	30.3	0.0	80.7	0.0	0.0			
LnGrp LOS	F	A	A	A	C		F	A				
Approach Vol, veh/h		3849			1740			307				
Approach Delay, s/veh		18.9			30.3			80.7				
Approach LOS		B			C			F				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		104.4			57.0	47.4		15.6				
Change Period (Y+Rc), s		5.3			4.0	5.3		4.2				
Max Green Setting (Gmax), s		99.1			53.0	42.1		11.4				
Max Q Clear Time (g_c+I1), s		33.0			55.0	41.3		12.2				
Green Ext Time (p_c), s		41.9			0.0	0.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		25.5
HCM 6th LOS		C

Notes

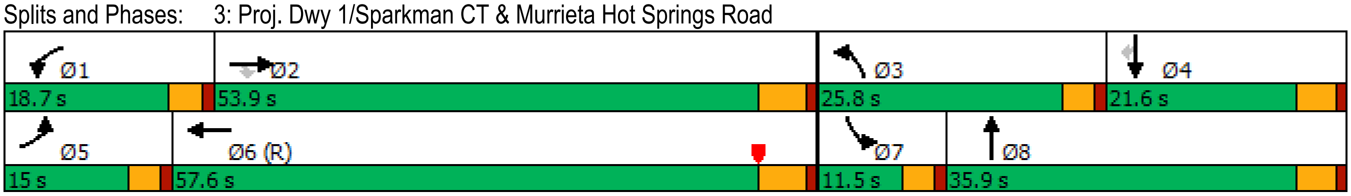
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	280	2600	405	406	2372	614	10	24	10	218
Future Volume (vph)	280	2600	405	406	2372	614	10	24	10	218
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.5	21.3	21.3	11.5	21.3	11.5	20.6	11.5	20.6	20.6
Total Split (s)	15.0	53.9	53.9	18.7	57.6	25.8	35.9	11.5	21.6	21.6
Total Split (%)	12.5%	44.9%	44.9%	15.6%	48.0%	21.5%	29.9%	9.6%	18.0%	18.0%
Yellow Time (s)	3.0	4.3	4.3	3.0	4.3	3.0	3.6	3.0	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	5.3	4.0	5.3	4.0	4.6	4.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	11.0	48.6	48.6	14.7	52.3	21.8	36.1	7.1	17.0	17.0
Actuated g/C Ratio	0.09	0.40	0.40	0.12	0.44	0.18	0.30	0.06	0.14	0.14
v/c Ratio	0.91	1.02	0.48	0.99	0.90	1.01	0.21	0.12	0.02	0.99
Control Delay	78.8	54.0	5.3	77.5	21.7	86.7	5.9	54.9	44.6	109.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.8	54.0	5.3	77.5	21.7	86.7	5.9	54.9	44.6	109.8
LOS	E	D	A	E	C	F	A	D	D	F
Approach Delay		50.1			29.6		65.8		102.1	
Approach LOS		D			C		E		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 45.6	Intersection LOS: D
Intersection Capacity Utilization 85.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	2600	405	406	2372	79	614	10	205	24	10	218
Future Volume (veh/h)	280	2600	405	406	2372	79	614	10	205	24	10	218
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	2653	413	414	2420	81	627	10	209	24	10	222
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	2606	642	423	2808	94	628	517	462	111	503	225
Arrive On Green	0.09	0.40	0.40	0.25	0.87	0.87	0.18	0.29	0.29	0.03	0.14	0.14
Sat Flow, veh/h	3456	6434	1585	3456	6442	215	3456	1777	1585	3456	3554	1585
Grp Volume(v), veh/h	286	2653	413	414	1812	689	627	10	209	24	10	222
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1832	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.8	48.6	25.2	14.3	23.2	23.4	21.8	0.5	12.9	0.8	0.3	16.8
Cycle Q Clear(g_c), s	9.8	48.6	25.2	14.3	23.2	23.4	21.8	0.5	12.9	0.8	0.3	16.8
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	2606	642	423	2103	798	628	517	462	111	503	225
V/C Ratio(X)	0.90	1.02	0.64	0.98	0.86	0.86	1.00	0.02	0.45	0.22	0.02	0.99
Avail Cap(c_a), veh/h	317	2606	642	423	2103	798	628	517	462	216	503	225
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	35.7	28.7	45.1	5.8	5.8	49.1	30.3	34.7	56.6	44.3	51.4
Incr Delay (d2), s/veh	20.9	19.4	3.4	37.8	4.9	11.9	35.6	0.1	3.2	1.0	0.1	57.2
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	5.1	21.3	10.1	7.3	3.3	5.2	12.4	0.2	5.4	0.4	0.1	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.9	55.1	32.1	83.0	10.8	17.8	84.7	30.4	37.9	57.6	44.4	108.6
LnGrp LOS	E	F	C	F	B	B	F	C	D	E	D	F
Approach Vol, veh/h		3352			2915			846			256	
Approach Delay, s/veh		54.0			22.7			72.5			101.3	
Approach LOS		D			C			E			F	

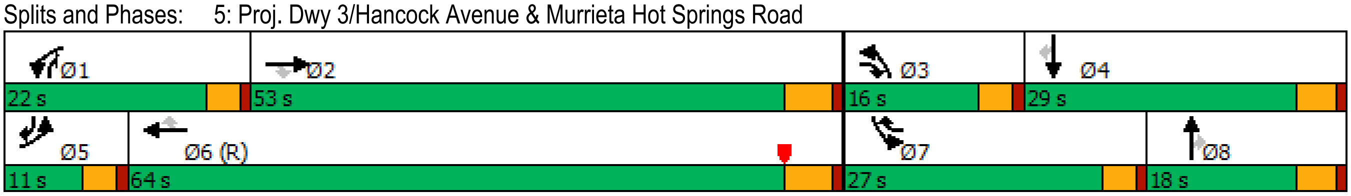
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	53.9	25.8	21.6	15.0	57.6	7.9	39.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6
Max Green Setting (Gmax), s	14.7	48.6	21.8	17.0	11.0	52.3	7.5	31.3
Max Q Clear Time (g_c+I1), s	16.3	50.6	23.8	18.8	11.8	25.4	2.8	14.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	20.0	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	45.4
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	227	2173	278	499	2395	696	256	216	551	675	238	352
Future Volume (vph)	227	2173	278	499	2395	696	256	216	551	675	238	352
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	11.0	15.3	11.0	11.0	38.3	11.0	11.0	14.6	11.0	11.0	14.6	11.0
Total Split (s)	11.0	53.0	16.0	22.0	64.0	27.0	16.0	18.0	22.0	27.0	29.0	11.0
Total Split (%)	9.2%	44.2%	13.3%	18.3%	53.3%	22.5%	13.3%	15.0%	18.3%	22.5%	24.2%	9.2%
Yellow Time (s)	3.0	4.3	3.0	3.0	4.3	3.0	3.0	3.6	3.0	3.0	3.6	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.3	4.0	4.0	5.3	4.0	4.0	4.6	4.0	4.0	4.6	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	C-Min	Min	None	None	None	Min	Min	None
Act Effct Green (s)	7.0	47.7	64.9	18.0	58.7	87.0	11.9	13.4	36.0	23.0	24.5	36.1
Actuated g/C Ratio	0.06	0.40	0.54	0.15	0.49	0.72	0.10	0.11	0.30	0.19	0.20	0.30
v/c Ratio	1.33	0.96	0.33	1.05	1.08	0.70	0.82	1.13	0.66	1.20	0.68	0.73
Control Delay	212.7	25.8	0.5	92.6	63.5	8.4	72.6	149.7	34.8	145.4	54.4	37.2
Queue Delay	0.0	2.8	0.0	0.0	7.6	5.3	0.0	0.0	0.4	0.0	0.0	0.0
Total Delay	212.7	28.6	0.5	92.6	71.1	13.8	72.6	149.7	35.2	145.4	54.4	37.2
LOS	F	C	A	F	E	B	E	F	D	F	D	D
Approach Delay		41.3			63.0			68.8			98.1	
Approach LOS		D			E			E			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.33	
Intersection Signal Delay: 62.1	Intersection LOS: E
Intersection Capacity Utilization 98.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

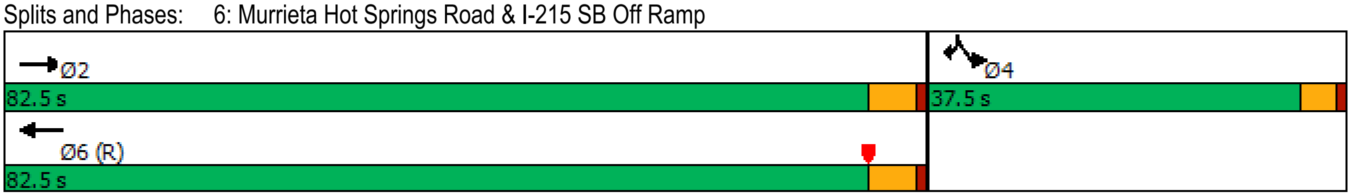


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	2173	278	499	2395	696	256	216	551	675	238	352
Future Volume (veh/h)	227	2173	278	499	2395	696	256	216	551	675	238	352
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	2362	302	542	2603	757	278	235	599	734	259	383
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	2558	783	518	2498	1079	332	209	730	662	387	421
Arrive On Green	0.06	0.40	0.40	0.30	0.98	0.98	0.10	0.11	0.11	0.19	0.21	0.21
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	1870	2790	3456	1870	1585
Grp Volume(v), veh/h	247	2362	302	542	2603	757	278	235	599	734	259	383
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1870	1395	1728	1870	1585
Q Serve(g_s), s	7.0	41.9	14.3	18.0	58.7	17.3	9.5	13.4	13.4	23.0	15.3	24.9
Cycle Q Clear(g_c), s	7.0	41.9	14.3	18.0	58.7	17.3	9.5	13.4	13.4	23.0	15.3	24.9
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	202	2558	783	518	2498	1079	332	209	730	662	387	421
V/C Ratio(X)	1.23	0.92	0.39	1.05	1.04	0.70	0.84	1.13	0.82	1.11	0.67	0.91
Avail Cap(c_a), veh/h	202	2558	783	518	2498	1079	346	209	730	662	387	421
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	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	56.5	34.4	19.0	42.0	1.3	0.4	53.3	53.3	41.7	48.5	43.8	42.7
Incr Delay (d2), s/veh	137.3	6.3	0.3	52.0	30.2	3.8	15.8	100.0	7.4	68.5	4.4	23.5
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	6.8	16.5	5.3	9.8	7.5	1.4	4.8	12.1	9.0	16.1	7.5	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	193.8	40.7	19.3	94.0	31.5	4.2	69.1	153.3	49.1	117.0	48.2	66.2
LnGrp LOS	F	D	B	F	F	A	E	F	D	F	D	E
Approach Vol, veh/h		2911			3902			1112			1376	
Approach Delay, s/veh		51.5			34.9			76.1			89.9	
Approach LOS		D			C			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	53.0	15.5	29.5	11.0	64.0	27.0	18.0				
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	4.0	5.3	4.0	4.6				
Max Green Setting (Gmax), s	18.0	47.7	12.0	24.4	7.0	58.7	23.0	13.4				
Max Q Clear Time (g_c+I1), s	20.0	43.9	11.5	26.9	9.0	60.7	25.0	15.4				
Green Ext Time (p_c), s	0.0	3.4	0.1	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			53.1									
HCM 6th LOS			D									

Lane Group	EBT	WBT	SBL	SBR
Lane Configurations				
Traffic Volume (vph)	3104	2866	736	660
Future Volume (vph)	3104	2866	736	660
Turn Type	NA	NA	Prot	Prot
Protected Phases	2	6	4	4
Permitted Phases				
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	29.3	14.2	14.2
Total Split (s)	82.5	82.5	37.5	37.5
Total Split (%)	68.8%	68.8%	31.3%	31.3%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	-0.2
Total Lost Time (s)	5.3	5.3	4.2	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	None	None
Act Effct Green (s)	77.2	77.2	33.3	33.5
Actuated g/C Ratio	0.64	0.64	0.28	0.28
v/c Ratio	1.04	0.96	0.99	1.10
Control Delay	42.3	23.0	69.0	112.8
Queue Delay	0.0	43.4	0.0	0.0
Total Delay	42.3	66.5	69.0	112.8
LOS	D	E	E	F
Approach Delay	42.3	66.5	82.9	
Approach LOS	D	E	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 59.4	Intersection LOS: E
Intersection Capacity Utilization 157.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	3104	2866	0	736	660
Future Volume (veh/h)	0	3104	2866	0	736	660
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1945	1945
Adj Flow Rate, veh/h	0	3302	3049	0	976	495
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	3285	3285	0	1028	460
Arrive On Green	0.00	0.64	1.00	0.00	0.28	0.28
Sat Flow, veh/h	0	5443	5443	0	3705	1648
Grp Volume(v), veh/h	0	3302	3049	0	976	495
Grp Sat Flow(s),veh/h/ln	0	1702	1702	0	1853	1648
Q Serve(g_s), s	0.0	77.2	0.0	0.0	31.0	33.5
Cycle Q Clear(g_c), s	0.0	77.2	0.0	0.0	31.0	33.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	3285	3285	0	1028	460
V/C Ratio(X)	0.00	1.01	0.93	0.00	0.95	1.08
Avail Cap(c_a), veh/h	0	3285	3285	0	1028	460
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	0.0	0.0	42.5	43.3
Incr Delay (d2), s/veh	0.0	17.0	6.0	0.0	17.2	63.7
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	30.8	1.8	0.0	16.5	21.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	38.4	6.0	0.0	59.7	107.0
LnGrp LOS	A	F	A	A	E	F
Approach Vol, veh/h		3302	3049		1471	
Approach Delay, s/veh		38.4	6.0		75.6	
Approach LOS		D	A		E	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		82.5		37.5		82.5
Change Period (Y+Rc), s		5.3		* 4.2		5.3
Max Green Setting (Gmax), s		77.2		* 33		77.2
Max Q Clear Time (g_c+I1), s		79.2		35.5		2.0
Green Ext Time (p_c), s		0.0		0.0		45.1

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Notes

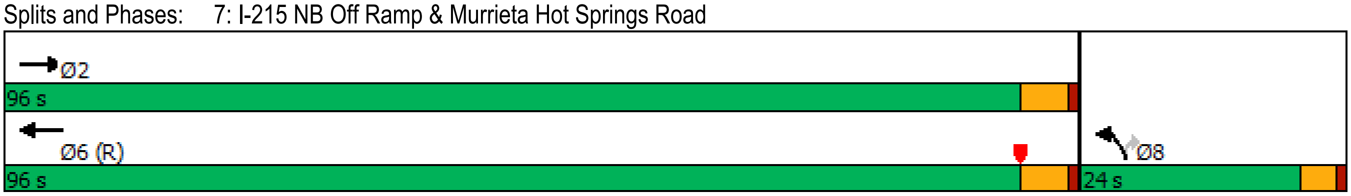
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Traffic Volume (vph)	2950	2772	373	334
Future Volume (vph)	2950	2772	373	334
Turn Type	NA	NA	Prot	Perm
Protected Phases	2	6	8	
Permitted Phases				8
Detector Phase	2	6	8	8
Switch Phase				
Minimum Initial (s)	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	15.3	14.2	14.2
Total Split (s)	96.0	96.0	24.0	24.0
Total Split (%)	80.0%	80.0%	20.0%	20.0%
Yellow Time (s)	4.3	4.3	3.2	3.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.2	4.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	C-Max	Max	Max
Act Effct Green (s)	90.7	90.7	19.8	19.8
Actuated g/C Ratio	0.76	0.76	0.16	0.16
v/c Ratio	0.85	0.80	0.64	0.73
Control Delay	6.8	11.3	52.2	56.3
Queue Delay	0.6	11.8	0.0	0.0
Total Delay	7.4	23.1	52.2	56.3
LOS	A	C	D	E
Approach Delay	7.4	23.1	54.1	
Approach LOS	A	C	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↰↰	↱↱
Traffic Volume (veh/h)	2950	0	0	2772	373	334
Future Volume (veh/h)	2950	0	0	2772	373	334
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1945	1945
Adj Flow Rate, veh/h	3172	0	0	2981	401	359
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	3859	0	0	3859	593	479
Arrive On Green	0.76	0.00	0.00	0.76	0.17	0.17
Sat Flow, veh/h	5443	0	0	5443	3594	2901
Grp Volume(v), veh/h	3172	0	0	2981	401	359
Grp Sat Flow(s),veh/h/ln	1702	0	0	1702	1797	1451
Q Serve(g_s), s	48.1	0.0	0.0	41.1	12.6	14.1
Cycle Q Clear(g_c), s	48.1	0.0	0.0	41.1	12.6	14.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3859	0	0	3859	593	479
V/C Ratio(X)	0.82	0.00	0.00	0.77	0.68	0.75
Avail Cap(c_a), veh/h	3859	0	0	3859	593	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	0.0	0.0	8.6	47.1	47.7
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.6	6.1	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.0	0.0	11.5	6.1	5.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	0.0	0.0	10.2	53.2	58.1
LnGrp LOS	B	A	A	B	D	E
Approach Vol, veh/h	3172			2981	760	
Approach Delay, s/veh	11.5			10.2	55.5	
Approach LOS	B			B	E	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	96.0	96.0	24.0
Change Period (Y+Rc), s	5.3	5.3	4.2
Max Green Setting (Gmax), s	90.7	90.7	19.8
Max Q Clear Time (g_c+I1), s	50.1	43.1	16.1
Green Ext Time (p_c), s	31.7	32.6	1.4

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LTR	R
Maximum Queue (ft)	294	278	294	72	84	71	618	619	505
Average Queue (ft)	221	149	125	51	60	49	445	475	354
95th Queue (ft)	305	262	273	60	74	60	620	628	526
Link Distance (ft)				48	48	48	566	566	
Upstream Blk Time (%)				34	36	17	7	10	
Queuing Penalty (veh)				161	171	80	0	0	
Storage Bay Dist (ft)									480
Storage Blk Time (%)								11	0
Queuing Penalty (veh)								19	1

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	239	139	131	242	117	151	184	228	202	528
Average Queue (ft)	133	81	57	74	48	72	74	151	131	365
95th Queue (ft)	207	129	122	192	104	143	143	212	191	510
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	159	170	309	277	318	274	45	160	153	86	125	201
Average Queue (ft)	73	107	170	186	197	183	6	84	97	35	61	106
95th Queue (ft)	140	157	251	255	274	254	21	130	137	81	121	173
Link Distance (ft)			1082	1082	1082	1082				271	271	271
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	226	220	244	49	150	6	52	39	284	260
Average Queue (ft)	140	102	162	16	42	1	10	6	36	180
95th Queue (ft)	216	193	235	44	98	3	31	23	190	258
Link Distance (ft)	271	275	275	275	275			269	269	
Upstream Blk Time (%)									1	1
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									0	4
Queuing Penalty (veh)									0	0

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	NB
Directions Served	T	T	R
Maximum Queue (ft)	94	38	66
Average Queue (ft)	7	2	30
95th Queue (ft)	41	14	59
Link Distance (ft)	271	271	288
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	257	270	347	307	260	176	71	193	199	197	238	263
Average Queue (ft)	181	194	144	157	165	30	27	118	125	112	163	205
95th Queue (ft)	270	278	273	256	238	93	63	177	180	191	222	270
Link Distance (ft)			307	307	307	307				240	240	240
Upstream Blk Time (%)			3	0							0	2
Queuing Penalty (veh)			17	1							0	15
Storage Bay Dist (ft)	245	245					215	300	300			
Storage Blk Time (%)	5	10	1									
Queuing Penalty (veh)	19	37	3									

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	T	R
Maximum Queue (ft)	118	114	94	115	223	47	162	175	299	163
Average Queue (ft)	51	58	40	53	95	10	161	174	278	67
95th Queue (ft)	87	108	73	97	164	34	164	176	289	135
Link Distance (ft)	240	311	311	311	311	311				
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							7	64	1	0
Queuing Penalty (veh)							28	252	8	2

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	97	96	114	123	160	126	889	880	495
Average Queue (ft)	74	75	82	113	111	120	845	846	430
95th Queue (ft)	83	87	103	136	152	126	862	860	652
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	28	34	38	17	14	34	57	81	
Queuing Penalty (veh)	205	248	274	136	112	277	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								67	0
Queuing Penalty (veh)								272	3

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	T	T	T	T	T	T	L	L	R	R
Maximum Queue (ft)	182	177	169	70	53	100	266	282	214	152
Average Queue (ft)	139	141	132	34	27	50	136	178	108	49
95th Queue (ft)	183	179	171	59	52	81	213	258	171	122
Link Distance (ft)	144	144	144	15	15	15	1042	1042		
Upstream Blk Time (%)	7	5	4	20	15	33				
Queuing Penalty (veh)	53	41	30	159	120	265				
Storage Bay Dist (ft)									1000	1000
Storage Blk Time (%)										
Queuing Penalty (veh)										

Zone Summary

Zone wide Queuing Penalty: 3010

Intersection: 1: I-15 SB On Ramp/I-15 SB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (ft)	318	313	311	292	69	61	49	606	618	505
Average Queue (ft)	296	257	243	19	27	24	10	585	585	466
95th Queue (ft)	308	323	328	139	63	60	37	598	598	545
Link Distance (ft)					48	48	48	566	566	
Upstream Blk Time (%)					4	3	1	55	62	
Queuing Penalty (veh)					22	18	7	0	0	
Storage Bay Dist (ft)										480
Storage Blk Time (%)									63	1
Queuing Penalty (veh)									70	4

Intersection: 2: I-15 NB Off Ramp/I-15 NB On Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	T	T	L	LT	R
Maximum Queue (ft)	470	508	459	214	96	85	78	1275	1275	610
Average Queue (ft)	416	266	138	137	28	28	26	1234	1254	610
95th Queue (ft)	493	591	350	213	74	71	66	1304	1265	610
Link Distance (ft)		473	473	473	1082	1082	1082	1236	1236	
Upstream Blk Time (%)	4	5	0					44	100	
Queuing Penalty (veh)	0	63	1					0	0	
Storage Bay Dist (ft)	500									585
Storage Blk Time (%)	4	5							2	100
Queuing Penalty (veh)	37	38							8	147

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	138	202	280	281	313	315	80	108	129	74	79	115
Average Queue (ft)	65	88	167	188	227	215	16	48	58	12	36	56
95th Queue (ft)	125	153	239	264	304	297	53	95	103	47	77	104
Link Distance (ft)			1082	1082	1082	1082				271	271	271
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	310	310					320	245	245			
Storage Blk Time (%)						0						
Queuing Penalty (veh)						0						

Intersection: 3: Proj. Dwy 1/Sparkman CT & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	TR	L	L	T	TR	L	L	T	T	R
Maximum Queue (ft)	133	290	314	290	89	4	55	39	321	260
Average Queue (ft)	66	204	291	19	21	0	8	9	287	260
95th Queue (ft)	121	324	301	136	69	1	30	27	302	260
Link Distance (ft)	271	275	275	275	275			269	269	
Upstream Blk Time (%)		9	92	3					91	65
Queuing Penalty (veh)		0	0	0					0	0
Storage Bay Dist (ft)						235	235			235
Storage Blk Time (%)									0	98
Queuing Penalty (veh)									0	5

Intersection: 4: Proj. Dwy 2 & Murrieta Hot Springs Road

Movement	EB	EB	EB	NB
Directions Served	T	T	T	R
Maximum Queue (ft)	112	223	228	145
Average Queue (ft)	4	14	13	65
95th Queue (ft)	37	94	82	113
Link Distance (ft)	271	271	271	288
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	EB	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	210	223	276	312	355	323	240	68	88	157	240	250
Average Queue (ft)	83	100	171	231	251	107	38	18	35	69	107	157
95th Queue (ft)	154	162	268	324	360	276	131	51	72	136	188	229
Link Distance (ft)			307	307	307	307				240	240	240
Upstream Blk Time (%)				0	4	0					0	0
Queuing Penalty (veh)				3	27	1					0	1
Storage Bay Dist (ft)	245	245					215	300	300			
Storage Blk Time (%)			0			2						
Queuing Penalty (veh)			1			7						

Intersection: 5: Proj. Dwy 3/Hancock Avenue & Murrieta Hot Springs Road

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R	R	L	L	T	R
Maximum Queue (ft)	119	180	318	326	328	363	162	174	304	175
Average Queue (ft)	32	89	116	278	326	329	157	174	281	74
95th Queue (ft)	78	153	244	403	327	343	174	176	297	160
Link Distance (ft)	240	311	311	311	311	311				
Upstream Blk Time (%)			2	24	97	87				
Queuing Penalty (veh)			0	0	0	0				
Storage Bay Dist (ft)							150	150		150
Storage Blk Time (%)							3	64	5	1
Queuing Penalty (veh)							18	378	52	6

Intersection: 6: Murrieta Hot Springs Road & I-215 SB Off Ramp

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T	L	LR	R
Maximum Queue (ft)	91	97	144	118	117	121	890	861	495
Average Queue (ft)	73	78	99	63	65	89	845	843	429
95th Queue (ft)	79	94	135	116	107	145	865	851	664
Link Distance (ft)	70	70	70	113	113	113	827	827	
Upstream Blk Time (%)	24	28	33	1	0	2	55	90	
Queuing Penalty (veh)	249	288	338	6	2	15	0	0	
Storage Bay Dist (ft)									470
Storage Blk Time (%)								78	0
Queuing Penalty (veh)								259	2

Intersection: 7: I-215 NB Off Ramp & Murrieta Hot Springs Road

Movement	EB	EB	EB	NB	NB	NB	NB
Directions Served	T	T	T	L	L	R	R
Maximum Queue (ft)	182	186	177	188	237	222	208
Average Queue (ft)	149	147	131	123	145	144	104
95th Queue (ft)	176	176	173	178	208	202	191
Link Distance (ft)	144	144	144	1042	1042		
Upstream Blk Time (%)	7	5	3				
Queuing Penalty (veh)	71	48	26				
Storage Bay Dist (ft)						1000	1000
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

Zone wide Queuing Penalty: 2217

ATTACHMENT D

Cumulative Projects

Table 5–1
Cumulative Projects Trip Generation Summary

Project	Land Use	Size		Daily Volume	AM Peak Hour Volume			PM Peak Hour Volume		
					In	Out	Total	In	Out	Total
1. Los Alamos Community Plan (DP-2014-490)	Apartment	542	DU	3604	54	222	276	217	119	336
2. Sial Medical Plaza (DP-2016-785)	Medical Office	20.826	KSF	725	45	13	58	20	52	72
3. Whittaker Office Complex (DP-02-474/RPO-007-2570)	Office	118.56	KSF	1,436	183	25	208	33	160	193
4. Jefferson & Ivy (DP-2017-1397)	Apartment	333	DU	2214	33	137	170	133	206	339
5. Downtown Market Place (DP-2018-1741)	Commercial Office	51.455	KSF	704	61	13	74	19	56	75
6. Mar Vista Business Park (DP-2018-1792)	General Light Industrial	37.783	KSF	187	23	3	26	3	21	24
7. Murrieta Town Shopping Center Exp (DP-2018-1802)	Shopping Center	15	KSF	566	22	23	45	32	32	64
8. Jefferson & Fig (DP-2019-1919)	Super Convenience Market / Gas Stn	3.009	KSF	3009	149	149	298	124	125	249
	Automated Car Wash	0.131	KSF	131	9	5	14	7	7	14
	(Pass-by reduction)			-785	-40	-38		-33	-33	
	Subtotal			*2355*	*118*	*120*	*238*	*98*	*99*	*197*
9. Hotel Murrieta (DP-2019-2031)	Hotel	257	Rooms	2,149	71	50	121	79	76	155
10. Hancock Children's Clinic (DP-2020-2206)	Medical Office Bldg	3.76	KSF	131	8	5	13	6	9	15
11. Rancho Springs Medical Center (DP-2020-2199)	Hospital	43	KSF	461	26	12	38	13	29	42
12. Jefferson Apartments (DP-2020-2170)	Residential	160	DU	1171	17	57	74	56	33	90
13. Beyond Food Mart (DP-2020-2171)	Con Mkt / Gas Stn	16	Pumps	3688	225	224	449	184	183	367
	(Pass-by reduction)			-922	-56	-56		-46	-46	
	Subtotal			2766	169	168	337	138	137	275

Continued on the Next Page

Table 5–1 (Continued)
Cumulative Projects Trip Generation Summary [a]

Project	Land Use	Size	Daily Volume	AM Peak Hour Volume			PM Peak Hour Volume		
				In	Out	Total	In	Out	Total
Continued from the Previous Page									
14. U-Haul (DP-2021-2359)	Warehouse	11.608 KSF	21	1	1	2	1	1	2
15. The Triangle [b] DP-2022-2705 / TTM-2022-2706	Retail	268.464 KSF	6,158	181	111	292	552	597	1,149
16. QMC Murrieta Multi-Family Project (DP-2022-2605)	Multi-Family Housing	390 DU	2,629	37	119	156	125	74	199
17. Jefferson Multi-Family Project (DP-2022-2685)	Multi-Family Housing	851 DU	3,863	72	242	314	203	130	333
18. Makena Hancock II Project (DP-2022-2744)	Medical Office Building	31.6 KSF	1,138	77	21	98	37	87	124
19. Los Alamos / Vista Murrieta Apartments (DP-2023-2786)	Multi-Family Housing	120 DU	809	12	36	48	38	23	61
20. Vista Murrieta (DP-2022-2562)	Multi-Family Housing	214 DU	1,442	21	65	86	69	40	109
21. Los Alamos SS & Retail (DP-2022-2700)	Mini Warehouse /Variety Store/FF	Various	1,607	69	42	111	72	73	145
22. Monamos Apartments (DP-2021-2385)	Multifamily	140 DU	1,025	15	50	65	50	29	79
23. Jefferson South Apartments (DP-2022-2480)	Multifamily	68 DU	446	7	21	28	22	13	35
24. 24960 Adams Avenue (DP-2022-2562)	Multifamily	200 DU	947	17	42	59	44	29	73
25. Ivy House Residential (DP-2021-2311)	Single Family	62 DU	585	11	32	43	37	21	58
26. 41705 Hawthorn Housing (DP-2022-2601)	Multifamily	96 DU	462	10	25	35	26	18	44
27. Gierson Ranch (DP-2022-2551)	Multifamily	107 DU	721	10	33	43	35	20	55
Total Cumulative Trips			**40,322**	**1,371**	**1,688**	**3,058**	**2,158**	**2,185**	**4,342**

General Note:
1. Trip generation obtained from City of Murrieta traffic studies.
2. This Project is expected to be open in the Year 2028 and is only included in the cumulative projects for the Year 2028.

ATTACHMENT E

Buildout (2035) calculations

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Date
Job No.
Page
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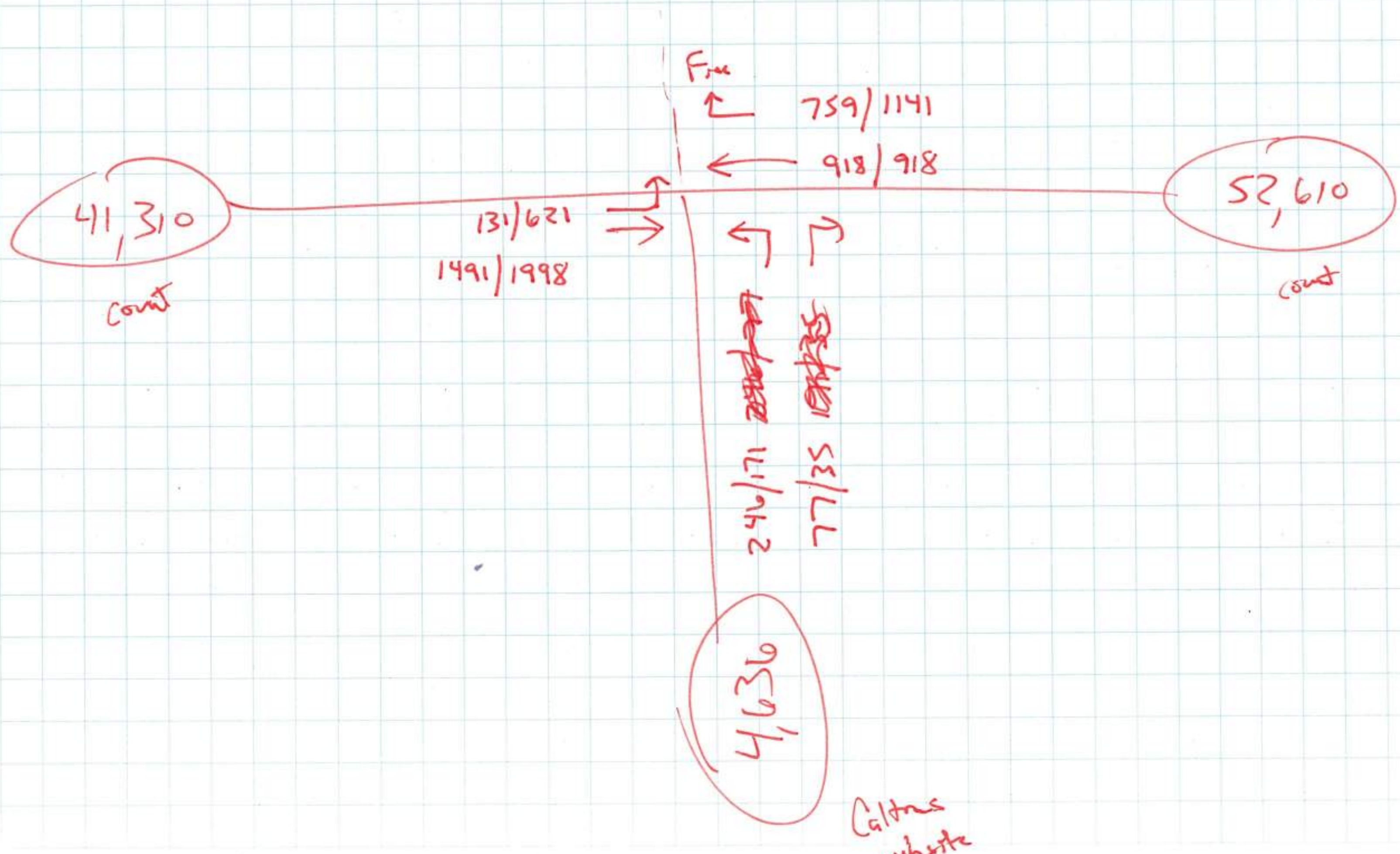
MHSR / I-15 NB

Ex

ADT
Am/Pm



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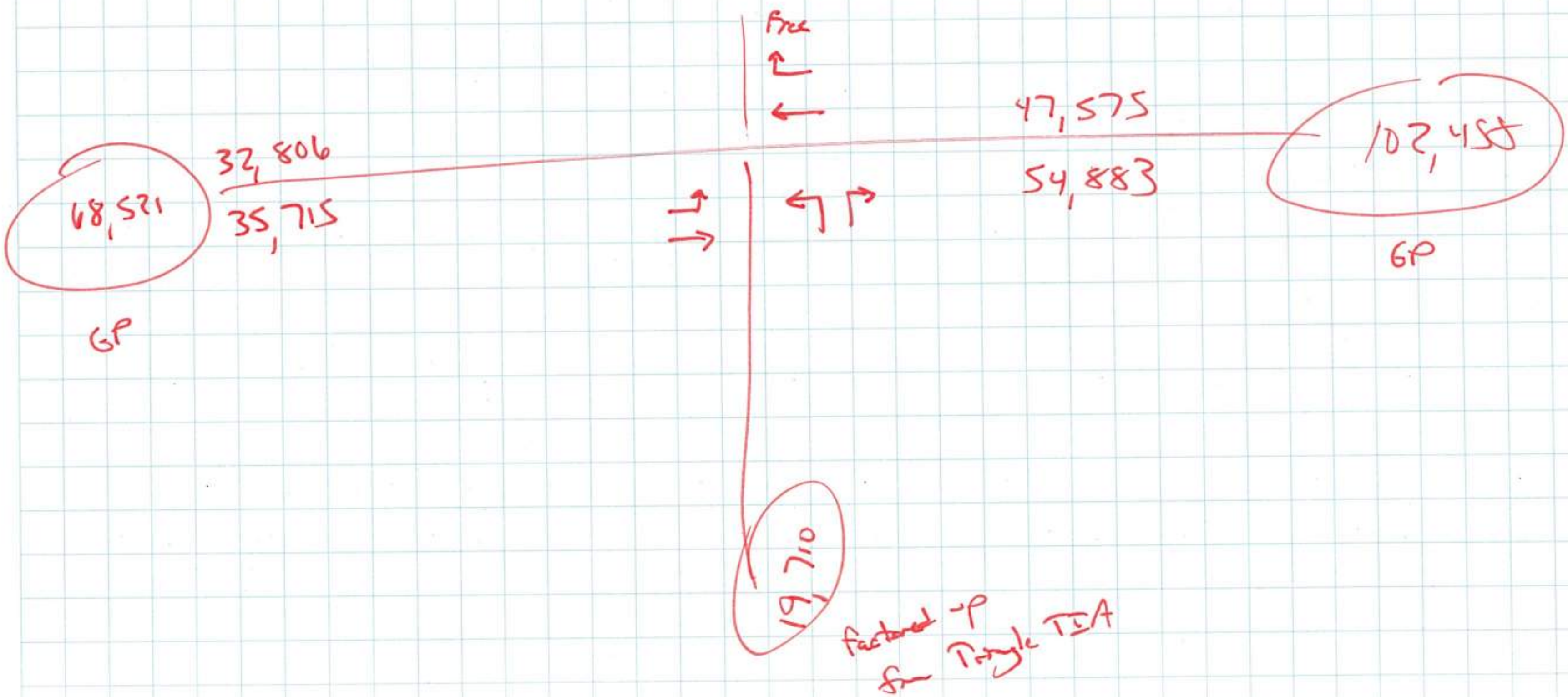
Fax: (619) 291-4165

Date
Job No.
Page
Done By
Checked By

MHSR / I-15 NB

$\boxed{\begin{matrix}2035 \\ \cancel{2040}\end{matrix}}$ ADT



Am $\dfrac{659 + 1{,}312}{x} = \dfrac{10}{100}$ $x = 19{,}710$

Pm $\dfrac{319 + 822}{x} = \dfrac{12}{100}$ $x = 9{,}508$

19843
BRS
6/16/2023

FORECAST MOVEMENT VOLUMES
AM PEAK

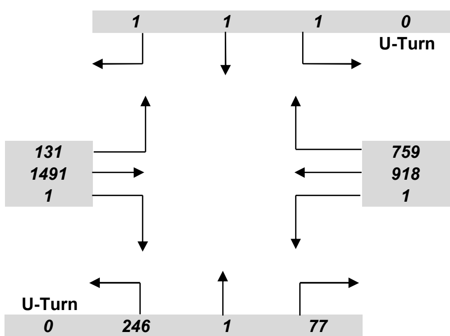
RICK ENGINEERING COMPANY
Traffic Division

INPUTS:		Baseline Year 1:	2021	Forecast year:	2035
OUTPUTS:		Baseline Year 2:	2035	Time of Day:	AM

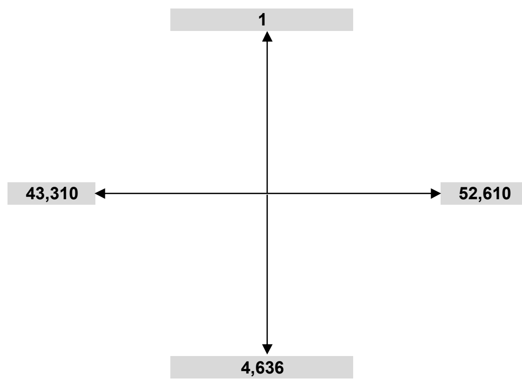
2035 - Baseline Peak Hour Turning Movement Calculations - AM

Intersection Name (Major/Minor): ***I-15 NB OFF RAMP (N-S)/ MURRIETA HOT SPRINGS ROAD (E-W)***

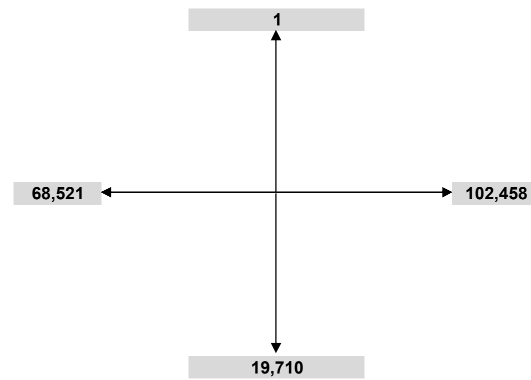
Existing Peak Hour Turning Movement Volumes
2021 AM



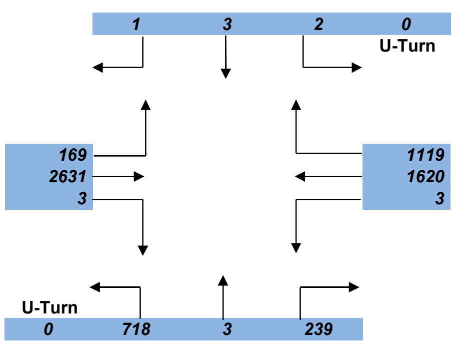
Baseline ADTs
2021



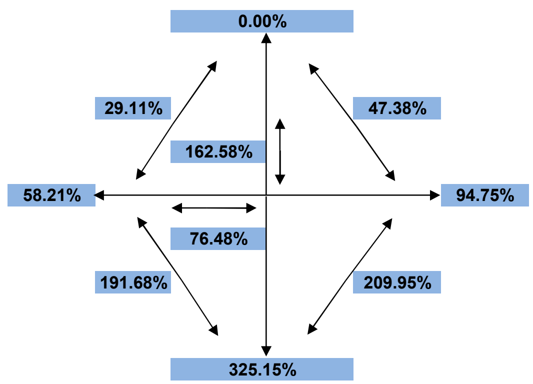
Forecast Year ADTs
2035



Forecasted Peak Hour Turning Movement Volumes
2035 AM



Percent Increase/Decrease



\\cp.rickeng.com\projects\C19500\19843_TriangleAnalysis\Traffic\Analysis\AnalysisCalcs\Buildout analysis\19843_Triangle_buildout.xlsx

RICK ENGINEERING COMPANY
Traffic Division

FORECAST MOVEMENT VOLUMES
PM PEAK

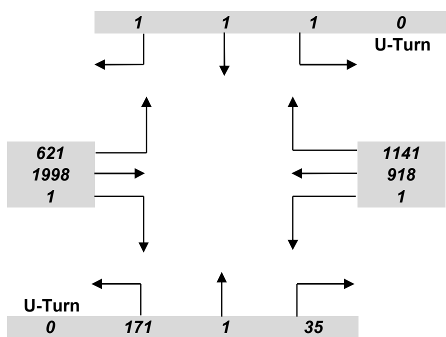
19843
BRS
6/16/2023

INPUTS:		Baseline Year 1:	2021	Forecast year:	2035
OUTPUTS:		Baseline Year 2:	2035	Time of Day:	PM

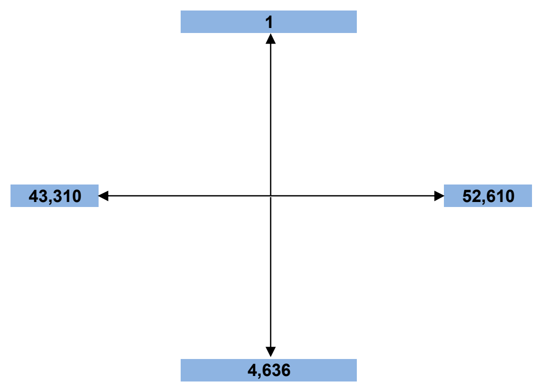
2035 - Baseline Peak Hour Turning Movement Calculations - PM

Intersection Name (Major/Minor): ***I-15 NB OFF RAMP (N-S)/ MURRIETA HOT SPRINGS ROAD (E-W)***

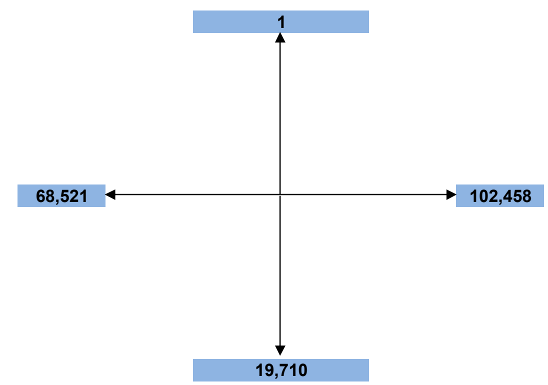
Existing Peak Hour Turning Movement Volumes
2021 PM



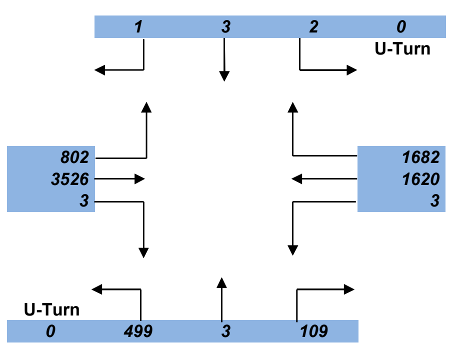
Baseline ADTs
2021



Forecast Year's ADTs
2035



Forecasted Peak Hour Turning Movement Volumes
2035 PM



Percent Increase/Decrease

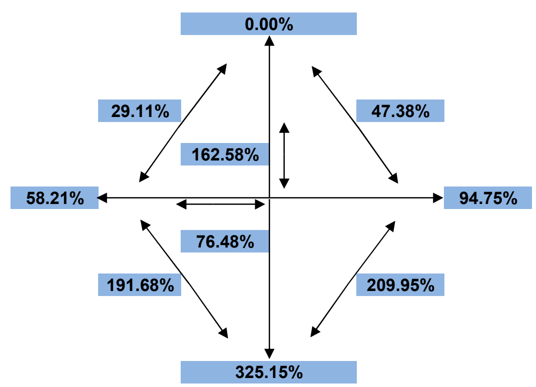


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EXHIBIT 3-KKK

GENERAL PLAN BUILDOUT WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)

LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

The Triangle Project
City of Murrieta, CA (JN - 05050:358)

URBAN CROSSROADS

EXHIBIT 3-LLL

GENERAL PLAN BUILDOUT WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES (PROJECT BUILDOUT)

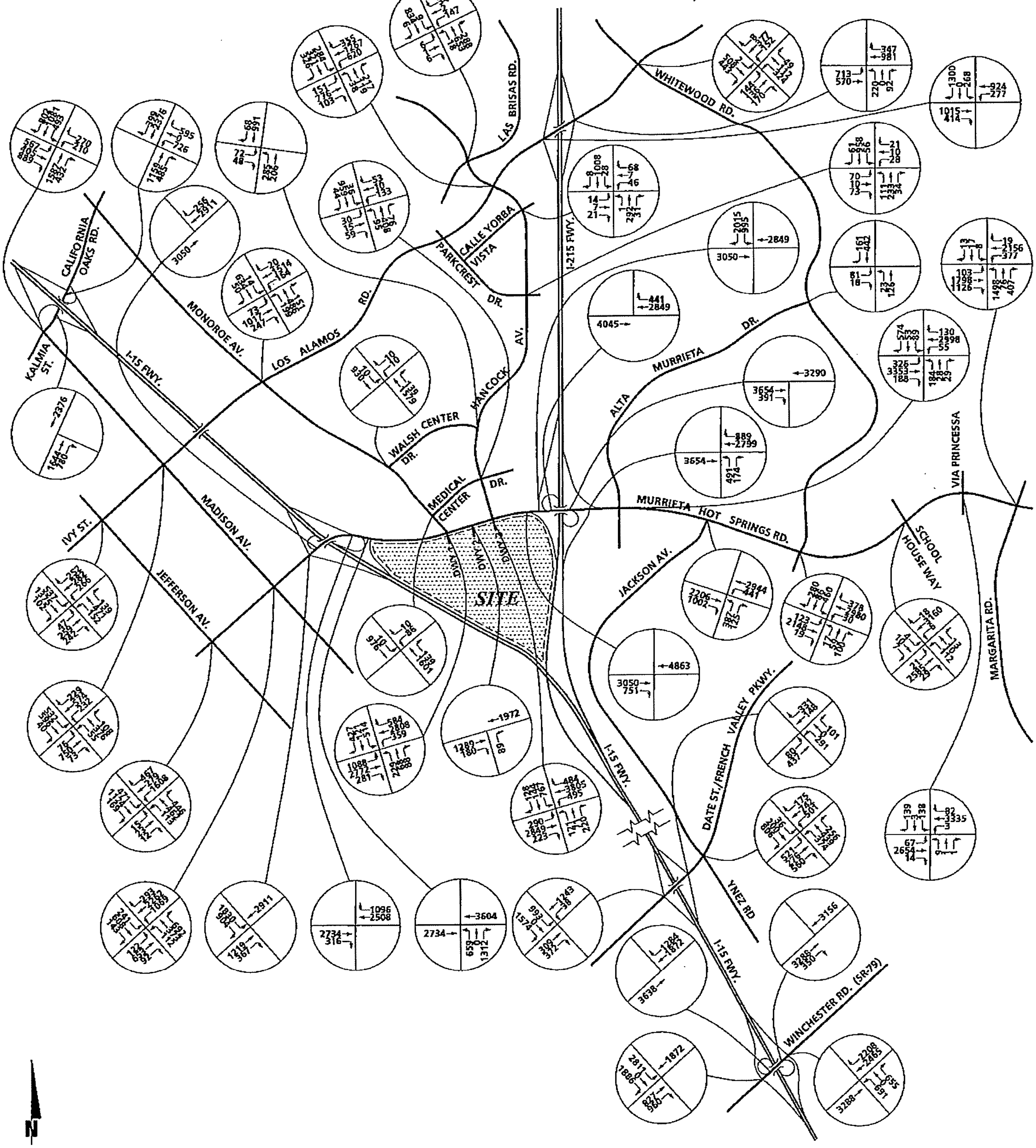
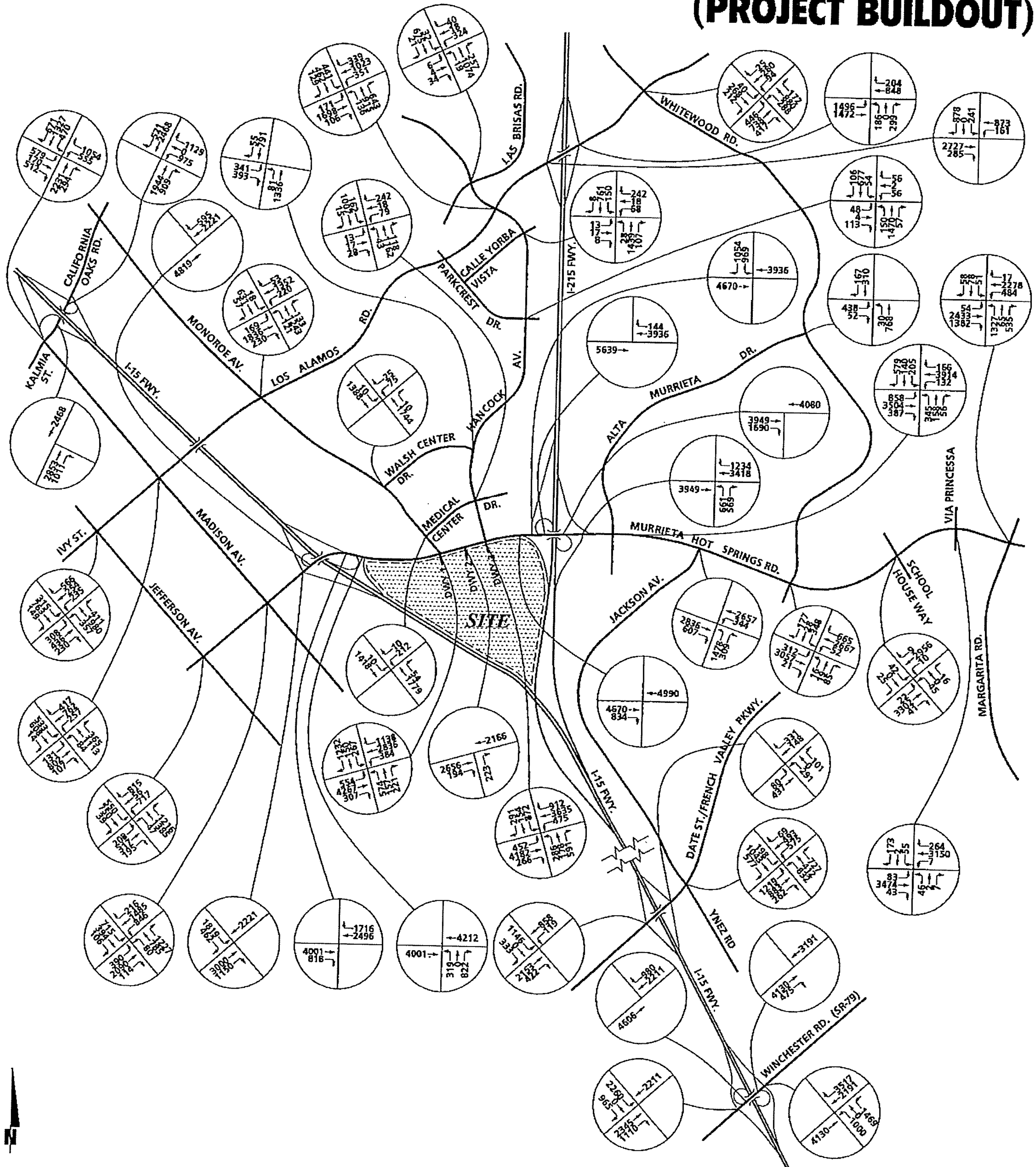


EXHIBIT 3-MMM

GENERAL PLAN BUILDOUT WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES (PROJECT BUILDOUT)



The Triangle Project
City of Murrieta, CA (JN - 05050:p5\356.dwg)

URBAN CROSSROADS

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers			
Location:	#08	File Name:	ITM-21-071-08
Intersection:	I-15 Northbound Ramps & Murrieta Hot Springs Road	Project:	LLG Ref. #3-21-3434
Date of Count:	Wednesday, November 10, 2021		The Terraces - Murrieta

AM	I-15 NB On Ramp Southbound			Murrieta Hot Spgs. Road Westbound			I-15 NB Off Ramp Northbound			Murrieta Hot Spgs. Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	0	0	243	221	0	24	6	22	246	0	762
7:15	0	0	0	0	261	179	0	39	19	31	273	0	802
7:30	0	0	0	0	245	179	0	59	21	22	396	0	922
7:45	0	0	0	0	263	191	0	85	19	33	394	0	985
8:00	0	0	0	0	209	192	0	44	24	27	331	0	827
8:15	0	0	0	0	201	197	0	58	13	49	370	0	888
8:30	0	0	0	0	222	217	0	50	22	42	365	0	918
8:45	0	0	0	0	209	225	0	65	14	37	324	0	874
Total	0	0	0	0	1853	1601	0	424	138	263	2699	0	6978
Approach%	-	-	-	-	53.6	46.4	-	75.4	24.6	8.9	91.1	-	
Total%	-	-	-	-	26.6	22.9	-	6.1	2.0	3.8	38.7	-	

AM Intersection Peak Hour: 07:30 to 08:30

Volume	-	-	-	-	918	759	-	246	77	131	1,491	-	3,622
Approach%	-	-	-	-	54.7	45.3	-	76.2	23.8	8.1	91.9	-	
Total%	-	-	-	-	25.3	21.0	-	6.8	2.1	3.6	41.2	-	
PHF			#DIV/0!			0.92			0.78			0.95	0.92

PM	I-15 NB On Ramp Southbound			Murrieta Hot Spgs. Road Westbound			I-15 NB Off Ramp Northbound			Murrieta Hot Spgs. Road Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	0	235	255	0	40	17	178	527	0	1252
16:15	0	0	0	0	249	283	0	42	14	128	429	0	1145
16:30	0	0	0	0	231	290	0	44	9	165	537	0	1276
16:45	0	0	0	0	201	272	0	45	4	187	436	0	1145
17:00	0	0	0	0	198	333	0	33	10	133	515	0	1222
17:15	0	0	0	0	288	246	0	49	12	136	510	0	1241
17:30	0	0	0	0	269	176	0	31	44	137	426	0	1083
17:45	0	0	0	0	303	159	0	42	64	105	385	0	1058
Total	0	0	0	0	1974	2014	0	326	174	1169	3765	0	9422
Approach%	-	-	-	-	49.5	50.5	-	65.2	34.8	23.7	76.3	-	
Total%	-	-	-	-	21.0	21.4	-	3.5	1.8	12.4	40.0	-	

PM Intersection Peak Hour: 16:30 to 17:30

Volume	-	-	-	-	918	1,141	-	171	35	621	1,998	-	4,884
Approach%	-	-	-	-	44.6	55.4	-	83.0	17.0	23.7	76.3	-	
Total%	-	-	-	-	18.8	23.4	-	3.5	0.7	12.7	40.9	-	
PHF			#DIV/0!			0.96			0.84			0.93	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

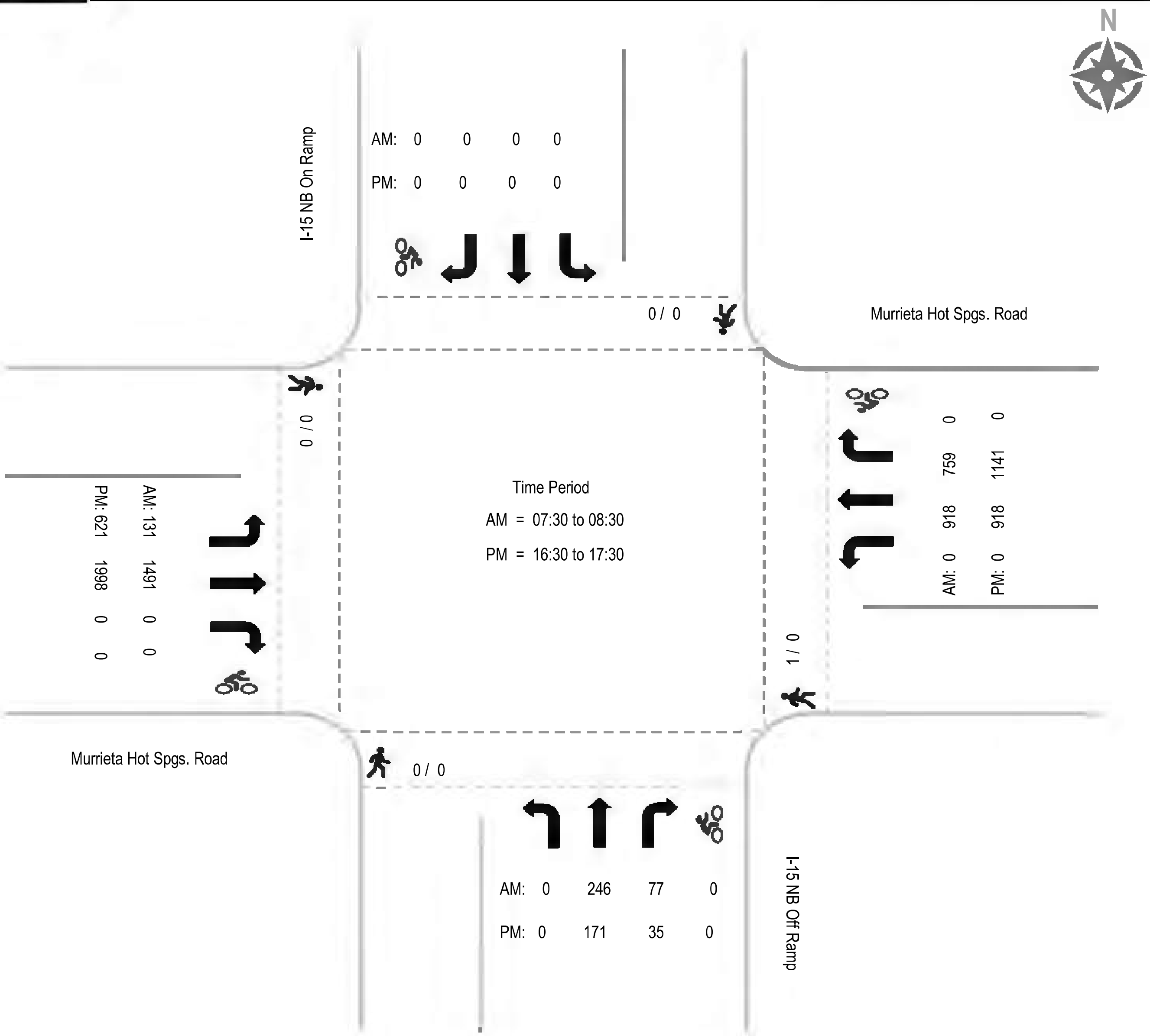
Location:	#08	File Name:	ITM-21-071-08
Intersection:	I-15 Northbound Ramps & Murrieta Hot Springs Road	Project:	LLG Ref. #3-21-3434
Date of Count:	Wednesday, November 10, 2021		The Terraces - Murrieta

AM	I-15 NB On Ramp Southbound				Murrieta Hot Spgs. Road Westbound				I-15 NB Off Ramp Northbound				Murrieta Hot Spgs. Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				1				0				0				1	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	I-15 NB On Ramp Southbound				Murrieta Hot Spgs. Road Westbound				I-15 NB Off Ramp Northbound				Murrieta Hot Spgs. Road Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

Location:	#08	File Name:	ITM-21-071-08
Intersection:	I-15 Northbound Ramps & Murrieta Hot Springs Road	Project:	LLG Ref. #3-21-3434
Date of Count:	Wednesday, November 10, 2021		The Terraces - Murrieta



Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **#C Murrieta Hot Springs Rd, between Madison Ave and I-15 Ramps**

Date: **Wednesday, November 10, 2021** Total Daily Volume: **41313** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
201	185	130	179	570	677	1445	2268	2304	2583	2805	2897	3036	2997	3124	3089	3008	3110	2252	1625	1230	861	476	261
57	32	34	27	97	116	228	448	506	646	694	665	763	759	740	803	739	797	631	486	328	245	145	113
40	83	37	26	118	117	303	543	589	563	636	705	756	749	748	745	724	829	579	366	343	252	133	54
66	40	28	36	184	175	372	607	589	690	735	745	780	743	793	774	777	768	529	413	293	209	117	48
38	30	31	90	171	269	542	670	620	684	740	782	737	746	843	767	768	716	513	360	266	155	81	46

Date: **Wednesday, November 10, 2021** Total Daily Volume: **20772** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
153	139	85	107	160	213	414	722	921	1110	1312	1433	1533	1533	1714	1768	1842	1758	1230	923	707	529	290	176
39	20	29	18	51	53	78	164	187	276	328	355	399	392	398	434	435	523	338	279	191	169	81	86
26	67	24	11	40	48	80	170	237	262	303	343	395	393	408	414	434	492	315	213	180	150	81	37
60	31	13	22	31	53	113	185	241	284	357	348	380	376	425	476	480	396	278	233	179	116	83	29
28	21	19	56	38	59	143	203	256	288	324	387	359	372	483	444	493	347	299	198	157	94	45	24

Date: **Wednesday, November 10, 2021** Total Daily Volume: **20541** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
48	46	45	72	410	464	1031	1546	1383	1473	1493	1464	1503	1464	1410	1321	1166	1352	1022	702	523	332	186	85
18	12	5	9	46	63	150	284	319	370	366	310	364	367	342	369	304	274	293	207	137	76	64	27
14	16	13	15	78	69	223	373	352	301	333	362	361	356	340	331	290	337	264	153	163	102	52	17
6	9	15	14	153	122	259	422	348	406	378	397	400	367	368	298	297	372	251	180	114	93	34	19
10	9	12	34	133	210	399	467	364	396	416	395	378	374	360	323	275	369	214	162	109	61	36	22

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **#D Murrieta Hot Springs Rd, between I-15 Ramps and Sparkman Ct-Monroe Ave**

Date: **Wednesday, November 10, 2021** Total Daily Volume: **52612** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
210	195	145	217	681	981	2001	3163	3161	3049	3176	3306	3499	3425	3905	3777	3915	4365	3147	2211	1742	1197	700	444
65	44	35	35	110	150	325	683	705	763	717	732	880	822	900	1004	1004	1072	907	618	439	368	212	170
49	72	31	29	137	205	404	781	857	707	787	845	831	832	992	887	962	1132	811	538	471	316	195	100
51	42	40	57	215	238	540	789	776	744	793	876	929	861	975	918	1013	1090	737	557	439	271	151	84
45	37	39	96	219	388	732	910	823	835	879	853	859	910	1038	968	936	1071	692	498	393	242	142	90

Date: **Wednesday, November 10, 2021** Total Daily Volume: **25477** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
134	123	66	64	131	281	827	1416	1522	1399	1505	1573	1735	1698	1977	1913	1974	1999	1600	1141	986	734	401	278
38	25	22	15	23	38	108	258	349	357	343	373	400	399	438	487	506	497	430	301	243	232	118	111
32	54	17	7	33	60	160	309	424	325	367	396	446	438	487	457	487	556	419	294	269	195	102	64
31	25	17	11	30	71	224	398	381	322	391	376	444	412	501	494	492	449	384	281	252	157	98	51
33	19	10	31	45	112	335	451	368	395	404	428	445	449	551	475	489	497	367	265	222	150	83	52

Date: **Wednesday, November 10, 2021** Total Daily Volume: **27135** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
76	72	79	153	550	700	1174	1747	1639	1650	1671	1733	1764	1727	1928	1864	1941	2366	1547	1070	756	463	299	166
27	19	13	20	87	112	217	425	356	406	374	359	480	423	462	517	498	575	477	317	196	136	94	59
17	18	14	22	104	145	244	472	433	382	420	449	385	394	505	430	475	576	392	244	202	121	93	36
20	17	23	46	185	167	316	391	395	422	402	500	485	449	474	424	521	641	353	276	187	114	53	33
12	18	29	65	174	276	397	459	455	440	475	425	414	461	487	493	447	574	325	233	171	92	59	38

YRS	DIST_COUNTY_ROUTE	DIST	CNTY	RTE	RTE_SFX	PM_PFX	POSTMILE	PM_SFX	LOCATION_DESC	YR_2012	YR_2013	YR_2014	YR_2015	YR_2016	YR_2017	YR_2018	YR_2019	YR_2020	YR_2021
2012 - 2021	08-RIV-015	08	RIV	015			3.192		NB OFF TO RTE 79/TEMECULA							1001			
2012 - 2021	08-RIV-015	08	RIV	015			3.257		SB ON FR RTE 79/TEMECULA							1001			
2012 - 2021	08-RIV-015	08	RIV	015			3.531		SB OFF TO RTE 79/TEMECULA							1001			
2012 - 2021	08-RIV-015	08	RIV	015			3.595		NB ON FR RTE 79/TEMECULA							1001			
2012 - 2021	08-RIV-015	08	RIV	015			4.830		SB ON FR RANCHO CALIF							11789			
2012 - 2021	08-RIV-015	08	RIV	015			4.844		NBOFF TO RANCHO CALIF							11992			
2012 - 2021	08-RIV-015	08	RIV	015			5.112		SBOFF TO RANCHO CALIF							18348			
2012 - 2021	08-RIV-015	08	RIV	015			5.130		NB ON FR RANCHO CALIF							13524			
2012 - 2021	08-RIV-015	08	RIV	015			6.450		SBON FR NB 79/WINCHESTER							3922			
2012 - 2021	08-RIV-015	08	RIV	015			6.477		NB OFF TO RTE 79/WINCHESTER							13277			
2012 - 2021	08-RIV-015	08	RIV	015			6.592		NB ON FR NB 79/WINCHESTER				1001	1001	1001				
2012 - 2021	08-RIV-015	08	RIV	015			6.648		SBON FR SB 79/WINCHESTER							10063			
2012 - 2021	08-RIV-015	08	RIV	015			6.812		NB ON FR 79/WINCHESTER							17119			
2012 - 2021	08-RIV-015	08	RIV	015			6.822		SB OFF TO RTE 79/WINCHESTER							23111			
2012 - 2021	08-RIV-015	08	RIV	015			7.410		015/SB OFF TO FRENCH VALLEY PKWY			1001							
2012 - 2021	08-RIV-015	08	RIV	015			9.243		NBOFF TO MURRIETA H.SPG							4636			
2012 - 2021	08-RIV-015	08	RIV	015			9.342		SBON FR MURRIETA H.SPGS							42387			
2012 - 2021	08-RIV-015	08	RIV	015			9.592		NBON FR MURRIETA H.SPGS							17428			
2012 - 2021	08-RIV-015	08	RIV	015			9.735		SBOFF TO MURRIETA H.SPG							19797			
2012 - 2021	08-RIV-015	08	RIV	015			10.421		NB OFF TO CALIF OAKS RD							12704			
2012 - 2021	08-RIV-015	08	RIV	015			10.442		SB ON FR CALIF OAKS RD					5600		5898			
2012 - 2021	08-RIV-015	08	RIV	015			10.573		NB ON FR EB KAMIA ST	1001	1001	1001	1001	1001	1001				
2012 - 2021	08-RIV-015	08	RIV	015			10.625		SB ON FR WB CALIF OAKS RD	1001	1001	1001	1001	1001	1001				
2012 - 2021	08-RIV-015	08	RIV	015			10.780		SB OFF TO CALIF OAKS RD							10127			
2012 - 2021	08-RIV-015	08	RIV	015			10.784		NB ON FR CALIF OAKS RD					5100		5165			

Appendix F

Updated Trip Generation Evaluation
Claremont Law Group, Inc. (July 2024)

CLAREMONT LAW GROUP, INC.
618 WEST BASELINE ROAD
CLAREMONT, CALIFORNIA 91711
(909) 445-9133
FAX (909) 445-9138

SAUL JAFFE
(909) 445-9135
sjaffe@claremontlaw.com

July 2, 2024

Dennis Watts
Senior Planner
City of Murrieta
1 Town Square
Murrieta, CA 92562

Re: The Shops at the Triangle
Trip Generation Evaluation
Case No. DP-2022-2705 and TTM-2022-2706

Dear Dennis:

We understand that the City has reviewed the preliminary trip generation analysis provided by Scott Sato of Trames Solutions, Inc. We further understand that you requested additional information related to (a) the location of the proposed uses on site, (b) the trip generation results by phase, and (c) if certain improvements are needed with respect to the proposed scope of development.

By way of background, Mr. Sato provided the City with the trip generation counts for the following:

Planning Area 1 ï 144,483 sf (5,900 sf outdoor)
Planning Area 2 ï 77,616 sf (4,700 sf outdoor)
Planning Area 3 ï 57,439 sf (500 sf outdoor)
Future Development ï Outdoor Commercial Recreation

The trip generation calculations completed by Mr. Sato are shown in the Use Matrix attached hereto as Exhibit A. Table 2 of the Use Matrix is a Trip Generation Summary which is summarized below:

PEAK HOUR						
AM			PM			
IN	OUT	TOTAL	IN	OUT	TOTAL	DAILY
698	539	1,240	1,032	907	1,937	19,248

The locations of each use are listed by building number and the buildings are depicted on the Site Plan included at Exhibit B (the "Site Plan").

Received - Planning Division
SP-2023-00003/ DP-2022-2705/
TTM-2022-2706
7/2/24

You have asked for the trip generation analysis to compare the trip generation for the proposed project to the trip generation analysis completed in the existing entitlements. The project was analyzed under a Subsequent Environmental Impact Report which was approved on May 8, 2013 (the "SEIR").

Table 5.10-6 of the SEIR contains the trip generation analysis for Phase 1c of the project and is enclosed at Exhibit "C" (the "Phase 1c Trip Generation Summary").

The Phase 1c Trip Generation Summary is summarized below:

PEAK HOUR						
AM			PM			
IN	OUT	TOTAL	IN	OUT	TOTAL	DAILY
723	534	1,257	1,082	967	2,049	22,541

We note that in all aspects, AM (In and Out) and Total Trips, PM (In and Out) Total Trips and Total Daily Trips, the proposed project is within the trip generation counts analyzed for Phase 1c, and that this analysis includes the anticipated trips for an additional confidential tenant in the future development area which is not currently included in *Case No. DP-2022-2705*. Accordingly, the proposed project is well within the trip generation for Phase 1c of the project.[1]

Under the SEIR the project is required to construct certain project design features and to pay a fair share contribution to traffic improvements. The project incorporates the required project design features and will pay its fair share contribution at the time building permits are issues for the respective construction.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

CLAREMONT LAW GROUP, INC.

SAUL JAFFE

SJ:hjw
Enclosures

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[1] The AM out exceeds the Phase 1c trips by 5 trips (539 vs 534). Upon removal of the 5 anticipated trips for the confidential use listed for Future Development, the project complies with the Phase 1c trip generation for AM Out specified in the SEIR.

EXHIBIT A

TABLE 1

TRIP GENERATION RATES[1]

LAND USE	ITE CODE	UNITS[2]	PEAK HOUR TRIP RATES						DAILY
			AM			PM			
			IN	OUT	TOTAL	IN	OUT	TOTAL	
Drive-in Bank	912	TSF	5.77	4.18	9.95	10.51	10.51	21.02	100.35
Fast Casual Restaurant	930	TSF	0.72	0.71	1.43	6.9	5.65	12.55	97.14
Fine Dining Restaurant	931	TSF	0.37	0.37	0.74	5.23	2.57	7.8	83.84
High Turnover (Sit-Down) Restaurant	932	TSF	5.26	4.31	9.57	5.52	3.53	9.05	107.2
Fast-Food Restaurant w/ Drive-Through Window	934	TSF	22.75	21.86	44.61	17.18	15.85	33.03	467.48
Shopping Center (<40k)	822	TSF	1.42	0.94	2.36	3.3	3.29	6.59	54.45
Supermarket	850	TSF	2.29	1.53	3.82	4.71	4.53	9.24	106.78
Small Office Building (10k or less)	712	TSF	1.37	0.3	1.67	0.73	1.43	2.16	14.39
Health/Fitness Club	492	TSF	0.67	0.64	1.31	1.97	1.48	3.45	30
Outdoor Recreational Commercial	433	80 Bays	0.31	0.07	0.38	1.18	1.06	2.24	20.235

[1] Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 11th Edition, 2021.

[2] TSF = Thousand Square Feet

[3] DATA = Trip Rates determined by Empirical Counts

TABLE 2

TRIP GENERATION SUMMARY

LAND USE	BUILDING	LAND USE CODE	QUANTITY	UNITS[1]	PEAK HOUR						DAILY
					AM			PM			
					IN	OUT	TOTAL	IN	OUT	TOTAL	
Drive-in Bank	B-7 Bank	912	5.495	TSF	32	23	55	58	58	116	551
Pass-by (AM:29%, PM:35%, Daily:29%)					-9	-7	-16	-20	-20	-41	-160
Fast Casual Restaurant	B-8 Fast Food	930	7.404	TSF	5	5	10	51	42	93	719
Pass-by (AM:50%, PM:55%, Daily:50%)					-3	-3	-5	-28	-23	-51	-360
High Turnover (Sit-Down) Restaurant	B-11 Fast Food	932	7.5	TSF	39	32	71	41	26	67	804
Pass-by (AM:50%, PM:55%, Daily:50%)					-20	-16	-36	-23	-14	-37	-402
High Turnover (Sit-Down) Restaurant	B-12 Sit Down Restaurant	932	11.031	TSF	58	48	106	61	39	100	1,183
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-26	-17	-43	-509
Shopping Center (<40k)	B-B-1 Retail	822	1.998	TSF	3	2	5	7	7	14	109
Shopping Center (<40k)	B-B-2 Retail	822	3.5	TSF	5	3	8	12	12	24	191
Shopping Center (<40k)	B-B-3 Retail	822	4.55	TSF	6	4	10	15	15	30	248
Supermarket	B-B Supermarket	850	39.967	TSF	92	61	153	188	181	369	4,268
Pass-by (AM:0%, PM:24%, Daily:24%)					0	0	0	-45	-43	-89	-1,024
Shopping Center (<40k)	B-B-4 Retail	822	10	TSF	14	9	23	33	33	66	545
Shopping Center (<40k)	B-B-5 Retail	822	11.187	TSF	16	11	27	37	37	74	609
Shopping Center (<40k)	B-C-1 Retail	822	12.3	TSF	17	12	29	41	40	81	670
Shopping Center (<40k)	B-C Retail	822	12.413	TSF	18	12	30	41	41	82	676
Shopping Center (<40k)	B-D Retail	822	23.038	TSF	33	22	55	76	76	152	1,254
High Turnover (Sit-Down) Restaurant	B-1 Sit Down Restaurant	932	5.993	TSF	32	26	58	33	21	54	642
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-14	-9	-23	-276
Fine Dining Restaurant	B-2 Sit Down Restaurant	931	10.092	TSF	4	4	8	53	26	79	846
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-23	-11	-34	-364
Shopping Center (<40k)	B-3 Retail	822	5.818	TSF	8	5	13	19	19	38	317
High Turnover (Sit-Down) Restaurant	B-4 Sit Down Restaurant	932	8.744	TSF	46	38	84	48	31	79	937
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-21	-13	-34	-403
Shopping Center (<40k)	B-5 Retail	822	10.568	TSF	15	10	25	35	35	70	575
Fast-Food Restaurant w/ Drive-Through Window	B-6 Fast Food	934	6.744	TSF	153	147	300	116	107	223	3,153
Pass-by (AM:50%, PM:55%, Daily:50%)					-77	-74	-150	-64	-59	-123	-1,577
High Turnover (Sit-Down) Restaurant	B-A Arcade/Restaurant	932	16.441	TSF	86	71	157	91	58	149	1,762
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-39	-25	-64	-758
Shopping Center (<40k)	B-A-1 Retail	822	6.428	TSF	9	6	15	21	21	42	350
Small Office Building (10k or less)	B-A-3 Office	712	1.194	TSF	2	0	2	1	2	3	17
Shopping Center (<40k)	B-A-2 Retail	822	3.122	TSF	4	3	7	10	10	20	170
Fine Dining Restaurant	B-13 Sit Down Restaurant	931	8.046	TSF	3	3	6	42	21	63	675
Pass-by (AM:0%, PM:43%, Daily:43%)					0	0	0	-18	-9	-27	-290
Fast-Food Restaurant w/ Drive-Through Window	B-14 Fast Food	934	4.28	TSF	97	94	191	74	68	142	2,001
Pass-by (AM:50%, PM:55%, Daily:50%)					-49	-47	-96	-41	-37	-78	-1,001
Health/Fitness Club	B-E Gym	492	41.001	TSF	27	26	53	81	61	142	1,230
Shopping Center (<40k)	B-E-1 Retail	822	4.612	TSF	7	4	11	15	15	30	251
Outdoor Recreational Commercial	Outdoor Recreational Commercial	433	80	Bays	25	5	31	94	85	179	1619
TOTAL					698	539	1,240	1,032	907	1,937	19,248

[1] TSF = Thousand Square Feet

REGISTERED PROFESSIONAL ENGINEER
PRESCOTT T. SATO
TR 2586
EXP. 6/30/2025
TRAFFIC
STATE OF CALIFORNIA

EXHIBIT B

THE TRIANGLE

THE TRIANGLE
MURRIETA CA

JOB #18.1821

E:\Triangle\Team CAD\ddm apr 17.dwg 04/17/2024 16:52

EXHIBIT C

not been considered in this analysis; the traffic projections are "conservative" in that public transit might be able to reduce the traffic volumes.

TABLE 5.10-6
THE TRIANGLE SPECIFIC PLAN LAND USE
AND TRIP GENERATION SUMMARY

Land Use	Quantity	Units[a]	Peak Hour AM In	AM Out	AM Total	PM In	PM Out	PM Total	Daily
Phase 1a (Year 2009)									
High Turnover (Sit-Down) Rest.	49.392	TSF	296	273	569	329	210	539	6,280
Passby Trips (15%) [c]						*-34*	*-15*	*-49*	*-754*
PHASE 1A TOTAL			***296***	***273***	***569***	***295***	***195***	***490***	***5,526***
Phase 1b (Year 2010)									
Commercial Retail	184.486	TSF	138	89	227	450	487	937	10,112
General Office Building	48.0	TSF	92	12	104	23	110	133	758
Theater	74.66	TSF	10	10	20	287	191	478	5,973
High Turnover (Sit-Down) Rest.	75.122	TSF	450	415	865	500	320	820	9,552
Phase 1b Subtotal			***690***	***526***	***1,216***	***1,260***	***1,108***	***2,368***	***26,395***
Internal Trips (AM=5%, PM=17%, ADT=17%) [b]			*-28*	*-28*	*-56*	*-202*	*-202*	*-404*	*-4,503*
Passby Trips (Shopping Center and High Turnover [Sit-Down] Restaurant)(15%) [c]						*-115*	*-94*	*-209*	*-2,446*
PHASE 1B TOTAL			***662***	***498***	***1,160***	***943***	***812***	***1,755***	***19,446***
Phase 1c (Year 2010)									
Commercial Retail	339.714	TSF	200	126	326	673	730	1,403	15,036
General Office Building	48.0	TSF	92	12	104	23	110	133	758
Theater	74.66	TSF	10	10	20	287	191	478	5,973
High Turnover (Sit-Down) Rest.	75.122	TSF	450	415	865	500	320	820	9,552
Phase 1c Subtotal			***752***	***563***	***1,315***	***1,483***	***1,351***	***2,834***	***31,319***
Internal Trips (AM=5%, PM=18%, ADT=18%) [b]			*-29*	*-29*	*-58*	*-261*	*-261*	*-522*	*-5,769*
Passby Trips (Shopping Center and High Turnover [Sit-Down] Restaurant)(15%) [c]						*-140*	*-123*	*-263*	*-3,009*
PHASE 1C TOTAL			***723***	***534***	***1,257***	***1,082***	***967***	***2,049***	***22,541***
Phase 2 (Year 2014)									
Commercial Retail	438.774	TSF	233	149	382	799	864	1,663	17,757
General Office Building	530.0	TSF	625	85	710	117	557	674	4,818
Hotel	220	RM	75	48	123	68	59	127	1,797
Theater	74.66	TSF	10	10	20	287	191	478	5,973
High Turnover (Sit-Down) Rest.	75.122	TSF	450	415	865	500	320	820	9,552
Phase 2 Subtotal			***1,393***	***707***	***2,100***	***1,771***	***1,991***	***3,762***	***39,897***
Internal Trips (AM=11%, PM=18%, ADT=18%) [b]			*-112*	*-112*	*-224*	*-331*	*-331*	*-662*	*-7,021*
Passby Trips (Shopping Center and High Turnover [Sit-Down] Restaurant)(15%) [c]						*-166*	*-151*	*-317*	*-3,375*
PHASE 2 TOTAL			***1,281***	***595***	***1,876***	***1,274***	***1,509***	***2,783***	***29,501***

Appendix G

Transportation Demand Management Memorandum
RK Engineering Group, Inc. (July 2024)

THE TRIANGLE
TRANSPORTATION DEMAND MANAGEMENT PLAN
City of Murrieta, California

THE TRIANGLE

RK engineering group, inc.

THE TRIANGLE
TRANSPORTATION DEMAND MANAGEMENT PLAN
City of Murrieta, California

Prepared for:

TRES ESTRELLAS, LLC
618 West Baseline Road
Murrieta, CA 91711

Prepared by:

RK ENGINEERING GROUP, INC.
1401 Dove Street, Suite 540
Newport Beach, CA 92660

Rogier Goedecke
President

July 10, 2024

Table of Contents

List of Attachments

Exhibits

Appendices

1.0 Introduction

Project Description

The proposed Triangle mixed-use development project (hereinafter referred to as "The Triangle" or "project") consists of a regional shopping center on an approximately 64.3-acre site bounded by Murrieta Hot Springs Road to the north, I-15 to the southwest, and I-215 to the southeast, in the City of Murrieta. The project will be served by three (3) vehicular access points located along Murrieta Hot Springs Road. The initial development plan consists of approximately 280,000 square feet (SF) of use on approximately 40 acres.

The project site is currently designated commercial in the City of Murrieta General Plan and is also zoned as The Triangle Specific Plan (SP 276). No changes are proposed to those existing designations.

Based on project conditions of approval, a Transportation Demand Management (TDM) plan is required to reduce single-occupancy employee vehicle trips to and from the project site, per the City of Murrieta Municipal Code Section 16.40: Transportation Demand Management.

Appendix B includes the City of Murrieta Municipal Code Section 16.40: Transportation Demand Management.

The Triangle mixed-use development project will be constructed in multiple phases. Typical land uses within the shopping center will consist of retail, restaurant, health club, general office, etc. This TDM plan as it stands reflects only the initial phase of the development, which consists of approximately 280,000 SF of commercial/retail use. As more development phases are added, the TDM plan may be modified to include future project expansions.

A location map and site plan for the project are provided in Exhibit A and Exhibit B, respectively.

Proposed Employees

The site will be occupied by The Triangle mixed-use development project. Due to the preliminary stage of the project, the final tenant/land use mix for the initial 280,000 SF phase of The Triangle has not been determined, and as such, there is no employee information available.

The City of Murrieta Municipal Code Section 16.40.030 provides a methodology to determine employee generation for new developments where actual employment statistics may not exist. Said methodology utilizes gross square feet-to-employee rates which are dependent on land use categories, as published in the Municipal Code and shown in the table below.

Employee Generation by Land Use Category

Land Use Category	Gross Square Feet/Employee
Retail/Commercial	Five Hundred (500) Square Feet/Employee
Office/Professional	Three Hundred (300) Square Feet/Employee
Industrial/Manufacturing	Five Hundred (500) Square Feet/Employee
Warehouse	One Thousand (1,000) Square Feet/Employee
Hotel/Motel	0.5 Employees/Guest Room
Hospital	Three Hundred (300) Square Feet/Employee

Source: City of Murrieta Municipal Code Section 16.40.030 Table 3-12.

For retail/commercial land uses such as the proposed project, the Municipal Code advises one employee per 500 SF. As previously mentioned, the initial development plan for The Triangle consists of approximately 280,000 SF of commercial/retail use. Therefore, the number of employees expected to be employed during the initial phase of The Triangle is calculated as follows:

Number of Employees = 280,000 SF x (1 Employee/500 SF) = **560 Employees**.

TDM Plan & Objectives

The City of Murrieta Municipal Code requires all new or expanded facilities that employ 100 or more persons at one site to prepare a TDM plan. Since the proposed Triangle mixed-use development project is forecast to employ approximately 560 employees, it is subject to following these guidelines.

This TDM plan is consistent with The Triangle Specific Plan (SP 276) Ordinance, dated October 2013, and the South Coast Air Quality Management District (SCAQMD) Rule 2202 Employee Commute Reduction Program (ECRP) Guidelines, dated February 5, 2016.

In accordance with the SCAQMD Rule 2202 ECRP Guidelines, employers shall submit an ECRP that demonstrates that they have met the annual Average Vehicle Ridership (AVR) target for the AVR Performance Zone in which the worksite is located. In the case of new developments, such as the proposed project, employers may fulfill this requirement by choosing to submit a TDM plan that includes employee commute trip reduction strategies.

The purpose of the TDM plan is to provide regulations to help reduce air pollution and congestion caused by vehicle trips and vehicle miles traveled (VMT). The TDM plan will provide the occupants of the site with additional transportation options to reduce vehicle trips and VMT.

The primary objective of this TDM plan is to reduce the number of single occupancy vehicle (SOV) trips to and from the project site. To reduce the amount of vehicular traffic, the number of people driving alone to the building can be reduced by diverting a portion of employees to alternative modes of transportation. Common vehicle trip reduction strategies include walking, public transit, bicycling, carpooling, vanpooling, monetary incentives, etc. This TDM plan incorporates many strategies which can facilitate convenient access to transit, provide a pedestrian-friendly environment, promote non-automobile travel, and can support the goals of a trip reduction program.

The Triangle will include pedestrian walkways and open spaces to ensure pedestrian mobility within the site. Each Planning Area within The Triangle will be linked through a series of pedestrian walkways to the pedestrian walkway along the Internal Connector Road. This network of pedestrian connections among all the uses on-site will be designed to unify the entire project area and provide pedestrian site access to the buildings, parking, and site activity areas. A 6' meandering sidewalk along the southern side of Murrieta Hot Springs Road provides pedestrian access to the three (3) project site entries. Internal pedestrian circulation is provided throughout The Triangle by use of 6’ sidewalks along the Internal Connector Road, 5’ sidewalks along all secondary drives, and 5’ pathways that connect all the Planning Areas and uses of The Triangle. Marked crosswalks will be provided at all street crossings to provide safe crossings of the Internal Connector Road, secondary drives, and access to building entries.

The project's location allows the employees to take advantage of the existing network of public transit offerings. The Triangle project site is bounded by Murrieta Hot Springs Road to the north, I-15 to the southwest, and I-215 to the southeast. As a result, the project can utilize existing public transit services with five (5) bus stops located within ½ of a mile of the site. Class II Bike Lanes are also conveniently provided near the project site. Based on the City of Murrieta General Plan Trails and Bikeways map, bicycle and pedestrian facilities will continue to expand near the project site.

2.0 Alternative Transportation Methods

This Transportation Demand Management plan contains interrelated strategies that work together to reduce the number of work-related SOV trips to and from the site. A primary objective of the TDM plan is to make more efficient use of existing transportation facilities to reduce traffic congestion and air pollution. Apart from increasing vehicle occupancy, the TDM strategies proposed to be implemented by The Triangle mixed-use development project have great potential to promote and encourage the use of alternative transportation methods by the employees. A key to getting employees to use alternative transportation is informing and educating them about the availability and benefits of alternative transportation modes.

2.1 Public Transit Options (Exhibit C)

The location of The Triangle along Murrieta Hot Springs Road makes the site easily served by public transit. Currently, bus transit service operates nearby and may be a viable option for employees.

Public transit use is the most ideal of the TDM strategies. It is a total removal of a vehicle trip from the roadways and the need for a parking space, rather than merely shifting the time of a vehicle trip. Making public transit services more readily available to the employees of the site would allow them more opportunity to take advantage of public transit to commute to work. Utilizing public transit would also reduce parking demand and traffic impacts.

Using public transit also results in savings for people who start using it. They save money on fuel and the mileage on their cars. They also gain time to use when riding public transit to read, sleep, or work.

Bus Service

Public transit bus service in the City of Murrieta is provided by the Riverside Transit Agency (RTA) and runs on major arterial and collector streets in the city. The following two (2) bus lines operate within ½ of a mile of the project site, as shown on Exhibit C:

1. Route 23: Temecula – Murrieta – Wildomar

   - Service is provided from approximately 6:30 AM – 8:00 PM at approximately 1-hour intervals Monday – Friday.

   - Service is provided from approximately 7:00 AM – 7:30 PM at approximately 1-hour intervals Saturday – Sunday.

2. Route 61: Perris Station Transit Center – Sun City – Quail Valley – Menifee – Murrieta - Temecula

   - Service is provided from approximately 4:30 AM – 8:30 PM at approximately 1-hour intervals Monday – Friday.

   - Service is provided from approximately 6:30 AM – 7:30 PM at approximately 1-hour intervals Saturday – Sunday.

   - Service is provided to and from the Perris Station Transit Center, in the City of Perris.

It should be noted that anticipating future expansion of local transit service, per The Triangle Specific Plan (SP 276) Ordinance, a public transit stop with a bus turnout is planned on the south side of Murrieta Hot Springs Road just east of the future Monroe Avenue at Murrieta Hot Springs Road intersection. This future bus stop will include a seating bench and a passenger shade shelter and will provide service eastbound along Murrieta Hot Springs Road. The proximity of the proposed location to the project site will further promote and encourage the use of public transit by project employees and visitors.

RTA Routes 23 and 61 have five (5) bus stops located within ½ of a mile walking distance from the project site, as described below:

1. Bus Stop #2514 is in the Walmart parking lot along Madison Avenue and serves RTA Route 23. Service is provided both northbound and southbound along Madison Avenue, since this is a turnaround stop.

2. Bus Stop #2473 is located at the southwest corner of Hancock Avenue at Medical Center Drive and serves RTA Routes 23 and 61. Service is provided southbound along Hancock Avenue.

3. Bus Stop #2531 is located at the northeast corner of Hancock Avenue at Medical Center Drive and serves RTA Routes 23 and 61. Service is provided northbound along Hancock Avenue.

4. Bus Stop #2493 is located on the west side of Alta Murrieta Drive approximately ¼ of a mile north of Murrieta Hot Springs Road and serves RTA Route 23. Service is provided southbound along Alta Murrieta Drive.

5. Bus Stop #3318 is located at the southeast corner of Alta Murrieta Drive at Murrieta Hot Springs Road and serves RTA Routes 23 and 61. Service is provided eastbound along Murrieta Hot Springs Road.

The project should provide bus service maps and schedules and information to all employees to further promote the use of local transit.

Transit schedules for RTA Routes 23 and 61 are included in Appendix B.

Train Service

As previously mentioned, RTA Route 61 offers service to and from the Perris Station Transit Center, which is located approximately eighteen (18) miles from the project site, in the City of Perris.

Trains can provide service for longer distance commuters to the project. Current Metrolink schedules are available online at www.metrolinktrains.com. Copies of the Metrolink train schedules can also be obtained at the Perris Metrolink Station.

2.2 Motorcycle and Bicycle Use (Exhibit D)

Although the automobile is the most common type of vehicle used for commuting in Southern California, other vehicle types exist that accomplish the same purpose with much less traffic and pollution impact. The motorcycle and bicycle are the vehicle types that have the narrowest profile of all vehicles and cause the least traffic impact.

Motorcycles provide the same amount of mobility cars provide yet produce low traffic and parking impact. They occupy less than half the space of a car, even less compared to a sports utility vehicle (SUV). In traffic, a motorcycle easily bypasses traffic congestion due to its small size. Although motorcycles have some drawbacks compared with an automobile, growing traffic congestion in the region may make motorcycle use more desirable.

Biking is encouraged since it has a low traffic impact and is non-polluting and healthy for the commuter. Southern California is particularly well-suited for bicycle commuting due to its temperate climate, and research has indicated that a commute distance of 1-7 miles can easily be done on a bicycle. In addition, all RTA buses have bicycle racks, making bicycle commuting very convenient and extending the range of a bicycle commuter.

Bicycle facilities have been implemented throughout the city, which make bicycling safer and more convenient. The closest existing bicycle facility to the project site is the Class II on-road striped bike lane along Hancock Avenue. The City of Murrieta General Plan Trails and Bikeways map is shown on Exhibit D.

Additionally, and as previously mentioned, bicycle facilities are planned to continue to expand in the future near the project site. Per The Triangle Specific Plan (SP 276) Ordinance, a Class II bike lane is planned for Murrieta Hot Springs Road that will allow bicyclists access to the project site. Furthermore, to facilitate bicycle movement into and through the site, a 5’ bicycle lane will be provided either as an on-street lane on the Internal Connector Road or in a multi-purpose path along one side of the Internal Connector Road.

3.0 TDM Recommendations (Exhibit E)

Transportation Demand Management is the use of strategies to make more efficient use of existing transportation facilities to reduce traffic congestion and air pollution. This includes strategies to increase vehicle occupancy (the number of occupants per vehicle) during the AM/PM peak hour commutes, diverting drivers to alternative transportation, and reducing lunchtime vehicle trips. This involves providing opportunities to reduce driving alone and providing incentives for alternative modes of transportation.

The Triangle mixed-use development project will implement this TDM plan which consists of the following employee commute reduction strategies:

1. Flex Time Schedules
2. Preferential Parking for Ridesharers
3. Transit Information Center
4. Secure Bicycle Parking
5. On-Site Amenities

As previously mentioned, this TDM plan along with its recommended trip reduction strategies reflects only the initial phase of The Triangle mixed-use development project, which consists of approximately 280,000 SF of commercial/retail use. As more development phases are added in future expansions, the TDM plan may be modified and new trip reduction strategies/recommendations may be considered.

The implementation of the employee commute reduction strategies described in the following sections is the responsibility of The Triangle as a whole development, and not the responsibility of the individual employers/tenants that will operate within The Triangle.

3.1 Flex Time Schedules

Employees within The Triangle should be allowed to adjust their work hours to accommodate public transit schedules or rideshare arrangements. Employers must have a formal written policy on flex time that outlines the provisions to permit their employees to adjust their start- and end-times based on available alternative transportation.

3.2 Preferential Rideshare (Carpool) Parking

The Triangle will provide preferential parking spaces for rideshare vehicles. Such spaces must be clearly posted or marked in a manner that identifies them for carpool use only. Preferential parking may include parking that is located near the building entrance, covered, or otherwise preferable. Passenger loading areas to embark and disembark passengers from carpool vehicles will also be established. The passenger loading areas will be located near the building entrance and should be designed in a manner that does not impede vehicular circulation in the parking area or internal street system of the site, as well as fire, police, or paramedic access to the site.

The Triangle will have designated areas for preferential parking spaces for all employees from all worksites to access and utilize. Individual employers must inform their employees about the location of these parking spaces and their shared nature among all employees within The Triangle. Exhibit E illustrates the location of the proposed forty-eight (48) preferential carpool parking spaces, as well as the location of proposed passenger loading areas.

3.3 Transit Information Center

The Triangle will provide a transit information center that makes available general transit information and/or the on-site sale of public transit passes, tickets, or tokens to the worksite employees. At a minimum, the information must be updated quarterly. Since The Triangle will be a multi-employer site, this strategy may be implemented by establishing a centralized site-wide transit information center. The centralized transit information center will serve all employees from all worksites within The Triangle and will be in a central area accessible to all employees on-site. It will provide the most up-to-date transit information as well as sell bus passes, tickets, etc. Additionally, transit information kiosks will be located throughout the site with real-time travel information screens to further promote alternative transportation to all employees and visitors. Exhibit E illustrates the location of the proposed centralized transit information center as well as the proposed transit information kiosks.

3.4 Secure Bicycle Parking

The Triangle will provide secure bicycle parking throughout the site available to eligible employees who commute by bicycle. Site-wide secure bicycle parking, in the form of racks, will be installed throughout the site and accessible to all employees from all worksites. Exhibit E illustrates the location of the proposed twelve (12) bicycle racks throughout the site, comprising sixty (60) secure bicycle parking spaces on-site.

3.5 On-Site Amenities

The Triangle will include typical shopping center land uses designed to encourage solo commuters to participate in the commute reduction program. Since The Triangle will be a multi-employer site, on-site amenities such as restaurant uses, cafeterias and food vendors, transit information kiosks, and ATMs, will be established and accessible to all employees from all worksites. This strategy has the potential to decrease off-site trips, reducing overall VMT. Exhibit E illustrates the location of the proposed on-site amenities.

3.6 Trip Reductions

Per the City of Murrieta Municipal Code Section 16.40.040, applicable developments employing 100 or more persons shall incorporate facilities and/or programs to attain a 12% work-related trip reduction.

As previously mentioned, the number of employees expected to be employed during the initial phase of The Triangle mixed-use development project is 560, which generates 560 round-trip employee trips. As such, the resulting trip reduction required to meet the City of Murrieta Municipal Code trip reduction requirement is sixty-eight (68) round-trip employee trips.

The City of Murrieta Municipal Code provides specific trip reduction measures that can be utilized to comply with the 12% reduction requirement. The table below shows the projected number of round-trip employee trips that will be reduced per applicable trip reduction measures to attain a minimum 12% work-related trip reduction (68 trips).

Trip Reduction Summary

Measure Number	Reduction Measure	Trips
1	Preferential Parking for Carpool Vehicles	48
2	Secure Bicycle Parking (Racks)	60
3	Information Center for Transportation Alternatives	2
4	On-Site Amenities	8
	Total Trip Reduction	**118 (21%)**

Through the implementation of the TDM strategies summarized in the table above, The Triangle is expected to attain a 21% work-related vehicle trip reduction (118 trips), which is greater than the 12% trip reduction requirement outlined in the City of Murrieta Municipal Code Section 16.40.

RK ENGINEERING GROUP, INC. appreciates this opportunity to work with TRES ESTRELLAS, LLC on this project. If you have any questions regarding this study, please do not hesitate to contact us at (949) 474-0809.

Respectfully Submitted,

RK ENGINEERING GROUP, INC.

Rogier Goedecke

Rogier Goedecke
President

Exhibits

Exhibit A

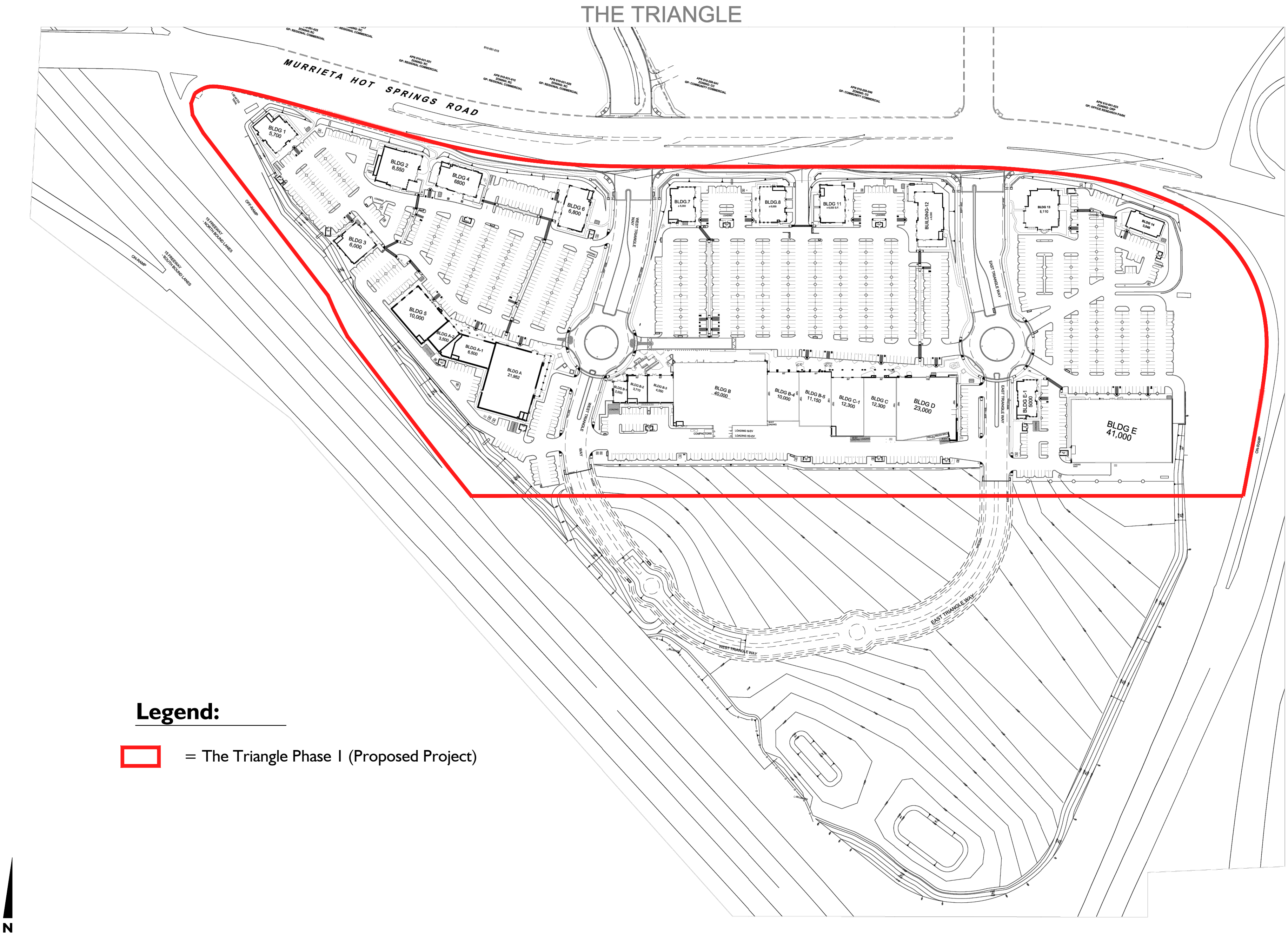
Location Map

Legend:

= The Triangle Project Site

N

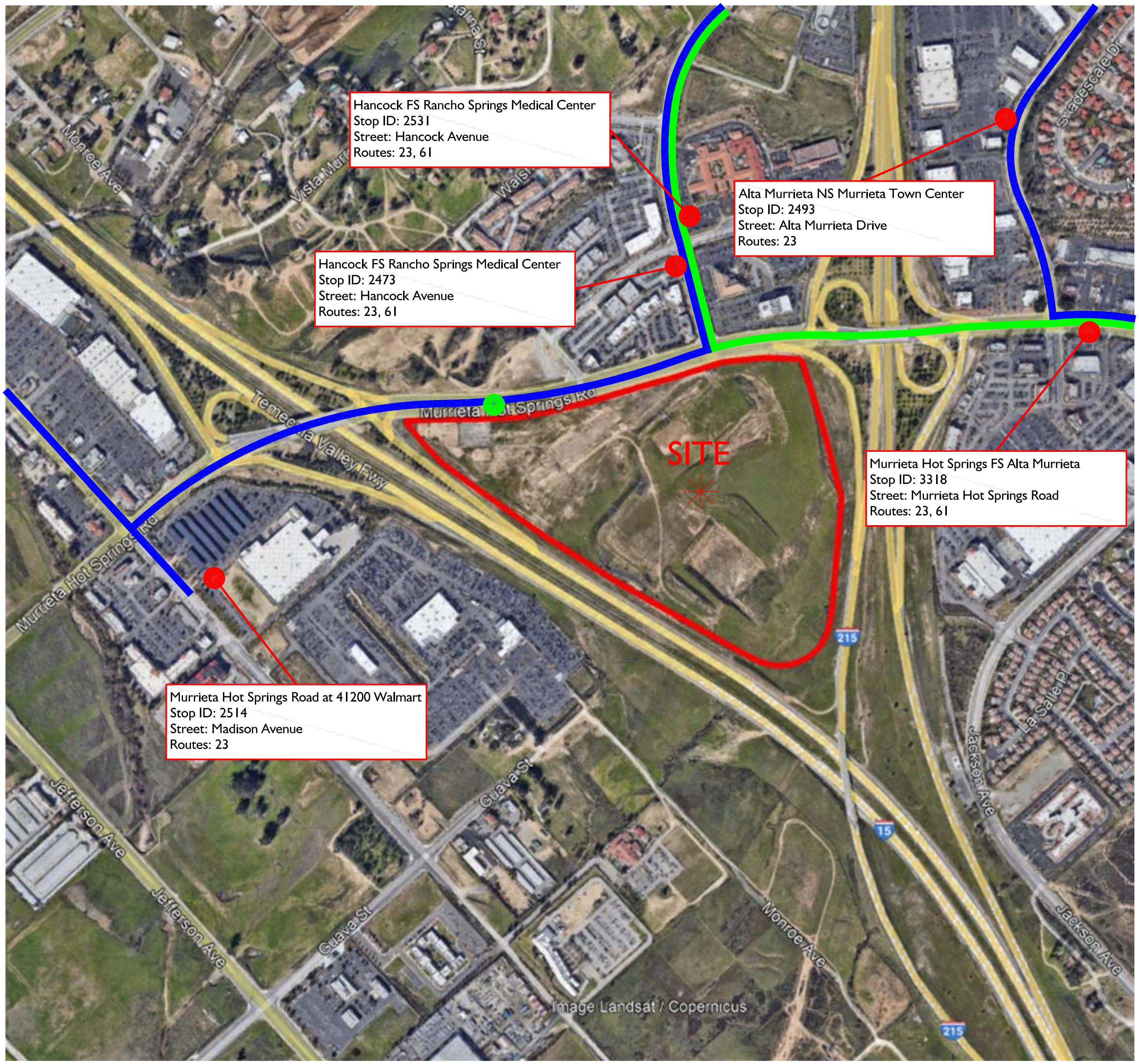
Site Plan



Legend:

= The Triangle Phase I (Proposed Project)

Existing Bus Stops



Legend:

= Project Site Boundary

= Existing Bus Stop

= Planned Future Bus Stop (Route #23)

= Bus Route #23

= Bus Route #61

N

RK engineering group, inc.

Exhibit D

City of Murrieta General Plan Trails and Bikeways

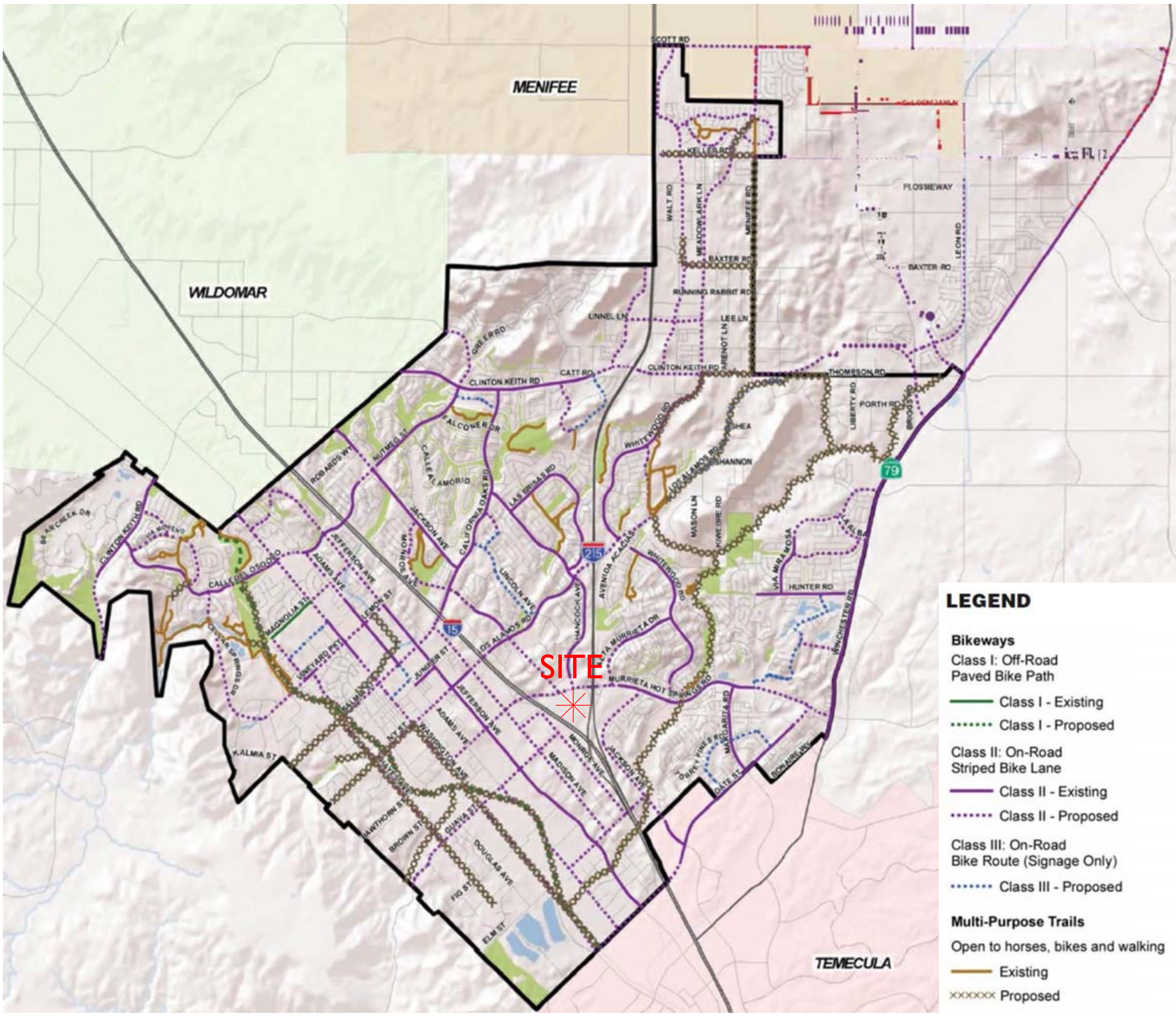


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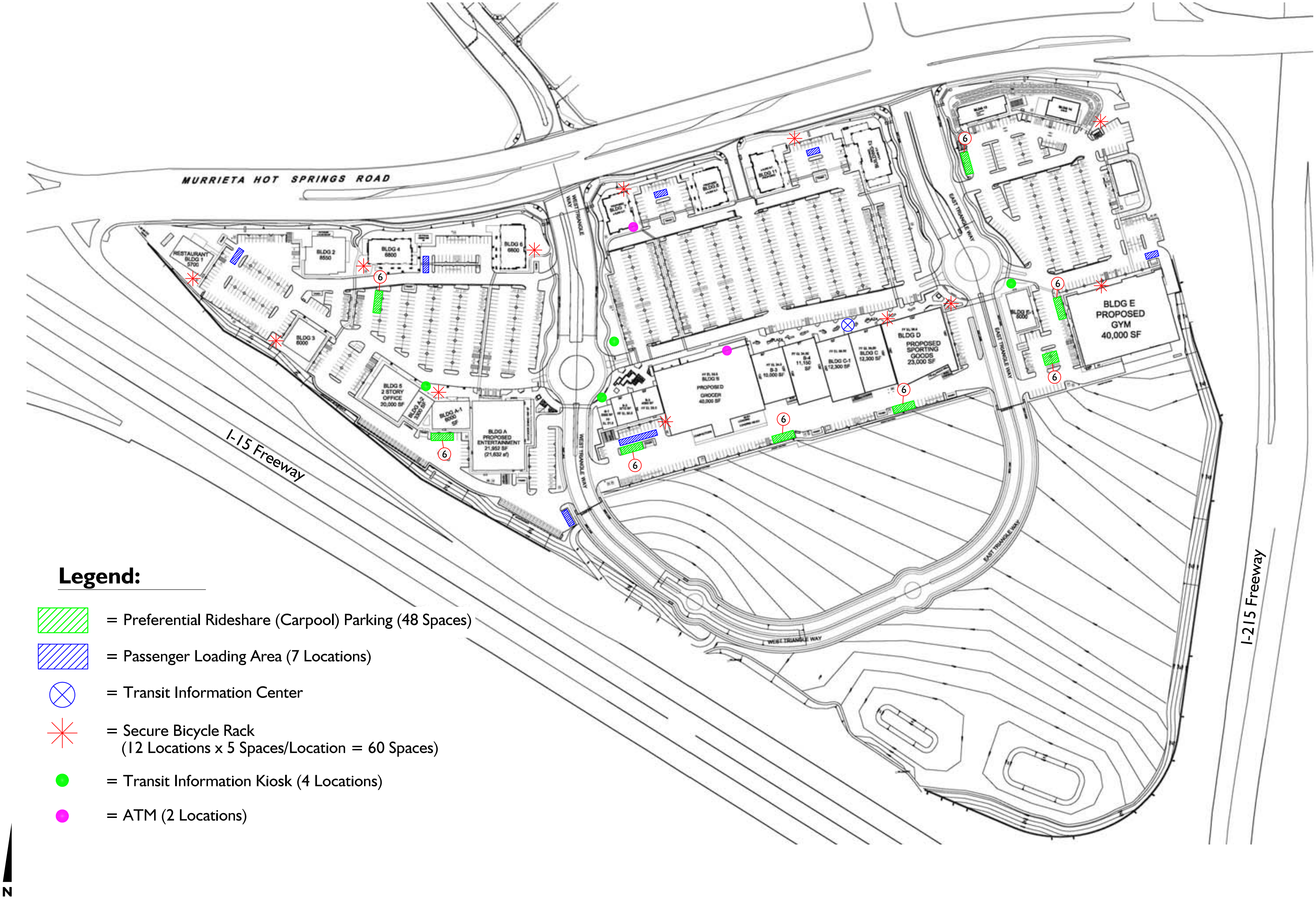
Exhibit E

TDM On-Site Recommendations



Appendices

Appendix A

Riverside Transit Agency (RTA) Bus Schedules

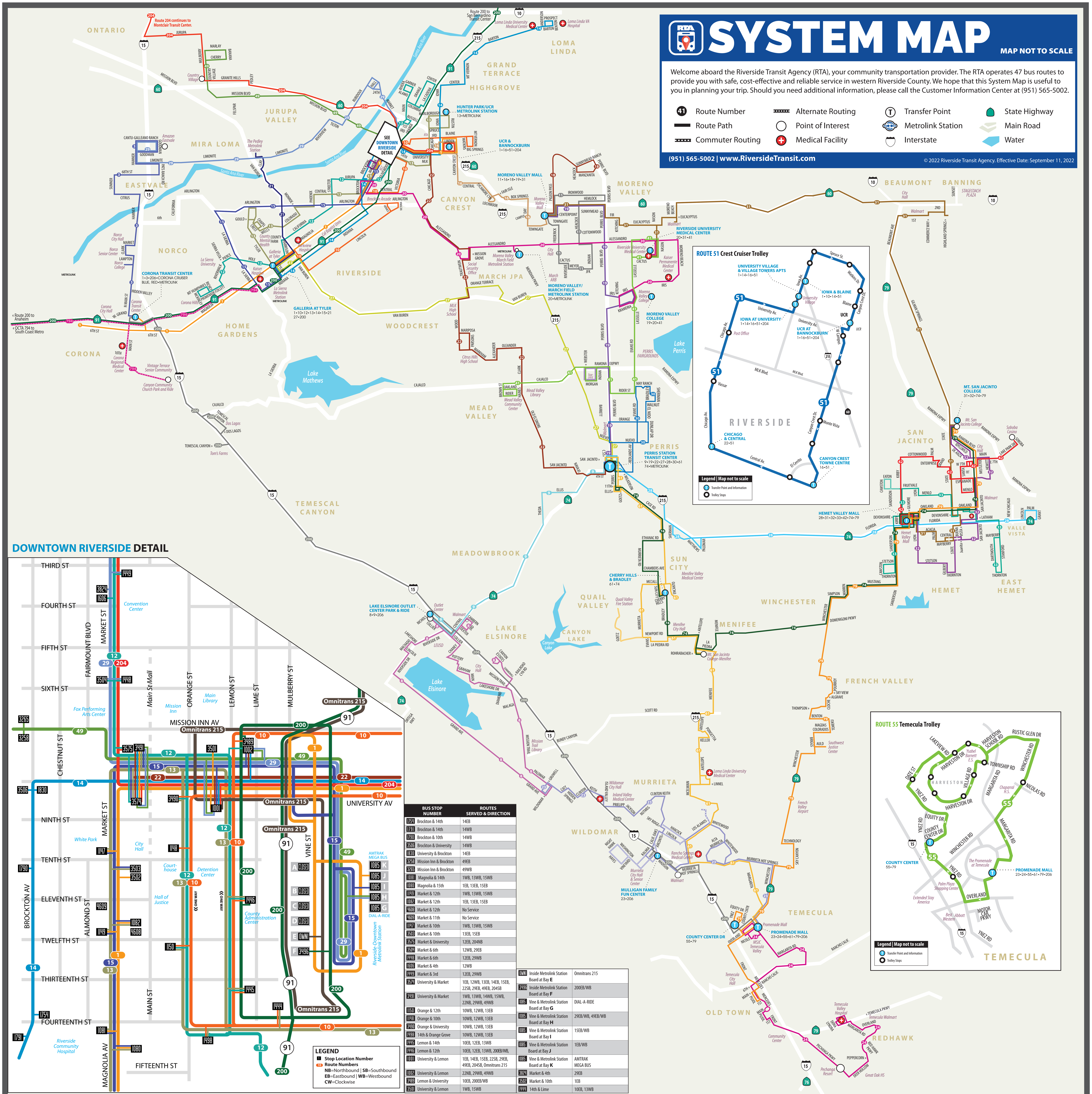
SYSTEM MAP

MAP NOT TO SCALE

Welcome aboard the Riverside Transit Agency (RTA), your community transportation provider. The RTA operates 47 bus routes to provide you with safe, cost-effective and reliable service in western Riverside County. We hope that this System Map is useful to you in planning your trip. Should you need additional information, please call the Customer Information Center at (951) 565-5002.

41	Route Number		Alternate Routing		Transfer Point		State Highway
	Route Path		Point of Interest		Metrolink Station		Main Road
	Commuter Routing		Medical Facility		Interstate		Water

(951) 565-5002 | www.RiversideTransit.com

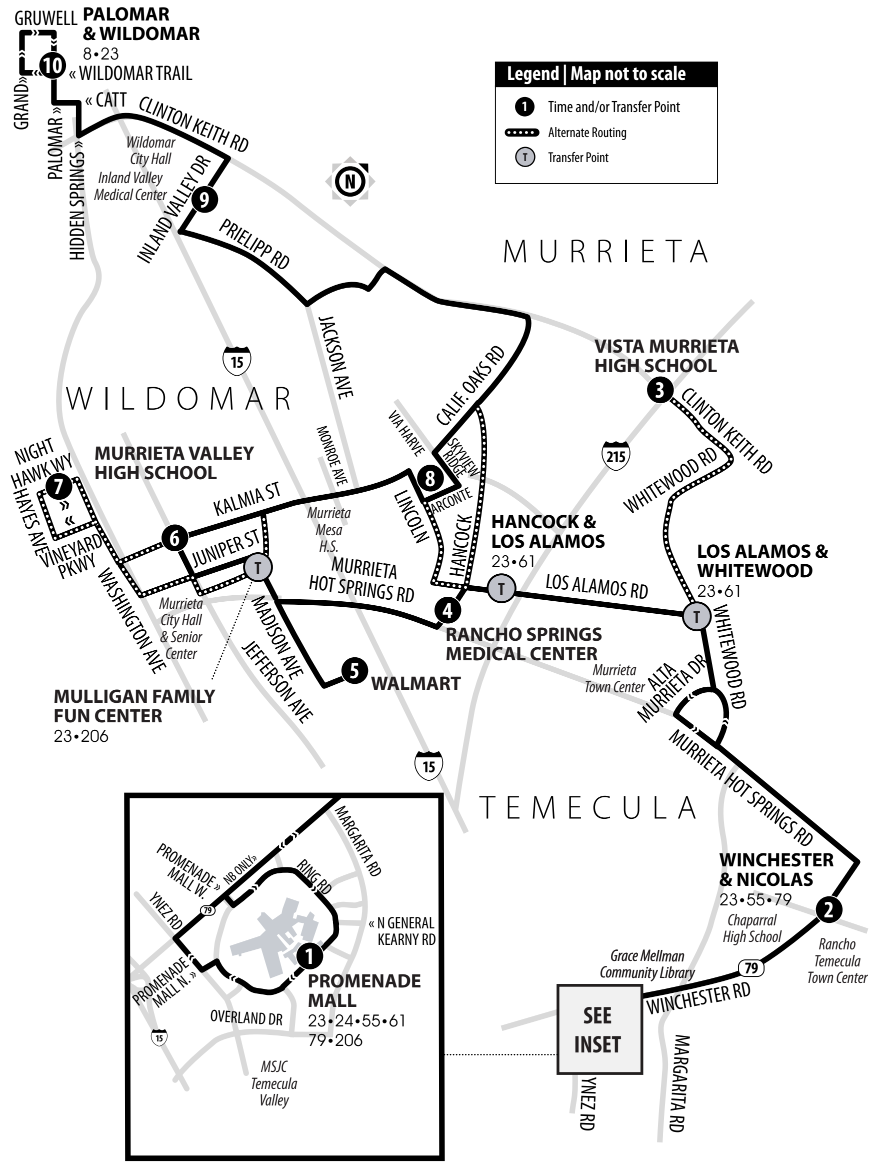


BUS STOP NUMBER		ROUTES SERVED & DIRECTION
1754	Brockton & 14th	14EB
1791	Brockton & 14th	14WB
1790	Brockton & 10th	14WB
3506	Brockton & University	14WB
1830	University & Brockton	14EB
3258	Mission Inn & Brockton	49EB
3265	Mission Inn & Brockton	49WB
1081	Magnolia & 14th	1WB, 13WB, 15WB
1080	Magnolia & 15th	1EB, 13EB, 15EB
1149	Market & 12th	1WB, 13WB, 15WB
1082	Market & 12th	1EB, 13EB, 15EB
4608	Market & 12th	No Service
4609	Market & 11th	No Service
1147	Market & 10th	1WB, 13WB, 15WB
3503	Market & 10th	13EB, 15EB
3575	Market & University	12EB, 204NB
3504	Market & 6th	12WB, 29EB
1448	Market & 6th	12EB, 29WB
1606	Market & 4th	12WB
1449	Market & 3rd	12EB, 29WB
3574	University & Market	1EB, 12WB, 13EB, 14EB, 15EB, 22SB, 29EB, 49EB, 204SB
3491	University & Market	1WB, 13WB, 14WB, 15WB, 22NB, 29WB, 49WB
1150	Orange & 12th	10WB, 12WB, 13EB
1148	Orange & 10th	10WB, 12WB, 13EB
3490	Orange & University	10WB, 12WB, 13EB
1498	14th & Orange Grove	10WB, 12WB, 13EB
1445	Lemon & 14th	10EB, 12EB, 13WB
1446	Lemon & 12th	10EB, 12EB, 13WB, 200EB/WB,
1001	University & Lemon	1EB, 14EB, 15EB, 22SB, 29EB, 49EB, 204SB, Omnitrans 215
1002	University & Lemon	22NB, 29WB, 49WB
3489	Lemon & University	10EB, 200EB/WB
3501	University & Lemon	1WB, 15WB
OMNI	Inside Metrolink Station Board at Bay **E**	Omnitrans 215
3496	Inside Metrolink Station Board at Bay **F**	200EB/WB
1085	Vine & Metrolink Station Board at Bay **G**	DIAL-A-RIDE
1085	Vine & Metrolink Station Board at Bay **H**	29EB/WB, 49EB/WB
1085	Vine & Metrolink Station Board at Bay **I**	15EB/WB
1085	Vine & Metrolink Station Board at Bay **J**	1EB/WB
1085	Vine & Metrolink Station Board at Bay **K**	AMTRAK MEGA BUS
3824	Market & 4th	29EB
3502	Market & 10th	1EB
1444	14th & Lime	10EB, 13WB

23 TEMECULA - MURRIETA - WILDOMAR

Information Center
(951) 565-5002
RiversideTransit.com
RTABus.com

Routing and timetables subject to change.
Rutas designadas y horarios son sujetos a cambios.



23 NORTHBOUND TO WILDOMAR | WEEKDAYS

A.M. times are in PLAIN, P.M. times are in BOLD | Times are approximate
A = Alternate routing from Murrieta Valley High School, operates when school is in session

	PROMENADE MALL	WINCHESTER & NICOLAS	RANCHO SPRINGS MEDICAL CENTER	MURRIETA WALMART	KALMIA & JEFFERSON	MURRIETA VALLEY HIGH SCHOOL	SKYVIEW RIDGE AMANDA APTS	INLAND VALLEY MEDICAL CENTER	PALOMAR & WILDOMAR
	1	2	4	5	6	7	8	9	10
	7:15	7:22	7:45	7:50	7:59	—	8:06	8:17	8:29
	8:25	8:32	8:55	9:00	9:09	—	9:16	9:27	9:39
	9:35	9:43	10:06	10:11	10:20	—	10:27	10:38	10:50
	10:45	10:53	11:20	11:26	11:35	—	11:42	11:53	**12:06**
	11:55	**12:04**	**12:32**	**12:39**	**12:48**	—	**12:55**	**1:06**	**1:20**
	1:05	**1:14**	**1:42**	**1:49**	**1:58**	—	**2:05**	**2:16**	**2:30**
	2:10	**2:20**	**2:48**	**2:55**	**3:04**	—	**3:11**	**3:22**	**3:36**
A	—	—	—	—	—	**3:42**	—	**4:19**	—
	3:35	**3:45**	**4:14**	**4:21**	**4:30**	—	**4:37**	**4:48**	**5:02**
	4:45	**4:55**	**5:24**	**5:31**	**5:40**	—	**5:46**	**5:57**	**6:10**
	5:45	**5:54**	**6:23**	**6:30**	**6:39**	—	**6:45**	**6:56**	—
	6:47	**6:56**	**7:24**	**7:30**	**7:39**	—	**7:45**	**7:56**	**8:08**

23 SOUTHBOUND TO TEMECULA (PROMENADE MALL) | WEEKDAYS

A.M. times are in PLAIN, P.M. times are in BOLD | Times are approximate
B = Alternate routing to Murrieta Valley High School, operates when school is in session
C = Alternate routing from Vista Murrieta High School, operates when school is in session

	PALOMAR & WILDOMAR	INLAND VALLEY MEDICAL CENTER	SKYVIEW RIDGE AMANDA APTS	MURRIETA VALLEY HIGH SCHOOL	KALMIA & JEFFERSON	MURRIETA WALMART	RANCHO SPRINGS MEDICAL CENTER	VISTA MURRIETA HIGH SCHOOL	WINCHESTER & NICOLAS	PROMENADE MALL
	10	9	8	7	6	5	4	3	2	1
	6:35	6:46	6:56	—	7:03	7:11	7:17	—	7:36	7:46
	7:25	7:36	7:46	—	7:53	8:02	8:07	—	8:26	8:36
B	—	7:43	7:55	8:08	—	—	—	—	—	—
	8:55	9:06	9:16	—	9:23	9:32	9:37	—	9:56	10:06
	10:05	10:16	10:26	—	10:34	10:44	10:50	—	11:09	11:20
	11:15	11:26	11:36	—	11:45	11:56	**12:02**	—	**12:21**	**12:32**
	12:25	**12:36**	**12:47**	—	**12:56**	**1:07**	**1:13**	—	**1:32**	**1:43**
	1:35	**1:46**	**1:57**	—	**2:06**	**2:16**	**2:22**	—	**2:41**	**2:52**
C	—	—	—	—	—	—	—	**3:43**	**4:11**	**4:21**
	3:20	**3:31**	**3:42**	—	**3:51**	**4:01**	**4:07**	—	**4:26**	**4:36**
	4:15	**4:26**	**4:37**	—	**4:46**	**4:56**	**5:02**	—	**5:21**	**5:31**
	5:20	**5:31**	**5:42**	—	**5:50**	**5:58**	**6:06**	—	**6:25**	**6:35**
	6:30	**6:41**	**6:52**	—	**6:59**	**7:09**	**7:15**	—	**7:34**	**7:44**

23 NORTHBOUND TO WILDOMAR | WEEKENDS

A.M. times are in PLAIN, P.M. times are in BOLD | Times are approximate

PROMENADE MALL	WINCHESTER & NICOLAS	RANCHO SPRINGS MEDICAL CENTER	MURRIETA WALMART	KALMIA & JEFFERSON	SKYVIEW RIDGE AMANDA APTS	INLAND VALLEY MEDICAL CENTER	PALOMAR & WILDOMAR
1	**2**	**4**	**5**	**6**	**8**	**9**	**10**
7:56	8:05	8:27	8:33	8:41	8:48	8:57	9:12
8:56	9:05	9:27	9:33	9:43	9:50	10:00	10:15
10:06	10:17	10:39	10:45	10:55	11:02	11:12	11:27
11:11	11:23	11:49	11:55	**12:05**	**12:12**	**12:22**	**12:37**
12:25	**12:37**	**1:05**	**1:11**	**1:21**	**1:28**	**1:38**	**1:55**
1:39	**1:51**	**2:19**	**2:25**	**2:35**	**2:42**	**2:51**	**3:08**
2:44	**2:56**	**3:24**	**3:30**	**3:40**	**3:47**	**3:56**	**4:13**
3:56	**4:08**	**4:36**	**4:42**	**4:52**	**4:59**	**5:09**	**5:26**
5:06	**5:18**	**5:46**	**5:52**	**6:02**	**6:09**	**6:19**	**6:34**
6:10	**6:22**	**6:50**	**6:56**	**7:04**	**7:11**	**7:26**	**—**

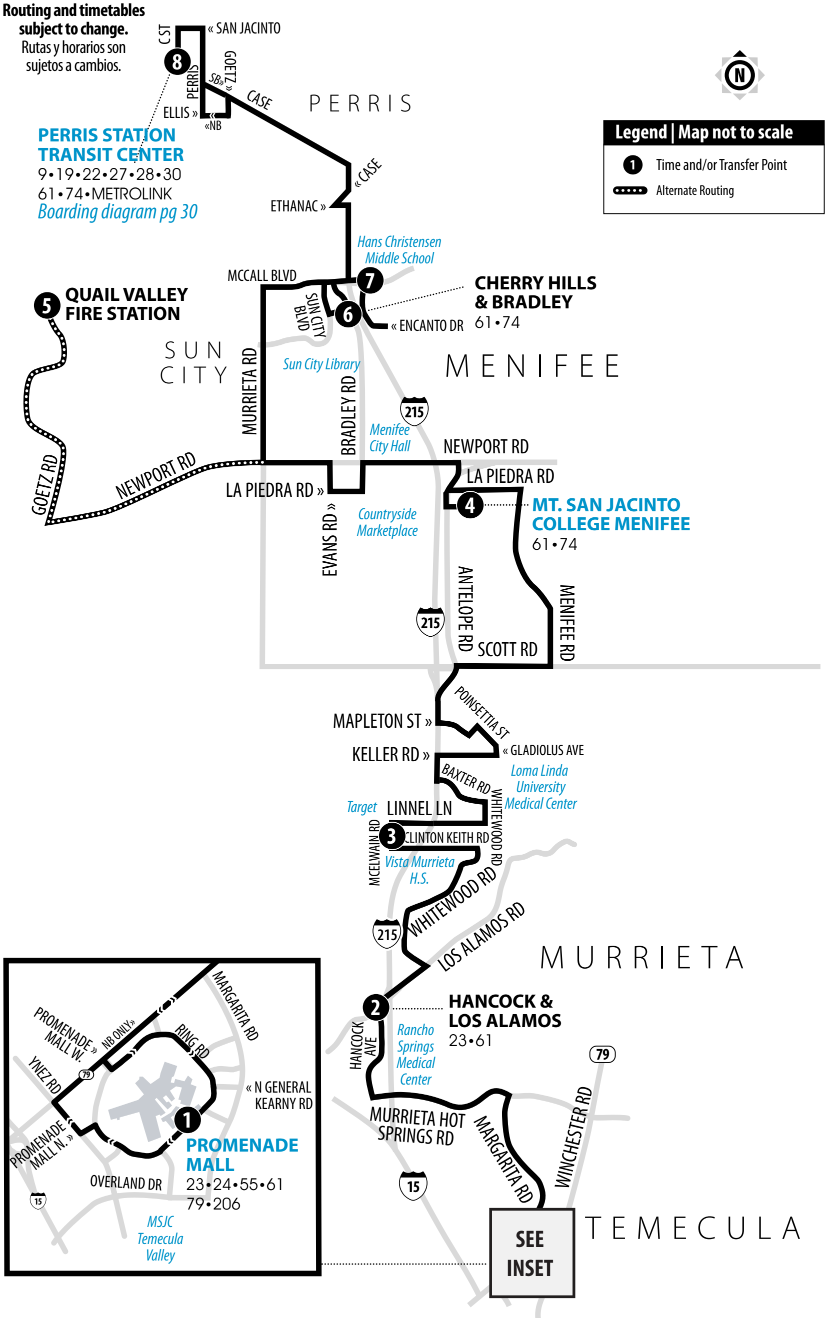
23 SOUTHBOUND TO TEMECULA (PROMENADE MALL) | WEEKENDS

A.M. times are in PLAIN, P.M. times are in BOLD | Times are approximate

PALOMAR & WILDOMAR	INLAND VALLEY MEDICAL CENTER	SKYVIEW RIDGE AMANDA APTS	KALMIA & JEFFERSON	MURRIETA WALMART	RANCHO SPRINGS MEDICAL CENTER	WINCHESTER & NICOLAS	PROMENADE MALL
10	**9**	**8**	**6**	**5**	**4**	**2**	**1**
7:19	7:31	7:41	7:49	7:57	8:02	8:22	8:31
8:33	8:45	8:55	9:04	9:12	9:17	9:37	9:46
9:42	9:54	10:04	10:13	10:23	10:28	10:48	10:57
10:48	11:00	11:10	11:19	11:29	11:35	11:55	**12:04**
11:52	**12:05**	**12:15**	**12:24**	**12:34**	**12:40**	**1:00**	**1:09**
1:05	**1:18**	**1:28**	**1:37**	**1:47**	**1:53**	**2:13**	**2:22**
2:17	**2:29**	**2:39**	**2:48**	**2:58**	**3:04**	**3:24**	**3:33**
3:32	**3:44**	**3:54**	**4:03**	**4:13**	**4:19**	**4:39**	**4:48**
4:46	**4:58**	**5:08**	**5:17**	**5:27**	**5:33**	**5:53**	**6:02**
5:46	**5:58**	**6:08**	**6:16**	**6:26**	**6:32**	**6:52**	**7:01**

61 PERRIS STATION TRANSIT CENTER - SUN CITY - QUAIL VALLEY - MENIFEE - MURRIETA - TEMECULA

Routing and timetables subject to change.
Rutas y horarios son sujetos a cambios.



61 NORTHBOUND TO PERRIS STATION TRANSIT CENTER | WEEKDAYS

A.M. times are in PLAIN, P.M. times are in **BOLD** | Times are approximate
A = Alternate routing from Hans Christensen Middle School, operates when school is in session only.

	PROMENADE MALL	HANCOCK & LOS ALAMOS	MCELWAIN AT SUPER TARGET	MT. SAN JACINTO COLLEGE MENIFEE	QUAIL VALLEY FIRE STATION	CHERRY HILLS & BRADLEY	ENCANTO & MCCALL	PERRIS STATION TRANSIT CENTER
	1	2	3	4	5	6	7	8
	4:45	5:01	5:12	5:33	—	5:57	6:04	6:30
	5:52	6:08	6:19	6:41	—	7:05	7:12	7:38
A	—	—	—	—	7:30	7:56	8:05	—
	7:05	7:21	7:34	7:57	—	8:21	8:28	8:54
	7:55	8:11	8:22	8:43	—	9:07	9:14	9:40
	9:30	9:48	9:59	10:20	—	10:45	10:52	11:18
	10:40	11:02	11:13	11:34	**—**	**12:00**	**12:07**	**12:33**
	11:50	**12:11**	**12:23**	**12:44**	**—**	**1:10**	**1:17**	**1:43**
	1:00	**1:21**	**1:33**	**1:54**	**—**	**2:20**	**2:28**	**2:54**
	2:05	**2:27**	**2:40**	**3:02**	**—**	**3:28**	**3:36**	**4:02**
	3:20	**3:45**	**3:58**	**4:19**	**—**	**4:45**	**4:51**	**5:17**
	4:35	**4:58**	**5:11**	**5:33**	**—**	**5:59**	**6:05**	**6:31**
	5:50	**6:13**	**6:25**	**6:47**	**—**	**7:12**	**7:18**	**7:41**

61 SOUTHBOUND TO TEMECULA (PROMENADE MALL) | WEEKDAYS

A.M. times are in PLAIN, P.M. times are in **BOLD** | Times are approximate
A = Alternate routing from Hans Christensen Middle School, operates when school is in session only.

	PERRIS STATION TRANSIT CENTER	ENCANTO & MCCALL	CHERRY HILLS & BRADLEY	QUAIL VALLEY FIRE STATION	MT. SAN JACINTO COLLEGE MENIFEE	MCELWAIN AT SUPER TARGET	HANCOCK & LOS ALAMOS	PROMENADE MALL
	8	7	6	5	4	3	2	1
	6:35	6:52	7:01	—	7:27	7:51	8:05	8:25
	8:05	8:22	8:31	—	8:57	9:19	9:31	9:52
	9:15	9:32	9:41	—	10:08	10:29	10:41	11:03
	10:25	10:43	10:52	—	11:20	11:42	11:54	**12:17**
	11:35	11:53	**12:02**	**—**	**12:30**	**12:53**	**1:05**	**1:28**
	12:45	**1:03**	**1:12**	**—**	**1:40**	**2:02**	**2:14**	**2:37**
	1:48	**2:06**	**2:15**	**—**	**2:44**	**3:06**	**3:20**	**3:43**
	3:00	**3:18**	**3:27**	**—**	**3:56**	**4:18**	**4:30**	**4:52**
A	**—**	**3:28**	**3:42**	**4:10**	**—**	**—**	**—**	**—**
	4:15	**4:34**	**4:43**	**—**	**5:12**	**5:34**	**5:45**	**6:07**
	5:25	**5:43**	**5:51**	**—**	**6:18**	**6:39**	**6:50**	**7:12**
	6:45	**7:03**	**7:11**	**—**	**7:37**	**7:58**	**8:09**	**8:31**

61 NORTHBOUND TO PERRIS STATION TRANSIT CENTER | WEEKENDS

A.M. times are in PLAIN, P.M. times are in BOLD | Times are approximate

PROMENADE MALL	HANCOCK & LOS ALAMOS	MCELWAIN AT SUPER TARGET	MT. SAN JACINTO COLLEGE MENIFEE	CHERRY HILLS & BRADLEY	ENCANTO & MCCALL	PERRIS STATION TRANSIT CENTER
1	2	3	4	5	6	7
6:27	6:44	6:53	7:13	7:37	7:44	8:06
8:11	8:28	8:37	8:57	9:22	9:29	9:52
9:28	9:45	9:55	10:15	10:40	10:47	11:10
10:52	11:14	11:24	11:44	**12:09**	**12:16**	**12:39**
12:05	**12:27**	**12:37**	**12:57**	**1:22**	**1:29**	**1:51**
1:21	**1:45**	**1:56**	**2:18**	**2:43**	**2:50**	**3:12**
2:50	**3:14**	**3:25**	**3:47**	**4:12**	**4:19**	**4:41**
4:06	**4:30**	**4:41**	**5:02**	**5:27**	**5:34**	**5:56**
5:39	**6:02**	**6:13**	**6:34**	**6:59**	**7:05**	**7:26**

61 SOUTHBOUND TO TEMECULA (PROMENADE MALL) | WEEKENDS

A.M. times are in PLAIN, P.M. times are in BOLD | Times are approximate

PERRIS STATION TRANSIT CENTER	ENCANTO & MCCALL	CHERRY HILLS & BRADLEY	MT. SAN JACINTO COLLEGE MENIFEE	MCELWAIN AT SUPER TARGET	HANCOCK & LOS ALAMOS	PROMENADE MALL
7	6	5	4	3	2	1
7:34	7:52	8:00	8:25	8:47	8:58	9:16
8:52	9:11	9:19	9:45	10:07	10:19	10:40
10:07	10:26	10:34	11:00	11:22	11:34	11:55
11:24	11:43	11:51	**12:17**	**12:39**	**12:50**	**1:11**
12:49	**1:08**	**1:16**	**1:42**	**2:04**	**2:15**	**2:36**
2:03	**2:22**	**2:30**	**2:56**	**3:18**	**3:29**	**3:50**
3:23	**3:42**	**3:50**	**4:16**	**4:37**	**4:48**	**5:09**
5:07	**5:26**	**5:34**	**6:00**	**6:21**	**6:32**	**6:53**

Appendix B

City of Murrieta Municipal Code
Section 16.40: Transportation Demand Management

16.40 Transportation Demand Management

Sections:

16.40.010 Purpose.

The purpose of this chapter is to provide regulations to help reduce air pollution and congestion caused by vehicle trips and vehicle miles traveled to protect the public health, welfare, and safety.

(Ord. 182 § 2 (part), 1997)

16.40.020 Definitions.

The following are definitions of specialized terms and phrases used in this chapter. Definitions of general terms and phrases are located in Article VI (Development Code Definitions).

Alternate Work Schedules. A variation from the traditional five-day/forty- (40-) hour work week to a fourday/forty- (40-) hour, nine-day/eighty- (80-) hour work schedule or other alternative schedules.

Flex-time. A situation whereby employees are allowed to determine their own starting and quitting times by either extending the workday in the morning, or evening, or both.

Parking Management. An action taken to alter the supply, operation and/or demand of parking facilities to force a shift from the single-occupant vehicle to carpool, vanpool, or other transportation mode.

Rideshare. A transportation mode with multiple occupants per vehicle.

Telecommuting. A situation whereby an employee forgoes a trip to the normal work site and instead, works from home or from a satellite office near home.

(Ord. 182 § 2 (part), 1997)

16.40.030 Applicability.

The provisions of this chapter shall apply to all new or expanded facilities that employ one hundred (100) or more persons at one site. The following methodology shall be used to determine employee generation for new developments where actual employment statistics may not exist.

TABLE 3-12

EMPLOYEE GENERATION BY LAND USE CATEGORY

Land Use Category	Gross Square Feet/Employee
Retail Commercial	Five hundred (500) square feet/employee
Office/Professional	Three hundred (300) square feet/employee
Industrial/Manufacturing	Five hundred (500) square feet/employee
Warehouse	One thousand (1,000) square feet/employee
Hotel/Motel	.5 employees/guest room
Hospital	Three hundred (300) square feet/employee

The project employment factor for mixed-use developments shall be based upon the proportion of the development devoted to each land use.

Employers that employ fewer than one hundred (100) people are encouraged to submit trip reduction plans on a voluntary basis to achieve an overall trip reduction of twelve (12) percent.

(Ord. 182 § 2 (part), 1997)

16.40.040 Standards for Trip Reduction.

A. Trip Reduction Required. Applicable developments shall incorporate facilities and/or programs sufficient to attain a twelve- (12-) percent, work-related trip reduction from the expected number of trips as indicated in the *Trip Generation Handbook* published by the institute of Traffic engineers (iTE). Trip reductions shall be calculated in compliance with standards established by Southern California Association of Governments (SCAG) and/or the South Coast Air Quality Management District (SCAQMD).

B. Trip Reduction Plans. All applicable developments or businesses shall submit a trip reduction plan to reduce work-related vehicle trips by twelve (12) percent. The plan shall be submitted for approval at least one hundred twenty (120) days prior to the issuance of a certificate of occupancy in the case of a new development or prior to the issuance or renewal of a business license in the case of new or existing business where no new development is proposed.

C. Trip Reduction Methods. Trip reduction facilities and programs provided in compliance with the provisions of this chapter may include, but are not limited to:

1. Preferential parking for carpool vehicles;
2. Bicycle parking and shower facilities:
3. Information center for transportation alternatives;
4. Rideshare vehicle loading areas;
5. Vanpool vehicle accessibility;
6. Bus stop improvements;
7. On-site child care facilities;
8. Local transportation systems management and road improvements;
9. Contributions to support regional facilities designed to reduce vehicle trips and miles traveled;
10. On-site amenities (e.g., cafeterias. restaurants. and automated teller machines) and other services that would eliminate the need for additional trips;
11. Alternative work schedules/flex-time:

12. Telecommuting or work-at-home programs including providing incentives through the provision of equipment and supplies and the establishment of satellite work centers.

13. Financial and other incentives (e.g., bus pass. flex-time) to encourage employees to rideshare and use alternative modes of transportation;

14. Reschedule truck delivery schedules and routing to avoid congested areas and minimize peak hour travel; and

15. Other measures that can exhibit a reduction in vehicle trips and further the purpose of this chapter.

(Ord. 182 § 2 (part), 1997)

16.40.050 Enforcement.

Following approval of a trip reduction plan, if there is future noncompliance with this chapter, or exhibited failure to implement the trip reduction plan, one or more of the following provisions shall apply as determined by the director:

A. Exercise a lien on the subject property based upon the terms of the agreement; or

B. Assess a monetary penalty compounded on a monthly basis upon the length of time of noncompliance equal to the business license renewal fee.

(Ord. 182 § 2 (part), 1997)

16.40.060 Compliance with AQMD Regulation XV.

Trip reduction plans approved by the South Coast AQMD in compliance with provisions of Regulation XV may be submitted to the city in lieu of plans required under the provisions of this chapter. AQMD approved Regulation XV trip reduction plans approved by the city shall be deemed to comply with trip reduction plan requirements of this chapter. Monitoring and annual reporting requirements shall continue to be the responsibility of AQMD and individual employers in compliance with rules and procedures established by the South Coast Air Quality Management District or as subsequently amended.

(Ord. 182 § 2 (part), 1997)