
Appendix O2

Santee Roadway Operations Memo

Carlton Oaks Country Club and Resort Draft Local Transportation Analysis

City of San Diego PTS # 645381

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Executive Summary

The purpose of this Local Transportation Analysis (LTA) is to evaluate the effects the Carlton Oaks Country Club and Resort Project ("Proposed Project") will have on its surrounding local transportation network. If it is determined that the Proposed Project will critically affect the operations of the local transportation network, additional off-site improvements are recommended to improve operations back to standard levels, or to pre-development conditions. It should be noted that this document is not required under CEQA and will not be included within the Proposed Project's environmental assessment. A Transportation Impact Assessment (TIA) has been prepared under separate cover to evaluate the Proposed Project's transportation VMT impacts under CEQA and will be included as an appendix to the Proposed Project Environmental Impact Report.

As part of its entitlement and permitting process, the Proposed Project is requesting the following approvals from each respective jurisdiction:

City of Santee

- Certification of Environmental Impact Report (EIR)
- Approval of Tentative Map
- Approval of the Development Review Permit
- Approval of 2 Conditional Use Permits for the golf course, country club and related uses
- Ministerial permits (building permit, grading permit, final map, etc.)

City of San Diego

- Site Development Permit - Process 3
- Ministerial permits (grading, etc.)

ES.1 Project Description and Project Trip Generation

The Proposed Project is located at 9200 Inwood Drive, which is on the south side of Carlton Oaks Drive and the east side of West Hills Parkway. The total project area, which includes all proposed development, encompasses approximately 169 acres. The Project is located within the Carlton Oaks Country Club property as described in the General Plan. A portion of the site is designated as a Planned Development and the other portion is designated as open space/recreation. It should be noted that portions of the open space/recreation (golf course) are located within both the City of Santee and the City of San Diego; however, the land uses located within the City of San Diego will remain the same and are consistent with the respective cities' general plan.

Since the Proposed Project's study area includes transportation facilities located in the City of Santee and the City of San Diego, the standards from each jurisdiction were applied to their respective transportation facilities. Transportation facilities located within the City of Santee were evaluated utilizing City of Santee standards. Similarly, transportation facilities located within the City of San Diego were evaluated utilizing City of San Diego standards.

The Proposed Project is proposing to redevelop the existing Country Club and 52-room hotel, into a recreational-oriented mixed-use resort community. The Proposed Project will include an improved golf course, clubhouse, hotel, pro shop, practice area, tournament hall, cart barn, learning center and residential accessory uses. The following is a summary of the proposed project uses:

Golf Course (Existing use that will be redeveloped)

- Redesign of the existing 18-hole golf course (approximately 104 acres)
- Practice areas
- 1,258 square foot (SF) golf learning center
- 6,012 SF cart barn
- 1,258 SF exterior storage



- 1,200 SF pro shop
- 4,800 SF tournament hall

Golf Clubhouse and Hotel/Cottages (Existing uses that will be redeveloped)

- 50,695 SF Clubhouse and Hotel/Cottages
- 52 rooms (42 hotel rooms and 10 cottage style rooms)
- 3,675 SF of restaurant uses

Residential area

- 236 multi-family residential units (86 units western and 150 units northern)
- 6 new single family units

In addition, one existing home located at 9225 Inwood Drive has also been included within the project area to allow for minor driveway modifications. No changes to this structure are proposed.

Trip generation rates for the Proposed Project were developed utilizing SANDAG's *not so Brief Guide to Vehicular Trip Generation* (SANDAG, April 2002). Trip generation calculations are provided in Section 3. The Proposed Project land uses are anticipated to generate a total of 2,836 average daily trips (ADT) with 196 trips (53-in/143-out) during the AM peak hour and 272 trips (186-in/86-out) during the PM peak hour.

Access to the Proposed Project will be provided via two driveways:

- *Project Driveway #1 (San Diego)* - will be constructed along the east side of West Hills Parkway, south of Carlton Oaks Drive, and will create the eastern leg of a new side-street stop-controlled intersection with full access. Improvements will be implemented by the Proposed Project to construct a turn pocket for the southbound left-turn movement to allow vehicles to safely enter the project driveway. One lane will be constructed for traffic entering the driveway and another for traffic exiting the driveway.
- *Project Driveway #2 (Santee)* - will be constructed along the south side of Carlton Oaks Drive, and will create the southern leg of the Burning Tree Way / Carlton Oaks Drive intersection with full access. This intersection will continue to operate as a side-street stop-controlled intersection with the minor streets as Burning Tree Way and Project Driveway #2 in the City of San Diego. One lane will be constructed for traffic entering the driveway and another for traffic exiting the driveway.

Two emergency access points will also be provided. The first will be located at the southern leg of the Carlton Oaks Drive / Fanita Parkway intersection. This access point will be gated and not open to the public except during times of emergency. The emergency access will utilize the existing private driveway for the Vista del Verde Condominiums. The second emergency access point will be along West Hills Parkway directly north of Driveway #2. This access will only be open during times of emergency as well.

The project will also provide a private utility/maintenance road between Residential West and Residential North that would also serve as a pedestrian/golf cart passageway connecting Residential West to the resort. This roadway would not be considered a fire apparatus access road but would be built to California Fire Code requirements and could be used as an emergency evacuation route, if needed.

Trail Segments

The San Diego River Trail is a regional Class I multi-use path that runs along the San Diego River and connects the Lakeside Baseball Fields to the western terminus of the City of Santee. Currently there is a gap in the trail between the intersection of Mast Boulevard/SR-52 eastbound ramps and the eastern proposed project boundary. The San Diego Association of Governments (SANDAG) has developed a plan to complete this portion of the San Diego River Trail by constructing it along the southern edge of the project site. A Mitigated Negative Declaration was adopted on June 16, 2017 (SANDAG 2017), and the bicycleway is currently in the engineering design phase; a construction schedule has yet to be set.



The SANDAG segment would be funded through Transnet, the regional half-cent sales tax for transportation administered by SANDAG, although construction funds have not yet been identified. The segment of the San Diego River Trail that runs along the project boundary is not part of the proposed project, but the project applicant would continue to work with the City of Santee, City of San Diego, and SANDAG to ensure that the proposed project's design would not impede implementation of the trail.

As part of the proposed project, a multipurpose public trail would be provided on the northern side of the San Diego River, linking with existing and planned trails east and west of the site (termed the Project Trail Segment herein, see Figure 4.2). A portion of the Project Trail Segment on the eastern side of the project site would begin at the entrance of Residential North at Carlton Oaks Drive, traverse through the resort and along the southeastern border of the project site, and end slightly west of the jurisdictional line between the City of Santee and the City of San Diego. This portion of the trail would vary in width from 6 to 10 feet and be a decomposed granite path. Safety fencing, approximately 10 feet tall, would be constructed along the Project Trail Segment adjacent to the golf course. Additionally, this portion of the trail would link to the existing Mast Park West Trail and to the future planned trail known as the Carlton Oaks Golf Course Segment (SANDAG 2017).

A portion of the Project Trail Segment on the western side of the project site would be constructed beginning at the City of Santee's jurisdictional line and ending at the property line. This portion of the trail would be 10 feet wide and consist of decomposed granite. Safety fencing would be constructed along the Project Trail Segment adjacent to the golf course. This portion of the trail would link to the future planned trail known as the Carlton Oaks Golf Course Segment. In addition, the project applicant would provide an Irrevocable Offer of Dedication for portions of the Carlton Oaks Golf Course Segment that are within the project site but are not being constructed by the project applicant; these sections would be provided on the project's subdivision map.

Along the Residential West boundary, a 14-foot-long graded bench (located within the Carlton Oaks Golf Course Segment) would be provided within the easement areas that the City of San Diego would grant to the applicant as part of this project.

As an alternative to the trail alignment currently proposed through Residential North and the resort area, a supplemental trail Offer of Dedication is shown on project site plan, should the City of Santee request this supplemental trail alignment. The supplemental trail Offer of Dedication is for a trail that would be 12 feet wide and start from an area east of the resort parking lot to the property line of the Vista del Verde community. The supplemental trail would be within the project development footprint analyzed in this EIR. The applicant is not proposing to construct this trail segment as part of the project, and this segment is only an alternative alignment to the proposed Project Trail Segment located through the resort.

ES.2 Project Critical Traffic Effect to Roadway & Recommended Improvements

The Proposed Project will have the following critical traffic effects (by analysis time frame) on the surrounding roadway network under each of the studied scenario. Feasible improvement measures that would improve operations back to standard levels, or to pre-development conditions are also provided, as appropriate.

Existing Conditions

All roadways providing access to the Proposed Project currently operate at acceptable LOS D or better. All roadways are also projected to operate at LOS D or better with the implementation of the Proposed Project, as shown in Table 5.5. Therefore, since the implementation of the Proposed Project will not degrade roadway operations to a sub-standard condition, the Proposed Project will not critically affect the local roadway network and no additional improvements would be needed.



Near-Term Year 2026 Conditions

Mast Boulevard between SR-52 WB Ramps and West Hills Parkway (San Diego / Caltrans) - As shown in Table 6.6, Mast Boulevard between the SR-52 WB Ramps and West Hills Parkway is anticipated to operate at LOS E both with and without the Proposed Project. Traffic associated with the Proposed Project will cause the volume to capacity (V/C) ratio of the segment to increase by 0.010. Since this roadway is currently built out to its ultimate classification (4-lane major arterial), no improvements are recommended for this study segment.

Carlton Oaks Drive between Fanita Parkway and Carlton Hills Boulevard (Santee) - As shown in Table 6.6, Carlton Oaks Drive between Fanita Parkway and Carlton Hills Drive is anticipated to operate at LOS E both with and without the Proposed Project conditions. Traffic associated with the Proposed Project will cause the volume to capacity (V/C) ratio of the segment to increase by 0.058. As noted in Section 2.7, the Proposed Project would have a critical effect on this roadway since it would cause roadway operations to degrade by more than .02 V/C. The following improvement would restore roadway operations on Carlton Oaks Drive back to standard levels:

Adding a travel lane in each direction would increase the capacity of the roadway from a 2-Lane Collector with center-left-turn-lane (CLTL) to a 4-Lane Major Arterial, which would improve the operations to LOS A. However, this improvement is not recommended. To implement this improvement, additional right-of-way acquisition would be required from a built-environment, or the existing right of way would need to be repurposed at the expense of existing or planned active transportation facilities. It should also be noted that the *Santee General Plan Mobility Element, October 2017* identified this segment of Carlton Oaks Drive as operating at LOS E under Preferred Plan conditions. Therefore, the projected operations along this segment are consistent with the vision set forth by the City's General Plan, and no additional improvements are recommended.

Horizon Year 2035 Conditions

Mast Boulevard between the SR-52 WB Ramps and West Hills Parkway (San Diego / Caltrans) - As shown in Table 7.4, Mast Boulevard between the SR-52 WB Ramps and West Hills Parkway is anticipated to operate at LOS F both with and without the Proposed Project under Horizon Year 2035 Conditions. Traffic associated with the Proposed Project will cause the volume to capacity (V/C) ratio of the segment to increase by 0.019. Since this roadway is currently built out to its ultimate classification (4-lane major arterial), no improvements are recommended for this study segment.

Carlton Oaks Drive between Fanita Parkway and Carlton Hills Boulevard (Santee) - As shown in Table 7.4, Carlton Oaks Drive between Fanita Parkway and Carlton Hills Boulevard is anticipated to operate at LOS E both with and without the Proposed Project under Horizon Year 2035 Conditions. Traffic associated with the Proposed Project will cause the volume to capacity (V/C) ratio of the segment to increase by 0.058. As noted in Section 2.7, the Proposed Project would be increasing the V/C ratio by more than 0.020 on a roadway operating at LOS E. However, the Santee General Plan Mobility Element, October 2017 identified this segment of Carlton Oaks Drive as operating at LOS E under preferred plan conditions. The following improvement would improve roadway operations on Carlton Oaks Drive back to standard levels:

Adding a travel lane in each direction would increase the capacity of the roadway from a 2-Lane Collector with CLTL to a 4-Lane Major Arterial, which would improve the operations to LOS A. Although as stated above, the Santee General Plan Mobility Element, October 2017 identified this segment of Carlton Oaks Drive as operating at LOS E under preferred plan conditions. Therefore, , this improvement is not recommended. Moreover, to implement this improvement, additional right-of-way acquisition would be required from a built-environment, or the existing right of way would need to be repurposed at the expense of existing or planned active



transportation facilities. In summary, the projected operations along this segment are consistent with the vision set forth by the City's General Plan, and no additional improvements are needed.

ES.3 Project Critical Traffic Effect to Intersections and Recommended Improvements

The Proposed Project will have the following critical traffic effects on the study area intersections under each of the studied scenarios. Feasible improvement measures that would improve operations back to standard levels, or to pre-development conditions are also provided, as appropriate.

Existing Plus Project Conditions

Intersection LOS and Delay

All intersections in which the Proposed Project will add more than 50 peak hour trips will currently operate at acceptable LOS D or better. These intersections are projected to still operate at acceptable LOS D or better with the implementation of the Proposed Project. Therefore, since the implementation of the Proposed Project will not degrade intersection operations to a sub-standard condition, the Proposed Project will not critically affect the local roadway network and no additional improvements would be needed.

95th Percentile Queue

#1 SR-52 EB Ramps & Mast Boulevard (San Diego / Caltrans), Westbound Left-Turn Movement - The left-turn movement from westbound Mast Boulevard to the southbound SR-52 EB On-Ramp - 23 feet during the AM peak hour and 47 feet during the PM peak hour of 95th percentile queue that would exceed storage length, as shown in Table 5.7. The Proposed Project will add 6 AM peak hour and 4 PM peak hour trips to this turning movement, as shown in Figure 3.3. Extending this turn pocket would be infeasible due to existing left-turn pocket at closely spaced intersection of SR-52 WB Ramps and Mast Boulevard; thus, there is not sufficient room to expand the pocket without impacting the SR-52 WB Ramps & Mast Boulevard intersection.

#2 SR-52 WB Ramps & Mast Boulevard (San Diego / Caltrans), Westbound Right-Turn Movement - The right-turn movement from westbound Mast Boulevard to northbound SR-52 WB On-Ramp - 294 feet of 95th percentile queue length, as shown in Table 5.7. As such, the queue length would exceed storage length during the AM peak hour, which would extend past the upstream intersection of West Hills Parkway & Mast Boulevard. The Proposed Project will add 37 AM peak hour trips to this turning movement, as shown in Figure 3.3 (Note: since the right-turn movement is shared with the through movement, the 6 through trips were added to the 31 right-turn trips generated by the proposed project resulting in 37 total project trips for the movement). Due to the close intersection spacing with the West Hills Parkway and Mast Boulevard intersection, there are no other feasible improvements to extend the storage length as they would be extended into the upstream intersection.

#4 West Hills Parkway & Carlton Oaks Drive (San Diego), Southbound Left-Turn Movement - The left-turn movement from southbound West Hills Parkway to eastbound Carlton Oaks Drive - 127 feet of 95th percentile queue length would exceed the storage length during the PM peak hour, as shown in Table 5.7. The Proposed Project will add 35 PM peak hour trips to this turning movement, as shown in Figure 3.3. Extending the turn pocket for this turn movement is feasible and would require re-striping of the median along West Hills Parkway.

#4 West Hills Parkway & Carlton Oaks Drive (San Diego), Westbound Left-Turn Movement - The left-turn movement from westbound Carlton Oaks Drive to southbound West Hills Parkway - 180 feet during the AM peak hour and 29 feet during the PM peak hour of 95th percentile queue that would exceed storage length, as shown in Table 5.7. The queue length is projected to extend past the closely spaced



intersection of Leticia Drive and Carlton Oaks Drive. The Proposed Project will add 35 AM peak hour and 41 PM peak hour trips to this turning movement, as shown in Figure 3.3. Extending storage space for this turning movement would be infeasible because the extension would require encroaching onto existing driveways at existing residential development along Carlton Oaks Drive which may result in other safety issues from people exiting their driveways.

#8 West Hills Parkway & Mission Gorge Road (Santee / San Diego), Eastbound Left-Turn Movement - The left-turn movement from eastbound Mission Gorge Road to northbound West Hills Parkway - 159 feet during the AM peak hour and 169 feet during the PM peak hour of 95th percentile queue that would exceed storage length, as shown in Table 5.7. The Proposed Project will add 11 AM peak hour and 35 PM peak hour trips to this turning movement, as shown in Figure 3.3. Extending this turn pocket would be infeasible due to existing left-turn pocket at closely spaced intersection of Aubrey Glen Drive & Mission Gorge Road thus, there is not sufficient room to expand the pocket without impacting the Aubrey Glen Drive & Mission Gorge Road intersection. Moreover, the improvement would require the removal of an existing land scaped median which may create a less safe environment as the median would no longer be present to separate the lanes.

Near-Term Year 2026 With Project Conditions

Intersection LOS and Delay

All intersections in which the Proposed Project will add more than 50 peak hour trips are anticipated to operate at acceptable LOS D or better under Near-Term Year 2026 Conditions, both without and with the Proposed Project.

95th Percentile Queue

#1 SR-52 EB Ramps & Mast Boulevard (San Diego / Caltrans), Westbound Left-Turn Movement - The left-turn movement from westbound Mast Boulevard to the southbound SR-52 EB On-Ramp - 36 feet during the AM peak hour and 62 feet during the PM peak hour of 95th percentile queue that would exceed storage length, as shown in Table 6.8. The Proposed Project will add 6 AM peak hour and 4 PM peak hour trips to this turning movement, as shown in Figure 3.3. Extending this turn pocket would be infeasible due to existing left-turn pocket at closely spaced intersection of SR-52 WB Ramps and Mast Boulevard; thus, there is not sufficient room to expand the pocket without impacting the SR-52 WB Ramps & Mast Boulevard intersection.

#2 SR-52 WB Ramps & Mast Boulevard (San Diego / Caltrans), Westbound Right-Turn Movement - The right-turn movement from westbound Mast Boulevard to northbound SR-52 WB On-Ramp - 922 feet of 95th percentile queue length would exceed storage length during the AM peak hour, as shown in Table 6.8. As such, the queue length is projected to extend to the east along Mast Boulevard past the upstream intersection of West Hills Parkway & Mast Boulevard. The Proposed Project will add 37 AM peak hour trips to this turning movement, as shown in Figure 3.3. Due to the close intersection spacing with the West Hills Parkway and Mast Boulevard intersection, there are no other feasible improvements to extend the storage length as they would be extended into the upstream intersection.

#3 West Hills Parkway & Mast Boulevard (Santee / San Diego), Eastbound Left-Turn Movement - The left-turn movement from eastbound Mast Boulevard to northbound West Hills Parkway - 60 feet during the AM peak hour of the 95th percentile queue that would exceed storage length, as shown in Table 6.8. However, the Proposed Project will not add trips to this movement; therefore, it will not have an impact on this queue length.

#4 West Hills Parkway & Carlton Oaks Drive (San Diego), Southbound Left-Turn Movement - The left-turn movement from southbound West Hills Parkway to eastbound Carlton Oaks Drive - 132 feet of 95th percentile queue length would exceed the storage length during the PM peak hour, as shown in Table



6.8. The Proposed Project will add 35 PM peak hour trips to this turning movement, as shown in Figure 3.3. Extending the turn pocket for this turn movement is feasible and would require re-striping of the median along West Hills Parkway.

#4 West Hills Parkway & Carlton Oaks Drive (San Diego), Westbound Left-Turn Movement - The left-turn movement from westbound Carlton Oaks Drive to southbound West Hills Parkway - 230 feet during the AM peak hour and 63 feet during the PM peak hour of 95th percentile queue that would exceed storage length, as shown in Table 6.8. As such, the queue length will extend past the closely spaced intersection of Leticia Drive and Carlton Oaks Drive. The Proposed Project will add 35 AM peak hour and 41 PM peak hour trips to this turning movement, as shown in Figure 3.3. Extending storage space for this turning movement would be infeasible because the extension would require encroaching a driveway at existing residential development along Carlton Oaks Drive which may result in other safety issues from people exiting their driveways.

#8 West Hills Parkway & Mission Gorge Road (Santee / San Diego), Westbound Left-Turn Movement - The left-turn movement from westbound Mission Gorge Road to the driveway located as the southern leg of the intersection - 61 feet during the AM peak hour and 42 feet during the PM peak hour of 95th percentile queue that would exceed storage length, as shown in Table 6.8. However, the Proposed Project will not add trips to this movement; therefore, it will not have an impact on this queue length.

#8 West Hills Parkway & Mission Gorge Road (Santee / San Diego), Eastbound Left-Turn Movement - The left-turn movement from eastbound Mission Gorge Road to northbound West Hills Parkway - 209 feet during the AM peak hour and 341 feet during the PM peak hour of 95th percentile queue that would exceed storage length, as shown in Table 6.8. The Proposed Project will add 11 AM peak hour and 35 PM peak hour trips to this turning movement, as shown in Figure 3.3. Extending this turn pocket would be infeasible due to existing left-turn pocket at closely spaced intersection of Aubrey Glen Drive & Mission Gorge Road thus, there is not sufficient room to expand the pocket without impacting the Aubrey Glen Drive & Mission Gorge Road intersection. Moreover, the improvement would require the removal of an existing land scaped median which may create a less safe environment as the median would no longer be present to separate the lanes.

Horizon Year 2035 With Project Conditions

Intersection LOS and Delay

All intersections in which the Proposed Project will add more than 50 peak hour trips are anticipated to operate at acceptable LOS D or better under Horizon Year 2035 Conditions, both without and with the proposed project, with the exception of the following three (3) intersections:

West Hills Parkway & Mast Boulevard (Santee / San Diego) - This intersection is anticipated to operate at LOS F during the AM peak hour both without and with project conditions. The addition of Proposed Project Traffic would increase the overall intersection delay by 1.2 seconds in the AM peak. Based on the standards outlined in Section 2.8 the Proposed Project would not critically affect this intersection.

Carlton Hills Boulevard & Carlton Oaks Road (Santee) - This intersection is anticipated to operate at LOS E during the AM peak hour both without and with project conditions. The addition of Proposed Project Traffic would increase the overall intersection delay by 0.8 seconds in the AM peak hour. Based on the standards outlined in Section 2.7 the Proposed Project would not critically affect this intersection.

Carlton Hills Boulevard & Mission Gorge Road (Santee) - This intersection is anticipated to operate at LOS E during the AM peak hour both without and with project conditions. The addition of Proposed Project Traffic would increase the overall intersection delay by 1.0 seconds in the AM peak hour. Based on the standards outlined in Section 2.7 the Proposed Project would not critically affect this intersection.



ES.4 Project Critical Traffic Effect to Freeway

The Proposed Project will not have any critical traffic effect on the study area freeway segments. A summary of each study scenario is provided below.

Existing Conditions

The following three (3) freeway segments in which the Proposed Project will add more than 50 peak hour trips are projected to operate at sub-standard LOS E or F both without and with the Proposed Project:

- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F in the AM peak hour in the WB direction
- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS E in the PM peak hour in the EB direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS E in the PM peak hour in the EB direction

However, the Proposed Project will not add more than 0.01 V/C to any of the study segments, nor will it decrease travel speeds by more than 1 mile per hour (mph). Therefore, based on the standards outlined in Section 2.7, the Proposed Project is not anticipated to critically affect freeway operations under Existing with Project conditions.

Near-Term Year 2026 Conditions

The following four (4) freeway segments in which the Proposed Project will add more than 50 peak hour trips are projected to operate at sub-standard LOS E or F both without and with the Proposed Project:

- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the PM peak hour in the eastbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the PM peak hour in the eastbound direction

However, the Proposed Project will not add more than 0.01 V/C to any of the study segments, nor will it decrease travel speeds by more than 1 mph. Therefore, based on the standards outlined in Section 2.7, the Proposed Project is not anticipated to critically affect freeway operations under Near-Term Year 2026 conditions.

Horizon Year 2035 Conditions

The following four (4) freeway segments in which the Proposed Project will add more than 50 peak hour trips are projected to operate at sub-standard LOS E or F both without and with the Proposed Project:

- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS E during the AM peak hour in the westbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the AM peak hour in the westbound direction



- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the PM peak hour in the eastbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the PM peak hour in the eastbound direction

However, the Proposed Project will not add more than 0.01 V/C to any of the study segments, nor will it decrease travel speeds by more than 1 mph. Therefore, based on the standards outlined in Section 2.7, the Proposed Project is not anticipated to critically affect freeway operations under Horizon Year 2035 conditions.

ES.5 Recommended Improvements Summary

Roadway

No roadway improvements are recommended with the implementation of the Proposed Project.

Intersection

No intersection improvements are recommended with the implementation of the Proposed Project.

95th Percentile Queue

West Hills Parkway & Carlton Oaks Drive (San Diego), Left-turn movement from southbound West Hills Parkway to eastbound Carlton Oaks Drive - Extending the turn pocket for this turn movement is feasible and would require re-stripping of the median along West Hills Parkway. A conceptual drawing that displays the feasibility of the extension is provided in Appendix K.

Freeway

No freeway improvements are recommended with the implementation of the Proposed Project.

Pedestrian Facilities

All sidewalks adjacent to the projects site are contiguous and in adequate condition without any gaps. However, the intersection of Carlton Oaks Drive / Burning Tree Way was identified to have missing curb ramps on the southeastern and southwestern corners, as well as missing truncated domes on the northeastern corner. Since the Proposed Project will be modifying this intersection to provide project access, it is recommended that all curb ramps at the Carlton Oaks Drive / Burning Tree Way are improved to meet current ADA standards.

Bicycle Facilities

SANDAG is in the process of constructing a segment of the San Diego River Park Pathway, extending a distance of approximately two miles between Carlton Hills Boulevard and West Hills Parkway through Mast Park, Mast Park West, and the Carlton Oaks Golf Course in the Plateau area Carlton ("SANDAG Segment"). A portion of the SANDAG Segment would be located at the boundary of the project's Golf Course's southern edge near the river. A Mitigated Negative Declaration ("MND") was prepared to address any potential environmental effects related to the construction of the pathway. (*Final Initial Study/Mitigated Negative Declaration, June 2017, State Clearinghouse No. 2017031037*). The SANDAG Segment is planned to be funded through Transnet, the regional half- cent sales tax for transportation administered by SANDAG, although construction funds have not yet been identified.

Trail Segments

The San Diego River Trail is a regional Class I multi-use path that runs along the San Diego River and connects the Lakeside Baseball Fields to the western terminus of the City of Santee. Currently there is a gap in the trail between the intersection of Mast Boulevard/SR-52 eastbound ramps and the eastern proposed project boundary. The San Diego Association of Governments (SANDAG) has developed a plan to complete this portion of the San Diego River Trail by constructing it along the southern edge of



the project site. A Mitigated Negative Declaration was adopted on June 16, 2017 (SANDAG 2017), and the bicycleway is currently in the engineering design phase; a construction schedule has yet to be set. The SANDAG segment would be funded through Transnet, the regional half-cent sales tax for transportation administered by SANDAG, although construction funds have not yet been identified. The segment of the San Diego River Trail that runs along the project boundary is not part of the proposed project, but the project applicant would continue to work with the City of Santee, City of San Diego, and SANDAG to ensure that the proposed project's design would not impede implementation of the trail.

As part of the proposed project, a multipurpose public trail would be provided on the northern side of the San Diego River, linking with existing and planned trails east and west of the site (termed the Project Trail Segment herein, see Figure 4.2). A portion of the Project Trail Segment on the eastern side of the project site would begin at the entrance of Residential North at Carlton Oaks Drive, traverse through the resort and along the southeastern border of the project site, and end slightly west of the jurisdictional line between the City of Santee and the City of San Diego. This portion of the trail would vary in width from 6 to 10 feet and be a decomposed granite path. Safety fencing, approximately 10 feet tall, would be constructed along the Project Trail Segment adjacent to the golf course. Additionally, this portion of the trail would link to the existing Mast Park West Trail and to the future planned trail known as the Carlton Oaks Golf Course Segment (SANDAG 2017).

A portion of the Project Trail Segment on the western side of the project site would be constructed beginning at the City of Santee's jurisdictional line and ending at the property line. This portion of the trail would be 10 feet wide and consist of decomposed granite. Safety fencing would be constructed along the Project Trail Segment adjacent to the golf course. This portion of the trail would link to the future planned trail known as the Carlton Oaks Golf Course Segment. In addition, the project applicant would provide an Irrevocable Offer of Dedication for portions of the Carlton Oaks Golf Course Segment that are within the project site but are not being constructed by the project applicant; these sections would be provided on the project's subdivision map.

Along the Residential West boundary, a 14-foot-long graded bench (located within the Carlton Oaks Golf Course Segment) would be provided within the easement areas that the City of San Diego would grant to the applicant as part of this project.

As an alternative to the trail alignment currently proposed through Residential North and the resort area, a supplemental trail Offer of Dedication is shown on project site plan, should the City of Santee request this supplemental trail alignment. The supplemental trail Offer of Dedication is for a trail that would be 12 feet wide and start from an area east of the resort parking lot to the property line of the Vista del Verde community. The supplemental trail would be within the project development footprint analyzed in this EIR. The applicant is not proposing to construct this trail segment as part of the project, and this segment is only an alternative to the proposed Project Trail Segment located through the resort.

Transit Facilities

It is recommended that the Proposed Project coordinate with MTS to install red curbs at West Hills Parkway and Carlton Oaks Drive bus stop (Stop ID: 88948), if necessary.

Systemic Safety Review (City of San Diego)

3. *West Hills Parkway & Mast Boulevard* - Identified to meet Bicycle Matrix - Intersection Footprint #1 because it is a 4-Lane (2-way) roadway that intersects a 4-Lane (2-way) roadway. Based on the potential counter measures identified in the *City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero* it is recommended that bicycle detection be added to the intersection for the approaches where bike lanes are present
4. *West Hills Parkway & Carlton Oaks Drive* - Identified to meet Pedestrian Matrix - Intersection Footprint #2 because it is a 4-Lane (2-way) roadway that intersects a 2-Lane (2-way) roadway and has a primary



roadway ADT between 7,500 and 25,000 (12,878 ADT). Based on the potential counter measures identified in the *City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero* it is recommended that continental cross-walks be installed at all legs of the intersection, pedestrian countdown signals be installed at every corner of the intersection, and a lead pedestrian interval be implemented for all crossing phases of the intersection.

8. *West Hills Parkway & Mission Gorge Road* - Identified to meet Bicycle Matrix - Intersection Footprint #1 because it is a 4-Lane (2-way) roadway that intersects a 4-Lane (2-way) roadway. Based on the potential counter measures identified in the *City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero* it is recommended that bicycle detection be added to the intersection for the approaches where bike lanes are present.



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1.0 Introduction

The purpose of this Local Transportation Analysis (LTA) is to evaluate the effects the Carlton Oaks Country Club and Resort Project ("Proposed Project") will have on its surrounding local transportation network. Based on local standards (non-CEQA), it is determined if the traffic associated with the Proposed Project will degrade the operations of the local transportation network to sub-standard levels (i.e., having a critical effect). If it is determined that the Proposed Project will critically affect the operations of the local transportation network, additional off-site improvements may be recommended as appropriate to improve operations back to standard levels, or to pre-development conditions. As noted, this document is not required under CEQA and will not be included within the Proposed Project's environmental assessment. A Transportation Impact Assessment (TIA) has been prepared under separate cover to evaluate the Proposed Project's transportation related impacts under CEQA and will be included as an appendix to the Proposed Project Environmental Impact Report.

1.1 Study Area and Project Background

The Proposed Project is located at 9200 Inwood Drive, which is on the south side of Carlton Oaks Drive and the east side of West Hills Parkway. The Project is located within the Carlton Oaks Country Club property as described in the General Plan. A portion of the site is designated as a Planned Development and the other portion is designated as open space/recreation. Portions of the open space/recreation (golf course) are located within both the City of Santee and the City of San Diego; however, the land uses located within the City of San Diego will remain the same and are consistent with the respective cities' general plan. All new developments will occur within the City of Santee.

The proposed project site that will be developed is located on approximately 169 acres and would include the redesign of the existing Carlton Oaks Golf Course and the following components: (1) redesign of the golf course, (2) reconstruction of the clubhouse and pro shop, practice area, and learning center structure; (3) a hotel and associated cottages; (4) residential accessory uses consisting of two residential neighborhoods with open space areas; and (5) related on-site infrastructure. Approximately 3.4 acres consist of areas outside of the project site that will be developed with improvements associated with the Project and are located either in the City of San Diego or Santee (Off-site improvement areas). The off-site improvement areas and the proposed project site (developed and undeveloped) make up the CEQA Study area

Since the Proposed Project's study area includes transportation facilities located in the City of Santee and the City of San Diego, the standards from each jurisdiction were applied to their respective transportation facilities. Transportation facilities located within the City of Santee were evaluated utilizing City of Santee standards. Similarly, transportation facilities located within the City of San Diego were evaluated utilizing City of San Diego standards.

The Proposed Project is proposing to redevelop the existing Country Club and 52-room hotel, into a recreational-oriented mixed-use resort community. The Proposed Project will include an improved golf course, clubhouse, hotel, pro shop, practice area, tournament hall, cart barn, learning center, and residential accessory uses. The following is a summary of the proposed project uses:

Golf Course (Existing use that will be redeveloped)

- Redesign of the existing 18-hole golf course (approximately 104 acres)
- Practice areas
- 1,258 square foot (SF) golf learning center
- 6,012 SF cart barn
- 1,258 SF exterior storage
- 1,200 SF pro shop
- 4,800 SF tournament hall



Golf Clubhouse and Hotel/Cottages (Existing uses that will be redeveloped)

- 50,695 SF Clubhouse and Hotel/Cottages
- 52 rooms (42 hotel rooms and 10 cottage style rooms)
- 3,675 SF of restaurant uses

Residential area

- 236 multi-family residential units
- 6 new single family units

In addition, one existing home located at 9225 Inwood Drive has also been included within the project area to allow for minor driveway modifications. No changes to this structure are proposed.

The residential and commercial land uses will be located in the City of Santee; and the Carlton Oaks Golf Course will be partially located in the City of San Diego. **Figure 1.1** displays the Proposed Project's regional location.

Access to the Proposed Project will be provided via two driveways:

- Project Driveway #1 - will be constructed along east side of West Hills Parkway, south of Carlton Oaks Drive, and will create the eastern leg of a new side-street stop-controlled intersection with full access. Improvements will be implemented by the Proposed Project to construct a turn pocket for the southbound left-turn movement to allow vehicles to safely enter the project driveway. One lane will be constructed for traffic entering the driveway and another for traffic exiting the driveway.
- Project Driveway #2 - will be constructed along the south side of Carlton Oaks Drive, and will create the southern leg of the Burning Tree Way / Carlton Oaks Drive intersection with full access. This intersection will continue to operate as a side-street stop-controlled intersection with minor streets as Burning Tree Way and Project Driveway #2 in the City of San Diego. One lane will be constructed for traffic entering the driveway and another for traffic exiting the driveway.

Two emergency access points will also be provided. The first will be located at the southern leg of the Carlton Oaks Drive / Fanita Parkway intersection. This access point will be gated and not open to the public except during times of emergency. The emergency access will utilize the existing private driveway for the Vista del Verde Condominiums. The second emergency access point will be along West Hills Parkway directly north of Driveway #2. This access will only be open during times of emergency as well.

The project will also provide a private utility/maintenance road between Residential West and Residential North that would also serve as a pedestrian/golf cart passageway connecting Residential West to the resort. This roadway would not be considered a fire apparatus access road but would be built to California Fire Code requirements and could be used as an emergency evacuation route, if needed.

Trail Segments

The San Diego River Trail is a regional Class I multi-use path that runs along the San Diego River and connects the Lakeside Baseball Fields to the western terminus of the City of Santee. Currently there is a gap in the trail between the intersection of Mast Boulevard/SR-52 eastbound ramps and the eastern proposed project boundary. The San Diego Association of Governments (SANDAG) has developed a plan to complete this portion of the San Diego River Trail by constructing it along the southern edge of the project site. A Mitigated Negative Declaration was adopted on June 16, 2017 (SANDAG 2017), and the bicycleway is currently in the engineering design phase; a construction schedule has yet to be set. The SANDAG segment would be funded through Transnet, the regional half-cent sales tax for transportation administered by SANDAG, although construction funds have not yet been identified. The segment of the San Diego River Trail that runs along the project boundary is not part of the proposed project, but the project applicant would continue to work with the City of Santee, City of San Diego, and SANDAG to ensure that the proposed project's design would not impede implementation of the trail.



As part of the proposed project, a multipurpose public trail would be provided on the northern side of the San Diego River, linking with existing and planned trails east and west of the site (termed the Project Trail Segment herein, see **Figure 4.2**). A portion of the Project Trail Segment on the eastern side of the project site would begin at the entrance of Residential North at Carlton Oaks Drive, traverse through the resort and along the southeastern border of the project site, and end slightly west of the jurisdictional line between the City of Santee and the City of San Diego. This portion of the trail would vary in width from 6 to 10 feet and be a decomposed granite path. Safety fencing, approximately 10 feet tall, would be constructed along the Project Trail Segment adjacent to the golf course. Additionally, this portion of the trail would link to the existing Mast Park West Trail and to the future planned trail known as the Carlton Oaks Golf Course Segment (SANDAG 2017).

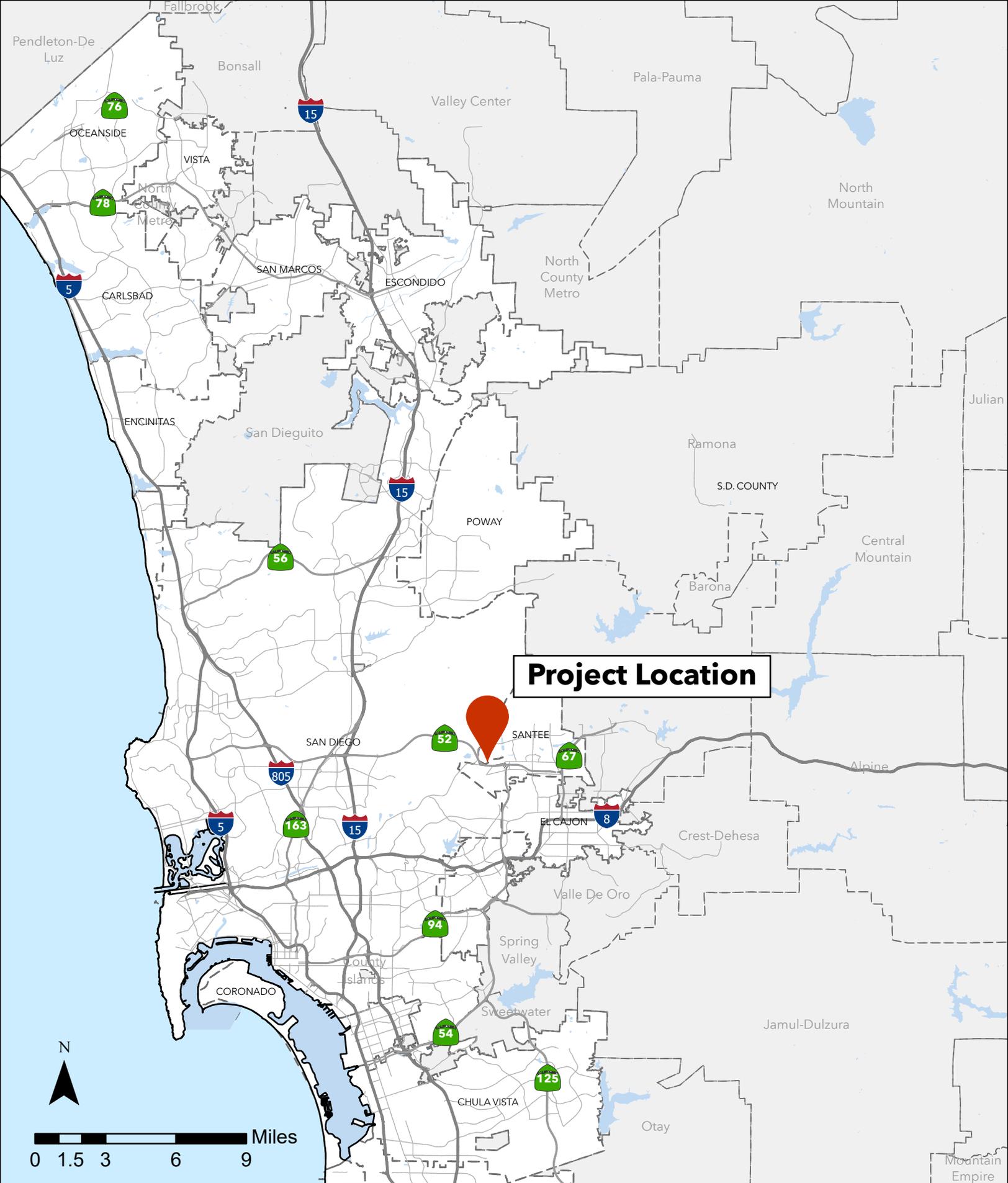
A portion of the Project Trail Segment on the western side of the project site would be constructed beginning at the City of Santee's jurisdictional line and ending at the property line. This portion of the trail would be 10 feet wide and consist of decomposed granite. Safety fencing would be constructed along the Project Trail Segment adjacent to the golf course. This portion of the trail would link to the future planned trail known as the Carlton Oaks Golf Course Segment. In addition, the project applicant would provide an Irrevocable Offer of Dedication for portions of the Carlton Oaks Golf Course Segment that are within the project site but are not being constructed by the project applicant; these sections would be provided on the project's subdivision map.

Along the Residential West boundary, a 14-foot-long graded bench (located within the Carlton Oaks Golf Course Segment) would be provided within the easement areas that the City of San Diego would grant to the applicant as part of this project.

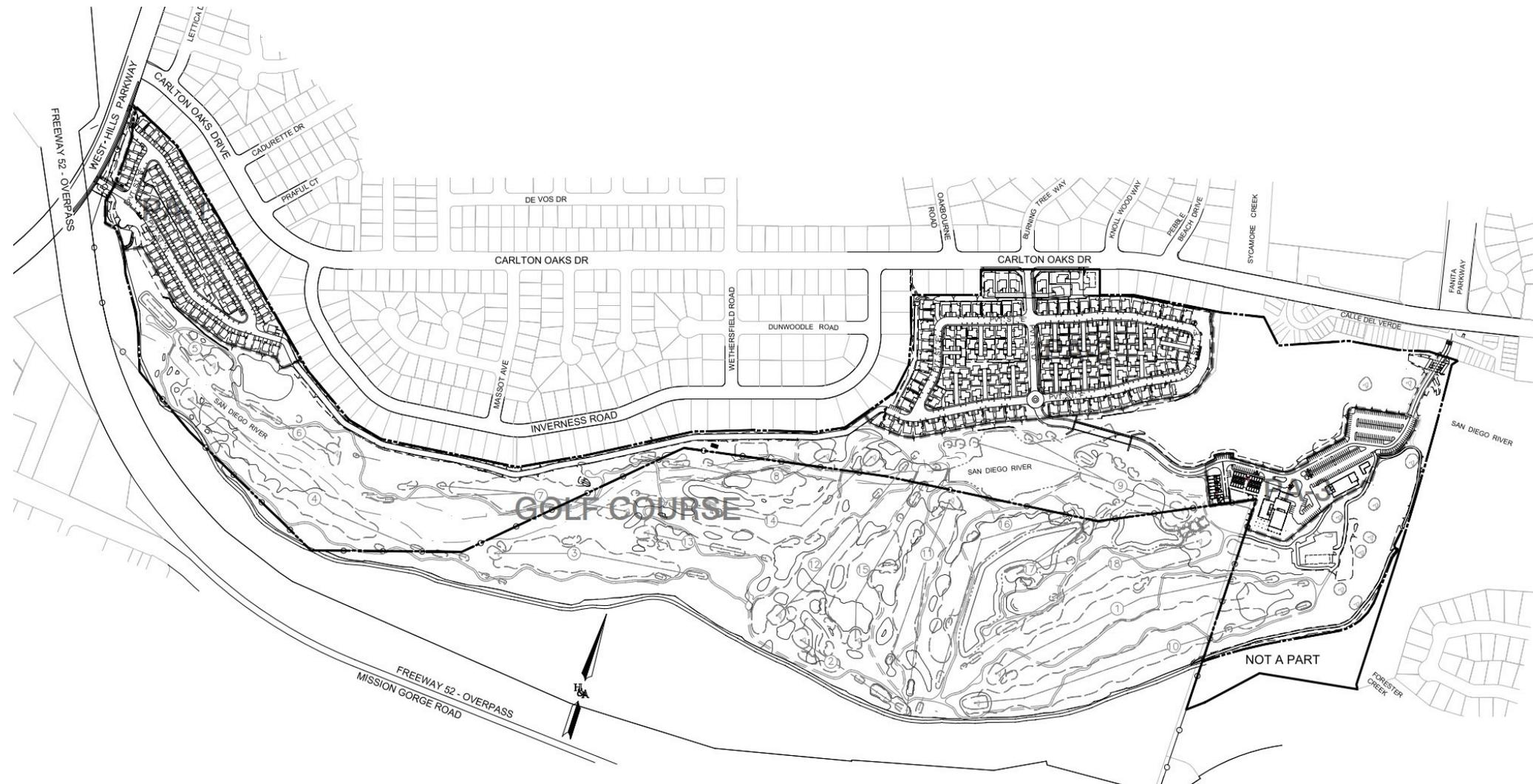
As an alternative to the trail alignment currently proposed through Residential North and the resort area, a supplemental trail Offer of Dedication is shown on project site plan, should the City of Santee request this supplemental trail alignment. The supplemental trail Offer of Dedication is for a trail that would be 12 feet wide and start from an area east of the resort parking lot to the property line of the Vista del Verde community. The supplemental trail would be within the project development footprint analyzed in this EIR. The applicant is not proposing to construct this trail segment as part of the project, and this segment is only an alternative to the proposed Project Trail Segment located through the resort.

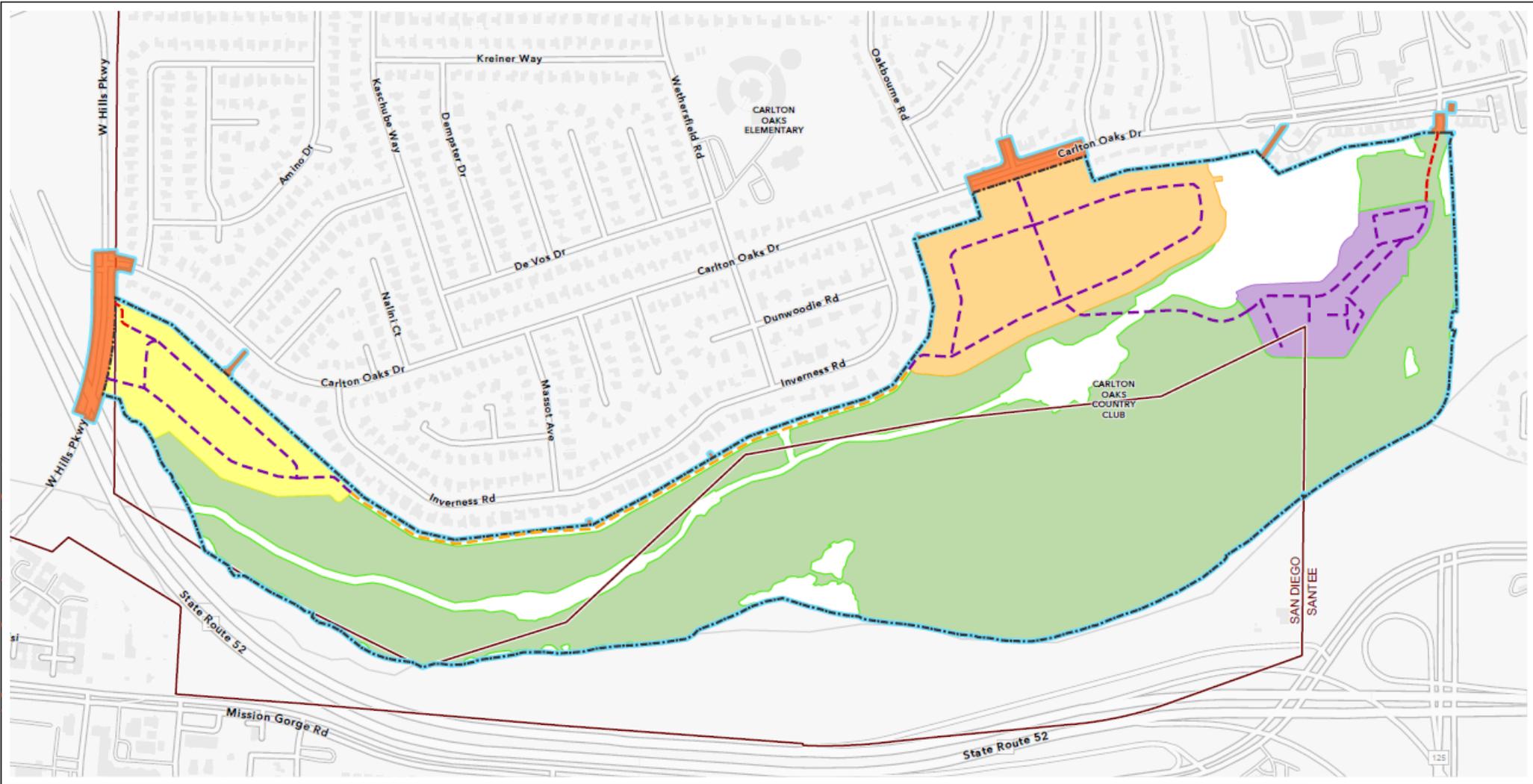
Figure 1.2 displays the Proposed Project site plan.

Figure 1.3 displays the CEQA study area which includes the Project footprint as well as the locations where off-site improvements will occur. The proposed off-site improvement areas will not affect the transportation operations analysis contained within this report.



Project Location





- Project Site
- Residential North
- Emergency Vehicle Access Only
- Residential West
- Golf Course Redesign
- Private Utility Maintenance Road
- CEQA Study Area
- Hotel and Clubhouse
- Residential / Resort Circulation Roadway
- City of Santee/San Diego Municipal Boundary

Source: Site Plan-Hunsaker & Associates (2024)





1.2 Proposed Project Approvals

As part of its entitlement and permitting process, the Proposed Project is requesting the following approvals from each respective jurisdiction:

City of Santee

- Certification of Environmental Impact Report (EIR)
- Approval of Tentative Map
- Approval of the Development Review Permit
- Approval of 2 Conditional Use Permits for the golf course, country club and related uses
- Ministerial permits (building permit, grading permit, final map, etc.)

City of San Diego

- Site Development Permit - Process 3
- Ministerial permits (grading, etc.)

1.3 Report Organization

Following this introductory Section, this report is organized into the following sections:

- 2.0 *Local Transportation Analysis Methodology* - This Section describes the methodologies and standards, including applicable thresholds, utilized to evaluate the effects in which the Proposed Project will have on the local transportation network. The methods and standards outlined in this section are based on City of Santee LTA and City of San Diego Local Mobility Analysis (LMA) standards.
 - 3.0 *Proposed Project* - This Section describes the Proposed Project including project trip generation, distribution, and assignment. An analysis of the Proposed Projects parking requirements and supply is also provided.
 - 4.0 *Project Setting* - This Section evaluates the existing vehicular, pedestrian, bicycle, and transit facilities within the project study area. Additionally, the improvements which the Proposed Project will make to the surrounding transportation network are summarized.
 - 5.0 *Existing Conditions* - This Section describes the existing transportation network with and without the addition of the Proposed Project, including the new driveway connections on West Hills Parkway and Carlton Oaks Drive. Facilities operating at sub-standard levels and the improvements needed to restore their operations back to acceptable levels are also identified, as applicable.
 - 6.0 *Near-Term Year 2026 Base Conditions* - This Section describes near-term developments that are anticipated to generate additional traffic within the study area by the Year 2026 (the Proposed Project's opening year). Analysis results are provided for the Year 2026 without Project and Year 2026 with Project conditions, including the new driveway connections. Facilities operating at sub-standard levels and the improvements needed to restore their operations back to acceptable levels are also identified, as applicable.
 - 7.0 *Horizon Year 2035 Traffic Conditions* - This Section describes projected long-range future cumulative traffic conditions. Traffic analysis results are presented for the Year 2035 without Project and Year 2035 with Project conditions, including the new driveway connections. Facilities operating at sub-standard levels and the improvements needed to restore their operations back to acceptable levels are also identified, as applicable.
 - 8.0 *Systemic Safety Review* - This section evaluates the study area intersections within the City of San Diego to determine if a study intersection meets any hotspot criteria identified in *Appendix C of the City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero*.
-



- 9.0 *Access Analysis* - This Section addresses site access and internal circulation within the project site.
- 10.0 *Recommended Improvement Summary* - This Section provides a summary of the recommend improvements to reduce the critical traffic effects that may be caused by the Proposed Project.



2.0 Analysis Methodology

This study also provides an assessment of the operations of the local transportation network accessing the Proposed Project site. The purpose of the LTA is to determine if the additional traffic associated with the Proposed Project will critically affect the operations of the local transportation network. If it is determined that the Proposed Project will critically affect the operations of the local transportation network, additional off-site improvements are recommended to improve operations back to standard levels, or to pre-development conditions. It should be noted that this analysis is not required by CEQA and is intended to inform both the project applicant and the local jurisdiction of potential sub-standard roadway operations accessing and connecting to the Proposed Project site.

2.1 Analysis Guidelines

This study was conducted in accordance with the standards and requirements outlined within the ITE *Guidelines for Transportation Impact Studies in the San Diego Region, May 2019* (City of Santee) and also identified as the Regional TIS Guidelines, and the *City of San Diego Transportation Study Manual (TSM), September 2022* (City of San Diego). Excerpts from the ITE and the TSM are included in **Appendix A**.

The Regional TIS Guidelines were recently developed by a committee of San Diego ITE, both public and private, currently operating within the San Diego Region. The Regional Transportation Guidelines provide standards to determine potential affects in which a land development project will have on the local transportation network. This analysis is conducted through a Local Transportation Assessment (LTA) which is separate from the transportation impact analysis conducted as part of the environmental (CEQA) project review process. The LTA is not required by CEQA and is not included in the Project EIR. The LTA is intended to provide both the project applicant and the local jurisdiction an understanding of how the local transportation network will operate with the implementation of the Proposed Project and identify facilities that may require improvement to maintain standard operations.

The affect the Proposed Project will have on the transportation facilities located within the City of San Diego were evaluated using the methods and standards outlined in Local Mobility Assessment (LMA) portion of the City of San Diego’s TSM.

Since the Proposed Project has study facilities that reside within both the City of Santee and the City of San Diego, each study facility was analyzed using the standards for acceptable levels of services (LOS) as well as the triggers for needed improvements as per their respective jurisdictional guidelines, mentioned above. Detailed information on roadway segments, as well as intersection analysis methodologies, standards, and thresholds are discussed in the following sections.

2.2 LTA/LMA Screening Criteria

The ITE (City of Santee) and TSM (City of San Diego) both have screening criteria to determine if a land use project should conduct an LTA/LMA analysis. **Table 2.1** displays the ADT screening criteria as contained in each document.

Table 2.1 LTA/LMA Screening Criteria

| Consistent w/ General Plan/Community Plan? | ADT | Level of Analysis |
|--|---|------------------------------|
| Consistent | <110 peak-hour trips (City of Santee) 0 – 1,000 (City of Santee and San Diego) | LTA/LMA may not be required. |
| Inconsistent | <50 peak-hour trips (City of Santee) 0 – 500 (City of Santee and San Diego) | LTA/LMA may not be required. |

Guidelines for Transportation Impact Studies in the San Diego Region (May 2019), City of San Diego TSM (September 2022)



2.3 Determination of Project Study Area

Table 2.2 and Table 2.3 display the criteria to determine the project study area as defined for the City of Santee and the City of San Diego, respectively.

Table 2.2 Determination of Project Study Area – City of Santee

| Facility | Trips Added by Proposed Project |
|--|--|
| Roadway Intersection Mainline Freeway | 50+ peak hour trips in either direction |
| Bicycle Facilities | All roadways adjacent to the project, extending in each direction to the nearest intersection with a classified roadway or with a Class I path (both directions) |
| Transit Facilities | Existing or planned transit lines and stops within ½ mile walking distance from project |
| Pedestrian Facilities | All pedestrian facilities directly connected to the project access points or adjacent to the project development, extending in each direction to the nearest intersection with a classified roadway or with a Class I path (both directions) |
| | Facilities connecting to transit stops within two blocks of the project |
| | Only facilities on the side of the project or along the walking route to the transit stop |

Guidelines for Transportation Impact Studies in the San Diego Region (May 2019)

Table 2.3 Determination of Project Study Area – City of San Diego

| Facility | Project Trips Generated ¹ | Community Plan Consistency? | Trips Added by Proposed Project |
|--|--|-----------------------------|--|
| Roadway Segments ² | - | Yes | 1,000+ ADT |
| | - | No | 500+ ADT |
| Signalized Intersections ³ | <2,400 | - | 50 or more trips to any turning movement |
| Unsignalized Intersections ³ | | - | 50 or more trips in either direction |
| Freeway Interchange (Signalized or Unsignalized) | | - | 50 or more trips in either direction |
| Signalized Intersections | >2,400 | - | 50 or more trips to any turning movement |
| Unsignalized Intersections | | - | 50 or more trips on any approach |
| Freeway Interchange (Signalized or Unsignalized) | | - | 50 or more trips on any approach |
| Bicycle Facilities | ½ mile biking from Proposed Project driveway | | |
| Transit Facilities | ½ mile walking distance from pedestrian access point | | |
| Pedestrian Facilities | ½ mile walking distance from pedestrian access point | | |

City of San Diego TSM (September 2022)

Notes:

ADT = Average Daily Traffic

¹ Final Driveway Trips

² AND have improvements identified in the community plan or not built to the community plan ultimate classification

³ Located ½ mile driving distance from Proposed Project Driveway for project



2.4 Roadway Segment LOS Standards and Thresholds

Roadway segment Level of Service (LOS) standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes. **Table 2.4** and **Table 2.5** presents the roadway segment capacity and LOS standards for the City of Santee and the City of San Diego, respectively, that were utilized to analyze the roadways evaluated in this study. The roadway LOS analysis was performed for facilities located within the City of Santee utilizing the information found in Table 7.1 of the *City of Santee Mobility Element (October 2017)*, while the roadways within the City of San Diego were analyzed using the information found in Appendix F of the TSM.

Table 2.4 Roadway Classifications, Capacity and LOS Standards – City of Santee

| Street Classification | Description / Sub-classification | # of Lanes | Proposed LOS/ADT Thresholds | | | | |
|-----------------------|----------------------------------|------------------|-----------------------------|--------|--------|---------------|--------|
| | | | A | B | C | D | E |
| Prime Arterial | Median | 6 lanes | 25,000 | 35,000 | 50,000 | 55,000 | 60,000 |
| Major Arterial | Median | 4 lanes | 15,000 | 21,000 | 30,000 | 35,000 | 40,000 |
| Parkway | Median | 4 lanes | 15,000 | 21,000 | 30,000 | 35,000 | 40,000 |
| | w/ TWLTL | 2 lanes w/ TWLTL | 5,000 | 7,000 | 10,000 | 13,000 | 15,000 |
| | - | 2 lanes | 4,000 | 5,500 | 7,500 | 9,000 | 10,000 |
| Collector | w/ TWLTL | 2 lanes w/ TWLTL | 5,000 | 7,000 | 10,000 | 13,000 | 15,000 |
| | Industrial Collector | 2 lanes | 2,500 | 3,500 | 5,000 | 6,500 | 8,000 |
| | Residential Collector | 2 lanes | 2,500 | 3,500 | 5,000 | 6,500 | 8,000 |
| Non-Mobility Element | | | | | | | |
| | Industrial Local | 2 lanes | - | - | 2,200* | - | - |
| | Residential Local | 2 lanes | - | - | 2,200* | - | - |
| | Cul-De-Sac Street | 2 lanes | - | - | 200* | - | - |
| | Hillside Street | 2 lanes | - | - | 700* | - | - |

Source: City of Santee Mobility Element, October 2017

Notes:

TWLTL = Two-way left-turn lane.

Bold letter indicates acceptable roadway threshold.

*represents design capacity of non-CE road. LOS does not apply to non-CE roads.



Table 2.5 City of San Diego Roadway Segment Capacity & LOS Standards

| Street Classification | Lanes | LOS | | | | |
|--|---------|--------|--------|--------|---------------|---------|
| | | A | B | C | D | E |
| Expressway | 8 lanes | 40,000 | 56,000 | 80,000 | 93,333 | 106,667 |
| Expressway | 7 lanes | 35,000 | 49,000 | 70,000 | 81,667 | 93,333 |
| Expressway | 6 lanes | 30,000 | 42,000 | 60,000 | 70,000 | 80,000 |
| Prime Arterial | 8 lanes | 35,000 | 50,000 | 70,000 | 75,000 | 80,000 |
| Prime Arterial | 7 lanes | 30,000 | 42,500 | 60,000 | 65,000 | 70,000 |
| Prime Arterial | 6 lanes | 25,000 | 35,000 | 50,000 | 55,000 | 60,000 |
| Prime Arterial | 5 lanes | 20,000 | 28,000 | 40,000 | 45,000 | 50,000 |
| Prime Arterial | 4 lanes | 17,500 | 24,500 | 35,000 | 40,000 | 45,000 |
| Major Arterial | 7 lanes | 22,500 | 31,500 | 45,000 | 50,000 | 55,000 |
| Major Arterial | 6 lanes | 20,000 | 28,000 | 40,000 | 45,000 | 50,000 |
| Major Arterial | 5 lanes | 17,500 | 24,500 | 35,000 | 40,000 | 45,000 |
| Major Arterial | 4 lanes | 15,000 | 21,000 | 30,000 | 35,000 | 40,000 |
| Major Arterial | 3 lanes | 11,250 | 15,750 | 22,500 | 26,250 | 30,000 |
| Major Arterial | 2 lanes | 7,500 | 10,500 | 15,000 | 17,500 | 20,000 |
| Major Arterial (one-way) | 3 lanes | 12,500 | 16,500 | 22,500 | 25,000 | 27,500 |
| Major Arterial (one-way) | 2 lanes | 10,000 | 13,000 | 17,500 | 20,000 | 22,500 |
| Collector (with two-way left turn lane) | 5 lanes | 12,500 | 17,500 | 25,000 | 30,750 | 37,500 |
| Collector (with two-way left turn lane) | 4 lanes | 10,000 | 14,000 | 20,000 | 25,000 | 30,000 |
| Collector (with two-way left turn lane) | 3 lanes | 7,500 | 10,500 | 15,000 | 18,750 | 22,500 |
| Collector (with two-way left turn lane) | 2 lanes | 5,000 | 7,000 | 10,000 | 13,000 | 15,000 |
| Collector (without two-way left turn lane) | 4 lanes | 5,000 | 7,000 | 10,000 | 13,000 | 15,000 |
| Collector (without two-way left turn lane) | 3 lanes | 4,000 | 5,000 | 7,500 | 10,000 | 11,000 |
| Collector (without two-way left turn lane) | 2 lanes | 2,500 | 3,500 | 5,000 | 6,500 | 8,000 |
| Collector (with no fronting property) | 2 lanes | 4,000 | 5,500 | 7,500 | 9,000 | 10,000 |
| Collector (one-way) | 3 lanes | 11,000 | 14,000 | 19,000 | 22,500 | 26,000 |
| Collector (one-way) | 2 lanes | 7,500 | 9,500 | 12,500 | 15,000 | 17,500 |
| Collector (one-way) | 1 lane | 2,500 | 3,500 | 5,000 | 6,500 | 7,500 |

City of San Diego TSM (September 2022) – Appendix F (June 2020)

Note:

Bold letter indicates acceptable roadway threshold.

The standards shown in Table 2.4 and Table 2.5 are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical attributes. Typically, the performance and LOS of a roadway segment is heavily influenced by the ability of the arterial intersections to accommodate peak hour volumes. Per Santee’s General Plan, LOS D is considered acceptable for roadway segments. Similarly, LOS D is considered acceptable for roadway segments within the City of San Diego.

2.5 Peak Hour Intersection LOS Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analyses at the signalized and unsignalized intersections within the study area. The following assumptions were utilized in conducting all intersection LOS analyses:



- Pedestrian Calls per Hour - 5 calls per hour for each pedestrian movement were assumed.
- Peak Hour Factor (PHF) - Based on actual existing approach peak hour traffic count data when available, included in **Appendix B**. A default value of 0.92 was applied to intersections where a count PHF was not available. It should be noted that the City of Santee requires intersection delay and LOS analyses to be conducted utilizing the overall intersection PHF, whereas the City of San Diego requires the PHF to be analyzed by intersection approach.
- Signal Timing - Based on existing signal timing plans, provided in **Appendix C**.

Signalized Intersection Analysis

The analysis of signalized intersections utilized the operational analysis procedure as outlined in the *Highway Capacity Manual 6th Edition* (HCM). This method defines LOS in terms of delay, or more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption and lost travel time. This technique uses 1,900 vehicles per hour per lane (VPHPL) as the maximum saturation volume of an intersection. This saturation volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage trucks) and shared lane movements (i.e., through and right-turn movements originating from the same lane). The LOS criteria used for the analysis of signalized intersections are described in **Table 2.6**, identifying the thresholds of control delays and the associated LOS. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

Table 2.6 Signalized Intersection LOS Operational Analysis Method

| Average Stopped Delay Per Vehicle (seconds) | LOS Characteristics |
|---|---|
| <10 | LOS A occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable, or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping. |
| >10– 20 | LOS B occurs when the volume-to-capacity ratio is low and either progression is highly favorable, or the cycle length is short. More vehicles stop than with LOS A. |
| >20 – 35 | LOS C occurs when progression is favorable, or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping. |
| >35– 55 | LOS D occurs when the volume-to-capacity ratio is high and either progression is ineffective, or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable. |
| >55 – 80 | LOS E occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent. |
| >80 | LOS F occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue. |

Source: Highway Capacity Manual, 6th Edition

Unsignalized Intersection Analysis

Side-street stop-controlled intersections were analyzed using the HCM 6th Edition (Section 19) Two-Way Stop-Controlled Intersection analysis methodology. The Synchro Version 11 software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (SSSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. **Table 2.7** summarizes the LOS criteria for unsignalized intersections.



Table 2.7 LOS Criteria for Stop Controlled Unsignalized Intersections

| Average Control Delay (sec/veh) | LOS |
|---------------------------------|-----|
| <10 | A |
| >10 to <15 | B |
| >15 to <25 | C |
| >25 to <35 | D |
| >35 to <50 | E |
| >50 | F |

Source: Highway Capacity Manual, 6th Edition

The City of Santee and City of San Diego both consider LOS D or better during the AM and PM peak hours to be the threshold of standard for intersection LOS. This is consistent with the approach of other jurisdictions within San Diego County and past studies conducted within both the City of Santee and San Diego.

95th Percentile Queuing Analysis

A 95th percentile queuing analysis was performed for all freeway off-ramps and for each City of San Diego study area intersections identified in the field to be approaching or surpassing the critical queue length under Existing and Near-Term Conditions. The 95th percentile queuing analyses were conducted to assess potential overflow issues at off-ramps and at exclusive turn-lanes. Limitations in turn-lane storage capacity could result in turning vehicles overflowing into adjacent lanes, while queue length exceeding the distance to the upstream intersection at closely spaced intersections could negatively affect upstream intersection operations or spill onto freeway mainlines. 95th Percentile queue lengths were calculated using Synchro Version 11 traffic analysis software.

2.6 Freeway Segment Analysis

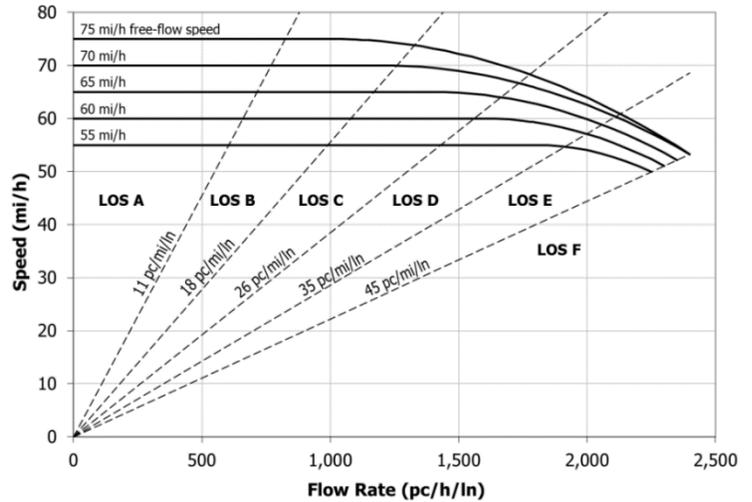
Freeway LOS analysis is based upon procedures developed by the HCM 6th Edition. The procedure for calculating freeway LOS involves estimating the vehicle speed (mi/h) and density/flow (pc/mi/ln).

Highway Capacity Software (HCS7), developed by McTrans, was used to calculate both the vehicle speed and density/flow along the study area freeway segments. The HCS7 software required the following inputs to complete the speed and density/flow calculations:

- *AADT* - Caltrans Traffic Census 2017 AADT Volumes Report
- *K (peak hour percentage)* - Caltrans Traffic Census 2017 AADT Volumes Report
- *D (directional split)* - Caltrans Traffic Census 2017 AADT Volumes Report
 - *AADT_{adj}* - Calculated using AADT and D values provided by Caltrans using the following equation:
 - $AADT_{adj} = (D/(1-D))AADT$
- *PHF* - Assumed to be a typical default value of 0.94
- *PT (% Trucks, RVs, and Busses)* - Caltrans Traffic Census 2016 AADT Truck Volumes Report
- *General Terrain* - Assumed to be less than 2% grade and therefore Level Terrain (HCM 6th Edition 12-35)
- *f_p* - Driver population factor assumed one as traffic is largely commuter traffic
- *ET* - Value of 1.5 as terrain is Level (HCM 6th Edition 12-35)



- *Lane Width* - Assumed 12' maximum value by Google Earth survey
- *Rt-Side Lat. Clearance* - Assumed 6' maximum value by Google Earth survey
- *Total Ramp Density, TRD*
 - Density calculated by total number of on/off ramps in single direction within segment length plus 3 miles in both directions, divided by the total length
- *Base free-flow Speed, BFFS* - Assumed 75.4 mph (HCM 6th Edition 12-28)



Using the calculated freeway speed and density/flow, the LOS is determined using the chart to the above.

2.7 Determination of the Need for Roadway Improvements – City of Santee

For transportation facilities located within the City of Santee, a critical effect would be identified when the addition of project traffic results in a LOS dropping from LOS D or better to substandard LOS E or F. The Proposed Project's affect would also be considered critical if it further degrades the operations of facilities already operating at LOS E or F substantially. **Table 2.8** summarizes at what point a project would have a critical effect on the local roadway network and when additional roadway improvements may be required.

Table 2.8 Determination of the need for Roadway Improvements – City of Santee

| LOS with Project ¹ | Allowable Change Due to Project Effect ² | | | | | |
|--|---|-------------|------------------|-------------|---------------|---------------|
| | Freeways | | Roadway Segments | | Intersections | Ramp Metering |
| | V/C | Speed (mph) | V/C | Speed (mph) | Delay (sec.) | Delay (min.) |
| E & F (or ramp meter delays above 15 min.) | 0.01 | 1 | 0.02 | 1 | 2 | 2 |

Source: Guidelines for Transportation Impact Studies in the San Diego Region, May 2019

Notes:

¹ All LOS measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis (using Table 2.4 or a similar LOS chart for each jurisdiction). The target LOS for freeways, roadways, and intersections is generally "D". For metered freeways ramps, LOS does not apply; however, ramp meter delays above 15 minutes are considered excessive.

² If a proposed project's traffic causes the values shown in the table to be exceeded, the effects of the project are determined to justify improvements. These changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible improvements within the LTA report that will maintain the traffic facility at the target LOS or restore to pre-project conditions. If the LOS with the proposed project becomes worse than the target (see above ¹ note), or if the project adds a critical amount of peak-hour trips to cause any traffic queues to exceed on-or off-ramp storage capacities, roadway improvements should be considered.

It is important to note that not all improvement measures can feasibly consist of roadway widening (new lanes or new capacity). A sample improvement might include financing toward a defined Intelligent Transportation System (ITS) project, enhanced traffic signal communications project, or active transportation projects. This type of improvement would allow a project applicant to provide



improvements to the roadway system by paying into a local or regional fee program, providing the fee can be established in the near future.

2.8 Determination of the Need for Roadway Improvements – City of San Diego

As per the TSM, for transportation facilities located within the City of San Diego, a project should consider all feasible improvements to accommodate the addition of the Proposed Project’s vehicular traffic, increase in pedestrian usage, and increase in bicycle usage, both around the Proposed Project’s frontage and within the LMA study area. The TSM also provides recommendations for vehicular facility improvements to accommodate the addition of Project traffic. **Table 2.9** displays the recommended improvement associated with projected traffic conditions.

Table 2.9 Potential Improvements to Accommodate Project Traffic – City of San Diego

| Facility Type | Facility Feature | Conditions | Recommendation |
|---------------------------|---|---|--|
| Signal | No Existing Left-Turn Lane | Peak hour left turns exceed 100 vph | Add left turn lane |
| | Existing Single Left-Turn Lane | Peak hour left turns exceed 300 vph | Add second left turn lane |
| | No Existing Right-Turn Lane | Peak hour right turns exceed 500 vph | Add right turn lane |
| | Existing Single Right-Turn Lane | Peak hour right turns exceed 800 vph | Add second right turn lane |
| | Existing Turn Pocket | 95 th percentile queue exceeds turn pocket capacity | Extend turn pocket |
| | Signal Timing | Within ½ mile path of a Major Transit Stop ¹ , degrades to LOS F, or adds traffic to a signal already operating at LOS F Outside ½ mile path of a Major Transit Stop ¹ , degrades to LOS E or F, or adds traffic to a signal already operating at LOS E or F | Updating split times Transit signal priority improvements Right turn overlap phasing Signal phasing changes Intelligent Transportation System (ITS) improvements |
| Unsignalized Intersection | AWSC | Within ½ mile path of a Major Transit Stop ¹ , degrades to LOS F, or adds traffic to an AWSC already operating at LOS F | Construct Roundabout or Traffic Signal |
| | | Outside ½ mile path of a Major Transit Stop ¹ , degrades to LOS E or F, or adds traffic to an AWSC already operating at LOS E or F | |
| | SSSC | Within ½ mile path of a Major Transit Stop ¹ , degrades worst movement to LOS F, or adds traffic to worst movement already operating at LOS F | |
| | | Outside ½ mile path of a Major Transit Stop ¹ , degrades worst movement to LOS E or F, or adds traffic to worst movement already operating at LOS E or F | |
| Pedestrian Facility | Sidewalks | Adjacent to project site | Construct sidewalks to close sidewalk gaps |
| | | Obstructions that constrain to pedestrian access route to less than four feet | Remove obstructions adjacent to the project site |
| | Curb Ramps | Missing or substandard curb ramps | Construct or upgrade adjacent to the project site |
| | Facilities along Roadway and at Intersections | Adjacent to project site; high pedestrian demand | Traffic calming, timing changes (pedestrian hybrid beacons, lead pedestrian interval, etc.) |



Table 2.9 Potential Improvements to Accommodate Project Traffic – City of San Diego

| Facility Type | Facility Feature | Conditions | Recommendation |
|--------------------|--|--|---|
| Bicycle Facilities | Planned bikeway | Planned not constructed per Community Plan or Bicycle Master Plan | Construct or reserve space for planned bicycle facility |
| | Existing bikeway | Substandard bikeway | Upgrade treatments for facilities adjacent to the project site (green bike lane paint, buffers, etc.) |
| Transit Facilities | Planned or existing transit stops | Planned not constructed or existing per Community Plan, RTIP and/or RTP within the study area | Consider accommodating proposed transit services |
| | Existing transit stops | Operational analysis determines a transit movement would experience LOS E or worse | Consider transit priority treatments identified within the Community Plan for the study area |
| | Existing transit stop amenities | Sub-standard or missing amenities based on existing demand and coordination with MTS and/or the NCTD | Provide additional or upgraded transit stop amenities based on existing demand |
| Roadway Segments | Improvements identified in the community plan (including upgrading to ultimate classification) or planned new circulation element roadways | Project adds greater than 50% of total ADT for the segment | Consider implementing improvement |
| | | Project adds less than or equal to 50% of total ADT for the segment | Evaluate project's fair share toward improvement |

Source: City of San Diego TSM (September 2022)

Notes:

¹ Major transit stop means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15-minutes or less during the morning and afternoon peak commute periods.

ADT = average daily trips

vph = vehicles per hour

AWSC = all-way stop control

SSSC = side-street stop control



3.0 Project Traffic

This Section describes the Proposed Project, including proposed land uses, estimated trip generation, trip distribution, and trip assignment.

3.1 Project Trip Generation, Distribution, and Assignment

Project Trip Generation

Trip generation rates for the Proposed Project were developed utilizing SANDAG's *Brief Guide to Vehicular Trip Generation (SANDAG, April 2002)*. As noted in the project description, the Golf Course, pro shop, cart barn, learning center, and practice areas, are existing uses. Therefore, these uses are not included in the Proposed Project trip generation, as they are not changing in nature and any trip generation associated with these uses should be accounted for under baseline conditions. Conversely, there is an existing 52 room hotel on the Proposed Project site; however, the existing hotel will be fully redeveloped to include a new clubhouse with amenities such as a spa, pool, and tournament hall. Since the hotel is being redeveloped and will include new amenities, it is not assumed to be included within the baseline and its full trip generation was assumed. **Table 3.1** displays daily, as well as AM and PM peak hour project trip generation.

Table 3.1 Project Trip Generation

| Land Use | Units | Trip Rate | ADT | AM | | | | | PM | | | | |
|---|----------|-----------|--------------|----|------------|-------|-----------|------------|-----|------------|-------|------------|-----------|
| | | | | % | Trips | Split | In | Out | % | Trips | Split | In | Out |
| Multi-Family (6-20 DU/Acre) ¹ | 236 DU | 8/DU | 1,888 | 8% | 152 | (2:8) | 30 | 122 | 10% | 189 | (7:3) | 132 | 57 |
| Single Family Detached Housing ² | 6 DU | 10/DU | 60 | 8% | 5 | (3:7) | 2 | 3 | 10% | 6 | (7:3) | 4 | 2 |
| Hotel (W/Convention Facilities/Restaurant) ³ | 52 Room | 10/Room | 520 | 6% | 32 | (6:4) | 19 | 13 | 8% | 42 | (6:4) | 25 | 17 |
| Restaurant (Quality) ⁴ | 3,675 SF | 100/KSF | 368 | 1% | 4 | (6:4) | 2 | 2 | 8% | 30 | (7:3) | 21 | 9 |
| Total | | | 2,836 | | 193 | | 53 | 140 | | 267 | | 182 | 85 |

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

Notes:

¹Includes the 86 multi-family dwelling units located in the western residential area and the 150 dwelling units located in the northern residential area. The density of the residential units is 9.0 units per acre on the westside and 8.4 per acre on the northside. Therefore, the residential trip generation rate for units with a density between 6-20 units per acre was utilized.

²It should be noted that the Proposed Project site plan shows seven single family units; however, one unit currently exists and is included due to impacts on the sidewalk fronting the existing home; therefore, it is not included in the Proposed Project trip generation.

³The proposed hotel use is anticipated to include a 4,800 SF tournament hall which can be used to host special events and other public functions. Other clubhouse features such as the proposed spa and pool are also assumed within the hotels trip generation. To account for the additional trips associated with the tournament hall, the SANDAG trip generation rate for a Hotel with convention facilities/restaurant was assumed.

⁴Typically restaurant uses associated with Hotel sites are accounted for within the hotels trip generation rate, However, due to the limited number of hotel rooms, the proposed restaurant was analyzed separately, even though this use is generally included within the Hotel (with conversion facilities/restaurant) land use.

As shown above, the proposed land uses are anticipated to generate a total of 2,836 average daily trips (ADT) with 193 trips (53-in/140-out) during the AM peak hour and 267 trips (182-in/85-out) during the PM peak hour.

It should be noted that the Project analysis was conducted using the trip generation rate of a previous iteration of the Proposed Project. A trip generation of 2,881 average daily trips (ADT) with 196 trips (53-



in/143-out) during the AM peak hour and 272 trips (186-in/86-out) during the PM peak hour was assumed for the with Project analysis instead of those outlined in Table 3-1. The assumed Proposed Project trip generation is higher than the trip generation presented in Table 3.1; thus, it provides a more conservative analysis. A comparison of the two trip generation rates are provided in **Appendix D**.

Multi-Family Land Use Trip Generation

As shown in Table 3.1, the Proposed Project is using the trip generation rates for the proposed project's land uses based on corresponding land uses listed in the *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*, by SANDAG. The residential portion of the Proposed Project consist of multi-family detached residential units in which the underlying land will be held in common ownership. The average residential unit density within the Proposed Project will be between 8.4-and 9.0 units per acre consistent with the densities of the R-7 I and R-14 and use district.

The R-7 and R-14 land use district allows for densities between 7-14 units per acre and offers a wide range of residential development types, including attached and detached single family units at the lower end of the density range and multiple family attached units at the higher end of the density range. Under the R-7 and R-14 land use district, multifamily dwellings (townhomes and detached condominiums) are also a permitted use. (Table 13.10.030A of the *Santee Municipal Code*) Multifamily residential development is defined as:

“Development, multifamily residential” means a development where the number of dwelling units on one lot is more than one or where dwelling units are attached. Such development includes condominiums, townhomes, apartments and similar types of development.”

Therefore, the LTA is using a trip generation rate for multi-family units with a density between 6 - 20 units per acre, at 8 daily trips per unit, from the *(Not So) Brief Guide of Vehicular Traffic Generation Rates*. This trip generation rate was determined to be the most appropriate to be used for the Proposed Project based on the type of use proposed (multifamily residential) and the density allowed under the R-7 and R-14 land use district category. The Proposed Project's multifamily residential product will consist of detached dwelling units located very near to each other on shared lots with common areas. Unlike single family homes, the homeowner does not own the underlying land resulting in units being clustered together on one lot.

Project Trip Distribution

The project trip distribution was developed via a “Select Zone Assignment” (SZA) utilizing a SANDAG Series 13 Transportation Santee Subarea Model. **Figure 3.1** displays the trip distribution patterns associated with each planning area as well as the overall trip distribution for the Proposed Project. The SZA output is provided in **Appendix E**.

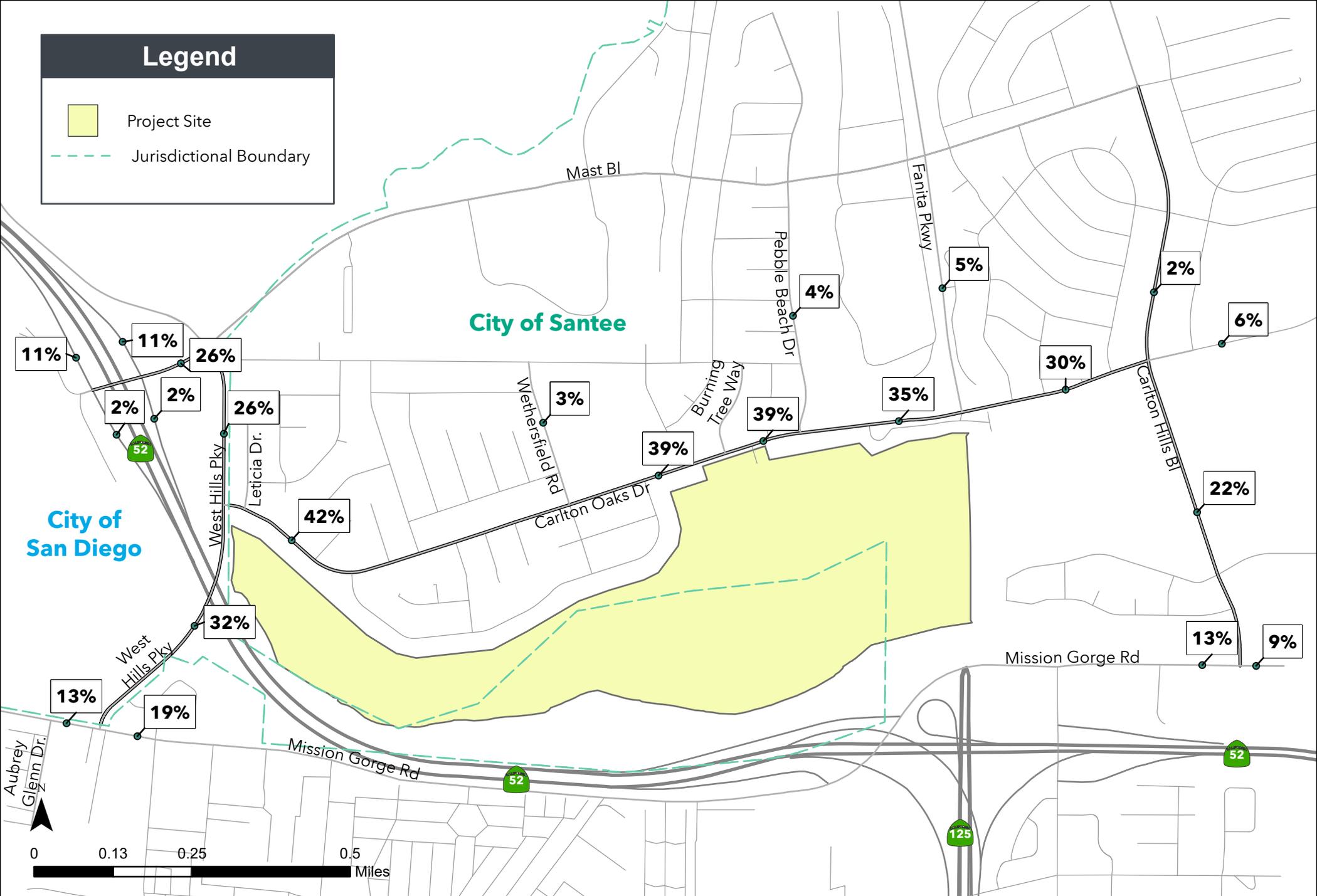
Legend



Project Site



Jurisdictional Boundary



Carlton Oaks Country Club and Resort
Local Transportation Analysis

Figure 3.1a
Project Trip Distribution (Western Residential)

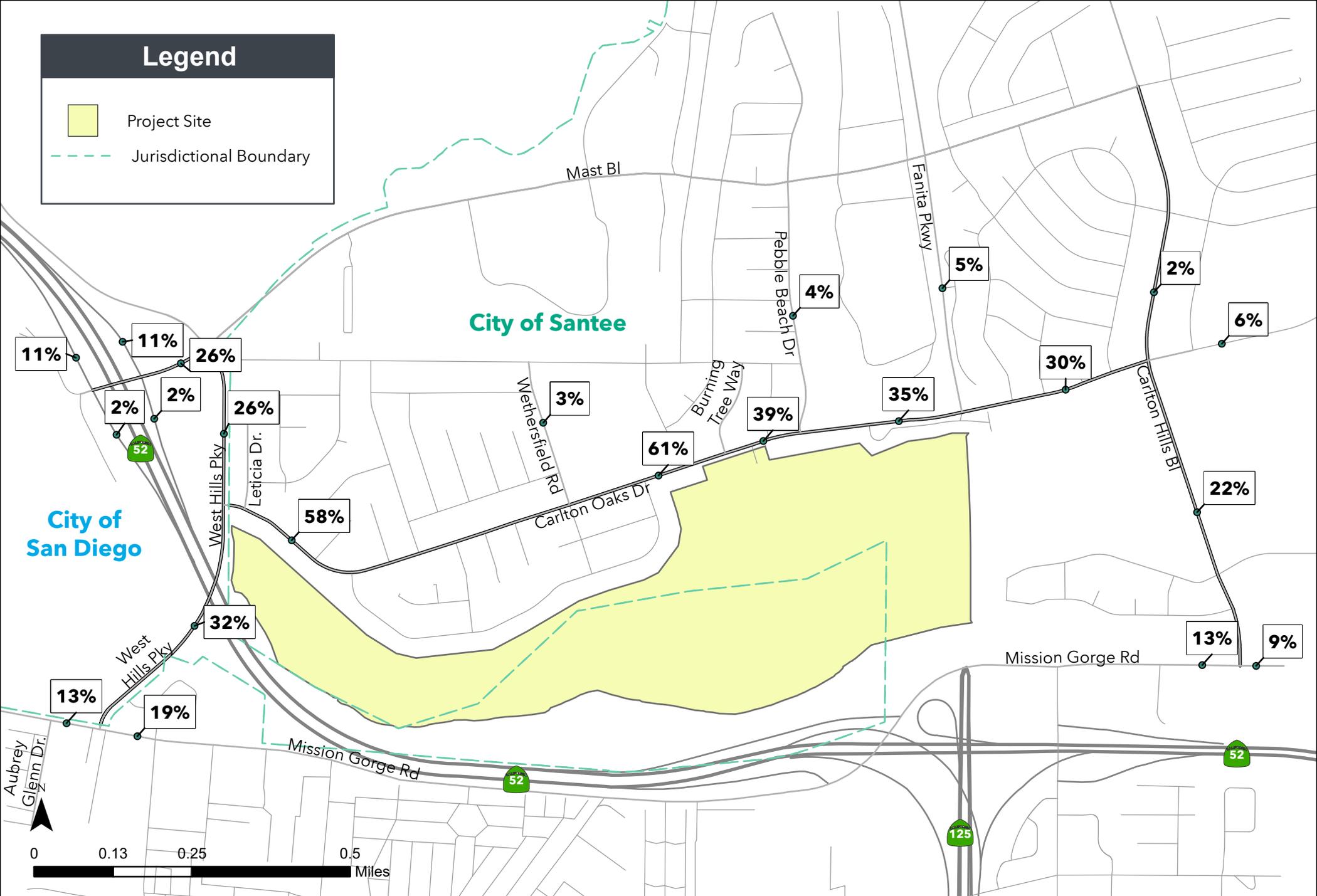
Legend



Project Site



Jurisdictional Boundary



Carlton Oaks Country Club and Resort
Local Transportation Analysis

Project Trip Distribution (Northern Residential and Golf Clubhouse & Hotel/Cottages)

Figure 3.1b



Project Trip Assignment

Based upon the Proposed Project's trip distribution, daily and AM/PM peak hour project trips were assigned to the adjacent roadway network, as displayed in **Figure 3.2** and **Figure 3.3**, respectively.

3.2 Project Study Area

Based on the criteria previously outlined in Section 2.3, the project trip assignment shown in Figure 3.2 and Figure 3.3, and the preliminary scoping with the City of Santee, the following 12 intersections, and 11 roadway segments are included within the project study area:

Intersection:

1. SR-52 EB Ramps & Mast Boulevard (Signal) (San Diego / Caltrans)
2. SR-52 WB Ramps & Mast Boulevard (Signal) (San Diego / Caltrans)
3. West Hills Parkway & Mast Boulevard (Signal) (Santee / San Diego)¹
4. West Hills Parkway & Carlton Oaks Drive (Signal) (San Diego)
5. Wethersfield Road & Carlton Oaks Drive (Signal) (Santee)
6. Pebble Beach Drive & Carlton Oaks Drive (Signal) (Santee)
7. Carlton Hills Boulevard & Carlton Oaks Drive (Signal) (Santee)
8. West Hills Parkway & Mission Gorge Road (Signal) (San Diego)
9. Carlton Hills Boulevard & Mission Gorge Road (Signal) (Santee)
10. West Hills Parkway & Project Driveway #1 (SSSC) (San Diego)
11. Burning Tree Way/Project Driveway #2 & Carlton Oaks Drive (SSSC) (Santee)
12. Fanita Parkway/Carlton Oaks Drive (Signal) (Santee)

Roadway:

1. West Hills Parkway, from Mast Boulevard to Carlton Oaks Drive (San Diego)
2. West Hills Parkway, from Carlton Oaks Drive to Mission Gorge Road (San Diego)
3. Mast Boulevard, from SR-52 EB Ramps to SR-52 WB Ramps (San Diego / Caltrans)
4. Mast Boulevard, from SR-52 WB Ramps to West Hills Parkway (San Diego / Caltrans)
5. Carlton Oaks Drive, from West Hills Parkway to Wethersfield Road (Santee)
6. Carlton Oaks Drive, from Wethersfield Road to Burning Tree Way (Santee)
7. Carlton Oaks Drive, from Burning Tree Way to Pebble Beach Drive (Santee)
8. Carlton Oaks Drive, from Pebble Beach Drive to Fanita Parkway (Santee)
9. Carlton Oaks Drive, from Fanita Parkway to Carlton Hills Boulevard (Santee)
10. Carlton Hills Boulevard, from Mast Boulevard to Carlton Oaks Drive (Santee)
11. Carlton Hills Boulevard, from Carlton Oaks Drive to Mission Gorge Road (Santee)

The following two (2) freeway segments were also analyzed for informational purposes:

Freeway:

1. SR-52, from I-15 Interchange to Santo Road (Caltrans)
2. SR-52, from Santo Road to Mast Boulevard (Caltrans)

Figure 3.4 displays the overall project study area roadway segments and intersections. The SR-52 WB and Mast Boulevard On-Ramp, as well as the SR-52 EB and Mast Boulevard On-Ramp are currently unmetered during the peak hours, thus a ramp meter analysis was not included in the study.

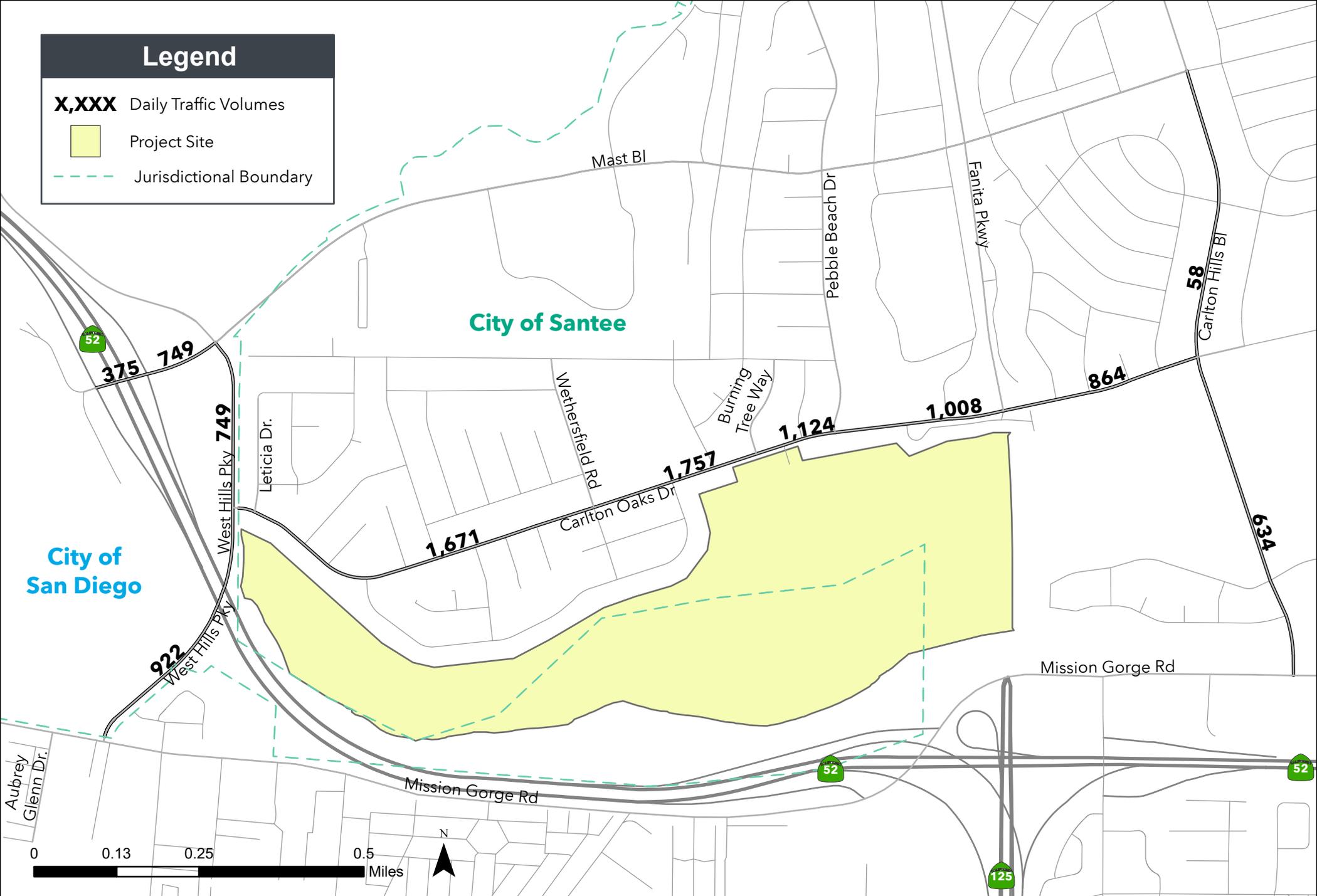
¹ The intersection of West Hills Parkway & Mast Boulevard is physically located in both the City of San Diego and the City of Santee. The intersection's timing and operations are controlled by the City of Santee.

Legend

X,XXX Daily Traffic Volumes

 Project Site

 Jurisdictional Boundary



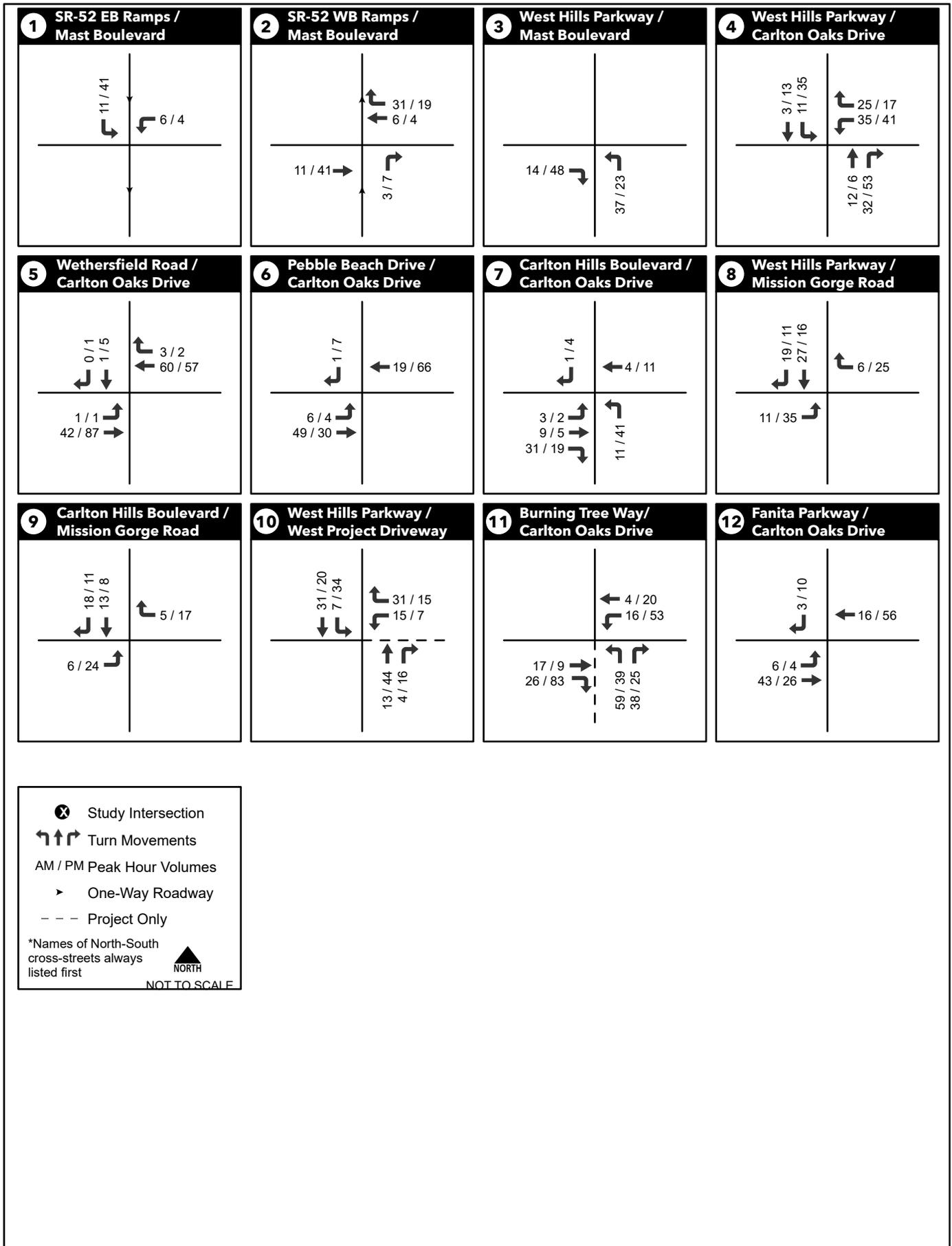
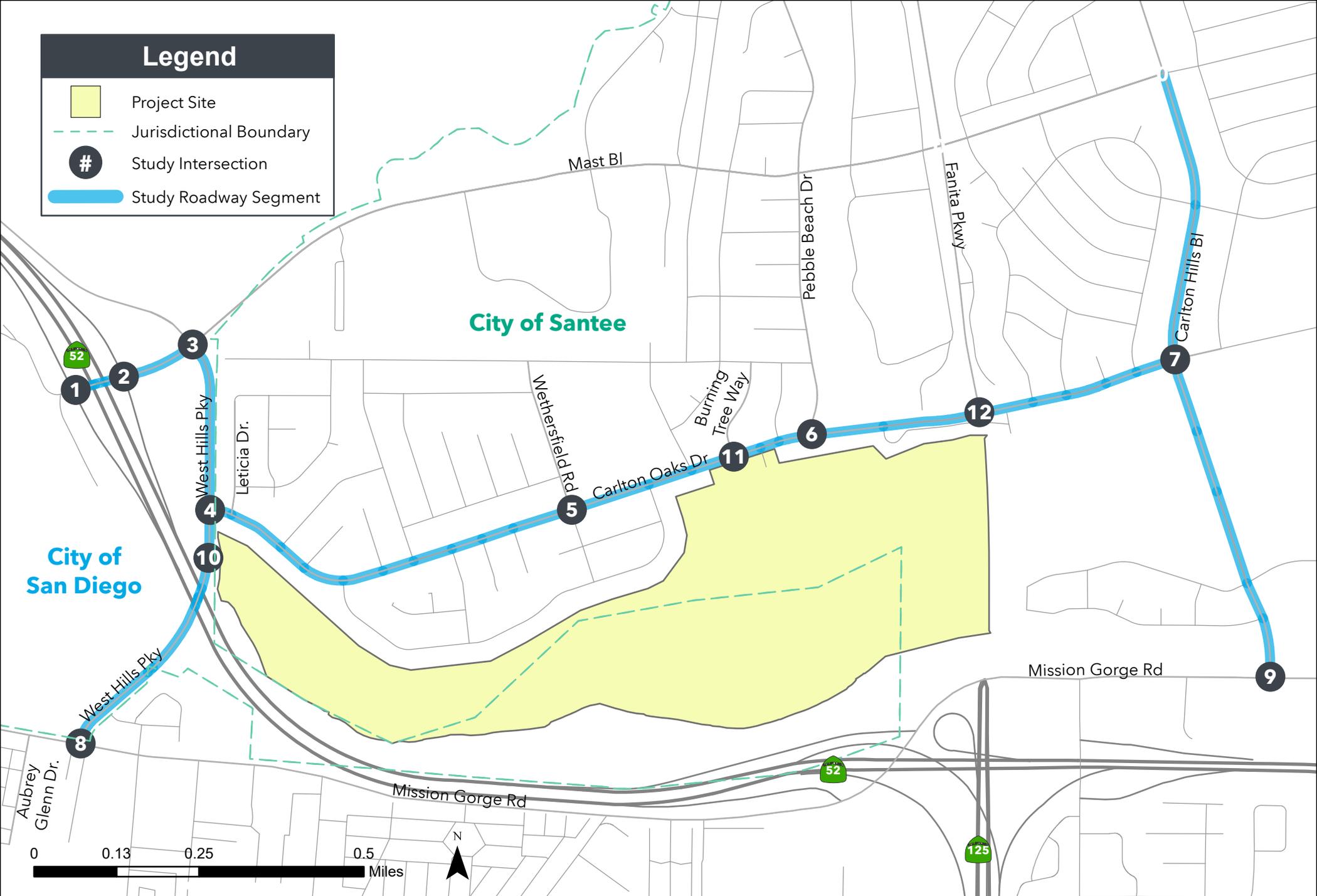


Figure 3.3

**Peak Hour Intersection Traffic Volumes
Project Trip Assignment**

Legend

-  Project Site
-  Jurisdictional Boundary
-  Study Intersection
-  Study Roadway Segment





3.3 Parking Analysis

This section outlines the on-site parking requirements for the Proposed Project, as per Section 13.24.040 of the City of Santee Municipal Code, and determines if the Proposed Project will satisfy those requirements. The parking requirements for the Clubhouse & Hotel and residential portions of the Proposed Project are analyzed separately below.

Clubhouse & Hotel Parking

Table 3.2 provides a summary of the individual parking requirements for each land use within the Clubhouse & Hotel proportions of the Proposed Project. The parking requirements were derived from Section 13.24.040 of the City of Santee Municipal Code.

Table 3.2 Clubhouse & Hotel – Base Parking Requirements

| Land Use | Amount | Unit | Single Use Rate | Single Use Demand |
|-----------------------------------|--------|-----------------|-----------------|-------------------|
| Hotel (Visitor) | 52 | Rooms | 1.00 | 52 |
| Hotel (manager or owner) | 1 | Manager / Owner | 2.00 | 2 |
| Restaurant | 3,675 | SF | 1/100 SF | 37 |
| Golf Course | 18 | Hole | 6.00 | 108 |
| Golf Tournament Hall ¹ | 4,800 | SF | 1 / 75 SF | 64 |
| Total | | | | 263 |

Source: City of Santee Municipal Code Section 13.24.040

Note:

¹ Based on the parking rate for Private clubs, lodge halls, dance halls, nightclubs, teenage nightclubs, cabarets, or union headquarters

As shown in Table 3.2, when not assuming shared parking between the Proposed Project’s Clubhouse & Hotel uses, a total of 263 parking spaces would be required.

Clubhouse & Hotel Shared Parking Analysis

The City of Santee’s Municipal Code establishes the parking requirements for different land uses within the City. However, these requirements look at parking demand for each land use individually and do not account for the ebbs and flow of parking needs throughout the day, particularly for different land use types. For example, hotel land uses have a high parking demand during the nighttime when occupants are sleeping, but have a lower demand during the daytime when their occupants are enjoying other activities in the area. Conversely, golf courses have a high demand during the morning and mid-day time periods, but have little to no parking demand after twilight, when there is no longer enough light to golf. As such, when you combine these uses together, and they share the same parking supply, they will require less total parking spaces than when they are looked at individually. Hotel occupants can park in vacant golf course parking spaces at night and golfers can park in vacant hotel spaces during the day. Additionally, some hotel occupants may also use the golf course and only require one parking space while utilizing both land uses.

To quantify the efficiencies that are associated with sharing the parking supply between different land uses, the parking demand for each individual use was broken down on an hourly basis. The hourly parking demands were then summed across all the land uses to determine the overall hourly parking demand for the Clubhouse & Hotel area during the different hours of the day. For this analysis, the base parking demands were derived from the requirements in the City’s Municipal Code (displayed in Table 3.2), while the hourly parking occupancy rates for each land use were derived from the *Urban Land Use Institute’s (ULI) Shared Parking Guide, Second Edition, 2005*. Relevant pages from the *ULI Shared Parking Guide* are provided in **Appendix F**. It should be noted that the *ULI Shared Parking Guide* does not include hourly parking occupancy rates for a golf course. Therefore, it is assumed that these uses would occupy their full parking requirements (100 percent) between 6:00 AM and 9:00 PM, which is generally the length



of a typical day during the summer months (peak time of year) within the City of Santee. A 20 percent parking occupancy rate was assumed for these uses during off hours (9:00 PM to 6:00AM) to account for employees and other maintenance activities that may occur during off hours.

Tables 3.3 & 3.4 display the hourly parking demand analysis for the Proposed Project's Clubhouse & Hotel uses for a typical weekday and typical weekend day, respectively.

As shown, the projected peak parking demand for the Proposed Project's Clubhouse & Hotel uses is 238 total parking spaces, which is anticipated to occur at 1:00 PM on a typical weekend day. Therefore, if the Proposed Project designates a pool of parking spaces to be shared between its Clubhouse & Hotel uses, in-lieu of designating spaces for each individual use, the Clubhouse & Hotel uses will only need to provide 238 parking spaces to meet their minimum requirements. Consequently, providing shared parking creates an efficiency of 54 total parking spaces when compared to parking each use individually (292 spaces - 238 spaces).

As shown in Figure 3.1A, the Clubhouse & Hotel areas of the Proposed Project will provide a total of 292 on-site parking spaces. This is well above the 238 parking spaces that are required based on the shared parking analysis (as shown in Table 3.4). Therefore, the Clubhouse & Hotel areas of the Proposed Project will provide a sufficient number of on-site parking spaces.

Residential Parking

The parking requirements for the Proposed Project's residential uses were derived based on the parking requirements outlined in Section 13.24.040 of the City of Santee Municipal Code.

Western Residential

86 multi-family units x 2 spaces per unit = 172 garage parking spaces

86 x 0.25 guest spaces per unit = 22 guest parking spaces

Total spaces required = 194 total parking spaces

As shown in Figure 3.1B, the Western Residential portion of the Proposed Project will provide a total of 230 on-site parking spaces (172 garage spaces + 55 parallel spaces + 3 disabled spaces = 230 total parking spaces). This is well above the 194 parking spaces that are required based on Section 13.24.040 of the City of Santee Municipal Code. Therefore, the Western Residential portion of the Proposed Project will provide a sufficient number of on-site parking spaces.

Northern Residential

6 single family units x 2 spaces per unit within a garage = 12 garage parking spaces

150 Units x 2 spaces per unit = 300 garage parking spaces

150 x 0.25 guest spaces per unit = 38 guest parking spaces

Total spaces required = 350 total parking spaces

As shown in Figure 3.1C, the Northern Residential portion of the Proposed Project will provide a total of 405 on-site parking spaces (314 garage spaces + 6 standard spaces + 81 parallel spaces + 4 disabled = 405 total spaces). This is well above the 350 parking spaces that are required based on Section 13.24.040 of the City of Santee Municipal Code. Therefore, the Northern Residential portion of the Proposed Project will provide a sufficient number of on-site parking spaces.



Table 3.3 Hourly Parking Demand – Typical Weekday

| Land Use | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | 12 AM |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|
| Hotel Guest | 36 | 36 | 34 | 30 | 27 | 27 | 25 | 25 | 27 | 27 | 29 | 30 | 32 | 32 | 34 | 36 | 36 | 38 | 38 |
| Hotel Employee | 1 | 5 | 14 | 14 | 16 | 16 | 16 | 16 | 16 | 16 | 14 | 11 | 6 | 3 | 3 | 3 | 3 | 2 | 1 |
| Golf Tournament Hall | 0 | 0 | 19 | 38 | 38 | 38 | 42 | 42 | 42 | 42 | 42 | 64 | 64 | 64 | 64 | 64 | 32 | 0 | 19 |
| Restaurant | 0 | 4 | 11 | 4 | 4 | 2 | 37 | 37 | 12 | 4 | 4 | 11 | 20 | 22 | 26 | 25 | 22 | 15 | 37 |
| Golf Course | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 108 | 22 | 22 | 22 | 0 |
| Total | 145 | 153 | 186 | 194 | 193 | 191 | 228 | 228 | 205 | 197 | 197 | 224 | 230 | 229 | 235 | 150 | 115 | 77 | 95 |

Table 3.4 Hourly Parking Demand – Typical Weekend Day

| Land Use | 6 AM | 7 AM | 8 AM | 9 AM | 10 AM | 11 AM | 12 PM | 1 PM | 2 PM | 3 PM | 4 PM | 5 PM | 6 PM | 7 PM | 8 PM | 9 PM | 10 PM | 11 PM | 12 AM |
|----------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|
| Hotel Guest | 0 | 4 | 11 | 4 | 4 | 2 | 37 | 37 | 12 | 4 | 4 | 11 | 20 | 22 | 26 | 25 | 22 | 15 | 11 |
| Hotel Employee | 1 | 5 | 14 | 14 | 16 | 16 | 16 | 16 | 16 | 16 | 14 | 12 | 10 | 9 | 9 | 9 | 7 | 7 | 5 |
| Golf Tournament Hall | 0 | 0 | 32 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 32 | 19 | 19 | 6 | 0 | 0 | 0 |
| Restaurant | 0 | 0 | 11 | 22 | 22 | 22 | 24 | 24 | 24 | 24 | 24 | 36 | 36 | 36 | 36 | 36 | 18 | 0 | 0 |
| Golf Course | 22 | 22 | 32 | 76 | 76 | 86 | 97 | 97 | 108 | 108 | 108 | 86 | 76 | 43 | 43 | 0 | 0 | 0 | 0 |
| Total | 23 | 31 | 100 | 180 | 182 | 190 | 238 | 238 | 224 | 216 | 214 | 209 | 174 | 129 | 133 | 76 | 47 | 22 | 16 |



4.0 Project Setting

This Section provides a qualitative description of the transportation facilities located in the Proposed Project study area. This includes roadway facilities, active transportation facilities, as well as transit facilities and services.

4.1 Vehicular Facilities

Access to the Proposed Project from the regional transportation network will be provided via West Hills Parkway, Mast Boulevard, Carlton Oaks Drive, and Carlton Hills Boulevard, and the San Diego River Trail once constructed by SANDAG. These facilities will either provide a direct connection to Proposed Project, via project driveways (West Hills Parkway and Carlton Oaks Drive) or will provide a critical link between the Proposed Project and the regional transportation network (Mast Boulevard and Carlton Hills Drive). Descriptions of these transportation network facilities are provided below:

North-South Roadways

Carlton Hills Boulevard - Carlton Hills Boulevard provides a connection between the Proposed Project and SR-125, SR-52, and the commercial centers along Mission Gorge Road. Carlton Hills Boulevard between Mast Boulevard and Mission Gorge Road is a 4-lane roadway with a raised median and a posted speed limit of 35 mph. Sidewalks, on-street parking, and Class II bike lanes are provided on both sides of Carlton Hills Boulevard. Bus route 834 runs clockwise along Carlton Hills Boulevard (SB direction), providing transit services between the western neighborhoods of Santee and the Santee Transit Center. Bus Route 834 has an existing headway of 60 minutes throughout the day. The City of Santee's *General Plan Mobility Element* classifies Carlton Hills Boulevard as a Four-Lane Major Arterial.

West Hills Parkway - West Hills Parkway runs along the western edge of the Proposed Project and will provide direct access to the Proposed Project via a single driveway. West Hills Parkway is a 4-lane roadway with a striped or raised median (depending on the location) and a posted speed limit of 45 mph. Sidewalks are provided along the eastern side of West Hills Parkway and intermittently provided along the western side of the roadway. Parking is prohibited on both sides of the roadway. Bus route 834 runs clockwise West Hills Parkway (NB direction), providing transit services between the western neighborhoods of Santee and the Santee Transit Center. Bus Route 834 has an existing headway of 60 minutes throughout the day. The closest bus stop to the Proposed Project site is located at the northeastern corner of Carlton Oaks Drive & West Hills Parkway. This segment of West Hill Parkway is located within the City of San Diego; however, the East Elliott Community Plan does not identify an ultimate classification for the roadway. It should be noted that the City of Santee's *General Plan Mobility Element* classifies West Hills Parkway as a Four-Lane Major Arterial.

East-West Roadways

Mast Boulevard - Mast Boulevard between the SR-52 EB Ramps and West Hills Parkway provides a regional connection between the Proposed Project and SR-52. This segment of Mast Boulevard is a 4-lane roadway with a raised or striped median (depending on location) and a posted speed limit of 40 mph. Parking is currently prohibited along this segment Mast Boulevard. Sidewalks are available on both sides of this segment, with the exception of the southern side of the roadway between SR-52 EB Ramps and SR-52 WB Ramps. Class II Bike Lanes are provided in both directions. Bus route 834 runs clockwise along Mast Boulevard (EB direction), providing transit services between the western neighborhoods of Santee and the Santee Transit Center. Bus Route 834 has an existing headway of 60 minutes throughout the day. The City of Santee's *General Plan Mobility Element* classifies Mast Boulevard as a Four-Lane Major Arterial, east of the SR-52 Ramps. The East Elliott Community Plan does not identify a classification for the portions of Mast Boulevard that are located within the City of San Diego.

Carlton Oaks Drive - Carlton Oaks Drive will provide direct access for the Proposed Project via a single driveway location at the Burning Tree Way intersection. Along the Proposed Project frontage, between West Hills Parkway and Fanita Parkway, Carlton Oaks Drive is constructed as a 2-lane roadway with a



continuous left-turn lane and a 35-mph posted speed limit. Sidewalks and Class II bike lanes are available on both sides of Carlton Oaks Drive. No transit routes or services are currently available along Carlton Oaks Drive. The City of Santee's *General Plan Mobility Element* Classifies Carlton Oaks Drive as a Two-Lane Collector with Two-Way Left-Turn Lane.

Regional Trail

San Diego River Trail -The San Diego River trail is a regional Class I Multi-Use path that runs along the San Diego River and connects between the Lakeside Baseball Fields and the western terminus within the City of Santee.² There is currently a gap in the trail between the intersection of Mast Boulevard / SR-52 EB Ramps and the eastern Proposed Project boundary. San Diego Association of Governments (SANDAG) has developed a plan to complete this portion of the San Diego River Trail by constructing it along the southern edge of the Proposed Project site (SANDAG Segment). A Mitigated Negative Declaration (MND), was adopted by their Transportation Committee on June 16, 2017 (SANDAG 2017), and the bikeway is currently in the engineering design phase, with a construction schedule still to be set. While the SANDAG segment of the San Diego River Trail is not part of the proposed project, project applicant will continue to work with the City of Santee, City of San Diego, and SANDAG to ensure that the Proposed Project will not impede SANDAG's efforts to construct the future regional trail.

A map of the existing transportation network, including vehicular, pedestrian, bicycle, and transit facilities is provided in **Figure 4.1. Table 4.1** summarize the existing physical characteristics of the roadways within the project study area. This information was collected via field and aerial views (Google Earth).

4.2 Pedestrian Facilities

Per the Regional TIS Guidelines and City of San Diego TSM guidelines, the condition of the pedestrian facilities adjacent to the Proposed Project site were observed and documented. **Table 4.2** summarizes the existing physical characteristics of sidewalks within the project study area. Specifically, missing sidewalks, narrow sidewalks, and major obstructions are identified.

As shown in Table 4.2, three (3) sidewalk segments were identified to have missing sidewalks within the project study area. Two of which are located on the westside of West Hills Parkway and the third located on Mission Gorge Road. It should be noted that none of the missing sidewalk locations are along the project frontage and that sidewalk facilities are provided on the opposite side of the roadway in these locations. Additionally, there are no fronting land uses along the roadway segments with missing sidewalks.

² Note: The San Diego River Trail is not contiguous between the Lakeside Baseball Field and the western terminus. Multiple sections of the comprehensive trail still need to be designed, funded, and constructed.

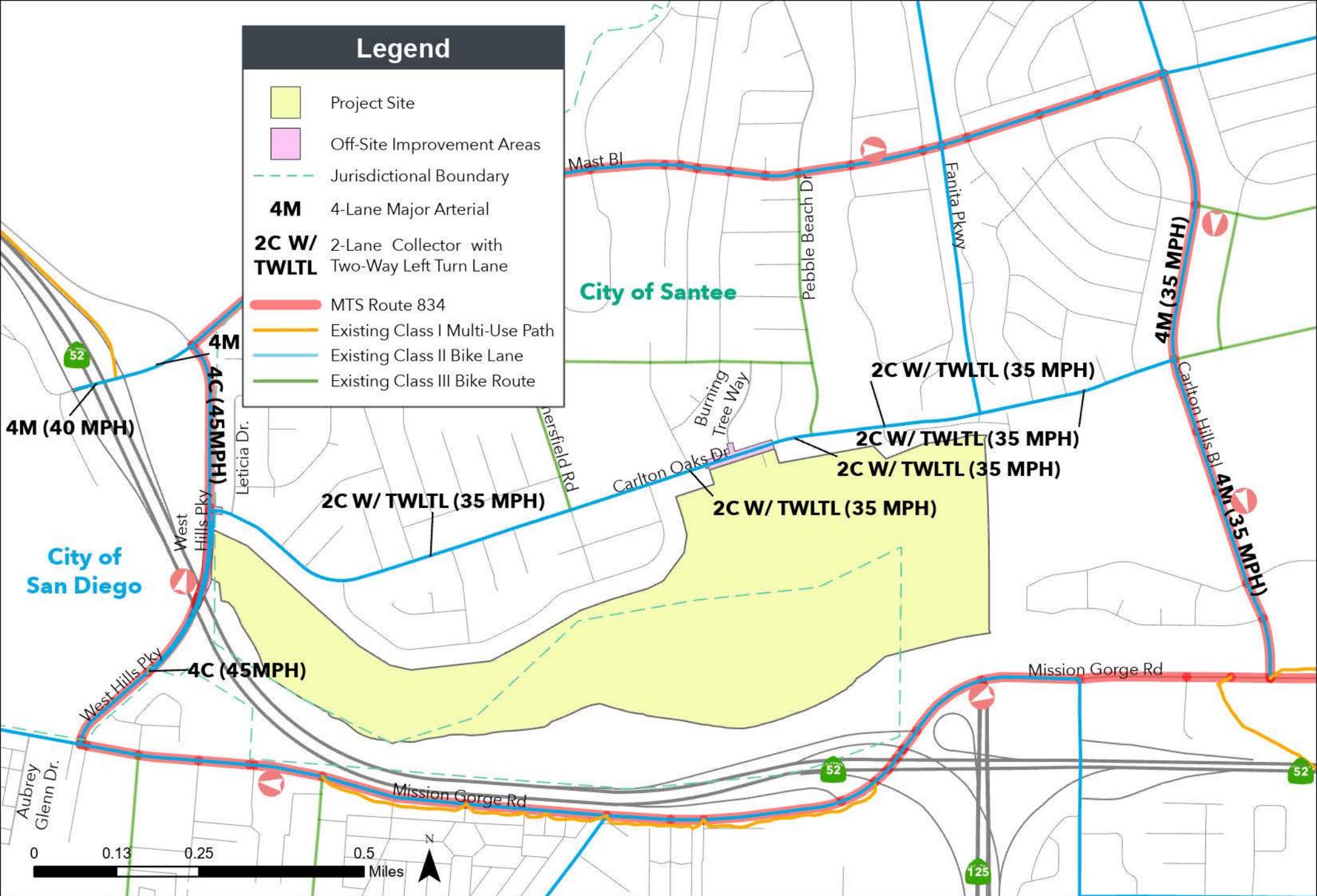


Figure 4.1
Surrounding Roadway Network
Existing Conditions



Table 4.1 Existing Roadway Characteristics

| ID | Roadway | From | To | Jurisdiction | Number of Lanes | Median Type | Sidewalk? | Bike lanes? | Transit Route |
|----|-------------------------|--------------------|-------------------------|----------------------|-----------------|-------------|-----------------|------------------------------|---------------|
| 1 | West Hills Parkway | Mast Boulevard | Carlton Oaks Drive | San Diego | 2 NB / 2 SB | S | Both | EB: Class II WB: Class II | 834 |
| 2 | West Hills Parkway | Carlton Oaks Drive | Mission Gorge Road | San Diego | 2 NB / 2 SB | S / R | East Side Only | EB: Class II WB: Class II | 834 |
| 3 | Mast Boulevard | SR-52 EB Ramps | SR-52 WB Ramps | San Diego / Caltrans | 2 EB / 1 WB | S | North Side Only | EB: Class II WB: Class II | - |
| 4 | Mast Boulevard | SR-52 WB Ramps | West Hills Parkway | San Diego / Caltrans | 2 EB / 2 WB | S / R | Both | EB: Class II WB: Class II | - |
| 5 | Carlton Oaks Drive | West Hills Parkway | Wethersfield Road | Santee | 1 EB / 1 WB | TWLTL | Both | EB: Class II WB: Class II | - |
| 6 | Carlton Oaks Drive | Wethersfield Road | Burning Tree Way | Santee | 1 EB / 1 WB | TWLTL | Both | EB: Class II WB: Class II | - |
| 7 | Carlton Oaks Drive | Burning Tree Way | Pebble Beach Drive | Santee | 1 EB / 1 WB | TWLTL | Both | EB: Class II WB: Class II | - |
| 8 | Carlton Oaks Drive | Pebble Beach Drive | Fanita Parkway | Santee | 1 EB / 1 WB | TWLTL | Both | EB: Class II WB: Class II | - |
| 9 | Carlton Oaks Drive | Fanita Parkway | Carlton Hills Boulevard | Santee | 1 EB / 1 WB | TWLTL | Both | EB: Class II WB: Class II | - |
| 10 | Carlton Hills Boulevard | Mast Boulevard | Carlton Oaks Drive | Santee | 2 NB / 2 SB | S / R | Both | EB: Class II WB: Class II | 834 |
| 11 | Carlton Hills Boulevard | Carlton Oaks Drive | Mission Gorge Road | Santee | 2 NB / 2 SB | S / R | Both | EB: Class II WB: Class II | 834 |

Notes:

S = Striped Median, R = Raised Median, TWLTL = Two-way left-turn lane



Table 4.2 Roadway Pedestrian Facilities and Conditions along Project Frontage and within ¼ Mile

| Roadway | From | To | Eastside / Southside | | | Westside / Northside | | | Jurisdiction |
|------------------|---------------------------------|---------------------------------|----------------------|------------|------------|----------------------|------------|--|----------------------|
| | | | Sidewalk Type | Width (ft) | Conditions | Sidewalk Type | Width (ft) | Conditions | |
| Mast Blvd | 375' West of West Hills Pkwy | West Hill Pkwy | Contiguous | 6 | Adequate | Contiguous | 3 | Narrow due to debris from adjacent landscape | San Diego / Caltrans |
| West Hills Pkwy | Mast Blvd | Carlton Oaks Dr | Contiguous | 6 | Adequate | Contiguous | 4.25 | Adequate | San Diego |
| West Hills Pkwy | Carlton Oaks Dr | 670' South of Carlton Oaks Dr | Contiguous | 6 | Adequate | Missing | N/A | Missing | San Diego |
| West Hills Pkwy | 670' South of Carlton Oaks Dr | 1,230' South of Carlton Oaks Dr | Contiguous | 5 | Adequate | Contiguous | 5 | Adequate | San Diego |
| West Hills Pkwy | 1,230' South of Carlton Oaks Dr | Mission Gorge Rd | Contiguous | 5 | Adequate | Missing | N/A | Missing | San Diego |
| Mission Gorge Rd | 600' West of West Hills Pkwy | West Hills Pkwy | Contiguous | 5.5 | Adequate | Missing | N/A | Missing | San Diego |
| Mission Gorge Rd | West Hills Pkwy | 725' East of West Hills Pkwy | Contiguous | 6 | Adequate | Contiguous | 9.5 | Adequate | Santee |
| Carlton Oaks Dr | West Hills Pkwy | Burning Tree Wy | Contiguous | 6 | Adequate | Contiguous | 6 | Adequate | Santee |
| Carlton Oaks Dr | Burning Tree Wy | Fanita Pkwy | Contiguous | 5.5 | Adequate | Contiguous | 6 | Adequate | Santee |
| Carlton Oaks Dr | Fanita Pkwy | Carlton Hills Blvd | Contiguous | 7.5 | Adequate | Contiguous | 7.5 | Adequate | Santee |

Note:
Adequate is defined as roadway with sidewalks present, no obstructions, and no significant sidewalk deterioration.



Table 4.3 summarizes the existing physical characteristics of the intersection curb ramps within the project study area, per ITE and the City of San Diego TSM guidelines. Specifically, major ramp obstructions and missing truncated domes are reported.

Table 4.3 Intersection Missing Curb Ramps along Project Frontage and within ¼ Mile

| N/S Roadway | E/W Roadway | Conditions | Jurisdiction |
|--------------------|------------------|---|--------------|
| West Hills Pkwy | Mast Blvd | NW, NE, & SE Curb Ramp Missing Truncated Domes | San Diego |
| West Hills Pkwy | Carlton Oaks Dr | SW Curb Ramp Missing All Missing Truncated Domes | San Diego |
| Wethersfield Rd | Carlton Oaks Dr | All Missing Truncated Domes | Santee |
| Pebble Beach Dr | Carlton Oaks Dr | SW Curb Ramp Missing All Missing Truncated Domes | Santee |
| Carlton Hills Blvd | Carlton Oaks Dr | All Curb Ramps and Truncated Domes Present | Santee |
| West Hills Pkwy | Mission Gorge Rd | All Missing Truncated Domes | San Diego |
| Burning Tree Wy | Carlton Oaks Dr | SW & SE Curb Ramp Missing NE Missing Truncated Domes | Santee |
| Fanita Pkwy | Carlton Oaks Dr | All Missing Truncated Domes | Santee |

Note: Intersections with driveways/alleys were not included in this assessment.

As shown in Table 4.3, seven (7) intersections were identified to have missing curb ramps and/or Truncated Domes. The intersection of Carlton Hills Boulevard / Carlton Oaks Drive (Santee) is the only intersection within the study areas to have fully compliant curb ramps.

4.3 Bicycle Facilities

Per the Regional TIS Guidelines, Bicycle facilities within a ¼ miles of a Proposed Project access point were observed and documented. Table 4.4 summarizes the observed bicycle facilities, their respective ultimate classifications, and their present conditions.

Table 4.4 Bicycle Facilities and Conditions along Project Frontage and within ¼ Mile

| Roadway | From | To | Facility | Conditions | Ultimate Classification | Jurisdiction |
|------------------|---------------------------------|---------------------------------|---------------------|------------|-------------------------|--------------|
| Mast Blvd | 375' West of West Hills Pkwy | West Hill Pkwy | Class II Bike Lanes | Adequate | Class II or III | San Diego |
| West Hills Pkwy | Mast Blvd | Carlton Oaks Dr | Class II Bike Lanes | Adequate | Class II Bike Lanes | San Diego |
| West Hills Pkwy | Carlton Oaks Dr | 670' South of Carlton Oaks Dr | Class II Bike Lanes | Adequate | Class II Bike Lanes | San Diego |
| West Hills Pkwy | 670' South of Carlton Oaks Dr | 1,230' South of Carlton Oaks Dr | Class II Bike Lanes | Adequate | Class II Bike Lanes | San Diego |
| West Hills Pkwy | 1,230' South of Carlton Oaks Dr | Mission Gorge Rd | Class II Bike Lanes | Adequate | Class II Bike Lanes | San Diego |
| Mission Gorge Rd | 600' West of West Hills Pkwy | West Hills Pkwy | Class II Bike Lanes | Adequate | Class II Bike Lanes | San Diego |
| Mission Gorge Rd | West Hills Pkwy | 725' East of West Hills Pkwy | Class II Bike Lanes | Adequate | Class II Bike Lanes | Santee |
| Carlton Oaks Dr | West Hills Pkwy | Burning Tree Wy | Class II Bike Lanes | Adequate | Class II Bike Lanes | Santee |
| Carlton Oaks Dr | Burning Tree Wy | Fanita Pkwy | Class II Bike Lanes | Adequate | Class II Bike Lanes | Santee |
| Carlton Oaks Dr | Fanita Pkwy | Carlton Hills Blvd | Class II Bike Lanes | Adequate | Class II Bike Lanes | Santee |

Note: Adequate is defined in this report as bicycle facilities that are continuous with no major obstructions or gaps.



As shown in Table 4.4, all existing bicycle facilities within the Proposed Project study area were found to be adequate and built to their ultimate classification.

4.4 Trail Segments

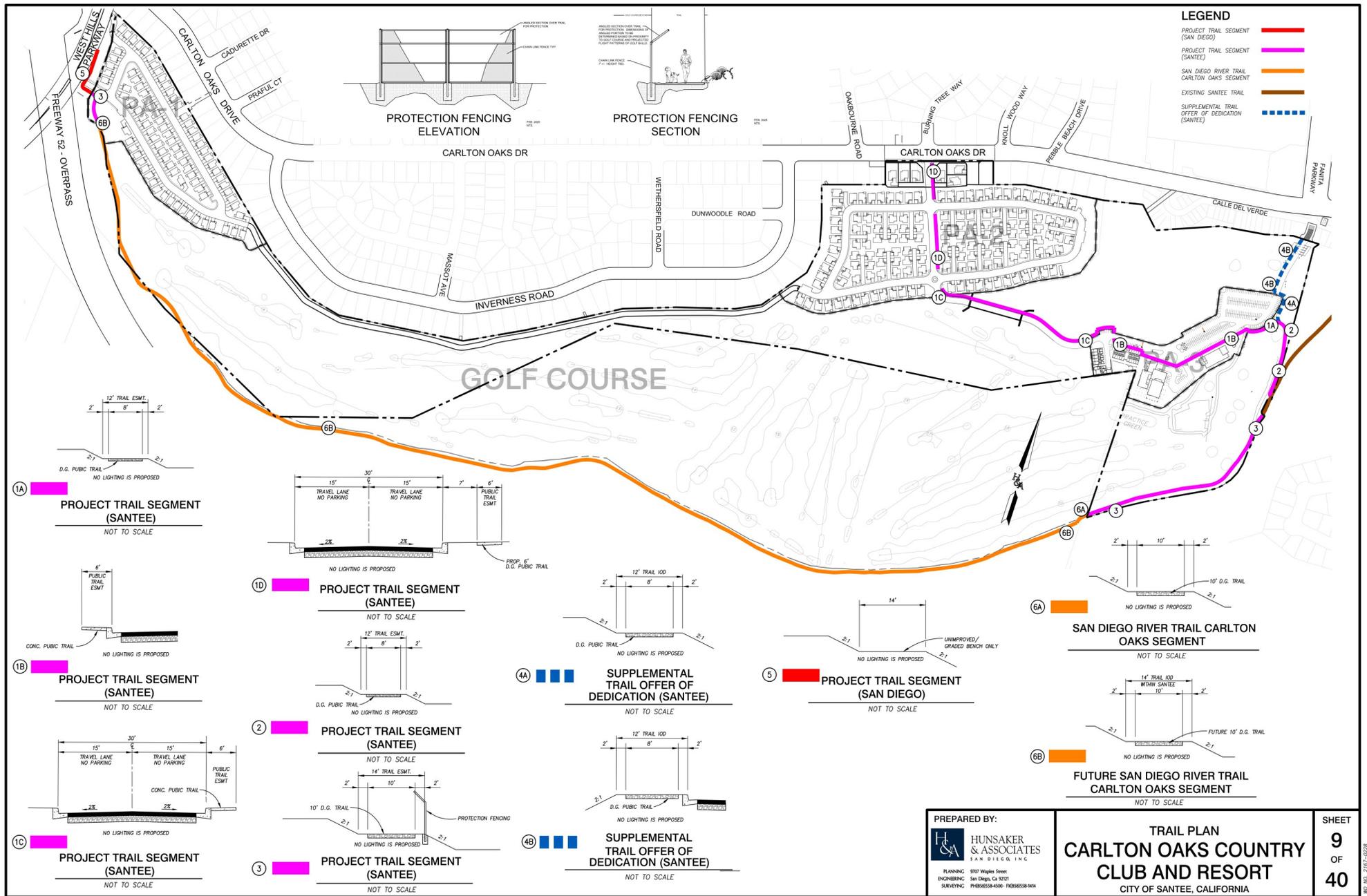
The San Diego River Trail is a regional Class I multi-use path that runs along the San Diego River and connects the Lakeside Baseball Fields to the western terminus of the City of Santee. Currently there is a gap in the trail between the intersection of Mast Boulevard/SR-52 eastbound ramps and the eastern proposed project boundary. The San Diego Association of Governments (SANDAG) has developed a plan to complete this portion of the San Diego River Trail by constructing it along the southern edge of the project site. A Mitigated Negative Declaration was adopted on June 16, 2017 (SANDAG 2017), and the bicycleway is currently in the engineering design phase; a construction schedule has yet to be set. The SANDAG segment would be funded through Transnet, the regional half-cent sales tax for transportation administered by SANDAG, although construction funds have not yet been identified. The segment of the San Diego River Trail that runs along the project boundary is not part of the proposed project, but the project applicant would continue to work with the City of Santee, City of San Diego, and SANDAG to ensure that the proposed project's design would not impede implementation of the trail.

As part of the proposed project, a multipurpose public trail would be provided on the northern side of the San Diego River, linking with existing and planned trails east and west of the site (termed the Project Trail Segment herein, see **Figure 4.2**). A portion of the Project Trail Segment on the eastern side of the project site would begin at the entrance of Residential North at Carlton Oaks Drive, traverse through the resort and along the southeastern border of the project site, and end slightly west of the jurisdictional line between the City of Santee and the City of San Diego. This portion of the trail would vary in width from 6 to 10 feet and be a decomposed granite path. Safety fencing, approximately 10 feet tall, would be constructed along the Project Trail Segment adjacent to the golf course. Additionally, this portion of the trail would link to the existing Mast Park West Trail and to the future planned trail known as the Carlton Oaks Golf Course Segment (SANDAG 2017).

A portion of the Project Trail Segment on the western side of the project site would be constructed beginning at the City of Santee's jurisdictional line and ending at the property line. This portion of the trail would be 10 feet wide and consist of decomposed granite. Safety fencing would be constructed along the Project Trail Segment adjacent to the golf course. This portion of the trail would link to the future planned trail known as the Carlton Oaks Golf Course Segment. In addition, the project applicant would provide an Irrevocable Offer of Dedication for portions of the Carlton Oaks Golf Course Segment that are within the project site but are not being constructed by the project applicant; these sections would be provided on the project's subdivision map.

Along the Residential West boundary, a 14-foot-long graded bench (located within the Carlton Oaks Golf Course Segment) would be provided within the easement areas that the City of San Diego would grant to the applicant as part of this project.

As an alternative to the trail alignment currently proposed through Residential North and the resort area, a supplemental trail Offer of Dedication is shown on project site plan, should the City of Santee request this supplemental trail alignment. The supplemental trail Offer of Dedication is for a trail that would be 12 feet wide and start from an area east of the resort parking lot to the property line of the Vista del Verde community. The supplemental trail would be within the project development footprint analyzed in this EIR. The applicant is not proposing to construct this trail segment as part of the project, and this segment is only an alternative to the proposed Project Trail Segment located through the resort.



| | | | |
|---|--|--|---|
| PREPARED BY: HUNSAKER & ASSOCIATES SAN DIEGO, INC. <small>PLANNING: 3107 Wiggins Street ENGINEERING: San Diego, CA 92121 SURVEYING: PH020538-000; PH020538-010</small> | TRAIL PLAN CARLTON OAKS COUNTRY CLUB AND RESORT CITY OF SANTEE, CALIFORNIA | | SHEET 9 OF 40 |
| | <small>R:\1759\&Pin\Santee\1759_Site Plan Sht 9.dwg May-15-2025:12:03</small> | | |





4.5 Transit Facilities

The project site is within a one-half mile walking distance of multiple bus stops for MTS Bus Route #834 West Santee Loop (Santee Town Center - West Santee) line. Route #834 runs a loop around western Santee, originating from the Santee Town Center Trolley Station (which connects 22 total bus routes and the Green Line Trolley). Route #834 runs west on Town Center Parkway, west on Mission Gorge Road, north on West Hills Parkway, east on Mast Boulevard, south on Carlton Hills Boulevard, east on Mission Gorge Road, and east on Town Center Parkway before returning to the Santee Trolley Station. This route runs Monday through Friday on one-hour headways from 6:36 AM to 7:13 PM. The Project site is within a one-half mile distance of the following four (4) bus stops:

- Mission Gorge Road & West Hills Parkway (Stop No. 40259)
- West Hills Parkway & Carlton Oaks Drive (Stop No. 88948)
- Mast Boulevard & Fanita Parkway (Stop No. 41059)
- Carlton Hills Boulevard & Carlton Oaks Drive (Stop No. 40534)

Detailed MTS Route information for the above routes is provided in **Appendix H**.

Table 4.5 displays the transit amenities per transit stop. Average weekday boarding and alighting information was provided by MTS (December 2020). Boarding and alighting information is provided in Appendix H.



Table 4.5 Transit Amenities per Transit Stop

| Stop ID | Intersection | Route(s) | Direction of Travel | Boardings | Alighting | Boardings and Alighting | Sign and Pole | Built-in Sign | Expanded Sidewalk | Accessible | Seating | Passenger Shelter | Route Designations | Schedule Display | Route Map | System Map | Trash Receptacle | Real Time Display | Bus Pads | Red Curbs | Meets Desired MTS Design Requirements* |
|---------|--------------------------------------|----------|---------------------|-----------|-----------|-------------------------|---------------|---------------|-------------------|------------|---------|-------------------|--------------------|------------------|-----------|------------|------------------|-------------------|----------|-----------|--|
| 40259 | West Hills Pkwy & Mission Gorge Rd | 834 | W | 6 | 6 | 12 | X | - | X | X | X | X | X | - | - | - | X | - | X | X | X |
| 88948 | West Hill Pkwy & Carlton Oaks Dr | 834 | N | 2 | 2 | 4 | X | - | - | X | - | - | X | - | - | - | - | - | - | M | - |
| 41059 | Fanita Pkwy & Mast Blvd | 834 | E | 1 | 1 | 2 | X | - | - | X | X | - | X | - | - | - | - | - | - | X | X |
| 40534 | Carlton Hills Blvd & Carlton Oaks Dr | 834 | S | 4 | 5 | 9 | X | - | - | X | - | - | X | - | - | - | - | - | - | X | X |

Source: MTS (2020)

Notes:

Per Table 4-1 Summary of Desired Bus Stop Features, MTS *Designing for Transit* (February 2018)

X = Amenity is present

M = Missing and required per MTS design standards



As shown in Table 4.5, per MTS design standards for bus transit, all bus stops meet desired MTS bus stop features with exception to the following:

- *Stop ID: 88948 (MTS Route 834 @ West Hills Parkway and Carlton Oaks Drive)* - All MTS bus routes regardless of boarding and alighting daily average require red curbs at the bus stop location.

However, on-street parking is not permitted along this segment of West Hills Parkway; therefore, a red curb may not be necessary at this stop. The Project applicant will work with MTS to determine if this improvement is needed.



5.0 Existing Conditions

This section provides an analysis of the existing vehicular operations of the local transportation network both with and without the Proposed Project. The scenarios analyzed in this section include:

- Existing without Project Conditions
- Existing with Project Conditions

5.1 Existing Transportation Network

Figure 5.1 displays the existing roadway geometrics network around the Proposed Project site, including the proposed San Diego River Trail alignment, while Figure 5.2 displays the key study intersection and geometrics under Existing Conditions.

5.2 Existing Intersection and Roadway Volumes

Figure 5.3 displays existing daily traffic volumes for the study area roadway segments while Figure 5.4 displays AM/PM peak hour traffic volumes for the key study area intersections. Several of the roadway segment and study area intersection traffic counts were conducted on June 1, 2017 by Accurate Video Counts (AVC), as well as on February 7, 2018 and June 11, 2019 by Bearcat Enterprises LLC. To maintain consistency with other studies conducted within the area, the Mast Boulevard / West Hill Parkway intersection count was derived from the *Fanita Ranch Development TIA, March 25, 2020*.

Finally, to ensure that the counts conducted in 2017 and 2018 are still valid and relevant to current conditions, a sampling of counts along key study area roadway segments were conducted on December 2, 2021 by Elite Traffic Dynamics, LLC. The validation counts show that the current volumes along the key study area roadway segments are generally³ lower than the previous counts. As such, the previous collected counts were determined to still be valid for this analysis. Traffic counts are provided in Appendix B.

³ The volumes along Carlton Hills Boulevard between Mast Boulevard and Mission Gorge Boulevard showed a slight (3%) increase over the previously collected data.

Legend

- Project Site
- Jurisdictional Boundary
- 4M** 4-Lane Major Arterial
- 2C W/
TWLTL** 2-Lane Collector with
Two-Way Left Turn Lane

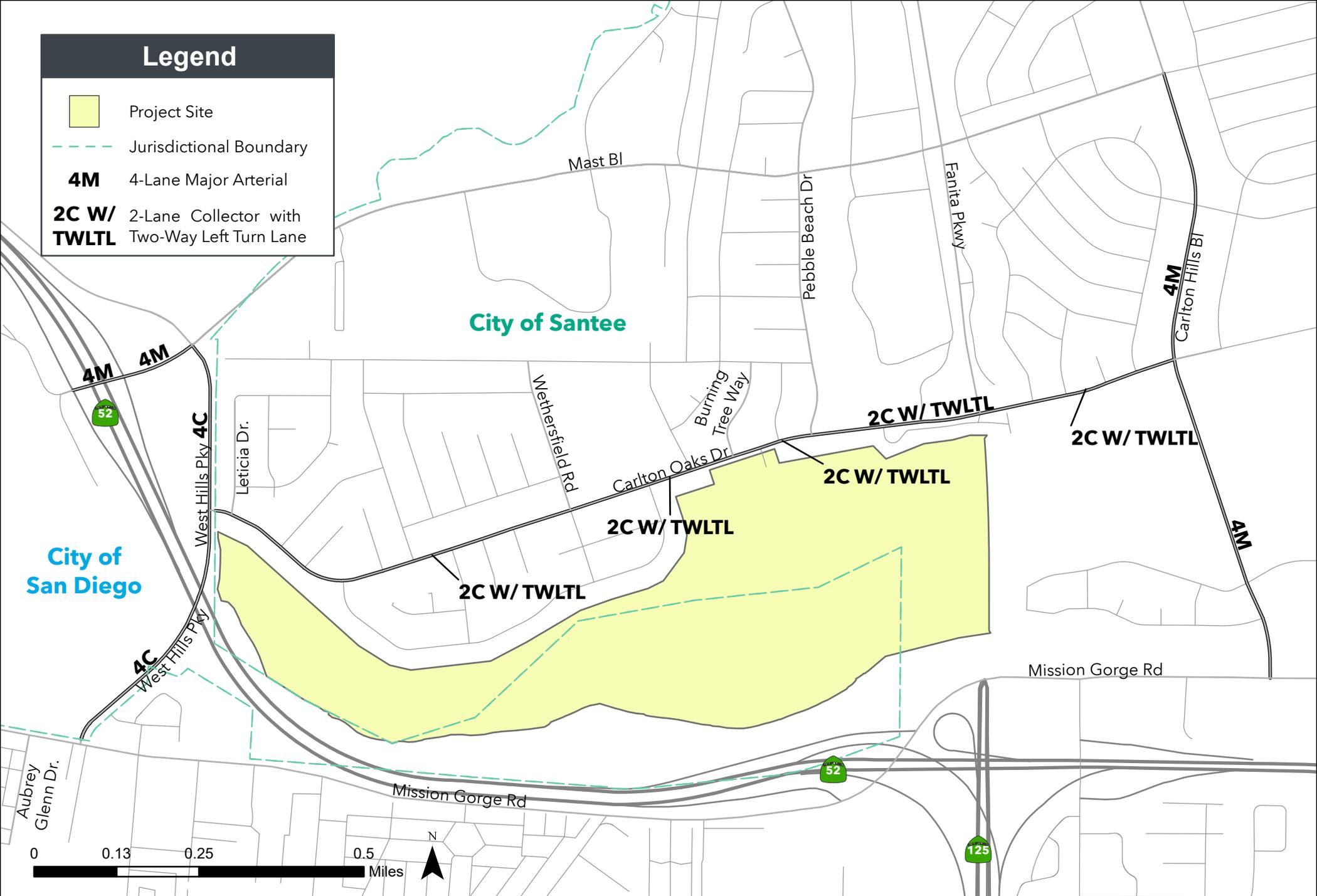


Figure 5.1
Roadway Geometrics
Existing Conditions



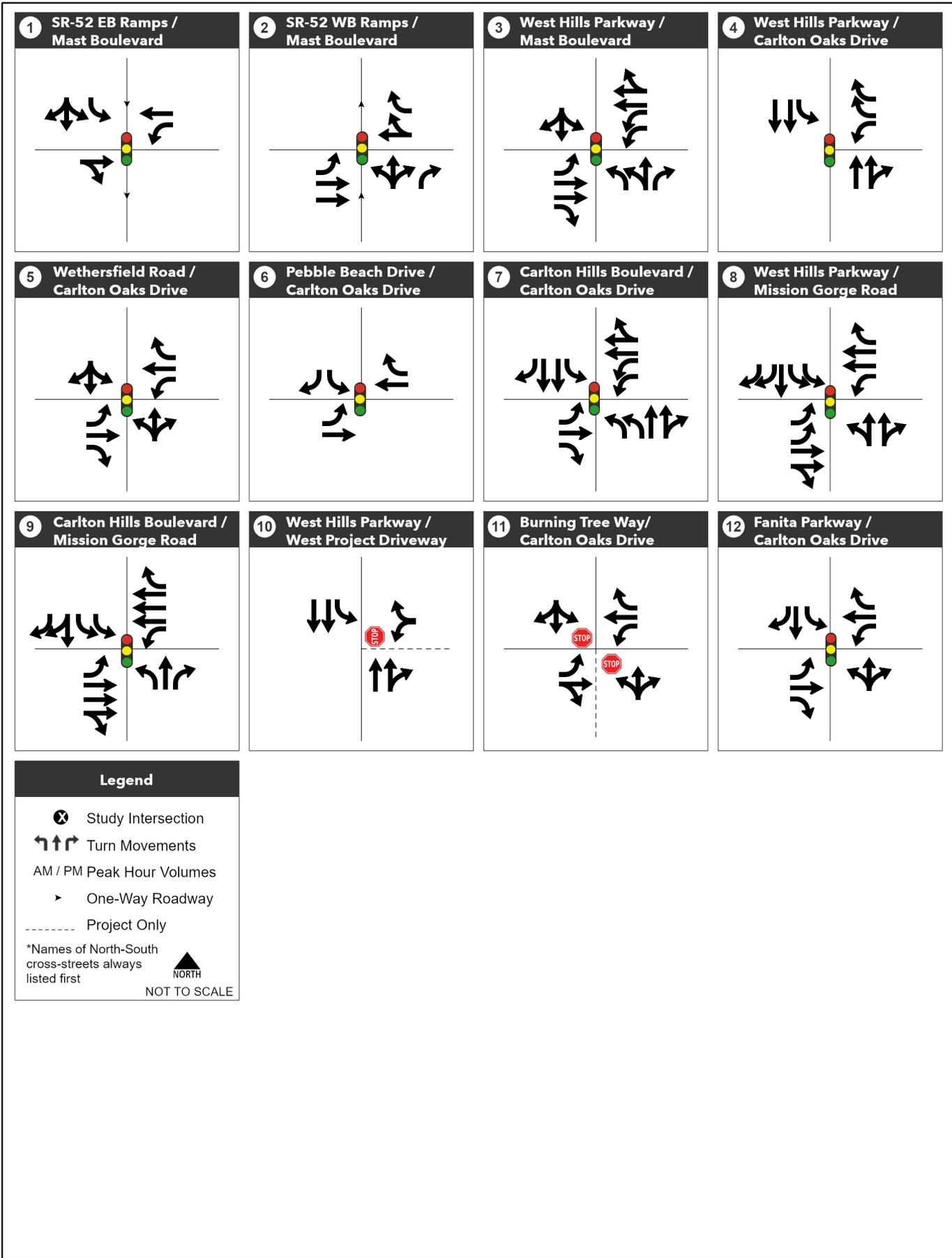


Figure 5.2

**Intersection Geometrics
Existing Conditions**

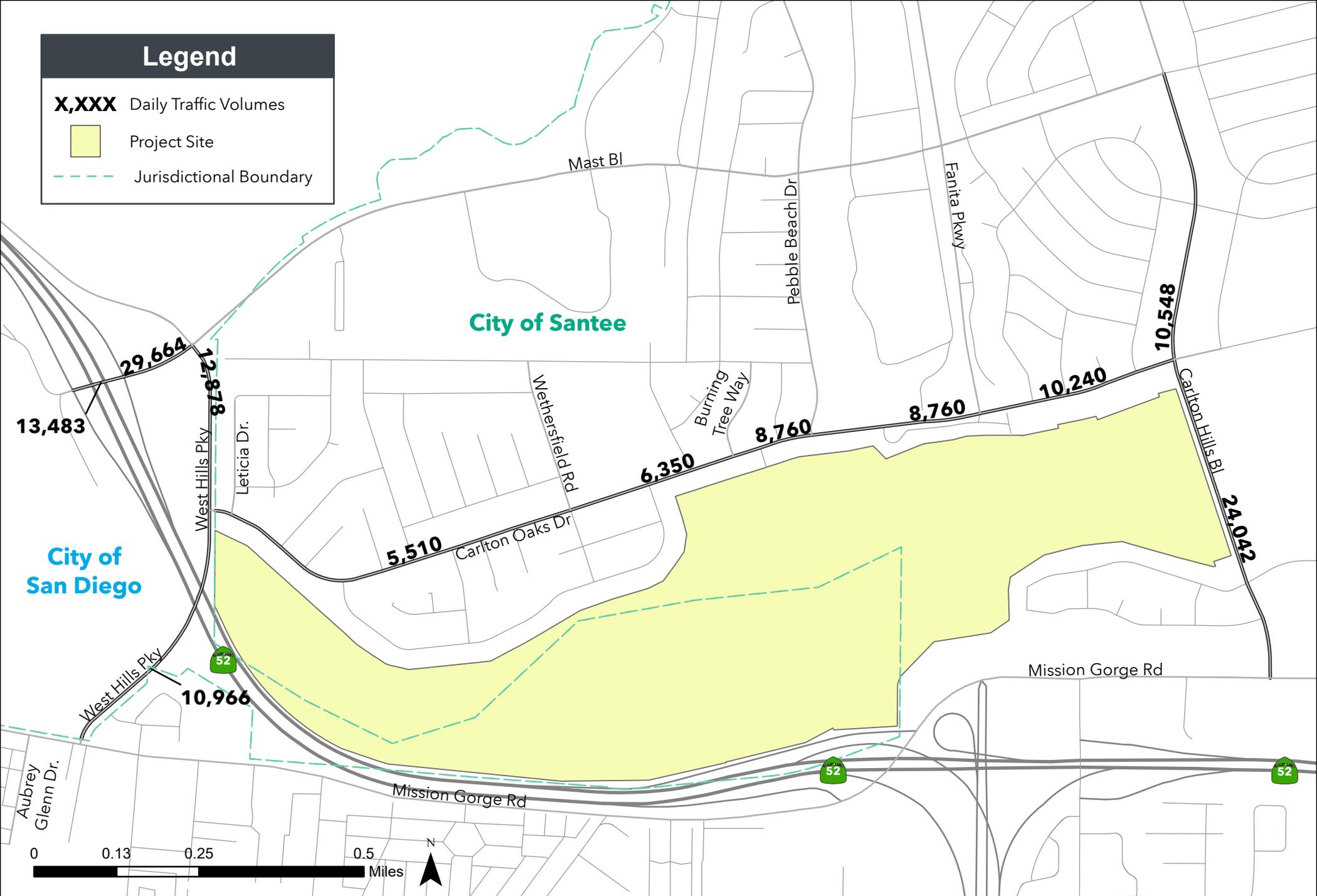


Legend

X,XXX Daily Traffic Volumes

 Project Site

 Jurisdictional Boundary



Carlton Oaks Country Club and Resort
Local Transportation Analysis

Figure 5.3
**Roadway Average Daily Traffic Volumes
Existing Conditions**

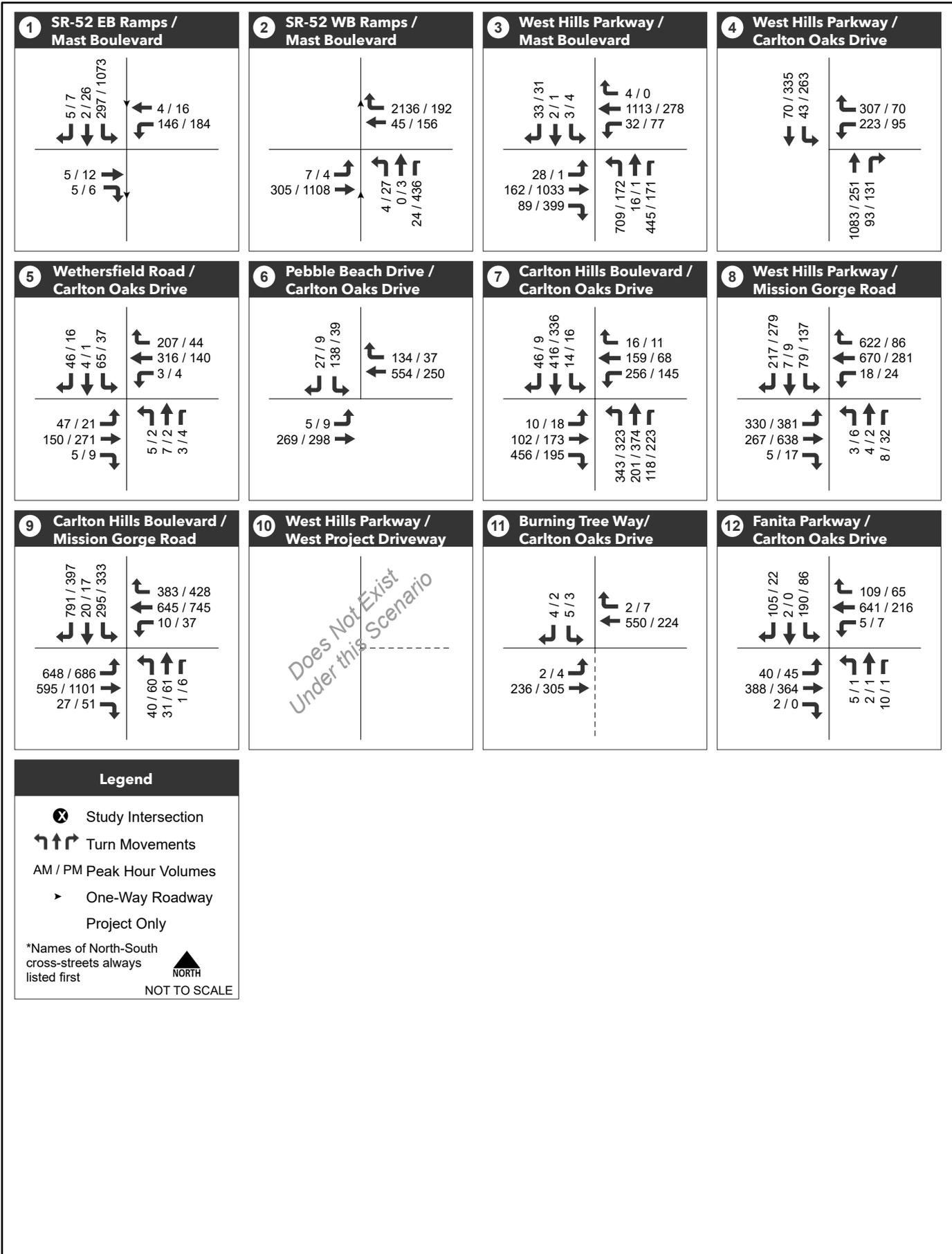


Figure 5.4

Peak Hour Intersection Traffic Volumes Existing Conditions



5.3 Existing Traffic Conditions

LOS analyses under Existing Conditions were conducted using the methodologies described in Section 2.0. Roadway segment, intersection, and freeway LOS results are discussed separately in this section.

Roadway Segment Analysis

Table 5.1 displays the LOS analysis results for key study area roadway segments under Existing Conditions.

Table 5.1 Roadway Segment LOS Results – Existing Conditions

| Roadway | Segment | Jurisdiction | Functional Classification | Average Daily Traffic (ADT) | Roadway Capacity (LOS E) | V/C | LOS |
|-------------------------|---|----------------------|---------------------------|-----------------------------|--------------------------|-------|-----|
| West Hills Parkway | Mast Boulevard to Carlton Oaks Drive | San Diego | 4-Lane Collector | 12,878 | 30,000 | 0.429 | B |
| West Hills Parkway | Carlton Oaks Drive to Mission Gorge Road | San Diego | 4-Lane Collector | 10,966 | 30,000 | 0.366 | B |
| Mast Boulevard | SR-52 EB Ramps to SR-52 WB Ramps | San Diego / Caltrans | 4-Lane Major Arterial | 13,483 | 40,000 | 0.337 | A |
| Mast Boulevard | SR-52 WB Ramps to West Hills Parkway | San Diego / Caltrans | 4-Lane Major Arterial | 29,664 | 40,000 | 0.742 | C |
| Carlton Oaks Drive | West Hills Parkway to Wethersfield Road | Santee | 2-Lane Collector w/ TWLTL | 5,510 | 15,000 | 0.367 | B |
| Carlton Oaks Drive | Wethersfield Road Burning Tree Way | Santee | 2-Lane Collector w/ TWLTL | 6,350 | 15,000 | 0.423 | B |
| Carlton Oaks Drive | Burning Tree Way to Pebble Beach Drive | Santee | 2-Lane Collector w/ TWLTL | 8,760 | 15,000 | 0.584 | C |
| Carlton Oaks Drive | Pebble Beach Drive to Fanita Parkway | Santee | 2-Lane Collector w/ TWLTL | 8,760 | 15,000 | 0.584 | C |
| Carlton Oaks Drive | Fanita Parkway to Carlton Hills Boulevard | Santee | 2-Lane Collector w/ TWLTL | 10,240 | 15,000 | 0.683 | D |
| Carlton Hills Boulevard | Mast Boulevard to Carlton Oaks Drive | Santee | 4-Lane Major Arterial | 10,548 | 40,000 | 0.264 | A |
| Carlton Hills Boulevard | Carlton Oaks Drive to Mission Gorge Road | Santee | 4-Lane Major Arterial | 24,042 | 40,000 | 0.601 | C |

Note:

V/C = Volume-to-Capacity

TWLTL = Two-way left-turn lane

As shown in the Table 5.1, all study area roadway segments currently operate at an acceptable LOS D or better.



Intersection Analysis

Table 5.2 displays intersection LOS and average vehicle delay results for key study area intersections under Existing Conditions. LOS calculation worksheets for Existing Conditions are provided in Appendix I.

Table 5.2 Peak Hour Intersection LOS Results – Existing Conditions

| # | Intersection | Control | Jurisdiction | AM Peak Hour | | PM Peak Hour | |
|----|---|---------|----------------------|-------------------|-----|-------------------|-----|
| | | | | Avg. Delay (sec.) | LOS | Avg. Delay (sec.) | LOS |
| 1 | SR-52 EB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 10.2 | B | 13.3 | B |
| 2 | SR-52 WB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 9.9 | A | 11.0 | B |
| 3 | West Hills Parkway & Mast Boulevard | Signal | Santee / San Diego | 34.9 | C | 16.9 | B |
| 4 | West Hills Parkway & Carlton Oaks Drive | Signal | San Diego | 15.4 | B | 10.5 | B |
| 5 | Wethersfield Road & Carlton Oaks Drive | Signal | Santee | 6.3 | A | 5.5 | A |
| 6 | Pebble Beach Drive & Carlton Oaks Drive | Signal | Santee | 8.0 | A | 5.4 | A |
| 7 | Carlton Hills Boulevard & Carlton Oaks Drive | Signal | Santee | 34.0 | C | 21.1 | C |
| 8 | West Hills Parkway & Mission Gorge Road | Signal | San Diego | 37.8 | D | 14.0 | B |
| 9 | Carlton Hills Boulevard & Mission Gorge Road | Signal | Santee | 47.9 | D | 31.2 | C |
| 10 | West Hills Parkway & Project Driveway #1 | DNE | San Diego | N/A | N/A | N/A | N/A |
| 11 | Burning Tree Way/Project Driveway #2 & Carlton Oaks Drive | SSSC | Santee | 14.9 | B | 12.2 | B |
| 12 | Fanita Parkway/Project Driveway #3 & Carlton Oaks Drive | Signal | Santee | 16.0 | B | 10.1 | B |

Notes:

DNE = Does Not Exist.

SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches.

As shown in Table 5.2, all study area intersections currently operate at an acceptable LOS D or better during both AM and PM peak hours.

As noted in the City of Santee *Mobility Element Update EIR* and the current City of Santee *Mobility Element*, traffic along westbound Mast Boulevard was observed to be congested during the AM peak hours. Field observations indicated that additional delays and queuing occurred on Mast Boulevard due to a high number of vehicles traveling at slow speeds while climbing up a steep grade and merging onto westbound SR-52. Therefore, the number of vehicles passing through the SR-52 WB Ramps / Mast Boulevard intersection does not reflect the true demand of the intersection. Due to limitations associated with the Highway Capacity Manual (HCM) 6th Edition methodology, these observations cannot be reflected in this analysis. However, the intersection analysis methodology utilized in this report is



consistent with the methodology utilized for the City of Santee’s *Mobility Element* intersection analysis. Excerpts from the City of Santee *Mobility Element Update EIR* documenting this condition is provided in **Appendix G**.

In addition to the intersection LOS analysis, a 95th percentile queuing analysis was also conducted to determine the extent of intersection queuing under Existing Conditions for transportation facilities located within the City of San Diego. **Table 5.3** identifies the intersection control, pocket length, 95% queue length, and length of queue exceeding available storage, if applicable. All movements with designated turn pockets at study area intersections, and freeway off-ramps were included in the analysis. Intersection queuing reports are provided in Appendix I.

Table 5.3 Peak Hour Intersection 95th Percentile Queuing Analysis – Existing Conditions

| ID | Intersection | Traffic Control | Jurisdiction | Turning Movement | Pocket Length (ft) | AM / PM 95% Queue Length (ft) | AM / PM Excess Queue (ft) |
|----|------------------------------------|-----------------|----------------------|------------------|--------------------|-------------------------------|---------------------------|
| 1 | SR-52 EB Ramps & Mast Blvd | Signal | San Diego / Caltrans | SB Leg | 1,520 | 121 / 567 | 0 / 0 |
| | | | | WBL | 100 | 118 / 144 | 18 / 44 |
| 2 | SR-52 WB Ramps & Mast Blvd | Signal | San Diego / Caltrans | WB Leg | 495 | 748 / 140 | 253 / 0 |
| | | | | NB Leg | 1,115 | 0 / 112 | 0 / 0 |
| | | | | EBL | 145 | 23 / 12 | 0 / 0 |
| 3 | West Hills Pkwy & Mast Blvd | Signal | San Diego | WBL | 195 | 42 / 69 | 0 / 0 |
| | | | | NBL | 1,250 | 565 / 141 | 0 / 0 |
| | | | | NBR | 845 | 77 / 58 | 0 / 0 |
| | | | | EBL | 230 | 74 / 8 | 0 / 0 |
| | | | | EBR | 385 | 43 / 197 | 0 / 0 |
| 4 | West Hills Pkwy & Carlton Oaks Dr | Signal | San Diego | SBL | 150 | 67 / 244 | 0 / 94 |
| | | | | WBL | 100 | 217 / 91 | 117 / 0 |
| | | | | WBR | 92 | 36 / 18 | 0 / 0 |
| 8 | West Hill Pkwy & Mission George Rd | Signal | San Diego | SBL | 260 | 50 / 88 | 0 / 0 |
| | | | | SBR | 260 | 17 / 18 | 0 / 0 |
| | | | | WBL | 75 | 36 / 51 | 0 / 0 |
| | | | | WBR | 175 | 55 / 28 | 0 / 0 |
| | | | | EBL | 145 | 291 / 279 | 146 / 134 |

Note:

Bold and Grey Highlights indicate that the calculated 95th percentile queue that exceeds storage length via HCM 6th methodology.

As shown in Table 5.3, the following five (5) movements at four (4) intersections currently operate with potential queuing issues during either the AM or PM peak hour:

SR-52 EB Ramps & Mast Boulevard (San Diego / Caltrans)

- *Westbound Left-Turn Movement* - 18 feet during the AM peak hour and 44 feet during the PM peak hour of 95th percentile queues exceeds storage length.

SR-52 WB Ramps & Mast Boulevard (San Diego / Caltrans)



- *Westbound Leg* - 253 feet during the AM peak hour of 95th percentile queue exceeds the storage length and past the upstream intersection of West Hills Parkway & Mast Boulevard.

West Hills Parkway & Carlton Oaks Drive (San Diego)

- *Southbound Left-Turn Movement* - 94 feet during the PM peak hour of 95th percentile queue exceeds the storage length.
- *Westbound Left-Turn Movement* - 117 feet during the AM peak hour of 95th percentile queue exceeds storage length and extends past closely spaced intersection of Leticia Drive and Carlton Oaks Drive.

West Hills Parkway & Mission Gorge Road (Santee / San Diego)

- *Eastbound Left-Turn Movement* - 146 feet during the AM peak hour and 134 feet during the PM peak hour of 95th percentile queue exceeds storage length.

Freeway Segment Analysis

Table 5.4 displays freeway segment LOS results for the study area freeway mainline facilities under Existing Conditions. The freeway segment LOS analysis was performed utilizing the methodology presented in Section 2.6. Freeway analysis calculation worksheets for Existing Conditions are provided in Appendix J.

Table 5.4 Freeway Segment Analysis – Existing Conditions

| Peak Hour | Freeway | Segment | Dir. | # of Lanes | D | K | HVF | ADT | Peak Hour Volume | Average Speed | V/C | LOS |
|-----------|---------|--------------------------------|------|------------|--------|-------|-------|---------|------------------|---------------|------|-----|
| AM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 28.17% | 8.37% | 2.60% | 102,000 | 2,405 | 71.2 | 0.39 | B |
| | | | WB | 4 | 71.83% | 8.37% | 2.60% | | 6,132 | 68.2 | 0.71 | C |
| AM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 21.47% | 7.69% | 2.60% | 98,000 | 1,618 | 74.0 | 0.28 | A |
| | | | WB | 3 | 78.53% | 7.69% | 2.60% | | 5,918 | - | 1.05 | F |
| PM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 71.35% | 8.05% | 2.60% | 102,000 | 5,859 | 57.1 | 0.94 | E |
| | | | WB | 4 | 28.65% | 8.05% | 2.60% | | 2,352 | 71.9 | 0.27 | A |
| PM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 69.26% | 8.08% | 2.60% | 98,000 | 5,484 | 56.7 | 0.95 | E |
| | | | WB | 3 | 30.74% | 8.08% | 2.60% | | 2,434 | 74.0 | 0.43 | B |

Notes:

D = Directional Split

K = Peak Hour Percentage

HVF = Heavy Vehicle Factor

ADT = Average Daily Traffic, ADT shown is for both directions.

Bold and Grey Highlights indicate substandard LOS E or F.

As shown in Table 5.4, all of the freeway segments currently to operate at acceptable LOS D or better, with the exception of the following three (3) segments:

- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS E during the PM peak hour in the eastbound direction
- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS E during the PM peak hour in the eastbound direction



5.4 Existing with Project Roadway Network and Traffic Volumes

Roadway and intersection geometrics under the Existing with Project Conditions were assumed to be identical to the Existing roadway network, as shown in Figure 5.1 and 5.2, with the addition of the two (2) new project driveways.

Daily and peak hour intersection volumes for Existing with Project Conditions were derived by adding the project trips to the Existing traffic volumes, as previously shown in Figure 5.3 and Figure 5.4. Daily roadway and peak hour intersection volumes for this scenario are displayed in **Figure 5.5** and **Figure 5.6**, respectively.

5.5 Existing with Project Traffic Conditions

Analyses were conducted using the methodologies described in Section 2.0. Roadway segment, intersection, and freeway LOS results are discussed below.

Roadway Segment Analysis

Table 5.5 displays the LOS analysis results for key study area roadway segments under Existing with Project Conditions.

As shown in **Table 5.5**, all roadways are projected to operate at LOS D or better with the implementation of the Proposed Project. Therefore, since the implementation of the Proposed Project will not degrade roadway operations to a sub-standard condition, the Proposed Project will not critically affect the local roadway network and no additional improvements would be needed.

Intersection Analysis

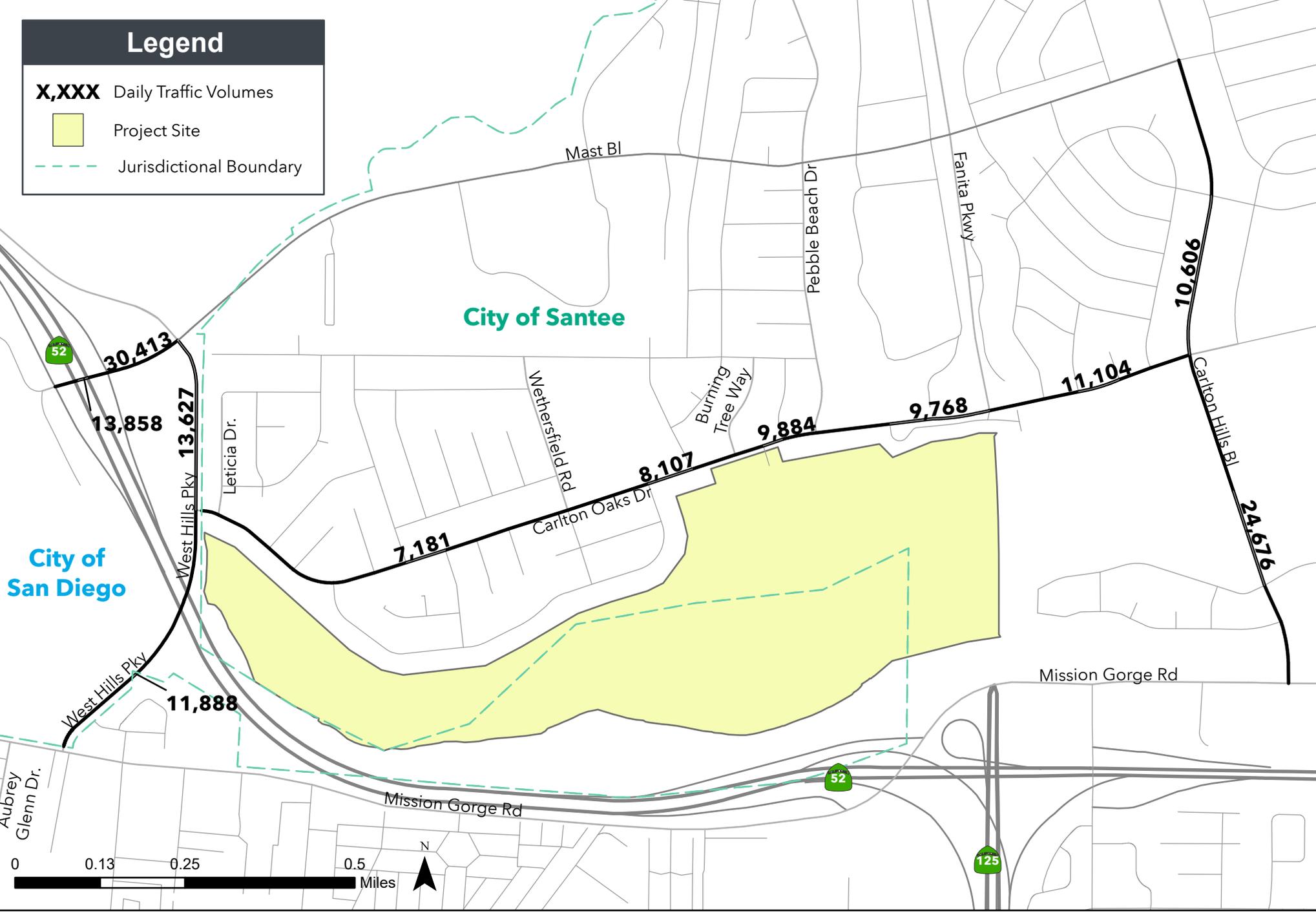
Table 5.6 displays intersection LOS and average vehicle delay results for key study area intersections under Existing with Project Conditions. LOS calculation worksheets for Existing with Project Conditions are provided in **Appendix K**.

Legend

X,XXX Daily Traffic Volumes

 Project Site

 Jurisdictional Boundary



Carlton Oaks Country Club and Resort
Local Transportation Analysis

Figure 5.5
**Roadway Average Daily Traffic Volumes
Existing with Project Conditions**

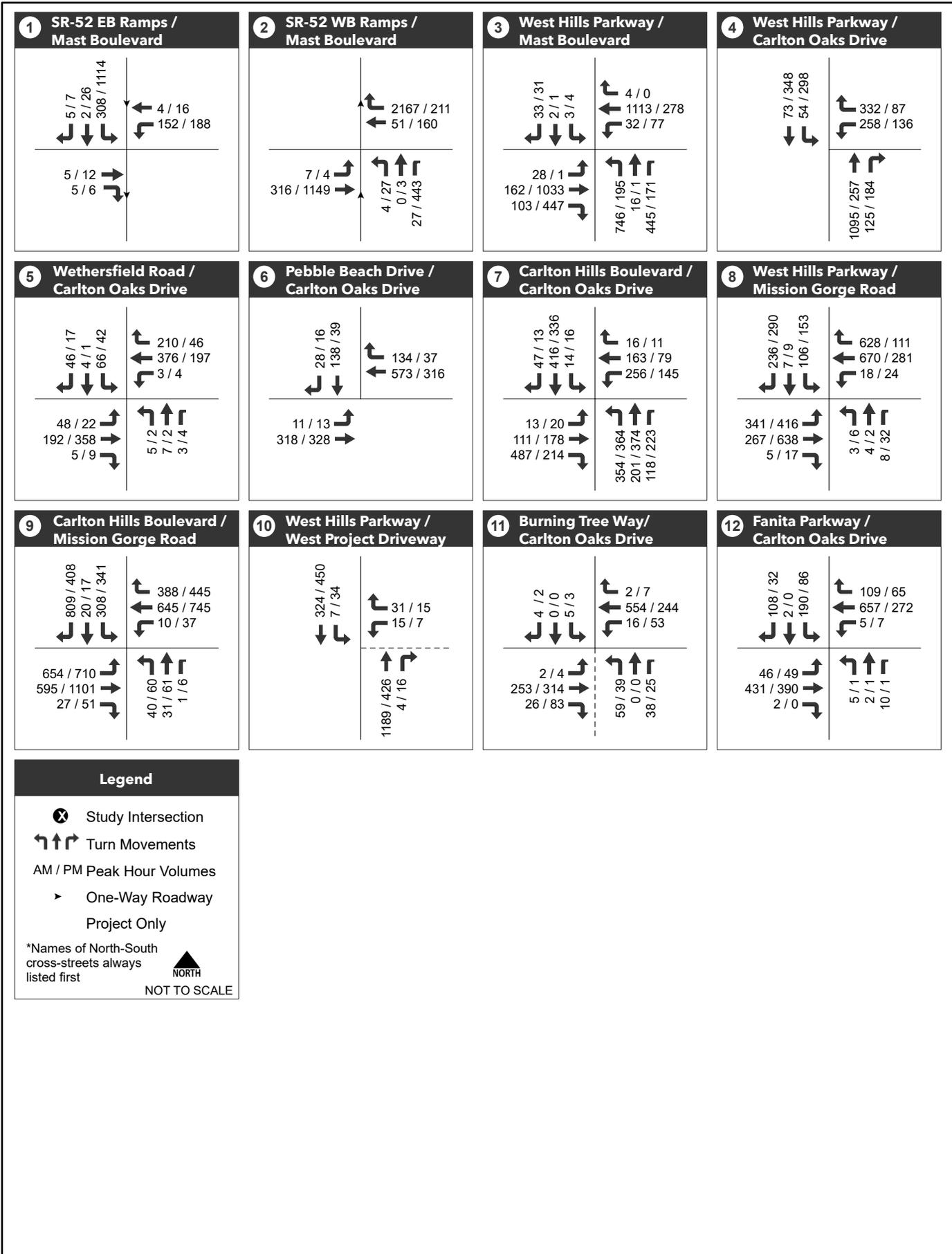


Figure 5.6

**Peak Hour Intersection Traffic Volumes
Existing Plus Project Conditions**



Table 5.5 Roadway Segment LOS Results – Existing with Project Conditions

| Roadway | Segment | Jurisdiction | Functional Classification | Average Daily Traffic (ADT) | Roadway Capacity (LOS E) | V/C w/o Project | LOS w/o Project | V/C w/ Project | LOS w/ Project | Δ V/C | CTE? |
|-------------------------|---|----------------------|---------------------------|-----------------------------|--------------------------|-----------------|-----------------|----------------|----------------|-------|------|
| West Hills Parkway | Mast Boulevard to Carlton Oaks Drive | San Diego | 4-Lane Collector | 13,627 | 30,000 | 0.429 | B | 0.454 | B | 0.025 | No |
| West Hills Parkway | Carlton Oaks Drive to Mission Gorge Road | San Diego | 4-Lane Collector | 11,888 | 30,000 | 0.366 | B | 0.396 | B | 0.031 | No |
| Mast Boulevard | SR-52 EB Ramps to SR-52 WB Ramps | San Diego / Caltrans | 4-Lane Major Arterial | 13,858 | 40,000 | 0.337 | A | 0.346 | A | 0.009 | No |
| Mast Boulevard | SR-52 WB Ramps to West Hills Parkway | San Diego / Caltrans | 4-Lane Major Arterial | 30,413 | 40,000 | 0.742 | C | 0.76 | D | 0.019 | No |
| Carlton Oaks Drive | West Hills Parkway to Wethersfield Road | Santee | 2-Lane Collector w/ TWLTL | 7,181 | 15,000 | 0.367 | B | 0.479 | C | 0.111 | No |
| Carlton Oaks Drive | Wethersfield Road Burning Tree Way | Santee | 2-Lane Collector w/ TWLTL | 8,107 | 15,000 | 0.423 | B | 0.54 | C | 0.117 | No |
| Carlton Oaks Drive | Burning Tree Way to Pebble Beach Drive | Santee | 2-Lane Collector w/ TWLTL | 9,884 | 15,000 | 0.584 | C | 0.659 | C | 0.075 | No |
| Carlton Oaks Drive | Pebble Beach Drive to Fanita Parkway | Santee | 2-Lane Collector w/ TWLTL | 9,768 | 15,000 | 0.584 | C | 0.651 | C | 0.067 | No |
| Carlton Oaks Drive | Fanita Parkway to Carlton Hills Boulevard | Santee | 2-Lane Collector w/ TWLTL | 11,104 | 15,000 | 0.683 | D | 0.740 | D | 0.058 | No |
| Carlton Hills Boulevard | Mast Boulevard to Carlton Oaks Drive | Santee | 4-Lane Major Arterial | 10,606 | 40,000 | 0.264 | A | 0.265 | A | 0.001 | No |
| Carlton Hills Boulevard | Carlton Oaks Drive to Mission Gorge Road | Santee | 4-Lane Major Arterial | 24,676 | 40,000 | 0.601 | C | 0.617 | C | 0.016 | No |

Notes:

V/C = Volume-to-Capacity, CTE? = Critical Traffic Effect? TWLTL = Two-way left-turn lane



Table 5.6 Peak Hour Intersection LOS Results – Existing with Project Conditions

| # | Intersection | Control | Jurisdiction | Delay w/o Project (sec) AM/PM | LOS w/o Project AM/PM | AM Peak Hour w/ Project | | PM Peak Hour w/ Project | | Δ Delay (sec) | CTE? |
|----|---|---------|----------------------|-------------------------------|-----------------------|-------------------------|-----|-------------------------|-----|---------------|---------|
| | | | | | | Avg. Delay (sec.) | LOS | Avg. Delay (sec.) | LOS | | |
| 1 | SR-52 EB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 10.2 / 13.3 | B / B | 10.3 | B | 13.8 | B | 0.1 / 0.5 | No / No |
| 2 | SR-52 WB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 9.9 / 11.0 | A / B | 10.9 | B | 11.0 | B | 1.0 / 0.0 | No / No |
| 3 | West Hills Parkway & Mast Boulevard | Signal | Santee / San Diego | 34.9 / 16.9 | C / B | 35.2 | D | 17.2 | B | 0.3 / 0.3 | No / No |
| 4 | West Hills Parkway & Carlton Oaks Drive | Signal | San Diego | 15.4 / 10.5 | B / B | 17.4 | B | 12.5 | B | 2.0 / 2.0 | No / No |
| 5 | Wethersfield Road & Carlton Oaks Drive | Signal | Santee | 6.3 / 5.5 | A / A | 6.4 | A | 5.7 | A | 0.1 / 0.2 | No / No |
| 6 | Pebble Beach Drive & Carlton Oaks Drive | Signal | Santee | 8.0 / 5.4 | A / A | 8.1 | A | 5.6 | A | 0.1 / 0.2 | No / No |
| 7 | Carlton Hills Boulevard & Carlton Oaks Drive | Signal | Santee | 34.0 / 21.1 | C / C | 35.8 | D | 22.0 | C | 1.8 / 0.9 | No / No |
| 8 | West Hills Parkway & Mission Gorge Road | Signal | San Diego | 37.8 / 14.0 | D / B | 42.4 | D | 14.3 | B | 4.6 / 0.3 | No / No |
| 9 | Carlton Hills Boulevard & Mission Gorge Road | Signal | Santee | 47.9 / 31.2 | D / C | 49.2 | D | 32.0 | C | 1.3 / 0.8 | No / No |
| 10 | West Hills Parkway & Project Driveway #1 | SSSC | San Diego | 0.0 / 0.0 | A / A | 19.9 | C | 11.2 | B | 19.9 / 11.2 | No / No |
| 11 | Burning Tree Way/Project Driveway #2 & Carlton Oaks Drive | SSSC | Santee | 14.9 / 12.2 | B / B | 22.4 | D | 18.6 | C | 7.5 / 6.4 | No / No |
| 12 | Fanita Parkway/Project Driveway #3 & Carlton Oaks Drive | Signal | Santee | 16.0 / 10.1 | B / B | 16.7 | B | 10.4 | B | 0.7 / 0.3 | No / No |

Notes:

CTE? = Critical Traffic Effect? SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches



As shown in Table 5.6, all study area intersections are projected to continue to operate at acceptable LOS D or better with the implementation of the Proposed Project. Therefore, the implementation of the Proposed Project will not degrade intersection operations to a sub-standard condition. As such, the Proposed Project will not critically affect the local roadway network and no additional improvements would be needed.

In addition to the intersection LOS analysis, a 95th percentile queuing analysis was also conducted to determine the extent of intersection queuing under Existing with Project Conditions for transportation facilities located within the City of San Diego. **Table 5.7** identifies the intersection control, pocket length, 95th percentile queue length and excess queue, if applicable for each movement identified to approaching critical capacity at the study area intersections. Intersection queuing reports are provided in Appendix K.

Table 5.7 Peak Hour Intersection 95th Percentile Queuing Analysis – Existing with Project Conditions

| ID | Intersection | Traffic Control | Jurisdiction | Turning Movement | Pocket Length (ft) | AM / PM 95% Queue Length (ft) | AM / PM Excess Queue (ft) | Project Trips Added to Movement (AM/PM) |
|----|-----------------------------------|-----------------|----------------------|------------------|--------------------|-------------------------------|---------------------------|---|
| 1 | SR-52 EB Ramps & Mast Blvd | Signal | San Diego / Caltrans | SB Leg | 1,520 | 124 / 610 | 0 / 0 | 11 / 41 |
| | | | | WBL | 100 | 123 / 147 | 23 / 47 | 6 / 4 |
| 2 | SR-52 WB Ramps & Mast Blvd | Signal | San Diego / Caltrans | WB Leg | 495 | 789 / 147 | 294 / 0 | 37 / 23 |
| | | | | NB Leg | 1,115 | 0 / 125 | 0 / 0 | 3 / 7 |
| | | | | EBL | 145 | 23 / 13 | 0 / 0 | 11 / 41 |
| 3 | West Hills Pkwy & Mast Blvd | Signal | San Diego | WBL | 195 | 42 / 69 | 0 / 0 | 0 / 0 |
| | | | | NBL | 1,250 | 602 / 157 | 0 / 0 | 37 / 23 |
| | | | | NBR | 845 | 75 / 58 | 0 / 0 | 0 / 0 |
| | | | | EBL | 230 | 74 / 8 | 0 / 0 | 0 / 0 |
| | | | | EBR | 385 | 47 / 226 | 0 / 0 | 14 / 48 |
| | | | | SBL | 150 | 85 / 277 | 0 / 127 | 11 / 35 |
| 4 | West Hills Pkwy & Carlton Oaks Dr | Signal | San Diego | WBL | 100 | 280 / 129 | 180 / 29 | 35 / 41 |
| | | | | WBR | 92 | 40 / 21 | 0 / 0 | 25 / 17 |
| | | | | SBL | 260 | 63 / 97 | 0 / 0 | 27 / 16 |
| 8 | West Hill Pkwy & Mission Gorge Rd | Signal | San Diego | SBR | 260 | 18 / 19 | 0 / 0 | 19 / 11 |
| | | | | WBL | 75 | 36 / 51 | 0 / 0 | 0 / 0 |
| | | | | WBR | 260 | 55 / 32 | 0 / 0 | 6 / 25 |
| | | | | EBL | 145 | 304 / 314 | 159 / 169 | 11 / 35 |
| | | | | SBL | 260 | 63 / 97 | 0 / 0 | 27 / 16 |

Notes:

Bold and Grey Highlights indicate that the calculated 95th percentile queue that exceeds storage length via HCM 6th methodology.

Bold Underline indicates project trips adds to 95th percentile queue that exceeds storage length.

As shown, five (5) movements at four (4) intersections are forecasted to operate with potential queuing issues during either the AM or PM peak hour under Existing with Project conditions. Of those intersections, the Proposed Project contributes to excessing queuing for all five (5) movements at four (4) intersections including:

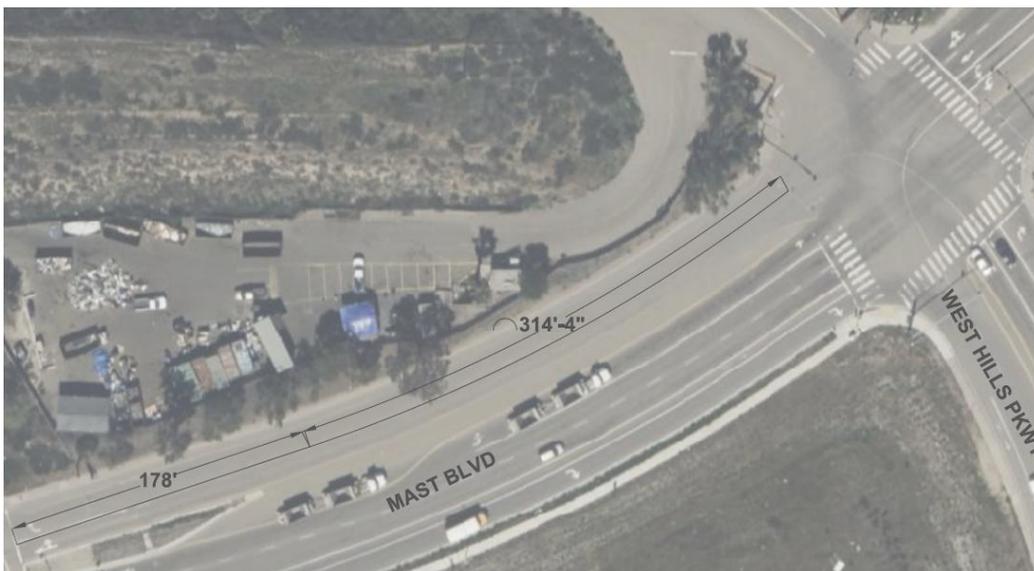
SR-52 EB Ramps & Mast Boulevard (San Diego / Caltrans)

- *Westbound Left-Turn Movement* - The westbound movement has 95th percentile queue length of 123 feet during the AM peak hour and 147 feet during the PM peak hour with a total pocket length of 100 feet. This results in an excess queue of 23 feet during the AM peak hour and 47 feet during the PM peak hour. The Proposed Project will add 6 AM peak hour and 4 PM peak hour trips to this turning movement. Extending this turn pocket would be infeasible due to existing left-turn pocket at closely spaced intersection of SR-52 WB Ramps and Mast Boulevard; thus, there is not sufficient room to expand the pocket without impacting the SR-52 WB Ramps & Mast Boulevard intersection, as shown in the graphic below.



SR-52 WB Ramps & Mast Boulevard (San Diego / Caltrans)

- *Westbound Leg* - The westbound movement has 95th percentile queue length of 789 feet during the AM peak hour and 147 feet during the PM peak hour with a total storage length of 495 feet. This results in an excess queue of 294 feet of 95th percentile queue length would exceed storage length during the AM peak hour, which would extend past the upstream intersection of West Hills Parkway & Mast Boulevard. The Proposed Project will add 37 AM peak hour trips to this turning movement. Due to the close intersection spacing with the West Hills Parkway and Mast Boulevard intersection, there are no other feasible improvements to extend the storage length as they would be extended into the upstream intersection, as shown in the graphic below.

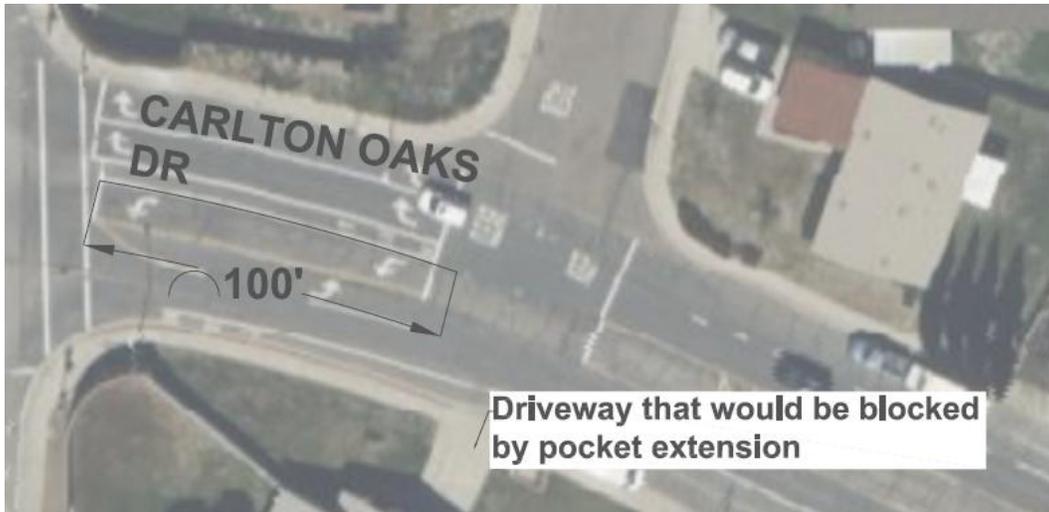


West Hills Parkway & Carlton Oaks Drive (San Diego)

- *Southbound Left-Turn Movement* - The southbound left-turn movement has 95th percentile queue length of 85 feet during the AM peak hour and 277 feet during the PM peak hour with a total storage length of 150 feet. 127 feet of 95th percentile queue length would exceed the storage length during the PM peak hour. The Proposed Project will add 35 PM peak hour trips to this turning movement. Extending the turn pocket for this turn movement is feasible and would require re-stripping of the median along West Hills Parkway. A conceptual drawing that displays the feasibility of the extension is provided below.



- *Westbound Left-Turn Movement* - The westbound left-turn movement has 95th percentile queue length of 280 feet during the AM peak hour and 129 feet during the PM peak hour with a total storage length of 100 feet. 180 feet during the AM peak hour and 29 feet during the PM peak hour of 95th percentile queue that would exceed storage length and extend past closely spaced intersection of Leticia Drive and Carlton Oaks Drive. The Proposed Project will add 35 AM peak hour and 41 PM peak hour trips to this turning movement. Extending storage space for this turning movement would be infeasible because the extension would require encroaching onto existing driveways at existing residential development along Carlton Oaks Drive which may result in other safety issues from people exiting their driveways as shown in the graphic below.



West Hills Parkway & Mission Gorge Road (Santee / San Diego)

- *Eastbound Left-Turn Movement* - The eastbound left-turn movement has 95th percentile queue length of 304 feet during the AM peak hour and 314 feet during the PM peak hour with a total storage length of 145 feet. 159 feet during the AM peak hour and 169 feet during the PM peak hour of 95th percentile queue that would exceed storage length. The Proposed Project will add 11 AM peak hour and 35 PM peak hour trips to this turning movement. Extending this turn pocket would be infeasible due to existing left-turn pocket at closely spaced intersection of Aubrey Glen Drive & Mission Gorge Road thus, there is not sufficient room to expand the pocket without impacting the Aubrey Glen Drive & Mission Gorge Road intersection. Moreover, the improvement would require the removal of an existing landscaped median which may create a less safe environment as the median would no longer be present to separate the lanes.



Freeway Segment Analysis

Table 5.8 displays freeway segment LOS results for the study area freeway mainline facilities under Existing with Project Conditions. The freeway segment LOS analysis was performed utilizing the methodology presented in Section 2.6. Freeway analysis calculation worksheets for Existing with Project Conditions are provided in Appendix L.

Table 5.8 Freeway Segment Analysis – Existing with Project Conditions

| Peak Hour | Freeway | Segment | Dir. | # of Lanes | ADT w/ Project | Peak Hour Volume | Speed w/ Project | V/C w/ Project | LOS w/ Project | Δ Speed | Δ V/C | CTE ? |
|-----------|---------|--------------------------------|------|------------|----------------|------------------|------------------|----------------|----------------|---------|-------|-------|
| AM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 102,620 | 2,416 | 71.2 | 0.39 | B | 0.0 | 0.00 | No |
| | | | WB | 4 | | 6,163 | 68.0 | 0.71 | C | -0.2 | 0.00 | No |
| AM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 98,620 | 1,629 | 74.0 | 0.28 | A | 0.0 | 0.00 | No |
| | | | WB | 3 | | 5,949 | - | 1.05 | F | - | 0.00 | No |
| PM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 102,620 | 5,899 | 56.7 | 0.95 | E | -0.4 | 0.01 | No |
| | | | WB | 4 | | 2,370 | 71.9 | 0.27 | A | 0.0 | 0.00 | No |
| PM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 98,620 | 5,524 | 56.2 | 0.96 | E | -0.5 | 0.01 | No |
| | | | WB | 3 | | 2,452 | 74.0 | 0.43 | B | 0.0 | 0.00 | No |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

ADT = Average Daily Traffic, ADT shown is for both directions.

CTE? = Critical Traffic Effect?

Directional Split (D), Peak Hour Percentage (K), and Heavy Vehicle Factor (HVF) are the same as Existing condition.

Δ Speed = Change in Speed



5.6 Recommended Improvements

This section identifies potential improvement measures under Existing with Project Conditions.

Roadway

No additional roadway improvements are recommended with the implementation of the Proposed Project.

Intersection

No additional intersection improvements are recommended with the implementation of the Proposed Project.

95th Percentile Queue

As noted in Section 5.5 the following improvements are recommended:

West Hills Pkwy & Carlton Oaks Dr (San Diego)

- *Southbound Left-Turn Movement* - The left-turn movement from southbound West Hills Parkway to eastbound Carlton Oaks Drive - Extending the turn pocket for this turn movement is feasible and would require re-striping of the median along West Hills Parkway. A conceptual drawing that displays the feasibility of the extension is provided in Appendix K.

Freeway

No additional freeway improvements are recommended with the implementation of the Proposed Project.

Pedestrian Facilities

As noted in Section 4.2, all sidewalks adjacent to the projects site are contiguous and in adequate condition without any gaps. However, the intersection of Carlton Oaks Drive / Burning Tree Way was identified to have missing curb ramps on the southeastern and southwestern corners, as well as missing truncated domes on the northeastern corner. Since the Proposed Project will be modifying this intersection to provide access, it is recommended that all curb ramps be improved to meet current ADA standards.

Bicycle Facilities

As noted in Section 4.3, all bicycle facilities adjacent to the project site were identified to be adequate.

Transit Facilities

As noted in Section 4.4, all transit facilities within a ½ mile walking distance of the project site were identified to meet MTS design standards in relation amenities, with exception to the following:

- *Stop ID: 88948 (MTS Route 834 @ West Hills Parkway and Carlton Oaks Drive)* - All MTS bus routes regardless or boarding and alighting daily average require red curbs at the bus stop location.

It is recommended that the Proposed Project, with coordination with MTS, install red curbs at the bus stop listed above, if deemed necessary.



6.0 Near-Term Year 2026 Conditions

This section provides an analysis of Year 2026 traffic conditions both with and without the Proposed Project. The purpose of the Near-Term Year conditions analysis is to ensure that the study takes into consideration all cumulative traffic growth that would occur by the project's opening year. The analysis year of 2026 was selected for the Near-Term analysis since this is the anticipated opening year of the Proposed Project where all land use components will be fully developed and contributing traffic to the project study area. The project team coordinated with the City of Santee and City of San Diego to determine specific cumulative projects and amount of trips that each project would contribute to the project's study area. Cumulative projects were also researched via the City of San Diego's Development Service Department OpenDSD Web Portal. The scenarios analyzed in this section include:

- Near-Term Year 2026
- Near-Term Year 2026 with Project

6.1 Cumulative Project Traffic

The City of Santee identified six (6) projects that are anticipated to be developed by the end of 2026 that would contribute traffic to the project study area. These projects were selected based on their trip generation, location relative to the project study area, and the trip assignment identified in each of the cumulative project traffic studies. Cumulative projects within the City of Santee but located at a much further distance from the project study area, and not anticipated to contribute trips to the project study area, were not included in the cumulative project list. These six (6) cumulative projects have been included in the Near-Term Year 2026 base scenario to provide an accurate background for comparing traffic critical effects associated with the proposed project. **Figure 6.1** displays the location of the cumulative projects. No cumulative projects were identified within the City of San Diego.

6.2 Cumulative Project Trip Generation

Table 6.1 displays the trip generation estimates for the cumulative projects. All trip generation rates for the cumulative projects developed using the SANDAG's *Guide to Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002) unless noted, and incorporated into the Near-Term Base condition.

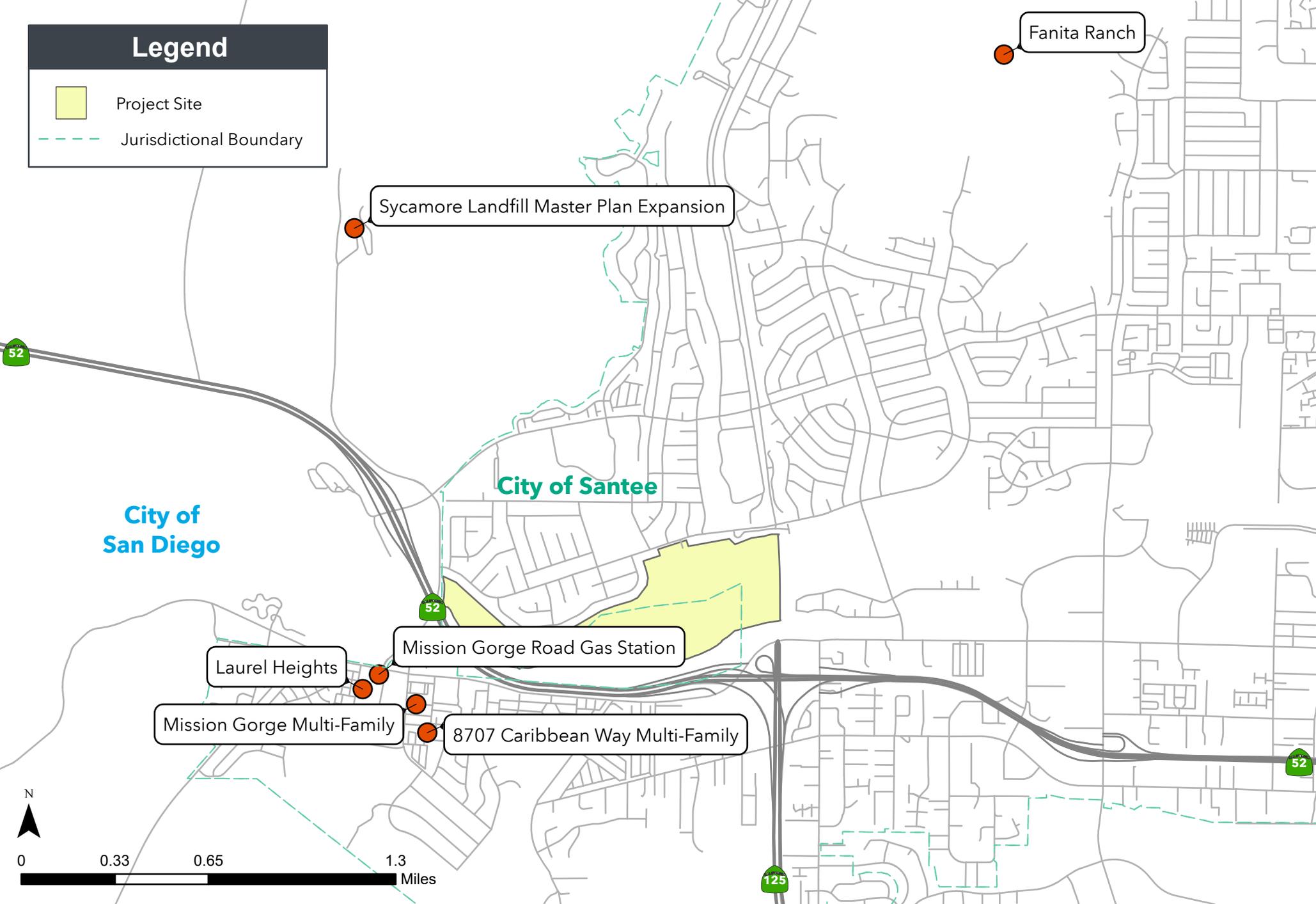




Table 6.1 Cumulative Projects Trip Generation

| Cumulative Project | Land Use | Daily Trips | Trip Generation | | | |
|---|---|-------------|-----------------|-------|--------------|-----|
| | | | AM Peak Hour | | PM Peak Hour | |
| | | | In | Out | In | Out |
| 1. Mission Gorge Road Gas Station ¹ | 12-pump gas station with food mart & car wash, 800 SF sit-down (high turnover) restaurant, 1,200 SF fast-food w/o drive-thru, 1,200 SF standard office commercial | 1,574 | 66 | 57 | 43 | 44 |
| 2. Mission Gorge Multi-Family ² | 113-unit residential condominiums | 678 | 11 | 43 | 43 | 18 |
| 3. 8707 Caribbean Way Multi-Family ³ | 42-unit residential condominiums | 336 | 5 | 22 | 24 | 10 |
| 4. Fanita Ranch Development ⁴ | 80 KSF retail, 1,000 student elementary school, 30-acre farm, 59.3-acre regional park, 10 KSF recreation center, 250-space RV Parking/Solar Farm, 2,949 residential units | 26,272 | 843 | 1,629 | 1670 | 839 |
| 5. Sycamore Landfill Master Plan Expansion ⁵ | Planned expansion of the existing Sycamore Landfill | 1,438 | 86 | 58 | 34 | 52 |
| 6. Laurel Heights ⁶ | 80 Condominium Multi-Family Units | 640 | 10 | 41 | 45 | 19 |

Notes:

¹ Obtained Mobil Gas Station, Sunshine Carwash, QSR Focused Traffic Impact Study (June 2018, K2 Traffic Engineering)

² Obtained from 7927 Mission Gorge Road Multi-Family Project Trip Generation memo (February 2015, LOS Engineering)

³ Obtained from 8707 Caribbean Way Trip Generation memo (September 2017, Kimley Horn & Associates)

⁴ Obtained from the Fanita Ranch Project Revised EIR, May 2020. It should be noted that the Fanita Ranch Development is not anticipated to be buildout by 2026, however due to uncertainty regarding the phasing of the Fanita Ranch Development and for a conservative analysis, it is assumed that the Fanita Ranch development would be buildout by 2026. It should be noted that the "Without School" scenario of the development generates a slightly higher number of daily trips (26,445 ADT). However, the preferred scenario of the development was utilized in the analysis because it is more likely to be implemented. Additionally the difference in trip generation would be negligible within the project area.

⁵ Obtained from Sycamore Landfill Master Plan Expansion Traffic Impact Analysis (April 2012, Linscott, Law, and Greenspan Engineers (LLG)), Note that values are based on Year 2026 trip estimates see Appendix M for calculations.

⁶ Obtained from Laurel Heights Project, VMT Assessment (March 11, 2021, Linscott, Law, and Greenspan Engineers (LLG))

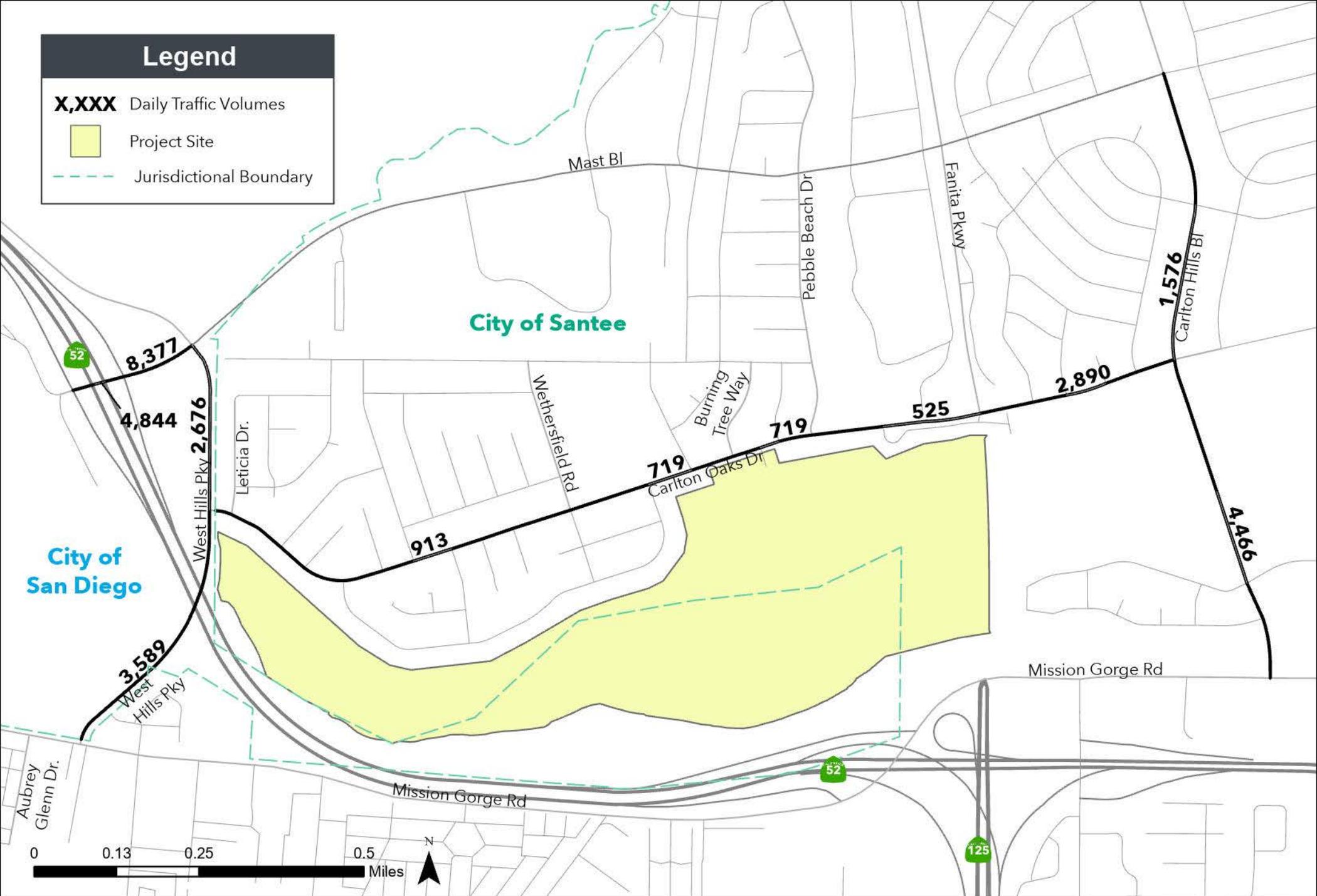
Trip distribution assumptions as well as excerpts from the available traffic impact studies for each of the near-term cumulative projects are included in **Appendix M**. **Figure 6.2** displays the trip assignment of the cumulative project traffic to the study area roadways while **Figure 6.3** displays the trip assignment to the intersections.

Legend

X,XXX Daily Traffic Volumes

 Project Site

 Jurisdictional Boundary



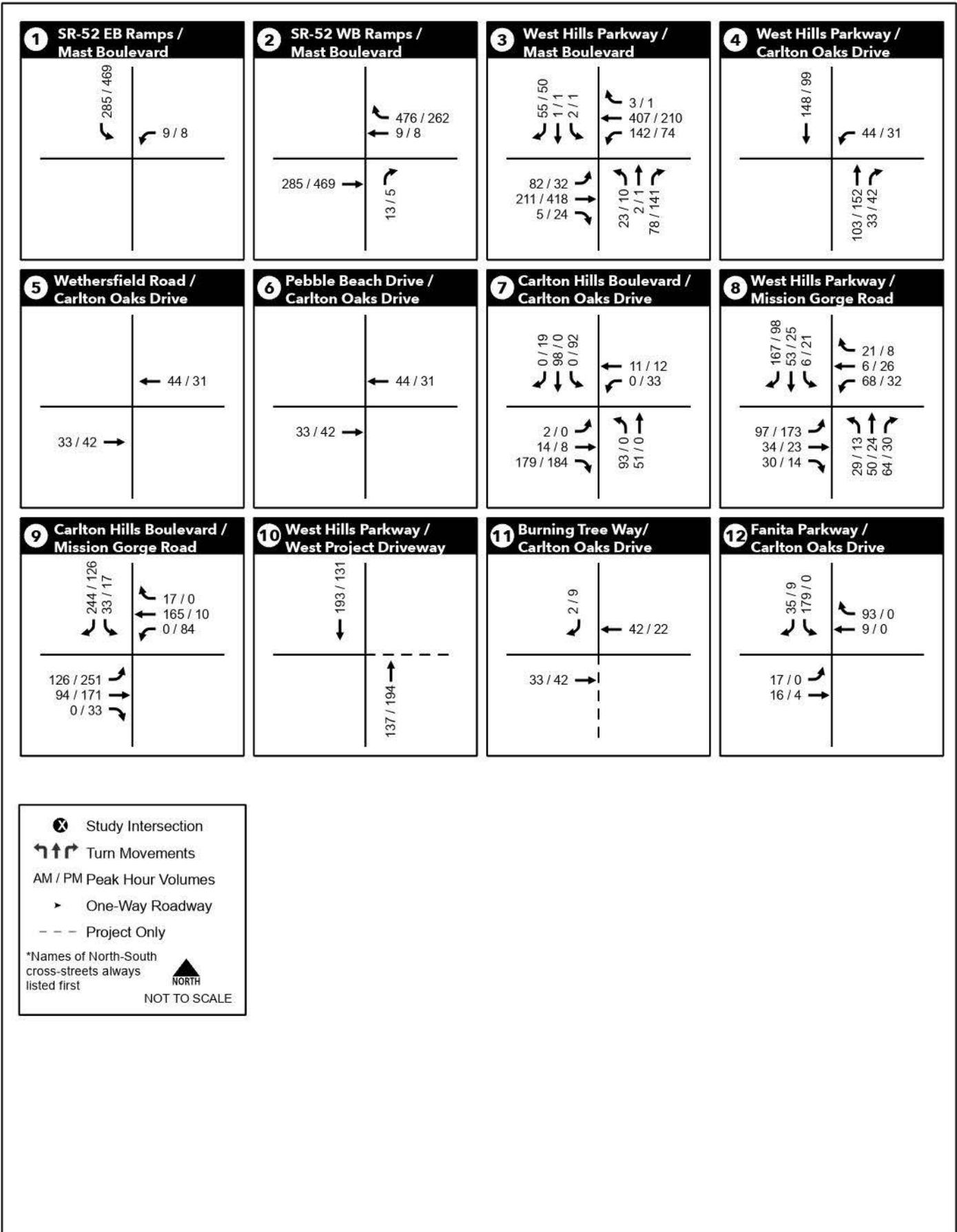


Figure 6.3
Peak Hour Intersection Traffic Volumes
Cumulative Project Trip Assignment



6.3 Cumulative Trip Distribution and Assignment

To accurately reflect the associated travel patterns, separate trip distribution patterns were utilized for each of the near-term cumulative projects. Trip distribution patterns were based on the information provided in each of the cumulative project's traffic impact study (if available) or each cumulative project location in relation to the regional transportation network as well as nearby land uses. The trip distribution for the following projects were obtained from their respective traffic impact studies:

1. *Mission Gorge Road Gas Station* - Obtained from the Mobile Gas Station, Sunshine Carwash, QSR 7751 Mission Gorge Road, Santee Focused Traffic Impact Study prepared by K2 Traffic Engineering, Inc.
2. *Mission Gorge Multi-Family (TM2015-6)* - Obtained from 7927 Mission Gorge Road Multi-Family Project Trip Generation memorandum prepared by LOS Engineering (February 2015).
3. *8707 Caribbean Way Multi-Family* - Obtained from the 8707 Caribbean Way Trip Generation memorandum prepared by Kimley Horn and Associates, Inc.
4. *Fanita Ranch Development* - Obtained from Fanita Ranch Project Revised EIR, May 2020. It should be noted that the Fanita Ranch Project Revised EIR does not assume any project phasing. Therefore, to be conservative, it is assumed that the Fanita Ranch project would be fully built out by the year 2026.
5. *Sycamore Landfill Master Plan Expansion* - Obtained from Sycamore Landfill Master Plan Expansion Traffic Impact Analysis prepared by Linscott, Law, and Greenspan Engineers (April 2012).
6. *Laurel Heights* - Assumed to have the same trip distribution as the Mission Gorge Multi-Family project.

6.4 Near-Term Year 2026 Base Roadway Network and Traffic Volumes

Near-Term Year 2026 Base roadway conditions are assumed to be the same as existing conditions, which were previously displayed in Figures 5.1 and 5.2.

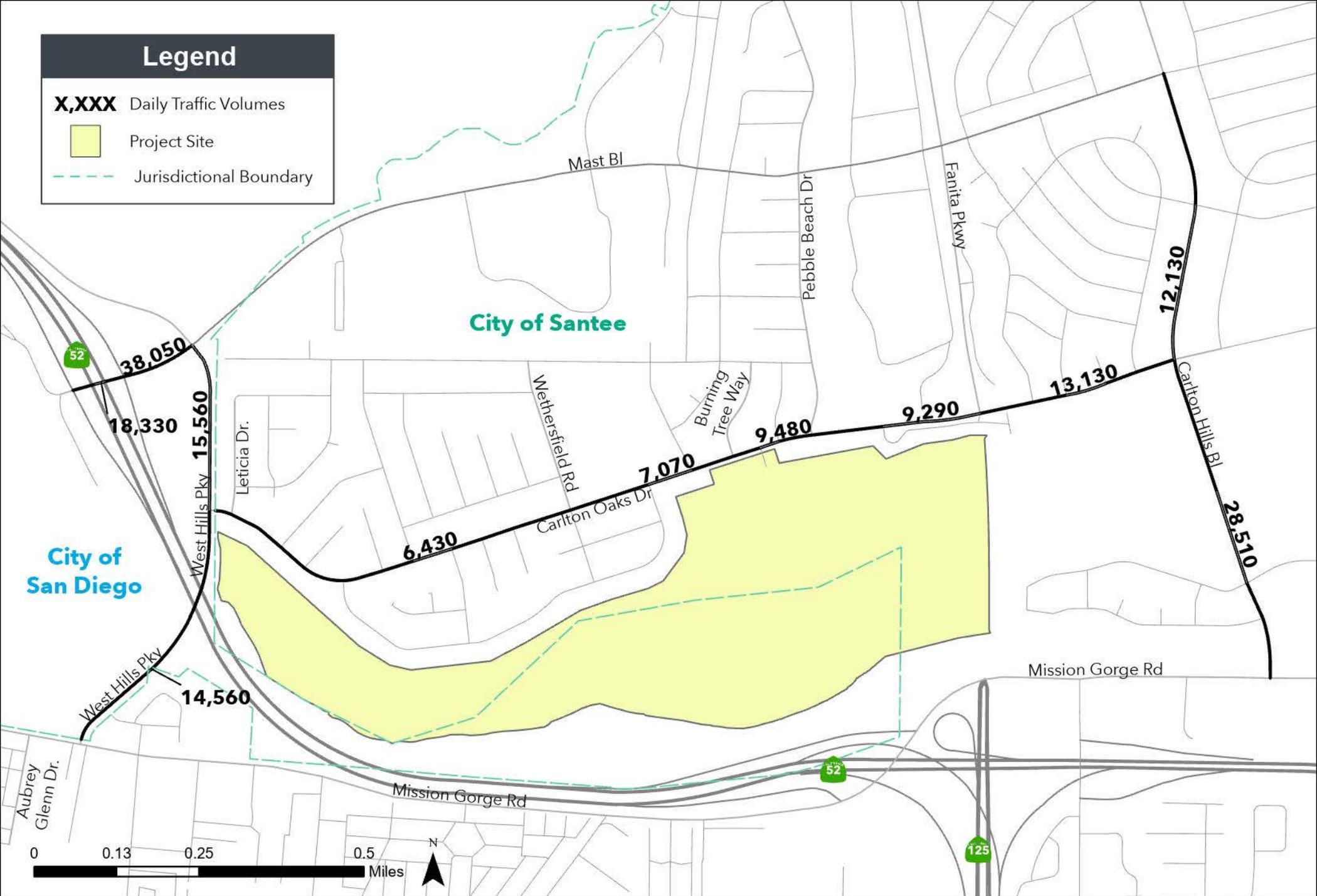
Near-Term Year 2026 traffic volumes were developed by adding the identified specific cumulative project traffic volumes (shown in Figure 6.2 and Figure 6.3) to the existing roadway and intersection traffic volumes (shown in Figure 5.3 and Figure 5.4). Ambient growth was not assumed since growth is accounted for within the five cumulative projects identified in the previous section. Near-Term Year 2026 Base roadway ADT and intersection peak hour volumes for this scenario are displayed in **Figure 6.4** and **Figure 6.5**, respectively.

Legend

X,XXX Daily Traffic Volumes

 Project Site

 Jurisdictional Boundary



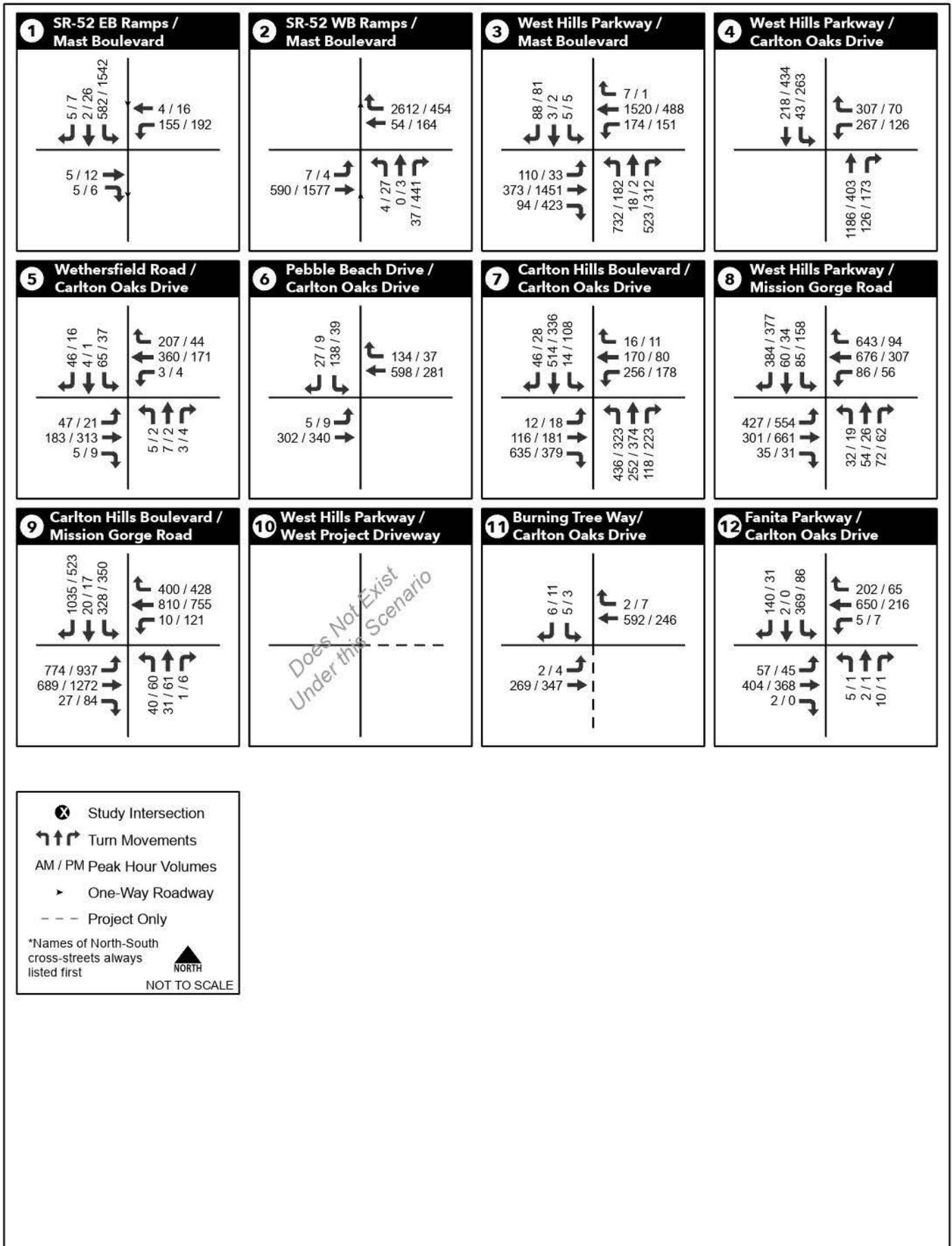


Figure 6.5

**Peak Hour Intersection Traffic Volumes
Near-Term Year 2026 Base Conditions**



6.5 Near-Term Year 2026 Base Traffic Conditions

LOS analyses for Near-Term Year 2026 Base Conditions were conducted using the methodologies described in Section 2.0. Roadway segment, intersection, and freeway LOS results are discussed below.

Roadway Segment Analysis

Table 6.2 displays the LOS analysis results for the key roadway segments under the Near-Term Year 2026 Base Conditions.

Table 6.2 Roadway Segment LOS Results – Near-Term Year 2026 Base Conditions

| Roadway | Segment | Jurisdiction | Functional Classification | Average Daily Traffic (ADT) | Roadway Capacity (LOS E) | V/C | LOS |
|-------------------------|---|----------------------|---------------------------|-----------------------------|--------------------------|--------------|----------|
| West Hills Parkway | Mast Boulevard to Carlton Oaks Drive | San Diego | 4-Lane Collector | 15,560 | 30,000 | 0.519 | C |
| West Hills Parkway | Carlton Oaks Drive to Mission Gorge Road | San Diego | 4-Lane Collector | 14,560 | 30,000 | 0.485 | C |
| Mast Boulevard | SR-52 EB Ramps to SR-52 WB Ramps | San Diego / Caltrans | 4-Lane Major Arterial | 18,330 | 40,000 | 0.458 | B |
| Mast Boulevard | SR-52 WB Ramps to West Hills Parkway | San Diego / Caltrans | 4-Lane Major Arterial | 38,050 | 40,000 | 0.951 | E |
| Carlton Oaks Drive | West Hills Parkway to Wethersfield Road | Santee | 2-Lane Collector w/ TWLTL | 6,430 | 15,000 | 0.429 | B |
| Carlton Oaks Drive | Wethersfield Road Burning Tree Way | Santee | 2-Lane Collector w/ TWLTL | 7,070 | 15,000 | 0.471 | C |
| Carlton Oaks Drive | Burning Tree Way to Pebble Beach Drive | Santee | 2-Lane Collector w/ TWLTL | 9,480 | 15,000 | 0.632 | C |
| Carlton Oaks Drive | Pebble Beach Drive to Fanita Parkway | Santee | 2-Lane Collector w/ TWLTL | 9,290 | 15,000 | 0.619 | C |
| Carlton Oaks Drive | Fanita Parkway to Carlton Hills Boulevard | Santee | 2-Lane Collector w/ TWLTL | 13,130 | 15,000 | 0.875 | E |
| Carlton Hills Boulevard | Mast Boulevard to Carlton Oaks Drive | Santee | 4-Lane Major Arterial | 12,130 | 40,000 | 0.303 | A |
| Carlton Hills Boulevard | Carlton Oaks Drive to Mission Gorge Road | Santee | 4-Lane Major Arterial | 28,510 | 40,000 | 0.713 | C |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

V/C = Volume-to-Capacity

TWLTL = Two-way left-turn lane

As shown in Table 6.2, all of the study area roadway segments are projected to operate at acceptable LOS D or better under Near-Term Year 2026 Base Conditions with the exception of the following two (2) roadway segments:

- Mast Boulevard, SR-52 WB Ramps to West Hills Parkway (San Diego / Caltrans) - LOS E.
- Carlton Oaks Drive, Fanita Parkway to Carlton Hills Boulevard (Santee) - LOS E



Intersection Analysis

Table 6.3 displays intersection LOS and average vehicle delay results under Near-Term Year 2026 Base Conditions. LOS calculation worksheets for Near-Term Year 2026 Base Conditions are provided in Appendix N.

Table 6.3 Peak Hour Intersection LOS Results – Near-Term Year 2026 Base Conditions

| # | Intersection | Control | Jurisdiction | AM Peak Hour | | PM Peak Hour | |
|----|---|---------|----------------------|-------------------|-----|-------------------|-----|
| | | | | Avg. Delay (sec.) | LOS | Avg. Delay (sec.) | LOS |
| 1 | SR-52 EB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 10.7 | B | 15.8 | B |
| 2 | SR-52 WB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 14.0 | B | 12.4 | B |
| 3 | West Hills Parkway & Mast Boulevard | Signal | Santee / San Diego | 51.8 | D | 34.1 | C |
| 4 | West Hills Parkway & Carlton Oaks Drive | Signal | San Diego | 16.9 | B | 11.8 | B |
| 5 | Wethersfield Road & Carlton Oaks Drive | Signal | Santee | 6.4 | A | 5.5 | A |
| 6 | Pebble Beach Drive & Carlton Oaks Drive | Signal | Santee | 8.1 | A | 5.4 | A |
| 7 | Carlton Hills Boulevard & Carlton Oaks Drive | Signal | Santee | 41.6 | D | 29.7 | C |
| 8 | West Hills Parkway & Mission Gorge Road | Signal | San Diego | 29.2 | C | 17.6 | B |
| 9 | Carlton Hills Boulevard & Mission Gorge Road | Signal | Santee | 43.2 | D | 44.3 | D |
| 10 | West Hills Parkway & Project Driveway #1 | DNE | San Diego | N/A | N/A | N/A | N/A |
| 11 | Burning Tree Way/Project Driveway #2 & Carlton Oaks Drive | SSSC | Santee | 15.6 | C | 12.7 | B |
| 12 | Fanita Parkway/Project Driveway #3 & Carlton Oaks Drive | Signal | Santee | 23.9 | C | 10.1 | B |

Notes:

Bold letter indicates substandard LOS E or F.

DNE = Does Not Exist.

SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches

As shown in Table 6.3, all of the study area intersections are projected to operate at acceptable LOS D or better under Near-Term Year 2026 Base Conditions during both AM and PM peak hour.

In addition to the intersection LOS analysis, a 95th percentile queuing analysis was also conducted to determine the extent of intersection queuing under Near-Term Year 2026 Base Conditions for transportation facilities located within the City of San Diego. **Table 6.4** identifies the intersection control, pocket length, 95% queue length, and length of queue exceeding available storage, if applicable. All movements with designated turn pockets at study area intersections, and freeway off-ramps were included in the analysis. Intersection queuing reports are provided in Appendix N.



Table 6.4 Peak Hour Intersection 95th Percentile Queuing Analysis – Near-Term Year 2026 Base Conditions

| ID | Intersection | Traffic Control | Jurisdiction | Turning Movement | Pocket Length (ft) | AM / PM 95% Queue Length (ft) | AM / PM Excess Queue (ft) |
|----|------------------------------------|-----------------|----------------------|------------------|--------------------|-------------------------------|---------------------------|
| 1 | SR-52 EB Ramps & Mast Blvd | Signal | San Diego / Caltrans | SB Leg | 1,520 | 230 / 897 | 0 / 0 |
| | | | | WBL | 100 | 131 / 159 | 31 / 59 |
| 2 | SR-52 WB Ramps & Mast Blvd | Signal | San Diego / Caltrans | WB Leg | 495 | 1371 / 209 | 876 / 0 |
| | | | | NB Leg | 1,115 | 1 / 253 | 0 / 0 |
| 3 | West Hills Pkwy & Mast Blvd | Signal | San Diego | EBL | 145 | 25 / 15 | 0 / 0 |
| | | | | WBL | 195 | 112 / 160 | 0 / 0 |
| | | | | NBL | 1,250 | 767 / 124 | 0 / 0 |
| | | | | NBR | 845 | 36 / 69 | 0 / 0 |
| | | | | EBL | 230 | 290 / 65 | 60 / 0 |
| 4 | West Hills Pkwy & Carlton Oaks Dr | Signal | San Diego | EBR | 385 | 56 / 119 | 0 / 0 |
| | | | | SBL | 150 | 72 / 243 | 0 / 93 |
| | | | | WBL | 100 | 286 / 117 | 186 / 17 |
| 8 | West Hill Pkwy & Mission George Rd | Signal | San Diego | WBR | 92 | 38 / 18 | 0 / 0 |
| | | | | SBL | 260 | 55 / 100 | 0 / 0 |
| | | | | SBR | 260 | 51 / 21 | 0 / 0 |
| | | | | WBL | 75 | 133 / 118 | 58 / 43 |
| | | | | WBR | 260 | 62 / 30 | 0 / 0 |
| | | | | EBL | 145 | 342 / 451 | 197 / 306 |

Notes:

Bold and Grey Highlights indicate that the calculated 95th percentile queue that exceeds storage length via HCM 6th methodology.

As shown in Table 6.4, the following six (6) movements at five (5) intersections are forecasted to operate with potential queuing issues during either the AM or PM peak hour under Near-Term Year 2026 Base Conditions including:

SR-52 EB Ramps & Mast Boulevard (San Diego / Caltrans)

- *Westbound Left-Turn Movement* - The left-turn movement from westbound Mast Boulevard to the southbound SR-52 EB On-Ramp - 31 feet during the AM peak hour and 59 feet during the PM peak hour of 95th percentile queue that would exceed storage length.

SR-52 WB Ramps & Mast Boulevard (San Diego / Caltrans)

- *Westbound Right-Turn Movement* - The right-turn movement from westbound Mast Boulevard to northbound SR-52 WB On-Ramp - 876 feet of 95th percentile queue length would exceed storage length during the AM peak hour, which would extend to the east along Mast Boulevard past the upstream intersection of West Hills Parkway & Mast Boulevard.

West Hills Parkway & Mast Boulevard (Santee / San Diego)

- *Eastbound Left-Turn Movement* - The left-turn movement from eastbound Mast Boulevard to northbound West Hills Parkway - 60 feet during the AM peak hour of the 95th percentile queue that would exceed storage length. However, the Proposed Project will not add trips to this movement; therefore, it will not have an impact on this queue length.

West Hills Parkway & Carlton Oaks Drive (San Diego)

- *Southbound Left-Turn Movement* - The left-turn movement from southbound West Hills Parkway to eastbound Carlton Oaks Drive - 93 feet of 95th percentile queue length would exceed the storage length during the PM peak hour.



- *Westbound Left-Turn Movement* - The left-turn movement from westbound Carlton Oaks Drive to southbound West Hills Parkway - 186 feet during the AM peak hour and 17 feet during the PM peak hour of 95th percentile queue that would exceed storage length and extend past closely spaced intersection of Leticia Drive and Carlton Oaks Drive development along Carlton Oaks Drive.

West Hills Parkway & Mission Gorge Road (Santee / San Diego)

- *Westbound Left-Turn Movement* - The left-turn movement from westbound Mission Gorge Road to the driveway located as the southern leg of the intersection - 58 feet during the AM peak hour and 43 feet during the PM peak hour of 95th percentile queue that would exceed storage length.

West Hills Parkway & Mission Gorge Road (Santee / San Diego)

- *Eastbound Left-Turn Movement* - The left-turn movement from eastbound Mission Gorge Road to northbound West Hills Parkway - 197 feet during the AM peak hour and 306 feet during the PM peak hour of 95th percentile queue that would exceed storage length.

Freeway Segment Analysis

Table 6.5 displays freeway segment LOS results for the study area freeway mainline facilities under Near-Term Year 2026 Base Conditions. The freeway segment LOS analysis was performed utilizing the methodology presented in Section 2.6. Freeway analysis calculation worksheets for Near-Term Year 2026 Base Conditions are provided in Appendix O.

Table 6.5 Freeway Segment Analysis – Near-Term Year 2026 Base Conditions

| Peak Hour | Freeway | Segment | Dir. | # of Lanes | D | K | HVF | ADT | Peak Hour Volume | Average Speed | V/C | LOS |
|-----------|---------|--------------------------------|------|------------|--------|-------|-------|---------|------------------|---------------|------|-----|
| AM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 28.17% | 8.37% | 2.60% | 117,604 | 3,260 | 71.1 | 0.52 | B |
| | | | WB | 4 | 71.83% | 8.37% | 2.60% | | 8,914 | - | 1.03 | F |
| AM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 21.47% | 7.69% | 2.60% | 113,604 | 2,477 | 74.0 | 0.43 | B |
| | | | WB | 3 | 78.53% | 7.69% | 2.60% | | 8,725 | - | 1.54 | F |
| PM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 71.35% | 8.05% | 2.60% | 117,604 | 7,530 | - | 1.21 | F |
| | | | WB | 4 | 28.65% | 8.05% | 2.60% | | 2,992 | 71.9 | 0.35 | B |
| PM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 69.26% | 8.08% | 2.60% | 113,604 | 7,170 | - | 1.24 | F |
| | | | WB | 3 | 30.74% | 8.08% | 2.60% | | 3,078 | 73.2 | 0.54 | B |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

D = Directional Split

K = Peak Hour Percentage

HVF = Heavy Vehicle Factor

ADT = Average Daily Traffic, ADT shown is for both directions

As shown in Table 6.5, all of the freeway segments are projected to operate at acceptable LOS D or better under Near-Term Year 2026 conditions, with the exception of the following segments:

- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the PM peak hour in the eastbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the PM peak hour in the eastbound direction



6.6 Near-Term Year 2026 with Project Roadway Network and Traffic Volumes

Roadway and intersection geometrics under the Year 2026 with Project Conditions were assumed to be identical to the Existing Conditions geometrics, as previously shown in Figure 5.1 and Figure 5.2, with the addition of the two (2) new driveway connections.

Daily and peak hour intersection volumes for Near-Term Year 2026 with Project Conditions were derived by adding the project trips (See Figures 3.2 and 3.3) to the Near-Term Year 2026 Base traffic volumes, as previously shown in Figure 6.4 and Figure 6.5. Daily roadway and peak hour intersection volumes for this scenario are displayed in Figure 6.6 and Figure 6.7, respectively.

6.7 Near-Term Year 2026 with Project Traffic Conditions

The Near-Term Year 2026 with Project analyses were conducted using the methodologies described in Section 2.0. Roadway segment, intersection, and freeway LOS results are discussed below.

Roadway Segment Analysis

Table 6.6 displays the LOS analysis results for key roadway segments under Near-Term Year 2026 with Project Conditions.

Similar to the Near-Term Year 2026 Base Conditions, all of the roadway segments are projected to continue to operate at an acceptable LOS D or better under the Near-Term Year 2026 with Project Conditions, with the exception of the following two (2) roadway segments:

Mast Boulevard between SR-52 WB Ramps and West Hills Parkway (San Diego / Caltrans) - As shown in Table 6.6, Mast Boulevard between the SR-52 WB Ramps and West Hills Parkway is anticipated to operate at LOS F both with and without the Proposed Project. Traffic associated with the Proposed Project will cause the volume to capacity (V/C) ratio of the segment to increase by 0.010. Since this roadway is currently built out to its ultimate classification (4-lane major arterial), no improvements are recommended for this study segment.

Carlton Oaks Drive between Fanita Parkway and Carlton Hills Boulevard (Santee) - As shown in Table 6.6, Carlton Oaks Drive between Fanita Parkway and Carlton Hills Drive is anticipated to operate at LOS E under Near-Term 2026 Base Conditions; however, roadway operations along this segment are anticipated to degrade further with the implementation of the Proposed Project. As noted in Section 2.7, the Proposed Project would have a critical effect on this roadway since it would cause roadway operations to degrade by more than .02 V/C. The following improvement would restore roadway operations on Carlton Oaks Drive back to standard levels:

Adding a travel lane in each direction would increase the capacity of the roadway from a 2-Lane Collector with center-left-turn-lane (CLTL) to a 4-Lane Major Arterial which would improve the operations to LOS A. However, this improvement is not recommended. To implement this improvement, additional right-of-way acquisition would be required from a built-environment, or the existing right of way would need to be repurposed at the expense of existing or planned active transportation facilities. It should also be noted that the *Santee General Plan Mobility Element, October 2017* identified this segment of Carlton Oaks Drive as operating at LOS E under Preferred Plan conditions. Therefore, the projected operations along this segment are consistent with the vision set forth by the City's General Plan, and no additional improvements are recommended.

Intersection Analysis

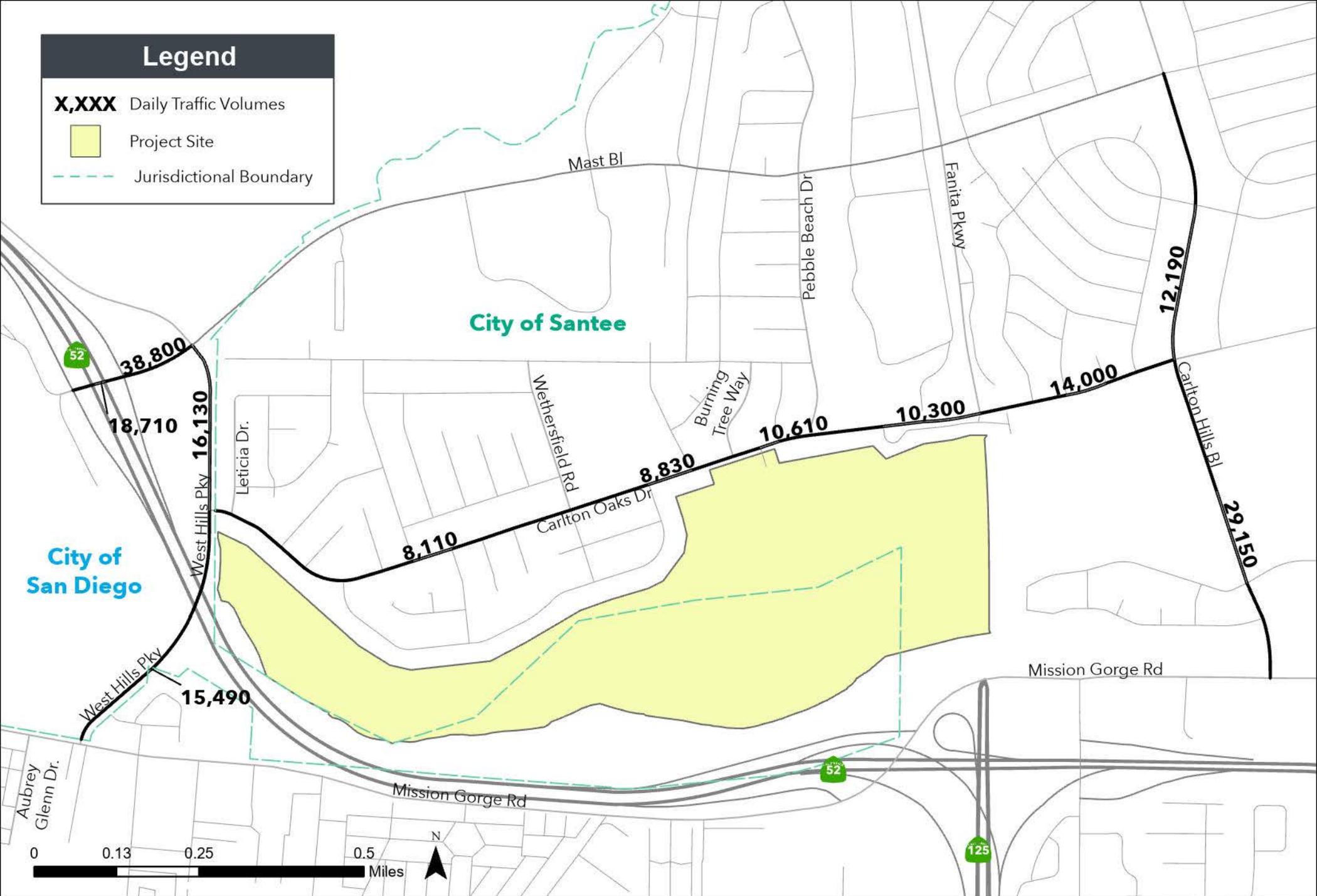
Table 6.7 displays intersection LOS and average vehicle delay results under Near-Term Year 2026 with Project Conditions. LOS calculation worksheets for the Year 2026 Base with Project Conditions are provided in Appendix P.

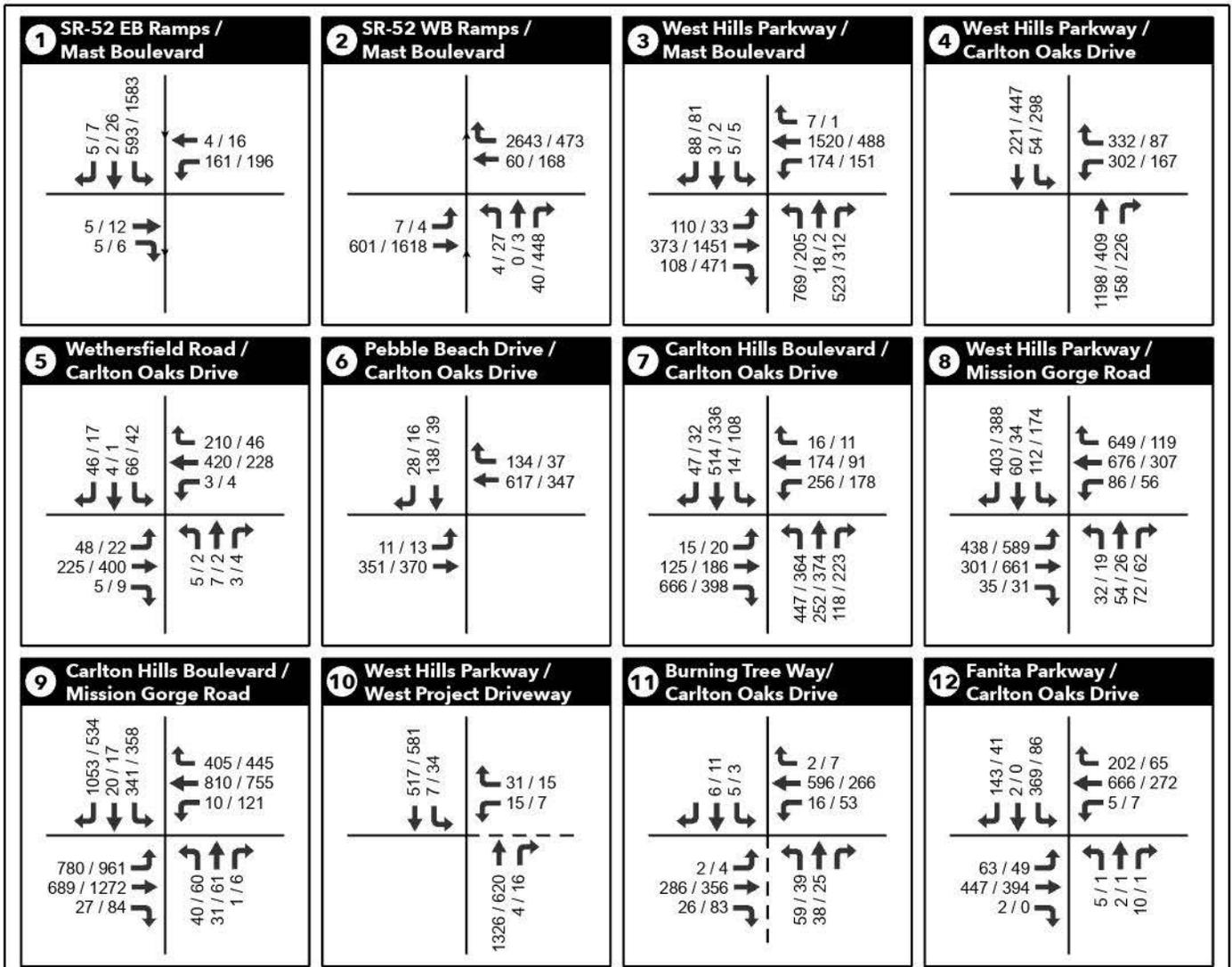
Legend

X,XXX Daily Traffic Volumes

 Project Site

 Jurisdictional Boundary





Study Intersection
 Turn Movements
 AM / PM Peak Hour Volumes
 One-Way Roadway
 Project Only
 *Names of North-South cross-streets always listed first
 NORTH
 NOT TO SCALE

Figure 6.7

**Peak Hour Intersection Traffic Volumes
Near-Term Year 2026 with Project Conditions**



Table 6.6 Roadway Segment LOS Results – Near-Term Year 2026 with Project Conditions

| Roadway | Segment | Jurisdiction | Functional Classification | Average Daily Traffic (ADT) | Roadway Capacity (LOS E) | V/C w/o Project | LOS w/o Project | V/C w/ Project | LOS w/ Project | Δ V/C | CTE? |
|-------------------------|---|----------------------|---------------------------|-----------------------------|--------------------------|-----------------|-----------------|----------------|----------------|--------------|------------|
| West Hills Parkway | Mast Boulevard to Carlton Oaks Drive | San Diego | 4-Lane Collector | 16,310 | 30,000 | 0.544 | C | 0.544 | C | 0.025 | No |
| West Hills Parkway | Carlton Oaks Drive to Mission Gorge Road | San Diego | 4-Lane Collector | 15,490 | 30,000 | 0.516 | C | 0.516 | C | 0.031 | No |
| Mast Boulevard | SR-52 EB Ramps to SR-52 WB Ramps | San Diego / Caltrans | 4-Lane Major Arterial | 18,710 | 40,000 | 0.458 | B | 0.468 | B | 0.009 | No |
| Mast Boulevard | SR-52 WB Ramps to West Hills Parkway | San Diego / Caltrans | 4-Lane Major Arterial | 38,800 | 40,000 | 0.951 | E | 0.970 | E | 0.019 | No |
| Carlton Oaks Drive | West Hills Parkway to Wethersfield Road | Santee | 2-Lane Collector w/ TWLTL | 8,110 | 15,000 | 0.429 | B | 0.541 | C | 0.112 | No |
| Carlton Oaks Drive | Wethersfield Road Burning Tree Way | Santee | 2-Lane Collector w/ TWLTL | 8,830 | 15,000 | 0.471 | C | 0.589 | C | 0.117 | No |
| Carlton Oaks Drive | Burning Tree Way to Pebble Beach Drive | Santee | 2-Lane Collector w/ TWLTL | 10,610 | 15,000 | 0.632 | C | 0.707 | D | 0.075 | No |
| Carlton Oaks Drive | Pebble Beach Drive to Fanita Parkway | Santee | 2-Lane Collector w/ TWLTL | 10,300 | 15,000 | 0.619 | C | 0.687 | D | 0.067 | No |
| Carlton Oaks Drive | Fanita Parkway to Carlton Hills Boulevard | Santee | 2-Lane Collector w/ TWLTL | 14,000 | 15,000 | 0.875 | E | 0.933 | E | 0.058 | Yes |
| Carlton Hills Boulevard | Mast Boulevard to Carlton Oaks Drive | Santee | 4-Lane Major Arterial | 12,190 | 40,000 | 0.303 | A | 0.305 | A | 0.002 | No |
| Carlton Hills Boulevard | Carlton Oaks Drive to Mission Gorge Road | Santee | 4-Lane Major Arterial | 29,150 | 40,000 | 0.713 | C | 0.729 | C | 0.016 | No |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

V/C = Volume-to-Capacity

CTE? = Critical Traffic Effect?

TWLTL = Two-way left-turn lane



Table 6.7 Peak Hour Intersection LOS Results – Near-Term Year 2026 with Project Conditions

| # | Intersection | Control | Jurisdiction | Delay w/o Project (sec) AM/PM | LOS w/o Project AM/PM | AM Peak Hour | | PM Peak Hour | | Δ Delay (sec) | CTE? |
|----|---|---------|----------------------|-------------------------------|-----------------------|-------------------|-----|-------------------|-----|---------------|---------|
| | | | | | | Avg. Delay (sec.) | LOS | Avg. Delay (sec.) | LOS | | |
| 1 | SR-52 EB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 10.7 / 15.8 | B / B | 10.8 | B | 16.7 | B | 0.1 / 0.9 | No / No |
| 2 | SR-52 WB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 14.0 / 12.4 | B / B | 33.5 | C | 12.9 | B | 19.5 / 0.5 | No / No |
| 3 | West Hills Parkway & Mast Boulevard | Signal | Santee / San Diego | 51.8 / 34.1 | D / C | 53.9 | D | 34.4 | C | 2.1 / 0.3 | No / No |
| 4 | West Hills Parkway & Carlton Oaks Drive | Signal | San Diego | 16.9 / 11.8 | B / B | 19.8 | B | 14.3 | B | 2.9 / 2.5 | No / No |
| 5 | Wethersfield Road & Carlton Oaks Drive | Signal | Santee | 6.4 / 5.5 | A / A | 6.5 | A | 5.8 | A | 0.1 / 0.3 | No / No |
| 6 | Pebble Beach Drive & Carlton Oaks Drive | Signal | Santee | 8.1 / 5.4 | A / A | 8.2 | A | 5.6 | A | 0.1 / 0.2 | No / No |
| 7 | Carlton Hills Boulevard & Carlton Oaks Drive | Signal | Santee | 41.6 / 29.7 | D / C | 42.7 | D | 30.1 | C | 1.1 / 0.4 | No / No |
| 8 | West Hills Parkway & Mission Gorge Road | Signal | San Diego | 29.2 / 17.6 | C / B | 32.3 | C | 18.3 | B | 3.1 / 0.7 | No / No |
| 9 | Carlton Hills Boulevard & Mission Gorge Road | Signal | Santee | 43.2 / 44.3 | D / D | 43.3 | D | 45.2 | D | 0.1 / 0.9 | No / No |
| 10 | West Hills Parkway & Project Driveway #1 | SSSC | San Diego | 0.0 / 0.0 | A / A | 23.0 | C | 12.5 | B | 23.0 / 12.5 | No / No |
| 11 | Burning Tree Way/Project Driveway #2 & Carlton Oaks Drive | SSSC | Santee | 15.6 / 12.7 | C / B | 25.0 | D | 20.3 | C | 9.4 / 7.6 | No / No |
| 12 | Fanita Parkway/Project Driveway #3 & Carlton Oaks Drive | Signal | Santee | 23.9 / 10.1 | C / B | 25.1 | C | 10.5 | B | 1.2 / 0.4 | No / No |

Notes:

Bold letter indicates substandard LOS E or F. CTE? = Critical Traffic Effect?

SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches



As shown Table 6.7, all intersections will continue to operate at LOS D or better under Near-Term Year 2026 with Project Conditions during both AM and PM peak hours.

In addition to the intersection LOS analysis, a 95th percentile queue analysis was also conducted to determine the extent of intersection queuing under Near-Term Year 2026 with Project Conditions for transportation facilities located within the City of San Diego. **Table 6.8** identifies the intersection control, pocket length, 95% queue length and excess queue, if applicable for each movement identified to approaching critical capacity at the study area intersections. Intersection queuing reports are provided in Appendix P.

Table 6.8 Peak Hour Intersection 95th Percentile Queuing Analysis – Near-Term Year 2026 with Project Conditions

| ID | Intersection | Traffic Control | Jurisdiction | Turning Movement | Pocket Length (ft) | AM / PM 95% Queue Length (ft) | AM / PM Excess Queue (ft) | Project Trips Added to Movement (AM/PM) |
|----|------------------------------------|-----------------|----------------------|------------------|--------------------|-------------------------------|---------------------------|---|
| 1 | SR-52 EB Ramps & Mast Blvd | Signal | San Diego / Caltrans | SB Leg | 1,520 | 234 / 926 | 0 / 0 | 11 / 41 |
| | | | | WBL | 100 | 136 / 162 | 36 / 62 | 6 / 4 |
| 2 | SR-52 WB Ramps & Mast Blvd | Signal | San Diego / Caltrans | WB Leg | 495 | 1,417 / 216 | 922 / 0 | 37 / 23 |
| | | | | NB Leg | 1,115 | 1 / 258 | 0 / 0 | 3 / 7 |
| | | | | EBL | 145 | 25 / 11 | 0 / 0 | 11 / 41 |
| 3 | West Hills Pkwy & Mast Blvd | Signal | San Diego | WBL | 195 | 112 / 160 | 0 / 0 | 0 / 0 |
| | | | | NBL | 1,250 | 820 / 137 | 0 / 0 | 37 / 23 |
| | | | | NBR | 845 | 36 / 69 | 0 / 0 | 0 / 0 |
| | | | | EBL | 230 | 290 / 65 | 60 / 0 | 0 / 0 |
| | | | | EBR | 385 | 59 / 133 | 0 / 0 | 14 / 48 |
| 4 | West Hills Pkwy & Carlton Oaks Dr | Signal | San Diego | SBL | 150 | 88 / 282 | 0 / 132 | 11 / 35 |
| | | | | WBL | 100 | 330 / 163 | 230 / 63 | 35 / 41 |
| | | | | WBR | 92 | 39 / 21 | 0 / 0 | 25 / 17 |
| 8 | West Hill Pkwy & Mission George Rd | Signal | San Diego | SBL | 260 | 68 / 108 | 0 / 0 | 27 / 16 |
| | | | | SBR | 260 | 56 / 21 | 0 / 0 | 19 / 11 |
| | | | | WBL | 75 | 136 / 117 | 61 / 42 | 0 / 0 |
| | | | | WBR | 260 | 65 / 33 | 0 / 0 | 6 / 25 |
| | | | | EBL | 145 | 354 / 487 | 209 / 342 | 11 / 35 |

Notes:

Bold and Grey Highlights indicate that the calculated 95th percentile queue that exceeds storage length via HCM 6th methodology.

Bold Underline indicates project trips adds to 95th percentile queue that exceeds storage length.

As shown, seven (7) movements at five (5) intersections are forecasted to operate with potential queuing issues during either the AM or PM peak hour under Near-Term Year 2026 Base with Project conditions, which include the following:

SR-52 EB Ramps & Mast Boulevard (San Diego / Caltrans)

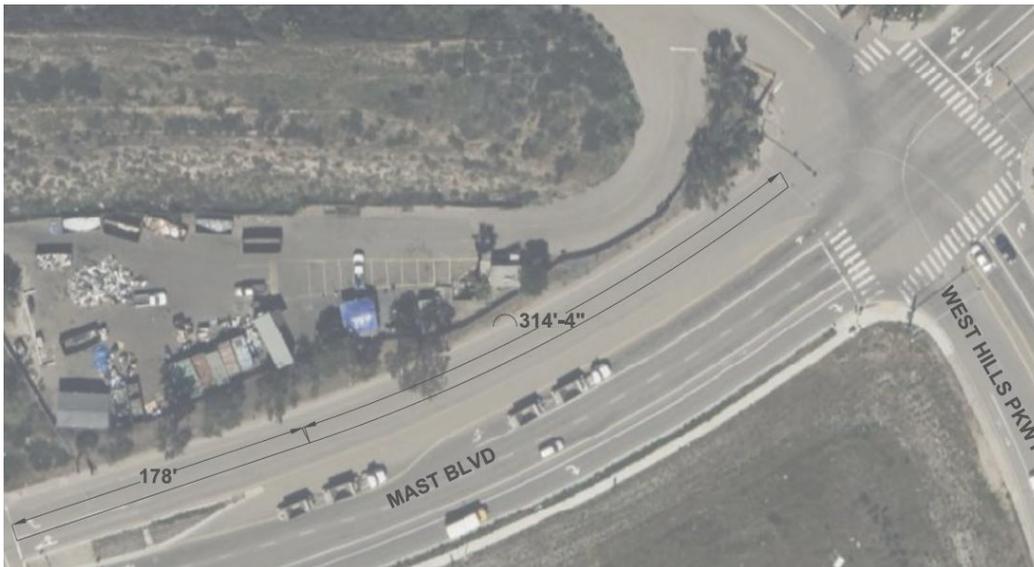
- *Westbound Left-Turn Movement* – The westbound movement has 95th percentile queue length of 136 feet during the AM peak hour and 162 feet during the PM peak hour with a total pocket length of 100 feet. This results in an excess queue of 36 feet during the AM peak hour and 62 feet during the PM peak hour. The Proposed Project will add 6 AM peak hour and 4 PM peak hour trips to this turning movement. Extending this turn pocket would be

infeasible due to existing left-turn pocket at closely spaced intersection of SR-52 WB Ramps and Mast Boulevard; thus, there is not sufficient room to expand the pocket without impacting the SR-52 WB Ramps & Mast Boulevard intersection, as shown in the graphic below.



SR-52 WB Ramps & Mast Boulevard (San Diego / Caltrans)

- *Westbound Leg* - The westbound movement has 95th percentile queue length of 1,417 feet during the AM peak hour and 216 feet during the PM peak hour with a total storage length of 495 feet. This results in an excess queue of 922 feet of 95th percentile queue length would exceed storage length during the AM peak hour, which would extend past the upstream intersection of West Hills Parkway & Mast Boulevard. The Proposed Project will add 37 AM peak hour trips to this turning movement. Due to the close intersection spacing with the West Hills Parkway and Mast Boulevard intersection, there are no other feasible improvements to extend the storage length as they would be extended into the upstream intersection, as shown in the graphic below.



West Hills Parkway & Mast Boulevard (Santee / San Diego)

- *Eastbound Left-Turn Movement* - The southbound left-turn movement has 95th percentile queue length of 290 feet during the AM peak hour and 65 feet during the PM peak hour with a total storage length of 230 feet. The left-turn movement from eastbound Mast Boulevard to northbound West Hills Parkway - 60 feet during the AM peak hour of the 95th percentile

queue that would exceed storage length. However, the Proposed Project will not add trips to this movement; therefore, it will not have an impact on this queue length.

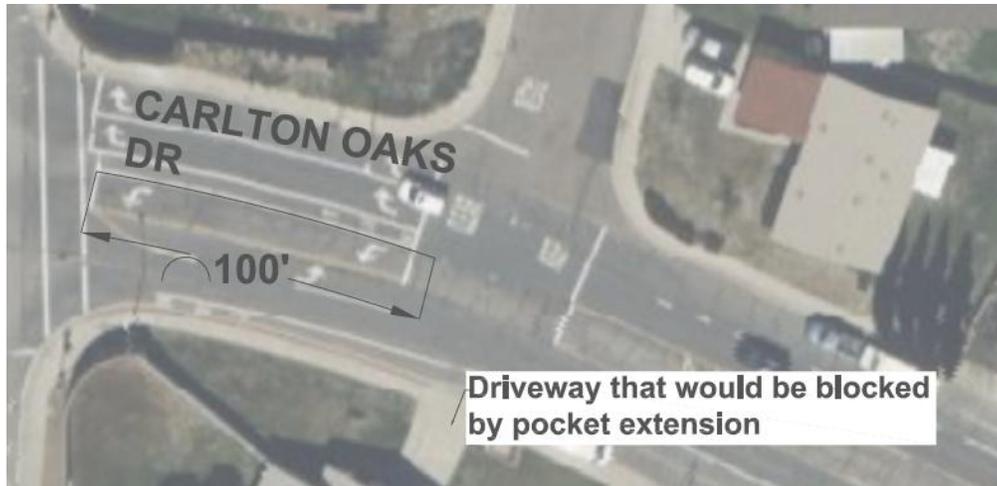
*West Hills Parkway & Carlton Oaks Drive
(San Diego)*

- *Southbound Left-Turn Movement -*
The southbound left-turn movement has 95th percentile queue length of 88 feet during the AM peak hour and 282 feet during the PM peak hour with a total storage length of 150 feet. 132 feet of 95th percentile queue length would exceed the storage length during the PM peak hour. The Proposed Project will add 35 PM peak hour trips to this turning movement. Extending the turn pocket for this turn movement is feasible and would require re-striping of the median along West Hills Parkway. A conceptual drawing that displays the feasibility of the extension is to the right.

- *Westbound Left-Turn Movement -*
The westbound left-turn movement has 95th percentile queue length of 330 feet during the AM peak hour and 163 feet during the PM peak hour with a total storage length of 100 feet. 230 feet during the AM peak hour and 63 feet during the PM peak hour of 95th percentile queue that



would exceed storage length and extend past closely spaced intersection of Leticia Drive and Carlton Oaks Drive. The Proposed Project will add 35 AM peak hour and 41 PM peak hour trips to this turning movement. Extending storage space for this turning movement would be infeasible because the extension would require encroaching into a driveway of an existing residential development along Carlton Oaks Drive, which may result in other safety issues from people exiting their driveways as shown in the graphic below.



West Hills Parkway & Mission Gorge Road (Santee / San Diego)

- *Westbound Left-Turn Movement* - The eastbound left-turn movement has 95th percentile queue length of 136 feet during the AM peak hour and 117 feet during the PM peak hour with a total storage length of 75 feet. The left-turn movement from westbound Mission Gorge Road to the driveway located as the southern leg of the intersection - 61 feet during the AM peak hour and 42 feet during the PM peak hour of 95th percentile queue that would exceed storage length. However, the Proposed Project will not add trips to this movement; therefore, it will not have an impact on this queue length.
- *Eastbound Left-Turn Movement* - The eastbound left-turn movement has 95th percentile queue length of 354 feet during the AM peak hour and 487 feet during the PM peak hour with a total storage length of 145 feet. 209 feet during the AM peak hour and 342 feet during the PM peak hour of 95th percentile queue that would exceed storage length. The Proposed Project will add 11 AM peak hour and 35 PM peak hour trips to this turning movement. Extending this turn pocket would be infeasible due to existing left-turn pocket at closely spaced intersection of Aubrey Glen Drive & Mission Gorge Road thus, there is not sufficient room to expand the pocket without impacting the Aubrey Glen Drive & Mission Gorge Road intersection, as shown in the graphic below.





Freeway Segment Analysis

Table 6.9 displays freeway segment LOS results for the study area freeway mainline facilities under Near-Term Year 2026 with Project Conditions. The freeway segment LOS analysis was performed utilizing the methodology presented in Section 2.6. Freeway analysis calculation worksheets for Near-Term Year 2026 with Project Conditions are provided in Appendix Q.

Table 6.9 Freeway Segment Analysis – Near-Term Year 2026 with Project Conditions

| Peak Hour | Freeway | Segment | Dir. | # of Lanes | ADT w/ Project | Peak Hour Volume | Speed w/ Project | V/C w/ Project | LOS w/ Project | Δ Speed | Δ V/C | CTE? |
|-----------|---------|--------------------------------|------|------------|----------------|------------------|------------------|----------------|----------------|---------|-------|------|
| AM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 118,224 | 3,271 | 71.1 | 0.53 | B | 0.0 | 0.01 | No |
| | | | WB | 4 | | 8,945 | - | 1.03 | F | - | 0.00 | No |
| AM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 114,224 | 2,488 | 74.0 | 0.43 | B | 0.0 | 0.00 | No |
| | | | WB | 3 | | 8,756 | - | 1.55 | F | - | 0.01 | No |
| PM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 118,224 | 7,570 | - | 1.22 | F | - | 0.01 | No |
| | | | WB | 4 | | 3,010 | 71.9 | 0.35 | B | 0.0 | 0.00 | No |
| PM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 114,224 | 7,210 | - | 1.25 | F | - | 0.01 | No |
| | | | WB | 3 | | 3,096 | 73.2 | 0.55 | B | 0.0 | 0.01 | No |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

ADT = Average Daily Traffic, ADT shown is for both directions.

CTE? = Critical Traffic Effect?

Directional Split (D), Peak Hour Percentage (K), and Heavy Vehicle Factor (HVF) are the same as Near-Term Year 2026 base conditions.

Δ Speed = Change in Speed from base conditions

As shown in Table 6.9, all of the freeway segments are projected to continue to operate at acceptable LOS D or better under Near-Term 2026 with Project Conditions, with the exception of the following segments:

- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the PM peak hour in the eastbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the PM peak hour in the eastbound direction

However, the Proposed Project will not add more than 0.01 V/C to any of the study segments nor will it decrease travel speeds by more than 1 mph. Therefore, based on the standards outlined in Section 2.7, the Proposed Project is not anticipated to critically affect freeway operations under Near-Term Year 2026 with Project Conditions.



6.8 Recommended Improvements Near-Term Year 2026 with Project Conditions.

This section identifies potential improvement measures under Near-Term Year 2026 with Project Conditions.

Roadway

No additional roadway improvements are recommended with the implementation of the Proposed Project.

Intersection

No additional intersection improvements are recommended with the implementation of the Proposed Project.

95th Percentile Queue

As noted in Section 6.7 the following improvements are recommended:

West Hills Parkway & Carlton Oaks Drive (San Diego)

- Left-turn movement from southbound West Hills Parkway to eastbound Carlton Oaks Drive - Extending the turn pocket for this turn movement is feasible and would require re-striping of the median along West Hills Parkway. A conceptual drawing that displays the feasibility of the extension is provided in Appendix K.

Freeway

No additional freeway improvements are recommended with the implementation of the Proposed Project.

7.0 Horizon Year 2035 Conditions

This Section provides a description of Horizon Year 2035 Traffic Conditions network, both with and without the Proposed Project. Scenarios analyzed in this section included:

- Horizon Year 2035 Base Conditions
- Horizon Year 2035 with Project Conditions

It should be noted that the City of San Diego TSM does not require the evaluation of City of San Diego Transportation facilities under Horizon Year conditions for projects that are not seeking a Community Plan/General Plan Amendment. The Proposed Project is not seeking a Community Plan Amendment or Rezone within the City of San Diego or the City of Santee; therefore, a Horizon Year analysis of City of San Diego facilities is not required.

However, intersection and roadway LOS analyses for study area facilities located within the City of San Diego were prepared for a previous draft of the report and were kept in for informational purposes. It should be noted that 95th percentile queuing analyses were not included in previous drafts of this report and is therefore not included in this Section.

7.1 Horizon Year 2035 Roadway Network and Traffic Volumes

The future year forecast volumes were derived from the *Fanita Ranch FEIR*, which was approved by the City of Santee City Council on September 23, 2020. Relevant pages from the FEIR Transportation study are provided in **Appendix R**.

The *Sycamore Landfill Master Plan Expansion Transportation Impact Study; April 27, 2012*, includes the following direct mitigation measures:

- *SR-52 WB Ramps & Mast Boulevard (San Diego / Caltrans)* - widen the westbound approach at the intersection to provide the following lane geometry:
 - Westbound - one through-right-turn lane; and two exclusive right-turn lanes.
- *West Hills Parkway & Mast Boulevard (Santee / San Diego)* - widen the intersection to provide the following lane geometry:
 - Eastbound - one left-turn lane, three through lanes, one right-turn lane
 - Westbound - two left-turn lanes, two through lanes, one shared through lane/right-turn lane
 - Northbound - two left-turn lanes, one shared through lane/right-turn lane
 - Southbound - one shared through lane/left-turn lane, one right-turn lane

As such, the Sycamore Landfill Master Plan Expansion project is responsible for implementing these measures prior to the expansion's buildout. Therefore, since buildout of the Landfill Master Plan is assumed under Horizon Year 2035 conditions, the mitigation from the plan is also assumed to be in place. **Figure 7.1** and **Figure 7.2** display the Near-Term Year 2026 Base roadway and intersection geometrics, respectively.

Daily roadway and peak hour intersection volumes for this scenario are displayed in **Figure 7.3** and **Figure 7.4**, respectively.

Legend

-  Project Site
-  Jurisdictional Boundary
- 4M** 4-Lane Major Arterial
- 2C W/ TWLTL** 2-Lane Collector with Two-Way Left Turn Lane

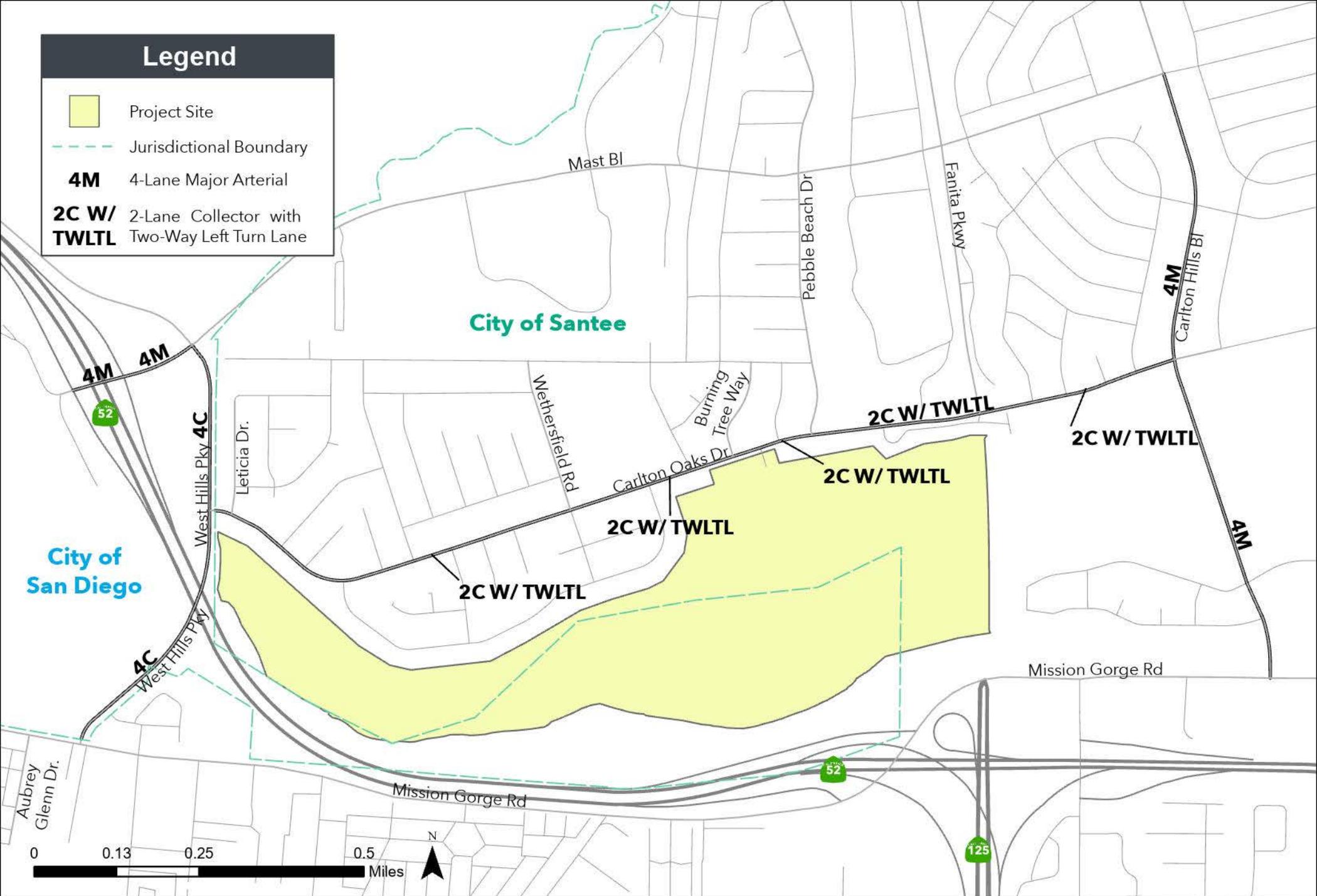


Figure 7.1

Roadway Geometrics Horizon Year 2035 Conditions

Carlton Oaks Country Club and Resort
Local Transportation Analysis



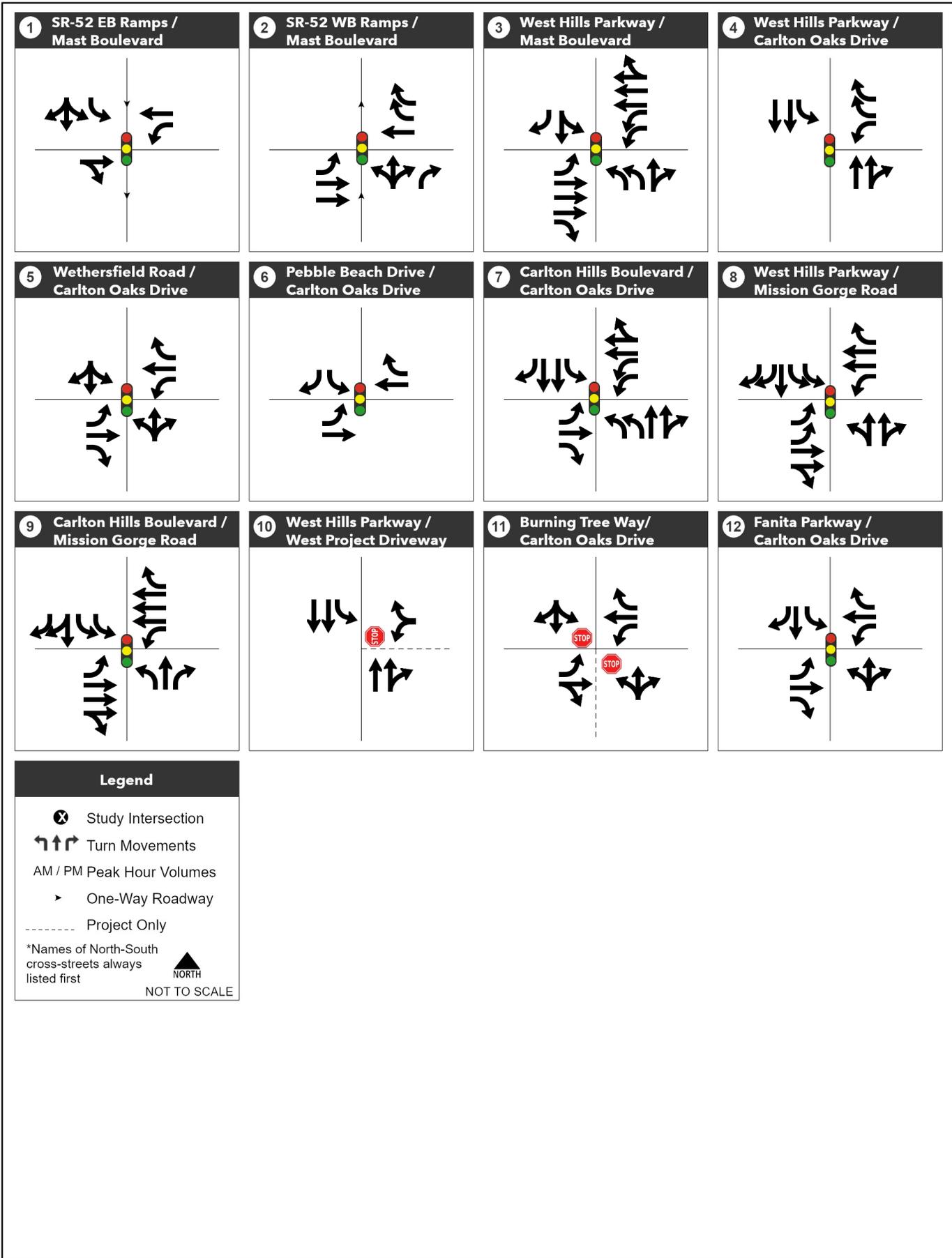


Figure 7.2

Legend

X,XXX Daily Traffic Volumes

 Project Site

 Jurisdictional Boundary

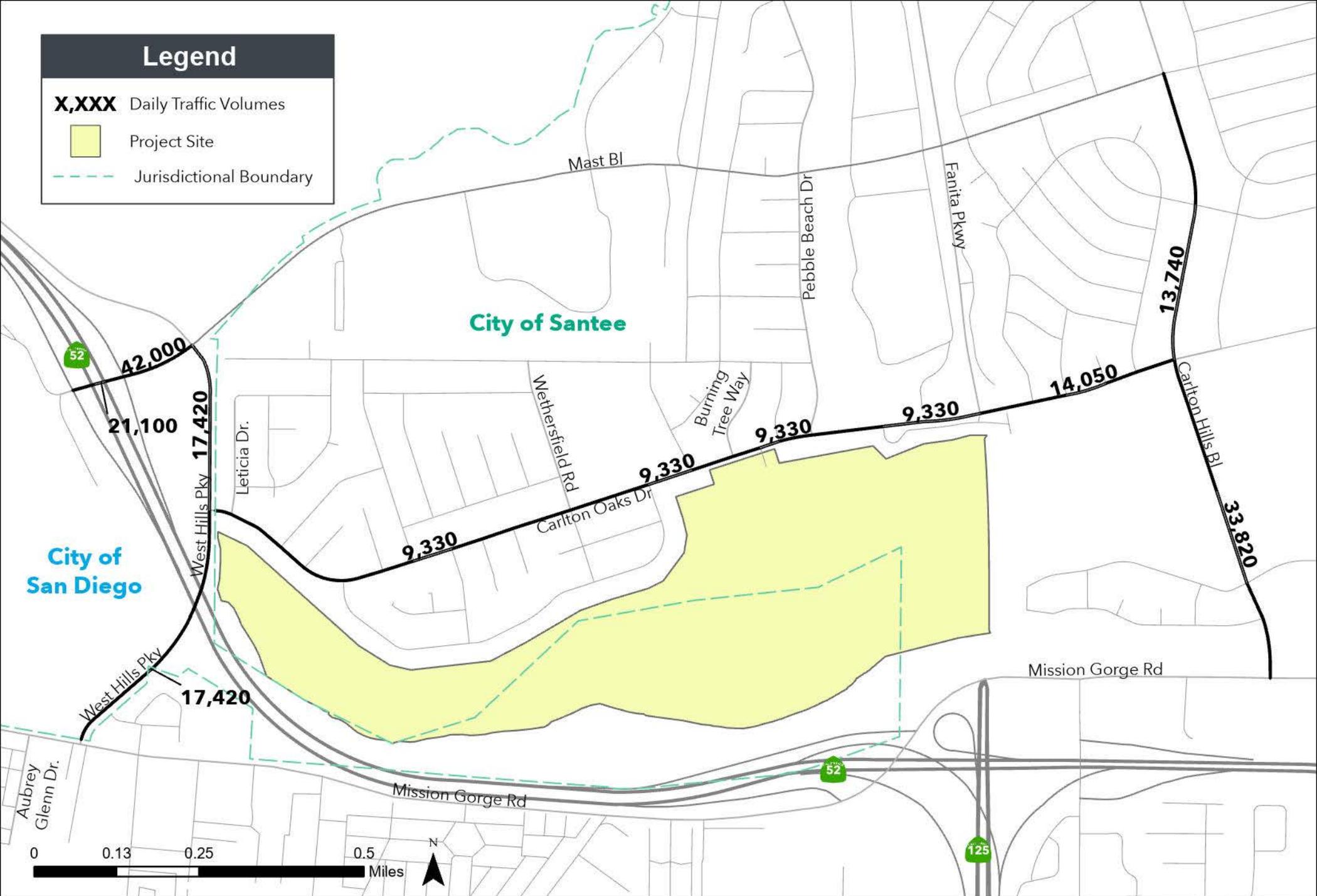


Figure 7.3

**Roadway Average Daily Traffic Volumes
Horizon Year 2035 Base Conditions**

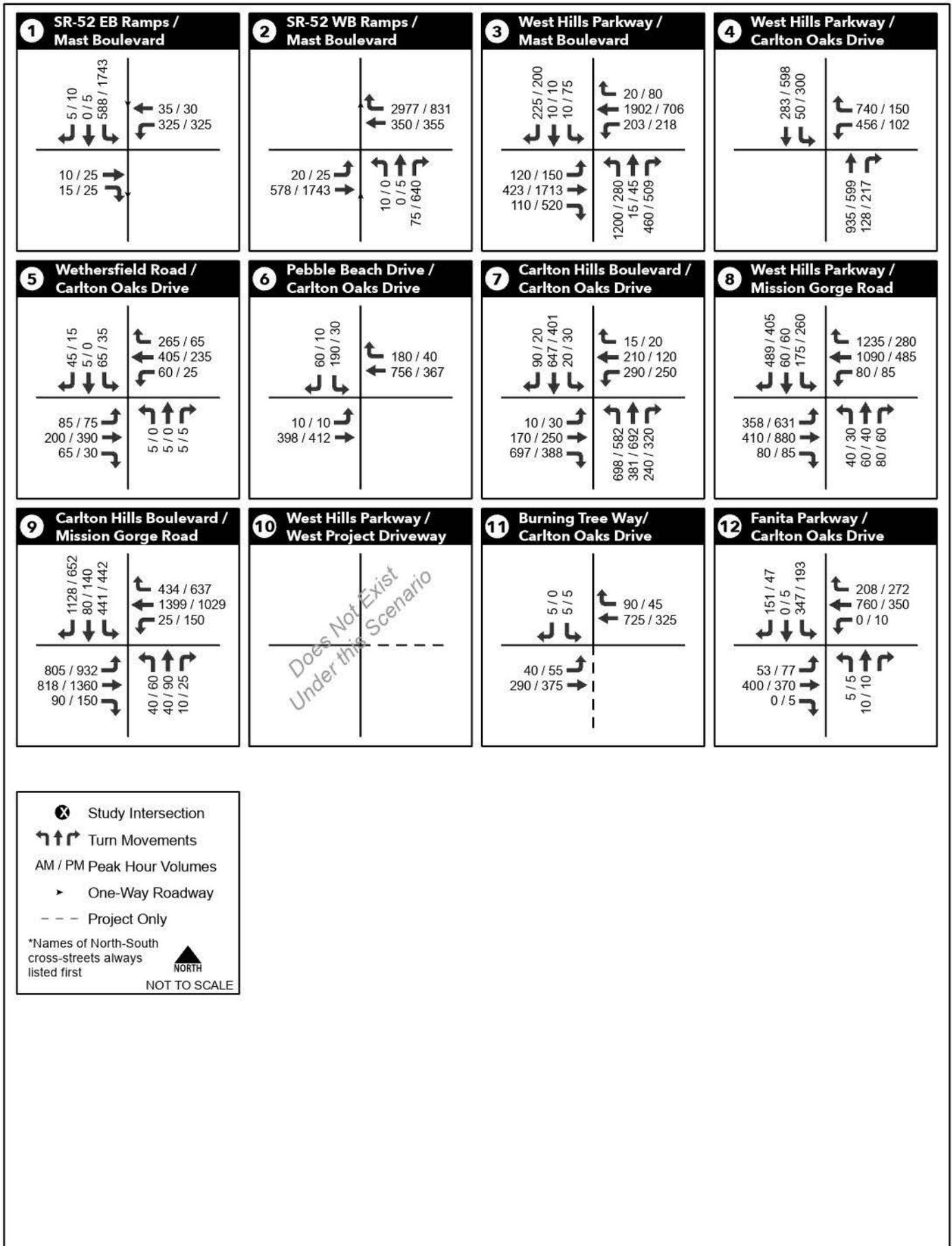


Figure 7.4

**Peak Hour Intersection Traffic Volumes
Horizon Year 2035 Base Conditions**



7.2 Horizon Year 2035 Traffic Conditions

LOS analyses for the Horizon Year 2035 Base Conditions were conducted using the methodologies described in Section 2.0. Roadway segment, intersection, and freeway LOS results are discussed below.

Roadway Segment Analysis

Table 7.1 displays the LOS analysis results for key roadway segments under the Horizon Year 2035 Base Conditions.

Table 7.1 Roadway Segment LOS Results – Horizon Year 2035 Base Conditions

| Roadway | Segment | Jurisdiction | Functional Classification | Average Daily Traffic (ADT) | Roadway Capacity (LOS E) | V/C | LOS |
|-------------------------|---|----------------------|---------------------------|-----------------------------|--------------------------|--------------|----------|
| West Hills Parkway | Mast Boulevard to Carlton Oaks Drive | San Diego | 4-Lane Collector | 17,420 | 30,000 | 0.581 | C |
| West Hills Parkway | Carlton Oaks Drive to Mission Gorge Road | San Diego | 4-Lane Collector | 17,420 | 30,000 | 0.581 | C |
| Mast Boulevard | SR-52 EB Ramps to SR-52 WB Ramps | San Diego / Caltrans | 4-Lane Major Arterial | 21,100 | 40,000 | 0.528 | C |
| Mast Boulevard | SR-52 WB Ramps to West Hills Parkway | San Diego / Caltrans | 4-Lane Major Arterial | 42,000 | 40,000 | 1.050 | F |
| Carlton Oaks Drive | West Hills Parkway to Wethersfield Road | Santee | 2-Lane Collector w/ TWLTL | 9,330 | 15,000 | 0.622 | C |
| Carlton Oaks Drive | Wethersfield Road Burning Tree Way | Santee | 2-Lane Collector w/ TWLTL | 9,330 | 15,000 | 0.622 | C |
| Carlton Oaks Drive | Burning Tree Way to Pebble Beach Drive | Santee | 2-Lane Collector w/ TWLTL | 9,330 | 15,000 | 0.622 | C |
| Carlton Oaks Drive | Pebble Beach Drive to Fanita Parkway | Santee | 2-Lane Collector w/ TWLTL | 9,330 | 15,000 | 0.622 | C |
| Carlton Oaks Drive | Fanita Parkway to Carlton Hills Boulevard | Santee | 2-Lane Collector w/ TWLTL | 14,050 | 15,000 | 0.937 | E |
| Carlton Hills Boulevard | Mast Boulevard to Carlton Oaks Drive | Santee | 4-Lane Major Arterial | 13,740 | 40,000 | 0.344 | A |
| Carlton Hills Boulevard | Carlton Oaks Drive to Mission Gorge Road | Santee | 4-Lane Major Arterial | 33,820 | 40,000 | 0.846 | D |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

V/C = Volume-to-Capacity

TWLTL = Two-way left-turn lane

¹ADT was adjusted from that included in the General Plan EIR due to increase in existing ADT on the segment



As shown in Table 7.1, all roadway segments are projected to operate at LOS D or better under Horizon Year 2035 Base Conditions with the following exception:

- Mast Boulevard (SR-52 WB Ramps to West Hills Parkway) (San Diego / Caltrans) - LOS F
- Carlton Oaks Drive (Fanita Parkway to Carlton Hills Boulevard) (Santee) - LOS E⁴

Intersection Analysis

Table 7.2 displays intersection LOS and average vehicle delay results under the Horizon Year 2035 Base Conditions. LOS calculation worksheets are provided in Appendix S.

Table 7.2 Peak Hour Intersection LOS Results – Horizon Year 2035 Base Conditions

| # | Intersection | Control | Jurisdiction | AM Peak Hour | | PM Peak Hour | |
|----|---|---------|----------------------|-------------------|----------|-------------------|-----|
| | | | | Avg. Delay (sec.) | LOS | Avg. Delay (sec.) | LOS |
| 1 | SR-52 EB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 13.3 | B | 26.6 | C |
| 2 | SR-52 WB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 22.9 | C | 17.0 | B |
| 3 | West Hills Parkway & Mast Boulevard | Signal | Santee / San Diego | 84.3 | F | 52.1 | D |
| 4 | West Hills Parkway & Carlton Oaks Drive | Signal | San Diego | 21.1 | C | 13.0 | B |
| 5 | Wethersfield Road & Carlton Oaks Drive | Signal | Santee | 6.3 | A | 5.5 | A |
| 6 | Pebble Beach Drive & Carlton Oaks Drive | Signal | Santee | 10.5 | B | 5.2 | A |
| 7 | Carlton Hills Boulevard & Carlton Oaks Drive | Signal | Santee | 56.1 | E | 41.4 | D |
| 8 | West Hills Parkway & Mission Gorge Road | Signal | San Diego | 51.4 | D | 24.0 | C |
| 9 | Carlton Hills Boulevard & Mission Gorge Road | Signal | Santee | 55.3 | E | 47.9 | D |
| 10 | West Hills Parkway & Project Driveway #1 | DNE | San Diego | 0.0 | A | 0.0 | A |
| 11 | Burning Tree Way/Project Driveway #2 & Carlton Oaks Drive | SSSC | Santee | 18.6 | C | 14.8 | B |
| 12 | Fanita Parkway/Project Driveway #3 & Carlton Oaks Drive | Signal | Santee | 28.2 | C | 12.5 | B |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

DNE = Does Not Exist.

SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches. Intersection delay and LOS shown above were evaluated using the Highway Capacity Manual 6th Edition (2016), whereas the delay and LOS shown in the City of Santee Mobility Element Update EIR were evaluated using HCM 2010. As such there is a slight difference between the intersection delay and LOS shown above vs. the Mobility Element Update EIR.

⁴ LOS E operations for this segment is consistent with findings of the City of Santee General Plan EIR



As shown in Table 7.2, all study area intersections are projected to operate at LOS D or better under Horizon Year 2035 Base Conditions during both AM and PM peak hour, with the following exceptions:

3. West Hills Parkway & Mast Boulevard (Santee / San Diego) - (AM: LOS F)
7. Carlton Hills Boulevard & Carlton Oaks Drive (Santee) - (AM: LOS E)
9. Carlton Hills Boulevard & Mission Gorge Road (Santee) - (AM: LOS E)

Freeway Segment Analysis

Table 7.3 displays freeway segment LOS results for the study area freeway mainline facilities under Horizon Year 2035 Base Conditions. The freeway segment LOS analysis was performed utilizing the methodology presented in Section 2.6. Freeway analysis calculation worksheets for Horizon Year 2035 Base Conditions are provided in Appendix T

Table 7.3 Freeway Segment Analysis – Horizon Year 2035 Base Conditions

| Peak Hour | Freeway | Segment | Dir. | # of Lanes | D | K | HVF | ADT | Peak Hour Volume | Average Speed | V/C | LOS |
|-----------|---------|--------------------------------|------|------------|--------|-------|-------|---------|------------------|---------------|------|-----|
| AM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 28.17% | 8.37% | 2.60% | 128,700 | 3,035 | 71.2 | 0.49 | B |
| | | | WB | 4 | 71.83% | 8.37% | 2.60% | | 7,738 | 60.1 | 0.89 | E |
| AM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 21.47% | 7.69% | 2.60% | 128,700 | 2,125 | 74.0 | 0.37 | B |
| | | | WB | 3 | 78.53% | 7.69% | 2.60% | | 7,772 | - | 1.38 | F |
| PM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 71.35% | 8.05% | 2.60% | 128,700 | 7,392 | - | 1.19 | F |
| | | | WB | 4 | 28.65% | 8.05% | 2.60% | | 2,968 | 71.9 | 0.34 | B |
| PM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 69.26% | 8.08% | 2.60% | 128,700 | 7,202 | - | 1.25 | F |
| | | | WB | 3 | 30.74% | 8.08% | 2.60% | | 3,197 | 72.9 | 0.57 | C |

Notes:

old and Grey Highlights indicate substandard LOS E or F.

D = Directional Split

K = Peak Hour Percentage

HVF = Heavy Vehicle Factor

ADT = Average Daily Traffic, ADT shown is for both directions.

As shown in Table 7.3, all of the freeway segments are projected to operate at acceptable LOS D or better under Horizon Year 2035 Base Conditions, with the exception of the following segments:

- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS E during the AM peak hour in the westbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the PM peak hour in the eastbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the PM peak hour in the eastbound direction

7.3 Horizon Year 2035 with Project Roadway Network and Traffic Volumes

This scenario includes Horizon Year 2035 Base Conditions with the addition of Proposed Project traffic. Roadway and intersection geometrics under the Horizon Year 2035 with Project Conditions were



assumed to be identical to the Near-Term Year 2026 Base conditions, as previously shown in Figure 6.1 and 6.2. with the exception of the two (2) new driveway connections.

Daily and peak hour intersection volumes for Horizon Year 2035 with Project Conditions were derived by adding the project trips to the Horizon Year 2035 traffic volumes, as previously shown in Figure 7.1 and Figure 7.2. Daily roadway and peak hour intersection volumes for this scenario are displayed in **Figure 7.3** and **Figure 7.4**, respectively.

7.4 Horizon Year 2035 with Project Traffic Conditions

LOS analyses were conducted using the methodologies described in Section 2.0. Roadway segment, intersection, and freeway LOS results are discussed below.

Roadway Segment Analysis

Table 7.4 displays the LOS analysis results for key roadway segments under the Horizon Year 2035 with Project Conditions.

As shown in **Table 7.3**, all study area roadway segments will continue to operate at LOS D or better under Horizon Year 2035 with Project Conditions, with the exception of the following two (2) roadway segments:

Mast Boulevard between SR-52 WB Ramps and West Hills Parkway (San Diego / Caltrans) - As shown in **Table 7.4**, Mast Boulevard between the SR-WB Ramps and West Hills Parkway is anticipated to operate at LOS F both with and without the Proposed Project under Horizon Year 2035 Conditions. Traffic associated with the Proposed Project will cause the volume to capacity (V/C) ratio of the segment to increase by 0.019. Since this roadway is currently built out to its ultimate classification (4-lane major arterial), no improvements are recommended for this study segment.

Carlton Oaks Drive between Fanita Parkway and Carlton Hills Boulevard (Santee) - As shown in **Table 7.4**, Carlton Oaks Drive between Fanita Parkway and Carlton Hills Boulevard is anticipated to operate at LOS E both with and without the Proposed Project under Horizon Year 2035 Conditions. Traffic associated with the Proposed Project will cause the volume to capacity (V/C) ratio of the segment to increase by 0.058. As noted in Section 2.7, the Proposed Project would have a critical effect on this roadway since it would be increasing the V/C ratio by more than 0.020 on a roadway operating at LOS E. The following improvement would improve roadway operations on Carlton Oaks Drive back to standard levels:

Adding a travel lane in each direction would increase the capacity of the roadway from a 2-Lane Collector with CLTL to a 4-Lane Major Arterial which would improve the operations to LOS A. However, this improvement is not recommended. To implement this improvement, additional right-of-way acquisition would be required from a built-environment, or the existing right of way would need to be repurposed at the expense of existing or planned active transportation facilities. The *Santee General Plan Mobility Element, October 2017* identified this segment of Carlton Oaks Drive as operating at LOS E under preferred plan conditions. Therefore, the projected operations along this segment are consistent with the vision set forth by the City's General Plan, and no additional improvements are recommended.

Intersection Analysis

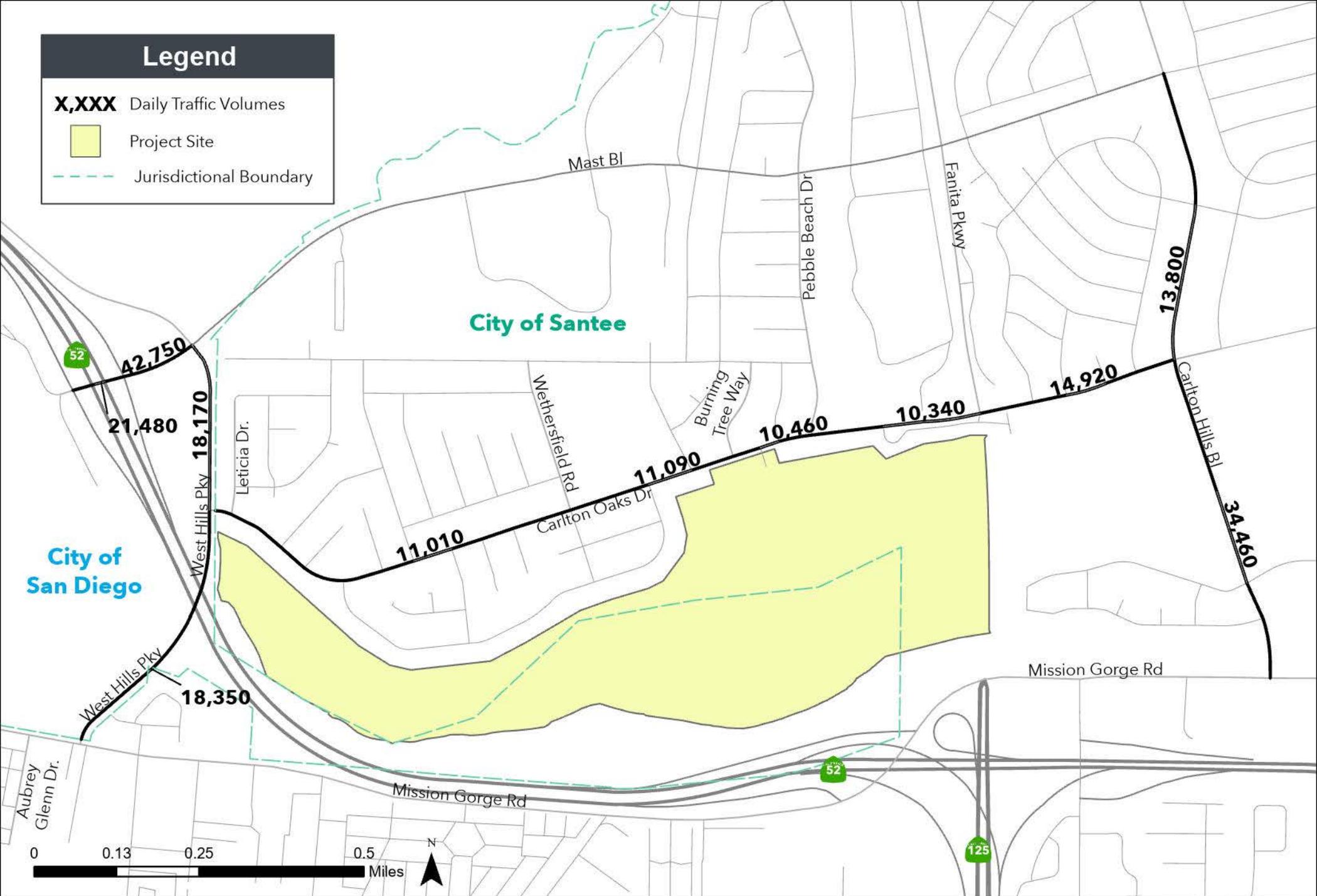
Table 7.4 displays intersection LOS and average vehicle delay results under the Horizon Year 2035 with Project Conditions. LOS calculation worksheets for this scenario are provided in **Appendix U**.

Legend

X,XXX Daily Traffic Volumes

 Project Site

 Jurisdictional Boundary



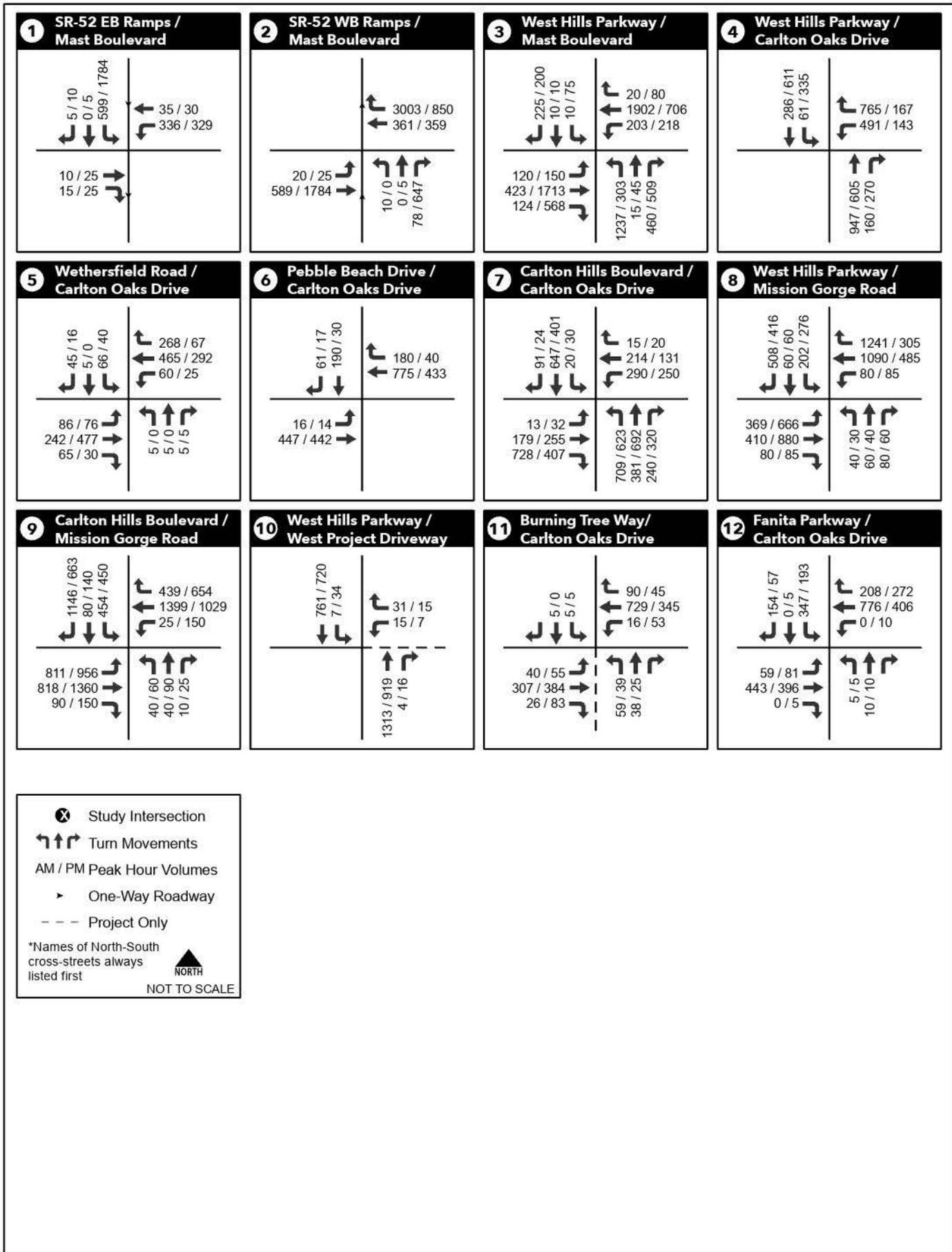


Figure 7.6

**Peak Hour Intersection Traffic Volumes
Horizon Year 2035 with Project Conditions**



Table 7.4 Roadway Segment LOS Results – Horizon Year 2035 with Project Conditions

| Roadway | Segment | Jurisdiction | Functional Classification | Average Daily Traffic (ADT) | Roadway Capacity (LOS E) | V/C w/o Project | LOS w/o Project | V/C w/ Project | LOS w/ Project | Δ V/C | CTE? |
|-------------------------|---|----------------------|---------------------------|-----------------------------|--------------------------|-----------------|-----------------|----------------|----------------|-------|------------|
| West Hills Parkway | Mast Boulevard to Carlton Oaks Drive | San Diego | 4-Lane Collector | 18,170 | 30,000 | 0.581 | C | 0.606 | C | 0.025 | No |
| West Hills Parkway | Carlton Oaks Drive to Mission Gorge Road | San Diego | 4-Lane Collector | 18,350 | 30,000 | 0.581 | C | 0.612 | C | 0.031 | No |
| Mast Boulevard | SR-52 EB Ramps to SR-52 WB Ramps | San Diego / Caltrans | 4-Lane Major Arterial | 21,480 | 40,000 | 0.528 | C | 0.537 | C | 0.010 | No |
| Mast Boulevard | SR-52 WB Ramps to West Hills Parkway | San Diego / Caltrans | 4-Lane Major Arterial | 42,750 | 40,000 | 1.050 | F | 1.069 | F | 0.019 | No |
| Carlton Oaks Drive | West Hills Parkway to Wethersfield Road | Santee | 2-Lane Collector w/ TWLTL | 11,010 | 15,000 | 0.622 | C | 0.734 | D | 0.112 | No |
| Carlton Oaks Drive | Wethersfield Road Burning Tree Way | Santee | 2-Lane Collector w/ TWLTL | 11,090 | 15,000 | 0.622 | C | 0.739 | D | 0.117 | No |
| Carlton Oaks Drive | Burning Tree Way to Pebble Beach Drive | Santee | 2-Lane Collector w/ TWLTL | 10,460 | 15,000 | 0.622 | C | 0.697 | D | 0.075 | No |
| Carlton Oaks Drive | Pebble Beach Drive to Fanita Parkway | Santee | 2-Lane Collector w/ TWLTL | 10,340 | 15,000 | 0.622 | C | 0.689 | D | 0.067 | No |
| Carlton Oaks Drive | Fanita Parkway to Carlton Hills Boulevard | Santee | 2-Lane Collector w/ TWLTL | 14,920 | 15,000 | 0.937 | E | 0.995 | E | 0.058 | Yes |
| Carlton Hills Boulevard | Mast Boulevard to Carlton Oaks Drive | Santee | 4-Lane Major Arterial | 13,800 | 40,000 | 0.344 | A | 0.345 | A | 0.001 | No |
| Carlton Hills Boulevard | Carlton Oaks Drive to Mission Gorge Road | Santee | 4-Lane Major Arterial | 34,460 | 40,000 | 0.846 | D | 0.862 | D | 0.016 | No |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

V/C = Volume-to-Capacity

CTE? = Critical Traffic Effect?

TWLTL = Two-way left-turn lane



Table 7.5 Peak Hour Intersection LOS Results – Horizon Year 2035 with Project Conditions

| # | Intersection | Control | Jurisdiction | Delay w/o Project (sec) AM/PM | LOS w/o Project AM/PM | AM Peak Hour | | PM Peak Hour | | Δ Delay (sec) | CTE? |
|----|---|---------|----------------------|-------------------------------|-----------------------|-------------------|----------|-------------------|-----|---------------|-------|
| | | | | | | Avg. Delay (sec.) | LOS | Avg. Delay (sec.) | LOS | | |
| 1 | SR-52 EB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 13.3 / 26.6 | B / C | 13.6 | B | 28.3 | C | 0.3 / 1.7 | N / N |
| 2 | SR-52 WB Ramps & Mast Boulevard | Signal | San Diego / Caltrans | 22.9 / 17.0 | C / B | 24.7 | C | 17.8 | B | 1.8 / 0.8 | N / N |
| 3 | West Hills Parkway & Mast Boulevard | Signal | Santee / San Diego | 84.3 / 52.1 | F / D | 85.5 | F | 54.5 | D | 1.2 / 2.4 | N / N |
| 4 | West Hills Parkway & Carlton Oaks Drive | Signal | San Diego | 21.1 / 13.0 | C / B | 25.0 | C | 16.6 | B | 3.9 / 3.6 | N / N |
| 5 | Wethersfield Road & Carlton Oaks Drive | Signal | Santee | 6.3 / 5.5 | A / A | 6.5 | A | 5.8 | A | 0.2 / 0.3 | N / N |
| 6 | Pebble Beach Drive & Carlton Oaks Drive | Signal | Santee | 10.5 / 5.2 | B / A | 11.0 | B | 5.4 | A | 0.5 / 0.2 | N / N |
| 7 | Carlton Hills Boulevard & Carlton Oaks Drive | Signal | Santee | 56.1 / 41.4 | E / D | 56.9 | E | 47.3 | D | 0.8 / 5.9 | N / N |
| 8 | West Hills Parkway & Mission Gorge Road | Signal | San Diego | 51.4 / 24.0 | D / C | 53.1 | D | 27.1 | C | 1.7 / 3.1 | N / N |
| 9 | Carlton Hills Boulevard & Mission Gorge Road | Signal | Santee | 55.3 / 47.9 | E / D | 56.3 | E | 49.8 | D | 1.0 / 1.9 | N / N |
| 10 | West Hills Parkway & Project Driveway #1 | SSSC | San Diego | 0.0 / 0.0 | A / A | 23.2 | C | 14.9 | B | 23.2 / 14.9 | N / N |
| 11 | Burning Tree Way/Project Driveway #2 & Carlton Oaks Drive | SSSC | Santee | 18.6 / 14.8 | C / B | 34.6 | D | 27.0 | D | 16.0 / 12.2 | N / N |
| 12 | Fanita Parkway/Project Driveway #3 & Carlton Oaks Drive | Signal | Santee | 28.2 / 12.5 | C / B | 30.5 | C | 12.8 | B | 2.3 / 0.3 | N / N |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

DNE = Does Not Exist.

SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches

CTE? = Critical Traffic Effect?



As shown in Table 7.5, all intersections in which the Proposed Project will add more than 50 peak hour trips are anticipated to operate at acceptable LOS D or better under Horizon Year 2035 Conditions, both without and with the proposed project, with the exception of the following three (3) intersections:

3. *West Hills Parkway & Mast Boulevard (Santee / San Diego)* - This intersection is anticipated to operate at LOS F during the AM peak hour, under both without and with project conditions. The addition of Proposed Project Traffic would increase the overall intersection delay by 1.2 seconds in the AM peak. Based on the standards outlined in Section 2.8 the Proposed Project would not critically affect this intersection.

7. *Carlton Hills Boulevard & Carlton Oaks Road (Santee)* - This intersection is anticipated to operate at LOS E during the AM peak hour, under both without and with project conditions. The addition of Proposed Project Traffic would increase the overall intersection delay by 0.8 seconds in the AM peak hour. Based on the standards outlined in Section 2.7 the Proposed Project would not critically affect this intersection.

9. *Carlton Hills Boulevard & Mission Gorge Road (Santee)* - This intersection is anticipated to operate at LOS E during the AM peak hour, under both without and with project conditions. The addition of Proposed Project Traffic would increase the overall intersection delay by 1.0 seconds in the AM peak hour. Based on the standards outlined in Section 2.7 the Proposed Project would not critically affect this intersection.

Freeway Segment Analysis

Table 7.6 displays freeway segment LOS results for the study area freeway mainline facilities under Horizon Year 2035 with Project Conditions. The freeway segment LOS analysis was performed utilizing the methodology presented in Section 2.6. Freeway analysis calculation worksheets for Horizon Year 2035 with Project Conditions are provided in **Appendix V**.

Table 7.6 Freeway Segment Analysis – Horizon Year 2035 with Project Conditions

| Peak Hour | Freeway | Segment | Dir. | # of Lanes | ADT w/ Project | Peak Hour Volume | Speed | V/C | LOS | Δ Speed | Δ V/C | CTE? |
|-----------|---------|--------------------------------|------|------------|----------------|------------------|-------------|-------------|----------|-------------|-------------|-----------|
| AM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 129,320 | 3,046 | 71.2 | 0.49 | B | 0.0 | 0.00 | No |
| | | | WB | 4 | | 7,769 | 59.9 | 0.90 | E | -0.2 | 0.01 | No |
| AM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 129,320 | 2,136 | 74.0 | 0.37 | B | 0.0 | 0.00 | No |
| | | | WB | 3 | | 7,803 | - | 1.38 | F | - | 0.00 | No |
| PM | SR-52 | I-15 Interchange to Santo Road | EB | 3 | 129,320 | 7,432 | - | 1.19 | F | - | 0.00 | No |
| | | | WB | 4 | | 2,986 | 71.9 | 0.34 | B | 0.0 | 0.00 | No |
| PM | SR-52 | Santo Road to Mast Boulevard | EB | 3 | 129,320 | 7,242 | - | 1.26 | F | - | 0.01 | No |
| | | | WB | 3 | | 3,215 | 72.8 | 0.57 | C | -0.1 | 0.00 | No |

Notes:

Bold and Grey Highlights indicate substandard LOS E or F.

ADT = Average Daily Traffic, ADT shown is for both directions.

Directional Split (D), Peak Hour Percentage (K), and Heavy Vehicle Factor (HVF) are the same as Horizon Year 2035 base conditions.

- = HCM methodology does not calculate freeway speed < 50 mph. Actual change in speed due to project cannot be calculated.

Δ Speed = Change in Speed from base conditions



As shown in Table 7.6, all of the freeway segments are projected to continue to operate at acceptable LOS D or better under Horizon Year 2035 with Project Conditions, with the exception of the following segments:

- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS E during the AM peak hour in the westbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the AM peak hour in the westbound direction
- SR-52 between I-15 Interchange and Santo Road (Caltrans) - LOS F during the PM peak hour in the eastbound direction
- SR-52 between Santo Road and Mast Boulevard (Caltrans) - LOS F during the PM peak hour in the eastbound direction

However, the Proposed Project will not add more than 0.01 V/C to any of the study segments nor will it decrease travel speeds by more than 1 mph. Therefore, based on the standards outlined in Section 2.7, the Proposed Project is not anticipated to critically affect freeway operations under Horizon Year 2035 with Project Conditions.

7.5 Recommended Improvements - Horizon Year 2035 with Project Conditions

This section identifies potential improvement measures under Horizon Year 2035 with Project Conditions.

Roadway

No roadway improvements are recommended with the implementation of the Proposed Project.

Intersection

No intersection improvements are recommended with the implementation of the Proposed Project.

Freeway

No freeway improvements are recommended with the implementation of the Proposed Project.



8.0 Systemic Safety Review (San Diego)

This section evaluates the study area intersections within the City of San Diego to determine if a study intersection meets any hotspot criteria identified in *Appendix C of the City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero*⁵. It should be noted that this analysis is based on collision data that was sampled throughout the City of San Diego and is intended to identify intersections that may have a higher potential for collisions to occur based upon nonlocational statistics. The analysis is solely based on the number of lanes at an intersection, the intersection control type, and the roadway volumes. This analysis does not account for, or provide any review of specific intersection design, signal timing, signage, travel speeds, sight distances, or collision history of the specific intersections. The analysis also does not project a specific probability for collisions to occur nor does it provide various tiers or degrees of severity. The analysis only identifies that the intersection has a similar number of lanes and traffic volume to other intersections within the City that have experienced collisions in the past. As shown in Figure 8-1, the intersections adjacent to the project site, located within the City of San Diego, have not experienced any pedestrian or bicycle collisions over the past five year (2020-2024). As such, there is no recent pedestrian or bicycle collision history or known safety issues at any of the study intersections within the City of San Diego.

Table 8.1 outlines the hotspot criteria identified within *Appendix C of the City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero* that the study area intersections are compared against.

Table 8.1 Systemic Safety Hotspot Criteria

| Matrix | # | Control | Intersection Configuration | Primary Roadway ADT | Secondary Roadway ADT |
|------------|---|------------------|---|---------------------|-----------------------|
| Pedestrian | 1 | Signalized | 3-Lane (1-Way) Intersects 3-Lane (1-Way) or 3-Lane (1- Way) Intersects 4-Lane (2-Way) | 7,001-15,000 | N/A |
| | 2 | Signalized | 4-Lane (2-Way) Intersects 2-Lane (2-Way) | 7,001-25,000 | N/A |
| | 3 | Signalized | 2-Lane (2-Way) Intersects 4-Lane (2-Way) | 15,001-25,000 | N/A |
| Bicycle | 1 | Signalized | 4-Lane Intersects 2-Lane or 4-Lane Intersects 4-Lane | N/A | N/A |
| | 2 | Side-Street Stop | 2-Lane Intersects 2-Lane | N/A | N/A |
| Vehicle | 1 | Signalized | 4-Lane (2-Way) Intersects 2-Lane (2-Way) | >15,000 | ≤7,000 |
| | 2 | Signalized | N/A | >15,000 | >7,000, |
| | 3 | Signalized | N/A | N/A | >7,000, |
| | 4 | Signalized | 3-Lane (One-Way) Intersects 3-Lane (One-Way) | ≤15,000 | >7,000 |

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Table 8.2 summarizes the features of the study area intersections located within the City of San Diego and Identifies if they, meet any of the hotspot criteria identified in Table 8.1.

⁵ <https://www.sandiego.gov/sites/default/files/systemic-safety-the-data-driven-path-to-vision-zero.pdf>

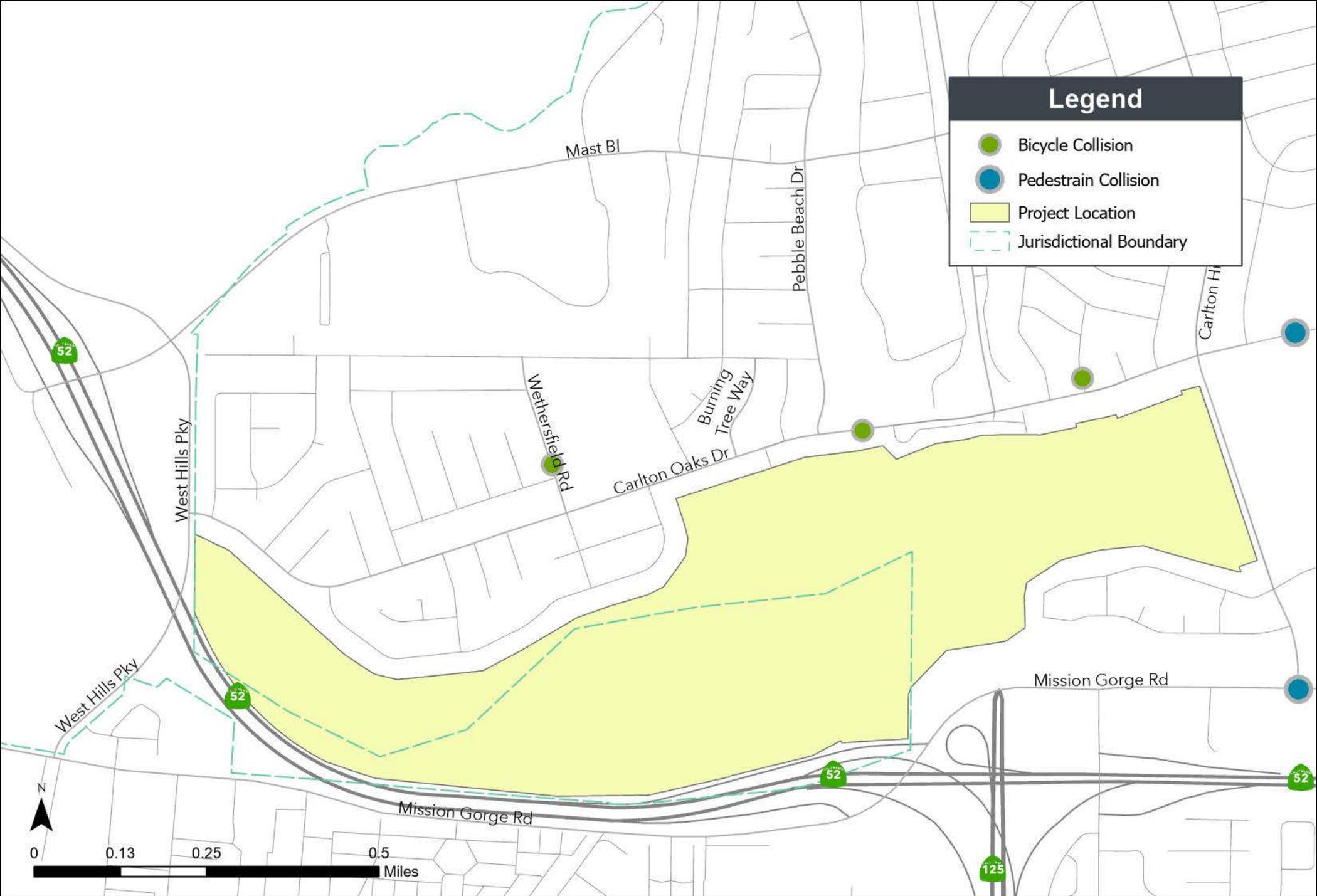


Figure 8.1
Pedestrian And Bicycle Collisions
Year 2020-2024



Table 8.2 Systemic Safety Hotspot Analysis (San Diego)

| # | Intersection | Control | Intersection Configuration | Primary Roadway ADT | Secondary Roadway ADT | Potential Hotspot |
|----|--|-----------------------------|---|---------------------|-----------------------|--|
| 3 | West Hills Parkway & Mast Boulevard | Signalized | 4-Lane (2-way) Intersects 4-Lane (2-way) | 29,664 | 12,878 | Bicycle Matrix - Intersection Footprint #1 |
| 4 | West Hills Parkway & Carlton Oaks Drive | Signalized | 4-Lane (2-way) Intersects 2-Lane (2-way) | 12,878 | 5,510 | Pedestrian Matrix - Intersection Footprint #2 |
| 8 | West Hills Parkway & Mission Gorge Road | Signalized | 4-Lane (2-way) Intersects 4-Lane (2-way) | 16,744 | 10,966 | Bicycle Matrix - Intersection Footprint #1 |
| 10 | West Hills Parkway & Project Driveway #1 | Side-Street Stop Control | 4-Lane (2-way) Intersects 2-Lane (2-way) | 10,966 | 748 | No |

As shown in Table 8.2, three of the project study intersections within the City of San Diego meet the hotspot criteria outlined in *Appendix C of the City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero*. It should be noted that all three intersections would be considered a hotspot both with or without the implementation of the Proposed Project; thus, the Proposed Project is not responsible for triggering any of the hotspots. In other words, the intersections are identified as a hotspot due to its current configuration and traffic conditions and therefore are considered an existing condition (deficiency). Additionally, the *City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero* does not include any thresholds or standards for when a development project would be responsible for a fair-share contribution towards the implementation of counter measures that may offset a specific hotspot, nor does the document identify what counter measures should be implemented at a particular intersection, nor determine which counter measure(s) would be sufficient to offset a specific hotspot. Finally, since there is no collision history or identified safety issues at any of the analyzed intersections (as shown in Figure 8-1) there is no indication that the Proposed Project would create a systemic safety issue. In any event the Proposed Project will implement the following project design features per Appendix C of the *City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero* :

4. *West Hills Parkway & Mast Boulevard* -Bicycle detection added to the approaches of the intersection where Class II Bicycle Lanes are present.
5. *West Hills Parkway & Carlton Oaks Drive* - Continental cross-walks installed at all legs of the intersection, pedestrian countdown signals installed at each corner of the intersection, and lead pedestrian intervals for all crossing phases of the intersection, if the current signal controller can accommodate it.
8. *West Hills Parkway & Mission Gorge Road* -Bicycle detection added to the approaches of the intersection where Class II Bicycle Lanes are present.



9.0 Access Analysis

This Section addresses access to the project site and discusses the functionality of the project's internal circulation.

9.1 Driveway Access

Access to the Proposed Project will be provided via three driveways.

- *Project Driveway #1 (San Diego)* - constructed along east side of West Hills Parkway, south of Carlton Oaks Drive, and will create the eastern leg of a new side-street stop-controlled intersection with full access. Improvements will be implemented by the Proposed Project to construct a turn pocket for the southbound left-turn movement to allow vehicles to safely enter the project driveway. One lane will be constructed for traffic entering the driveway and another for traffic exiting the driveway.
- *Project Driveway #2 (Santee)* - constructed along the south side of Carlton Oaks Drive, and will create the southern leg of the Burning Tree Way / Carlton Oaks Drive intersection with full access. This intersection will continue to operate as a side-street stop-controlled intersection with minor streets Burning Tree Way and Project Driveway #2 in the City of San Diego. One lane will be constructed for traffic entering the driveway and another for traffic exiting the driveway.

Two emergency access points will also be provided. The first will be located at the southern leg of the Carlton Oaks Drive / Fanita Parkway intersection. This access point will be gated and not open to the public except during times of emergency. The emergency access will utilize the existing private driveway for the Vista del Verde Condominiums. The second emergency access point will be along West Hills Parkway directly north of Driveway #2. This access will only be open during times of emergency as well.

The project will also provide a private utility/maintenance road between Residential West and Residential North that would also serve as a pedestrian/golf cart passageway connecting Residential West to the resort. This roadway would not be considered a fire apparatus access road but would be built to California Fire Code requirements and could be used as an emergency evacuation route, if needed.

Based upon review of the project site plan, the following comments on site access are offered:

- The Proposed Project should construct all driveways in accordance with City of Santee or City of San Diego standards, based on their respective locations.
- The proposed Project should construct all internal roadways in accordance with the City of Santee standards.
- Each Proposed Project driveway will require a sight distance evaluation, which will be submitted to the City within the Proposed Project's design plans.

9.2 Driveway LOS

As shown in Table 7.5, both driveways are anticipated to operate at acceptable LOS D or better under the Horizon Year 2035 with Project conditions. Both project driveways would be constructed as side street stop-controlled intersections. Due to community concern, signal warrants were conducted for both unsignalized intersections. **Table 9.1** displays the signal warrant analysis results.



Table 9.1 Intersections Signal Warrants Results

| # | Intersection | Jurisdiction | Conditions A – Minimum Vehicular Volume | Condition B – Interruption of Continuous Traffic | Conditions A + B |
|----|---|--------------|---|--|------------------|
| 10 | West Hills Parkway & Project Driveway #1 | San Diego | No | No | No |
| 11 | Burning Tree Way/Project Driveway #2 & Carlton Oaks Drive | Santee | No | No | No |

As shown in Table 9.1, both intersections do not meet signal warrants, therefore signalization of these intersections is not recommended. Intersection signal warrants worksheets are provided in **Appendix W**.

9.3 Driveway Queue Analysis

Per the City of San Diego’s TSM, a 95th percentile queuing analysis was conducted for Project Driveway #1 (located within the City of San Diego) to determine the extent of intersection queuing under Near-Term Year 2026 with Project. **Table 9.2** identifies the intersection control, pocket length, 95% queue length and excess queue (if applicable) for each movement identified to approaching critical capacity at the study area intersections. Intersection queuing reports are provided in Appendix U.

Table 9.2 Peak Hour Intersection 95th Percentile Queuing Analysis – Near-Term Year 2026 with Project Conditions

| ID | Intersection | Traffic Control | Jurisdiction | Turning Movement | Pocket Length (ft) | AM / PM 95% Queue Length (ft) ¹ | AM / PM Excess Queue (ft) | Project Trips Added to Movement (AM/PM) |
|----|--|-----------------|--------------|------------------|--------------------|--|---------------------------|---|
| 10 | West Hills Parkway & Project Driveway #1 | SSSC | San Diego | SBL | 120 | 0 / 6 | 0 / 0 | 7 / 34 |
| | | | | WBL & WBR | 115 | 21 / 6 | 0 / 0 | WBL: 15 / 7 WBR: 31 / 15 |

Notes:

SSSC = Side-street stop-control

Bold indicates calculated 95th percentile queue that exceeds storage length via HCM 6th methodology.

¹A vehicle length of 30 feet was assumed to calculate the queue length.

As shown, the vehicle queues at Project Driveway #1 and on West Hills Parkway are expected to fit within anticipated pocket lengths and would not impede traffic at the driveway for vehicles entering and exiting the project driveway.

9.4 Site Access and Circulation

The City of San Diego’s TSM requests the analysis of the following items related to site access and on-site circulation.

Driveway Analysis

- Review of proposed driveways (i.e., widths, curb returns, spacing, permitted turn movements, accommodation of delivery vehicles, etc.) for consistency with applicable City standards.
- Adequacy of throat depths to accommodate entering traffic. Detailed sight distance analysis (in accordance with the City’s Street Design Manual) for driveways on streets with horizontal and/or vertical curvature (or with other potential sight distance constraints).

The Project applicant has submitted design plans to the City of San Diego for the proposed driveway location on West Hills Parkway and to the City of Santee for the Project Driveways located on Carlton Oaks Drive. Prior to pulling grading permits, the Project applicant will be required to submit sight analyses and design plans for all access points and internal streets, which must be approved by City of Santee and San



Diego. This will ensure that the access design is consistent with the relevant City's design manual and sight distance standards.

Internal Circulation

- Review of parking lots/garages for adequate vehicle circulation and parking maneuvers
- On-site circulation of bicycles and pedestrians including to/from parking areas and drop-off/pick-up activity
- On-site circulation of fire/emergency vehicles
- On-site circulation of delivery trucks and location of delivery bays/drop-off areas
- On-site circulation of trash trucks and location of trash enclosures

As noted previously, all Proposed Project land uses, and on-site circulation facilities are located within the City of Santee and the Project applicant is working with the City of Santee to develop specific plans for on-site circulation which will cover the items listed above. Any final plans will be reviewed for consistency with the City of Santee's regulations, policies, and design guidelines and approved by the City of Santee's Traffic Engineer prior to construction of the Proposed Project.

Parking/Loading Zones/Curbside Utilization

- On-Street Parking/Off-Street Parking
- Electric Vehicle (EV) Charging Stations
- Delivery Vehicle Space
- Areas for Transportation Network Company (TNC) Drop-Off/Pick-Up
- Bicycle/Scooter Share

As noted previously, all Proposed Project land uses, and on-site parking facilities are located within the City of Santee. At this time, the Project Applicant is working with the City of Santee to develop specific plans for on-site parking which will generally cover the items listed above. Any final plans will be reviewed and approved by the City of Santee's Traffic Engineer prior to construction of the Proposed Project.



10.0 Recommended Improvements Summary

This Section provides a summary of the recommended improvements to reduce the critical traffic effects caused by the Proposed Project.

Roadway

No additional roadway improvements are recommended with the implementation of the Proposed Project.

Intersection

No additional intersection improvements are recommended with the implementation of the Proposed Project.

95th Percentile Queue

West Hills Parkway & Carlton Oaks Drive (San Diego)

- *Left-turn movement from southbound West Hills Parkway to eastbound Carlton Oaks Drive*
- Extending the turn pocket for this turn movement is feasible and would require re-striping of the median along West Hills Parkway. A conceptual drawing that displays the feasibility of the extension is provided in Appendix K.

Freeway

No additional freeway improvements are recommended with the implementation of the Proposed Project.

Pedestrian Facilities

All sidewalks adjacent to the projects site are contiguous and in adequate condition without any gaps. However, the intersection of Carlton Oaks Drive / Burning Tree Way was identified to have missing curb ramps on the southeastern and southwestern corners, as well as missing truncated domes on the northeastern corner. Since the Proposed Project will be modifying this intersection to provide project access, it is recommended that all curb ramps be improved to meet current ADA standards.

Bicycle Facilities

SANDAG is in the process of constructing a segment of the San Diego River Park Pathway extending a distance of approximately two miles between Carlton Hills Boulevard and West Hills Parkway through Mast Park, Mast Park West, and the Carlton Oaks Golf Course in the Plateau area Carlton ("SANDAG Segment"). A portion of the SANDAG Segment would be located at the boundary of the Golf Course's southern edge near the river. A Mitigated Negative Declaration ("MND") was prepared to address any potential environmental effects related to the construction of the pathway. (Final Initial Study/Mitigated Negative Declaration, June 2017, State Clearinghouse No. 2017031037). The SANDAG Segment is planned to be funded through Transnet, the regional half-cent sales tax for transportation administered by SANDAG, although construction funds have not yet been identified.

Class I Multi-Use Paths are planned to be constructed within the Project study area, as identified in the Santee General Plan Mobility Element, Figure 7-2. Policy 7.4 of Santee's General Plan Mobility Element requires new development to provide connections to existing and proposed bicycle routes, where appropriate.

Trail Segments

The San Diego River Trail is a regional Class I multi-use path that runs along the San Diego River and connects the Lakeside Baseball Fields to the western terminus of the City of Santee. Currently there is a gap in the trail between the intersection of Mast Boulevard/SR-52 eastbound ramps and the eastern proposed project boundary. The San Diego Association of Governments (SANDAG) has developed a plan to complete this portion of the San Diego River Trail by constructing it along the southern edge of



the project site. A Mitigated Negative Declaration was adopted on June 16, 2017 (SANDAG 2017), and the bicycleway is currently in the engineering design phase; a construction schedule has yet to be set. The SANDAG segment would be funded through Transnet, the regional half-cent sales tax for transportation administered by SANDAG, although construction funds have not yet been identified. The segment of the San Diego River Trail that runs along the project boundary is not part of the proposed project, but the project applicant would continue to work with the City of Santee, City of San Diego, and SANDAG to ensure that the proposed project's design would not impede implementation of the trail.

As part of the proposed project, a multipurpose public trail would be provided on the northern side of the San Diego River, linking with existing and planned trails east and west of the site (termed the Project Trail Segment herein, see **Figure 4.2**). A portion of the Project Trail Segment on the eastern side of the project site would begin at the entrance of Residential North at Carlton Oaks Drive, traverse through the resort and along the southeastern border of the project site, and end slightly west of the jurisdictional line between the City of Santee and the City of San Diego. This portion of the trail would vary in width from 6 to 10 feet and be a decomposed granite path. Safety fencing, approximately 10 feet tall, would be constructed along the Project Trail Segment adjacent to the golf course. Additionally, this portion of the trail would link to the existing Mast Park West Trail and to the future planned trail known as the Carlton Oaks Golf Course Segment (SANDAG 2017).

A portion of the Project Trail Segment on the western side of the project site would be constructed beginning at the City of Santee's jurisdictional line and ending at the property line. This portion of the trail would be 10 feet wide and consist of decomposed granite. Safety fencing would be constructed along the Project Trail Segment adjacent to the golf course. This portion of the trail would link to the future planned trail known as the Carlton Oaks Golf Course Segment. In addition, the project applicant would provide an Irrevocable Offer of Dedication for portions of the Carlton Oaks Golf Course Segment that are within the project site but are not being constructed by the project applicant; these sections would be provided on the project's subdivision map.

Along the Residential West boundary, a 14-foot-long graded bench (located within the Carlton Oaks Golf Course Segment) would be provided within the easement areas that the City of San Diego would grant to the applicant as part of this project.

In addition to the trail alignment currently proposed through Residential North and the resort area, a supplemental trail Offer of Dedication is shown on project site plan, should the City of Santee request this supplemental trail alignment. The supplemental trail Offer of Dedication is for a trail that would be 12 feet wide and start from an area east of the resort parking lot to the property line of the Vista del Verde community. The supplemental trail would be within the project development footprint analyzed in this EIR. The applicant is not proposing to construct this trail segment as part of the project, and this segment is only an alternative to the proposed Project Trail Segment located through the resort.

Based on discussions with the City of San Diego, the Proposed Project will implement a graded bench on both the north and south side of the Proposed Project's western driveway to accommodate the future Carlton Oaks segment of the San Diego River Trail to accommodate the future trail, as shown in **Figure 10.1**.

Transit Facilities

It is recommended that the Proposed Project coordinate with MTS to install red curbs at West Hills Parkway and Carlton Oaks Drive bus stop (Stop ID: 88948), if necessary.

