TIERRA REJADA GOLF COURSE
MODIFIED CONDITIONAL USE PERMIT (CUP)
CASE NO. PL19-0100

A. PROJECT INFORMATION

1. **Request:** The applicant requests that a modified Conditional Use Permit (CUP) be granted to authorize the continued operation of an existing golf course and ancillary outdoor non-golf special event uses for an additional 30-year period. (Case No. PL19-0100)

1. **Property Owner/Applicant:** Ralph Mahan, 15255 Tierra Rejada Road, Moorpark, CA 93021

2. **Applicant's Representative:** Nichole Garner, Jensen Design and Survey, 1672 Donlon Street, Ventura, CA 93002

3. **Decision-Making Authority:** Pursuant to Section 8105-5 and Section 8111-6.1.3 of the Ventura County Non-Coastal Zoning Ordinance (NCZO), the Planning Director is the decision-maker for the requested modified CUP.

4. **Project Site Size, Location, and Parcel Number:** The 183-acre project site is located at 15187 Tierra Rejada Road, near the intersection of Tierra Rejada Road and CA State Route 23, near the city of Moorpark, in the unincorporated area of Ventura County. The Tax Assessor's parcel number for the parcel that constitute the project site is 500-0-450-025. (Exhibit 2).

5. **Project Site Land Use and Zoning Designations (Exhibit 2):**

    a. Countywide General Plan Land Use Map Designation: Open Space

    b. Zoning Designation: OS-40-ac/HCWC/CWPA (Open Space, 40-acre minimum lot size/Habitat Connectivity Wildlife Corridor/Critical Wildlife Passage Area

6. Adjacent Zoning and Land Uses/Development (Exhibit 2):

Location in Relation to the Project Site	Zoning	Land Uses/Development
North	OS-40-ac/HCWC/CWPA	Tierra Rejada Golf Club
South	OS-40-ac/HCWC/CWPA	Agriculture Orchard
East	OS-10-ac/HCWC/CWPA	Golf driving range, Open Space, Agriculture field
West	OS-10-ac/HCWC	CA State Route 23

7. History:

The following table summarizes the permitting history of the Tierra Rejada Golf Club:

Date	Permit Granted	Case No.	Decision-maker	Explanation
1-14-97	CUP 4933	N/A	BOS (on appeal)	CUP granted to authorize construction and operation of a golf driving range. The approved facility included 30 tee boxes, three practice holes, a 46-space parking lot, and a 1,452 square foot (SF) accessory building.
1-29-98	CUP 4933-1	N/A	PC	Modified CUP granted to authorize an 18-hole golf course, driving range, and appurtenant structures. The approved structures included a 5,000 square foot Operations Building with 190 parking spaces and 8,400 square foot Maintenance Building with 20 parking spaces. Permit term established at 25 years ending on January 29, 2023.
3-5-98	Permit Adjustment No. 1	N/A	PD	Conditions of approval (62 through 64) were added to the CUP to address biological resource issues.
12-14-98	Permit Adjustment No. 2	N/A	PD	This adjustment authorized changes to the ancillary structures to the golf course. The 6480 square foot basement of the Maintenance Building was eliminated. The cart barn was relocated to a separate 5,620 square foot building. The 8400 square foot Maintenance Building was split into two phases of 4800 SF (Phase 1) and 3600 SF (Phase 2). *(Note: The 3600 SF*

				Phase 2 was never built and is no longer authorized by the CUP.) The fertilizer/pesticide building was enlarged by 300 SF to 1500 SF. The entryway to the facility was redesigned
9-8-99	Permit Adjustment No. 3	N/A	PD	This adjustment authorized the enclosure of approximately 200 square feet of the Operations Building for use as storage of patio furniture.
8-20-08	Permit Adjustment No. 4	LU08-0083	PD	This adjustment authorized the use of a 2,100 square-foot temporary tent structure for tournament events for a two-year period, ending September 1, 2010.
12-3-08	CUP 4933-2	LU06-0020	PD	This modified CUP authorized: a) construction of a 3,700 square-foot Tournament Building for special events. *(This building was never constructed and is no longer authorized.)* b) temporary use of a 2,100 square foot tent for the special events until the construction of the permanent Tournament building. (The temporary tent has been removed for the project site and is no longer part of the CUP permit); and c) limited special events as follows: • 4:00 p.m. and 11:00 p.m. Saturday and Sunday; • maximum number of 200 guests; • maximum of 100 special events per year; • events to be held inside of the proposed Tournament building or in the temporary tent; and, • one event rehearsal the day prior to the event limited to the following: • limited to two hours maximum; • no food, drink, music, or other entertainment; • maximum of 20 attendees; and, • non-peak hours (9:00 a.m. to 3:00 p.m. and after 6:30 p.m. Monday through Friday, and all-day Saturday and Sunday).

On December 9, 2010, a Notice of Violation (Case No. PV10-0111) was issued to the property owners of record for failure to remove the temporary tent, which was authorized by Permit Adjustment No. 3 for CUP 4933. On January 25, 2013, a Close Out Letter was sent to the property owners of record to verify that the temporary tent was removed, and the Violation was fully abated.

8. Project Description:

The applicant requests that a modified Conditional Use Permit (CUP) be granted to authorize the continued operation of an existing golf course and ancillary outdoor non-golf special event uses for an additional 30-year period.

Golf Course Operations and Structures:

The existing facility that would continue in operation for a requested 30-year term includes an 18-hole public golf course, driving range, 186-space parking lot and various accessory structures. These accessory structures include the following:

a) Operations Building (7,289 SF)

b) Covered Patio attached to Clubhouse (800 SF)

c) Maintenance Building 1 (5,625 SF)

d) Maintenance Building 2 (4,800 SF)

e) Pergola with permeable roof (under 120 SF)

f) Storage Building (400 SF)

g) Driving Range Storage (75 SF)

h) Main Pump Station Housing (1,000 SF)

i) Fire Pump Station/Restroom (600 SF)

j) 30 tee boxes, three (3) practice holes, putting green and chipping area

k) TJ's Bar and Grille (Clubhouse) (located within Operations Building)

The Operations Building houses a Pro Shop, TJ's Bar and Grille (Clubhouse) and small storage area, separated by an open breezeway. The Pro Shop is 2,370 SF, TJ's Bar and Grille (Clubhouse) is 3,169 SF, the storage area is 340 SF, and the open breezeway is 1,410 SF.

The golf course would continue to remain open 7 days per week during daylight hours. (Exhibit 3)

Non-golf special event uses:

The applicant is requesting that the previously authorized 100 non-golf outdoor special event days per calendar year (CUP 4933) continue to occur on the project site as an ancillary use to the golf club for a 30-year term. No new permanent or temporary structures are proposed.

Event activities would continue to be held in a central location on the property, just north of the existing operations building. Rehearsals would continue to be limited to one, 2-hour rehearsal on one day, and continue to occur during non-peak hours (9:00am to 3:00pm and after 6:30pm Monday through Friday, and all day on Saturday and Sunday) with no amplified sound or music.

Non-golf special events would continue to overlap with regular golf club operational hours except for the proposed annual 1,000-attendee event (attendee count is to include all onsite staff and vendor staff). On that day, the golf course would not be in operation and the 1,000-attendee event would occur in the central location, just north of the existing operations building and on the golf course greens.

Non-golf events would continue to be generally catered by the existing onsite restaurant, TJ's Bar and Grille (Clubhouse). TJ's Bar and Grille can serve 100 plated meals or can serve 300 guests with a buffet. Outside vendors would serve food at events that exceed these thresholds.

In addition to requesting a 30-year continuance of outdoor special events, the applicant is proposing the following modifications for events and rehearsals:

Events:

- Increase the number of attendees from 200 to 300 attendees or less for no more than ninety-nine (99) event days per calendar year.

- Increase the number of attendees from 200 to 1,000 attendees or less for one (1) event day per calendar year. Condition of Approval No. 24 (Exhibit 8) would require that event security be present for this requested event. Security would be provided by the event organizer.

- Authorize events to occur on every day of the week, instead of being limited to 4:00pm to 11:00pm on Saturday and Sunday only. The requested time limitations would be as follows:

    - The requested 99 events with 300 attendees or less would occur from 8:00am to 10:00pm on Sunday through Thursday, and from 8:00am to Midnight (12:00am) on Fridays and Saturdays.

- The requested one event with 1,000 attendees or less would occur from 10:00am to 7:00pm (during daylight savings time) on any day of the week.

Rehearsals:

- Increase the maximum number of attendees from 20 to 50 attendees.
- Authorize food and drink service during rehearsals. Such service is not authorized by CUP 4933.
- Authorize that rehearsals do not count as one of the 100 event days.

B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE

Pursuant to CEQA (Public Resources Code §21000 et seq.) and the State CEQA Guidelines (Title 14, California Code or Regulations, Division 6, Chapter 3, §15000 et seq.), the subject application is a "project" that is subject to environmental review.

On January 29, 1998 the Planning Commission adopted a Mitigated Negative Declaration (MND) that evaluated the environmental impacts of a golf course, a driving range, and construction of appurtenant buildings.

Section 15164(b) of the CEQA Guidelines (Title 14, California Code of Regulations, Chapter 3) states that the decision-making body may adopt an addendum to an adopted MND if (1) only minor technical changes or additions are necessary; and (2) none of the conditions described in Section 15162 of the CEQA Guidelines calling for the preparation of a subsequent Environmental Impact Report (EIR) or mitigated negative declaration have occurred.

The project is comprised of minor changes to, and the continued operation of, an existing facility that has been in operation for more than 20 years. As indicated in the attached MND Addendum (Exhibit 4), none of the conditions described in Section 15162 of the CEQA Guidelines have occurred. Thus, the MND Addendum satisfies the environmental review requirements of CEQA.

C. CONSISTENCY WITH THE GENERAL PLAN

The Ventura County NCZO (Section 8111-1.2.1.1.a) states that in order to be approved, a project must be found consistent with all applicable policies of the Ventura County General Plan.

Evaluated below is the consistency of the proposed project with the applicable policies of the 2040 General Plan.

CTM-1.4 Level of Service (LOS) Evaluation:

County General Plan land use designation changes and zone changes shall be evaluated for their individual (i.e., project-specific) and cumulative effects, and ***discretionary developments shall be evaluated for their individual effects****, on Level of Service (LOS) on existing and future roads, to determine whether the project:*

a. Would cause existing roads within the Regional Road Network or County-maintained roadways that are currently functioning at an acceptable LOS to function below an acceptable LOS;

b. Would add traffic to existing roads within the Regional Road Network or County-maintained roadways that are currently functioning below an acceptable LOS; and

c. Could cause future roads planned for addition to the Regional Road Network or County-maintained roadways to function below an acceptable LOS.

d. The Level of Service (LOS) evaluation shall be conducted based on methods established by the County.

Staff Analysis:
The proposed project's individual effect on LOS was evaluated in the traffic study prepared by Stantec (March 10, 2020). The change in proposed events would not generate traffic during the AM peak hour. Project trip generation estimates therefore focused on the weekday PM peak hour, during which existing commuter traffic in the study area network could overlap with traffic generated by a Special Event.

The traffic study concluded that the project would not have a significant effect on LOS for the area, as summarized below (Table 5 from Stantec Report).

Table 5
Existing plus Project Intersection Peak Hour Levels of Service

Intersection	Existing PM Peak Hour Sec. of Delay/LOS	Existing + Project PM Peak Hour Sec. of Delay/LOS	Project-Specific Impact?
1. Los Angeles Ave (SR 118)/Tierra Rejada Rd	34.3 sec/LOS C	34.7 sec/LOS C	No
2. Los Angeles Ave (SR 118)/SR 23 SB Ramps	13.6 sec/LOS B	13.6 sec/LOS B	No
3. Los Angeles Ave (SR 118)/SR 23 NB Ramps	6.5 sec/LOS A	6.5 sec/LOS A	No
4. Tierra Rejada Rd/Moorpark Rd	14.4 sec/LOS B	14.5 sec/LOS B	No
5. Tierra Rejada Rd/SR 23 SB Ramps	14.5 sec/LOS B	14.5 sec/LOS B	No
6. Tierra Rejada Rd/SR 23 NB Ramps	21.0 sec/LOS C	22.1 sec/LOS C	No

Based on the above discussion, the proposed project is consistent with this policy.

LU-16.1 Community Character and Quality of Life: *The County shall encourage discretionary development to be designed to maintain the distinctive character of unincorporated communities, to ensure adequate provision of public facilities and services, and to be compatible with neighboring uses.*

PFS-1.7 Public Facilities, Services, and Infrastructure Availability: *The County shall only approve discretionary development in locations where adequate public facilities, services, and infrastructure are available and functional, under physical construction, or will be available prior to occupancy.*

Staff Analysis: Water, road access, sewage disposal and all other necessary services will continue to be available to the project site to serve the proposed land uses.

Based on the above discussion, the proposed project is consistent with these policies.

PFS-3.2 Fair Share of Improvement Costs: *The County shall require development to pay its fair share of community improvement costs through impact fees, assessment districts, and other mechanisms.*

Staff Analysis:

The project will be conditioned to pay the Traffic Impact Mitigation Fee (Exhibit 8, Condition No. 25). No other developer fees have been identified for the proposed CUP modification.

Based on the above discussion, the proposed project is consistent with this policy.

PFS-4.2 Onsite Wastewater Treatment Systems: *The County may allow the use of onsite wastewater treatment systems that meet the state Water Resources Control Board Onsite Wastewater Treatment System Policy, Ventura County Sewer Policy, Ventura County Building Code, and other applicable County standards and requirements.*

Staff Analysis: Sewage disposal for the project site will continue to be accommodated on the project site through the use of an existing onsite wastewater treatment system. This system is operated under permit issued by the Regional Water Quality Control Board (RWQCB) and satisfies all applicable regulatory requirements.

Based on the above discussion, the proposed project is consistent with this policy.

PFS-6.1 Flood Control and Drainage Facilities Required for Discretionary Development: *The County shall require discretionary development to provide flood control and drainage facilities, as deemed necessary by the County Public Works Agency and Watershed Protection District. The County shall also require discretionary development to fund improvements to existing flood control facilities necessitated by or required by the development.*

Staff Analysis: The proposed project does not involve a change in the area of impervious surfaces or any alteration to the existing drainage facilities on the project site. Project implementation will not require the development of new flood control facilities or improvements in existing facilities.

Based on the above discussion, the proposed project is consistent with this policy.

PFS-11.4 Emergency Vehicles Access: *The County shall require all discretionary development to provide, and existing development to maintain, adequate access for emergency vehicles, including two points of access for subdivisions and multifamily developments.*

Staff Analysis: The proposed project includes driveways and gated entrances to the existing facilities. These gates will continue to be required to satisfy VCFPD requirements for emergency access. These driveways, the existing parking lot, and Tierra Rejada Road will provide adequate access for emergency vehicles.

Based on the above discussion, the proposed project is consistent with this policy.

PFS-12.3 Adequate Water Supply, Access, and Response Times for Firefighting Purposes: *The County shall prohibit discretionary development in areas that lack and cannot provide adequate water supplies, access, and response times for firefighting purposes.*

Staff Analysis: The proposed project includes driveways and gated entrances to the existing facilities. These gates will continue to be required to satisfy VCFPD requirements for emergency access. These driveways, the existing parking lot, and Tierra Rejada Road will provide adequate access for emergency vehicles.

Water will continue to be provided to the project site by the Camrosa Water District in a manner that meets the fire flow standards of the VCFPD. The project site is located approximately 4.2 miles from two separate fire stations. Thus, the available response time will meet VCFPD requirements.

Based on the above discussion, the proposed project is consistent with this policy.

WR-1.11 Adequate Water for Discretionary Development: *The County shall require all discretionary development to demonstrate an adequate long-term supply of water.*

Staff Analysis: Water will continue to be provided to the project site by Camrosa Water District and therefore, as demonstrated, the project will continue to receive an adequate long-term supply of water. As project implementation does not propose any new installation of landscaping or structures, the demand for water use is not expected to substantially increase.

Based on the above discussion, the proposed project is consistent with this policy.

D. ZONING ORDINANCE COMPLIANCE

The proposed project is subject to the requirements of the Ventura County NCZO.

Pursuant to the requirements of the Ventura County NCZO (Section 8105-5), the proposed use is allowed in the OS-40-ac/HCWC/CWPA zone district with the granting of a CUP. Upon the granting of the CUP, the proposed project will comply with the requirements of the Ventura County NCZO.

The proposed project is located within the Habitat Connectivity Wildlife Corridor and Critical Wildlife Passage Area Overlay Zones and, therefore, is subject to the standards of the Ventura County NCZO (Sections 8104-7.7 and 8104-7.8) Table 1 lists the applicable Habitat Connectivity Wildlife Corridor and Critical Wildlife Passage Area Overlay Zone standards and a description of whether the proposed project complies with those standards.

Table 1 – Habitat Connectivity Wildlife Corridor and Critical Wildlife Passage Area Overlay Zone Standards Consistency Analysis

Overlay Zone Standard	Complies?
Sec. 8104-7.7(a): Minimize the indirect impacts to wildlife created by outdoor lighting, such as disorientation of nocturnal species and the disruption of mating, feeding, migrating, and the predator-prey balance. *Sec. 8104-7.7(b): Preserve the functional connectivity and habitat quality of surface water features, due to the vital role they play in providing refuge and resources for wildlife.* *Sec. 8104-7.7(c): Protect and enhance wildlife crossing structures to help facilitate safe wildlife passage.* *Sec. 8104-7.7(d): Minimize the introduction of invasive plants, which can increase fire risk, reduce water availability, accelerate erosion and flooding, and diminish biodiversity within an ecosystem.* *Sec. 8104-7.7(e): Minimize wildlife impermeable fencing, which can create barriers to food and water, shelter, and breeding access to unrelated members of the same species needed to maintain genetic diversity.*	Yes. Non-Golf Tournament Special Events will utilize existing lighting at the facility (for the Operations Building, Maintenance Buildings, TJ's Bar and Grille (clubhouse), and parking lot; there is no existing lighting for the golf course itself. No permanent outdoor lighting will be installed for Non-Golf Tournament Special Events. All temporary outdoor lighting will be removed from the site after the special event has ended. Additionally, temporary outdoor lighting for special events is exempt from Habitat Connectivity Wildlife Corridor Overlay Zone regulations per Section 8109-4.8.2.2 of the Ventura County NCZO.
Sec. 8104-7.8: There are three critical wildlife passage areas that are located entirely within the boundaries of the larger Habitat Connectivity and Wildlife Corridors overlay zone. These areas are particularly critical for facilitating wildlife movement due to any of the following: (1) the existence of intact native habitat or other habitat with important beneficial values for wildlife; 2) proximity to water bodies or ridgelines; 3) proximity to critical roadway crossings; 4) likelihood of encroachment by future development which could easily disturb wildlife movement and plant dispersal; or 5) presence of non-urbanized or undeveloped lands within a geographic location that connects core habitats at a regional scale	Yes. Project implementation will not include any new permanent barriers or impediments for potential wildlife passage.

E. CUP FINDINGS AND SUPPORTING EVIDENCE

The Planning Commission must make certain findings in order to grant a CUP pursuant to Section 8111-1.2.1.1 of the Ventura County NCZO. The ability to make the required findings is evaluated below.

1. **The proposed development is consistent with the intent and provisions of the County's General Plan and of Division 8, Chapters 1 and 2, of the Ventura County Ordinance Code [Section 8111-1.2.1.1.a].**

   Based on the information and analysis presented in Sections C and D of this staff report, the finding that the proposed development is consistent with the intent and provisions of the County's General Plan and of Division 8, Chapters 1 and 2, of the Ventura County Ordinance Code can be made.

2. **The proposed development is compatible with the character of surrounding, legally established development [Section 8111-1.2.1.1.b].**

   The proposed project is comprised of the continued operation of an existing golf course and the continued allowance of the project site for non-golf related special events. No substantial change in the design or use of the existing buildings and ancillary facilities on the project site are proposed. No new effect on community character or on neighboring uses will result from project implementation.

   Based on the above discussion, this finding can be made.

3. **The proposed development would not be obnoxious or harmful, or impair the utility of neighboring property or uses [Section 8111-1.2.1.1.c].**

   The continued operation of the existing golf course would not result in any new effects on the environment.

   In summary, no aspect of project implementation has been identified that would be obnoxious, harmful or impair the utility of neighboring property or uses.

   Based on the discussion above, this finding can be made.

4. **The proposed development would not be detrimental to the public interest, health, safety, convenience, or welfare [Section 8111-1.2.1.1.d].**

   The proposed project involves the continued operation of a golf course. Project implementation would not substantially alter the intensity of activity and no aspect of the proposed project has been identified that would be detrimental to the public interest, health, safety, convenience, or welfare.

   Based on the discussion above, this finding can be made.

5. **The proposed development, if allowed by a Conditional Use Permit, is compatible with existing and potential land uses in the general area where the development is to be located [Section 8111-1.2.1.1.e].**

The proposed project is comprised of the continued operation of an existing golf course. Furthermore, conditions of approval (Exhibit 8) would be included with this project to ensure adequate and ongoing conformance with all pertinent Ventura County NCZO requirements for the site (i.e.: maintenance, signage and landscaping).

Given the OS-40 ac/HCWC/CWPA zoning and utilization of this area for recreational uses, a future change in zoning, General Plan designation or land use is not foreseeable at this time.

Based on the discussion above, this finding can be made.

6. The proposed development will occur on a legal lot [Section 8111-1.2.1.1f].

The subject property is a legal lot created as Parcel 3 of Parcel Map Waiver No. PMW 863 that is recorded as 56PM11.

Based on the above discussion, this finding can be made.

7. The proposed development is approved in accordance with the California Environmental Quality Act and all other applicable laws.

As discussed in Section B of this staff report and Exhibit 4, the proposed project has been reviewed in compliance with the CEQA Guidelines.

Based on the discussion above, this finding can be made.

F. PLANNING COMMISSION HEARING NOTICE, PUBLIC COMMENTS, AND JURISDICTIONAL COMMENTS

The Planning Division provided public notice regarding the Planning Director hearing in accordance with the Government Code (Section 65091) and the Ventura County NCZO (Section 8111-3.1). On February 3, 2021, the Planning Division mailed notice to owners of property within 500 feet of the property on which the project site is located. On February 8, 2021, the Planning Division placed a legal ad in the *Ventura County Star*. As of the date of this document, no comments from the public have been received by the Planning Division.

The project site is located within the City of Moorpark's Area of Interest. Therefore, on September 26, 2019 the Planning Division notified the City of Moorpark of the proposed project and requested the City of Moorpark to submit any comments that the City might have on the proposed project. On October 10, 2019, the City of Moorpark responded with a memo stating no concern with the continued use of the

Golf Club but did have concerns with event-related traffic on city streets and potential issues of noise for nearby residential uses. In response to the City of Moorpark's concerns, the applicant submitted a revised Traffic and Circulation Study (Exhibit 6) and Technical Sound Analysis Study (Exhibit 7) adequately addressing all concerns.

G. RECOMMENDED ACTIONS

Based upon the analysis and information provided above, Planning Division Staff recommends that the Planning Director take the following actions:

1. **CERTIFY** that the Planning Director has reviewed and considered this staff report and all exhibits thereto, and has considered all comments received during the public comment process;

2. **FIND** that the Addendum to the MND (Exhibit 4) satisfies the environmental review requirements of CEQA pursuant to the CEQA Guidelines;

3. **MAKE** the required findings to grant a modified CUP pursuant to Section 8111-1.2.1.1 of the Ventura County NCZO based on the substantial evidence presented in Section E of this staff report and the entire record;

4. **GRANT** modified CUP PL19-0100, subject to the conditions of approval (Exhibit 8); and,

5. **SPECIFY** that the Clerk of the Planning Division is the custodian, and 800 S. Victoria Avenue, Ventura, CA 93009 is the location, of the documents and materials that constitute the record of proceedings upon which this decision is based.

The decision of the Planning Director will be made within 40 days of the public hearing. This decision is final unless appealed to the Planning Commission within 10 calendar days after the permit has been granted, conditionally granted, or denied (or on the following workday if the 10th day falls on a weekend or holiday). Any aggrieved person may file an appeal of the decision with the Planning Division. The Planning Division shall then set a hearing date before the Planning Commission to review the matter at the earliest convenient date.

If you have any questions concerning the information presented above, please contact John Kessler at (805) 654-2461 or john.kessler@ventura.org.

Prepared by:

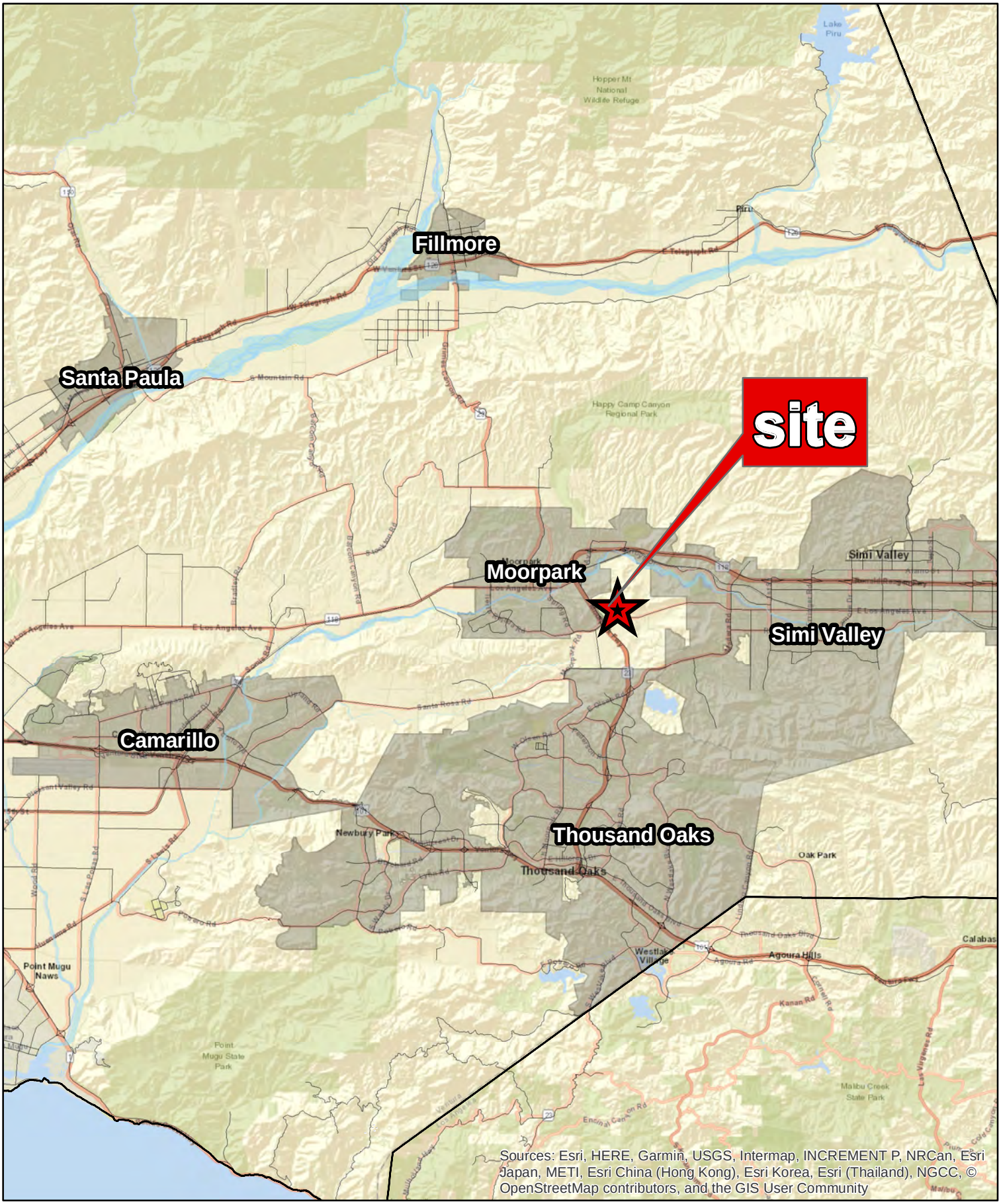
John Kessler, Case Planner
Commercial and Industrial Permits
Ventura County Planning Division

Reviewed by:

Mindy Fogg, Manager
Commercial and Industrial Permits
Ventura County Planning Division

EXHIBITS

Exhibit 2	Maps
Exhibit 3	Site Plan
Exhibit 4	Addendum to the MND
Exhibit 5	Mitigated Negative Declaration
Exhibit 6	Traffic and Circulation Study
Exhibit 7	Technical Sound Analysis
Exhibit 8	Conditions of Approval



Ventura County, California
Resource Management Agency
GIS Development & Mapping Services
Map created on 09-25-2019

RMAgis

County of Ventura
Planning Director Hearing
Case No. PL19-0100
Exhibit 2 - Maps

0 8,000 16,000 Feet

Disclaimer: This Map was created by the Ventura County Resource Management Agency, Mapping Services - GIS which is designed and operated solely for the convenience of the County and related public agencies. The County does no twarrant the accuracy of this mapand no decision involving a risk of economic loss or physical injury should be made in reliance thereon.

RH

Ventura County
Resource Management Agency
Information Systems GIS Services
Map created on 09-25-2019
Source: Pictometry: Nov 2017

RMAgis

County of Ventura
Planning Director Hearing
Aerial Photography
PL19-0100

0 250 500 1,000 Feet

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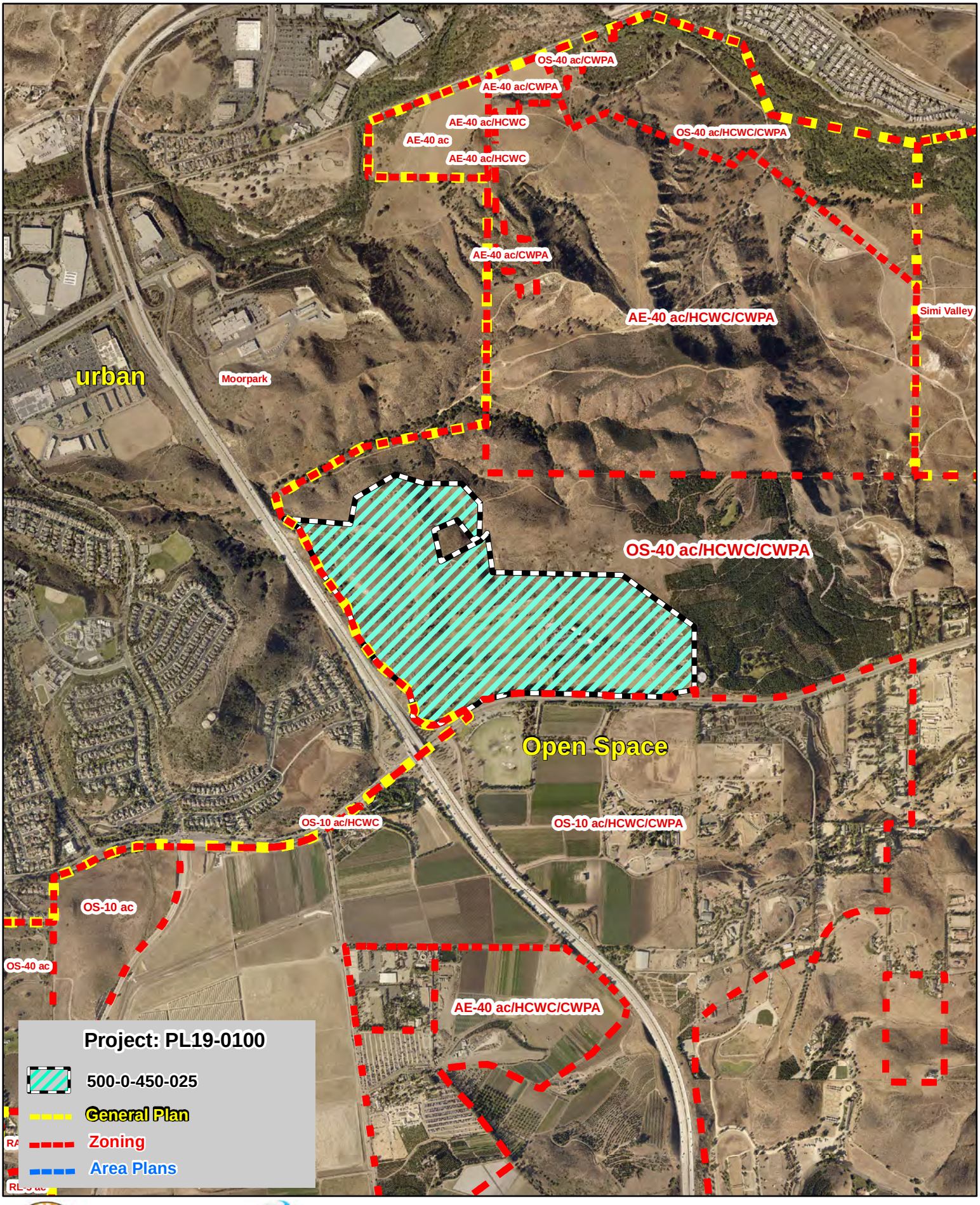
RH



Ventura County
Resource Management Agency
Information Systems GIS Services
Map created on 09-25-2019
Source: Pictometry: Nov 2018

RMAgis

County of Ventura
Planning Director Hearing
General Plan & Zoning Map
PL19-0100

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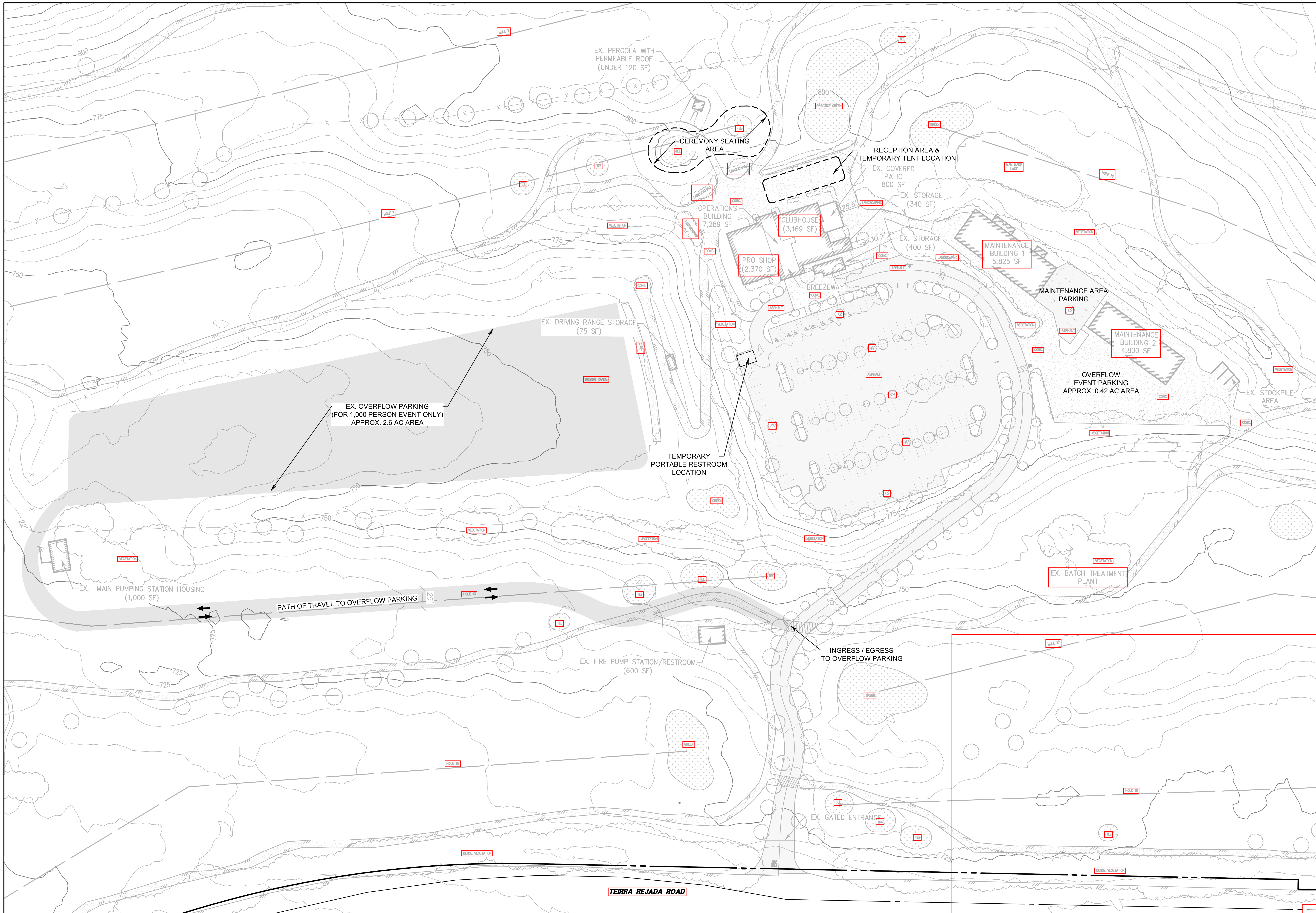
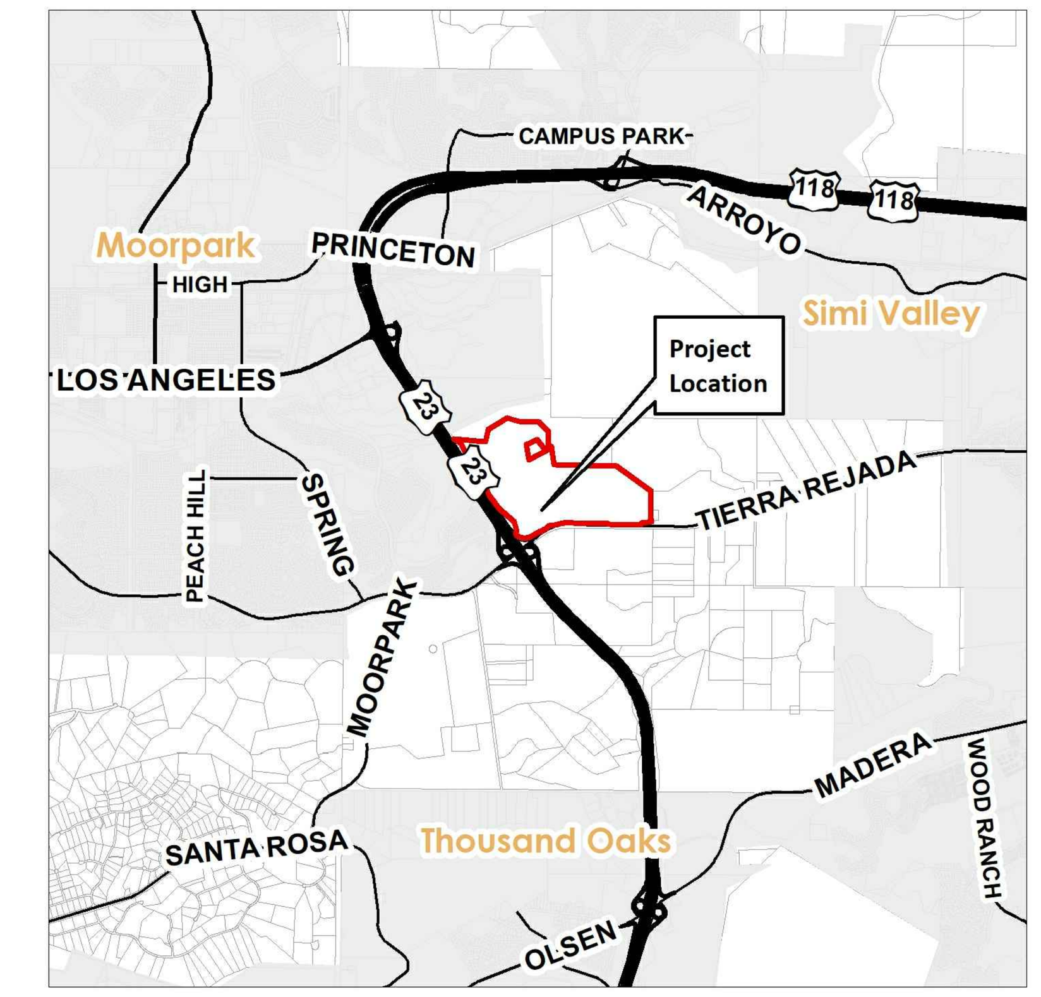




VICINITY MAP

NOT TO SCALE

LAND USE INFORMATION

PROPERTY OWNER:	MAHAN RANCH LLC 8275 POSITA ROAD SOMIS, CA 93066
PROPERTY LESSEE:	TIERRA REJADA GOLF CLUB 15255 TIERRA REJADA ROAD MOORPARK, CA 93021
LAND USE CONSULTANT:	JENSEN DESIGN & SURVEY, INC. 1672 DONLON STREET VENTURA, CA 93003
PROPERTY ADDRESS:	15187 TIERRA REJADA ROAD MOORPARK, CA 93021
APN:	500-0-450-025
ZONING:	OS-40 AC
GENERAL PLAN:	OPEN SPACE
LOT SIZE:	183.56 ACRES

EXISTING STRUCTURES & PARKING

PERMITTED STRUCTURES		LOT COVERAGE AREA (SQUARE FOOTAGE)
1. OPERATIONS BUILDING		7,289 SF
CLUBHOUSE:	3,169 SF	
PRO SHOP:	2,370 SF	
BREEZEWAY:	1,410 SF	
STORAGE:	340 SF	
2. COVERED PATIO		800 SF
3. MAINTENANCE BUILDING 1		5,625 SF
4. MAINTENANCE BUILDING 2		4,800 SF
5. STORAGE BUILDING		400 SF
6. DRIVING RANGE STORAGE		75 SF
7. MAIN PUMP STATION HOUSING		1,000 SF
8. FIRE PUMP STATION/RESTROOM		600 SF
TOTAL:		20,589 SF

PARKING

PARKING REQUIREMENTS:	PARKING SPACES
GOLF COURSE (3 SPACES/18 HOLE):	54
DRIVING RANGE (1 SPACE/30 TEES):	30
COMMERCIAL USE (1 SPACE/300 SF):	8
EATING ESTABLISHMENT (1 SPACE/90 SF):	36
TOTAL PARKING REQUIRED:	128 SPACES

PARKING PROVIDED:

VISITOR PARKING AREA:	166 STANDARD SPACES 8 HANDICAP SPACES
MAINTENANCE AREA:	12 STANDARD SPACES
TOTAL PARKING PROVIDED:	186 SPACES

LEGEND

EXISTING	PROPOSED
PROPERTY LINE	OVERFLOW PARKING INGRESS/EGRESS
EDGE OF PAVEMENT	CEREMONY & RECEPTION AREAS
VEGETATION	
CONCRETE	
ASPHALT	
LIGHT POLE	
PARKING SPACE	
FENCE	
FIRE HYDRANT	

60' 30' 0' 60' 120'

GRAPHIC SCALE: 1"=60'

NOTE:

INFORMATION SHOWN HEREON, SUCH AS ASSESSOR'S PARCEL LINES & NUMBERS ARE PROVIDED BY THE COUNTY OF VENTURA GEOGRAPHIC INFORMATION SYSTEMS AND IS NOT BASED ON A FIELD SURVEY. ADDITIONAL EASEMENTS OF RECORD NOT SHOWN ON THIS MAP MAY EXIST AS A TITLE REPORT WAS NOT PROVIDED FOR THIS PROJECT. THIS DATA IS FOR CONCEPTUAL AND VISUAL PURPOSES ONLY AND IS NOT TO BE USED FOR MAPPING AND/OR FINAL DESIGN.

County of Ventura
Planning Director Hearing
Case No. PL19-0100
Exhibit 3 - Site Plan

JENSEN DESIGN & SURVEY, INC
www.jdscivil.com
1672 DONLON STREET
VENTURA, CALIF. 93003
PHONE 805/654-6977
FAX 805/654-6979

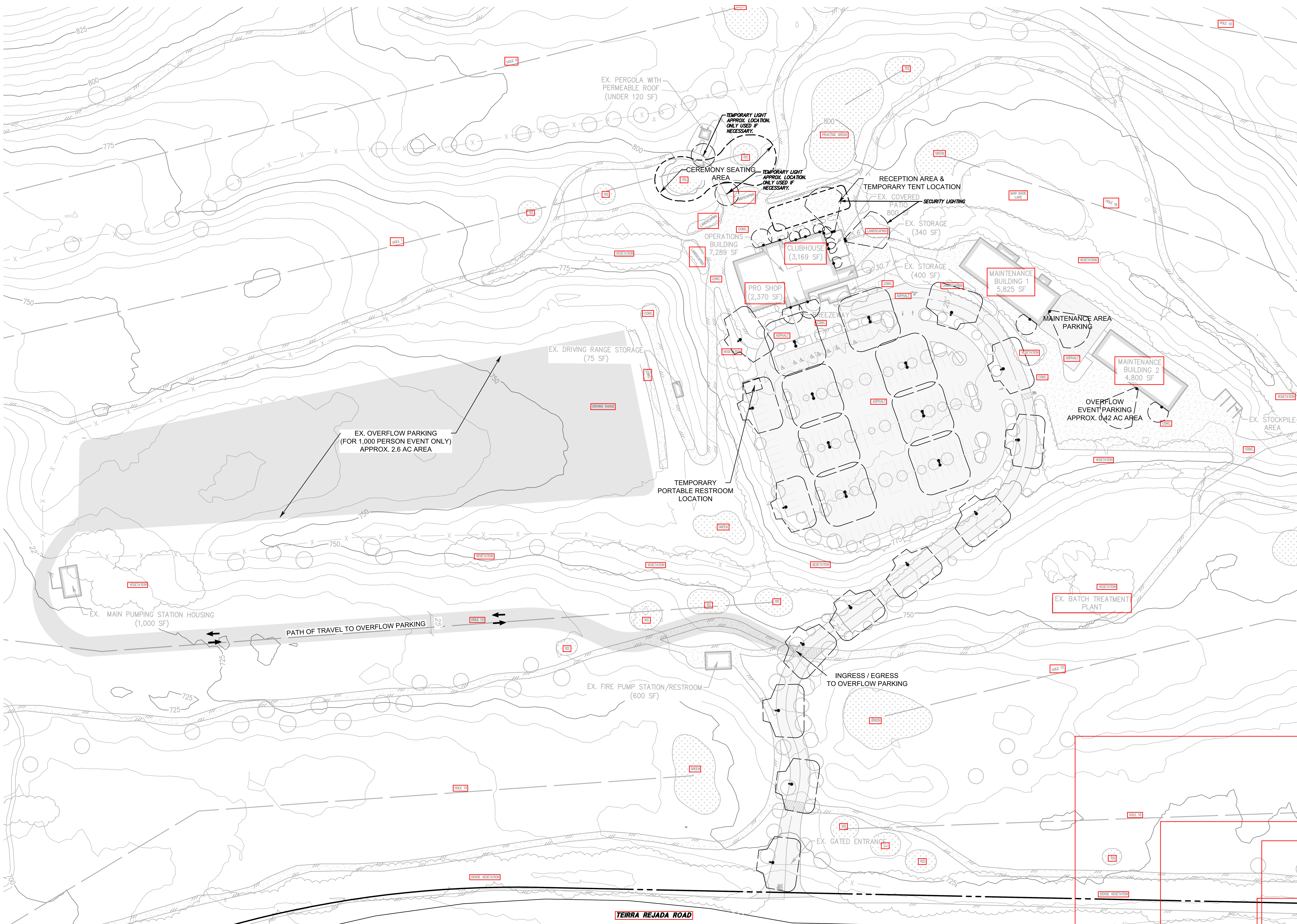
SCALE: 1" = 80' | J.N.: MAH01.6042
DATE: 9/11/2019 | DWG. NAME: 6042 CUP SITE PLAN.dwg

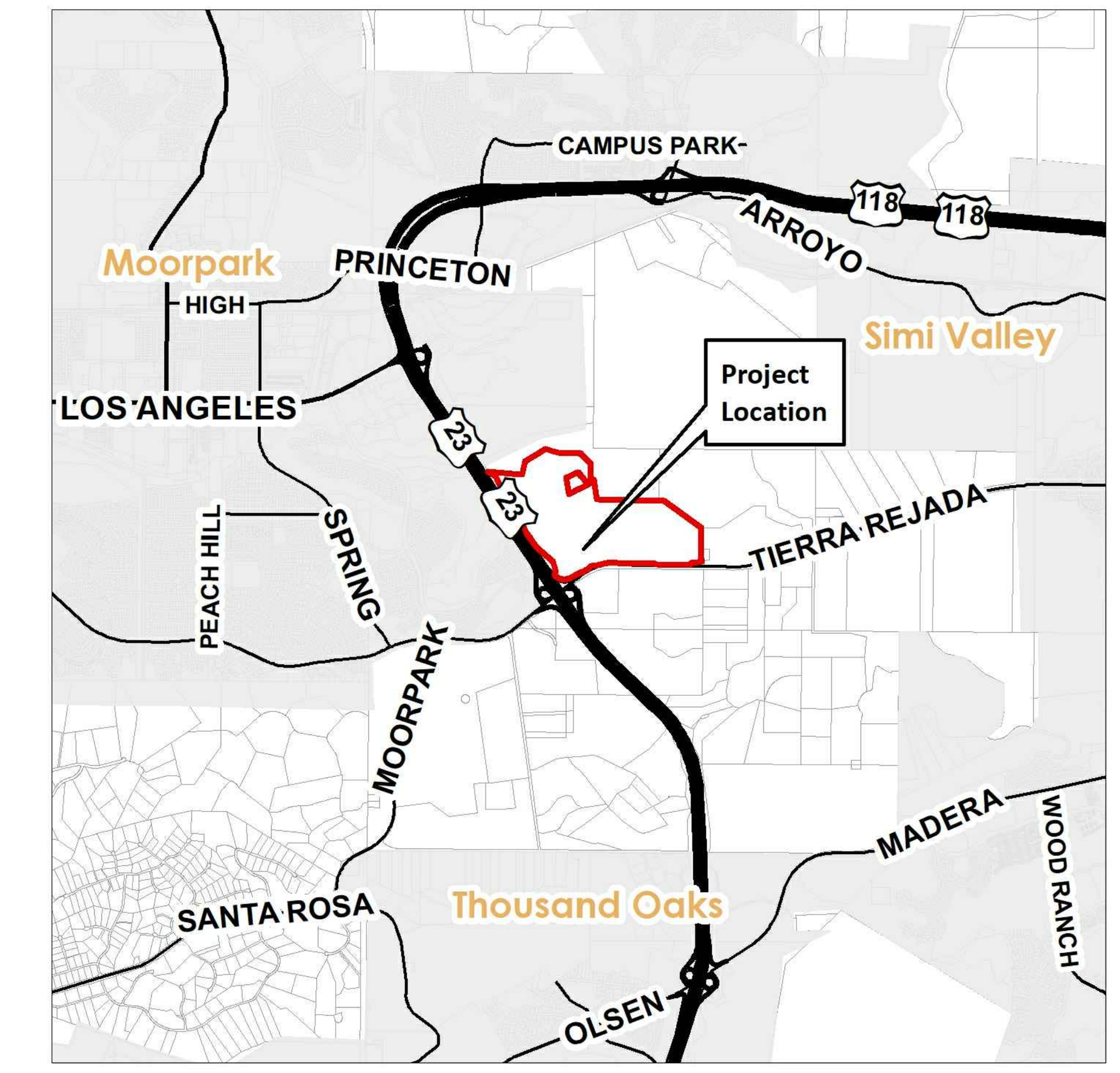
CUP 4933 MINOR MOD SITE PLAN FOR TIERRA REJADA GOLF CLUB

15187 Tierra Rejada Road
City of Moorpark

COUNTY OF VENTURA — STATE OF CALIFORNIA

SHEET 1 OF 1





VICINITY MAP
NOT TO SCALE

LIGHTING & SECURITY PLAN LEGEND

Symbol	Description
✷●	POLE MOUNTED LIGHT
✷●✷	POLE MOUNTED LIGHT– DOUBLE HEAD
✷	WALL MOUNTED OR FREESTANDING LIGHT
✷ (grey)	TEMPORARY LIGHT FIXTURE. NOT OPERATIONAL OUTSIDE OF PERMITTED TEMP. EVENTS.
⌒	APPROXIMATE LIGHTING EXTENTS FROM EACH LIGHT FIXTURE

NOTES

1) TEMPORARY LIGHT LOCATIONS SHOWN ARE APPROXIMATE. TEMPORARY LIGHTS MAY BE PLACED ANYWHERE WITHIN THE CEREMONY & RECEPTION AREAS. TEMPORARY LIGHTS WILL ONLY BE USED WHEN NEEDED DURING TEMPORARY EVENTS. LIGHTS WILL BE REMOVED & STORED WHEN NOT IN USE.
2) ALL LIGHTS SUBJECT TO THE PROVISIONS OF SECTION 8109–4.8.2 OF THE VENTURA COUNTY NON–COASTAL ZONING ORDINANCE (WILDLIFE CORRIDORS OVERLAY ZONE– OUTDOOR LIGHTING) SHALL BE COMPLIANT WITH THE APPLICABLE STANDARDS ESTABLISHED IN THIS SECTION.
3) PURSUANT TO SECTION 8109–4.8.2.2 OF THE VENTURA COUNTY NON–COASTAL ZONING ORDINANCE, THE FOLLOWING TYPES OF OUTDOOR LIGHTING ARE EXEMPT FROM WILDLIFE CORRIDOR STANDARDS:
   - –TEMPORARY OUTDOOR LIGHTING ASSOCIATED WITH A USE AUTHORIZED BY THIS CHAPTER.
   - –LIGHTING ON PUBLIC AND PRIVATE STREETS
   - –PARKING AREA LIGHTING
4) SECURITY GUARDS MAY BE PROVIDED BY EVENT ORGANIZER ON AN AS–NEEDED BASIS.
5) NO NEW PERMANENT LIGHTING IS PROPOSED.

LEGEND

EXISTING		PROPOSED	
— – —	PROPERTY LINE	(grey fill)	OVERFLOW PARKING INGRESS/EGRESS
	EDGE OF PAVEMENT	— — —	CEREMONY & RECEPTION AREAS
	VEGETATION		
	CONCRETE		
	ASPHALT		
	LIGHT POLE		
	PARKING SPACE		
—x—	FENCE		
	FIRE HYDRANT		

NOTE:

INFORMATION SHOWN HEREON, SUCH AS ASSESSOR'S PARCEL LINES & NUMBERS ARE PROVIDED BY THE COUNTY OF VENTURA GEOGRAPHIC INFORMATION SYSTEMS AND IS NOT BASED ON A FIELD SURVEY. ADDITIONAL EASEMENTS OF RECORD NOT SHOWN ON THIS MAP MAY EXIST AS A TITLE REPORT WAS NOT PROVIDED FOR THIS PROJECT. THIS DATA IS FOR CONCEPTUAL AND VISUAL PURPOSES ONLY AND IS NOT TO BE USED FOR MAPPING AND/OR FINAL DESIGN.

JENSEN DESIGN & SURVEY, INC
www.jdscivil.com
1672 DONLON STREET
VENTURA, CALIF. 93003
PHONE 805/654-6977
FAX 805/654-6979

SCALE: 1" = 60'
J.N.: MAH01.6042
DATE: 1/3/2020
DWG. NAME: 6042 Temporary Lighting Plan.dwg

CUP 4933 MINOR MOD.
TIERRA REJADA GOLF CLUB
TEMP. EVENTS LIGHTING & SECURITY PLAN

15187 Tierra Rejada Road
Moorpark, CA

COUNTY OF VENTURA
STATE OF CALIFORNIA

SHEET 1 OF 1

J:\MAH16042\Planning\Exhibits\6042 Temporary Lighting Plan.dwg Jan 03, 2020

MITIGATED NEGATIVE DECLARATION (MND) ADDENDUM

A. BACKGROUND INFORMATION AND PROJECT DESCRIPTION:

1. **Entitlement:** Minor Modification of Conditional Use Permit (CUP) 4933 for the continuance of a recreational sport and athletic facility and for outdoor events (Case No. PL19-0100).
2. **Applicant:** Nichole Garner, Jensen Design and Survey, 1672 Donlon Street, Ventura, CA 93003
3. **Property Owner:** Ralph Mahan, 15255 Tierra Rejada Road, Moorpark, CA 93021
4. **Location:** 15187 Tierra Rejada Road, Moorpark
5. **Tax Assessor's Parcel Number:** 500-0-450-025
6. **Lot Size:** 183 acres
7. **General Plan Land Use Designation:** Open Space
8. **Zoning Designation:** OS-40 ac/HCWC/CWPA (Open Space, 40-acre minimum lot size/Habitat Connectivity Wildlife Corridor/Critical Wildlife Passage Area)
9. **Project Description:** Request for minor modification of CUP 4933 for (1) the continued operation and use of the Tierra Rejada Golf Club for an additional 30-year term; and, (2) Non-golf tournament special events of no more than 100 events per calendar year.

   The following breakdown for events is being requested:

   - No more than ninety-nine (99) events per calendar year with 300 attendees[1] or less; and,
   - One (1) event per calendar year at 1,000 attendees[1] or less.

   Non-golf tournament special events are generally proposed to occur in a central location on the property just north of the existing operations building. Events may overlap with regular golf club operational hours, with the exception of the one (1) annual 1,000-attendee event.

   The one (1) requested 1,000-attendee event is proposed to begin at 10:00 a.m. and end no later than 7:00 p.m. (during daylight savings time). The remaining requested ninety-nine (99) events are proposed to begin as early as 8 a.m. and end no later than the following times:

[1] Attendee count is to include guests, staff, vendors, and any other persons in attendance at the event, pursuant to Section 8107-46.1 of the Ventura County Non-Coastal Zoning Ordinance.

- Friday and Saturday: 12:00 a.m. (midnight); and,
- Sunday through Thursday: 10:00 p.m.

Event security will be provided by the event organizer during the 1,000-attendee event.

Rehearsals do not qualify as one of the 100 Non-Golf Tournament Special Events and shall not include amplified sound. The event venue may allow one (1) event rehearsal prior to the event. The rehearsal shall be limited to a maximum of fifty (50) attendees.

Vendors will be permitted to arrive the day before and on the day of the event at 8:00 am to set up.

Events would generally be catered by the existing restaurant onsite, TJ's Bar and Grille (Clubhouse). TJ's Bar and Grille can serve 100 plated meals or can serve 300 guests with a buffet. Outside vendors will be brought in to serve events that exceed these thresholds.

No new permanent structures are proposed with this request.

Existing structures and operations at the Tierra Rejada Golf Club include the following:

a) Operations Building (7,289 square feet);

b) Covered Patio attached to Clubhouse (800 square feet);

c) Maintenance Building 1 (5,625 square feet);

d) Maintenance Building 2 (4,800 square feet);

e) Pergola with permeable roof (under 120 square feet);

f) Storage Building (400 square feet);

g) Driving Range Storage (75 square feet);

h) Main Pump Station Housing (1,000 square feet);

i) Fire Pump Station/Restroom (600 square feet);

j) 30 tee boxes, three (3) practice holes, putting green and chipping area; and,

k) TJ's Bar and Grille (Clubhouse) (located within Operations Building).

The Operations Building consists of a Pro Shop, TJ's Bar and Grille (Clubhouse) and small storage area separated by an open breezeway. The Pro Shop is 2,370

square feet, TJ's Bar and Grille (Clubhouse) is 3,169 square feet, the storage area is 340 square feet and the open breezeway is 1,410 square feet.

B. STATEMENT OF ENVIRONMENTAL FINDINGS:

On January 29, 1998 the Planning Commission adopted a Mitigated Negative Declaration (MND) that evaluated the environmental impacts of a golf course, a driving range, and construction of appurtenant buildings.

Section 15164(b) of the CEQA Guidelines (Title 14, California Code of Regulations, Chapter 3) states that the decision-making body may adopt an addendum to an adopted MND if: (1) only minor technical changes or additions are necessary; and (2) none of the conditions described in Section 15162 of the CEQA Guidelines calling for the preparation of a subsequent Environmental Impact Report (EIR) or mitigated negative declaration have occurred.

The conditions described in Section 15162 of the CEQA Guidelines which require the preparation of an EIR or subsequent mitigated negative declaration, are provided below, along with a discussion as to why an EIR or subsequent mitigated negative declaration is not required:

1. **Substantial changes are proposed in the project which will require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects [§ 15162(a)(1)].**

   The request includes a Minor Modification of CUP Case No. 4933 (as modified by Case Nos. CUP 4933-1 and LU06-0020 and Permit Adjustment Case Nos. CUP 4933-Adj. 1, CUP 4933-Adj. 2, CUP 4933-Adj. 3, and LU08-0083) to authorize the applicant to continue operations of the driving range and golf course for an additional 30 years and to authorize adjustments to the limitations of existing outdoor events within the designated CUP area. No physical changes are proposed with this modification and no new significant environmental effects or a substantial increase to the severity of previously identified significant effects have been identified.

2. **Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects [§ 15162(a)(2)].**

   There would be no changes in the physical development of the Project site. As stated in Item No. 1 (above), the request would authorize the applicant to continue operations of an existing golf course for 30 years and authorize adjustments to the limitations of existing outdoor events within the designated CUP area. Therefore,

no major revisions of the previous MND are required and there are no new significant environmental effects associated with this Project.

3. **New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the Planning Commission adopted the previous MND, shows any of the following:**

   a. **The project will have one or more significant effects not discussed in the previous MND [§ 15162(a)(3)(A)].**

      The Project would not have any significant effects that were not discussed in the previously adopted MND. The environmental conditions that currently exist on-site are substantially the same as those that existed at the time at which the MND was prepared and adopted.

Therefore, based on the information provided above, there is no substantial evidence to warrant the preparation of a subsequent MND. The decision-making body shall consider this addendum to the adopted MND prior to making a decision on the project.

C. PUBLIC REVIEW:

Pursuant to the CEQA Guidelines § 15164(c), this addendum to the MND does not need to be circulated for public review, and shall be included in, or attached to, the adopted MND.

Prepared by:

John Kessler, Case Planner
Commercial and Industrial
Permits Section
Ventura County Planning Division

Reviewed by:

Mindy Fogg, Manager
Commercial and Industrial
Permits Section
Ventura County Planning Division

RESOURCE MANAGEMENT AGENCY
county of ventura

Planning Division
Keith A. Turner
Director

FILED
OCT 20 1997
RICHARD D. DEAN, County Clerk
By Paul K Macencia
Deputy County Clerk

MITIGATED NEGATIVE DECLARATION

A. PROJECT DESCRIPTION

1. Entitlement: Modification #1 to Conditional Use Permit No. CUP-4933
2. Applicant: Jerry Crumpler of CRUMPLER & KRUGER
3. Location: Adjacent and north of Tierra Rejada Road and adjacent and east of the intersection of Highway 23 (Moorpark Freeway) and Tierra Rejada Road (Exhibit "A").
4. Assessor Parcel Numbers: 500-0-350-205; 500-0-360-195 and 225 (ptn)
5. Parcel Size: 183.85 Acres
6. General Plan Designation: The Ventura County General Plan designates the site as "Open Space" (Ten Acre Minimum) and the site lies within the City of Moorpark Area of Interest, but outside the Area of Influence. Therefore, the County is responsible for land use planning, consistent with the general land use goals and policies of the County General Plan.
7. Existing Zoning: "O-S-40Ac" (Open Space, 40 Acre Minimum)
8. Proposal: 18 hole public golf course (Exhibit "B"); a driving range with 30 tee boxes (Exhibit "C"); an Operations building @ 5000 square feet with parking for 190 vehicles (Exhibit "D"); and a Maintenance building @ 8400 square feet with parking for 20 vehicles (Exhibit "E").
9. Responsible Agencies: County of Ventura, Planning Division

B. STATEMENT OF ENVIRONMENTAL FINDINGS:

California State law requires that an Initial Study (environmental evaluation) be conducted to determine if this project will significantly affect the environment. An Initial Study was conducted by the Planning Division. Based on the findings contained in the attached Initial Study, it has been determined that this project **could** have a significant effect on the environment, and a **Mitigated Negative Declaration (MND)** has been prepared.

The potentially significant effects identified can be reduced to a level less than significant if the proposed Mitigation Measures are adopted as a **Mitigation Monitoring Program** in conjunction with the adoption of the Conditions of Approval.

C. LISTING OF POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS IDENTIFIED: (See Initial Study Section C for Mitigation Measures)

4. Water Resources (Groundwater Quantity); 8. Visual Resources; and 23. Waste Treatment/Disposal

The applicant, JERRY CRUMPLER, and the property owner, RALPH MAHAN have agreed to the proposed Mitigation Measures and a signed Consent Agreement is attached (see Attachment "A").

D. PUBLIC REVIEW:

1. Legal Notice Method: Direct mailing to property owners within 300 feet of the proposed project boundary.
2. Document Posting Period: October 22, 1997 to November 12, 1997

POSTED
10/20/97 - 11/10/97
RICHARD D. DEAN, County Clerk
By: Paul K Macencia
Deputy

County of Ventura
Planning Director Hearing
Case No. PL19-0100
Exhibit 5 - Mitigated Negative Declaration

entura, CA 93009

3. Comments: The public is encouraged to submit written comments regarding this **Mitigated Negative Declaration** no latter than 5:00 p.m. on the last day of the above posting period to the Case Planner listed below, RMA/Planning, 800 So. Victoria Avenue, Ventura, CA 93009. The Planning Division's FAX number is (805) 654-2509.

E. **CONSIDERATION AND APPROVAL OF THE NEGATIVE DECLARATION**:

Prior to approving the project, the decision-making body of the Lead Agency must consider this MND and all comments received during the public review. That body shall approve the MND if it finds that the project will not have a significant effect on the environment.

Prepared by: Ron Allen
Senior Planner

Reviewed by: Jeff Walker, Manager
Land Use Permit Section

The Planning Director recommends that the decision-making body find that the above environmental document has been completed in compliance with the California Environmental Quality Act.

Keith Turner, Planning Director
RESOURCE MANAGEMENT AGENCY

Date: 12-3-97

c:\environ\cu4933mnd#1

Stantec Consulting Services Inc.
111 E. Victoria Street, Santa Barbara CA 93101

March 10, 2020
File: 2042572600

Ms. Courtney Maguire
Tierra Rejada Golf Club
15255 Tierra Rejada Road
Moorpark, CA 93021

Reference: **Traffic and Circulation Study for the Tierra Rejada Golf Club CUP Minor Modification, Moorpark, CA**

Dear Ms. Maguire,

Stantec has prepared the following traffic and circulation study for the Tierra Rejada Golf Club CUP Minor Modification. The study provides an assessment of the existing and future traffic conditions within the study area, determines the trip generation and trip distribution for the proposed development, evaluates the potential traffic impacts to the vicinity roadways and intersections, and provides feasible mitigations where applicable. A discussion of the site access and circulation plan is also provided.

PROJECT DESCRIPTION

The Tierra Rejada Golf Club is requesting a Minor Modification to County of Ventura Conditional Use Permit (CUP) 4933 to allow (1) the continued use of the Tierra Rejada Golf Club for an additional 25 years; and, (2) Non-Golf Tournament Special Events of no more than 100 events per calendar year. These events will consist of the following:

1. No more than ninety-nine (99) events per calendar year with 300 attendees or less; and
2. One (1) event per calendar year at 1,000 attendees or less.

The total attendee count is to include all onsite staff and vendor staff. Non-Golf Tournament Special Events may overlap with regular golf club operational hours, with the exception of the annual 1,000 attendee event. Non-Golf Tournament Special Events with 300 attendees or less will end at the following times:

- Friday & Saturday: 12:00am
- Sunday through Thursday: 10:00pm

The annual 1,000 attendee event is restricted to daytime hours.

Events will generally be catered by the existing restaurant onsite, TJ's Bar and Grille (Clubhouse). TJ's Bar and Grille can serve 100 plated meals or can serve 300 guests with a buffet. Outside vendors will be brought in to serve events that exceed these thresholds.

STUDY METHODOLOGY

Traffic Analysis Scenarios

The traffic analysis includes the following traffic scenarios:

- Existing Conditions
- Existing plus Project Conditions
- Cumulative (Existing plus approved and pending projects) Conditions
- Cumulative plus Project Conditions

Level of Service Criteria

The traffic analysis focuses on key intersections within the study area during the AM and PM commute periods, when peak traffic volumes typically occur. A level of service (LOS) ranking scale is used to identify the operating condition at intersections. This scale compares traffic volumes to intersection capacity and assigns a letter value to this relationship. The letter scale ranges from A to F with LOS A representing free flow conditions and LOS F representing congested conditions. The level of service criteria are summarized in the attached Table A. The County of Ventura, City of Moorpark and Caltrans consider LOS C acceptable.

Because the majority of intersections included in the analysis are Caltrans facilities, the intersection level of service calculation method required by Caltrans was applied. Levels of service for the intersections in the study area were calculated using the methodologies outlined in the Highway Capacity Manual (HCM)[1], and the results are presented as seconds of delay. The calculations include application of a peak hour factor and a heavy truck factor to simulate peak traffic conditions.

[1] Highway Capacity Manual, 6th Edition: A Guide for Multi-Modal Mobility Analysis, Transportation Research Board, 2016.

EXISTING CONDITIONS

Roadway Network

The roadway system in the study area is comprised of a network of freeways, arterials and collectors. The study area roadway network is shown in Exhibit 1 (attached) and a brief description of the major components is provided below.

State Route 23 (SR 23) extends northerly from U.S. Highway 101 as a six-lane freeway until it connects to Los Angeles Avenue, where the freeway turns east and becomes State Route 118. The interchange with Tierra Rejada Road provides regional access to the project site.

State Route 18 (SR 118) extends east from State Route 126 to Interstate 210 in Los Angeles County. Within the study area, the roadway is a four- to six-lane highway (Los Angeles Ave) with at-grade intersections. At its intersection with SR 23 the state route continues as a four-lane frewway into Simi Valley.

Tierra Rejada Road is an four-lane divided arterial roadway with Class II bike lanes that extends southeast from Los Angeles Avenue through the southern portion of Moorpark and continues easterly into the County of Ventura and Simi Valley. All major intersections, including the ramp intersections with SR 23 are signalized. The intersection with the project driveway, located approximately 1,400 feet east of the interchange, is controlled by a stop sign on the project driveway.

Existing Intersection Operations

A total of six intersections were selected for analysis in consultation with County of Ventura and City of Moorpark staff. These are listed in Table 1. The proposed special events will not generate any traffic during the weekday AM peak hour, and this period was excluded from further analysis. Existing intersection turning volumes for the PM peak commute periods (7am to 9am and 4pm to 6pm) were derived from counts collected in January 2020. The intersection turning counts are attached for reference. The existing intersection lane geometry, traffic control AM and PM peak hour turning volumes are illustrated in Exhibit 3.

Levels of service were calculated for the intersections using the level of service methodology outlined previously. The technical calculation worksheets are attached and the existing intersection levels of service are summarized in Table 1.

Table 1
Existing Intersection Peak Hour Levels of Service

Intersection	Jurisdiction	Control	PM Peak Hour Sec. of Delay/LOS
1. Los Angeles Ave (SR 118)/Tierra Rejada Rd	Caltrans	Signal	34.3 sec/LOS C
2. Los Angeles Ave (SR 118)/SR 23 SB Ramps	Caltrans	Signal	13.6 sec/LOS B
3. Los Angeles Ave (SR 118)/SR 23 NB Ramps	Caltrans	Signal	6.5 sec/LOS A
4. Tierra Rejada Rd/Moorpark Rd	Moorpark	Signal	14.4 sec/LOS B
5. Tierra Rejada Rd/SR 23 SB Ramps	Caltrans	Signal	14.5 sec/LOS B
6. Tierra Rejada Rd/SR 23 NB Ramps	Caltrans	Signal	21.0 sec/LOS C

Intersections analyzed using the HCM methodology. LOS determined by vehicle delay in seconds.

As shown, the study-area intersections currently operate at LOS C or better during both peak hours, which is considered acceptable based on City and Caltrans level of service standards.

PROJECT SPECIFIC CONDITIONS

Traffic Impact Thresholds

County of Ventura. Minimum Level of Service for road segments within the Regional Road Network (Figure 4.2.3 of the Public Facilities and Service Appendix of the Ventura County General Plan) and the Local Road Network (all other County maintained local roads) is shown in the following Table 2.

Table 2
County of Ventura - Minimum Acceptable Level of Service (LOS)

CASE	MINIMUM LOS	DESCRIPTION
a.	LOS D	All County thoroughfares and state highways within the unincorporated area of the County, except as provided in case b.
b.	LOS E	State Route 33 between the end of the freeway and the City of Ojai.
c.	LOS C	All County maintained local roads.
d.	Varies	The LOS prescribed by the applicable city for all state highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County, pertaining to development in the city that would individually or cumulatively affect the LOS of state highways, County thoroughfares and County-maintained local roads in the unincorporated area of the County.
Any intersection between two roads, each of which has a prescribed minimum acceptable LOS, the less stringent LOS of the two shall be the minimum acceptable LOS of that intersection.		

The County's Environmental Assessments Guidelines provides the following standards for determining project-specific and cumulative impacts to the County roadway network:

Project-Specific Impact - A significant adverse project-specific traffic impact is assumed to occur on any road segment if any one of the following results from the project:

a. If the project will add 10 or more PHT to a road segment that is currently operating at an acceptable LOS as defined in Table 2, but would cause the LOS to fall to an unacceptable level as defined in Table 2.

b. If the project will add one or more PHT to a roadway segment that is currently operating at less-than-acceptable LOS as defined in Table 2.

c. If the project will add 10 or more PHT or 1% or more of the total ADT, whichever is greater, to a road segment that is currently operating at an acceptable LOS as defined in Table 2, but would cause the LOS to fall to an unacceptable level as defined in Table 2.

Cumulative Impacts - A significant adverse cumulative traffic impact is assumed to occur on any road segment if any one of the following results from the project:

a. If the project will add one or more PHT to a road segment that is part of the regional road network and is projected to fall to a less-than-acceptable LOS as defined in Table 2 by the year 2020. If the project will increase the projected 2020 V/C ratio by less than 0.01, and the County fees are paid, the project's contribution to an otherwise significant cumulative impact is considered mitigated.

b. If the project will add 10 or more PHT to a roadway segment which is part of the regional road network projected to operate at an acceptable LOS by the year 2020, but when considered with other approved, proposed, and reasonably foreseeable future projects, will cause the road segment to fall to a less than acceptable LOS as defined in Table 2.

City of Moorpark and Caltrans. The County of Ventura The City of Moorpark has adopted level of service (LOS) C as the threshold of significance for intersections. Similarly, Caltrans has established the cusp of the LOS C/D range as the target level of service standard for State Highway intersections. If an existing State Highway facility is operating at less than the target LOS, the existing Measure of Effectiveness (MOE) should be maintained.

Project Trip Generation

Existing Trip Generation. Trip generation estimates for the existing golf club CUP were determined based on rates presented in the Institute of Transportation Engineers *Trip Generation Manual*[2] for *Land Use #430 – Golf Course*. Table 3 summarizes the trip generation estimates for the existing golf club.

Table 3
Existing Golf Club Trip Generation

Land Use	Size	ADT		AM PHT		PM PHT	
		Rate	Trips	Rate	Trips	Rate	Trips
Golf Course	18 Holes	30.38	547	1.76	32 (25/7)	2.91	52 (14/38)

ADT = average daily trips.
PHT = peak hour trips.
(X/X) = inbound trips/outbound trips.

Project Trip Generation. The applicant has indicated that proposed events would not generate traffic during the AM peak hour. Project trip generation estimates therefore focus on the weekday PM peak hour, during which existing commute traffic on the study area network could overlap with traffic generated by a Special Event.

Trip generation estimates for the proposed land uses were developed based on the maximum level of 300 attendees (including attendees, onsite staff and vendors) and assuming start of a Special Event during the PM peak hour with the following travel characteristics:

- 100% personal vehicle use.
- 15% of attendees being dropped off and picked up.
- Average vehicle occupancy (AVO) of 2.2 persons per vehicle (Source: U.S. DOT FHWA *Managing Travel for Planned Special Events)*.
- 80% of total attendees arriving during the PM peak hour.

Table 4 shows the trip generation estimates for the Non-Golf Tournament Special Events.

[2] Trip Generation Manual, Institute of Transportation Engineers, 10th Edition, 2017.

Table 4
Non-Golf Tournament Special Event Trip Generation

Land Use	Size	ADT	PM PHT
Non-Golf Tournament Special Events	300 Attendees	314	125 (106/19)

ADT = average daily trips.
300 attendees with AVO of 2.2 persons per vehicle = 136.4 trips x 1.15 drop off/pick up factor x 2.0 = 314 ADT.
PHT = peak hour trips.
300 attendees with AVO of 2.2 persons per vehicle = 136.4 trips x 1.15 drop off/pick up factor x 0.8 arrival factor = 125 PM PHT.
(X/X) = inbound trips/outbound trips.

Project Trip Distribution

The attached Exhibit 4 provides the trip distribution and assignment for a Non-Golf Tournament Special Event. The trip distribution is based on existing traffic patterns derived from the intersection counts collected in the vicinity of the golf club, and a general understanding of population distribution in the region.

Existing plus Project Intersection Operations

Project traffic was added to the existing peak hour traffic volumes and levels of service were recalculated for existing plus project conditions. The existing plus project traffic volumes are illustrated in Exhibit 5 and Table 5 summarizes the level of service calculations for project-specific conditions.

As shown in Table 5, the study area intersections will continue to operate at LOS C or better during the PM peak hour. The project would therefore not generate any project-specific impacts based on City of Moorpark or Caltrans level of service standards.

Table 5
Existing plus Project Intersection Peak Hour Levels of Service

Intersection	Existing PM Peak Hour Sec. of Delay/LOS	Existing + Project PM Peak Hour Sec. of Delay/LOS	Project-Specific Impact?
1. Los Angeles Ave (SR 118)/Tierra Rejada Rd	34.3 sec/LOS C	34.7 sec/LOS C	No
2. Los Angeles Ave (SR 118)/SR 23 SB Ramps	13.6 sec/LOS B	13.6 sec/LOS B	No
3. Los Angeles Ave (SR 118)/SR 23 NB Ramps	6.5 sec/LOS A	6.5 sec/LOS A	No
4. Tierra Rejada Rd/Moorpark Rd	14.4 sec/LOS B	14.5 sec/LOS B	No
5. Tierra Rejada Rd/SR 23 SB Ramps	14.5 sec/LOS B	14.5 sec/LOS B	No
6. Tierra Rejada Rd/SR 23 NB Ramps	21.0 sec/LOS C	22.1 sec/LOS C	No

CUMULATIVE CONDITIONS

The *Ventura County Initial Study Assessment Guidelines (2011) section 27a(1). Transportation & Circulation – Roadways and Highways – Level of service (LOS)* states that: The cumulative analysis should include all approved un-built projects and all other pending approval projects or build out of the land uses in the County's General Plan in the study area. The latter method will be required for projects involving a General Plan Amendment.

Based on the County of Ventura guidelines and City of Moorpark traffic impact study policies, operations were assessed assuming cumulative traffic conditions, which include traffic that could be generated by other developments in the study area that are expected to be constructed in the near future. The following section discusses the cumulative (existing conditions plus approved and pending projects) conditions.

Street Network Improvements

Review of roadway or intersection improvements associated with approved projects included in the cumulative analysis and the City's Five-Year Capital Improvement Plan[3] indicates that there are several improvements programmed in the study area for the 2019-2024 Capital Improvement Plan cycle. These include the widening of Los Angeles Avenue widening between Springs Rd and Moorpark Rd, construction of medians along Los Angeles Avenue, traffic signals fiber optic upgrades, and widening of Springs Rd from Los Angeles Ave to Flinn Ave. These improvements

[3] City of Moorpark Five-Year Capital Improvements Projects Summary Fiscal Year 2019/20 Thru 2023/24.

would not change the intersections included in this analysis and existing geometries and control are therefore assumed under cumulative conditions.

Cumulative Traffic Volumes

Cumulative traffic volumes were developed using a list of approved and pending development projects provided by City staff[4]. A list summarizing the cumulative projects and trip generation estimates is attached. The cumulative projects traffic volumes were distributed onto the study-area street network based on each individual project's location, existing traffic patterns and a general knowledge of the residential and commercial lay-out of the Moorpark area. The cumulative projects PM peak turning volumes were assigned to the study area intersections and added to the existing peak hour volumes. The resulting cumulative (existing plus pending projects) peak hour volumes are shown in Exhibit 6.

Cumulative plus Project Intersection Operations

Intersection levels of service were recalculated assuming cumulative and cumulative plus project traffic conditions. The level of service calculations are summarized in Table 6. As shown, the Los Angeles Ave/Tierra Rejada Rd intersection is forecast to operate below the City's and Caltrans LOS C standard. Project trips would add to the delays and would therefore generate a cumulative impact at this intersection. Mitigations are outlined in the Mitigations section.

Table 6
PM Peak Hour
Cumulative plus Project Intersection Levels of Service

Intersection	Cumulative Sec. of Delay	Cumulative + Project Sec. of Delay	Change in Delay	Impact?
1. Los Angeles Ave (SR 118)/Tierra Rejada Rd	**43.2 sec/LOS D**	**43.6 sec/LOS D**	0.4 sec	**Yes**
2. Los Angeles Ave (SR 118)/SR 23 SB Ramps	14.5 sec/LOS B	14.5 sec/LOS B	0.0 sec	No
3. Los Angeles Ave (SR 118)/SR 23 NB Ramps	7.8 sec/LOS A	7.8 sec/LOS A	0.0 sec	No
4. Tierra Rejada Rd/Moorpark Rd	14.5 sec/LOS B	14.5 sec/LOS B	0.0 sec	No
5. Tierra Rejada Rd/SR 23 SB Ramps	14.6 sec/LOS B	14.7 sec/LOS B	0.1 sec	No
6. Tierra Rejada Rd/SR 23 NB Ramps	23.1 sec/LOS C	25.5 sec/LOS C	2.4 sec	No

Bolded values exceed City and Caltrans LOS C standard.

[4] Planning Division Quarterly Status Report, City of Moorpark, March 2019.

PROJECT SITE ACCESS AND PARKING

Project Site Access

Non-Golf Tournament Special Events traffic would access the Tierra Rejada Golf Club via the existing driveway connection on Tierra Rejada Road approximately 1,400 feet east of the SR 23 Northbound Ramps. Tierra Rejada Road contains two travel lanes in each direction and a two-way left-turn lane, and the golf club driveway contains one travel lane in each direction. The intersection is controlled by a stop sign on the golf club driveway. Level of service calculations using a peak hour factor indicate that the driveway would operate acceptably under project-specific conditions (19.4 sec/vehicle – LOS C) and cumulative conditions (20.3 sec/vehicle – LOS C). Review of sight lines from a vehicle on the golf club driveway onto approaching vehicles on Tierra Rejada Road indicate that the corner sight distance in excess of the required 605 feet (55 MPH) is provided. No improvements would be required to accommodate special event traffic.

Parking

The Tierra Rejada Golf Club has 186 off-street parking spaces, which will be shared between Non-Golf Tournament Special Events and the existing golf club operations, including employees. Overflow parking for special events will be provided as shown on the site plan illustrated in Exhibit 2. Twelve (12) parking spaces between the Maintenance Buildings 1 and 2 and an open area south of Maintenance Building 2 will be provided for vendor/overflow parking.

The driving range may also be used as additional overflow parking. A need for overflow parking on the driving range is only anticipated for the annual 1,000 guest event. Vehicles will be directed through driveway openings on hole #13 (as illustrated on Site Plan) and directed down the fairway and into the large open space driving range to park. Vehicles will exit on the same route.

MITIGATIONS

Project-Specific Mitigations

The project-specific analysis contained in this report indicated that the proposed project would not generate any impacts at the study area intersections. In addition, the Tierra Rejada Road/Golf Club Driveway intersection is expected to accommodate special event traffic flow. No project-specific mitigations are therefore required

Cumulative Mitigations

The cumulative analysis found that the Los Angeles Ave/Tierra Rejada Rd intersection is forecast to operate below the City's and Caltrans LOS C standard. Project trips would add to the delays and

would therefore generate a cumulative impact at this intersection. Future delay increases are largely generated by the addition of traffic generated by the proposed *Hitch Ranch Specific Plan* (755 residential units) and the *Moorpark 67/Rasmussen* site (138 residential units), both located north of the intersection.

The north/south approaches (Tierra Rejada Rd and Gabbert Rd) contain separate turning lanes but are currently split-phased. Changing the north/south signal phasing to protective left-turns would improve the level of service during the PM peak hour to LOS C, as shown in Table 7. It is noted that the environmental review for the proposed residential developments discussed above should include a detailed evaluation of improvements required to provide optimal service levels.

Table 7
PM Peak Hour
Cumulative plus Project – Mitigated Intersection Levels of Service

Intersection	Cumulative + Project Sec. of Delay	Mitigated Cumulative + Project Sec. of Delay
1. Los Angeles Ave (SR 118)/Tierra Rejada Rd	**43.6 sec/LOS D**	34.3 sec/LOS C

This concludes traffic and circulation study for the Tierra Rejada Golf Club CUP Minor Modification.

Very truly yours,

Dennis Lammers, PTP
Senior Transportation Planner

Derek Rapp, T.E.
Principal Traffic Engineer
Project Manager / QA/QC

Attachments

Attachment 1
Level of Service Criteria

Table A
Intersection Level of Service Criteria

LOS	**Signalized Intersections** (V/C Ratio)	**Signalized Intersections** (Sec. of Delay)	**Unsignalized Intersections** (Sec. of Delay)	**Definition**
A	< 0.60	≤ 10	≤ 10	Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.
B	0.61 – 0.70	> 10 and ≤ 20	> 10 and ≤ 15	Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.
C	0.71- 0.80	> 20 and ≤ 35	> 15 and ≤ 25	Conditions of stable flow, delays are low to moderate, full use of peak direction signal phases is experienced.
D	0.81 – 0.90	> 35 and ≤ 55	> 25 and ≤ 35	Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
E	0.91 – 1.00	> 55 and ≤ 80	> 35 and ≤ 50	Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.
F	> 1.00	> 80	> 50	Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal

Source: Highway Capacity Manual, 6th Edition.

Attachment 2

Exhibits 1 Through 6

N

N.T.S.

Stantec

111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

EXHIBIT 1

EXISTING STREET NETWORK/ PROJECT SITE LOCATION

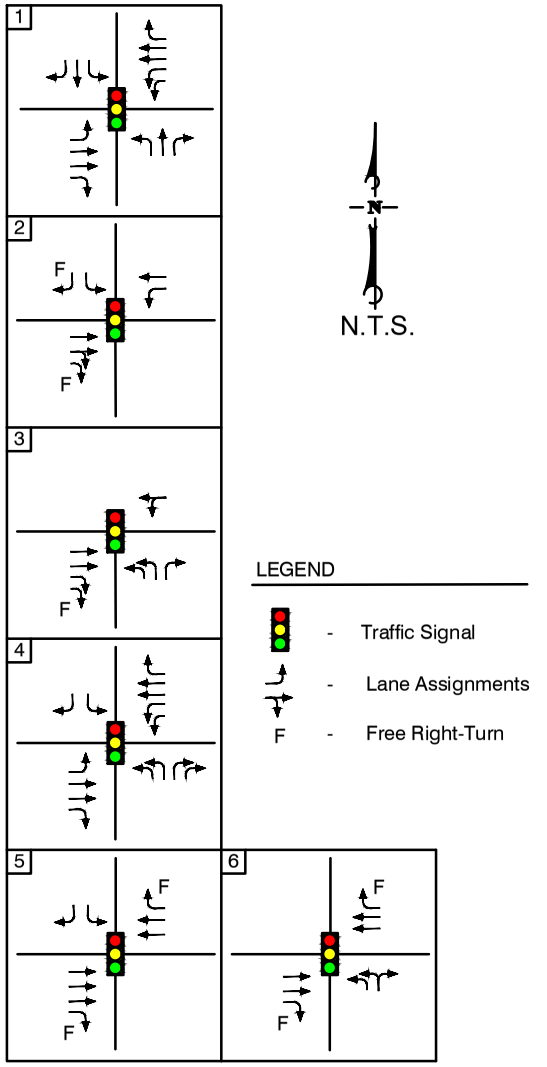
Stantec

111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

N

N.T.S.

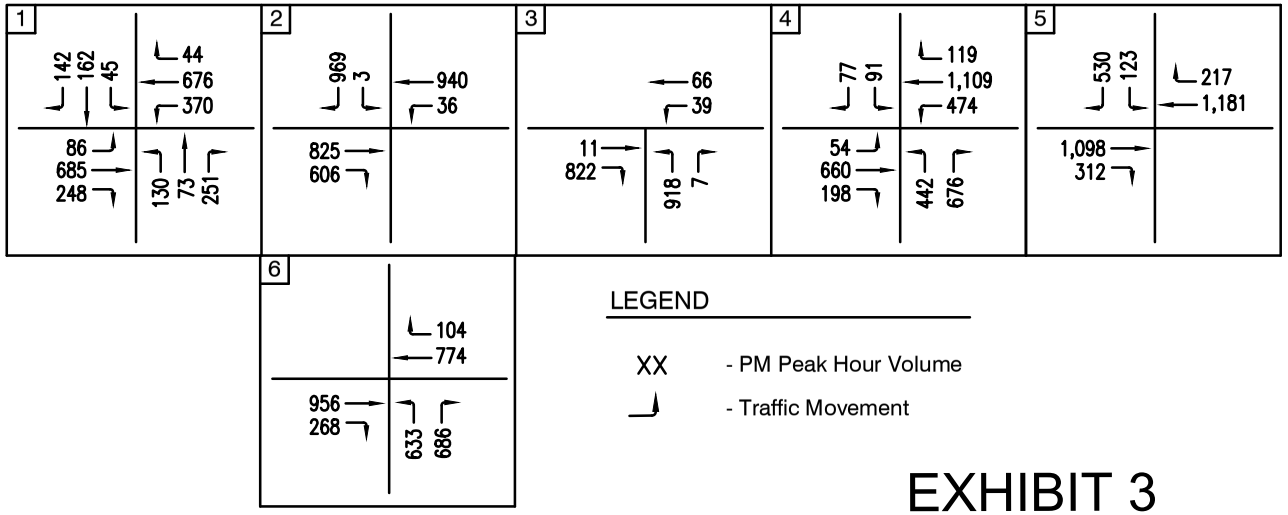
EXHIBIT 2
PROJECT SITE PLAN



N.T.S.

LEGEND

- Traffic Signal
- Lane Assignments
F - Free Right-Turn



LEGEND

XX - PM Peak Hour Volume

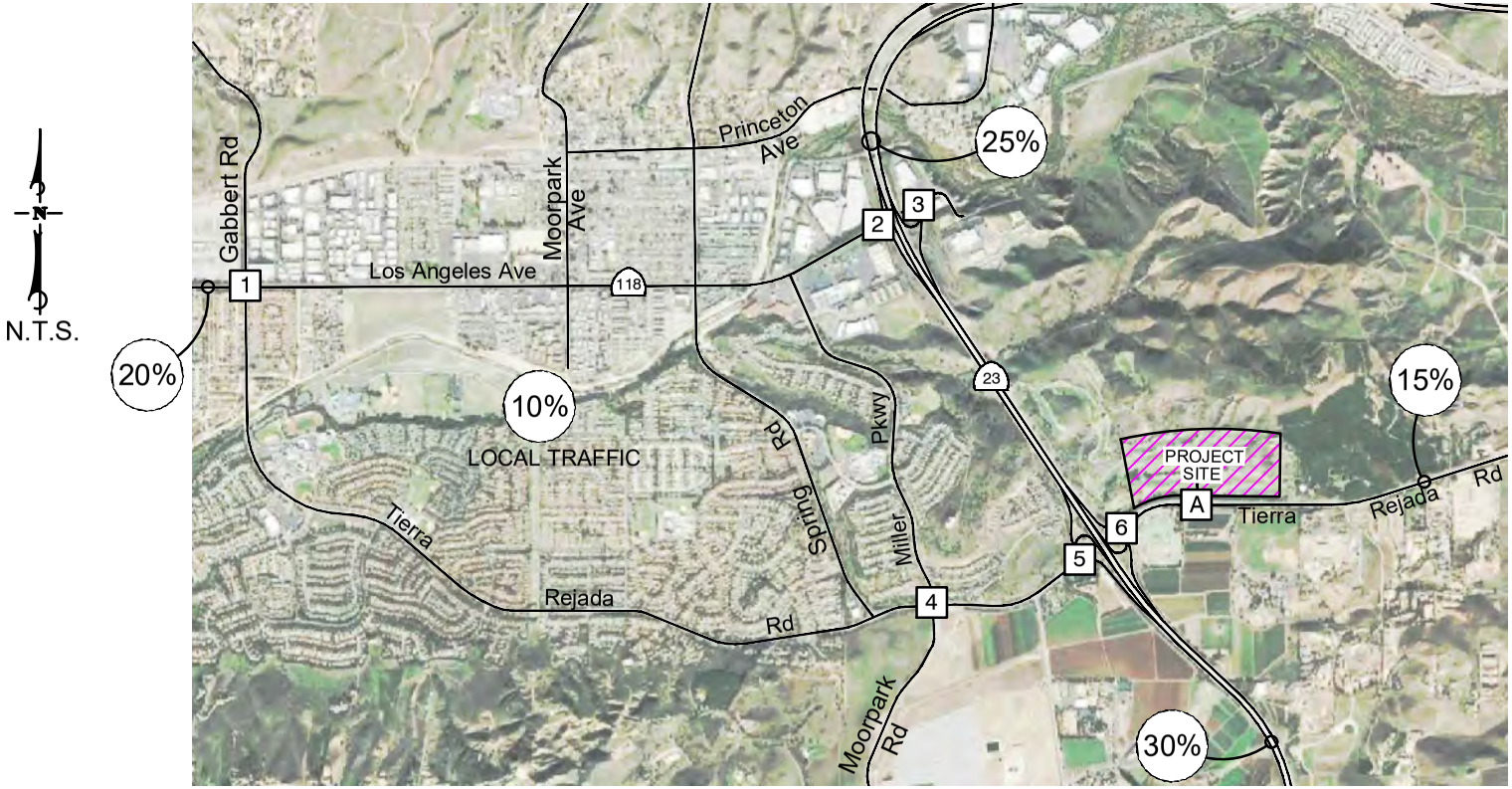
- Traffic Movement

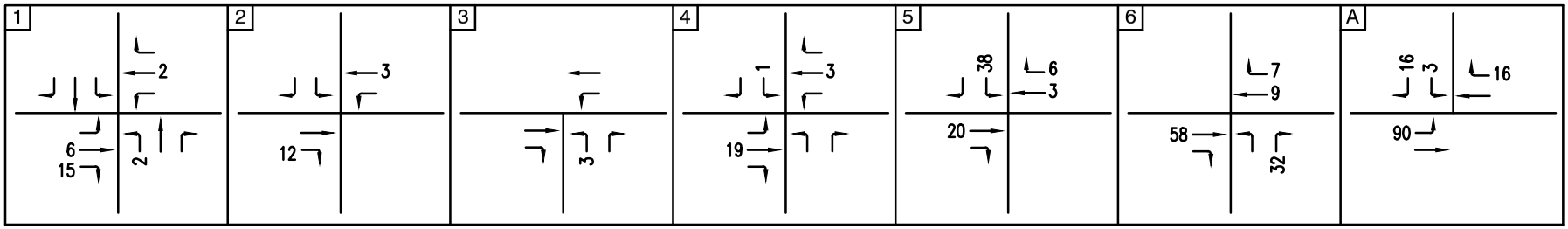
Stantec

111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

EXHIBIT 3

EXISTING INTERSECTION VOLUMES





LEGEND

XX - PM Peak Hour Volume

- Traffic Movement

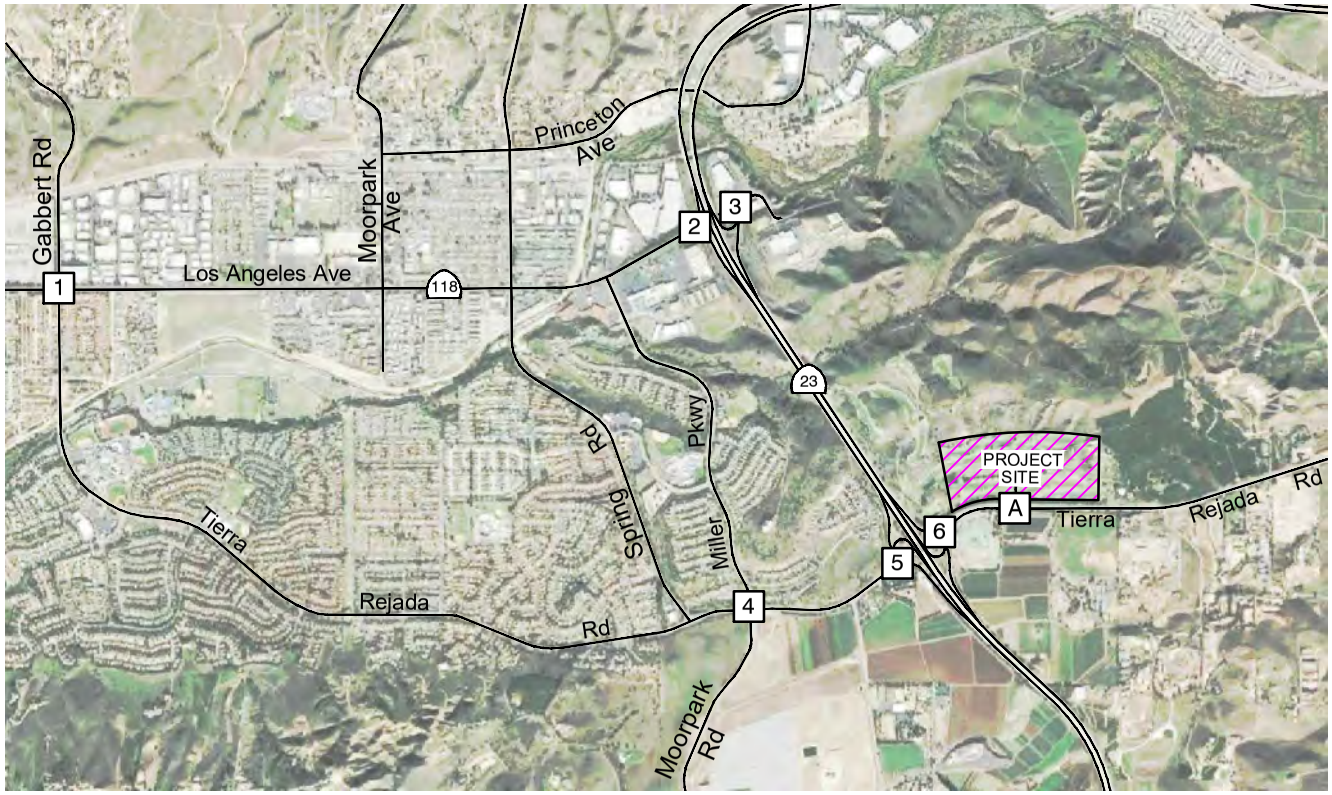
Stantec

111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

EXHIBIT 4

PROJECT-ADDED VOLUMES

N.T.S.



1	2	3	4	5	6	A
142 162 45 / 44 678 370	969 3 / 943 36	66 39	77 92 / 119 1,112 474	530 161 / 223 1,184	111 783	31 13 / 26 863
86 691 263 / 132 73 251	825 618	11 822 / 921 7	54 679 198 / 442 676	1,118 312	1,014 268 / 633 718	105 1,627

LEGEND

XX - PM Peak Hour Volume

- Traffic Movement

Stantec

111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

EXHIBIT 5

EXISTING + PROJECT INTERSECTION VOLUMES

N.T.S.

1	2	3	4	5	6	A
190 198 65 / 92 707 370	1,200 14 / 1,206 48	87 51	77 101 / 129 1,117 474	530 217 / 223 1,199	136 798	15 10 / 10 902
195 752 263 / 132 160 251	933 736	31 913 / 1,173 18	54 682 198 / 442 676	1,128 312	1,079 268 / 633 718	15 1,683

CUMULATIVE INTERSECTION VOLUMES

1	2	3	4	5	6	A
190 198 65 / 92 709 370	1,200 14 / 1,209 48	87 51	77 102 / 129 1,120 474	530 255 / 229 1,202	143 807	31 13 / 26 902
195 758 278 / 134 160 251	933 748	31 913 / 1,176 18	54 701 198 / 442 676	1,148 312	1,137 268 / 633 750	105 1,683

CUMULATIVE + PROJECT INTERSECTION VOLUMES

Stantec
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

LEGEND

XX - PM Peak Hour Volume

- Traffic Movement

EXHIBIT 6

CUMULATIVE AND CUMULATIVE + PROJECT VOLUMES

Attachment 3

PM Peak Hour Intersection Counts

Prepared by National Data & Surveying Services

Tierra Rejada Rd/Gabbert Rd & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 20-05019-00C
City: Moorpark

Day: Tuesday
Date: 01/21/2020

Tierra Rejada Rd/Gabbert Rd — SOUTHBOUND

PEAK HOURS	NONE					NONE	COUNT PERIODS
	NONE					NONE	
	04:30 PM - 05:30 PM					04:00 PM - 06:00 PM	
AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	142	162	45	0	203	PM
	1	1	1	0		

Los Angeles Ave — EASTBOUND

AM	NOON	PM	
0	0	948	
0	0	0	0
0	0	86	1
0	0	685	2
0	0	248	0

CONTROL

Signalized

	AM	NOON	PM
TEV	0	0	2912
PHF			0.94

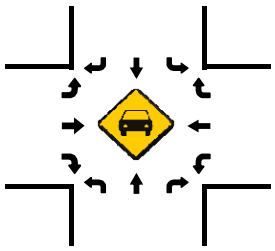
WESTBOUND — Los Angeles Ave

PM	NOON	AM	
44	0	0	1
676	0	0	2
370	0	0	2
0	0	0	0
981	0	0	

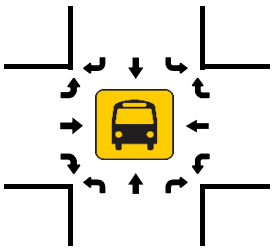
Tierra Rejada Rd/Gabbert Rd — NORTHBOUND

	0	1	1	1		
PM	780	0	130	73	251	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

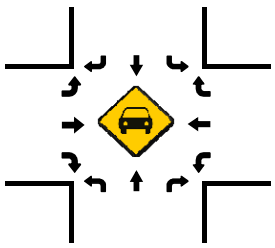
Total Vehicles (AM)



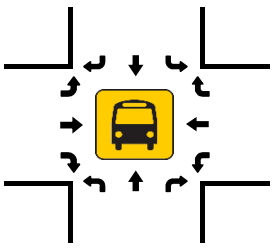
Total Vehicles (AM)



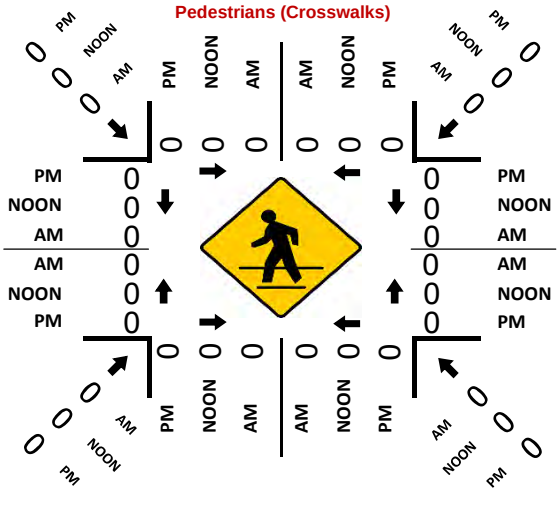
Total Vehicles (NOON)



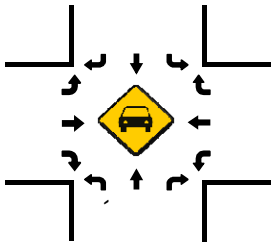
Total Vehicles (NOON)



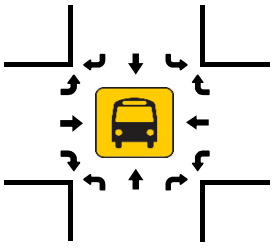
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



Prepared by National Data & Surveying Services

SB Hwy 118/Ronald Reagan Fwy & New Los Angeles Ave

Peak Hour Turning Movement Count

ID: 20-05019-006
City: Moorpark

Day: Tuesday
Date: 01/21/2020

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

SB Hwy 118/Ronald Reagan Fwy — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	969	0	3	0	0	PM

New Los Angeles Ave — EASTBOUND

AM	NOON	PM		
0	0	1909	⇦	
0	0	0	↶	0
0	0	0	↱	0
0	0	825	→	1.5
0	0	606	↴	1.5
AM	NOON	PM		

CONTROL

Signalized

	AM	NOON	PM
TEV	0	0	3379
PHF			0.94

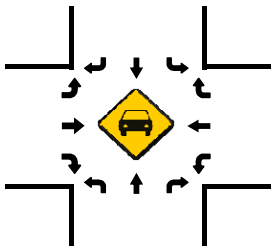
WESTBOUND — New Los Angeles Ave

				PM	NOON	AM
1	0	1	0			
0	↶			0	0	0
1	←			940	0	0
1	↰			36	0	0
0	↩			0	0	0
	⇨			828	0	0
0	0	0	0			
↶	←	↑	↱			

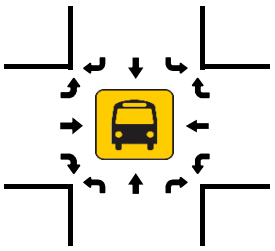
SB Hwy 118/Ronald Reagan Fwy — NORTHBOUND

PM	642	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

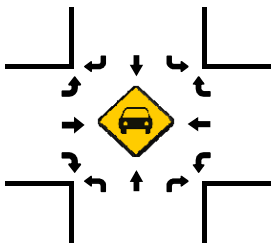
Total Vehicles (AM)



Total Vehicles (AM)



Total Vehicles (NOON)



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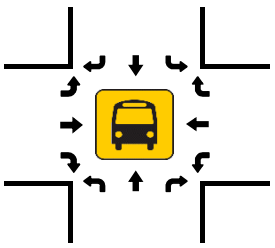
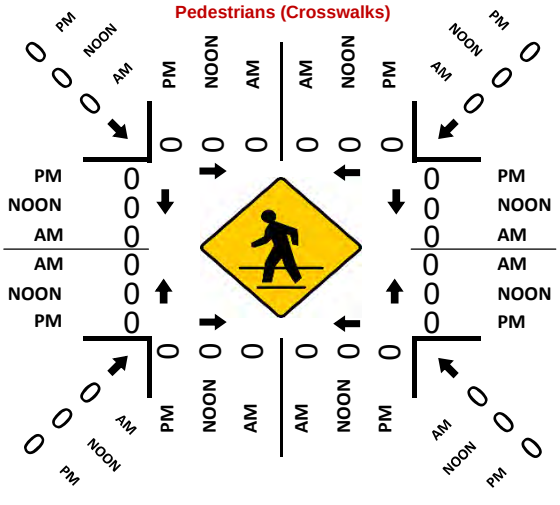


Pedestrians (Crosswalks)



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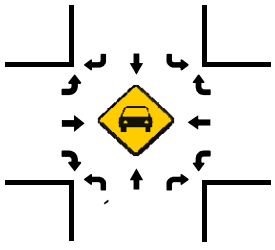
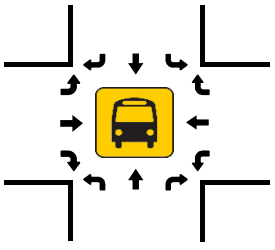


Total Vehicles (PM)



Prepared by National Data & Surveying Services

NB Hwy 118/Moorpark Fwy & White Sage Rd

Peak Hour Turning Movement Count

ID: 20-05019-00D1
City: Moorpark

Day: Tuesday
Date: 01/21/2020

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

NB Hwy 118/Moorpark Fwy — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

White Sage Rd — EASTBOUND

AM	NOON	PM	
0	0	984	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	11	→ 2
0	0	822	↷ 2
AM	NOON	PM	

CONTROL

Signalized

	AM	NOON	PM
TEV	0	0	1863
PHF			0.92

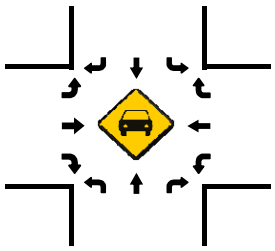
WESTBOUND — White Sage Rd

	PM	NOON	AM
↶ 0	0	0	0
← 1	66	0	0
↰ 0	39	0	0
↷ 0	0	0	0
⇨	18	0	0
	PM	NOON	AM

NB Hwy 118/Moorpark Fwy — NORTHBOUND

PM	861	0	918	0	7	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
		0	2	0	1	

Total Vehicles (AM)



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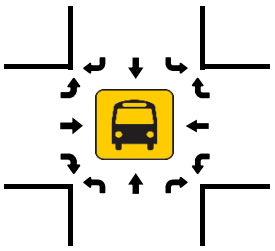

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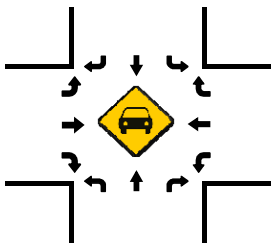
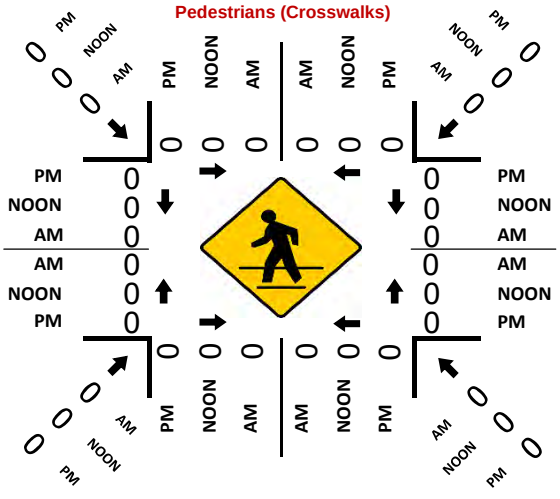


Pedestrians (Crosswalks)



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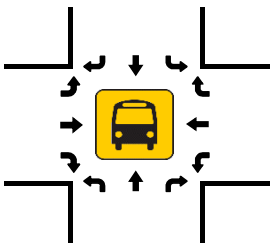
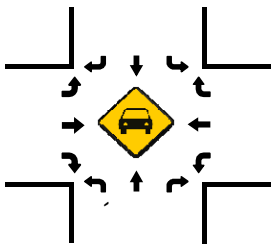
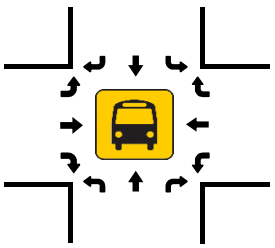


Total Vehicles (PM)



Total Vehicles (PM)



Prepared by National Data & Surveying Services

SB Hwy 23/Moorpark Fwy & Tierra Rejada Rd

Peak Hour Turning Movement Count

ID: 20-05019-00A2
City: Moorpark

Day: Tuesday
Date: 01/21/2020

PEAK HOURS	
AM	NONE
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS	
AM	NONE
NOON	NONE
PM	04:00 PM - 06:00 PM

SB Hwy 23/Moorpark Fwy — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	530	0	123	0	217	PM

EASTBOUND (Tierra Rejada Rd)

AM	NOON	PM	
0	0	1711	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	1098	→ 3
0	0	312	↴ 1

WESTBOUND (Tierra Rejada Rd)

PM	NOON	AM	
217	0	0	1 ↰
1181	0	0	2 ←
0	0	0	0 ↩
1	0	0	0 ↩
1222	0	0	⇨

CONTROL

Signalized

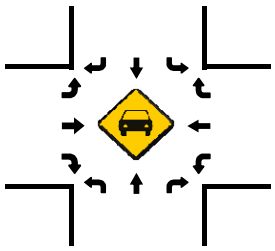
	AM	NOON	PM
TEV	0	0	3462
PHF			0.94

NORTHBOUND — SB Hwy 23/Moorpark Fwy

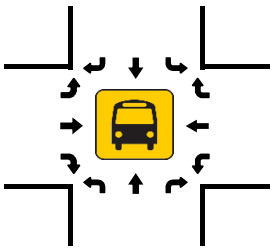
PM	312	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

0 0 0 0 (↰ ← ↑ ↱)

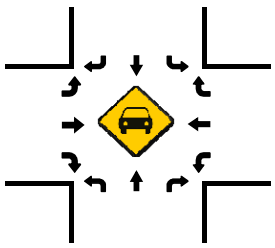
Total Vehicles (AM)



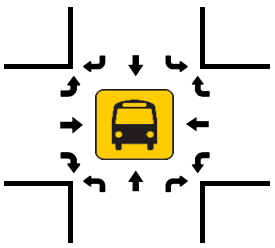
Total Vehicles (AM)



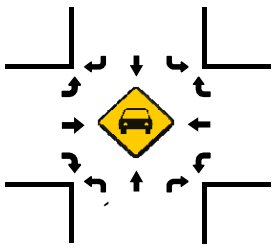
Total Vehicles (NOON)



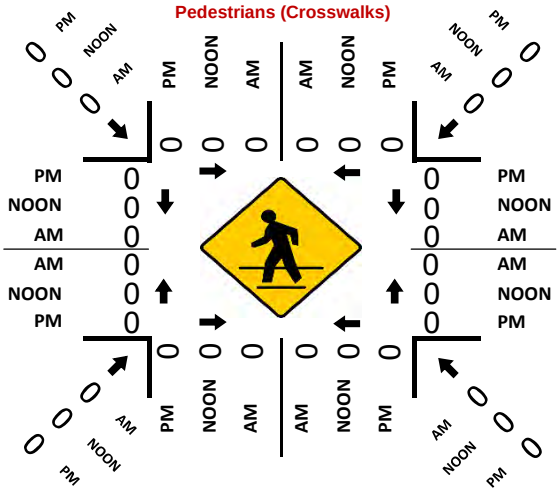
Total Vehicles (NOON)



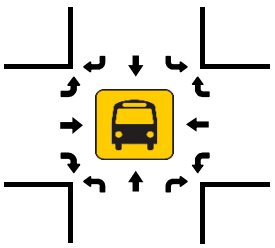
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



Prepared by National Data & Surveying Services

NB Hwy 23/Moorpark Fwy & Tierra Rejada Rd

Peak Hour Turning Movement Count

ID: 20-05019-00A1
City: Moorpark

Day: Tuesday
Date: 01/21/2020

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

NB Hwy 23/Moorpark Fwy — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	104	PM

Tierra Rejada Rd — EASTBOUND

AM	NOON	PM		
0	0	1407	⇦	
0	0	0	↶	0
0	0	0	↱	0
0	0	956	→	2
0	0	268	↴	1
AM	NOON	PM		

CONTROL

Signalized

	AM	NOON	PM
TEV	0	0	3421
PHF			0.93

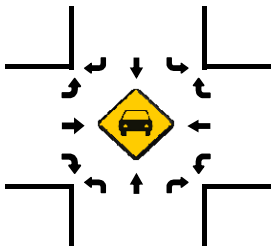
Tierra Rejada Rd — WESTBOUND

	PM	NOON	AM
1 ↰	104	0	0
2 ←	774	0	0
0 ↶	0	0	0
0 ↰	0	0	0
⇨	1642	0	0
	PM	NOON	AM

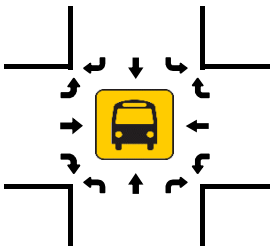
NB Hwy 23/Moorpark Fwy — NORTHBOUND

PM	268	0	633	0	686	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
		0 ↰	1.5 ↰	0 ↑	0.5 ↱	

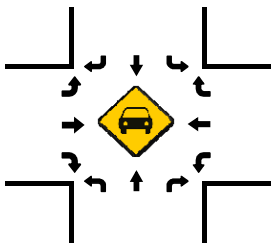
Total Vehicles (AM)



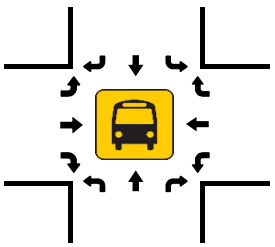
Total Vehicles (AM)



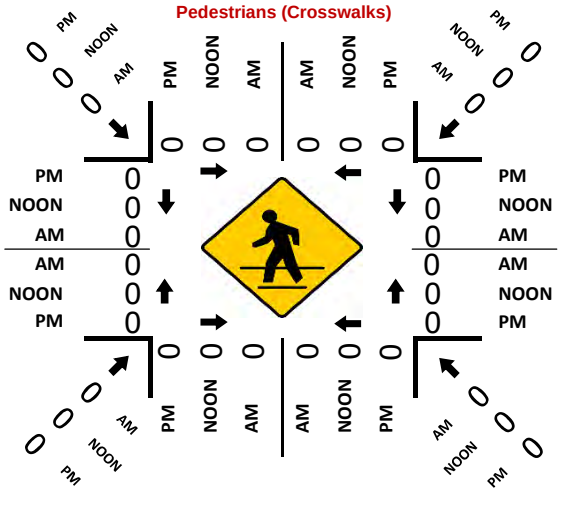
Total Vehicles (NOON)



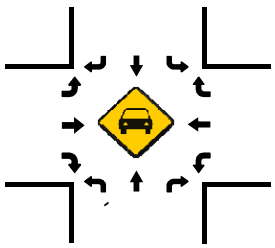
Total Vehicles (NOON)



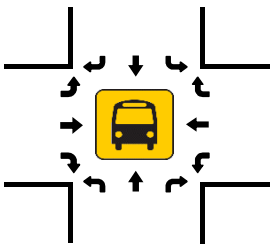
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



Attachment 4

Cumulative Projects List

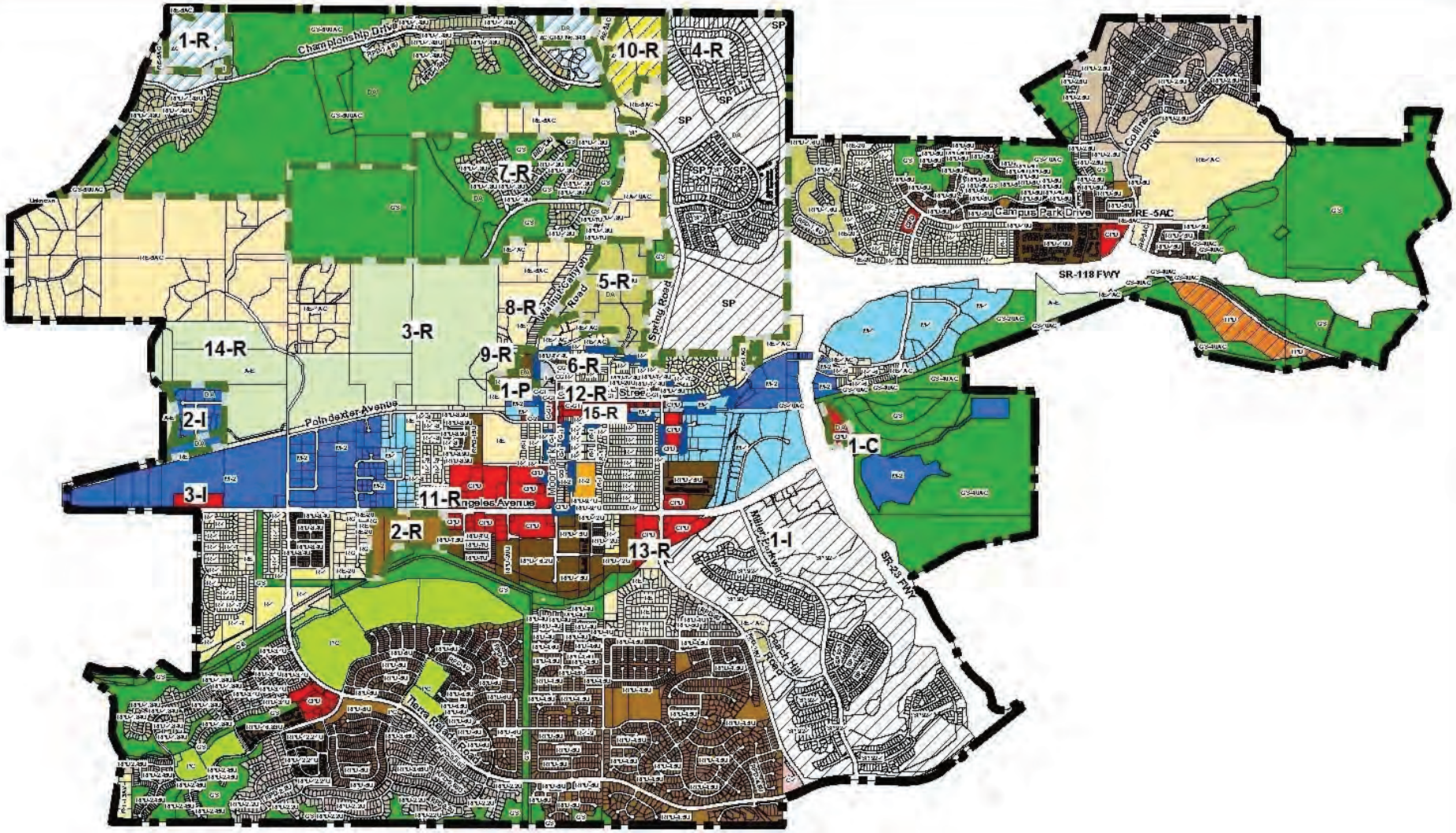
Cumulative Development Projects Trip Generation

Project	Site #	Land Use	Size	ADT	A.M. Peak Hour	P.M. Peak Hour	Note
Triliad Development	3-I	Movie Studio	37 Acres	100	10	10	Approved
Pacific Communities	2-R	Single Family Residential	283 Units	2,694	212	283	Approved
Essex Moorpark, LLC	9-R	Multi-Family Residential	200 Units	1,318	92	57	Approved
Spring Road, LLC	13-R	Condominiums	95 Units	552	42	49	Approved
City Ventures	6-R	Single Family Residential	110 Units	1,047	82	110	Approved
Oakmont Senior Living	-	Senior Residential	77 units/beds	285	15	20	Approved
Birdsall Group, LLC	10-R	Single Family Residential	21 Units	200	16	12	Approved
Aldersgate Senior Housing	8-R	Senior Residential	390 Units	1,443	78	101	Approved
Moorpark Hospitality/Fairfield Inn	1-C	Hotel	108 Rooms	903	51	65	Approved/Under construction
Grand Moorpark/Kozar	11-R	Condominiums	66 Units	383	29	34	Proposed
John C. Chiu, FLP-N	6-R	Condominiums	60 Units	349	26	31	Proposed
High Street Depot/Daly Group	15-R	Downtown Mixed-Use	14,000 sf retail and 91 res. units	870	39	79	Proposed
AHA Scattered Sites	12-R	Multi-family	56 units	410	26	31	Proposed
Hitch Ranch	3-R	Single and Multi-Family	755 units	6,327	453	585	Proposed
Moorpark 67/Rasmussen	14-R	Single Family Residential	138 Units	1,303	102	137	Proposed
*National Ready Mix		Batch Plant	10 acres	600	20	20	Unknown
**CEMEX		Quarry	N/A	980	276	148	Unknown
**Wayne J. Sand & Gravel		Quarry	N/A	504	92	34	Unknown
**Grimes Rock		Quarry	N/A	480	35	14	Unknown
Total Trips							

*No proposal to change or expand operations. Existing use creates significant truck traffic through Moorpark.

**Operations under County jurisdiction but bring significant truck traffic through Moorpark. Please contact Ventura County to determine whether any active permits for expansion are being reviewed or processed.

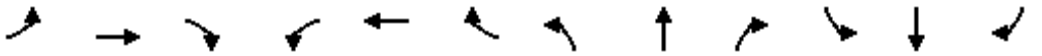
City of Moorpark



LOCATION MAP - MARCH 2019

Attachment 5
Intersection Level of Service Calculation Worksheets

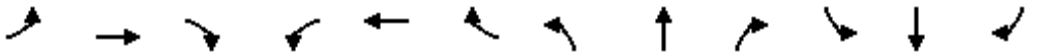
Existing and Existing + Project AM and PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	685	248	370	676	44	130	73	251	45	162	142
Future Volume (veh/h)	86	685	248	370	676	44	130	73	251	45	162	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	745	270	402	735	48	141	79	273	49	176	154
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	841	375	454	1069	477	446	468	605	251	263	223
Arrive On Green	0.07	0.24	0.24	0.13	0.30	0.30	0.25	0.25	0.25	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	93	745	270	402	735	48	141	79	273	49	176	154
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.8	15.1	11.7	8.5	13.6	1.6	4.8	2.5	9.6	1.8	6.7	6.9
Cycle Q Clear(g_c), s	3.8	15.1	11.7	8.5	13.6	1.6	4.8	2.5	9.6	1.8	6.7	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	841	375	454	1069	477	446	468	605	251	263	223
V/C Ratio(X)	0.78	0.89	0.72	0.89	0.69	0.10	0.32	0.17	0.45	0.20	0.67	0.69
Avail Cap(c_a), veh/h	157	857	382	454	1069	477	446	468	605	251	263	223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	27.5	26.2	31.9	23.0	18.8	22.8	21.9	17.2	28.3	30.4	30.5
Incr Delay (d2), s/veh	16.4	10.9	6.3	18.6	1.9	0.1	1.9	0.8	2.4	1.7	12.7	16.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	7.4	4.9	4.6	5.7	0.6	2.2	1.1	3.7	0.9	3.8	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.7	38.5	32.6	50.5	24.9	18.9	24.6	22.7	19.7	30.1	43.2	46.7
LnGrp LOS	D	D	C	D	C	B	C	C	B	C	D	D
Approach Vol, veh/h		1108			1185			493			379	
Approach Delay, s/veh		38.1			33.3			21.6			42.9	
Approach LOS		D			C			C			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.2	14.3	22.2		15.0	9.5	27.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.7	9.8	18.0		10.5	6.6	21.2				
Max Q Clear Time (g_c+I1), s		11.6	10.5	17.1		8.9	5.8	15.6				
Green Ext Time (p_c), s		1.1	0.0	0.5		0.3	0.0	2.4				

Intersection Summary												
HCM 6th Ctrl Delay			34.3									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	825	606	36	940	0	0	0	0	3	0	969
Future Volume (veh/h)	0	825	606	36	940	0	0	0	0	3	0	969
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	1108	0	39	1022	0				3	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1503		643	1531	0				7	0	
Arrive On Green	0.00	0.40	0.00	0.36	0.82	0.00				0.00	0.00	0.00
Sat Flow, veh/h	0	3741	1585	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	1108	0	39	1022	0				3	0	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	20.1	0.0	1.1	17.5	0.0				0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.1	0.0	1.1	17.5	0.0				0.1	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1503		643	1531	0				7	0	
V/C Ratio(X)	0.00	0.74		0.06	0.67	0.00				0.42	0.00	
Avail Cap(c_a), veh/h	0	2548		643	1531	0				122	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	20.3	0.0	16.7	2.9	0.0				39.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	2.3	0.0				34.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.3	0.0	0.5	3.5	0.0				0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.1	0.0	16.7	5.2	0.0				74.1	0.0	0.0
LnGrp LOS	A	C		B	A	A				E	A	
Approach Vol, veh/h		1108	A		1061						3	A
Approach Delay, s/veh		21.1			5.6						74.1	
Approach LOS		C			A						E	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		33.4	36.6		4.8		70.0					
Change Period (Y+Rc), s		4.5	4.5		4.5		4.5					
Max Green Setting (Gmax), s		6.5	54.5		5.5		65.5					
Max Q Clear Time (g_c+I1), s		3.1	22.1		2.1		19.5					
Green Ext Time (p_c), s		0.0	10.0		0.0		11.8					

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

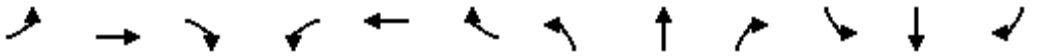
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	11	822	39	66	918	7
Future Volume (veh/h)	11	822	39	66	918	7
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	0	42	72	998	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	168		108	106	2757	1264
Arrive On Green	0.09	0.00	0.09	0.09	0.80	0.80
Sat Flow, veh/h	1870	2790	515	1183	3456	1585
Grp Volume(v), veh/h	12	0	114	0	998	8
Grp Sat Flow(s),veh/h/ln	1870	1395	1698	0	1728	1585
Q Serve(g_s), s	0.5	0.0	4.0	0.0	6.6	0.1
Cycle Q Clear(g_c), s	0.5	0.0	5.2	0.0	6.6	0.1
Prop In Lane		1.00	0.37		1.00	1.00
Lane Grp Cap(c), veh/h	168		214	0	2757	1264
V/C Ratio(X)	0.07		0.53	0.00	0.36	0.01
Avail Cap(c_a), veh/h	549		554	0	2757	1264
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	0.0	35.5	0.0	2.3	1.6
Incr Delay (d2), s/veh	0.2	0.0	2.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.2	0.0	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.5	0.0	37.5	0.0	2.7	1.7
LnGrp LOS	C		D	A	A	A
Approach Vol, veh/h	12	A		114	1006	
Approach Delay, s/veh	33.5			37.5	2.7	
Approach LOS	C			D	A	

Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		68.3		11.7		11.7
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		47.5		23.5		23.5
Max Q Clear Time (g_c+I1), s		8.6		2.5		7.2
Green Ext Time (p_c), s		4.5		0.0		0.5

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

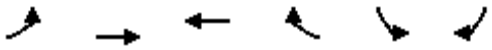
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	660	198	474	1109	119	442	0	676	91	0	77
Future Volume (veh/h)	54	660	198	474	1109	119	442	0	676	91	0	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	59	717	215	515	1205	129	480	0	735	99	0	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	100	1206	838	698	1724	887	656	0	0	133	0	0
Arrive On Green	0.06	0.34	0.34	0.20	0.49	0.49	0.19	0.00	0.00	0.07	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	480		1781	99	
Grp Volume(v), veh/h	59	717	215	515	1205	129	480	20.7		99	30.7	
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	C		1781	C	
Q Serve(g_s), s	1.6	8.4	2.3	7.0	13.2	2.0	6.6			2.7		
Cycle Q Clear(g_c), s	1.6	8.4	2.3	7.0	13.2	2.0	6.6			2.7		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	100	1206	838	698	1724	887	656			133		
V/C Ratio(X)	0.59	0.59	0.26	0.74	0.70	0.15	0.73			0.75		
Avail Cap(c_a), veh/h	178	1630	1028	1068	2374	1177	999			1350		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Uniform Delay (d), s/veh	23.1	13.7	2.5	18.8	10.1	5.3	19.1			22.7		
Incr Delay (d2), s/veh	5.5	0.5	0.2	1.6	0.6	0.1	1.6			8.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.8	2.9	0.9	2.6	4.0	0.5	2.5			1.3		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	14.2	2.6	20.3	10.6	5.4	20.7			30.7		
LnGrp LOS	C	B	A	C	B	A	C			C		
Approach Vol, veh/h		991			1849							
Approach Delay, s/veh		12.5			12.9							
Approach LOS		B			B							

Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	8.2		14.6	21.5	14.0		7.3	28.8				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	38.0		15.5	23.0	14.5		5.0	33.5				
Max Q Clear Time (g_c+I1), s	4.7		9.0	10.4	8.6		3.6	15.2				
Green Ext Time (p_c), s	0.3		1.1	4.6	1.0		0.0	9.1				

Intersection Summary												
HCM 6th Ctrl Delay			14.4									
HCM 6th LOS			B									



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↱	↰	↱
Traffic Volume (veh/h)	0	1098	1181	217	123	530
Future Volume (veh/h)	0	1098	1181	217	123	530
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1193	1284	0	134	576
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2
Cap, veh/h	0	2330	1621		768	684
Arrive On Green	0.00	0.46	0.91	0.00	0.43	0.43
Sat Flow, veh/h	0	5443	3647	1585	1781	1585
Grp Volume(v), veh/h	0	1193	1284	0	134	576
Grp Sat Flow(s),veh/h/ln	0	1702	1777	1585	1781	1585
Q Serve(g_s), s	0.0	13.3	9.1	0.0	3.7	26.0
Cycle Q Clear(g_c), s	0.0	13.3	9.1	0.0	3.7	26.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2330	1621		768	684
V/C Ratio(X)	0.00	0.51	0.79		0.17	0.84
Avail Cap(c_a), veh/h	0	2330	1621		768	684
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.60	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	15.4	2.3	0.0	14.0	20.3
Incr Delay (d2), s/veh	0.0	0.8	2.5	0.0	0.5	12.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.9	1.6	0.0	1.5	11.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	16.2	4.8	0.0	14.5	32.4
LnGrp LOS	A	B	A		B	C
Approach Vol, veh/h		1193	1284	A	710	
Approach Delay, s/veh		16.2	4.8		29.0	
Approach LOS		B	A		C	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			41.0		39.0	41.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			36.5		34.5	36.5
Max Q Clear Time (g_c+I1), s			15.3		28.0	11.1
Green Ext Time (p_c), s			9.0		1.6	11.1

Intersection Summary		
HCM 6th Ctrl Delay		14.5
HCM 6th LOS		B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	956	268	0	774	633	686
Future Volume (veh/h)	956	268	0	774	633	686
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	1039	0	0	841	715	717
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	1310		0	1310	924	822
Arrive On Green	0.74	0.00	0.00	0.37	0.52	0.52
Sat Flow, veh/h	3647	1585	0	3741	1781	1585
Grp Volume(v), veh/h	1039	0	0	841	715	717
Grp Sat Flow(s),veh/h/ln	1777	1585	0	1777	1781	1585
Q Serve(g_s), s	14.8	0.0	0.0	15.7	25.8	31.8
Cycle Q Clear(g_c), s	14.8	0.0	0.0	15.7	25.8	31.8
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1310		0	1310	924	822
V/C Ratio(X)	0.79		0.00	0.64	0.77	0.87
Avail Cap(c_a), veh/h	1310		0	1310	924	822
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.6	0.0	0.0	20.9	15.5	16.9
Incr Delay (d2), s/veh	4.4	0.0	0.0	2.4	6.3	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0	6.6	10.9	13.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.9	0.0	0.0	23.3	21.8	29.2
LnGrp LOS	B		A	C	C	C
Approach Vol, veh/h	1039	A		841	1432	
Approach Delay, s/veh	12.9			23.3	25.5	
Approach LOS	B			C	C	

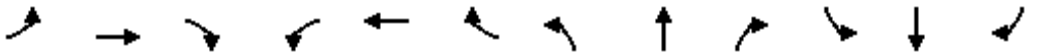
Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	46.0	34.0	34.0
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	41.5	29.5	29.5
Max Q Clear Time (g_c+I1), s	33.8	16.8	17.7
Green Ext Time (p_c), s	3.7	6.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

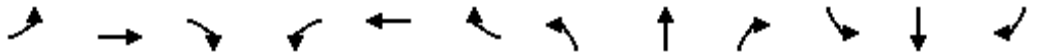
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	691	263	370	678	44	132	73	251	45	162	142
Future Volume (veh/h)	86	691	263	370	678	44	132	73	251	45	162	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	751	286	402	737	48	143	79	273	49	176	154
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	843	376	453	1071	478	446	468	604	250	263	223
Arrive On Green	0.07	0.24	0.24	0.13	0.30	0.30	0.25	0.25	0.25	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	93	751	286	402	737	48	143	79	273	49	176	154
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.8	15.3	12.5	8.5	13.7	1.6	4.9	2.5	9.6	1.8	6.7	6.9
Cycle Q Clear(g_c), s	3.8	15.3	12.5	8.5	13.7	1.6	4.9	2.5	9.6	1.8	6.7	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	843	376	453	1071	478	446	468	604	250	263	223
V/C Ratio(X)	0.78	0.89	0.76	0.89	0.69	0.10	0.32	0.17	0.45	0.20	0.67	0.69
Avail Cap(c_a), veh/h	157	856	382	453	1071	478	446	468	604	250	263	223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	27.6	26.5	31.9	23.0	18.8	22.8	21.9	17.3	28.4	30.5	30.6
Incr Delay (d2), s/veh	16.4	11.4	8.5	18.8	1.9	0.1	1.9	0.8	2.4	1.7	12.8	16.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	7.5	5.4	4.6	5.7	0.6	2.2	1.1	3.7	0.9	3.8	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.8	39.0	35.1	50.7	24.9	18.9	24.7	22.7	19.7	30.1	43.3	46.8
LnGrp LOS	D	D	D	D	C	B	C	C	B	C	D	D
Approach Vol, veh/h		1130			1187			495			379	
Approach Delay, s/veh		39.0			33.4			21.6			43.0	
Approach LOS		D			C			C			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.2	14.3	22.2		15.0	9.5	27.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.7	9.8	18.0		10.5	6.6	21.2				
Max Q Clear Time (g_c+I1), s		11.6	10.5	17.3		8.9	5.8	15.7				
Green Ext Time (p_c), s		1.1	0.0	0.5		0.3	0.0	2.4				

Intersection Summary												
HCM 6th Ctrl Delay			34.7									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	825	618	36	943	0	0	0	0	3	0	969
Future Volume (veh/h)	0	825	618	36	943	0	0	0	0	3	0	969
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	1120	0	39	1025	0				3	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1517		636	1531	0				7	0	
Arrive On Green	0.00	0.41	0.00	0.36	0.82	0.00				0.00	0.00	0.00
Sat Flow, veh/h	0	3741	1585	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	1120	0	39	1025	0				3	0	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	20.3	0.0	1.2	17.6	0.0				0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.3	0.0	1.2	17.6	0.0				0.1	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1517		636	1531	0				7	0	
V/C Ratio(X)	0.00	0.74		0.06	0.67	0.00				0.42	0.00	
Avail Cap(c_a), veh/h	0	2548		636	1531	0				122	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	20.2	0.0	16.9	2.9	0.0				39.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	2.3	0.0				34.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	0.0	0.5	3.6	0.0				0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	20.9	0.0	17.0	5.2	0.0				74.1	0.0	0.0
LnGrp LOS	A	C		B	A	A				E	A	
Approach Vol, veh/h		1120	A		1064						3	A
Approach Delay, s/veh		20.9			5.7						74.1	
Approach LOS		C			A						E	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		33.1	36.9		4.8		70.0					
Change Period (Y+Rc), s		4.5	4.5		4.5		4.5					
Max Green Setting (Gmax), s		6.5	54.5		5.5		65.5					
Max Q Clear Time (g_c+I1), s		3.2	22.3		2.1		19.6					
Green Ext Time (p_c), s		0.0	10.1		0.0		11.8					

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

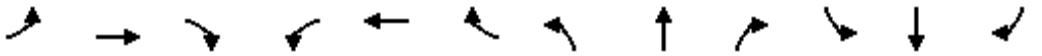
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	11	822	39	66	921	7
Future Volume (veh/h)	11	822	39	66	921	7
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	0	42	72	1001	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	168		108	106	2757	1264
Arrive On Green	0.09	0.00	0.09	0.09	0.80	0.80
Sat Flow, veh/h	1870	2790	515	1183	3456	1585
Grp Volume(v), veh/h	12	0	114	0	1001	8
Grp Sat Flow(s),veh/h/ln	1870	1395	1698	0	1728	1585
Q Serve(g_s), s	0.5	0.0	4.0	0.0	6.6	0.1
Cycle Q Clear(g_c), s	0.5	0.0	5.2	0.0	6.6	0.1
Prop In Lane		1.00	0.37		1.00	1.00
Lane Grp Cap(c), veh/h	168		214	0	2757	1264
V/C Ratio(X)	0.07		0.53	0.00	0.36	0.01
Avail Cap(c_a), veh/h	549		554	0	2757	1264
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	0.0	35.5	0.0	2.3	1.6
Incr Delay (d2), s/veh	0.2	0.0	2.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.2	0.0	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.5	0.0	37.5	0.0	2.7	1.7
LnGrp LOS	C		D	A	A	A
Approach Vol, veh/h	12	A		114	1009	
Approach Delay, s/veh	33.5			37.5	2.7	
Approach LOS	C			D	A	

Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		68.3		11.7		11.7
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		47.5		23.5		23.5
Max Q Clear Time (g_c+I1), s		8.6		2.5		7.2
Green Ext Time (p_c), s		4.5		0.0		0.5

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

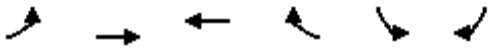
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	679	198	474	1112	119	442	0	676	92	0	77
Future Volume (veh/h)	54	679	198	474	1112	119	442	0	676	92	0	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	59	738	215	515	1209	129	480	0	735	100	0	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	99	1209	840	697	1727	890	655	0	0	134	0	0
Arrive On Green	0.06	0.34	0.34	0.20	0.49	0.49	0.19	0.00	0.00	0.08	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	480		1781	100	
Grp Volume(v), veh/h	59	738	215	515	1209	129	480	20.8		100	30.7	
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	C		1781	C	
Q Serve(g_s), s	1.6	8.7	2.3	7.0	13.3	2.0	6.6			2.8		
Cycle Q Clear(g_c), s	1.6	8.7	2.3	7.0	13.3	2.0	6.6			2.8		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	99	1209	840	697	1727	890	655			134		
V/C Ratio(X)	0.59	0.61	0.26	0.74	0.70	0.15	0.73			0.75		
Avail Cap(c_a), veh/h	177	1626	1026	1066	2369	1176	997			1347		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Uniform Delay (d), s/veh	23.2	13.8	2.5	18.8	10.1	5.3	19.2			22.8		
Incr Delay (d2), s/veh	5.5	0.5	0.2	1.6	0.6	0.1	1.6			8.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.8	3.0	0.9	2.7	4.1	0.5	2.5			1.4		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.7	14.3	2.6	20.4	10.6	5.3	20.8			30.7		
LnGrp LOS	C	B	A	C	B	A	C			C		
Approach Vol, veh/h		1012			1853							
Approach Delay, s/veh		12.7			13.0							
Approach LOS		B			B							

Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	8.3		14.6	21.6	14.0		7.3	28.9				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	38.0		15.5	23.0	14.5		5.0	33.5				
Max Q Clear Time (g_c+I1), s	4.8		9.0	10.7	8.6		3.6	15.3				
Green Ext Time (p_c), s	0.3		1.1	4.7	1.0		0.0	9.1				

Intersection Summary												
HCM 6th Ctrl Delay			14.5									
HCM 6th LOS			B									



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↱	↰	↱
Traffic Volume (veh/h)	0	1118	1184	223	161	530
Future Volume (veh/h)	0	1118	1184	223	161	530
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1215	1287	0	175	576
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2
Cap, veh/h	0	2330	1621		768	684
Arrive On Green	0.00	0.46	0.91	0.00	0.43	0.43
Sat Flow, veh/h	0	5443	3647	1585	1781	1585
Grp Volume(v), veh/h	0	1215	1287	0	175	576
Grp Sat Flow(s),veh/h/ln	0	1702	1777	1585	1781	1585
Q Serve(g_s), s	0.0	13.6	9.2	0.0	5.0	26.0
Cycle Q Clear(g_c), s	0.0	13.6	9.2	0.0	5.0	26.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2330	1621		768	684
V/C Ratio(X)	0.00	0.52	0.79		0.23	0.84
Avail Cap(c_a), veh/h	0	2330	1621		768	684
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.59	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	15.5	2.3	0.0	14.3	20.3
Incr Delay (d2), s/veh	0.0	0.8	2.5	0.0	0.7	12.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.1	1.6	0.0	2.0	11.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	16.4	4.8	0.0	15.0	32.4
LnGrp LOS	A	B	A		B	C
Approach Vol, veh/h		1215	1287	A	751	
Approach Delay, s/veh		16.4	4.8		28.3	
Approach LOS		B	A		C	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			41.0		39.0	41.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			36.5		34.5	36.5
Max Q Clear Time (g_c+I1), s			15.6		28.0	11.2
Green Ext Time (p_c), s			9.1		1.7	11.1

Intersection Summary		
HCM 6th Ctrl Delay	14.5	
HCM 6th LOS	B	

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1014	268	0	783	633	718
Future Volume (veh/h)	1014	268	0	783	633	718
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	1102	0	0	851	731	734
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	1310		0	1310	924	822
Arrive On Green	0.74	0.00	0.00	0.37	0.52	0.52
Sat Flow, veh/h	3647	1585	0	3741	1781	1585
Grp Volume(v), veh/h	1102	0	0	851	731	734
Grp Sat Flow(s),veh/h/ln	1777	1585	0	1777	1781	1585
Q Serve(g_s), s	17.1	0.0	0.0	15.9	26.8	33.2
Cycle Q Clear(g_c), s	17.1	0.0	0.0	15.9	26.8	33.2
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1310		0	1310	924	822
V/C Ratio(X)	0.84		0.00	0.65	0.79	0.89
Avail Cap(c_a), veh/h	1310		0	1310	924	822
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	0.0	0.0	21.0	15.7	17.3
Incr Delay (d2), s/veh	5.8	0.0	0.0	2.5	6.9	14.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0	6.7	11.4	13.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	0.0	0.0	23.5	22.6	31.3
LnGrp LOS	B		A	C	C	C
Approach Vol, veh/h	1102	A		851	1465	
Approach Delay, s/veh	14.7			23.5	27.0	
Approach LOS	B			C	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	46.0	34.0	34.0
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	41.5	29.5	29.5
Max Q Clear Time (g_c+I1), s	35.2	19.1	17.9
Green Ext Time (p_c), s	3.3	5.5	4.6

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

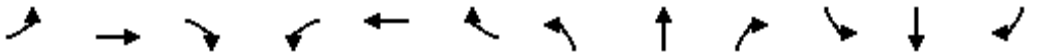
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	105	1627	863	26	13	31
Future Vol, veh/h	105	1627	863	26	13	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	1768	938	28	14	34

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	966	0	-	0	2064	483
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	1112	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	709	-	-	-	47	530
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	276	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	709	-	-	-	39	530
Mov Cap-2 Maneuver	-	-	-	-	145	-
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	276	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	19.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	709	-	-	-	297
HCM Lane V/C Ratio	0.161	-	-	-	0.161
HCM Control Delay (s)	11	-	-	-	19.4
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.6	-	-	-	0.6

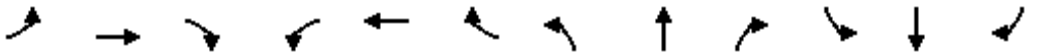
Cumulative and Cumulative + Project AM and PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	752	263	370	707	92	132	160	251	65	198	190
Future Volume (veh/h)	195	752	263	370	707	92	132	160	251	65	198	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	212	817	286	402	768	100	143	174	273	71	215	207
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	902	402	455	872	389	458	481	616	235	246	209
Arrive On Green	0.14	0.25	0.25	0.13	0.25	0.25	0.26	0.26	0.26	0.13	0.13	0.13
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	212	817	286	402	768	100	143	174	273	71	215	207
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	9.3	17.8	13.1	9.1	16.6	4.1	5.2	6.1	10.1	2.9	9.0	10.4
Cycle Q Clear(g_c), s	9.3	17.8	13.1	9.1	16.6	4.1	5.2	6.1	10.1	2.9	9.0	10.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	902	402	455	872	389	458	481	616	235	246	209
V/C Ratio(X)	0.85	0.91	0.71	0.88	0.88	0.26	0.31	0.36	0.44	0.30	0.87	0.99
Avail Cap(c_a), veh/h	257	913	407	455	872	389	458	481	616	235	246	209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	28.8	27.1	34.0	29.0	24.2	23.9	24.3	18.0	31.3	34.0	34.6
Incr Delay (d2), s/veh	22.2	12.4	5.6	18.2	10.4	0.3	1.8	2.1	2.3	3.3	32.2	60.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	8.8	5.4	4.9	8.0	1.5	2.3	2.9	3.9	1.4	6.2	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	41.2	32.7	52.2	39.3	24.6	25.7	26.4	20.3	34.6	66.1	94.8
LnGrp LOS	E	D	C	D	D	C	C	C	C	C	E	F
Approach Vol, veh/h		1315			1270			590			493	
Approach Delay, s/veh		41.7			42.2			23.4			73.6	
Approach LOS		D			D			C			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		25.0	15.0	24.7		15.0	15.7	24.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		20.5	10.5	20.5		10.5	11.5	19.5				
Max Q Clear Time (g_c+I1), s		12.1	11.1	19.8		12.4	11.3	18.6				
Green Ext Time (p_c), s		1.6	0.0	0.5		0.0	0.0	0.5				

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	933	736	48	1206	0	0	0	0	14	0	1200
Future Volume (veh/h)	0	933	736	48	1206	0	0	0	0	14	0	1200
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	1307	0	52	1311	0				15	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1739		541	1543	0				32	0	
Arrive On Green	0.00	0.46	0.00	0.30	0.82	0.00				0.02	0.00	0.00
Sat Flow, veh/h	0	3741	1585	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	1307	0	52	1311	0				15	0	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	23.0	0.0	1.7	32.8	0.0				0.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	23.0	0.0	1.7	32.8	0.0				0.7	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1739		541	1543	0				32	0	
V/C Ratio(X)	0.00	0.75		0.10	0.85	0.00				0.48	0.00	
Avail Cap(c_a), veh/h	0	2567		541	1543	0				111	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	0.0	20.0	4.1	0.0				38.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.1	6.0	0.0				10.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.2	0.0	0.7	7.0	0.0				0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.3	0.0	20.0	10.1	0.0				49.6	0.0	0.0
LnGrp LOS	A	B		C	B	A				D	A	
Approach Vol, veh/h		1307	A		1363						15	A
Approach Delay, s/veh		18.3			10.5						49.6	
Approach LOS		B			B						D	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		28.8	41.7		5.9		70.5					
Change Period (Y+Rc), s		4.5	4.5		4.5		4.5					
Max Green Setting (Gmax), s		6.6	54.9		5.0		66.0					
Max Q Clear Time (g_c+I1), s		3.7	25.0		2.7		34.8					
Green Ext Time (p_c), s		0.0	12.2		0.0		17.4					

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

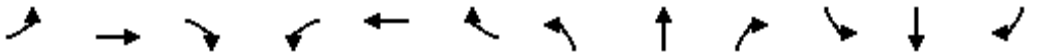
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	31	913	51	87	1173	18
Future Volume (veh/h)	31	913	51	87	1173	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	0	55	95	1275	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	216		120	136	2667	1223
Arrive On Green	0.12	0.00	0.12	0.12	0.77	0.77
Sat Flow, veh/h	1870	2790	508	1179	3456	1585
Grp Volume(v), veh/h	34	0	150	0	1275	20
Grp Sat Flow(s),veh/h/ln	1870	1395	1687	0	1728	1585
Q Serve(g_s), s	1.3	0.0	5.4	0.0	10.7	0.2
Cycle Q Clear(g_c), s	1.3	0.0	6.8	0.0	10.7	0.2
Prop In Lane		1.00	0.37		1.00	1.00
Lane Grp Cap(c), veh/h	216		257	0	2667	1223
V/C Ratio(X)	0.16		0.58	0.00	0.48	0.02
Avail Cap(c_a), veh/h	503		510	0	2667	1223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	0.0	34.2	0.0	3.3	2.1
Incr Delay (d2), s/veh	0.3	0.0	2.1	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.9	0.0	2.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.2	0.0	36.3	0.0	3.9	2.1
LnGrp LOS	C		D	A	A	A
Approach Vol, veh/h	34	A		150	1295	
Approach Delay, s/veh	32.2			36.3	3.9	
Approach LOS	C			D	A	

Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		66.2		13.8		13.8
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		49.5		21.5		21.5
Max Q Clear Time (g_c+I1), s		12.7		3.3		8.8
Green Ext Time (p_c), s		6.4		0.1		0.6

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

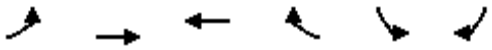
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	682	198	474	1117	129	442	0	676	101	0	77
Future Volume (veh/h)	54	682	198	474	1117	129	442	0	676	101	0	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	59	741	215	515	1214	140	480	0	735	110	0	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	99	1213	841	696	1731	904	654	0	0	148	0	0
Arrive On Green	0.06	0.34	0.34	0.20	0.49	0.49	0.19	0.00	0.00	0.08	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	480		1781	110	
Grp Volume(v), veh/h	59	741	215	515	1214	140	480	20.9		110	29.7	
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	C		1781	C	
Q Serve(g_s), s	1.6	8.7	2.3	7.1	13.4	2.1	6.6			3.0		
Cycle Q Clear(g_c), s	1.6	8.7	2.3	7.1	13.4	2.1	6.6			3.0		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	99	1213	841	696	1731	904	654			148		
V/C Ratio(X)	0.59	0.61	0.26	0.74	0.70	0.15	0.73			0.74		
Avail Cap(c_a), veh/h	177	1621	1023	1062	2360	1185	994			1342		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Uniform Delay (d), s/veh	23.3	13.8	2.5	18.9	10.1	5.1	19.2			22.6		
Incr Delay (d2), s/veh	5.6	0.5	0.2	1.6	0.6	0.1	1.6			7.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.8	3.1	0.9	2.7	4.1	0.5	2.5			1.5		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	14.3	2.6	20.5	10.7	5.2	20.9			29.7		
LnGrp LOS	C	B	A	C	B	A	C			C		
Approach Vol, veh/h		1015			1869							
Approach Delay, s/veh		12.7			12.9							
Approach LOS		B			B							

Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	8.7		14.7	21.7	14.1		7.3	29.1				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	38.0		15.5	23.0	14.5		5.0	33.5				
Max Q Clear Time (g_c+I1), s	5.0		9.1	10.7	8.6		3.6	15.4				
Green Ext Time (p_c), s	0.3		1.1	4.7	1.0		0.0	9.2				

Intersection Summary												
HCM 6th Ctrl Delay			14.5									
HCM 6th LOS			B									



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↱	↰	↱
Traffic Volume (veh/h)	0	1128	1199	223	217	530
Future Volume (veh/h)	0	1128	1199	223	217	530
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1226	1303	0	236	576
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2
Cap, veh/h	0	2330	1621		768	684
Arrive On Green	0.00	0.46	0.91	0.00	0.43	0.43
Sat Flow, veh/h	0	5443	3647	1585	1781	1585
Grp Volume(v), veh/h	0	1226	1303	0	236	576
Grp Sat Flow(s),veh/h/ln	0	1702	1777	1585	1781	1585
Q Serve(g_s), s	0.0	13.7	9.6	0.0	6.9	26.0
Cycle Q Clear(g_c), s	0.0	13.7	9.6	0.0	6.9	26.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2330	1621		768	684
V/C Ratio(X)	0.00	0.53	0.80		0.31	0.84
Avail Cap(c_a), veh/h	0	2330	1621		768	684
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.58	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	15.6	2.3	0.0	14.9	20.3
Incr Delay (d2), s/veh	0.0	0.9	2.6	0.0	1.0	12.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.1	1.6	0.0	2.9	11.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	16.4	4.9	0.0	16.0	32.4
LnGrp LOS	A	B	A		B	C
Approach Vol, veh/h		1226	1303	A	812	
Approach Delay, s/veh		16.4	4.9		27.6	
Approach LOS		B	A		C	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			41.0		39.0	41.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			36.5		34.5	36.5
Max Q Clear Time (g_c+I1), s			15.7		28.0	11.6
Green Ext Time (p_c), s			9.2		1.8	11.2

Intersection Summary		
HCM 6th Ctrl Delay		14.6
HCM 6th LOS		B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1079	268	0	798	633	718
Future Volume (veh/h)	1079	268	0	798	633	718
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	1173	0	0	867	731	734
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	1310		0	1310	924	822
Arrive On Green	0.74	0.00	0.00	0.37	0.52	0.52
Sat Flow, veh/h	3647	1585	0	3741	1781	1585
Grp Volume(v), veh/h	1173	0	0	867	731	734
Grp Sat Flow(s),veh/h/ln	1777	1585	0	1777	1781	1585
Q Serve(g_s), s	20.4	0.0	0.0	16.3	26.8	33.2
Cycle Q Clear(g_c), s	20.4	0.0	0.0	16.3	26.8	33.2
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1310		0	1310	924	822
V/C Ratio(X)	0.90		0.00	0.66	0.79	0.89
Avail Cap(c_a), veh/h	1310		0	1310	924	822
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	0.0	0.0	21.1	15.7	17.3
Incr Delay (d2), s/veh	8.5	0.0	0.0	2.6	6.9	14.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	0.0	6.9	11.4	13.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.8	0.0	0.0	23.7	22.6	31.3
LnGrp LOS	B		A	C	C	C
Approach Vol, veh/h	1173	A		867	1465	
Approach Delay, s/veh	17.8			23.7	27.0	
Approach LOS	B			C	C	

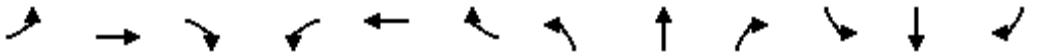
Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	46.0	34.0	34.0
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	41.5	29.5	29.5
Max Q Clear Time (g_c+I1), s	35.2	22.4	18.3
Green Ext Time (p_c), s	3.3	4.4	4.6

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

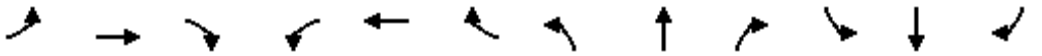
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	758	278	370	709	92	134	160	251	65	198	190
Future Volume (veh/h)	195	758	278	370	709	92	134	160	251	65	198	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	212	824	302	402	771	100	146	174	273	71	215	207
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	905	404	455	874	390	457	480	616	234	246	208
Arrive On Green	0.14	0.25	0.25	0.13	0.25	0.25	0.26	0.26	0.26	0.13	0.13	0.13
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	212	824	302	402	771	100	146	174	273	71	215	207
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	9.3	18.0	14.0	9.1	16.7	4.1	5.3	6.1	10.2	2.9	9.0	10.4
Cycle Q Clear(g_c), s	9.3	18.0	14.0	9.1	16.7	4.1	5.3	6.1	10.2	2.9	9.0	10.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	905	404	455	874	390	457	480	616	234	246	208
V/C Ratio(X)	0.85	0.91	0.75	0.88	0.88	0.26	0.32	0.36	0.44	0.30	0.87	0.99
Avail Cap(c_a), veh/h	257	913	407	455	874	390	457	480	616	234	246	208
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	28.9	27.4	34.1	29.0	24.2	24.0	24.3	18.0	31.4	34.0	34.6
Incr Delay (d2), s/veh	22.3	13.0	7.4	18.3	10.5	0.3	1.8	2.1	2.3	3.3	32.3	60.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	9.0	5.9	4.9	8.1	1.5	2.4	2.9	3.9	1.4	6.2	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	41.9	34.8	52.4	39.4	24.6	25.8	26.4	20.3	34.7	66.3	95.1
LnGrp LOS	E	D	C	D	D	C	C	C	C	C	E	F
Approach Vol, veh/h		1338			1273			593			493	
Approach Delay, s/veh		42.5			42.4			23.5			73.9	
Approach LOS		D			D			C			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		25.0	15.0	24.8		15.0	15.7	24.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		20.5	10.5	20.5		10.5	11.5	19.5				
Max Q Clear Time (g_c+I1), s		12.2	11.1	20.0		12.4	11.3	18.7				
Green Ext Time (p_c), s		1.6	0.0	0.4		0.0	0.0	0.5				

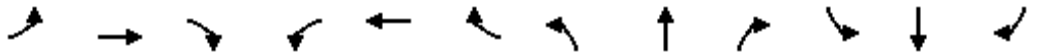
Intersection Summary												
HCM 6th Ctrl Delay			43.6									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	758	278	370	709	92	134	160	251	65	198	190
Future Volume (veh/h)	195	758	278	370	709	92	134	160	251	65	198	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	212	824	302	402	771	100	146	174	273	71	215	207
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	937	418	483	933	416	237	439	594	237	439	596
Arrive On Green	0.14	0.26	0.26	0.14	0.26	0.26	0.13	0.23	0.23	0.13	0.23	0.23
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	212	824	302	402	771	100	146	174	273	71	215	207
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	9.1	17.5	13.7	8.9	16.1	3.9	6.1	6.2	10.3	2.8	7.8	7.4
Cycle Q Clear(g_c), s	9.1	17.5	13.7	8.9	16.1	3.9	6.1	6.2	10.3	2.8	7.8	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	937	418	483	933	416	237	439	594	237	439	596
V/C Ratio(X)	0.84	0.88	0.72	0.83	0.83	0.24	0.62	0.40	0.46	0.30	0.49	0.35
Avail Cap(c_a), veh/h	283	970	432	504	933	416	237	439	594	237	439	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	27.8	26.4	33.0	27.4	22.9	32.2	25.4	18.6	30.8	26.1	17.7
Incr Delay (d2), s/veh	18.6	9.2	5.7	11.0	6.2	0.3	11.4	2.7	2.6	3.2	3.9	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	8.3	5.6	4.4	7.3	1.4	3.3	3.0	4.0	1.4	3.8	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.6	37.0	32.0	43.9	33.6	23.2	43.6	28.1	21.2	34.0	29.9	19.3
LnGrp LOS	D	D	C	D	C	C	D	C	C	C	C	B
Approach Vol, veh/h		1338			1273			593			493	
Approach Delay, s/veh		38.2			36.0			28.7			26.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	23.0	15.5	25.3	15.0	23.0	15.6	25.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	18.5	11.5	21.5	10.5	18.5	12.5	20.5
Max Q Clear Time (g_c+I1), s	4.8	12.3	10.9	19.5	8.1	9.8	11.1	18.1
Green Ext Time (p_c), s	0.1	1.1	0.1	1.3	0.1	1.3	0.1	1.3

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	933	748	48	1209	0	0	0	0	14	0	1200
Future Volume (veh/h)	0	933	748	48	1209	0	0	0	0	14	0	1200
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	1320	0	52	1314	0				15	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1754		534	1543	0				32	0	
Arrive On Green	0.00	0.47	0.00	0.30	0.82	0.00				0.02	0.00	0.00
Sat Flow, veh/h	0	3741	1585	1781	1870	0				1781	0	1585
Grp Volume(v), veh/h	0	1320	0	52	1314	0				15	0	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	23.2	0.0	1.7	33.1	0.0				0.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	23.2	0.0	1.7	33.1	0.0				0.7	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1754		534	1543	0				32	0	
V/C Ratio(X)	0.00	0.75		0.10	0.85	0.00				0.48	0.00	
Avail Cap(c_a), veh/h	0	2567		534	1543	0				111	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.4	0.0	20.2	4.1	0.0				38.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.1	6.1	0.0				10.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	0.0	0.7	7.0	0.0				0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.2	0.0	20.3	10.2	0.0				49.6	0.0	0.0
LnGrp LOS	A	B		C	B	A				D	A	
Approach Vol, veh/h		1320	A		1366						15	A
Approach Delay, s/veh		18.2			10.6						49.6	
Approach LOS		B			B						D	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		28.5	42.0		5.9		70.5					
Change Period (Y+Rc), s		4.5	4.5		4.5		4.5					
Max Green Setting (Gmax), s		6.6	54.9		5.0		66.0					
Max Q Clear Time (g_c+I1), s		3.7	25.2		2.7		35.1					
Green Ext Time (p_c), s		0.0	12.3		0.0		17.4					

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

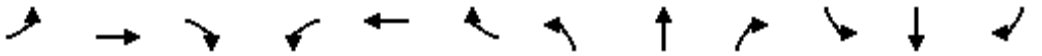
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	31	913	51	87	1176	18
Future Volume (veh/h)	31	913	51	87	1176	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	0	55	95	1278	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	216		120	136	2667	1223
Arrive On Green	0.12	0.00	0.12	0.12	0.77	0.77
Sat Flow, veh/h	1870	2790	508	1179	3456	1585
Grp Volume(v), veh/h	34	0	150	0	1278	20
Grp Sat Flow(s),veh/h/ln	1870	1395	1687	0	1728	1585
Q Serve(g_s), s	1.3	0.0	5.4	0.0	10.7	0.2
Cycle Q Clear(g_c), s	1.3	0.0	6.8	0.0	10.7	0.2
Prop In Lane		1.00	0.37		1.00	1.00
Lane Grp Cap(c), veh/h	216		257	0	2667	1223
V/C Ratio(X)	0.16		0.58	0.00	0.48	0.02
Avail Cap(c_a), veh/h	503		510	0	2667	1223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	0.0	34.2	0.0	3.3	2.1
Incr Delay (d2), s/veh	0.3	0.0	2.1	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.9	0.0	2.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.2	0.0	36.3	0.0	3.9	2.1
LnGrp LOS	C		D	A	A	A
Approach Vol, veh/h	34	A		150	1298	
Approach Delay, s/veh	32.2			36.3	3.9	
Approach LOS	C			D	A	

Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		66.2		13.8		13.8
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		49.5		21.5		21.5
Max Q Clear Time (g_c+I1), s		12.7		3.3		8.8
Green Ext Time (p_c), s		6.4		0.1		0.6

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

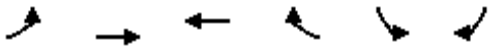
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	701	198	474	1120	129	442	0	676	102	0	77
Future Volume (veh/h)	54	701	198	474	1120	129	442	0	676	102	0	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	59	762	215	515	1217	140	480	0	735	111	0	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	99	1216	842	696	1733	906	654	0	0	150	0	0
Arrive On Green	0.06	0.34	0.34	0.20	0.49	0.49	0.19	0.00	0.00	0.08	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	480		1781	111	
Grp Volume(v), veh/h	59	762	215	515	1217	140	480	20.9		111	29.7	
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	C		1781	C	
Q Serve(g_s), s	1.6	9.1	2.3	7.1	13.5	2.1	6.6			3.1		
Cycle Q Clear(g_c), s	1.6	9.1	2.3	7.1	13.5	2.1	6.6			3.1		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	99	1216	842	696	1733	906	654			150		
V/C Ratio(X)	0.59	0.63	0.26	0.74	0.70	0.15	0.73			0.74		
Avail Cap(c_a), veh/h	176	1618	1022	1060	2357	1184	992			1340		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Uniform Delay (d), s/veh	23.3	13.9	2.5	18.9	10.1	5.1	19.3			22.6		
Incr Delay (d2), s/veh	5.6	0.5	0.2	1.6	0.6	0.1	1.6			7.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.8	3.2	0.9	2.7	4.1	0.5	2.5			1.5		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	14.5	2.6	20.5	10.7	5.2	20.9			29.7		
LnGrp LOS	C	B	A	C	B	A	C			C		
Approach Vol, veh/h		1036			1872							
Approach Delay, s/veh		12.8			13.0							
Approach LOS		B			B							

Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	8.7		14.7	21.8	14.1		7.3	29.1				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	38.0		15.5	23.0	14.5		5.0	33.5				
Max Q Clear Time (g_c+I1), s	5.1		9.1	11.1	8.6		3.6	15.5				
Green Ext Time (p_c), s	0.3		1.1	4.7	1.0		0.0	9.2				

Intersection Summary												
HCM 6th Ctrl Delay			14.5									
HCM 6th LOS			B									



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1148	1202	229	255	530
Future Volume (veh/h)	0	1148	1202	229	255	530
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1248	1307	0	277	576
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2
Cap, veh/h	0	2330	1621		768	684
Arrive On Green	0.00	0.46	0.91	0.00	0.43	0.43
Sat Flow, veh/h	0	5443	3647	1585	1781	1585
Grp Volume(v), veh/h	0	1248	1307	0	277	576
Grp Sat Flow(s),veh/h/ln	0	1702	1777	1585	1781	1585
Q Serve(g_s), s	0.0	14.1	9.7	0.0	8.4	26.0
Cycle Q Clear(g_c), s	0.0	14.1	9.7	0.0	8.4	26.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2330	1621		768	684
V/C Ratio(X)	0.00	0.54	0.81		0.36	0.84
Avail Cap(c_a), veh/h	0	2330	1621		768	684
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.56	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	15.7	2.3	0.0	15.3	20.3
Incr Delay (d2), s/veh	0.0	0.9	2.5	0.0	1.3	12.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	1.6	0.0	3.5	11.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	16.5	4.8	0.0	16.6	32.4
LnGrp LOS	A	B	A		B	C
Approach Vol, veh/h		1248	1307	A	853	
Approach Delay, s/veh		16.5	4.8		27.3	
Approach LOS		B	A		C	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			41.0		39.0	41.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			36.5		34.5	36.5
Max Q Clear Time (g_c+I1), s			16.1		28.0	11.7
Green Ext Time (p_c), s			9.3		1.9	11.2

Intersection Summary		
HCM 6th Ctrl Delay	14.7	
HCM 6th LOS	B	

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1137	268	0	807	633	750
Future Volume (veh/h)	1137	268	0	807	633	750
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	1236	0	0	877	747	752
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	1310		0	1310	924	822
Arrive On Green	0.74	0.00	0.00	0.37	0.52	0.52
Sat Flow, veh/h	3647	1585	0	3741	1781	1585
Grp Volume(v), veh/h	1236	0	0	877	747	752
Grp Sat Flow(s),veh/h/ln	1777	1585	0	1777	1781	1585
Q Serve(g_s), s	24.0	0.0	0.0	16.5	27.8	34.8
Cycle Q Clear(g_c), s	24.0	0.0	0.0	16.5	27.8	34.8
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1310		0	1310	924	822
V/C Ratio(X)	0.94		0.00	0.67	0.81	0.91
Avail Cap(c_a), veh/h	1310		0	1310	924	822
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.8	0.0	0.0	21.2	16.0	17.6
Incr Delay (d2), s/veh	12.9	0.0	0.0	2.7	7.6	16.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	0.0	7.0	12.0	14.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.7	0.0	0.0	23.9	23.5	34.0
LnGrp LOS	C		A	C	C	C
Approach Vol, veh/h	1236	A		877	1499	
Approach Delay, s/veh	22.7			23.9	28.8	
Approach LOS	C			C	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	46.0	34.0	34.0
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	41.5	29.5	29.5
Max Q Clear Time (g_c+I1), s	36.8	26.0	18.5
Green Ext Time (p_c), s	2.7	2.5	4.6

Intersection Summary	
HCM 6th Ctrl Delay	25.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	105	1683	902	26	13	31
Future Vol, veh/h	105	1683	902	26	13	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	1829	980	28	14	34

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1008	0	-	0	2137	504
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	1143	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	683	-	-	-	42	513
Stage 1	-	-	-	-	319	-
Stage 2	-	-	-	-	266	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	683	-	-	-	35	513
Mov Cap-2 Maneuver	-	-	-	-	137	-
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	266	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	20.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	683	-	-	-	283
HCM Lane V/C Ratio	0.167	-	-	-	0.169
HCM Control Delay (s)	11.3	-	-	-	20.3
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.6	-	-	-	0.6

Technical Sound Analysis Study

Tierra Rejada Golf Club

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March 2020

County of Ventura
Planning Director Hearing
Case No. PL19-0100
Exhibit 7 - Technical Sound Analysis

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ES. EXECUTIVE SUMMARY

This technical study discusses the sound analysis to support the County's adoption of a Minor Modification to Conditional Use Permit (CUP) 4933 to allow (1) the continued use of the Tierra Rejada Golf Club for an additional 25 years; and (2) Non-Golf Tournament Special Events of no more than 100 events per calendar year. The technical study describes the existing sound environment at the Tierra Rejada Golf Club; estimates future sound levels at surrounding land uses resulting from outdoor activities at the Tierra Rejada Golf Club and cumulative outdoor events; and identifies noise control measures, if necessary. The technical study summarizes the potential for future operations at Tierra Rejada Golf Club to conflict with applicable Ventura County noise regulations and standards. The findings of the technical sound analyses are as follows:

- Average hourly sound levels (Leq1H) during Non-Golf Special Events would not result in any exceedance above the standards identified in the County's General Plan Noise Policy 2.16.2-1(4) of 55 dBA Leq1H during daytime hours (6:00 AM - 7:00 PM) at off-site receptors.
- Average hourly sound levels (Leq1H) during Non-Golf Special Events would not result in any exceedance above the standards identified in the County's General Plan Noise Policy 2.16.2-1(4) of 50 dBA Leq1H during the evening time (7:00 PM – 10:00 PM) at off-site receptors.
- Average hourly sound levels (Leq1H) during cumulative events at the Tierra Rejada Golf Club and at the identified nearby receptors would not result in any exceedance above the daytime and evening standards at off-site receptors.
- Noise levels from outdoor events conducted at the Tierra Rejada Golf Club would be consistent with the standards listed in the Ventura County General Plan and the Ventura County Outdoor Event and Assembly Noise Ordinance.

1.0 INTRODUCTION

The purpose of this Technical Sound Analysis Study is to assess and discuss the potential off-site sound effects that may occur with the implementation of the Minor Modification to Conditional Use Permit (CUP) 4993 to allow (1) the continued use of the Tierra Rejada Golf Club for an additional 25 years; and (2) Non-Golf Tournament Special Events of no more than 100 events per calendar year. The technical sound analyses also discuss the applicable County noise regulations; the applicable noise standards; the methodology used to analyze potential sound effects; the simulated and modeled event sound; and any recommendations, if necessary.

PROJECT LOCATION

The Tierra Rejada Golf Club ("Golf Club") is located in unincorporated Ventura County above the City of Moorpark on a south facing slope of Oak Ridge, which is a structural extension of the Santa Susana Mountains (refer to **Figure 1: Regional and Local Vicinity Map**). The 18 hole public golf course on 183.85 acres is located on the north side of Tierra Rejada Road just east of the intersection of the Moorpark Freeway (Highway 23) and Tierra Rejada Road. In addition to the golf course, the facility consists of a driving range with 30 tee boxes an operations building/club house containing a restaurant with parking for 190 vehicles and various other maintenance and accessory buildings.

The Tierra Rejada Golf Course was constructed between 1998 – 1999 after a Mitigated Negative Declaration (MND) and Conditional Use Permit (CUP) 4933 were issued by the County of Ventura Planning Division on October 16, 1997.

PROJECT DESCRIPTION

On January 14, 1997, CUP 4933 was granted for operations of the Tierra Rejada Golf Club. CUP 4933 will expire on January 29, 2023. Existing structures and operations at the Tierra Rejada Golf Club include the following: (a) 7,829 square foot Operational Building; (b) 800 square foot covered Patio attached to Clubhouse; (c) 5,625 square foot maintenance building 1; (d) 4,800 square foot maintenance building 2; (e) under 120 square foot pergola with permeable roof; (f) 400 square foot storage building; (g) 75 square foot driving range storage; (h) 1,000 square foot main pump station housing; (i) 600 square foot fire pump station/restroom; (j) 30 tee boxes, three (3) practice holes, putting green and chipping area; and (k) TJ's Bar and Grille (Clubhouse) located within operations building.

The Operations Building consists of a Pro Shop (2,370 square feet), TJ's Bar and Grille (3,169 square feet) and small storage area (340 square feet) separated by an open breezeway (1,410 square feet).

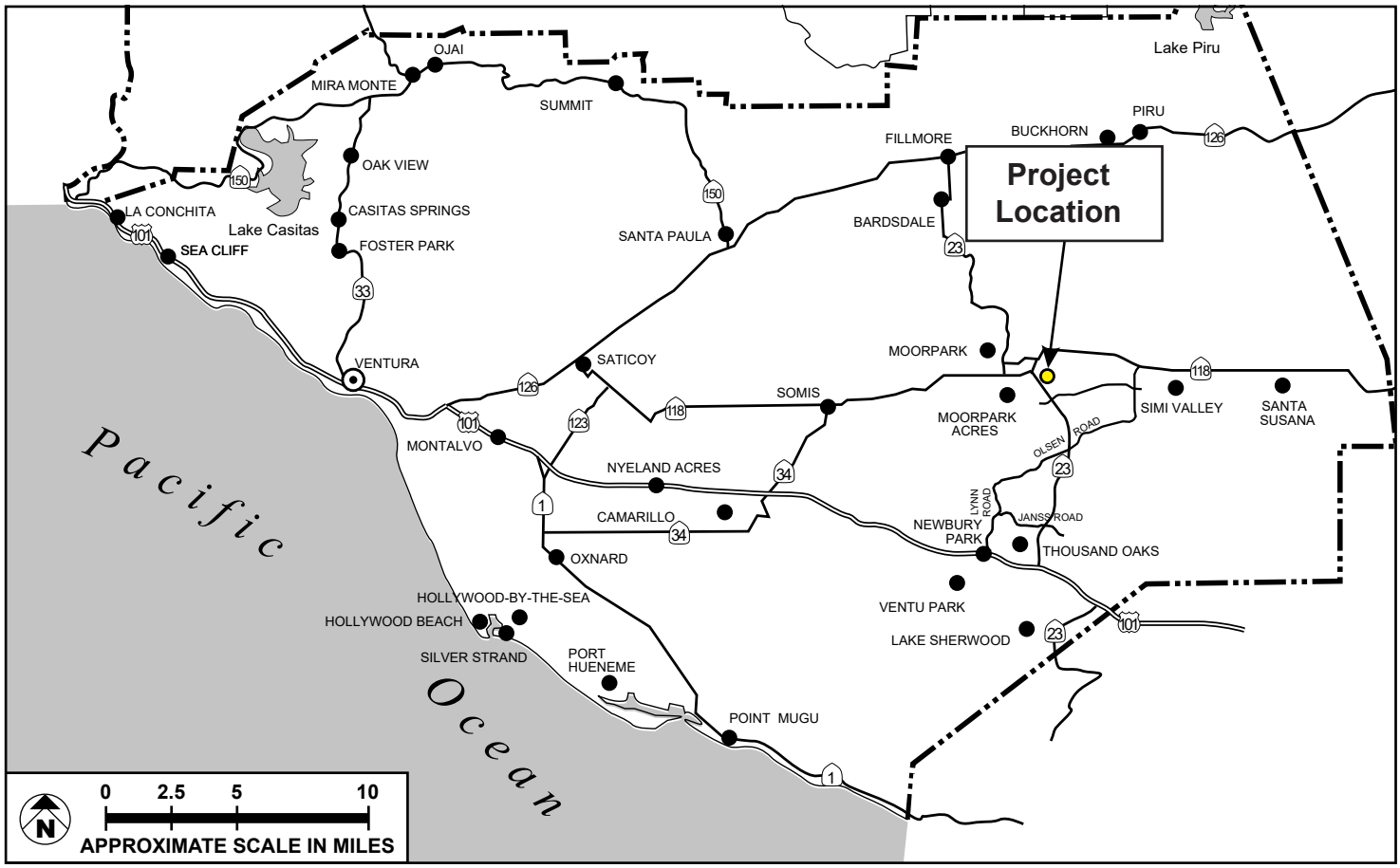
On October 30, 2008, a Minor Modification to CUP 4933 was granted for the construction of a new 3,700 square foot tournament building and special events. The Minor Modification was not inaugurated and expired October 30, 2009 as no Zoning Clearance for construction was issued.

The Applicant is requesting a Minor Modification to CUP 4933 to allow (1) the continued use of the Tierra Rejada Golf Club for an additional 25 years; and (2) Non-Golf Tournament Special Events of no more than 100 events per calendar year.

Events are generally proposed to occur in a central location on the property just north of the existing operations building (refer to **Figure 2: Site Plan**). No new permanent structures are proposed.

The following breakdown for events is being requested: (1) no more than 99 events per calendar year with 300 attendees or less; and (2) one event per calendar year at 1,000 attendees or less. Attendee count is to include all onsite staff and vendor staff.

Non-Golf Tournament Special Events may overlap with regular golf club operational hours with the exception of the annual 1,000 attendee event. Non-Golf Tournament Special Events are all events held within the approved CUP boundary that are not incidental to the Tierra Rejada Golf Club and onsite restaurant and clubhouse. Events may occur indoors and outside of structures and may be unrelated to the use of Tierra Rejada Golf Club. Non-Golf Tournament Special Events will end at 10:00 PM Sunday through Thursday and 12:00 AM on Fridays and Saturdays.



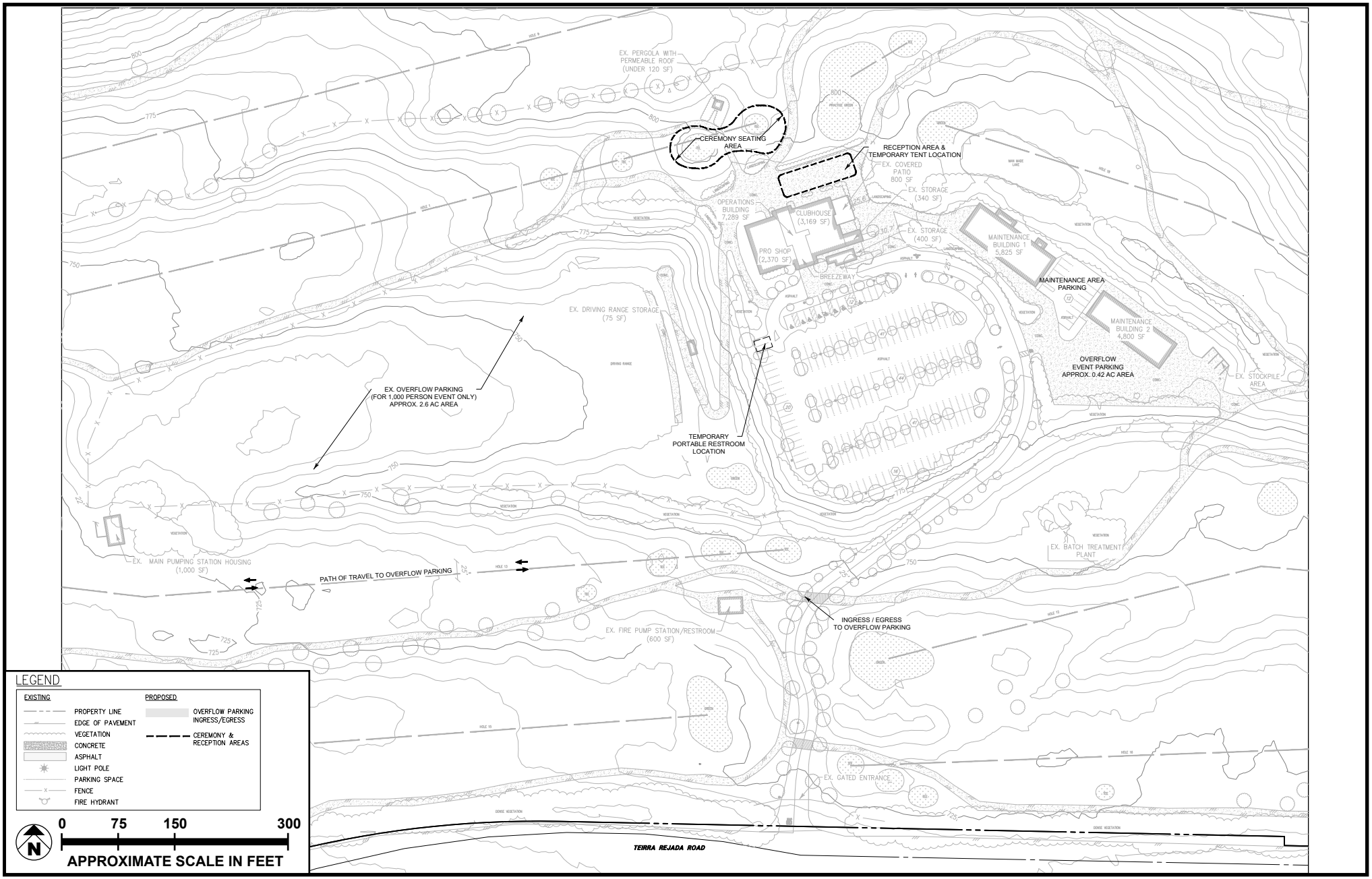
SOURCE: Google Earth - 2020; Meridian Consultants, LLC - 2020

FIGURE **1**

Meridian Consultants

Regional and Local Vicinity Map

274-001-20



SOURCE: Jensen Design & Survey, Inc. - September 2019

FIGURE **2**

Meridian Consultants

Site Plan

274-001-20

NOISE DESCRIPTORS AND METRICS

Fundamentals of Sound

Sound is the quickly varying pressure wave travelling through a medium. When sound travels through air, the atmospheric pressure varies periodically. The number of pressure variations per second is called the frequency of sound, and is measured in Hertz (Hz) which is defined as cycles per second. Sound and noise will be used interchangeably throughout this section.

The sounds we hear comprise of various frequencies. A normal human ear is able to hear sounds with frequencies from 20 Hz to 20,000 Hz. The range of 20 Hz to 20,000 Hz is called the audible frequency range. The entire audible frequency range can be divided into 10 or 24 frequency bands, known as octave bands or 1/3 octave bands, respectively.[1] A particular sound or noise can be seen to have different strengths or sound pressure levels in the frequency bands. The higher the frequency, the more high-pitched a sound is perceived. For example, the sounds produced by drums have much lower frequencies than those produced by a whistle.

One single sound pressure level is often used to describe a sound. This can be done by adding the contribution from all octave bands or 1/3 octave bands together to yield one single sound pressure level. Sound Pressure Level (SPL) alone is not a reliable indicator of loudness because the human ear does not respond uniformly to sounds at all frequencies. For example, the human ear is less sensitive to low and high frequencies than to the medium frequencies that more closely correspond to human speech. In response to this sensitivity of the human ear to different frequencies, the A-weighted noise level, referenced in units of dB(A), was developed to better correspond with subjective judgment of sound levels by individuals.

A doubling of sound energy results in a 3 dB(A) increase in sound, which means that a doubling of sound wave energy (e.g., doubling the volume of traffic on a roadway) would result in a barely perceptible change in sound level. In general, changes in a noise level of less than 3 dB(A) are not noticed by the human ear.[2] Changes from 3 to 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. An increase of greater than 5 dB(A) is readily noticeable, while the human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound volume.

To support assessing community reaction to noise, scales have been developed that average sound-pressure levels over time and quantifies the result in terms of a single numerical descriptor. Several scales

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1 There are approximately 31 1/3 octave centers or 30 1/3 octave bands in the human hearing range.

2 U.S. Department of Transportation, Federal Highway Administration, Fundamentals and Abatement of Highway Traffic Noise, (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 81.

have been developed that address community noise levels. Leq is the average A-weighted sound level measured over a given time interval. Leq can be measured over any period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dB(A), whereas a solid wall or berm reduces noise levels by 5 to 10 dB(A).[3] Vegetative barriers, such as shrubs up to 8 feet in height, typically attenuate noise levels 1 dB(A) and can attenuate noise levels from 1 to 3 dB(A) depending on the type and amount of vegetation.[4]

Decibel readings are weighted to reflect sensitivities to different frequencies. As discussed above, the A weighting is intended to reflect human sensitivity to higher frequencies, while the C weighting incorporates low frequencies. With a very low frequency transmission, such as sound from a deep bass speaker, this low frequency sound may be felt before it is heard. While this low frequency sound is typically airborne, it can be confused with ground vibration. This is mainly due to the fact that certain parts of the human body can resonate at various low frequencies. Usually, sounds that are characterized as impulsive generally contain low frequencies. Impulsive sounds may induce secondary effects, such as shaking of a structure, rattling of windows, inducing vibrations.

Low frequency noise can travel relatively long distances in comparison to higher frequencies because it has a relatively long wavelength and a low material absorption rate. Low frequency noise also has non directional transmission or propagation characteristics which results in the effect of low frequency sound enveloping the individual without any discernible localized source.

The sound level averages, Leq, were measured as A-weighted, slow time weighted (one-minute period) sound level variables, commonly used for measuring environmental sounds. The maximum one-minute recorded measurement is commonly referred to as Lmax. The minimum one-minute recorded measurement is commonly referred to as Lmin. Community Noise Equivalent Level (CNEL) is a weighted average of noise level over time. The day-night average sound level (Ldn or DNL) is the average noise level over a 24-hour period. Sound levels presented in this technical sound analysis represent an average Leq expressed in terms of dB(A).

Table 1: Noise Descriptors, identifies various noise descriptors developed to measure sound levels over different periods of time.

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[3] State of California Department of Transportation (Caltrans), *Technical Noise Supplement,* 1998, pp. 33-40, 123-131.

[4] Caltrans, *Traffic Noise Attenuation as a Function of Ground and Vegetation (Final Report),* 1995, pp. 65.

Table 1
Noise Descriptors

Term	Definition
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measure sound to a reference pressure.
A-Weighted Decibel [dB(A)]	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).
Hertz (Hz)	The frequency of the pressure vibration which is measured in cycles per second.
Kilo Hertz (kHz)	One thousand cycles per second.
Equivalent Sound Level (Leq)	The sound level containing the same total energy as a time varying signal over a given time period. The Leq is the value that expresses the time averaged total energy of a fluctuating sound level. Leq can be measured over any time period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods.
Community Noise Equivalent Level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments add 5 dB(A) for the evening, 7:00 PM to 10:00 PM, and add 10 dB(A) for the night, 10:00 PM to 7:00 AM. The 5 and 10 decibel penalties are applied to account for increased noise sensitivity during the evening and nighttime hours. The logarithmic effect of adding these penalties to the 1-hour L_{eq} measurements typically results in a CNEL measurement that is within approximately 3 dB(A) of the peak-hour L_{eq}.[1]
Nighttime (Lnight)	Lnight is the average noise exposure during the hourly periods from 10:00 PM to 7:00 AM.
sound pressure level	The sound pressure is the force of sound on a surface area perpendicular to the direction of the sound. The sound pressure level is expressed in dB.
Ambient Noise	The level of noise that is all encompassing within a given environment, being usually a composite of sounds from many and varied sources near to and far from the observer. No specific source is identified in the ambient.

Note:

[1] *California Department of Transportation, Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol, (Sacramento, California: November 2009), pp. N51-N54.*

Relevant Plans and Ordinances

The following regulatory plans and ordinances are applicable to the proposed outdoor events.

Ventura County General Plan

According to the County of Ventura General Plan Hazards Appendix: Noise, noise generators proposed near any noise sensitive use shall incorporate noise control measures so that ongoing outdoor noise levels received by the noise sensitive receptor, measured at the exterior wall of the building, does not exceed any of the standards identified in Noise Policy 2.16.2-1(4) of the County's Goals, Policies, and Programs.[5] Noise Policy 2.16.2-1(4) states that noise generators shall incorporate noise control measures so that:

a) Leq1H of 55 dBA or ambient noise level plus 3 dBA, whichever is greater, during any hour from 6:00 AM to 7:00 PM.

b) Leq1H of 50 dBA or ambient noise level plus 3 dBA, whichever is greater, during any hour from 7:00 PM to 10:00 PM.

c) Leq1H of 45 dBA or ambient noise level plus 3 dBA, whichever is greater, during any hour from 10:00 PM to 6:00 AM.

Ventura County Outdoor Event and Assembly Ordinance

Section 8111-1.2.1b, "Permit Approval Standards for Outdoor Events and Assembly" of the County's Non-Coastal Ordinance requires that specific factual findings be made as part of an application for a CUP. Specifically, whether the proposed use would generate offsite noise louder than ambient noise levels by considering:

i. the volume and times of day such noise would be generated;

ii. the proximity of the proposed use to the nearest offsite noise sensitive receptors such as dwellings, schools, hospitals, nursing homes and libraries;

iii. the topography of the surrounding area likely to affect how noise travels; and

iv. the existence of other nearby uses likely to generate offsite noise at similar times.

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[5] County of Ventura, *Ventura County General Plan, Goals, Policies and Programs*, last amended on October 22, 2013, Goal 2.16.1, pp. 49.

Ventura County Noise Ordinance

The County's noise ordinance governs noise within residential zones and does not specify maximum noise levels; instead it identifies various noise generators and identifies certain restrictions on these noise sources.[6]

Section 1-11 prohibits any loud or raucous noise which is audible to the human ear during the hours of 9:00 PM and 7:00 AM of the following day. A loud or raucous noise is defined as radios, musical instruments, phonographs, television receivers, video cassette recorders, or any machine or device for the production, reproduction, or amplification of the human voice or any other sound, as well as the use of lawn mowers or other hand tools.[7]

Because the Tierra Rejada Golf Club is located within the Open Space zone and not a residential zone, the Noise Ordinance does not apply to the site. Further, adjacent and nearby properties are zoned Open Space and are not designated as residential zones. Thus, the Noise Ordinance does not apply to these properties.

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6 County of Ventura, Ordinance Code, Chapter 2, Division 6, Section 1-11, "Loud or Raucous Nighttime Noise in Residential Zones."

7 Ibid., Section 5-16.02, "Unlawful acts: Public nuisances."

2.0 EXISTING CONDITIONS

Land Use and Zoning

The Golf Club is designated as Open Space (40 acre minimum) and zoned for OS-40 ac/HCWC/CWPA. Adjacent properties to the south are zoned OS-10 ac/HCWC/CWPA.

Topography

As mentioned above, the golf course is located in unincorporated Ventura County above the City of Moorpark on a south facing slope of Oak Ridge, which is a structural extension of the Santa Susana Mountains.

The highest elevation of the Tierra Rejada Golf Club is approximately 974 feet above mean sea level (msl) on the northern portion of the site (refer to **Figure 3**, [Site 4]). The lowest elevation is approximately 720 msl on the southern portion of the site (refer to **Figure 3**, [Site 1]). The eastern and western portions of the site vary, with elevations ranging from 761 feet msl (refer to **Figure 3**, [Site 3]) to 921 feet msl (refer to **Figure 3**, [Site 5]), respectively. Overall, the general elevation of the Tierra Rejada Golf Club declines in elevation from north to south and increase from east to west.

Surrounding Uses and Sound Sources

Land Uses

A noise sensitive use is defined as a residence, park and other recreation areas, schools, churches and libraries, prisons and correctional facilities, and group shelters. The nearest noise sensitive uses to the Tierra Rejada Golf Club, specifically the reception area include single family residence approximately 1,400 feet to the south, single family residence approximately 2,000 feet to the northwest, and single-family residential communty approximately 2,500 feet to the west across Highway 23. Sensitive receptors within the Tierra Rejada Golf Club are all are depicted on **Figure 3: Sensitive Receptor Map**.

Typical Sound Generating Sources in Moorpark

Ambient is defined as, “the level of noise that is all encompassing within a given environment, being usually a composite of sounds from many and varied sources near to and far from the observer. No specific source is identified in the ambient environment.”

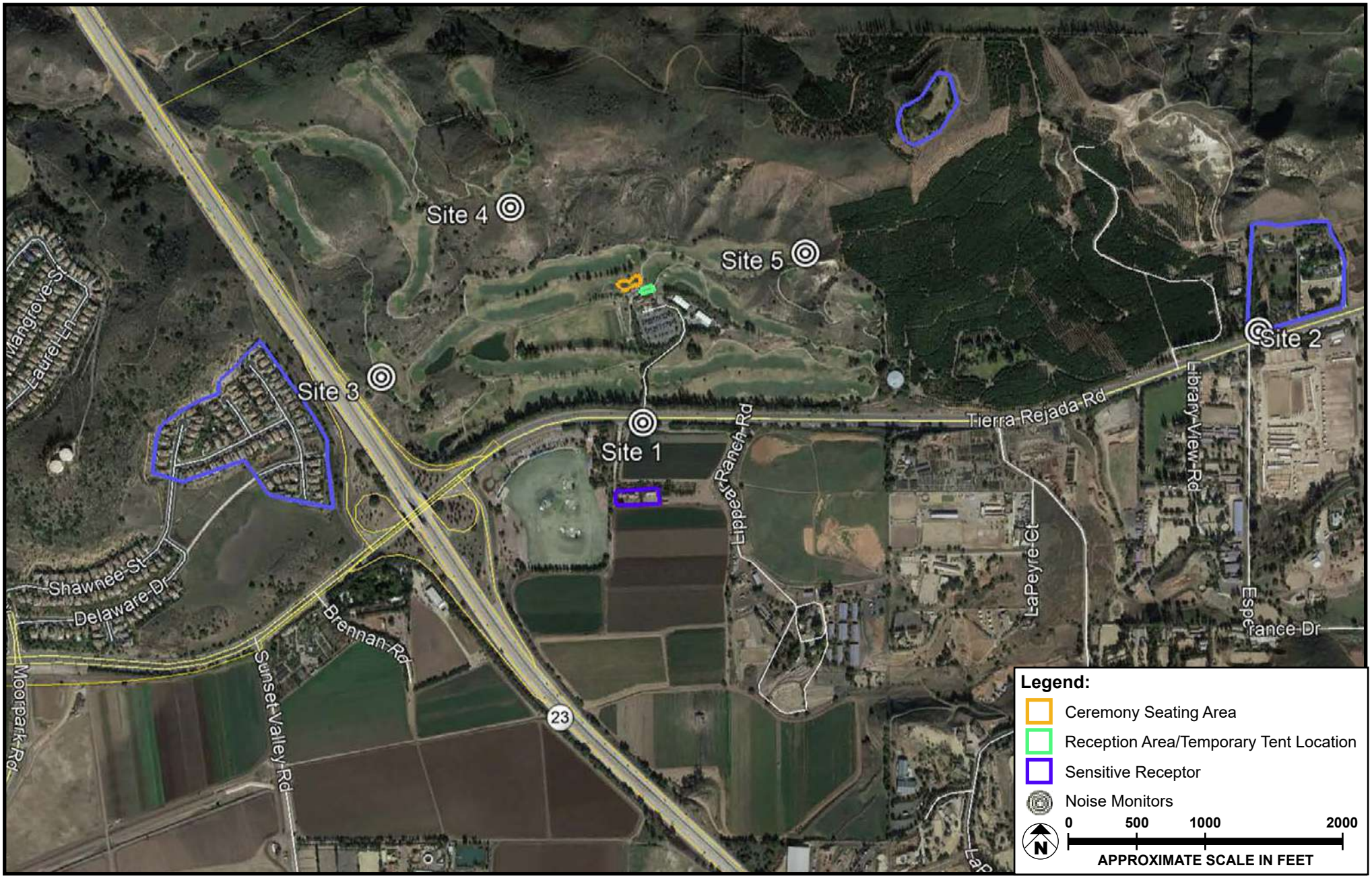
Noise sources can generally be categorized as one of two types: (1) point sources, such as stationary mechanical equipment; and (2) line sources, such as roadways. Point sources generally decrease by 6 dB per doubling of distance whereas line sources decrease by 3 dB per doubling of distance. In addition, noise can also be generated by mobile sources, such as trucks and construction equipment. Noise levels up to

60 dB(A) are generally considered moderate by most people, with noise levels above 60 dB(A) are considered loud. Below are activities within the vicinity of the Tierra Rejada Golf Club that contribute to the ambient sound levels at any given point during a 24-hour period.

Tractors and similar mechanized equipment of size used on Ventura County sized farms will produce noise levels in the range 75-85 dB(A) at a distance of 50 feet. Therefore, equipment that produces noise near the upper end of this range will cause some degree of interference with communication at distances of approximately 350 feet. Since the equipment is expected to be operating within this distance of neighbors for only a small fraction of the time, the noise impact would generally be temporary and insignificant. However, cases could occur wherein equipment was used in an unusually loud manner or repeatedly in a specific area which was near to a neighbor. These cases could produce significant noise impacts and should be covered by the Noise Ordinance. Operating procedures and equipment maintenance are the best practical means of minimizing this noise impact.

The noise level inside homes generally ranges from 30 to 45 dB(A). The noise generated by speech ranges from 50 to 70 dB(A). Of the typical noise events that occur in an urban environment, a loud horn from a car or a motorcycle accelerating can produce noise above 100 dB(A).

Additionally, vehicle traffic along Tierra Rejada Road and Highway 23, agricultural activities, equestrian related activities, landscape maintenance activities, outdoor filming activities that could include explosions/fireworks, gunfire, and/or aircraft, could also occur during similar times of proposed events at the Tierra Rejada Golf Club. Instantaneous sound levels from fireworks/explosions/gunfire generally are greater than 140 dB at 3 feet.



SOURCE: Google Earth - 2020

FIGURE **3**

Meridian Consultants

Sensitive Receptor Map

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3.0 METHODOLOGY AND APPROACH

The following outlines the various items to address Noise Policy 2.16.2-1(4) and, more specifically, the four items identified in the County's Outdoor Event and Assembly Ordinance.

SOUND LEVEL MEASUREMENTS

The American National Standards Institute (ANSI) specifies several types of sound level meters according to their precision. Types 1, 2, and 3 are referred to as "precision," "general-purpose," and "survey" meters, respectively. Most measurements carefully taken with a Type 1 sound level meter will have an error not exceeding 1 dB.

The sound level meter used to conduct this monitoring is a Type 1 (precision) Larson Davis model 831 Sound Level Meters. This meter meets all requirements of ANSI S1.4-1983 and ANSI1.43-1997 Type 1 standards, as well as International Electrotechnical Commission (IEC) IEC61672-1 Ed. 1.0, IEC60651 Ed 1.2, and IEC60804 Type 1, Group X standards.

The sound level meter was located approximately 5 feet above ground and was covered with a Larson Davis windscreen. The sound level meter was field calibrated with an external calibrator prior to operation.

Short-term noise monitoring was conducted at five (5) sites to measure the ambient environment on- and off-site, as depicted on **Figure 3**. Measurements were taken over 15-minute intervals at each location between the hours of 5:30 PM – 7:30 PM on February 6, 2020. As shown in **Table 2: Existing Ambient Noise Levels**, noise levels ranged from a low of 48.3 dBA (Site 5) to a high of 75.2 dBA (Site 1).

Table 2
Existing Ambient Noise Levels

Site	Description	15-minute LAeq
Site 1	South of the Project site along Tierra Rejada Road	75.2
Site 2	Southeast of the Project site along Tierra Rejada Road	73.9
Site 3	West of the Project site, adjacent to Highway 23	68.6
Site 4	North of the Reception Area/Temporary Tent Location	59.3
Site 5	East of the Reception Area/Temporary Tent Location	48.3

_____
*Note: Refer to **Appendix A** for noise monitoring sheet.*

A simulated outdoor evening event took place on Friday, October 7, 2020. The simulated event included two professional speakers operating. The two speakers were oriented facing south towards the operations building and Tierra Rejada Road, approximately 5 feet above ground. **Table 3: Speaker Noise Attenuation**, provides the noise attenuation levels of the simulated event from four locations: (1) 5 feet from the two speakers; (2) at 10 feet from the two speakers; (3) at 20 feet from the two speakers; and (4) at 40 feet from the two speakers. These measurements were then programmed into the SoundPLAN 3D modeling system.

Table 3
Speaker Noise Attenuation

Distance from Speakers	LAeq (1-second)	LApeak
	dBA	
5 feet	102.5	116.3
10 feet	103.5	115.2
20 feet	98.3	111.6
40 feet	93.4	108.0

NOISE MODELING

Noise-level calculations at the location of noise-sensitive land uses in the vicinity of Tierra Rejada Golf Club were assessed using the SoundPLAN noise model. The SoundPLAN model depicts noise contours at varying distances and accounts for various inputs to analyze topography, vegetation, propagation from buildings, and existing- and proposed-noise sources and barriers. The SoundPLAN model takes into account the distances between the noise sources and the receiver to depict noise contours at varying distances. The software utilizes algorithms (based on the inverse square law) to calculate noise level projections. Accuracy has been validated in published studies to be +/- 2.7 dBA with an 85 percent confidence level. The software allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations. Events at the Tierra Rejada Golf Club and surrounding off-site uses were modeled based on typical operations that currently occur, as described above under the Project Description subheading in Section 1.0: Introduction.

Additionally, several additional outdoor events were also included in the SoundPLAN noise model at different receptors in the vicinity of the Tierra Rejada Golf Club. These outdoor events were modeled using the same sound source as proposed at Tierra Rejada Golf Club. Sound levels were then predicted at the other receptors within the vicinity of the Tierra Rejada Golf Club.

4.0 RESULTS AND ANALYSIS

Pursuant to Ventura County Guidelines between 6:00 AM and 7:00 PM, the noise level over the course of one hour at the nearest wall of a sensitive receptor shall not exceed 55 dB(A), or ambient plus 3 dB(A), whichever is higher; between 7:00 PM and 10:00 PM shall not exceed 50 dB(A) or ambient plus 3 dB(A), whichever is higher; and between 10:00 PM and 6:00 AM shall not exceed 45 dB(A) or ambient plus 3 dB(A), whichever is higher. Accordingly, the ambient level of 55 dB(A) was selected between 6:00 AM and 7:00 PM; 50 dB(A) was selected between 7:00 PM and 10:00 PM; and 45 dB(A) was selected between 10:00 PM and 6:00 AM in order to determine if potential sound reduction techniques within the Tierra Rejada Golf Club were needed.

Table 4: Measured Noise Levels from Simulated Event, provides the noise levels at the monitored noise sites during the simulated event at the designated Reception Area (refer to **Figure 2**). Noise Levels were then compared to the existing ambient noise levels provided in **Table 3** above. As shown in **Table 4**, noise levels due to the simulated event increased at Site 5 by approximately 1.2 dBA. This is mainly due to the meter was placed in a direct line of sight to the speakers located approximately 1,125 feet. All other monitored locations did not exceed the established baseline noise levels.

Table 5: Modeled Noise Levels from Simulated Non-Golf Special Event, provides the hourly noise levels (Leq1H) at the identified off-site receptors during events at the Tierra Rejada Golf Club. As shown in **Table 5**, noise levels during events from the Tierra Rejada Golf Club would not result in any exceedance above the standards identified in Noise Policy 2.16.2-1(4) of the County's Goals, Policies, and Programs during the daytime (6:00 AM – 7:00 PM) and evening time (7:00 PM – 10:00 PM) at off-site receptors. Note that amplified music will be turned off at 10:00 PM and guests will be required to leave the property by 11:00 PM. Take down activities would potentially occur for a period of one hour between 11:00 PM and 12:00 AM midnight. Due to the increased distance of the identified surrounding sensitive receptors, noise levels generated from the Tierra Rejada Golf Club would not cause perceptible increases to the ambient noise environment. The results of the predictive modeling process are shown graphically in terms of 1-hour Leq (Leq1H) on **Figure 4: Non-Golf Tournament Special Event Contour Map**.

Figure 5: Cumulative Special Events Contour Map, provides the hourly noise levels (Leq1H) during concurrent events at the identified off-site receptors and at the Tierra Rejada Golf Club. As shown in **Figure 5**, due to the increased distance of the identified surrounding sensitive receptors from the Tierra Rejada Golf Club, cumulative noise levels from events taking place at similar times would not cause perceptible cumulative increases to the surrounding neighborhood.

Table 4

Measured Noise Levels from Simulated Event

Site	Thursday, 2/6	Friday, 2/7
	15-minute LAeq	2-minute LAeq
Site 1	75.2	73.4[1]
Site 2	73.9	72.0[1]
Site 3	68.6	67.9
Site 4	59.3	58.4
Site 5	48.3	49.5

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*Note: Refer to **Appendix A** for noise monitoring sheet.*

[1] 1-minute LAeq for off-site locations.

Table 5

Modeled Noise Levels from Simulated Non-Golf Tournament Special Event

Receptor ID	Simulated Event Sound Level at Receptor (Leq1H)	Ventura County General Plan Noise Standard (6:00 AM to 7:00 PM)	Logarithmic Increase from Simulated Event and Ambient Standard (Leq1H)	Exceeds Standard for Noise Reduction Measures?	Ventura County General Plan Noise Standard (7:00 PM to 10:00 PM)	Logarithmic Increase from Simulated Event and Ambient Standard (Leq1H)	Exceeds Standard for Noise Reduction Measures?
(REC-1) Residential to the South	36	55	0	**No**	50	0	**No**
(REC-2) Residential to the east	29	55	0	**No**	50	0	**No**
(REC-3) Residential to the west	37	55	0	**No**	50	0	**No**
(REC-4) Residential to the north	34	55	0	**No**	50	0	**No**

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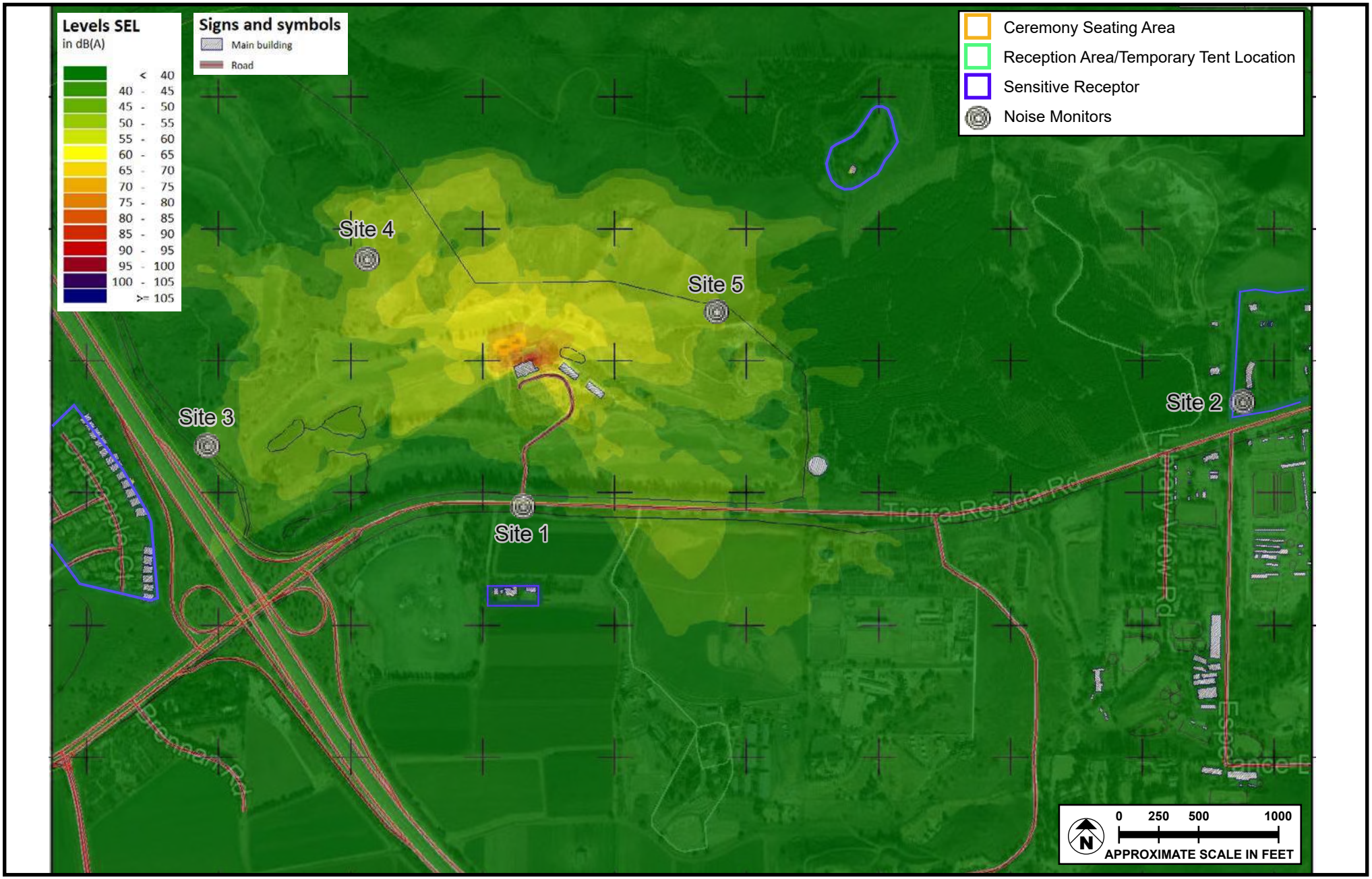
*Source: Refer to **Appendix B** for SoundPLAN Output Sheets*

Note: (--) indicates noise levels were below 0 dBA Leq1H.



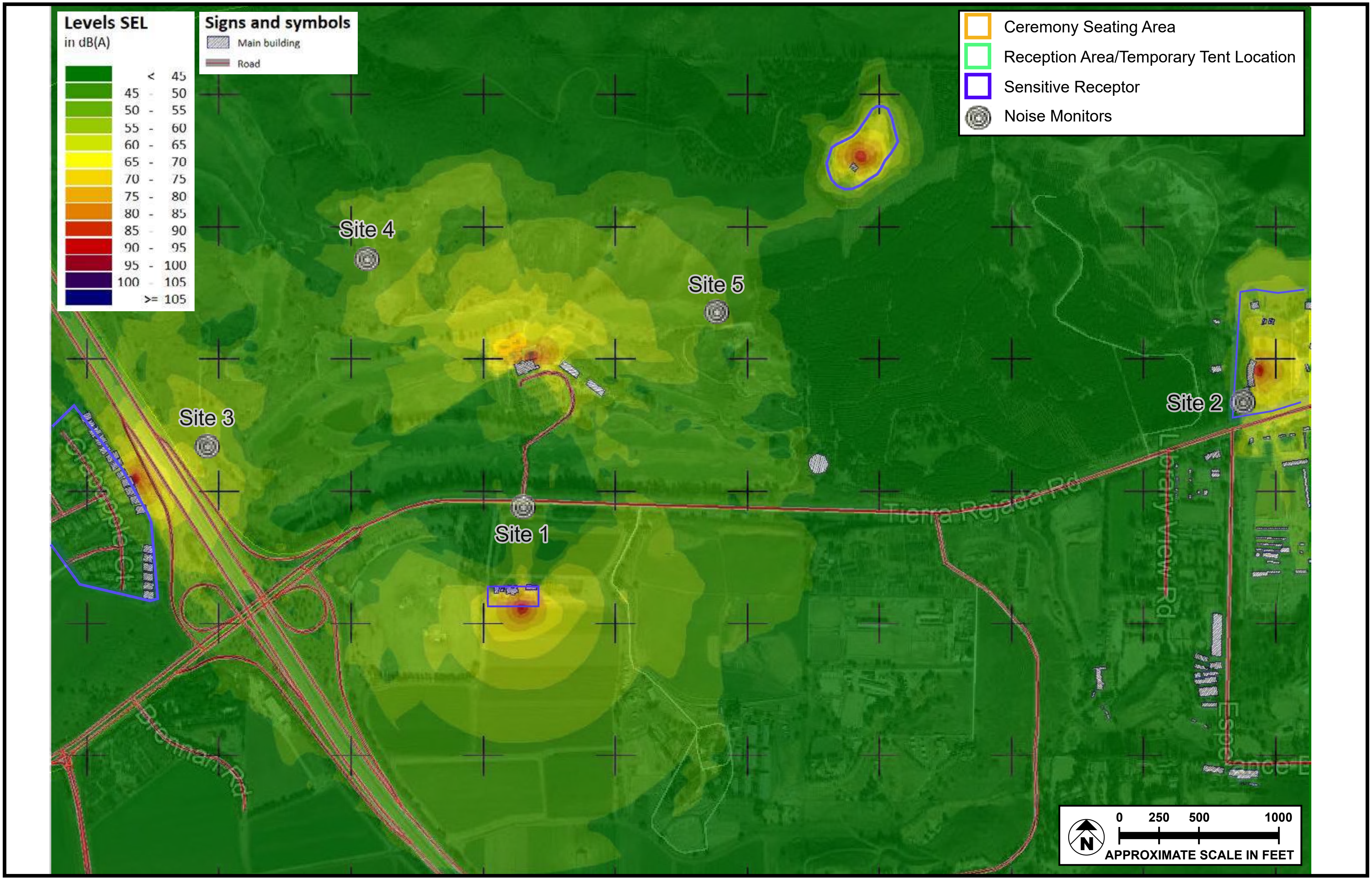
SOURCE: Google Earth - 2020

FIGURE **4**

Meridian Consultants

Non-Golf Tournament Special Event Contour Map

274-001-20



SOURCE: Google Earth - 2020

FIGURE **5**

Meridian Consultants

Cumulative Special Events Contour Map

274-001-20

5.0 SUMMARY

This section of the technical noise study summarizes the results shown in **Section 4.0** and compares and discusses the offsite simulated sound levels with the applicable regulations including the Ventura County General Plan and Outdoor Event and Assembly Ordinance, and the Ventura County Noise Ordinance. As described below, outdoor events at the Tierra Rejada Golf Club would be consistent with all applicable plans and policies.

VENTURA COUNTY GENERAL PLAN

The Ventura County General Plan provides hourly standards (Leq1H) for noise generators proposed near any noise sensitive use in order to determine if noise reduction techniques are needed to lower offsite sound levels.

As shown in **Table 5**, noise levels generated from the Tierra Rejada Golf Club would not exceed Leq1H of 55 dB(A) or 50 dB(A) during any hour from 6:00 AM to 10:00 PM.

As such, outdoor events at Tierra Rejada Golf Club would be consistent with the policies and standards listed in the Ventura County General Plan.

VENTURA COUNTY OUTDOOR EVENT AND ASSEMBLY ORDINANCE

The Ventura County Outdoor Event and Assembly Ordinance requires the Applicant to provide substantial proof which determines if outdoor events would generate offsite sound louder than ambient sound levels by considering the four factors listed above. For reference, the four factors to be discussed are the (1) volume and times of day such noise would be generated; (2) proximity of proposed uses to nearest offsite noise receptors; (3) topography of surrounding area; and (4) existence of other nearby uses likely to generate offsite noise at similar times.

As described in **Section 1.0,** the Minor Modification to the CUP would allow (1) the continued use of the Tierra Rejada Golf Club for an additional 25 years; and (2) Non-Golf Tournament Special Events of no more than 100 events per calendar year.

The modeled noise levels provided in **Table 5** compare the exterior noise levels to the daytime and evening standards of 55 and 50 dB(A) Leq1H between the hours of 6:00 AM – 10:00 PM. As indicated in the analyses, the outdoor events when combined with the lowest measured ambient hourly levels would not generate offsite noise louder than ambient noise levels.

As discussed throughout this technical sound analysis study, time of day and volume of sound was considered to determine offsite sound levels at nearby sensitive receptors. Thus, sound levels considered the volume and times of day outdoor events will occur within the Tierra Rejada Golf Club consistent with the first factor of the Outdoor Event and Assembly Ordinance.

As explained above, a noise sensitive use is defined as a residence, park, and other recreation areas, schools, churches and libraries, prisons and correctional facilities, and group shelters. The proximity of the nearest noise sensitive uses is shown in **Figure 3.** Thus, sound levels considered distance to, and time of day, at nearby offsite sensitive receptors consistent with the second factor of the Outdoor Event and Assembly Ordinance.

As described in **Section 2.0** of this study, topography of the area surrounding the Tierra Rejada Golf Club contains mostly flat open space with sparse vegetation and is bordered by hillsides on all sides. The topographical features of the site were programmed into the SoundPLAN model to depict noise contours at varying distances. Thus, sound levels considered the surrounding topography consistent with the third factor of the Outdoor Event and Assembly Ordinance.

Cumulative noise levels were modeled to take into account concurrent events taking place at the Tierra Rejada Golf Club and at nearby uses likely to generate offsite noise at similar times. As shown in **Figure 5**, cumulative noise levels generated from the Tierra Rejada Golf Club and nearby uses likely to generate offsite noise at similar times would not exceed Leq1H of 55 and 50 dB(A) or ambient noise levels plus 3 dBA during any hour from 6:00 AM to 10:00 PM. Thus, sound levels considered the existence of other nearby uses likely to generate offsite noise at similar times consistent with the fourth factor of the Outdoor Event and Assembly Ordinance.

VENTURA COUNTY NOISE ORDINANCE

As explained above, the Tierra Rejada Golf Club is located within the OS-40 ac zone and not in a residential zone. In addition, adjacent and nearby properties are zoned OS-10 ac or and are not designated as residential zones. As such, the Noise Ordinance does not apply to these properties.

APPENDIX A

Noise Monitoring Data Sheets

Monitoring Location: Site 1

Monitoring Date: 2/6/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
18:55:00	73.1	80.7	56.6
18:56:00	73.4	82.5	61.9
18:57:00	76.6	83.4	62.5
18:58:00	76.2	81.8	64.3
18:59:00	73.1	81.4	61.0
19:00:00	74.4	82.2	58.9
19:01:00	73.7	80.9	61.8
19:02:00	77.2	83.8	62.1
19:03:00	76.2	83.9	67.8
19:04:00	75.0	83.8	57.2
19:05:00	75.3	82.4	64.4
19:06:00	73.1	83.1	61.4
19:07:00	73.8	84.3	55.1
19:08:00	71.9	81.4	59.8
19:09:00	80.4	90.6	65.5
		90.6	55.1

15-minute LAeq **75.2**

Monitoring Date: 2/7/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
19:04:07	55.2	55.0	53.8
19:04:08	54.9	54.8	54.4
19:04:09	56.2	55.9	54.8
19:04:10	54.6	55.9	55.0
19:04:11	55.4	55.3	55.1
19:04:12	56.2	55.9	55.3
19:04:13	57.1	56.8	55.8
19:04:14	58.8	58.2	56.8
19:04:15	60.9	60.3	58.2
19:04:16	64.6	63.8	60.3
19:04:17	71.4	70.6	63.8
19:04:18	80.1	78.3	70.7
19:04:19	71.3	78.3	75.1
19:04:20	77.1	77.2	74.4
19:04:21	80.2	79.7	77.3
19:04:22	67.5	78.6	74.8
19:04:23	61.6	74.8	70.9
19:04:24	59.9	70.9	67.2
19:04:25	59.7	67.2	64.1
19:04:26	59.6	64.0	61.9
19:04:27	62.9	62.8	61.6
19:04:28	69.5	68.4	62.8
19:04:29	73.4	72.1	68.5
19:04:30	73.0	72.7	72.1
19:04:31	70.5	72.6	71.2
19:04:32	66.1	71.2	68.6
19:04:33	64.7	68.6	66.6
19:04:34	64.5	66.6	65.4
19:04:35	65.0	65.4	65.1
19:04:36	68.2	67.6	65.2
19:04:37	72.2	71.4	67.6
19:04:38	75.8	74.9	71.4
19:04:39	82.1	81.1	74.9
19:04:40	80.7	82.1	80.3
19:04:41	70.9	80.2	76.7
19:04:42	67.9	76.7	73.3
19:04:43	67.0	73.3	70.5
19:04:44	67.6	70.5	69.0
19:04:45	73.3	72.6	69.1
19:04:46	75.4	74.4	72.6
19:04:47	71.6	74.3	72.7
19:04:48	67.3	72.6	70.0
19:04:49	67.1	70.0	68.5
19:04:50	64.9	68.4	66.6
19:04:51	63.4	66.5	64.8
19:04:52	63.4	64.8	64.0
19:04:53	65.1	64.9	64.0
19:04:54	70.0	69.0	64.9
19:04:55	72.8	71.8	69.0
19:04:56	73.1	72.7	71.8
19:04:57	74.5	74.1	72.7
19:04:58	81.1	79.8	74.2
19:04:59	76.1	79.8	77.6
19:05:00	73.3	77.6	75.5
19:05:01	72.4	75.4	73.8
19:05:02	73.3	73.7	73.4
19:05:03	75.3	74.8	73.6
19:05:04	74.5	74.9	74.5
19:05:05	72.4	74.5	73.2
19:05:06	70.4	73.2	71.6
19:05:07	69.7	71.6	70.5
19:05:08	69.3	70.5	69.8
19:05:09	67.9	69.8	68.7
19:05:10	66.5	68.7	67.4
19:05:11	67.4	67.5	67.2
19:05:12	70.7	70.0	67.5
19:05:13	72.3	71.6	70.0
19:05:14	72.0	71.9	71.5
19:05:15	71.0	71.8	71.7

82.1 58.2

1-minute LAeq **73.4**

Monitoring Location: Site 2

Monitoring Date: 2/6/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
19:15:00	74.5	83.5	54.1
19:16:00	76.9	87.5	56.3
19:17:00	71.7	79.8	57.1
19:18:00	71.2	83.4	55.8
19:19:00	73.8	82.2	58.0
19:20:00	74.4	84.2	58.1
19:21:00	72.7	84.1	54.1
19:22:00	73.0	81.9	59.7
19:23:00	71.6	79.9	59.1
19:24:00	75.3	82.5	61.9
19:25:00	74.6	83.5	54.9
19:26:00	73.3	81.6	58.9
19:27:00	75.9	84.7	60.2
19:28:00	73.8	83.1	58.2
19:29:00	70.3	77.6	55.8
		87.5	54.1

15-minute LAeq **73.9**

Monitoring Date: 2/7/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
19:07:55	65.3	64.6	64.4
19:07:56	65.6	65.3	64.6
19:07:57	64.4	65.3	64.6
19:07:58	63.4	64.6	63.8
19:07:59	63.4	64.2	63.5
19:08:00	61.6	63.5	62.3
19:08:01	61.7	62.3	61.7
19:08:02	62.4	62.4	62.1
19:08:03	60.6	62.2	61.2
19:08:04	60.5	61.2	60.8
19:08:05	61.7	61.6	60.7
19:08:06	62.5	62.2	61.6
19:08:07	61.3	62.1	61.5
19:08:08	62.5	62.4	61.7
19:08:09	63.8	63.4	62.4
19:08:10	64.8	64.4	63.3
19:08:11	67.1	66.5	64.5
19:08:12	68.4	67.8	66.5
19:08:13	67.8	67.9	67.7
19:08:14	65.5	67.7	66.4
19:08:15	68.9	68.5	66.4
19:08:16	74.4	73.2	68.5
19:08:17	76.0	75.2	73.3
19:08:18	76.0	75.7	75.2
19:08:19	74.3	75.6	74.8
19:08:20	72.6	74.7	73.5
19:08:21	71.5	73.5	72.4
19:08:22	73.8	73.5	72.3
19:08:23	76.6	75.7	73.5
19:08:24	74.7	75.8	75.0
19:08:25	66.8	74.9	71.6
19:08:26	63.5	71.6	68.3
19:08:27	63.9	68.3	66.1
19:08:28	64.2	66.1	65.0
19:08:29	79.1	78.1	65.1
19:08:30	77.3	78.9	77.1
19:08:31	69.6	77.0	73.9
19:08:32	68.1	73.9	71.2
19:08:33	65.0	71.1	68.3
19:08:34	63.1	68.3	65.8
19:08:35	61.7	65.7	63.6
19:08:36	60.8	63.6	62.1
19:08:37	59.1	62.1	60.4
19:08:38	57.1	60.3	58.6
19:08:39	56.0	58.6	57.2
19:08:40	56.0	57.2	56.5
19:08:41	57.3	57.1	56.5
19:08:42	57.2	57.2	57.0
19:08:43	57.3	57.3	57.1
19:08:44	59.3	58.8	57.3
19:08:45	62.4	61.8	58.8
19:08:46	75.1	73.8	61.8
19:08:47	73.9	74.6	73.5
19:08:48	80.7	79.9	73.1
19:08:49	78.2	80.4	78.4
19:08:50	68.9	78.4	74.9
19:08:51	66.5	74.8	71.6
19:08:52	65.7	71.5	68.8
19:08:53	64.3	68.8	66.5
19:08:54	63.7	66.5	65.0
19:08:55	63.0	64.9	63.8
19:08:56	62.4	63.8	63.0
19:08:57	61.9	63.0	62.4
19:08:58	64.2	63.8	62.3
19:08:59	79.9	79.1	63.9
19:09:00	79.4	80.4	78.7
19:09:01	71.1	78.7	75.5
19:09:02	70.7	75.5	73.2
19:09:03	69.0	73.1	71.0
19:09:04	67.8	70.9	70.2
		80.4	56.5

1-minute LAeq **72.0**

Monitoring Location: Site 3
Monitoring Date: 2/6/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
18:05:00	69.2	71.7	67.0
18:06:00	68.3	71.6	65.3
18:07:00	67.8	69.7	65.3
18:08:00	69.3	70.7	68.1
18:09:00	69.0	70.8	65.5
18:10:00	69.0	70.5	65.6
18:11:00	68.0	69.8	64.0
18:12:00	69.3	71.6	66.2
18:13:00	68.8	70.7	66.6
18:14:00	69.3	72.5	65.4
18:15:00	67.8	71.8	65.1
18:16:00	68.4	70.7	65.0
18:17:00	68.3	71.4	64.9
18:18:00	68.6	70.6	64.9
18:19:00	66.9	69.2	64.1
		72.5	64.0

15-minute LAeq **68.6**

Monitoring Location: Site 4

Monitoring Date: 2/6/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
17:38:00	59.1	60.3	57.8
17:39:00	60.7	61.9	58.9
17:40:00	58.7	60.7	57.5
17:41:00	59.0	59.9	57.5
17:42:00	59.5	61.4	58.3
17:43:00	59.4	60.8	57.7
17:44:00	59.4	60.4	58.3
17:45:00	59.5	64.2	57.8
17:46:00	58.9	59.9	58.0
17:47:00	59.1	60.8	57.9
17:48:00	59.8	61.8	57.9
17:49:00	58.7	60.3	56.8
17:50:00	59.7	61.4	58.4
17:51:00	59.0	60.2	57.5
17:52:00	58.6	60.4	56.4
		64.2	56.4

15-minute LAeq **59.3**

Monitoring Date: 2/7/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
18:34:32	57.9	58.1	58.1
18:34:33	58.0	58.1	58.0
18:34:34	58.2	58.2	57.9
18:34:35	59.2	58.9	58.2
18:34:36	58.9	58.9	58.7
18:34:37	59.2	59.2	58.7
18:34:38	59.3	59.3	59.1
18:34:39	59.8	59.6	59.3
18:34:40	59.5	59.6	59.4
18:34:41	59.1	59.7	59.2
18:34:42	58.5	59.2	58.7
18:34:43	58.8	58.9	58.7
18:34:44	59.0	59.0	58.7
18:34:45	58.9	59.1	58.8
18:34:46	58.5	58.9	58.6
18:34:47	58.9	58.9	58.6
18:34:48	59.7	59.5	58.9
18:34:49	58.5	59.3	58.7
18:34:50	58.7	58.7	58.6
18:34:51	57.9	58.7	58.2
18:34:52	58.5	58.4	58.2
18:34:53	58.7	58.6	58.4
18:34:54	58.6	58.7	58.5
18:34:55	58.7	58.8	58.4
18:34:56	58.3	58.8	58.5
18:34:57	58.2	58.5	58.3
18:34:58	57.8	58.3	58.0
18:34:59	58.3	58.2	58.0
18:35:00	58.9	58.7	58.2
18:35:01	59.4	59.2	58.7
18:35:02	58.5	59.2	58.7
18:35:03	58.4	58.8	58.5
18:35:04	58.6	58.6	58.4
18:35:05	58.5	58.8	58.5
18:35:06	58.4	58.5	58.3
18:35:07	58.9	58.8	58.4
18:35:08	59.2	59.0	58.7
18:35:09	58.5	59.0	58.6
18:35:10	58.3	58.6	58.4
18:35:11	58.9	58.8	58.5
18:35:12	59.3	59.1	58.7
18:35:13	60.3	59.8	59.0
18:35:14	60.3	60.2	59.8
18:35:15	60.2	60.3	60.1
18:35:16	59.4	60.2	59.6
18:35:17	58.7	59.6	59.0
18:35:18	58.9	59.1	58.8
18:35:19	59.0	59.2	58.9
18:35:20	58.7	58.9	58.7
18:35:21	58.9	58.9	58.6
18:35:22	59.6	59.3	58.9
18:35:23	59.6	59.6	59.3
18:35:24	59.8	59.7	59.4
18:35:25	59.8	59.8	59.7
18:35:26	59.6	59.8	59.6
18:35:27	60.2	60.0	59.6
18:35:28	60.2	60.2	60.0
18:35:29	59.4	60.1	59.6
18:35:30	59.1	59.7	59.3
18:35:31	58.8	59.3	58.9
18:35:32	59.5	59.4	59.0
18:35:33	58.7	59.3	58.9
18:35:34	58.2	58.9	58.4
18:35:35	58.2	58.6	58.3
18:35:36	58.4	58.5	58.3
18:35:37	58.6	58.6	58.3
18:35:38	58.6	58.7	58.5
18:35:39	58.9	58.8	58.6
18:35:40	58.7	58.8	58.6
18:35:41	58.6	58.8	58.6
18:35:42	59.0	59.0	58.6
18:35:43	59.4	59.3	59.0
18:35:44	58.9	59.1	59.0
18:35:45	58.3	59.0	58.6
18:35:46	58.6	58.7	58.5
18:35:47	59.3	59.0	58.6
18:35:48	58.6	59.0	58.7
18:35:49	57.2	58.7	57.8
18:35:50	57.3	57.8	57.4
18:35:51	57.2	57.6	57.3
18:35:52	57.3	57.3	57.2
18:35:53	58.6	58.2	57.3
18:35:54	58.6	58.5	58.2
18:35:55	58.3	58.5	58.3
18:35:56	58.4	58.5	58.2
18:35:57	57.8	58.4	58.0
18:35:58	58.0	58.1	57.9
18:35:59	57.7	58.0	57.8
18:36:00	57.5	57.9	57.6
18:36:01	57.5	57.6	57.4
18:36:02	57.0	57.6	57.2
18:36:03	57.3	57.3	57.0
18:36:04	57.3	57.4	57.3
18:36:05	58.1	57.8	57.3
18:36:06	57.6	57.8	57.6
18:36:07	58.1	58.0	57.6
18:36:08	58.3	58.2	57.9
18:36:09	58.4	58.3	58.1
18:36:10	57.6	58.3	57.8
18:36:11	57.0	57.8	57.3
18:36:12	56.5	57.3	56.8
18:36:13	56.3	56.8	56.5
18:36:14	56.3	56.6	56.4
18:36:15	56.5	56.5	56.3
18:36:16	56.9	56.8	56.5
18:36:17	57.1	57.1	56.8
18:36:18	56.5	56.9	56.6
18:36:19	56.3	56.6	56.4
18:36:20	56.6	56.5	56.4
18:36:21	57.1	57.0	56.5
18:36:22	57.2	57.1	56.9
18:36:23	56.6	57.1	56.8
18:36:24	56.7	56.8	56.6
18:36:25	57.9	57.5	56.7
18:36:26	57.1	57.6	57.2
18:36:27	57.0	57.3	57.1
18:36:28	57.4	57.3	57.1
18:36:29	57.5	57.5	57.3
18:36:30	56.3	57.5	56.8
18:36:31	55.8	56.8	56.2
18:36:32	56.5	56.5	56.1
18:36:33	57.2	57.0	56.4
18:36:34	57.2	57.2	57.0
18:36:35	56.9	57.2	56.9
18:36:36	55.7	56.8	56.4

	60.3	56.1

1-minute L **58.4**

Monitoring Location: Site 5
Monitoring Date: 2/6/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
18:29:00	45.8	48.3	44.1
18:30:00	46.8	47.8	44.9
18:31:00	46.8	49.8	45.3
18:32:00	46.6	48.1	44.9
18:33:00	47.9	55.2	45.4
18:34:00	47.5	51.6	45.6
18:35:00	46.3	48.1	44.9
18:36:00	45.8	47.2	44.1
18:37:00	46.3	48.1	43.9
18:38:00	45.9	48.5	44.2
18:39:00	45.2	46.8	43.6
18:40:00	55.9	73.0	43.9
18:41:00	46.2	48.7	44.1
18:42:00	46.0	48.4	44.6
18:43:00	46.5	47.2	45.7
		73.0	43.6

15-minute LAeq **48.3**

Monitoring Date: 2/7/2020

Monitoring Period

Time	LAeq	LASmax	LASmin
18:51:02	47.2	47.7	47.2
18:51:03	47.5	47.5	47.3
18:51:04	47.2	47.4	47.2
18:51:05	48.2	48.1	47.2
18:51:06	48.2	48.1	47.8
18:51:07	47.6	48.1	47.8
18:51:08	48.7	48.5	47.8
18:51:09	48.1	48.5	48.1
18:51:10	48.4	48.5	48.3
18:51:11	47.8	48.3	48.0
18:51:12	47.9	48.1	47.9
18:51:13	48.1	48.1	47.8
18:51:14	47.9	48.1	47.9
18:51:15	48.9	48.6	48.0
18:51:16	49.1	49.0	48.6
18:51:17	49.6	49.4	49.0
18:51:18	49.2	49.4	49.2
18:51:19	49.4	49.6	49.2
18:51:20	48.8	49.2	48.8
18:51:21	49.4	49.3	49.0
18:51:22	49.3	49.4	49.2
18:51:23	49.1	49.3	49.0
18:51:24	49.0	49.3	49.0
18:51:25	50.6	50.1	49.1
18:51:26	50.7	50.5	50.1
18:51:27	50.4	50.5	50.3
18:51:28	50.0	50.4	50.1
18:51:29	50.8	50.7	50.2
18:51:30	50.1	50.5	50.2
18:51:31	50.4	50.5	50.2
18:51:32	49.3	50.3	49.7
18:51:33	49.0	49.7	49.3
18:51:34	49.8	49.6	49.3
18:51:35	50.2	50.0	49.7
18:51:36	50.3	50.2	50.0
18:51:37	50.0	50.2	50.0
18:51:38	50.9	50.8	49.9
18:51:39	50.5	50.9	50.6
18:51:40	50.1	50.6	50.2
18:51:41	49.3	50.2	49.7
18:51:42	50.0	50.1	49.7
18:51:43	49.8	49.9	49.8
18:51:44	50.4	50.2	49.8
18:51:45	50.3	50.6	50.2
18:51:46	51.0	50.8	50.1
18:51:47	49.5	50.7	50.0
18:51:48	49.4	50.0	49.5
18:51:49	48.2	49.5	48.7
18:51:50	48.7	48.9	48.6
18:51:51	48.6	48.9	48.5
18:51:52	49.0	49.0	48.5
18:51:53	49.2	49.1	48.8
18:51:54	49.2	49.3	49.0
18:51:55	48.7	49.2	48.7
18:51:56	49.6	49.4	48.9
18:51:57	50.4	50.3	49.4
18:51:58	50.3	50.2	49.9
18:51:59	48.7	50.2	49.3
18:52:00	49.5	49.6	49.4
18:52:01	49.1	49.5	49.1
18:52:02	48.9	49.6	48.8
18:52:03	48.5	48.9	48.6
18:52:04	48.7	48.8	48.5
18:52:05	48.9	48.9	48.6
18:52:06	48.7	49.0	48.7
18:52:07	47.9	48.7	48.1
18:52:08	48.1	48.3	48.0
18:52:09	47.7	48.0	47.8
18:52:10	48.8	48.6	47.8
18:52:11	48.8	48.7	48.4
18:52:12	49.3	49.1	48.7
18:52:13	49.4	49.5	49.1
18:52:14	48.5	49.2	48.7
18:52:15	48.7	48.8	48.6
18:52:16	49.3	49.2	48.7
18:52:17	48.8	49.1	48.8
18:52:18	48.7	49.1	48.7
18:52:19	49.4	49.3	48.9
18:52:20	49.6	49.6	49.1
18:52:21	51.9	51.4	49.6
18:52:22	49.7	50.9	50.2
18:52:23	50.8	50.8	50.1
18:52:24	50.6	50.7	50.5
18:52:25	50.7	50.7	50.4
18:52:26	51.1	51.0	50.6
18:52:27	50.0	51.1	50.4
18:52:28	49.5	50.3	49.9
18:52:29	51.0	50.8	49.9
18:52:30	50.9	51.0	50.7
18:52:31	49.1	50.7	49.8
18:52:32	50.5	50.3	49.8
18:52:33	49.8	50.2	49.9
18:52:34	50.1	50.2	49.9
18:52:35	49.9	50.2	49.9
18:52:36	50.0	50.2	49.9
18:52:37	49.3	49.9	49.5
18:52:38	49.8	49.7	49.3
18:52:39	49.7	49.9	49.6
18:52:40	50.2	50.2	49.5
18:52:41	50.5	50.6	50.2
18:52:42	48.9	50.3	49.4
18:52:43	48.5	49.5	48.8
18:52:44	49.0	49.1	48.8
18:52:45	49.7	49.5	48.8
18:52:46	49.2	49.4	49.1
18:52:47	48.5	49.3	48.8
18:52:48	48.6	49.0	48.6
18:52:49	48.4	48.8	48.4
18:52:50	48.0	48.5	48.1
18:52:51	48.4	48.4	48.1
18:52:52	48.1	48.4	48.1
18:52:53	48.1	48.3	48.0
18:52:54	48.1	48.2	47.9
18:52:55	48.7	48.6	48.1
18:52:56	48.5	48.7	48.4
18:52:57	48.5	48.6	48.3
18:52:58	49.4	49.1	48.5
18:52:59	48.7	49.1	48.8
18:53:00	49.2	49.2	48.6
18:53:01	50.0	49.8	49.2
18:53:02	49.9	50.0	49.6
18:53:03	50.7	50.6	49.9
18:53:04	50.2	50.5	49.8
18:53:05	49.4	50.4	49.8
18:53:06	48.9	49.8	49.2
18:53:07	49.1	49.2	49.0
18:53:08	49.2	49.4	49.1
18:53:09	48.7	49.0	48.9

51.4 47.8

2-minute L **49.5**

Monitoring Period

Time	LAeq	LASmax	LASmin
18:21:51	47.6	47.5	45.1
18:21:52	47.3	46.8	45.8
18:21:53	48.5	48.1	46.8
18:21:54	47.8	48.1	47.8
18:21:55	47.0	47.8	47.3
18:21:56	47.7	47.6	47.3
18:21:57	47.8	47.8	47.5
18:21:58	47.5	47.7	47.6
18:21:59	48.0	47.9	47.6
18:22:00	48.7	48.4	47.9
18:22:01	49.7	49.3	48.4
18:22:02	51.4	50.8	49.4
18:22:03	50.2	50.9	50.3
18:22:04	48.7	50.3	49.4
18:22:05	49.1	49.4	49.1
18:22:06	49.1	49.4	49.1
18:22:07	49.0	49.3	49.0
18:22:08	47.8	49.0	48.3
18:22:09	47.2	48.3	47.6
18:22:10	46.5	47.6	46.9
18:22:11	46.5	46.9	46.6
18:22:12	46.2	46.7	46.3
18:22:13	45.8	46.4	46.1
18:22:14	45.8	46.1	45.9
18:22:15	46.3	46.2	45.9
18:22:16	46.1	46.2	46.1
18:22:17	46.1	46.1	46.0
18:22:18	46.6	46.5	46.1
18:22:19	45.9	46.5	46.1
18:22:20	46.3	46.3	46.0
18:22:21	46.2	46.5	46.1
18:22:22	46.9	46.8	46.0
18:22:23	46.4	46.7	46.5
18:22:24	46.0	46.5	46.2
18:22:25	46.2	46.3	46.2
18:22:26	45.5	46.2	45.8
18:22:27	45.7	45.9	45.7
18:22:28	45.6	45.8	45.6
18:22:29	45.7	45.7	45.6
18:22:30	45.8	45.8	45.5
18:22:31	45.9	45.9	45.7
18:22:32	45.9	46.0	45.8
18:22:33	46.0	46.1	45.9
18:22:34	45.8	46.0	45.7
18:22:35	45.3	45.9	45.5
18:22:36	45.8	45.7	45.5
18:22:37	45.7	45.7	45.6
18:22:38	45.8	45.8	45.7
18:22:39	45.6	45.8	45.6
18:22:40	45.5	45.8	45.5
18:22:41	45.0	45.5	45.1
18:22:42	44.9	45.2	45.0
18:22:43	45.3	45.3	44.9
18:22:44	45.6	45.5	45.2
18:22:45	45.2	45.5	45.2
18:22:46	45.0	45.4	45.1
18:22:47	44.7	45.2	44.9
18:22:48	44.7	44.9	44.7
18:22:49	44.6	44.9	44.6
18:22:50	44.7	44.7	44.5
18:22:51	44.4	44.8	44.5
18:22:52	44.5	44.6	44.4
18:22:53	44.4	44.5	44.4
18:22:54	44.7	44.7	44.4
18:22:55	44.9	44.9	44.6
18:22:56	44.6	44.8	44.6
18:22:57	45.0	44.9	44.6
18:22:58	44.8	45.0	44.7
18:22:59	45.1	45.1	44.8
18:23:00	44.8	45.0	44.9
18:23:01	45.2	45.1	44.9
18:23:02	45.4	45.3	45.1
18:23:03	45.4	45.4	45.2
18:23:04	45.1	45.5	45.2
18:23:05	45.8	45.6	45.2
18:23:06	46.1	46.0	45.4
18:23:07	46.4	46.3	46.0
18:23:08	45.8	46.2	45.9
18:23:09	46.8	46.5	45.9
18:23:10	47.5	47.3	46.6
18:23:11	46.7	47.0	46.8
18:23:12	47.2	47.2	46.6
18:23:13	47.0	47.6	46.9
18:23:14	46.1	46.9	46.4
18:23:15	45.8	46.4	46.0
18:23:16	45.4	46.0	45.6
18:23:17	45.1	45.7	45.2
18:23:18	45.6	45.5	45.3
18:23:19	45.5	45.5	45.3
18:23:20	45.9	45.8	45.5
18:23:21	46.1	46.0	45.7
18:23:22	45.7	46.0	45.8
18:23:23	45.1	45.9	45.3
18:23:24	44.6	45.3	44.9
18:23:25	44.9	45.0	44.9
18:23:26	45.0	45.0	44.8
18:23:27	44.8	45.0	44.8
18:23:28	44.7	44.9	44.7
18:23:29	44.6	44.8	44.7
18:23:30	45.2	45.0	44.7
18:23:31	45.0	45.1	44.8
18:23:32	51.0	50.8	45.0
18:23:33	45.4	48.9	47.1
18:23:34	44.7	47.1	45.8
18:23:35	44.8	45.8	45.1
18:23:36	45.0	45.3	45.0
18:23:37	45.2	45.2	45.0
18:23:38	45.6	45.5	45.1
18:23:39	45.6	45.6	45.5
18:23:40	45.2	45.6	45.3
18:23:41	45.6	45.5	45.3
18:23:42	45.9	45.8	45.4
18:23:43	45.3	45.8	45.5
18:23:44	48.7	48.6	45.4
18:23:45	46.4	48.3	47.3
18:23:46	46.3	47.3	46.6
18:23:47	46.3	46.7	46.4
18:23:48	45.1	46.4	45.6
18:23:49	44.5	45.6	45.0
18:23:50	44.1	45.0	44.4
18:23:51	44.8	44.8	44.4
18:23:52	44.7	44.8	44.6
18:23:53	45.4	45.2	44.7
18:23:54	46.4	45.5	45.3

50.9 44.4

2-minute L **46.3**

APPENDIX B

SoundPLAN Output

Single Event

Receiver	Fl	SEL/dB(A)	Time slice	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)
REC-1	G	35.5	SEL	5.3	11.1	28	31.4	30.8	24.5	10.7	-19.7
REC-2	B1	28.6	SEL	-2.1	1.8	19.3	25.2	24.5	14.6	-12.6	
REC-3	G	37.2	SEL	3.5	7.1	20.1	30.7	35	28.9	11.2	
REC-4	G	33.6	SEL	3.7	9	23	30.5	29.2	21.4	3.3	

Cumulative Events

Receiver	Fl	SEL/dB(A)	Time slice	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)
REC-1	G	49	SEL	18.1	25.2	38.1	41.8	44.7	42.7	38.9	29.9
REC-2	B1	47.1	SEL	14.1	21	35	39.9	42.9	40.9	37.1	27.8
REC-3	G	95.3	SEL	53.1	63.6	81	87.2	90.7	89.7	87.2	80.9
REC-4	G	69.7	SEL	30.2	40.3	56.8	62.5	65.9	63.5	59	49.3

EXHIBIT 8

DRAFT CONDITIONS OF APPROVAL FOR CONDITIONAL USE PERMIT 4933 (AS MODIFIED BY MINOR MODIFICATION 4933-1, AND CASE NOS. LU06-0029 AND PL19-0100 AND ADJUSTED BY PERMIT ADJUSTMENT PERMIT NOS. 1, 2, 3, AND CASE NO. LU08-0083) FOR TIERRA REJADA GOLF CLUB

***NOTE: THE FOLLOWING LIST OF CONDITIONS (BELOW) SUPERSEDE ALL PREVIOUSLY APPROVED CONDITIONS FOR THE PROJECT SITE (TIERRA REJADA GOLF CLUB).**

RESOURCE MANAGEMENT AGENCY (RMA) CONDITIONS

I. Planning Division Conditions

1. Project Description

This Conditional Use Permit is based on and limited to compliance with the project description stated in this condition below, Exhibits 2 through 8 of the Planning Director hearing on February 18, 2021, and conditions of approval set forth below. Together, these conditions and documents describe the "Project." Any deviations from the Project must first be reviewed and approved by the County in order to determine if the Project deviations conform to the Project as approved. Project deviations may require Planning Director approval for changes to the permit or further California Environmental Quality Act (CEQA) environmental review, or both. Any Project deviation that is implemented without requisite County review and approval(s) may constitute a violation of the conditions of this permit and applicable law.

The Project description is as follows:

A modified Conditional Use Permit (CUP) is granted authorizing the continued operation of an existing golf course and ancillary outdoor non-golf special event uses for an additional 30-year period.

Golf Course Operations and Structures:

The existing facility that will continue in operation for a granted 30-year term includes an 18-hole public golf course, driving range, 186-space parking lot and various accessory structures. These accessory structures include the following:

a) Operations Building (7,289 SF)

b) Covered Patio attached to Clubhouse (800 SF)

c) Maintenance Building 1 (5,625 SF)

d) Maintenance Building 2 (4,800 SF)

e) Pergola with permeable roof (under 120 SF)

f) Storage Building (400 SF)

g) Driving Range Storage (75 SF)

h) Main Pump Station Housing (1,000 SF)

i) Fire Pump Station/Restroom (600 SF)

j) 30 tee boxes, three (3) practice holes, putting green and chipping area

k) TJ's Bar and Grille (Clubhouse) (located within Operations Building)

The Operations Building houses a Pro Shop, TJ's Bar and Grille (Clubhouse) and small storage area, separated by an open breezeway. The Pro Shop is 2,370 SF, TJ's Bar and Grille (Clubhouse) is 3,169 SF, the storage area is 340 SF, and the open breezeway is 1,410 SF.

The golf course will continue to remain open 7 days per week during daylight hours.

Non-golf special event uses:

The applicant has been granted approval to allow the previously authorized 100 non-golf outdoor special event days per calendar year (CUP 4933) continue to occur on the project site as an ancillary use to the golf club for a 30-year term. No new permanent or temporary structures are authorized.

Event activities shall continue to be held in a central location on the property, just north of the existing operations building. Rehearsals shall continue to be limited to one, 2-hour rehearsal on one day, and continue to occur during non-peak hours (9:00am to 3:00pm and after 6:30pm Monday through Friday, and all day on Saturday and Sunday) with no amplified sound or music.

Non-golf special events may continue to overlap with regular golf club operational hours except for the granted annual 1,000-attendee event (attendee count is to include all onsite staff and vendor staff). On that day, the golf course shall not be in operation and the 1,000-attendee event may occur in the central location, just north of the existing operations building and on the golf course greens.

Non-golf events may continue to be generally catered by the existing onsite restaurant, TJ's Bar and Grille (Clubhouse). TJ's Bar and Grille can serve 100 plated meals or can serve 300 guests with a buffet. Outside vendors may serve food at events that exceed these thresholds.

In addition to being authorized a 30-year continuance of outdoor special events, the applicant has been granted authorization for the following modifications for events and rehearsals:

Events:

- Increase the number of attendees from 200 to 300 attendees or less for no more than ninety-nine (99) event days per calendar year.

- Increase the number of attendees from 200 to 1,000 attendees or less for one (1) event day per calendar year. Condition of Approval No. 24 requires that event security be present for this authorized event. Security shall be provided by the event organizer.

- Events may occur on every day of the week, instead of being limited to 4:00pm to 11:00pm on Saturday and Sunday only. The authorized time limitations shall be as follows:

    - The authorized 99 events with 300 attendees or less shall occur from 8:00am to 10:00pm on Sunday through Thursday, and from 8:00am to Midnight (12:00am) on Fridays and Saturdays.

    - The authorized one event with 1,000 attendees or less shall occur from 10:00am to 7:00pm (during daylight savings time) on any day of the week.

Rehearsals:

- Increase the maximum number of attendees from 20 to 50 attendees.

- Authorize food and drink service during rehearsals. Such service is not authorized by CUP 4933.

- Authorize that rehearsals do not count as one of the 100 event days.

The development, use, and maintenance of the property, the size, shape, arrangement, and location of structures, parking areas and landscape areas shall conform to the project description above and all approved County land use hearing exhibits in support of the Project and conditions of approval below.

2. Site Maintenance

Purpose: To ensure that the Project site is maintained in a neat and orderly manner so as not to create any hazardous conditions or unsightly conditions which are visible from outside of the Project site.

Requirement: The Permittee shall maintain the Project site in a neat and orderly manner, and in compliance with the Project description set forth in Condition No. 1. Only

equipment and/or materials which the Planning Director determines to substantially comply with the Project description shall be stored within the Project site during the life of the Project.

Documentation: The Permittee shall maintain the Project site in compliance with Condition No. 1 and the approved plans for the Project.

Timing: The Permittee shall maintain the Project site in a neat and orderly manner and in compliance with Condition No. 1 throughout the life of the Project.

Monitoring and Reporting: The County Building Inspector, Fire Marshall, and/or Planning Division staff has the authority to conduct periodic site inspections to ensure the Permittee's ongoing compliance with this condition consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

3. CUP Modification

Prior to undertaking any operational or construction-related activity which is not expressly described in these conditions, the Permittee shall first contact the Planning Director to determine if the proposed activity requires a modification of this CUP. The Planning Director may, at the Planning Director's sole discretion, require the Permittee to file a written and/or mapped description of the proposed activity in order to determine if a CUP modification is required. If a CUP modification is required, the modification shall be subject to:

a. The modification approval standards of the Ventura County Ordinance Code in effect at the time the modification application is acted on by the Planning Director; and

b. Environmental review, as required pursuant to the California Environmental Quality Act (CEQA; California Public Resources Code, §§ 21000-21178) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, §§ 15000-15387), as amended from time to time.

4. Acceptance of Conditions and Schedule of Enforcement Responses

The Permittee's acceptance of this CUP and/or commencement of construction and/or operations under this CUP shall constitute the Permittee's formal agreement to comply with all conditions of this CUP. Failure to abide by and comply with any condition of this CUP shall constitute grounds for enforcement action provided in the Ventura County Non-Coastal Zoning Ordinance (Article 14), which shall include, but is not limited to, the following:

a. Public reporting of violations to the Planning Commission and/or Board of Supervisors;

b. Suspension of the permitted land uses (Condition No. 1);

c. Modification of the CUP conditions listed herein;

d. Recordation of a "Notice of Noncompliance" on the deed to the subject property;

e. The imposition of civil administrative penalties; and/or

f. Revocation of this CUP.

The Permittee is responsible for being aware of and complying with the CUP conditions and all applicable federal, state, and local laws and regulations.

5. Time Limits

a. Use inauguration:

(1) The approval decision for this CUP becomes effective upon the expiration of the 10-day appeal period following the approval date on which the Planning Director rendered the decision on the Project, or when any appeals of the decision are finally resolved. Once the approval decision becomes effective, the Permittee must obtain a Zoning Clearance for use inauguration in order to initiate the land uses set forth in Condition No. 1.

(2) This CUP shall expire and become null and void if the Permittee fails to obtain a Zoning Clearance for use inauguration within one year from the date the approval decision of this CUP becomes effective. The Planning Director may grant a one year extension of time to the Permittee in order to obtain the Zoning Clearance for use inauguration if the Permittee can demonstrate to the satisfaction of the Planning Director that the Permittee has made a diligent effort to implement the Project, and the Permittee has requested the time extension in writing at least 30 days prior to the one year expiration date.

(3) Prior to the issuance of the Zoning Clearance for use inauguration, all fees and charges billed to that date by any County agency, as well as any fines, penalties, and sureties, must be paid in full. After issuance of the Zoning Clearance for use inauguration, any final billed processing fees must be paid within 30 days of the billing date or the County may revoke this CUP.

b. Permit Life or Operations Period: This CUP will expire on January 29, 2053. The lack of additional notification of the expiration date provided by the County to the Permittee shall not constitute grounds to continue the uses that are authorized by this CUP after the CUP expiration date. The uses authorized by this CUP may continue after the CUP expiration date if:

(1) The Permittee has filed a permit modification application pursuant to § 8111-6 of the Ventura County Non-Coastal Zoning Ordinance prior to January 29, 2053; and

(2) The County decision-maker grants the requested modification.

The uses authorized by this CUP may continue during processing of a timely-filed modification application in accordance with § 8111-2.10 of the Ventura County Non-Coastal Zoning Ordinance.

6. Documentation Verifying Compliance with Other Agencies' Requirements Related to this CUP

Purpose: To ensure compliance with, and notification of, federal, state, and/or local government regulatory agencies that have requirements that pertain to the Project (Condition No. 1, above) that is the subject of this CUP.

Requirement: Upon the request of the Planning Director, the Permittee shall provide the Planning Division with documentation (e.g., copies of permits or agreements from other agencies, which are required pursuant to a condition of this CUP) to verify that the Permittee has obtained or satisfied all applicable federal, state, and local entitlements and conditions that pertain to the Project.

Documentation: The Permittee shall provide this documentation to Planning Division staff in the form that is acceptable to the agency issuing the entitlement or clearance, to be included in the Planning Division Project file.

Timing: The documentation shall be submitted to the Planning Division prior to the issuance of the Zoning Clearance for use inauguration or as dictated by the respective agency.

Monitoring and Reporting: The Planning Division maintains the documentation provided by the Permittee in the respective Project file. In the event that the federal, state, or local government regulatory agency prepares new documentation due to changes in the Project or the other agency's requirements, the Permittee shall submit the new documentation within 30 days of receipt of the documentation from the other agency.

7. Notice of CUP Requirements and Retention of CUP Conditions On-Site

Purpose: To ensure full and proper notice of these CUP conditions affecting the use of the subject property.

Requirement: Unless otherwise required by the Planning Director, the Permittee shall notify, in writing, the Property Owner(s) of record, contractors, and all other parties and vendors who regularly conduct activities associated with the Project, of the pertinent conditions of this CUP.

Documentation: The Permittee shall maintain a current set of CUP conditions and exhibits at the project site.

Timing: Prior to issuance of a Zoning Clearance for use inauguration and throughout the life of the Project.

Monitoring and Reporting: The Planning Division has the authority to conduct periodic site inspections to ensure ongoing compliance with this condition consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

8. Recorded Notice of Land Use Entitlement

Purpose: The Permittee shall record a "Notice of Land Use Entitlement" form and the conditions of this CUP with the deed for the subject property that notifies the current and future Property Owner(s) of the conditions of this CUP.

Requirement: The Permittee shall sign, have notarized, and record with the Office of the County Recorder, a "Notice of Land Use Entitlement" form furnished by the Planning Division and the conditions of this CUP, with the deed of the property that is subject to this CUP.

Documentation: Recorded "Notice of Land Use Entitlement" form and conditions of this CUP.

Timing: The Permittee shall record the "Notice of Land use Entitlement" form and conditions of this CUP, prior to issuance of a Zoning Clearance for use inauguration.

Monitoring and Reporting: The Permittee shall return a copy of the recorded "Notice of Land Use Entitlement" form and conditions of this CUP to Planning Division staff to be included in the Project file.

9. Financial Responsibility for Compliance Monitoring and Enforcement

a. Cost Responsibilities: The Permittee shall bear the full costs of all County staff time, materials, and County-retained consultants associated with condition compliance review and monitoring, CEQA mitigation monitoring, other permit monitoring programs, and enforcement activities, actions, and processes conducted pursuant to the Ventura County Non-Coastal Zoning Ordinance (§ 8114-3) related to this CUP. Such condition compliance review, monitoring and enforcement activities may include (but are not limited to): periodic site inspections; preparation, review, and approval of studies and reports; review of permit conditions and related records; enforcement hearings and processes; drafting and implementing compliance agreements; and attending to the modification, suspension, or revocation of permits. Costs will be billed at the rates set forth in the Planning Division or other applicable County Fee Schedule, and at the contract rates of County-retained consultants, in effect at the time the costs are incurred.

b. Pursuant to the requirements of CUP 4933, Case No. LU06-0020, the Resource Management Agency created Condition Compliance Case No. CC09-0060 to cover the costs associated with condition compliance review, monitoring, and enforcement activities, and any duly-imposed civil administrative penalties,

regarding CUP 4933, Case No. LU06-0020. The Planning Division will continue to use Condition Compliance Case No. CC09-0069 to cover the costs associated with condition compliance review, monitoring, and enforcement activities described in subsection 9.a (above), and any duly imposed civil administrative penalties regarding this CUP.

Within 10 calendar days of the effective date of the final decision approving this CUP, the Permittee shall submit a new, updated, and completed reimbursement agreement for Condition Compliance Case No. CC09-0060, in a form provided by the Planning Division, obligating the Permittee to pay all condition compliance review, monitoring, and enforcement costs, and any civil administrative penalties, subject to the Permittee's right to challenge all such charges and penalties prior to payment.

c. Billing Process: The Permittee shall pay all Planning Division invoices within 30 days of receipt thereof. Failure to timely pay an invoice shall subject the Permittee to late fees and charges set forth in the Planning Division Fee Schedule, and shall be grounds for suspension, modification, or revocation of this CUP. The Permittee shall have the right to challenge any charge or penalty prior to payment.

d. Inspections: The Permittee, in accepting this CUP, grants permission for County Staff to make unannounced inspections of all, or any, events for condition compliance purposes.

10. Defense and Indemnification

a. The Permittee shall defend, at the Permittee's sole expense with legal counsel acceptable to the County, against any and all claims, actions, or proceedings against the County, any other public agency with a governing body consisting of the members of the County Board of Supervisors, or any of their respective board members, officials, employees and agents (collectively, "Indemnified Parties") arising out of or in any way related to the County's issuance, administration, or enforcement of this CUP. The County shall promptly notify the Permittee of any such claim, action or proceeding and shall cooperate fully in the defense.

b. The Permittee shall also indemnify and hold harmless the Indemnified Parties from and against any and all losses, damages, awards, fines, expenses, penalties, judgments, settlements, or liabilities of whatever nature, including but not limited to court costs and attorney fees (collectively, "Liabilities"), arising out of or in any way related to any claim, action or proceeding subject to subpart (a) above, regardless of how a court apportions any such Liabilities as between the Permittee, the County, and/or third parties.

c. Except with respect to claims, actions, proceedings, and Liabilities resulting from an Indemnified Party's sole active negligence or intentional misconduct, the Permittee shall also indemnify, defend (at Permittee's sole expense with legal counsel acceptable to County), and hold harmless the Indemnified Parties from and against any and all claims, actions, proceedings, and Liabilities arising out of, or in any way related to, the construction, maintenance, land use, or operations conducted pursuant to this CUP, regardless of how a court apportions any such Liabilities as between the Permittee, the County, and/or third parties. The County shall promptly notify the Permittee of any such claim, action, or proceeding and shall cooperate fully in the defense.

d. Neither the issuance of this CUP, nor compliance with the conditions hereof, shall relieve the Permittee from any responsibility otherwise imposed by law for damage to persons or property; nor shall the issuance of this CUP serve to impose any liability upon the Indemnified Parties for injury or damage to persons or property.

11. Permittee's Consent to Site Inspections

Pursuant to the Ventura County Non-Coastal Zoning Ordinance (§ 8114-3.5), the Planning Division conducts periodic site inspections of permitted facilities and land uses to monitor compliance with the conditions of County-issued permits and the County zoning ordinance. The Permittee hereby consents to the inspection of all property, facilities, operations, and events comprising the Project that is subject of this CUP inspections may occur at any time the Planning Division deems necessary to fully and effectively monitor the Project, including nights or weekends. For example, if the permit authorizes events on weekend nights, the Permittee authorizes the Planning Division to conduct site inspections during such events to monitor compliance with event-related permit conditions. Upon the Planning Division's provision of reasonable notice, the Permittee agrees to provide Planning Division staff access to conduct the above-described inspections for the sole and exclusive purpose of monitoring compliance with this permit and the County zoning ordinance.

12. Temporary Events Schedule for Event Compliance Inspection

Purpose: To ensure that the Permittee informs the Planning Division Condition Compliance staff of scheduled temporary events for scheduling a site inspection and compliance review of the venue during a scheduled event.

Requirement: The Permittee shall submit an events schedule that includes (at a minimum) the following information for each scheduled temporary event:

a. a brief description of the type of temporary event (e.g., wedding event);

b. the scheduled date and hours of the temporary event; and

c. the anticipated number of attendees.

If the Permittee modifies the events schedule, the Permittee shall submit an updated events schedule to the Planning Division Condition Compliance staff.

Documentation: The Permittee shall submit the Events Schedule to the Planning Division Condition Compliance staff.

Timing: The Permittee shall submit the events schedule to the Planning Division Condition Compliance staff annually on or before May 15th. If the Permittee modifies the events schedule, the Permittee shall submit an updated events schedule to the Planning Division Condition Compliance staff at least 10 days prior to the event that warranted the modifications to the events schedule.

Monitoring and Reporting: The Planning Division shall review, and maintain in the Project File, the Event Schedule provided by the Permittee and conduct inspections, as needed and defined by Condition 11.

13. Invalidation of Condition(s)

If any of the conditions or limitations of this CUP are held to be invalid in whole or in part by a court of competent jurisdiction, that holding shall not invalidate any of the remaining CUP conditions or limitations. In the event that any condition imposing a fee, exaction, dedication, or other mitigation measure is challenged by the Permittee in an action filed in a court of competent jurisdiction, or threatened to be filed therein, the Permittee shall be required to fully comply with this CUP, including without limitation, by remitting the fee, exaction, dedication, and/or by otherwise performing all mitigation measures being challenged. This CUP shall continue in full force unless, until, and only to the extent invalidated by a final, binding judgment issued in such action.

If a court of competent jurisdiction invalidates any condition in whole or in part, and the invalidation would change the findings and/or the mitigation measures associated with the approval of this CUP, at the discretion of the Planning Director, the Planning Director may review the project and impose substitute feasible conditions/mitigation measures to adequately address the subject matter of the invalidated condition. The Planning Director shall make the determination of adequacy. If the Planning Director cannot identify substitute feasible conditions/mitigation measures to replace the invalidated condition, and cannot identify overriding considerations for the significant impacts that are not mitigated to a level of insignificance as a result of the invalidation of the condition, then this CUP may be revoked.

14. Consultant Review of Information and Consultant Work

The County and all other County permitting agencies for the Project have the option of referring any and all special studies that these conditions require to an independent and qualified consultant for review and evaluation of issues beyond the expertise or resources of County staff.

Prior to the County engaging any independent consultants or contractors pursuant to the conditions of this CUP, the County shall confer in writing with the Permittee

regarding the necessary work to be contracted, as well as the estimated costs of such work. Whenever feasible, the County will use the lowest responsible bidder or proposer. Any decisions made by County staff in reliance on consultant or contractor work may be appealed pursuant to the appeal procedures contained in the Ventura County Zoning Ordinance Code then in effect.

The Permittee may hire private consultants to conduct work required by the County, but only if the consultant and the consultant's proposed scope-of-work are first reviewed and approved by the County. The County retains the right to hire its own consultants to evaluate any work that the Permittee or a contractor of the Permittee undertakes. In accordance with Condition No. 9 above, if the County hires a consultant to review any work undertaken by the Permittee, or hires a consultant to review the work undertaken by a contractor of the Permittee, the hiring of the consultant will be at the Permittee's expense.

15. Relationship of CUP Conditions, Laws, and Other Entitlements

The Permittee shall implement the Project in compliance with all applicable requirements and enactments of federal, state, and local authorities. In the event of conflict between various requirements, the more restrictive requirements shall apply. In the event the Planning Director determines that any CUP condition contained herein is in conflict with any other CUP condition contained herein, when principles of law do not provide to the contrary, the CUP condition most protective of public health and safety and environmental resources shall prevail to the extent feasible.

No condition of this CUP for uses allowed by the Ventura County Ordinance Code shall be interpreted as permitting or requiring any violation of law, lawful rules, or regulations, or orders of an authorized governmental agency. Neither the approval of this CUP, nor compliance with the conditions of this CUP, shall relieve the Permittee from any responsibility otherwise imposed by law for damage to persons or property.

The Permittee shall obtain a business tax certificate and regulatory licenses for the operation of the golf club and temporary events.

16. Contact Person

Purpose: To designate a person responsible for responding to complaints.

Requirement: The Permittee shall designate a contact person(s) to respond to complaints from citizens and the County which are related to the permitted uses of this CUP.

Documentation: The Permittee shall provide the Planning Director with the contact information (e.g., name and/or position title, address, business and cell phone numbers, and email addresses) of the Permittee's field agent who receives all orders, notices, and communications regarding matters of condition and code compliance at the Project site.

Timing: Prior to the issuance of a Zoning Clearance for use inauguration, the Permittee shall provide the Planning Division the contact information of the Permittee's field agent(s) for the Project file. If the address or phone number of the Permittee's field agent(s) should change, or the responsibility is assigned to another person, the Permittee shall provide Planning Division staff with the new information in writing within three calendar days of the change in the Permittee's field agent.

Monitoring and Reporting: The Planning Division maintains the contact information provided by the Permittee in the Project file. The Planning Division has the authority to periodically confirm the contact information consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

17. Resolution of Complaints

The following process shall be used to resolve complaints related to the Project's events:

a. The Permittee shall post the telephone number for the designated Contact Person as identified pursuant to Condition No. 16 in a visible location on the site. The Contact Person shall be available via telephone on a 24-hour basis. Persons with concerns about a temporary event as it is occurring may directly contact the Contact Person;

b. If County staff receives a written complaint about the Project, Planning Division staff may contact the Permittee's Contact Person or the Permittee to request information regarding the alleged violation; and

c. If, following a complaint investigation by County staff, a violation of the Ventura County Code or a condition of this CUP is confirmed, County staff may initiate enforcement actions pursuant to § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

18. Change of Permittee

Purpose: To ensure that the Planning Division is properly and promptly notified of any change of Permittee.

Requirement: The Permittee shall file, as an initial notice with the Planning Director, the new name(s), address(es), telephone number(s), and email addresses of the new owner(s), lessee(s), operator(s) of the permitted uses, and the company officer(s). The Permittee shall provide the Planning Director with a final notice once the transfer of ownership and/or operational control has occurred.

Documentation: The initial notice must be submitted with the new Permittee's contact information. The final notice of transfer must include the effective date and time of the transfer and a letter signed by the new Property Owner(s), lessee(s), and/or operator(s) of the permitted uses acknowledging and agreeing to comply with all conditions of this CUP.

Timing: The Permittee shall provide written notice to the Planning Director 10 calendar days prior to the change of ownership or change of Permittee. The Permittee shall provide the final notice to the Planning Director within 15 calendar days of the effective date of the transfer.

Monitoring and Reporting: The Planning Division maintains notices submitted by the Permittee in the Project file and has the authority to periodically confirm the information consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

19. Availability of Parking Spaces
Purpose: To ensure compliance with § 8108-3 of the Ventura County Non-Coastal Zoning Ordinance.

Requirement: The Permittee shall ensure that the required 128 motor vehicle parking spaces (including accessible spaces) remain continuously available for their intended parking use and are not used for merchandise display, storage, vehicle repair, or any other unauthorized use. The Permittee shall maintain the required parking area as illustrated on the approved site plan. This maintenance requirement includes, but is not limited to, the number of parking spaces, curbs, directional markings, accessible parking symbols, screening, sight distance, surfaces, signs, striping, lighting fixtures, landscaping, and trash and recyclables enclosures.

Documentation: A stamped copy of the approved site plan.

Timing: The Permittee shall maintain the required parking area as illustrated on the approved site plan for the life of the Project.

Monitoring and Reporting: The Planning Division maintains a stamped copy of the approved site plan provided by the Permittee in the Project file. The Building and Safety Inspector and Planning Division have the authority to inspect the site to ensure compliance with the approved site plan. Planning Division staff has the authority to conduct periodic site inspections to ensure ongoing compliance with this condition consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

20. Trash and Recycling Storage Area
Purpose: In order to comply with § 8106-8.7 and § 8108-5.13 of the Ventura County Non-Coastal Zoning Ordinance.

Requirement: The Permittee shall ensure that trash and waste diversion (e.g., recyclables and yard waste) enclosures are constructed and maintained on the project site in accordance with the County of Ventura's adopted "Space Allocation for Recycling and Refuse Collection Design Criteria and Specifications Guidelines."

Documentation: A stamped copy of the approved site plan.

Timing: The Permittee shall maintain the required trash and recycling storage areas as illustrated on the approved site plan for the life of the Project.

Monitoring and Reporting: The Planning Division maintains a copy of the approved site plan in the Project file. The Planning Division has the authority to inspect the site to ensure that the enclosures are constructed as illustrated on the approved plans. The Planning Division has the authority to periodically inspect the site to ensure that the trash enclosures are maintained consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

21. Resolution of Noise Complaints at Temporary Events

Purpose: In order to resolve noise complaints during temporary events and minimize noise related impacts.

Requirement: The Permittee shall provide the Planning Director with the name, title, address, and phone number of the Permittee, or Permittee's designee, who will be responsible for ensuring condition and code compliance during temporary events at the project site.

The Permittee, or the Permittee's designee, must use the following process to resolve noise complaints received during temporary events:

a. Immediately investigate the complaint and take the following actions (as applicable) to abate the noise complaint below the maximum allowed (90 dBA at 50 feet from the source of amplified music):

    (1) lower speaker volumes of public address (PA) systems and/or amplified music below the maximum allowed;

    (2) discontinue the use of PA systems;

    (3) discontinue the use of amplified music and replace with acoustical music; and/or

    (4) alter the timing and sequence of wedding event activities to comply with the maximum noise standards.

b. Report back to the complaining party by telephone about the findings of the investigation and the abatement actions taken, if any, as soon as possible, but no later than 15 minutes after receiving the complaint, unless otherwise agreed to by the complainant.

c. Provide written notification to the Planning Director of the complaint, within 10 days of receiving a noise complaint. The notice shall indicate: (1) the date and

time of the complaint(s); (2) a description of the complaint; and (3) the name, address, and phone number of the complainant(s).

The Permittee shall take all reasonable actions to prevent noise from adversely affecting nearby residents. If the problem persists, the Planning Director may initiate actions to prevent further complaints, including (but not limited to) the use of a noise consultant, at the Permittee's expense, to monitor the event noise and implement measures to achieve compliance with the maximum noise levels (90 dBA at 50 feet from the source of amplified music). If the Permittee's actions fail to curtail noise complaints, the Planning Director may modify this CUP to disallow event activities that adversely affect nearby sensitive receptors. The Planning Director shall provide the Permittee with notice of such action and an opportunity to be heard in accordance with Non-Coastal Zoning Ordinance section 8111-3.

Documentation: The Permittee must maintain current contact information for the Permittee or Permittee's designee and supply the current contact information to the County Planning Division.

Timing: Prior to the issuance of a Zoning Clearance for use inauguration, and annually on June 1st thereafter, the Permittee shall provide the Planning Division updated contact information for the individual who will be responsible for ensuring condition and code compliance during temporary events at the Project site. The Permittee, or Permittee's designee, shall be available for contact during events. If the contact information should change prior to the mandatory annual update, the Permittee shall provide the residents and Planning Director with the new information prior to the next event. The Permittee shall notify the Planning Director in writing within 10 days of receiving a noise complaint.

Monitoring and Reporting: The Planning Division maintains the Permittee's, or Permittee's designee's, contact information in the Project file. The Permittee shall provide the Planning Division notice of any complaints associated with the events to be maintained in the Project file. In the event that complaints go on unabated, the Planning Director has the authority to review any complaints received by the Planning Division to determine whether this CUP should be modified or revoked. The Planning Division has the authority to conduct site inspections and take enforcement actions to ensure that the Permittee conducts the temporary events in compliance with this condition, consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

22. Events Report

Purpose: The purpose of this condition is to ensure that the Permittee conducts the temporary events in compliance with the requirements of this CUP.

Requirement: The Permittee shall maintain an Events Report, on a form that the Planning Division will provide to the Permittee, in order to record the following for each temporary event:

a. A brief description of the type of temporary event (e.g., wedding event);

b. The scheduled date and hours of the temporary event;

c. The number of attendees;

d. If a temporary event involves greater than 301 attendees, the number of security guards provided at the event, as required pursuant to Condition No. 24 (below); and

e. Whether noise complaints were received and resolved as required pursuant to Condition No. 21 (above).

The Permittee shall complete and maintain the Events Report and submit the Events Report to the Planning Division annually on or before February 1, at any time upon the written request of the Planning Director, and with an application for CUP renewal pursuant to Condition No. 5.b (above).

Documentation: The Permittee shall complete and maintain the Events Report form provided by the Planning Division.

Timing: The Permittee must submit the Events Report form to the Planning Division: annually on or before February 1; within 24 hours of receiving a request from the Planning Director to submit the form; and with an application for CUP renewal.

Monitoring and Reporting: The Planning Division reviews and maintains in the Project file, the Events Report forms. If the Events Report forms indicate that the temporary events were conducted in violation of the conditions of this CUP, the Planning Division has the authority to implement enforcement actions consistent with the regulations of Article 14 of the Ventura County Non-Coastal Zoning Ordinance.

23. Alcohol License

Purpose: The purpose of this condition is to ensure that the food service operator (caterer) possesses a valid license to serve alcohol at the events that are authorized pursuant to this CUP.

Requirement: If the temporary event(s) authorized by this CUP will involve the sale or distribution of alcohol, the Permittee shall ensure that the caterer, if any, possesses the appropriate license to serve alcohol.

Documentation: All contracts between the Permittee and the caterer for an event that will involve the sale or distribution of alcohol, must include a requirement that the caterer possess, and be able to provide evidence of, the appropriate license to serve alcohol at the event that is the subject of the contract.

Timing: Within 24 hours of a request from the Planning Director, the Permittee shall provide the Planning Division a copy of the (1) contract between the Permittee and the caterer and/or (2) caterer's license to serve alcohol.

Monitoring and Reporting: The Planning Division has the discretion to request a copy of the contract between the Permittee and the caterer, and/or the caterer's license to serve alcohol, for review. If the Planning Division finds that the caterer does not possess a valid license to serve alcohol, the Planning Division has the authority to implement enforcement actions consistent with the regulations of Article 14 of the Ventura County Non-Coastal Zoning Ordinance.

24. Security

Purpose: The purpose of this condition is to ensure that the Permittee provides adequate security at the events that are authorized pursuant to this CUP.

Requirement: If a temporary event will involve greater than 301 attendees, the Permittee shall provide security guard(s) in sufficient number to ensure on-site security.

Documentation: As required pursuant to Condition No. 22 (above), the Permittee shall complete and maintain an Events Report, on a form provided by the Planning Division, which includes the number of security guards provided at each temporary event that involves greater than 301 attendees.

The Permittee shall complete and maintain the Events Report and submit the Events Report to the Planning Division at any time upon the written request of the Planning Director and with an application for CUP renewal pursuant to Condition No. 5.b (above).

Documentation: The Permittee shall complete and maintain the Events Report form provided by the Planning Division.

Timing: The Permittee must submit the Events Report form to the Planning Division within 24 hours of receiving a request from the Planning Director to submit the form and with an application for CUP renewal.

Monitoring and Reporting: The Planning Division reviews and maintains in the Project file, the Events Report forms. If the Events Report forms indicate that the temporary events were conducted in violation of the conditions of this CUP, the Planning Division has the authority to implement enforcement actions consistent with the regulations of Article 14 of the Ventura County Non-Coastal Zoning Ordinance.

PUBLIC WORKS AGENCY (PWA) Conditions

Roads and Transportation Department

25. TRAFFIC IMPACT MITIGATION FEE:
Purpose: To address the cumulative adverse impacts of traffic on the Regional Road Network, Ventura County General Plan Goals, Policies, and Programs Section 4.2.2-6 and Ventura County Ordinance Code, Division 8, Chapter 6 require that the VCPWA-RT collect a Traffic Impact Mitigation Fee (TIMF).

Requirement: The applicant/permittee shall deposit with the VCPWA-RT a TIMF. The trip generation rate and TIMF are calculated based on the applicant's information and the provided traffic study. The applicant/permittee may choose to submit additional information to supplement the information currently provided to establish the trip generation rate. The TIMF may be adjusted for inflation at the time of deposit in accordance with the latest version of the Engineering News Record Construction Cost Index. Based on the applicant's information:

a. The TIMF due to the County would be:

$11,404.95 = 547 ADT(1) x $20.85(3) per ADT

Notes:

(1) The 547 ADT was established by a traffic study conducted by Stantec dated, March 10, 2020.

(2) The trips generated by the project shall be used as a baseline level so that the TIMF may be computed for future increases to the trip generation. Based on the applicant's information, the proposed total baseline level will be 547 Average Daily Trips (ADT). (TD - 4, RMA – 138).

(3) County TIMF for the Average Daily Trip in the Moorpark Area District #4.

(4) The TIMF due to the City of Moorpark will not be collected. The reciprocal agreement between the City and the County allows for the collection of Traffic Mitigation Fee based on the City's "normal procedures" or based on Traffic Impact Mitigation Fee (TIMF) Program adopted by the City. The City of Moorpark has not confirmed what the "normal procedure" is or adopted a TIMF program. Until either the City Council adopts the required TIMF Program and establishes the rate or the City can provide information showing how the City's normal procedures comply with the requirement to adopt a TIMF Program, the County will discontinue collecting the City reciprocal TIMF for projects approved by the County.

Documentation: The applicant/permittee shall come to the VCPWA-RT counter, fill out the TIMF form, and pay the TIMF. The applicant/permittee shall provide a copy of the

Conditions of Approval for the project. The fee will not be collected without sufficient documentation.

Timing: This condition shall be met prior to the issuance of the Zoning Clearance for use inauguration.

Monitoring and Reporting: The VCPWA-RT will review and approve the payment of the TIMF.

Integrated Waste Management Division

Grading

26. Refuse and Recyclables at Special Events with <2,000 attendees
Purpose: To comply with the California Solid Waste Reuse and Recycling Access Act of 1991 (CA Public Resources Code 42900-42901).

Requirement: For projects with special events with <2,000 attendees, the Permittee must provide adequate trash and recycling containers for all special events. The Permittee must ensure all food, trash, and recyclables are removed from the property following each event.

Documentation: Upon request, the Permittee shall submit a site plan to the IWMD indicating the location of a trash enclosure or a designated area with sufficient space to accommodate refuse and recycling bins necessary to meet the needs of the project.

Timing: For projects with special events with <2,000 attendees, the Permittee shall arrange for temporary trash and recycling containers.

Monitoring and Reporting: For projects with special events with <2,000 attendees, the Permittee shall, upon request, provide evidence that temporary trash and recycling containers were provided at special events hosted on the property (i.e. dated catering receipts, dated solid waste collection bills.

OTHER VENTURA COUNTY AGENCIES

Ventura County Fire Protection District (VCFPD) Conditions

27. Hazardous Fire Area (CONDITION SATISFIED)
Purpose: To advise the Permittee that the project is located within a Hazardous Fire Area and ensure compliance with California Building and Fire Codes.

Requirement: The Permittee shall construct all structures to meet hazardous fire area building code requirements.

Documentation: A stamped copy of the approved building plans to be retained by the Building Department.

Timing: The Permittee shall submit building plans to the Building Department for approval before the issuance of building permits.

Monitoring and Reporting: The Fire Prevention Bureau shall conduct a final inspection to ensure that the structure is constructed according to the approved hazardous fire area building code requirements. Unless a modification is approved by the Fire Prevention Bureau, the Permittee, and their successors in interest, shall maintain the approved construction for the life of the structure.

28. Fuel Modification Plans (CONDITION SATISFIED)
Purpose: To reduce hazardous fuel loads surrounding a project or developments to provide wildfire protection.

Requirement: The Permittee shall prepare a Fuel Modification Plan (FMP).

Documentation: A stamped copy of the approved Fuel Modification Plan (FMP).

Timing: The Permittee shall submit a Fuel Modification Plan (FMP) to the Fire Prevention Bureau for approval before the start of construction.

Monitoring and Reporting: A copy of the approved Fuel Modification Plan shall be kept on file with the Fire Prevention Bureau. The Fire Prevention Bureau shall conduct a final inspection to ensure the Fuel Modification Zones are installed according to the approved FMP. The Fire Prevention Bureau shall conduct annual inspections through its Fire Hazard Reduction Program to ensure the Fuel Modification Zones are maintained according to the FMP. Unless a modification is approved by the Fire Prevention Bureau, the Permittee, and their successors in interest, shall maintain the approved Fuel Modification Zones for the life of the development.

29. Fire Department Clearance
Purpose: To provide the Permittee a list of all applicable fire department requirements for their project.

Requirement: The Permittee shall obtain VCFD Form #126 “Requirements for Construction” for any new structures or additions to existing structures before issuance of building permits.

Documentation: A signed copy of the Ventura County Fire Protection District’s Form #126 “Requirements for Construction.”

Timing: The Permittee shall submit VCFPD Form #126 Application to the Fire Prevention Bureau for approval before issuance of building permits.

Monitoring and Reporting: A copy of the completed VCFPD Form #126 shall be kept on file with the Fire Prevention Bureau. The Fire Prevention Bureau will conduct a final onsite inspection of the project to ensure compliance with all conditions and applicable codes / ordinances.

30. Fire Code Permits
Purpose: To comply with the requirements of the Ventura County Fire Code.

Requirement: The Permittee shall obtain all applicable Fire Code permits.

Documentation: A signed copy of the Fire Code permit(s).

Timing: The Permittee shall submit a Fire Code permit application along with required documentation/plans to the Fire Prevention Bureau for approval before final occupancy, installation and/or use of any item/system requiring a Fire Code permit.

Monitoring and Reporting: A copy of the approved Fire Code permits shall be kept on file with the Fire Prevention Bureau. The Fire Prevention Bureau shall conduct a final inspection to ensure that the requirements of the Fire Code permit are installed according to the approved plans. Unless a modification is approved by the Fire Prevention Bureau, the Permittee, and their successors in interest, shall maintain the conditions of the Fire Code permit for the life of the development.

The following Conditions and Mitigation Measures are being carried forward from the previous approval of CUP 4933-1, dated January 29, 1998.

***Note, Condition Nos. 74 through 76 of Permit Adjustment No. 3, dated August 20, 2008 and Condition Nos. 77 through 129 of Case No. LU06-0020, approved on December 3, 2008 no longer apply to this CUP and have been removed.**

PLANNING DIVISION CONDITION:

THE FOLLOWING CONDITION IS AN ENVIRONMENTAL MITIGATION MEASURE TO REDUCE THE CUMULATIVE AND/OR PROJECT SPECIFIC VISUAL IMPACTS RESULTING FROM THE PROJECT, AS DISCUSSED IN SECTION 8(a & b) OF THE "INITIAL STUDY CHECKLIST", AND FOR REFERENCE, WAS PREVIOUSLY INCLUDED AS CONDITION NO. 18 OF CUP 4933-1, DATED JANUARY 29, 1998.

AS SUCH, ANY MODIFICATION TO THIS CONDITION CAN ONLY BE MADE IF: 1. IT DOES NOT REDUCE THE EFFECTIVENESS OF THIS CONDITION AS AN ENVIRONMENTAL MITIGATION MEASURE, OR 2. A NEW ENVIRONMENTAL DOCUMENT IS PREPARED TO REFLECT THE CHANGED PROJECT DESCRIPTION AND SLASH OR CONDITIONS.

31. Visual Resources Mitigation Measure (CONDITION SATISFIED)

The proposed project is located adjacent and north of Tierra Rejada Road and approximately 1,200 feet east of the intersection of State Highway 23 (Moorpark Freeway) and Tierra Rejada Road. Highway 23 is classified as a "eligible" designation for a Scenic Highway. The proposed location of *barrier fencing* could potentially cause significant visual impacts. This project feature could affect the view from Highway 23 and Tierra Rejada Road. Therefore, to reduce the potentially adverse impacts to a less than significant level, the project Site Plan shall reflect:

The *barrier fencing* shall have a maximum height of twenty-five (25) feet and shall be screened with appropriate landscaping to minimize visual effects. Also, the color of the fencing material shall be neutral in order to blend with surrounding natural colors.

Implementation Responsibility

Applicant/Developer, or successor in interest.

Monitoring Frequency

Prior to the issuance of a Zoning Clearance for construction for the Golf Driving Range, the project Site Plan shall be reviewed and approved by the Planning Director, or his designee.

Monitoring Work Program/Monitoring Agencies

Prior to the issuance of a Zoning Clearance for Construction for the Golf Driving Range, the Planning Division shall review the following documents:

a. Site Plan of proposed development.

b. Landscape and Irrigation Plans.

Prior to issuance of a Zoning Clearance for Use Inauguration, the County Landscape Consultant shall review and approve installation of plantings and irrigation systems for compliance with approved Landscape and Irrigation Plans. The inspection report shall be forwarded to the Planning Division for review and approval.

Standards of Success

Installation of *barrier fencing* is in compliance with the approved Site Plan; landscaping and irrigation systems are in compliance with approved Landscape and Irrigation Plans; and the Zoning Clearance for Use Inauguration has been issued.

Sheriff's Department Conditions

THE FOLLOWING CONDITIONS STILL APPLY TO THE PROJECT AND FOR REFERENCE, WERE PREVIOUSLY INCLUDED AS CONDITION NOS. 41 THROUGH 52 OF CUP 4933-1, DATED JANUARY 29, 1998.

32. During the construction phase, either a licensed security guard is required to patrol the site during nonworking hours, or a 6-foot-high chain link fence must be erected around the construction site. (CONDITION SATISFIED)

33. Construction equipment, tools, etc., shall be properly secured during non-working hours. Heavy equipment left overnight shall be maintained in well-lighted areas. (CONDITION SATISFIED)

34. All appliances (microwave ovens, dishwashers, trash compactors, etc.) shall be properly secured, prior to installation during non-working hours. All serial numbers shall be recorded by the property owner for identification purposes. (CONDITION SATISFIED)

35. If an alarm system is used for any structures on the site, it shall be wired to all exterior doors and windows, and to any roof vents or other roof opening where access can be gained. (CONDITION SATISFIED)

36. Lighting devices shall be protected against the elements and constructed a vandal resistant material. (CONDITION SATISFIED)

37. Landscaping shall not cover any exterior door or window.

38. Landscaping within parking lots shall not block or screen the view of a seated driver from another driver approaching from any direction. (CONDITION SATISFIED)

39. Addresses shall be clearly visible to approaching emergency vehicles an mounted against a contrasting color. (CONDITION SATISFIED)

40. All exterior doors will be constructed of solid wood core with a minimum thickness of 1 ¾-inch. (CONDITION SATISFIED)

41. Doors utilizing a cylinder lock shall have a minimum of a five (5) pintumbler operation with the locking bar or bolt extending into the receiving guide a minimum of one inch (deadbolt lock). (CONDITION SATISFIED)

42. All exterior sliding glass doors or windows shall be equipped with metal tracks at the top and bottom and be constructed so that the window cannot be lifted from the track when in the closed or locked position. (CONDITION SATISFIED)

43. The entrance gate to the golf course shall be equipped with a Knox system for entry by Sheriff's Department personnel for patrol purposes after business hours. (CONDITION SATISFIED)

PUBLIC WORKS AGENGY CONDITIONS:

THE FOLLOWING CONDITION IS AN ENVIRONMENTAL MITIGATION MEASURE TO REDUCE THE CUMULATIVE AND/OR PROJECT SPECIFIC WATER RESOURCE IMPACTS RESULTING FROM THE PROJECT, AS DISCUSSED IN SECTION 4(a) OF THE "INITIAL STUDY CHECKLIST", AND FOR REFERENCE, WAS PREVIOUSLY INCLUDED AS CONDITION NO. 62 OF CUP 4933-1, DATED JANUARY 29, 1998.

AS SUCH, ANY MODIFICATION TO THIS CONDITION CAN ONLY BE MADE IF: 1. IT DOES NOT REDUCE THE EFFECTIVENESS OF THE CONDITION AS AN ENVIRONMENTAL MITIGATION MEASURE OR 2. A NEW ENVIRONMENTAL DOCUMENT IS PREPARED TO REFLECT THE CHANGE PROJECT DESCRIPTION AND/OR CONDITIONS.

44. Water Resources Mitigation Measure (CONDITION SATISFIED)

The Tierra Rejada Golf Club is anticipated to have a total water demand of 388 acre-feet per year (AFY) in a normal year and up to 457 AFY in an abnormal hot and dry year; and domestic water demand is estimated at 3 AFY. As currently proposed; TOTAL WATER DEMAND for the project will be supplied by the Camrosa Water District. Camrosa supplies a blend of local groundwater and imported water from outside the County for potable water uses. New potable water demands are met by increasing imported water purchases throughout Camrosa's service area. In order to *not impact* groundwater resources within Ventura County, 100% of the water will be provided by the Camrosa Water District. Therefore, ALL WATER DEMAND for the proposed golf course will be met from outside the County, and no impacts to water resources within Ventura County will occur.

To ensure that the potentially adverse effects impacts to Water Resources will be reduced to a less than significant level, the permittee shall do the following:

a. Submit a *Will-Serve Letter* from the Camrosa Water District to the Public Works Agency (PWA), Water Resources Division and the Planning Division stating that 100% of water demand for the project will be provided by the Camrosa Water District; and,

b. Submit a letter to the PWA, Water Resources Division agreeing to facilitate and cooperate with the formation of a *Tierra Rejada Basin Management Plan*.

Implementation Responsibility

Applicant/Developer, or successor in interest

Monitoring Frequency

Prior to the issuance of Zoning Clearance for Construction for the Golf Course and/or Driving Range, the letters of agreement regarding *Water Will-Serve* and the formation of a *Tierra Rejada Basin Management Plan* shall be reviewed by the Planning Director or his designee and accepted by the PWA, Water Resources Division.

Monitoring Work Program/Monitoring Agencies

Prior to the issuance of Zoning Clearance for Construction for the Golf Course and/or Driving Range, the Planning Division shall review the above referenced document and receive acceptance confirmation from the PWA, Water Resources Division.

Standards of Success

Acceptance of the *Water Will-Serve* letter and the letter of agreement regarding formation of a *Tierra Rejada Basin Management Plan.*

THE FOLLOWING CONDITION IS AN ENVIRONMENTAL MITIGATION MEASURE TO REDUCE THE CUMULATIVE AND/OR PROJECT SPECIFIC WASTE TREATMENT DISPOSAL IMPACTS RESULTING FROM THE PROJECT, AS DISCUSSED IN SECTION 23(c) OF THE "INITIAL STUDY CHECKLIST", AND FOR REFERENCE, WAS PREVIOUSLY INCLUDED AS CONDITION NO. 70 OF CUP 4933-1, DATED JANUARY 29, 1998.

AS SUCH, ANY MODIFICATION TO THIS CONDITION CAN ONLY BE MADE IF: 1. IT DOES NOT REDUCE THE EFFECTIVENESS OF THE CONDITION AS AN ENVIRONMENTAL MITIGATION MEASURE OR 2. A NEW ENVIRONMENTAL DOCUMENT IS PREPARED TO REFLECT THE CHANGE PROJECT DESCRIPTION AN OR CONDITIONS.

45. Solid Waste Facilities Mitigation Measure (CONDITION SATISFIED)

The Solid Waste Management Department has calculated that the golf course will generate approximately 23.9 tons of green waste annually; and, it is estimated that 73 tons annually will be generated from activities associated with restaurant, retail, and maintenance operations. The amount of solid waste generated from the Tierra Rejada Golf Club is considered to be a significant adverse impact to solid waste facilities if the level of diversion is less than 50% and tonnage exceeds 65 tons per year. Therefore, to

be consistent with the Countywide Integrated Waste Management Plan and the, the solid waste generated by this project shall be reduced by diversion methods.

Mitigation: To reduce the potentially adverse impacts to Solid Waste Facilities to a less than significant level, the permittee shall do the following:

a. Complete description of all program activities, which will reduce solid waste disposal by a minimum of 50%;

b. Methodology for monitoring activities for program effectiveness/efficiency;

c. Compilation and provision of quarterly diversion updates/reports – 30 days after the end of each calendar quarter, listing the amount of wastes disposed and recycled by tons;

d. Listing of solid waste/recycling service providers utilized to provide recycling/composting/waste reduction activities; and

e. An annual evaluation of the programs used for solid waste reduction.

Implementation Responsibility

Applicant/Developer, or successor in interest

Monitoring Frequency

Prior to the issuance of a Zoning Clearance for Construction for the Golf Course and/or Driving Range, the permittee shall submit to the Solid Waste Management Department a *Recycling Plan* for review and approval.

Monitoring Work Program/Monitoring Agencies

Prior to the issuance of a Zoning Clearance for Construction for the Golf Course and/or Driving Range, the permittee shall provide evidence to the Planning Division the *Recycling Plan* has been submitted to the Solid Waste Management Department.

Prior to issuance of the Zoning Clearance for Use Inauguration, the Solid Waste Management Department shall have approved the *Recycling Plan* and the permittee is able to implement said plan.

Standards of Success

Approval and implementation of the *Recycling Plan* and the Zoning Clearance for Use Inauguration has been issued.

THE FOLLOWING CONDITIONS STILL APPLY TO THE PROJECT AND FOR REFERENCE, WERE PREVIOUSLY INCLUDED AS CONDITION NOS. 71 THROUGH 73 OF CUP 4933-1, DATED JANUARY 29, 1998.

46. Conservation Easement (CONDITION SATISFIED)

Granting of a conservation easement ("easement") over the project's open space to the Santa Monica Mountains Conservancy or its designee, the Mountains Recreation and Conservation Authority (MRCA), and to another appropriate public entity, (e.g., the Rancho Simi Recreation and Park District, or possibly, the County of Ventura). The easement shall be granted to the Conservancy, the MRCA, or other public entity at no cost and shall be executed by the applicant and the underlying landowner, Mr. Ralph D. Mahan.

Said "open space" is presently estimated at approximately 55 acres, however, we understand and agree that the precise acreage is as yet undetermined and may be as low as 40 acres or as high as 65 acres. The applicant shall provide to the Conservancy a legal description of the "open space" and a corresponding plat on which the acreage of the "open space" shall be computed.

The overlapped conservation easement would prohibit development on "open space" with the exception of modifications of the proposed golf tees, greens, fairways, secondary fairways, bunkers, lake features, and cart paths to account for a) damage due to weather or Acts of God, or b) design flaws in the golf course as determined from time to time by the applicant and/or its architect recognizing the need to preserve the integrity of the 18 hole championship Tierra Rejada Golf Course.

Except as stated above, the easement would prohibit any disking, mowing, application of herbicides, operation of parking of motorized vehicles, non-permanent structures, including signs (except for small signs for the purpose of controlling the direction of golf play), satellite dishes, ancillary structures, temporary or permanent storage of materials, or future above or below ground utilities for offsite purposes. Water tanks shall not be allowed in the "open space" unless the applicant can display a reasonable need for establishment of them.

Grading in "open space" will not be allowed except during the construction of the golf course and during golf course modification periods. In these situations, the applicant shall replace any lost vegetation due to grading with native species. Relative to grading, the construction contract will call attention to the existence of the easement and the contractor will be given a copy of the easement and the easement boundaries. In addition, the contractor will be instructed to conduct its work outside of the boundary of the easement.

Fuel modification shall be strictly limited to that required by the Fire Department as described in an official brush clearance diagram and an accompanying description. Controlled burns would be acceptable with prior notification to the easement holder(s). No public access would be allowed on the easement except in conjunction with normal golf play. The easement holder(s) access would be limited to periodic visits based on a minimum of five business days prior written notification for the sole purpose of verifying compliance with the conditions and shall not in any way compromise or interfere with normal golf operations.

Changes to the easement shall be subject to the prior written approval of the easement holder(s) which approval in no case would be unreasonably withheld or delayed.

The applicant will provide a preliminary title report to the Conservancy, and so long as commercially available, the applicant shall provide an easement title insurance policy to the Conservancy, or its designee, in the amount of $100,000. Additionally, the applicant agrees to cause to have recorded the easement prior in time to the trust deed of the construction lender for the golf course.

47. Wildlife Fencing Restrictions (CONDITION SATISFIED)

Any golf course perimeter fencing, including along Tierra Rejada Road, shall allow for the maximum passage by native wildlife as balanced by legitimate concerns for security for the property. The Conservancy will approve fencing not to exceed four feet in height with a maximum of three horizontal rails between posts. The lowest rail shall be no less than 20 inches above ground level. Rail thickness shall not exceed six inches. No wire mesh or any other material can occupy the 20-inch gap between the lowest rail and the ground surface.

48. Tree Species Restrictions (CONDITION SATISFIED)

The applicant shall agree to plant only native species outside of those areas shown as the “Operations and Maintenance Areas” on the “Conceptual Landscape Plan” approved by the Planning Commission.

Said native species include: a) those native species shown on the “Conceptual Landscape Plan” approved by the Planning Commission with the exception of Torry pine (*Pinus torreyana*), b) White alder (*Alnus rhombifolia*), California sycamore (*Platanus racemosa*), Coast live oak (*Quercus agrifolia*), Fremont’s cottonwood (*Populous fremontii*), Toyon (*Heteromeles arbutifolia*), and c) any and all trees and shrubs indigenous to the Simi Hills, the Santa Monica Mountains, or the Santa Susana Mountains.