

Initial Study / Mitigated Negative Declaration

County of Ventura · Resource Management Agency 800 S. Victoria Avenue, Ventura, CA 93009 · (805) 654-2478 · <u>www.vcrma.org/divisions/planning</u>

# Initial Study for Modified Conditional Use Permit Case No. PL18-0052 Camp Ramah Expansion

# Section A – Project Description

- 1. **Project Case Number(s):** Major Modification (Case No. PL18-0052) to Conditional Use Permit (CUP) No. 3048
- 2. Name of Applicant: Camp Ramah in California, Inc.
- 3. Project Location and Assessor's Parcel Number(s): The project site is located at 385 Fairview Road approximately 0.32 miles west of the City of Ojai in the unincorporated area of Ventura County. The nearest cross streets to the project site are Camp Ramah Road and Fairview Road. The Assessor Parcel Numbers that constitute the project site are 010-0-110-130, 010-0-110-120, 010-0-120-040, 010-0-070-310, 010-0-060-070, 010-0-060-030, 010-0-070-300, and 010-0-070-030 (Attachment 1).

# 4. Existing General Plan Land Use Designation and Zoning Designation of the Project Site (Attachment 2):

- a. General Plan Land Use Designation: Rural (APNs 010-0-110-130, 010-0-110-120, and 010-0-120-040) and Open Space (APNs 10-0-070-310, 010-0-060-070, 010-0-060-030, 010-0-070-300 and 010-0-070-030)
- b. Ojai Valley Area Plan Land Use Designation: Rural Institutional and Open Space 80 acres minimum lot size

# c. Zoning Designations:

APN	Zoning
010-0-070-310	OS-80 acres/TRU/DKS (Open Space 80 acres minimum
010-0-070-300	lot size / Temporary Rental Unit Overlay / Dark Skies
010-0-070-030	Overlay zones
010-0-110-130	RE-20 ac TRU/DKS (Rural Exclusive 20 acres minimum
010-0-110-120	lot size)
010-0-120-040	
010-0-060-070	OS-80 acres/TRU/DKS and OS 80 acres SRP (Scenic
	Resource Protection Overlay Zone)/TRU/DKS
010-0-060-030	OS-80 acres / TRU/DKS and OS 40 acres
	SRP/TRU/DKS

5. Description of the Environmental Setting: The subject property is comprised of approximately 431.45 acres. The Camp Ramah CUP boundary encompasses 83.45 acres. Camp Ramah has been in existence since 1956. On April 16, 1969, CUP No. 3048 was approved for the construction and operation of a year around camp for the use by children, youth and university personnel for study, sports and entertainment in the Rural Agricultural (RA) zone. Modifications to CUP No. 3048 were approved after 1969 and are noted in Table 1 below.

Permit No.	Approved Use	Approval Date
Modification No. 1	Relocation of buildings and roads on	1971
Madification No. 0	the camp property	
Modification No. 2	Relocation of one cabin, tents and	April 4, 1973
	restroom facilities; reorientation of	
	amphitheater	
Modification No. 3	Expansion of two restroom areas	1980
	located in the tent area	
Permit Adjustment	Remodel of the existing library facility	August 29, 1989
Permit Adjustment	Inclusion of an existing 300 square	September 10, 1990
	feet (sq. ft.), addition to a cabin,	
	resulting in 700 sq. ft. of floor area.	
Permit Adjustment	Relocation of a 6,728 sq. ft. adult	June 1, 1992
	only dormitory; Master Plan for Camp	
	approved	
Permit Adjustment	Addition of a gazebo with interior	July 52000
	lighting	
Permit Adjustment	Installation of a second gazebo near	July 8, 2003
	the baseball field.	
Permit Adjustment	Addition of a trellis and modifications	May 12, 2004
LU04-0041	to a deck around the existing	-
	swimming pool.	
Modification 4	Second story addition to the infirmary	November 10, 2005
	building with 28 beds	

Table 1 - Modifications to CUP No. 3048

Ministerial Zoning Clearances (ZC) that have been approved include the following: ZC 80629 was approved or the construction of 3 new dormitories, totaling 6,348 sq. ft (December 6, 1999); ZC04-0796 was approved for the installation of a pool trellis (May 12, 2004); ZC05-0399 was approved for conversion of a shower to a bath in the building adjacent to the pool (March 31, 2005), ZC07-1314 was approved for the construction of a new pool and water slide (October 1, 2007); ZC10-0124 was approved for the rebuild of the Bassan-Heiser Lodge dormitory that was damaged by fire (February 16, 2010).

Camp Ramah operates two, four-week summer sessions<sup>1</sup> (June to August) and hosts approximately 90 programs and activities during the non-summer months.

On December 4, 2017, the Thomas Fire ignited and burned 281,893 acres of land in Ventura and Santa Barbara Counties. A portion of the camp owned property was burned although no structures were lost. Fire crews bulldozed a firebreak through the center of the project area to establish a fire line that would protect the Camp and properties on Fairview Road. These fire suppression activities impacted approximately 1,519 sq. ft. (0.035 acres) of U.S. Army Corps of Engineers (ACOE) and California Department of Fish and Wildlife (CDFW) jurisdictional areas associated with the unnamed seasonal tributary of McDonald Canyon Creek that runs along the eastern edge of APN 010-0-110-130. An approximately 100-foot long reach of the channel was filled with soil and associated riparian scrub vegetation on both sides of the creek was removed to create a firebreak. The applicant is proposing to restore the channel in consultation with ACOE and CDFW regulations. The site conditions that existed prior to the fire are considered the baseline for the evaluation of environmental impacts.

Note: On April 29, 2021, a ministerial emergency tree permit (Tree Permit No. AD21-0064) was issued for the removal of a heritage sized oak tree (tree no. 251) located on APN 010-0-110-130, northwest of the pool and amphitheater. On February 11, 2022, a ministerial emergency tree permit (Tree Permit No. AD21-0162) was issued for the removal of a heritage sized oak tree (tree no. 428) also located on APN 010-0-110-130, approximately 35 feet north of the southern property line and 145 feet north of the nearest structure. In accordance with Sections 8107-25.6(a) and 8107-25.5(a) of the Ventura County Non-Coastal Zoning Ordinance (NCZO), no mitigation to offset the loss of these two trees was required as the trees posed a significant threat to people.

#### Surrounding Land Uses

The zoning and current use of the parcels surrounding the project site are described in the following table.

Adjacent Parcel	Adjacent Zoning	Existing Use
North	OS-80 ac TRU/SRP/DKS	Open space and undeveloped land

<sup>&</sup>lt;sup>1</sup> The Camp Ramah youth summer camp operates for nine weeks during the summer months (June to August) and consists of one week of training for Counselors/Staff and then two, four week sessions for campers. Within the four-week sessions, there are two 2-week sessions available for campers that need or desire a shorter stay.

South	RE-5 ac TRU/DKS and RA-5 ac (Rural Agricultural 5 acre minimum lot size) TRU/DKS	Agricultural and residential uses
East	RE-20 ac TRU/DKS/HCWC, OS-20 ac TRU/DKS, RE-20 ac TRU/DKS, and RA-2 ac TRU/DKS	Open space, agricultural and residential uses
West	OS-80 ac TRU/DKS, AE-40 ac (Agricultural Exclusive 40 acre minimum lot size) TRU/DKS, OS-40 ac TRU/DKS	Camp Ramah Retreat Center <sup>2</sup> and agricultural uses

6. **Project Description:** The applicant requests a Major Modification to CUP No. 3048 for a 20-year term. The CUP boundary will be expanded, and construction of new structures and the legalization of existing structures is proposed, as described below.

# CUP Boundary Adjustment

The current CUP boundary will be modified to include APNs 010-0-060-030, 010-0-060-070 and 010-0-070-310, increasing the camp from 83.45 acres to 348 acres (for a total of 431.45 acres). These parcels are undeveloped. APN 010-0-060-030 and APN 010-0-060-070 are vacant open space land with public trails that are part of the United States Los Padres National trail system<sup>3</sup>. No structures or vegetation removal is proposed on these parcels. Approximately one acre on APN 010-0-070-310 will be developed with a new cabin area known as the "Machon Village" (discussed below).

#### New Structures and Improvements

The following structures and site improvements are proposed:

• <u>Machon Village</u>: The camp expansion includes the construction of "Machon Village," (10,609 sq. ft.) over one acre of land to accommodate the existing Machon program. The village would serve as the new location of the existing leadership training program for campers entering the 11th grade. The village would consist of: six new cabins, four of the cabins would have a second story, (4,320 sq. ft.) and a central gathering structure (the "Machon") that includes counselor sleeping quarters, a prep kitchen,

<sup>&</sup>lt;sup>2</sup> The Applicant also operates an adult retreat center on the property adjacent to the subject Camp Ramah youth camp, which was permitted under CUP No. 5234. The adult retreat center is not part of the proposed or existing CUP boundary for the subject modified CUP request.

<sup>&</sup>lt;sup>3</sup> GIS information on public trails was provided by the (1) U.S. Forest Service: <u>https://www.fs.usda.gov/managing-land/trails;</u> (2) Santa Monica Mountains National Recreation Area: <u>https://www.nps.gov/state/ca/index.htm</u>; and, (3) Ventura County Day Hikes Around, 3rd Edition, Robert Stone

meeting spaces, storage, and restrooms (6,289 sq. ft.). Machon Village provides additional space to accommodate existing campers. The village complex will be nestled into the adjacent hillside with stepped retaining walls that vary between six feet and eight feet in height.

- The existing secondary access road located along the western property line would be extended, with a fire access turnaround, to provide emergency vehicle access to Machon Village.
- A new 1,436 sq. ft. reception, meeting, and storage area will be added to the Dining Hall.
- A 240 sq. ft. trellis would be constructed adjacent to the proposed reception area; and,
- The drop off area (adjacent to the existing Dining Hall) would be reconfigured to reduce bus traffic around the Camp.
- The existing driveway to Machon Village will be widened and will result in the removal of four protected Coast Live Oak trees (Tree Nos. 437, 438, 478, and 480) and encroachment into the Tree Protection Zone (TPZ) of four protected Coast Live Oak trees (Tree Nos. 481, 482, 598 and 599) (Attachment 4 Arborist Report and Tree Protection Plan, prepared by Kenneth A. Knight Consulting, LLC., February 7, 2019).

# Legalization of Existing Structures:

The applicant requests the legalization of the following unpermitted accessory structures:

- Sport court (2 tennis courts,) located on APN 010-0-110-130, adjacent to the western property line.
- Outdoor sanctuary trellis located on APN 010-0-110-130, adjacent to the existing pool.
- A 1,250 sq. ft. meditation deck and shade structure located on APN 010-0-110-120 adjacent to the reservoir.
- A total of 2,352 sq. ft. of shade structures located adjacent to the Dining Hall on APN 010-0-110-130.

Estimated earthwork includes 1,190 cubic yards of cut and 322 cubic yards of fill, with excess cut being balanced onsite. Table 2 below includes a list of existing structures.

Name	<u>Size (in square feet)</u>	<u>Use</u>
Dining Hall	14,800	Meals
Fingehut Chapel	1,156	Chapel
Old Library	1,020	Library
Friedman Library	2,070	Library
Office Complex	4,727	Office/staff housing/kindergarten
Laundry	1,050	Laundry
Director's House	970	lodging
Staff Lounge	1,375	Staff Lounge
Arts Building	2,237	Art
Bassan Heiser	5,600	Adult Housing
Friedland	5,600	Adult Housing
Whizin	10,356	Adult Housing
Infirmary (Kaye building)	4,400	Medical
Caretaker's house	613	lodging
Cabins	10,500	lodging
Boys' tents	4,800	lodging
Boys' tents	2,048	lodging
Boys' Bathroom	1,035	bathroom
Girls' Tents	3,600	lodging
Girls' Tents	4,096	lodging
Girls' Bathroom	836	bathroom
Staff Housing	898	lodging
Camp Manager's House and Garage	1,715	lodging
Sheds/Storage (7)	3,767	Sheds/Storage
Cabins	6,348	lodging
Bakery Addition to Dining	710	Bakery
2nd story to Kaye Building	4,400	Infirmary/lodging
Amphitheater	N/A	Outdoor theater
Trellis and Pool Deck	N/A	Trellis and Pool Deck
Outdoor Sanctuary Trellis	1,700	Outdoor Sanctuary Trellis
Swimming pool bathrooms	744	Swimming pool bathrooms
Gazebos	2,760	Gazebos
Swimming Pool/Slides	N/A	Swimming Pool/Slides
Parking	N/A	134 spaces

# Table 2 - Existing Structures (Exhibit 3)

Reservoir	N/A	N/A					
TOTAL							
100,727 sq. ft.							

#### Camp Ramah Youth Summer Camp

Camp Ramah is an American Camp Association (ACA) accredited camp that has been operating onsite since 1969. The Camp Ramah youth summer camp operates for nine weeks (June to August) and consists of one week of training for Counselors/Staff and then two, four week sessions for campers. Within the four-week sessions, there are two 2-week sessions available for campers that need or desire a shorter stay. During the summer months, Camp Ramah hosts 600 - 650 campers over each four week session.<sup>4</sup>. Camp Ramah summer session includes 93 daytime and 255 overnight employees (Camp counselors, kitchen, housekeeping, maintenance, administrative, and security staff, and 6 residents who live on-site). One family visitation day is scheduled per camp session where families are invited to visit the camp during the day only. Camp Ramah youth summer camp is a 24-hour program. Generally, the camp outdoor programs occur between 7:45 a.m. and 9:00 p.m. Sunday through Friday, and between 7:45 a.m. and 10:00 p.m. on Saturdays. One exception to those general hours is an outdoor café-like gathering (Café Ezra) on Thursday nights for staff throughout the summer and hosted by special needs counselors. Café Ezra ends at approximately 11:00 p.m.

# Non-Summer Programs and Activities

Camp Ramah hosts approximately 90 programs and activities per year for adult and youth campers. During the non-summer months, Camp Ramah is staffed by 37 daytime employees and two residents who live on-site. The non-summer camp activities generally occur Monday through Sunday from 8:00 a.m. to 10:00 p.m.

See Attachment 5 for the list of year-round programs.

# Outdoor Amplified Sound and Music

All activities occurring at Camp Ramah may use a hand-held, acoustic speech amplifier to direct campers to programs and locations. Other activities and programs may use microphones and amplified music. Camp Ramah's amplification system will be equipped with an automatic system to limit volume so that noise does not exceed 50 dBA after 7:00 p.m. All amplified equipment will be

<sup>&</sup>lt;sup>4</sup> In accordance with the Ventura County NCZO Section 8107-17.2.2, the maximum number of overnight guests that could be allowed at Camp Ramah is 942. This number is based on the size of the property.

turned off by 10:00 p.m., except during Café Ezra (which has low level ambient music). Campers and staff may only use outdoor amplification equipment provided by Camp Ramah for both day and nighttime use. The use of amplification equipment would generally occur at the following locations: inside Girl's gazebo for use during summer camp and non-summer camp programs of activities (e.g. dance classes, occasional outdoor dining); Basketball Court/Tennis Court (requires sound blankets); Main Dining Room Lawn; amphitheater; and, Fire Pit at Boy's Tent Area. Camp Ramah Staff remain on-site and are available for monitoring and to respond to complaints.

The majority of meals are prepared and served in the dining hall. However, catering services throughout the year may be provided by food trucks licensed in Ventura County.

#### Security and Earthquake/Disaster Procedures

Access to the Camp is restricted by a gate and security kiosk. Security cameras are used throughout the camp to monitor operations and to hinder criminal activity. Adult supervision of youth campers will be provided throughout the year. Camp Ramah maintains a handbook, which includes procedures for the staff to follow to protect the campers and on-site personnel in the event of a disaster. There are warning alarms located in the center of the camp, which are tested monthly during the summer camp program. Security personnel will be provided by Camp Ramah staff as needed.

#### <u>Access</u>

Access to the project site is available from Fairview Road (a paved public road) to Camp Ramah Road (a paved private road). Non-summer month campers and visitors would be bussed to the project site or arrive in personal vehicles. Summer month campers re bussed in. The on-site parking area and bus drop off point is located more than 100 feet from Fairview Road, south of the softball field.

#### Water and Wastewater Services

Water service is provided by the Casitas Municipal Water District (CMWD). A Conditional Water Will Serve Letter (dated November 12, 2020) has been provided to extend water service to Machon Village. Wastewater service is provided by the Ojai Valley Sanitary District (OVSD) or the existing camp.

Machon Village will be located on APN 010-0-070-310. This parcel is outside the OVSD Sphere of Influence. To provide wastewater service, OVSD will need to request annexation of all or some of APN 010-0-070-310 from the Ventura

County Local Agency Formation Commission (LAFCo) or negotiate an Out of Area Service Agreement with the Camp.

[See Attachment 3, Project Plans and Speaker Location Plan]

- 7. List of Responsible and Trustee Agencies: CDFW, ACOE, United States Forest Service, United States Fish and Wildlife Service, and Ventura County LAFCo (Responsible Agency).
- 8. Methodology for Evaluating Cumulative Impacts: "Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time [California Environmental Quality Act (CEQA) Guidelines, 2014c, Section 15355].

In order to analyze the proposed project's contribution to cumulative environmental impacts, this Initial Study relies on both the list method in part (e.g., for the analysis of impacts to biological resources) and the projection (or plans) method in part (e.g., for the analysis of cumulative traffic impacts).

Pursuant to the CEQA Guidelines [§ 15064(h)(1)], this Initial Study evaluates the cumulative impacts of the project, by considering the incremental effects of the proposed project in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects within a 5-mile radius of the project site. The projects listed in Table 3 were included in the evaluation of the cumulative impacts of the project due to their proximity to the proposed project site and potential to contribute to the environmental effects of the proposed project. Attachment 6 of this initial study includes a map of pending and recently approved projects within the Ventura County Unincorporated Area.

# Table 3- Ventura County Unincorporated Area Pending and Recently Approved Projects Within 5 Mile Radius

Permit No.	Description	Status
	Minor Modification to CUP 4408 to allow 10-year time extension for the continued operation of the	Approved
	Ojai Valley Organics Recycling Facility.	

Permit No.	Description	Status
PL16-0090	Parcel Map Waiver/Lot Line Adjustment between three lots associated with Assessor Parcel Number 033-0-440-105, 033-0-440-095, and 033-0-270-575.	Pending
PL17-0134	Minor Modification to CUP 4966 for an additional 30- year period to continue the operation of the Montessori School of Ojai. There is no request to increase the number of students (maximum of 140) or the number of faculty and employees (maximum of 35) or to change the hours of operation.	Approved
PL18-0120	Lot Line Adjustment between Assessor Parcel Numbers 009-0-090-070, 009-0-090-010, 009-0-090-080, 009-0-080-010.	Pending
PL18-0137	Tentative Parcel Map for a subdivision of a 3.29-acre parcel into three separate lots with associated Assessor Parcel Number 032-0-201-105.	Approved
PL19-0050	Lot Line Adjustment between two lots associated with Assessor Parcel Numbers 033-0-050-680 and 033-0-050-670.	Pending
PL19-0086	Lot Line Adjustment between two lots associated with Assessor Parcel Number 024-0-042-015, Parcel A and Parcel B.	Approved
PL19-0122	Planned Development (PD) Permit for the conversion of an existing 7,200 sq. ft. agricultural barn to a residential garage (Structure No. 10, Car Barn). The PD permit also includes after-the-fact permitting for the following: (1) three pump house structures (total 317 sq. ft.); (2) the addition of two half-bathrooms to the Equipment Garage (151 sq. ft.); (3) conversion of the carport attached to the Accessory Dwelling Garage into an enclosed garage (300 sq. ft.); (4) tennis court without lighting; (5) demolition of an unpermitted bathroom (155 sq. ft.); (6) installation of two onsite wastewater treatment systems; and (7) authorization of exterior lighting and fencing.	Approved
PL20-0065	New 10-year Agricultural Land Conservation Act Contract for a 106.57 acre property located at 10999 Santa Ana Road, Oak View on Assessor Parcel Number 011-0-190-305.	Pending
PL20-0086	Privately initiated General Plan Amendment, zone change, and Ojai Valley Area Plan Amendment to	Pending

Permit No.	Description	Status
	change the land use designations of four separate parcels in the Ojai Valley, from RE-5 ac TRU/DKS to OS-20 ac TRU/DKS. The project also includes a Tentative Parcel Map to abate a violation of the Subdivision Map Act as three of the four affected parcels were not created in accordance with the requirements of the Subdivision Map Act, and therefore, constitute as illegal lots. Assessor Parcel Numbers associated with the project include: 014-0- 100-040, 014-0-100-065, 014-0-100-220, 014-0-100- 230, 014-0-100-240	
PL20-0095	CUP to install a new 40-foot-tall wireless communications facility designed as a faux eucalyptus tree. The tree would include 5 feet of branches on top of the tree. Accessory equipment includes: (9) Panel Antennas, (36) RRU Radio Units, (2) Microwave Antennas, (4) Surge Suppressors, (2) Power Cabinets, (4) Purcell Cabinets, (1) GPS Antenna, Utility Cabinets, (3) DC-12_Outdoor, (1) 20 KW DC Generator, and an 8-foot-high chain link fence.	Pending
PL20-0096	Lot line adjustment between two legal lots with associated Assessor Parcel Numbers 029-0-010-735 and 029-0-010-745.	Approved
PL20-0130	Minor Modification to extend the existing wireless communications facility designed as a 60-foot monopine for an additional 10-year time period.	Approved
PL21-0002	CUP to operate a new bed-and-breakfast inn within two existing dwellings on portions of two separate, contiguous legal lots located at 334 E. Villanova Road and 350 E. Villanova Road	Approved
PL21-0018	Minor Modification to CUP 3527 for the continued use of the Ojai Retreat for a 25-year period.	Pending
PL21-0034	A voluntary merger of two legally created non- conforming lots into one lot with associated Assessor Parcel Numbers 031-0-101-335 and 031- 0-101-325.	Pending
PL21-0108	PD Permit to construct a new 2,538 sq. ft. single family residence (partially prefabricated modular, partially site-built) and 1,344 sq. ft. detached garage.	Withdrawn
PL21-0109	A voluntary merger of two legally created lots into	Void

Permit No.	Description	Status
	one lot with associated Assessor Parcel Number 017-0-033-100.	
PL21-0113	Minor Modification of CUP LU04-0049 for the continued operation of a self-storage facility, called Oak View Self Storage Facility located at 63 Portal Street in the Unincorporated Area of Ojai. The proposed renewal will also include the approval of six (6) existing non-operational roll up doors on the outside of the facility, facing Ventura Avenue.	Pending
PL21-0118	Lot Line Adjustment between two lots with associated Assessor Parcel Numbers APN 018-0-150-265 and 018-0-150-035.	Pending

# Section B – Initial Study Checklist and Discussion of Responses<sup>5</sup>

Issue (Responsible Department)*		Project Impact Degree Of Effect**			Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
RESOURCES:								
1. Air Quality (VCAPCD)								
Will the proposed project:								
a) Exceed any of the thresholds set forth in the air quality assessment guidelines as adopted and periodically updated by the Ventura County Air Pollution Control District (VCAPCD), or be inconsistent with the Air Quality Management Plan?		x				х		
b) Be consistent with the applicable General Plan Goals and Policies for Item 1 of the Initial Study Assessment Guidelines?		х				х		

# Impact Discussion:

<sup>&</sup>lt;sup>5</sup> The threshold criteria in this Initial Study are derived from the *Ventura County Initial Study Assessment Guidelines* (April 26, 2011). For additional information on the threshold criteria (e.g., definitions of issues and technical terms, and the methodology for analyzing each impact), please see the *Ventura County Initial Study Assessment Guidelines*.

**1a.** Based on the project application, regional and local air quality impacts will be below the 5 pounds per day significance threshold for reactive organic compounds (ROG) and oxides of nitrogen (NOx), as described in the Ventura County Air Quality Assessment Guidelines 2003 and the Ojai Valley Area Plan (Policy OV-55.1). As there would not be any increase in camp activities or the number of campers and staff, impacts on regional and local air quality would be less than significant with regard to operational emissions. In terms of construction-generated emissions, NOx and ROC emissions will also be below the 5 pounds per day significance threshold. Construction-related emissions are temporary and are not counted towards these significance thresholds.

Although the project request is not expected to result in any significant local air quality impacts, the applicant will be subject to a standard condition of approval to minimize fugitive dust, particulate matter, and creation of ozone precursor emissions that may result from proposed grading and construction activities [i.e., adherence to VCAPCD Rules and Regulations, which include but are not limited to, Rule 50 (Opacity), Rule 51 (Nuisance), and Rule 55 (Fugitive Dust)]. In addition, the applicant will be required to ensure that ozone precursor and diesel particulate emissions from mobile construction equipment are reduced during construction by prohibiting the idling of construction equipment for more than five minutes. As a result, project-specific and cumulative impacts related to air quality will be less than significant.

**1b.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 1 of the *Ventura County Initial Study Assessment Guidelines.* 

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*		Project Impact Degree Of Effect**			Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
2A. Water Resources – Groundwater Quantity		D)						
Will the proposed project:								
1) Directly or indirectly decrease, either individually or cumulatively, the net quantity of groundwater in a groundwater basin that is overdrafted or create an overdrafted groundwater basin?		x				х		

2)	In groundwater basins that are not overdrafted, or are not in hydrologic continuity with an overdrafted basin, result in net groundwater extraction that will individually or cumulatively cause overdrafted basin(s)?	x		×	
3)	In areas where the groundwater basin and/or hydrologic unit condition is not well known or documented and there is evidence of overdraft based upon declining water levels in a well or wells, propose any net increase in groundwater extraction from that groundwater basin and/or hydrologic unit?	x		х	
4)	Regardless of items 1-3 above, result in 1.0 acre-feet, or less, of net annual increase in groundwater extraction?	x		х	
5)	Be consistent with the applicable General Plan Goals and Policies for Item 2A of the Initial Study Assessment Guidelines?	x		х	

**2A-1 through 2A-4.** A portion of the project site overlies the Upper Ventura River Basin, which is designated a Medium Priority groundwater basin and has not been designated as "Critically Over drafted" by Department of Water Resources (DWR)<sup>6</sup>. Water to the project site is provided by CMWD and sewer is provided by the OVSD.

According to CMWD's 2015 Urban Water Management Plan, CMWD obtains 99 percent of its water supply from Lake Casitas and approximately 1 percent from a well located in the Upper Ventura River Basin. Lake Casitas is a fully appropriated stream reach as designated by the State Water Resources Control Board (SWRCB). Water used for the proposed project would come predominately from Lake Casitas and a minor amount from a groundwater basin. The project is not expected to, either individually or cumulative, decrease the quantity of groundwater in a basin or create an over drafted groundwater basin.

As there will not be an increase in the number of camp guests, staff, or programs and activities, there will not be any increase in water use. The Dudek Water Allocation and Demand Memorandum dated October 15, 2018, (Attachment 7) includes a detailed

<sup>&</sup>lt;sup>6</sup> Department of Water Resources (DWR) Basin No. 4 003.01

projected water demand including indoor water use, swimming pool evaporation, fire suppression water reservoir evaporation, and irrigation demand of 42.6-acre feet per year (AFY). Additionally, the applicant submitted 10 years of monthly meter billing data from CMWD (2008 - 2018). The CMWD data indicates an annual average consumption of 42.3 AFY from 2009 through 2017. Importantly, site water usage in recent years (2014-2017) averaged 36.3 AFY.

Camp Ramah installed a new well (State Well Number [SWN] 04N23W02D01) in 2016 approximately 223 feet east of the nearest extent of the Upper Ventura River Basin. The well is located outside of the Upper Ventura River Basin boundary. According to DWR, it is unknown if the new irrigation well installed by the Camp is in hydrologic continuity with the Upper Ventura River Basin, but it is not expected to result in net groundwater extraction that will individually or cumulatively cause an over drafted basin. The well was originally expected to produce 4.8 to 9.6 AFY for landscape irrigation and to fill an onsite fire suppression water reservoir. The applicant confirmed on September 30, 2019, that the well had been operating and pumped 72,580 gallons (0.22 AF) since startup during the third week of July 2019. The applicant estimated the annual extraction from the well will be 1.3 AFY. The estimated yield on the well completion report was 3 gallons per minute (gpm).

During the time period between startup of the well and the September 30, 2019 reading, the site used around 15.86 AF of water from CMWD. Based on billing statements provided by the applicant, CMWD water consumption was 8.61 AF during the same time period in 2018. The applicant reported that the summer camp had ended earlier in 2019 than 2018, which explained the difference in consumption between the two time periods.

The applicant provided an updated water usage Addendum to the 2018 Water Memorandum "Response to PL 18 0052", dated November 12, 2020 (Attachment 8). The memo stated that proposed non-summer camp programs and activities would increase total water usage by 0.5 AFY. The site's current, on site well production is currently 0.99 AFY, based upon a 16-month average during 2019-2020. The onsite well production would offset the historical average annual water usage to 42.1 AFY. However, the average annual water usage for the site from 2015-2020 has declined to less than the 37.055 AFY allocation from CMWD. The applicant's consultant has predicted this trend to continue beyond 2020.

An updated Will Serve Letter from CMWD, dated November 12, 2020, stated that the annual allocation for the site is 37.055 AFY based on the proposed improvements for the site. CMWD stated that the project is not expected to increase water use beyond the current allocation. Project-specific and cumulative impacts related to water quantity is considered less than significant.

**2A-5.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 2A of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*			npact De Effect**	gree			ative Imp Of Effec	
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
2B. Water Resources - Groundwater Quality (	WPD)							
Will the proposed project:								
<ol> <li>Individually or cumulatively degrade the quality of groundwater and cause groundwater to exceed groundwater quality objectives set by the Basin Plan?</li> </ol>	x				х			
2) Cause the quality of groundwater to fail to meet the groundwater quality objectives set by the Basin Plan?	x				х			
3) Propose the use of groundwater in any capacity and be located within two miles of the boundary of a former or current test site for rocket engines?					х			
4) Be consistent with the applicable General Plan Goals and Policies for Item 2B of the Initial Study Assessment Guidelines?	x				х			

#### Impact Discussion:

**2B-1. and 2B-2.** Sanitary sewer service to the site is provided by the OVSD. As stated in the project description above, the OVSD Sphere of influence will need to modify their Sphere of Influence and allow the parcel that includes the Machon Village to annex into the OVSD for wastewater service to serve the Machon Village or approve an Out of Area Service Agreement. No activities associated with the proposed project would be expected to impact groundwater quality and cause it to fail to meet the groundwater quality objectives set by the Basin Plan. There will not be any project-specific or cumulative impacts related to groundwater quality.

**2B-3.** The proposed project is not located within two miles of the boundary of a former or current test site for rocket engines.

**2B-4.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 2B of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*			npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
2C. Water Resources - Surface Water Quantity	/ (WP	D)							
Will the proposed project:									
1) Increase surface water consumptive use (demand), either individually or cumulatively, in a fully appropriated stream reach as designated by SWRCB or where unappropriated surface water is unavailable?		x				x			
2) Increase surface water consumptive use (demand) including but not limited to diversion or dewatering downstream reaches, either individually or cumulatively, resulting in an adverse impact to one or more of the beneficial uses listed in the Basin Plan?		x				х			
3) Be consistent with the applicable General Plan Goals and Policies for Item 2C of the Initial Study Assessment Guidelines?		x				х			

# Impact Discussion:

**2C-1. and 2C-2.** Water for the proposed project will be supplied by CMWD. According to CMWD's 2015 Urban Water Management Plan, CMWD obtains 99 percent of their water supply from Lake Casitas. The remaining 1 percent originates from a well located in the Upper Ventura River Basin. Lake Casitas is a fully appropriated stream reach as designated by the SWRCB. As of March 17, 2022, Lake Casitas was at 34.6 percent of

capacity. The project site has an allocation from CMWD of 37.05 AFY (Will Serve Letter from CMWD, dated November 12, 2020). CMWD remains under a Stage 3 Water Supply Condition that imposes a mandatory 20 percent allocation reduction resulting in a current allocation of 29.644 AFY for Camp Ramah. The applicant's projected water demand of 42.6 AFY is 5.5 AFY more than its allocation and 13.0 AFY more than its Stage 3 allocation. Historic water demand based on meter data from CMWD indicates that Camp Ramah's annual water use averaged 42.3 AFY between 2009 and 2017, ranging between 29 AF in 2016 to 59 AF in 2013. Julia Aranda, Engineering Manager with the CMWD, stated that CMWD will provide water to meet additional demand but will charge a conservation penalty (personal communication from Julie Aranda to Kristina Boero, dated February 5, 2019). Therefore, the proposed project demand, although above its allocation, does not represent an increase in surface water consumptive use. Thus, the proposed project estimated water demand does not represent an increase over historical surface-water consumptive use. Project-specific and cumulative impacts related to surface water quantity is considered less than significant.

**2C-3.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 2C of the *Ventura County Initial Study Assessment Guidelines.* 

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*		-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
2D. Water Resources - Surface Water Quality		))							
Will the proposed project:									
1) Individually or cumulatively degrade the quality of surface water causing it to exceed water quality objectives as contained in Chapter 3 of the three Basin Plans?		x				x			
2) Directly or indirectly cause storm water quality to exceed water quality objectives or standards in the applicable MS4 Permit or any other NPDES Permits?		x				х			

3) Be consistent with the applicable General Plan Goals and Policies for Item 2D of the Initial Study Assessment Guidelines?	х		х	

**2D-1.** The proposed project will not individually or cumulatively degrade the quality of surface water causing it to exceed water quality objectives as contained in Chapter 3 of the Los Angeles Basin Plan as applicable for this area. The proposed project is not expected to result in a violation of any surface water quality standards as defined in the Los Angeles Basin Plan.

**2D-2.** The proposed project will disturb less than half an acre of land and create less than 20,000 sq. ft. of impervious surfaces. In accordance with the 2010 Ventura Countywide Municipal Stormwater NPDES Permit Order no. CAS004002, "Development Construction Program" Subpart 4.F, the applicant will be required to include Best Management Practices (BMPs) designed to ensure compliance and implementation of an effective combination of erosion and sediment control measures for construction activities on a High Risk Site, to protect surface water quality during any soil disturbance activities (Tables 6 and 9 in Subpart 4.F, SW-HR Form). As such, project-specific and cumulative impacts related to water quality objectives or standards in the applicable MS4 Permit or any other NPDES Permits will be less than significant.

**2D-3.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 2D of the *Ventura County Initial Study Assessment Guidelines.* 

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
3A. Mineral Resources – Aggregate (PIng.)									
Will the proposed project:									

1)	Be located on or immediately adjacent to land zoned Mineral Resource Protection (MRP) overlay zone, or adjacent to a principal access road for a site that is the subject of an existing aggregate Conditional Use Permit (CUP), and have the potential to hamper or preclude extraction of or access to the aggregate resources?	x		х		
2)	Have a cumulative impact on aggregate resources if, when considered with other pending and recently approved projects in the area, the project hampers or precludes extraction or access to identified resources?			х		
3)	Be consistent with the applicable General Plan Goals and Policies for Item 3A of the Initial Study Assessment Guidelines?	х		х		

**3A-1. and 3A-2.** The project site is not located on or immediately adjacent to land with an overlay zone of Mineral Resource Protection (MRP), or adjacent to a principal access road for a site that is the subject of an existing aggregate CUP. Thus, the proposed project does not have the potential to hamper or preclude extraction of or access to aggregate resources. As such, there will not any project-specific or cumulative impacts related to aggregate resources.

**3A-3.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 3A of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro		npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
3B. Mineral Resources – Petroleum (PIng.)									
Will the proposed project:									

<ol> <li>Be located on or immediately adjacent to any known petroleum resource area, or adjacent to a principal access road for a site that is the subject of an existing petroleum CUP, and have the potential to hamper or preclude access to petroleum resources?</li> </ol>	x		x		
2) Be consistent with the applicable General Plan Goals and Policies for Item 3B of the Initial Study Assessment Guidelines?	х		х		

**3B-1.** There are no oil and gas facilities, nor major or minor pipelines located on or in the vicinity of the project site. Therefore, the proposed project will not have the potential to hamper or preclude access to petroleum resources. As such, there will not any project-specific or cumulative impacts related to mineral resources.

**3B-2.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 3B of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*		Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS		
4. Biological Resources										
4A. Species										
Will the proposed project, directly or indirectly:										
<ol> <li>Impact one or more plant species by reducing the species' population, reducing the species' habitat, fragmenting its habitat, or restricting its reproductive capacity?</li> </ol>			х				x			

2) Impact one or more animal species by reducing the species' population, reducing the species' habitat, fragmenting its habitat, or restricting its reproductive capacity?		х				х		
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Biological assessment surveys were conducted at the project site on January 16, 2017, March 13, 2017, and May 5, 2017, by Dr. Larry Hunt, a Ventura County Qualified Biologist. The first survey was a general survey consisting of habitat assessment and characterization of biological resources. The two surveys following this initial survey included focused botanical surveys. On February 20, 2019, an additional site survey was conducted as a follow-up survey to update site conditions post Thomas Fire. Information gathered from the surveys supported the preparation of an Initial Study Biological Assessment (ISBA, Attachment 9), prepared in accordance with the Ventura County Planning Division's Standards for Initial Study Biological Assessments.

#### **Baseline: Pre-Fire Conditions**

The proposed Machon Village and associated fuel modification zone ("development envelope") straddles the interface between a portion of the relatively flat floodplain of McDonald Canyon Creek, and the lower, south-facing slopes of the Topa Topa Mountain Range, in the unincorporated Ventura County area of Ojai. The development envelope includes primarily open space with non-native annual grassland and single stands of coast live oak trees (*Quercus agrifolia*). Chaparral and non-native annual grassland occur on slopes immediately west, north, and east of the development envelope. McDonald Canyon Creek, an ephemeral (seasonal) drainage, traverses in an east-west direction, approximately 527 feet from the proposed development envelope and a seasonal tributary of McDonald Canyon Creek traverses north-south, approximately 25 feet east of the development envelope.

A soccer field and other camp facilities border the southern and southeastern portions of the proposed development envelope. A paved driveway/dirt track parallels the western side of the soccer field.

Existing citrus orchards are located approximately 490 feet southwest of the development envelope and are separated by chaparral vegetation.

The table below provides the percent of various cover types occurring within the development envelope.

Cover Type	Amount of Cover
	(percentage)
Native vegetation (chaparral)	55

Non-native vegetation	35
Burned areas (Thomas fire)	30
Bare ground/graded/developed	30
Buildings, paved roads and other	20
impervious surfaces	

Project site surveys identified four major vegetation alliances occurring within the proposed development envelope. These alliances include:

- <u>Coast Live Oak Woodland Alliance</u> Coast live oaks border the proposed development envelope on the south, east, and north. Several individual Scrub oak trees (*Quercus berberidifolia*) occur adjacent to the Coast live oak woodland located in the southwestern portion of the development envelope. Scrub oaks were also found in adjacent chaparral on slopes west of the development envelope (Attachment 9). A Canyon live oak (*Quercus chrysolepis*) was located in the center of the proposed development envelope. This Canyon live oak and all Scrub oaks were removed as a result of fire-fighting activities during the Thomas Fire in December 2017.
- <u>Ripgut brome (Bromus diandrus) Semi-Natural Herbaceous Stand</u> This nonnative Annual Grassland/Ruderal community is the most extensive plant association occurring within proposed development envelope. Outside of the proposed development envelope, this community also occurs extensively in the southwestern and eastern portions of the parcels. These habitats were cleared (graded) by fire crews during the Thomas Fire in December 2017.
- 3. <u>Bush Mallow (*Malacothamnus fasciculatus*) Shrubland Alliance</u> This very diverse type of chaparral vegetation occurs on slopes west, north, and northeast of the proposed development envelope and is the most extensive vegetation type on the parcels.

Under the pre-fire conditions, the drainage supported poorly developed Coyote brush (*Baccharis salicifolia*) Shrubland Alliance. No riparian trees occurred in association with this drainage. Shrub species pre-dominated and the physiognomy was generally open in most places along the subject reach of the creek and supported by mule-fat (*Baccharis salicifolia*), elderberry (*Sambucus mexicana*), horehound (*Marrubium vulgare*), poison oak (*Toxicodendron diversilobum*), and non-native grasses. Chaparral shrubs, such as black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), and chaparral mallow (*Malacothamnus fasciculatus*), also occurred. Habitat quality along this reach was low, but the drainage connected to more developed riparian scrub habitat upstream of the development envelope. The drainage entered a buried culvert as it passes through Camp Ramah before connecting with the main stem of McDonald Canyon Creek. The reach of the drainage on the parcels was

generally dry except during and immediately following storm events. All the vegetation associated with this seasonal drainage along the reach adjacent to the proposed project area was cleared and the channel was filled with soil by fire crews to create a fire break during the Thomas Fire in December 2017.

4. <u>Mulefat Scrub (Baccharis salicifolia) Shrubland Alliance</u> - This plant community is closely associated with the channel bed and banks of the unnamed tributary of McDonald Canyon Creek that borders the eastern side of the proposed project area. All the vegetation associated with this seasonal drainage adjacent to the project area was removed, and the channel was completely filled with soil by fire crews during the Thomas Fire in December 2017.

The ISBA (Attachment 9) includes a plant communities table that identifies these alliances, their regulatory protection and pre-fire estimate of potential impacts to these communities from proposed project development.

# **Existing Conditions: Post-Thomas Fire**

A portion of the camp owned property was burned (though no structures were lost) that included vegetation on slopes adjacent to the northern and western edges of the project area. The parcels within the CUP area currently exhibit features characteristic of postfire landscape, charred remains of vegetation and bare soils with vegetation beginning to come back. For the purposes of impact analysis and mitigation, the site conditions that existed prior to the fire are considered baseline, which is characterized in the ISBA (Attachment 9). On December 5, 2017, Governor Jerry Brown and the County of Ventura declared a local state of emergency as a result of the Thomas Fire in accordance with Government Code Section 8630 et. Seq. and Section 5323 of the Ventura County Ordinance Code, respectively. With the declaration of a State of Emergency by local and state officials, the property owner is not required to restore physical damage to property that was the result of local and state emergency response efforts, such as the Ventura County Fire Protection District's degradation of drainage for fire protection purposes. The applicant has restored the impacted section of the drainage adjacent to the proposed building envelope. This drainage is located in the CDFW and is located within the ACOE jurisdiction. On January 27, 2020, CDFW allowed the Camp to conduct restoration activities (soil removal and minor grading) in the damaged portion of the drainage through operation of law, as CDFW did not approve the Camp's draft Streambed Alteration Agreement within the required timeframe (as a result, a Streambed Alteration agreement is not required). Restoration activities commenced in February 2021 with annual reporting for a 3 year period to ensure restoration goals are achieved (Exhibit 9). Consultation with ACOE is required to determine the appropriate permits that may be required.

# Impact Discussion:

**4A-1. and 4A-2**. Focused botanical surveys (Attachment 9) conducted for the project did not yield special-status plant species. All the sensitive plant species with a potential to occur in the project area, as indicated in the California Natural Diversity Database (CNDDB) records, have been assigned a low to no potential for occurrence within the proposed development envelope. The dominance of non-native grassland communities and the historically disturbed nature of the development envelope renders the site less than suitable for special-status plants.

A February 7, 2019, arborist report was prepared by Kenneth A. Knight Consulting LLC for the proposed project (Attachment 4). The proposed widening of the existing driveway located adjacent to the northwestern property line to access Machon Village will result in the removal of four Coast live oaks (Tree Nos. 437, 438, 478, and 480), which are considered protected trees pursuant to Section 8107-25 of the Ventura County NCZO.

Impacts to trees protected by the County of Ventura are considered a potentially significant impact; however, recommended Mitigation Measure BIO-1 would offset the loss of these trees, which will reduce the potentially significant impact to protected trees to less than significant. This mitigation measure will also ensure the proposed project is consistent with the provisions of the County's Tree Protection Regulations (TPR) set forth in Section 8107-25 et seq. of the Ventura County NCZO Tree Protection Guidelines (TPG).

Proposed development will also encroach into to the Tree Protection Zone (TPZ) of four protected oak trees (Tree Nos. 481, 482, 598 and 599). Encroachment within the Protected Zone of these trees could result in the decline in tree health and is considered a potentially significant impact. Recommended Mitigation Measure BIO-1 and Mitigation Measure BIO-2, ensures that impacts to these protected trees are less than significant by: (1) minimizing impacts on encroachment; (2) requiring monitoring of tree health after construction to ensure the health of trees is maintained; and (3) requiring compensation if these trees are lost. With the implementation of these mitigation measures, impacts to Protected Trees would be mitigated to a less-than-significant level.

Proposed development is anticipated to impact approximately 0.60 acres of non-native annual grassland and approximately 1.9 acres of chaparral habitat to accommodate buildings and the 100-foot fuel modification zone around the proposed development envelope. The annual grassland community is not considered to be a "sensitive" habitat. The chaparral community (Bush Mallow shrubland Alliance) is recognized as a "G4/S4" community (Globally and Sub-nationally have a low vulnerability) by the CDFW. The potential impacts to this chaparral vegetation community does not trigger mitigation under CEQA due to its lower threat status.

The proposed building footprint and 100-foot fuel modification zone supports moderate to high quality habitat for many vertebrate and invertebrate wildlife species. The "Observed and Potentially Occurring Special-Status Species" table in the ISBA (Attachment 9), provides a list of the animal species that could be potentially impacted, due to their moderate to high potential to occur within the developmental envelope. These include:

California Species of Special Concern (SSC):

**Reptiles:** 

- California Legless lizard (Anniella cf A. stebbinsi)
- San Bernardino ringneck snake (*Diadophis punctatus modestus*)

Small Mammals:

• Dulzura pocket mouse (Chaetodipus californicus femoralis)

In addition, the oak woodland and riparian scrub habitats to the south and east of the proposed development area are suitable nesting habitat for variety of protected specialstatus bird species, including raptors, such as Golden eagle (*Aquila chrysaetos*), Prairie falcon (*Falco mexicanus*), Cooper's hawk (*Accipiter cooperii*) and Sharp-shinned hawk (*Accipiter striatus*). The removal of four protected oak trees, noise and increased human presence during grading and construction activities could disrupt bird nesting activity that will occur near and at the proposed development envelope. To comply with the protection of such birds afforded by the Migratory Bird Treaty Act and California Department of Fish and Game Code, the applicant would be subject to a condition of approval requiring the prohibition of land clearing activities during the breeding and nesting season (January 1 - September 15). If land clearing activities are to occur during the nesting season, the applicant will be required to retain a County-approved biologist to conduct site-specific surveys prior to land clearing activities and submit a Survey Report documenting the results of the initial nesting bird survey and a plan for continued surveys and avoidance of nests.

In addition, the applicant will also be required to install protective silt fencing prior to grading and construction activities and provide a 100-foot buffer between construction activities and the scrub habitat and oak woodland communities located within the vicinity of the proposed Machon Village development. The installation of the fencing will reduce impacts to special status species to a less than significant level (Refer to MM 4702).

The potential impact to special-status wildlife species discussed above is considered potentially significant, but mitigable.

# Mitigation Measures:

#### Mitigation Measure BIO-1: Tree Protection Plan (TPP)

**Purpose:** To comply with the County's Tree Protection Regulations (TPR) set forth in Section 8107-25 et seq. of the Ventura County NCZO and the *Tree Protection Guidelines* (TPG), and with the Oak Woodland Conservation Act (OWCA) (PRC Section 21083.4, Fish and Game Code Section 1361).

**Requirement:** The applicant shall avoid impacting protected trees to the extent feasible, and shall offset or mitigate any damage to protected trees or associated impacts from such damage. If protected trees are felled/damaged and require offsets/mitigation pursuant to the TPR (Section 8107-25.10) and TPG (Section IV.C, Offset/Replacement Guidelines), the applicant shall post a financial assurance to cover the costs of planting and maintaining the offset trees.

**Documentation:** The applicant shall prepare and submit to the Planning Division for review and approval, a TPP pursuant to the "Content Requirement for Tree Protection Plans" that is currently available online at: http://www.ventura.org/rma/planning/pdf/permits/tree/Tree-Protection-Plan-11-11-19.pdf. The TPP must include (but is not limited to):

- measures to protect all TPR-protected trees whose tree protection zones (TPZs) are within 50 feet of the construction envelope (including stockpile and storage areas, access roads, and all areas to be used for construction activities) or within 10 feet of other trees proposed for felling or removal;
- b. the offset or mitigation that will be provided for any trees approved for felling; and,
- c. the offset or mitigation that will be provided should any protected trees be damaged unexpectedly.

A qualified arborist<sup>7</sup> shall prepare the TPP in conformance with the County's TPR, TPG, and "Content Requirements for Tree Protection Plans."

If in-lieu fees will be paid to a conservation agency for tree offsets/mitigation, the applicant shall submit to the Planning Division for review and approval, a tree mitigation plan from a conservation agency that explains how the mitigation funds will be used to support the preservation of protected trees. After the Planning Division's review and

<sup>&</sup>lt;sup>7</sup> A qualified arborist may be either an International Society of Arboriculture certified arborist or a related professional, such as a landscape architect, with qualifying education, knowledge and experience, as determined by the Planning Director.

approval of the tree mitigation plan, the applicant shall provide the Planning Division with a copy of the contract between the conservation agency and the applicant.

If a financial assurance is required for tree offsets/mitigation, the Planning Division shall provide the applicant with a "Financial Assurance Acknowledgement" form. The applicant shall submit the required financial assurance and the completed "Financial Assurance Acknowledgement" form to the Planning Division. The applicant shall submit annual verification that any non-cash financial assurances are current and have not expired.

**Timing:** Prior to the issuance of a Zoning Clearance for construction, the applicant shall submit the TPP to the Planning Division for review and approval, implement all prior-tozoning clearance tree protection measures, and submit the required documentation to demonstrate that the applicant implemented the tree protection measures. Unless otherwise approved by the Planning Director, replacement and transplant trees must be planted prior to occupancy. Other monitoring and reporting dates shall be as indicated in the approved TPP.

If in lieu fees are required and will be paid to the Planning Division's Tree Impact Fund, the applicant shall submit these fees prior to the issuance of a Zoning Clearance for construction. Where a TPP damaged tree addendum is prepared, the applicant shall remit payment of the fees within 30 days of Planning Division's approval of the addendum.

If a financial assurance is required, the applicant shall submit the required financial assurance and the completed "Financial Assurance Acknowledgement" form prior to the issuance of a Zoning Clearance for construction. The Planning Division may release the financial assurance after receiving the report from the project arborist that verifies that the replacement trees met their final 5 year performance targets set forth in the TPP.

**Monitoring and Reporting:** The applicant shall retain an arborist to monitor and prepare the documentation regarding the health of the protected trees, pursuant to the monitoring and reporting requirements set forth in the "Content Requirements for Tree Protection Plans." The Planning Division maintains the approved TPP and all supporting documentation in the Project file. The Resource Management Agency Operations Division maintains copies of all financial documentation. Planning Division staff, Building and Safety Inspectors, and Public Works Agency grading inspectors have the authority to inspect the site during the construction phase of the Project, in order to verify that tree protection measures remain in place during construction activities, consistent with the requirements of Section 8114-3 of the Ventura County NCZO.

# Mitigation Measure BIO-2: Tree Health Monitoring and Reporting

**Purpose:** To comply with the County's Tree Protection Regulations (TPR) in Section 8107-25 of the Ventura County NCZO and *Tree Protection Guidelines* (TPG), and with the *Oak Woodland Conservation Act* (OWCA) (PRC Section 21083.4, Fish and Game Code Section 1361).

**Requirement:** The applicant shall submit annual monitoring reports, prepared by an arborist, for five consecutive years after the approval date of the CUP Permit, to address the success of tree protection measures and the overall condition of encroached-upon trees relative to their condition at the time of the issuance of the CUP. If any trees are found to be in serious decline (e.g., "D" status, or "C" status if preconstruction status was "A"), the arborist's report must include a Damaged Tree Addendum to the TPP which recommends offsets, specific replacement location, and any associated additional monitoring.

**Documentation:** The applicant shall submit annual arborist reports as stated in the "Requirement" section of this condition (above).

**Timing:** The applicant shall submit annual arborist reports for five years after the approval date of the CUP.

**Monitoring and Reporting:** The applicant shall implement any recommendations made by the arborist's Damaged Tree Addendum to the satisfaction of the Planning Director. The Planning Division maintains copies of all documentation and evidence that the arborist's recommendations are implemented. The Planning Division has the authority to inspect the site to confirm the health of the protected trees and to ensure that the recommendations made by the arborist are implemented consistent with the requirements of Section 8114-3 of the Ventura County NCZO.

#### Mitigation Measure BIO-3: Scrub Habitat and Oak Woodland Construction Exclusion Fencing

**Purpose:** To avoid impacts to the scrub habitat and oak woodland communities during construction.

**Requirement:** All development, ground disturbances, and vegetation removal shall be prohibited in scrub habitat and oak woodland communities. The applicant shall install temporary protective fencing a minimum of 100 feet from the edge of the scrub habitat and oak woodland community boundary. For any ground disturbance or development within the 100-foot scrub habitat and oak woodland communities buffer as reflected on the approved site plan and in scrub habitat and oak woodland communities Map (Attachment 9, Figure 4) fencing shall be installed where it provides the maximum possible scrub habitat and oak woodland communities protection. In no case shall the

fencing be less than 20 feet from the edge of the scrub habitat and oak woodland community boundary. Fencing shall remain in place until all construction and grading activities have ceased. The fencing must consist of durable materials and shall be staked or driven into the ground such that it is not easily moved and will perform its function for the duration of development activities as reflected in the Project description set forth in Condition No. 1 of the Conditions of Approval.

**Documentation:** The applicant shall graphically depict the scrub habitat and oak woodland community habitat, setback area, and required fencing on all grading and site plans. The applicant shall also provide photo documentation of the fencing installed at the site prior to issuance of a Zoning Clearance for construction.

**Timing:** The applicant shall submit the site plan and grading plans with the locations of the fencing to the Planning Division for review and approval prior to the issuance of a Zoning Clearance for construction. The applicant shall install the fencing prior to any ground disturbance activities. The applicant shall maintain the fencing in place until ground disturbance activities are complete and the Building and Safety Division has issued the Certificate of Occupancy for the Machon Village development.

**Monitoring and Reporting:** The Planning Division maintains the site plan and grading plans provided in the Project file. The applicant shall verify to the satisfaction of the Planning Division that the temporary fencing is installed prior to any ground disturbance activities or construction activities (whichever occurs first). The Planning Division has the authority to inspect the site to confirm that the fencing remains in place during the development phase of the project as reflected in the Project description as set forth in Condition No. 1 of the Conditions of Approval.

# **Residual Impacts:**

With the implementation of Mitigation Measures BIO-1 through BIO-3, project-specific impacts, as well as the proposed project's contribution to significant cumulatively impacts to special-status species and its habitats; would be reduced to a less-than-significant level.

Issue (Responsible Department)*		ject In Effect'	npact De	gree	Cumulative Impa Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
4B. Ecological Communities - Sensitive Plant Communities									
Will the proposed project:									

1) Temporarily or permanently remove sensitive plant communities through construction, grading, clearing, or other activities?	x		х	
2) Result in indirect impacts from project operation at levels that will degrade the health of a sensitive plant community?	x		х	

**4B-1.** and **4B-2.** As indicated in Section 4A of this initial study, focused botanical surveys conducted for the project did not yield special-status plant species. However, the subject parcels do support an oak woodland community, which occurs to the south of the proposed development envelope and adjacent to McDonald Canyon Creek. As proposed, the project will not impact the oak woodland community. Only individual oak trees that are not part of the woodland community occur within the proposed development envelope. Impacts to these individual trees are addressed pursuant to mitigation measures BIO-1 through BIO-3 in Section 4A of this Initial Study. These recommended mitigation measures ensure protection of the oak woodland community from potential indirect impacts from proposed project development.

# Residual Impact(s)

With the implementation of Mitigation Measures BIO-1 through BIO-3, project-specific impacts, as well as the proposed project's contribution to significant cumulatively impacts to sensitive plant communities; would be reduced to a less-than-significant level.

		ject In Effect'	npact De	gree	Cum Degi	Impact		
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
4C. Ecological Communities - Waters and Wetlands								
Will the proposed project:								

1)	Cause any of the following activities within waters or wetlands: removal of vegetation; grading; obstruction or diversion of water flow; change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; or any disturbance of the substratum?	x		х	
2)	Result in disruptions to wetland or riparian plant communities that will isolate or substantially interrupt contiguous habitats, block seed dispersal routes, or increase vulnerability of wetland species to exotic weed invasion or local extirpation?	x		x	
3)	Interfere with ongoing maintenance of hydrological conditions in a water or wetland?	x		x	
4)	Provide an adequate buffer for protecting the functions and values of existing waters or wetlands?	x		x	

**4C-1. through 4C-4.** As indicated in Section 4A of this initial study, an approximately 125-foot-long reach of an unnamed tributary of McDonald Canyon Creek traverses in a north-south direction, located approximately 35 feet east of Machon Village (Attachment 9). This highly seasonal drainage enters a buried culvert 60 feet east of the southeast corner of Machon Village for a distance of 80 feet before returning above-ground (or daylighting). Confluence with the main channel of McDonald Canyon Creek is approximately 460 feet further downstream from the daylight point.

As discussed in (above), a section of the McDonald Canyon Creek drainage was cleared, and the drainage channel was filled with soil by fire crews to create a fire break during the Thomas Fire in 2017. These impacts are not attributed to the project's impacts. To address the drainage modification caused by State and County fire-fighting activities, the applicant restored approximately 1,050 linear feet of the channel of McDonald Canyon Creek drainage to pre-fire configuration and channel bed and bank morphology by utilizing a plant palette and methods of salvaging, relocating, propagating and/or planting, irrigating, maintenance and monitoring necessary to

ensure successful drainage restoration. The applicant restored the affected areas of the drainage in February 2021 through operation of law that was granted by CDFW in January 2020.

The proposed project construction footprint has been sited to maintain a minimum 30 to 35-foot buffer from this seasonal drainage, as recommended in the ISBA. Impacts to the drainage are not considered significant as the drainage is highly seasonal with poor riparian habitat development, and the drainage has no discernible riparian corridor or aquatic features. Although the drainage supports very patchy mule-fat (*Baccharis salicifolia*) and non-native annual grasses, the drainage has a hydrologic status of "dry" and the habitat quality along this reach is low. Restoration of thereach affected by fire-fighting activities assisted in re-establishing the riparian habitat that is upstream of the project area. Project-specific and cumulative impacts related to waters and wetlands is considered less than significant.

# **Residual Impact(s):**

None.

Issue (Responsible Department)*		ject In Effect	npact De	gree	Cum Deg	Impact		
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
4D. Ecological Communities - ESHA (Applies	to Co	oastal	Zone Or	nly)				
Will the proposed project:	1							
1) Temporarily or permanently remove ESHA or disturb ESHA buffers through construction, grading, clearing, or other activities and uses (ESHA buffers are within 100 feet of the boundary of ESHA as defined in Section 8172-1 of the Coastal Zoning Ordinance)?	x				x			
2) Result in indirect impacts from project operation at levels that will degrade the health of an ESHA?	х				x			

#### Impact Discussion:

**4D-1. and 4D-2.** The project site is not located in the Coastal Zone; therefore, ESHA policies and analysis do not apply. The proposed project will not result in direct or indirect or cumulatively considerable impacts to ESHA.

There will not be any project-specific or cumulative impacts related to EHSA.

# Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*			ject In Effect'	npact De	gree	Cumulative Impact Degree Of Effect**				
		Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
4E. H	Habitat Connectivity									
Will	the proposed project:									
,	Remove habitat within a wildlife movement corridor?			x		x				
2) Is	solate habitat?	Х				x				
a te a w	Construct or create barriers that impede fish and/or wildlife movement, migration or long- erm connectivity or interfere with wildlife access to foraging habitat, breeding habitat, vater sources, or other areas necessary for heir reproduction?		x				x			
í o	ntimidate fish or wildlife via the introduction of noise, light, development or increased numan presence?			x				х		

#### Impact Discussion:

**4E-1. through 4E-4.** The project site is not located within the Board of Supervisor's adopted Habitat Connectivity Wildlife Corridor overlay zone (Ordinance Nos. 4537 and 4539). However, the project site is located within the Sierra Madre-Castaic Wildlife Corridor, a mapped wildlife corridor of high significance for wildlife movement. In addition, the Ventura River floodplain is another important wildlife corridor, which traverses the project site in a north-south direction and is approximately 1.25 miles west of the project site.

The project area lies at an interface between built-up areas of low-density residential lots and agriculture to the east and south and open space on south-facing slopes of the Topa Topa Mountains. There is ample area for wildlife movement north, south, east, or west of the proposed Machon Village where wildlife movement will not be encumbered by proposed development. The open space lands to the north, west, and east are expected to continue to support uninterrupted movement for wildlife. The unnamed tributary of McDonald Canyon Creek is a seasonal tributary that traverses about 25 feet east of the proposed development area. Although seasonal in nature and this portion of the Sierra Madre-Castaic Wildlife Corridor is not considered a highly desirable and traveled wildlife corridor because it has no discernible riparian corridor or aquatic features that would facilitate or concentrate wildlife movements, the proposed restoration of the drainage could re-introduce this area as a wildlife corridor of high significance.

The proposed 10,609 sq. ft. Machon Village would result in loss of approximately 2.5 acres of grassland and chaparral habitat that provides cover, shelter, resting, and foraging for wildlife that would pass through the site. The development of the project will increase levels of noise and human presence above current levels. Exterior lighting associated with the proposed development could have a significant impact on wildlife movement if it is excessive or shines into adjacent areas with native vegetation.

Existing and proposed exterior night lighting shall be hooded and directed downward to prevent spillover. Temporary decorative low-level string lighting is allowed during a scheduled event. With the inclusion of Mitigation Measure BIO-4, lighting will be limited in intensity, shielded, and cast down and away from any adjacent habitat areas. Thus, potentially significant impacts to wildlife movement and habitat connectivity would be mitigated to a less-than-significant level.

The camp programs currently use amplified equipment. Amplified sound and music can create an impact on wildlife that utilize the area. With the implementation of noise and vibration mitigation measures (N-1 through N-4) discussed in detail in item 21 of this initial study, noise impacts to wildlife will be minimized. These mitigation measures require the positioning of the speakers in the amphitheater to direct sound away from open space areas. In addition, the installation of acoustical blankets at the basketball/tennis courts would be required.

#### Mitigation Measures:

# Mitigation Measure BIO-4: Lighting Plan

**Purpose:** In order to mitigate impacts associated with night lighting to wildlife movement and habitat connectivity and ensure lighting on the subject property is provided in compliance with Section 8109-4.7.2, 8109-4.7.4 and 8106-8.6 of the Ventura County NCZO, and to ensure the following objectives are met that lighting:

- a. avoids interference with reasonable use of adjoining properties;
- b. avoids conflict with landscape features;
- c. minimizes on-site and eliminates off-site glare;

- d. provides adequate on-site lighting for security;
- e. minimizes impacts to wildlife movement;
- f. minimizes energy consumption;
- g. includes devices that are compatible with the design of the permitted facility; and,
- h. complies with the general standards listed in Section 8109-4.7.4 (Dark Sky Overlay Zone Standards) for all new and replaced outdoor lighting.

**Requirement:** The applicant shall submit two copies of a lighting plan to the Planning Division for review and approval prior to implementing such plan. The lighting plan must comply with the following:

- a. the lighting plan shall be prepared by an electrical engineer registered by the State of California;
- b. the lighting plan shall include a photometric plan and manufacturer's specifications for each exterior light fixture type (e.g., light standards, bollards, and wall mounted packs). For parcels within the DKS Overlay Zone, the applicant shall also include the lighting color and maximum lumens for each light fixture;
- c. the lighting plan shall provide illumination information for all exterior lighting such as parking areas, walkways/driveways, streetscapes, and open spaces proposed throughout the development;
- d. in order to minimize light and glare on the project property and wildlife habitat areas, all parking lot lighting, exterior structure light fixtures, and freestanding light standards must be a cut-off type, fully shielded, and downward directed, such that the lighting is projected downward onto the property and does not cast light on any adjacent property or roadway; and,
- e. the outdoor lighting shall maintain the maximum light trespass levels identified in Table 1 of NCZO Section 8109-4.7.4.

The applicant shall bear the total cost of the review and approval of the lighting plan. The applicant shall install all exterior lighting in accordance with the approved lighting plan.

**Documentation:** The applicant shall submit two copies of a lighting plan to the Planning Division for review and approval.

**Timing:** The applicant shall obtain the Planning Division's approval of the lighting plan prior to the issuance of a Zoning Clearance for construction. The applicant shall maintain the lighting as approved in the lighting plan for the life of the Project.

**Timing:** The applicant shall obtain the Planning Division's approval of the lighting plan prior to the issuance of a Zoning Clearance for construction. The applicant shall maintain the lighting as approved in the lighting plan for the life of the Project.

**Monitoring and Reporting:** The Planning Division maintains a stamped copy of the approved lighting plan in the Project file. County staff shall conduct an onsite inspection to verify that all new and replaced lighting was installed by the approved lighting plan prior to occupancy. The Building and Safety Inspector and Planning Division staff have the authority to ensure that the lighting plan is installed according to the approved lighting plan. Planning Division staff has the authority to conduct periodic site inspections to ensure ongoing compliance with this condition consistent with the requirements of Section 8114-3 of the Ventura County NCZO.

#### **Residual Impact(s):**

With the implementation of the Mitigation Measure BIO-4, project-specific and cumulative impacts associated with night lighting to wildlife movement and habitat connectivity would be reduced to a less than significant level.

Issue (Responsible Department)*		ject In Effect'	npact De	gree	Cum Degi	Impact		
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
4F. Will the proposed project be consistent with the applicable General Plan Goals and Policies for Item 4 of the Initial Study Assessment Guidelines?		x					x	

#### Impact Discussion:

**4F.** The proposed project is consistent with the applicable *Ventura County* General Plan Policies for Item 4 of the *Ventura County Initial Study Assessment Guidelines*. The project site is located within areas that are subject to the Ojai Valley Area Plan. The project is consistent with General Plan Biological Resources Policies COS-1.1and COS-1.2 and the Ojai Valley Area Plan Policy OV-36.2, which requires discretionary development, which could potentially impact biological resources to be evaluated by a qualified biologist, and, if necessary, develop mitigation measures to mitigate any significant impacts to biological resources to less-than-significant. An ISBA was prepared for the proposed project (Attachment 9).

Ojai Valley Area Plan Policy OV-36.4 requires CDFW and the U.S. Fish and Wildlife Service be consulted for discretionary entitlement applications that may adversely affect the biological resources under their purview. On April 11, 2022 the Planning Division

distributed the application to CDFW or U.S. Fish and Wildlife Service. As previously discussed, the applicant will be required to consult with CDFW prior to the issuance of the Zoning Clearance for construction for proposed alterations to the seasonal tributary of McDonald Canyon Creek that traverses north-south, approximately 25 feet east of the development envelope. As a result, the proposed project is consistent with the Ventura County *General Plan* Policies and *Ojai Valley Area Plan* policies governing biological resources.

With implementation of the biological mitigation measures BIO-1 through BIO-4, the proposed project will be consistent with all applicable General Plan and Area Plan policies governing biological resources and noise residual impacts will be less than significant

# Mitigation/Residual Impact(s):

None.

Issue (Responsible Department)*	Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
5A. Agricultural Resources – Soils (PIng.)									
Will the proposed project:									
1) Result in the direct and/or indirect loss of soils designated Prime, Statewide Importance, Unique or Local Importance, beyond the threshold amounts set forth in Section 5a.C of the Initial Study Assessment Guidelines?	x				x				
2) Involve a General Plan amendment that will result in the loss of agricultural soils?	x				х				
3) Be consistent with the applicable General Plan Goals and Policies for Item 5A of the Initial Study Assessment Guidelines?	х				х				

### Impact Discussion:

**5A-1.** The project site includes soils designated as "Other Land" in the Ventura County Important Farmland Inventory (RMA GIS; March 2022). The proposed project will not

result in the removal or covering of soils designated as Prime, having Statewide Importance, Unique, or Local Importance as set forth in the Important Farmlands Inventory. Therefore, there will not be any project-specific or cumulative impact related to the loss of agricultural soils.

**5A-2.** The proposed project does not include a General Plan amendment that will result in the loss of designated agricultural soils.

**5A-3.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 5A of the *Ventura County Initial Study Assessment Guidelines.* 

### Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*		-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
5B. Agricultural Resources - Land Use Incomp	oatibi	lity (A	G.)						
Will the proposed project:									
<ol> <li>If not defined as Agriculture or Agricultural Operations in the zoning ordinances, be closer than the threshold distances set forth in Section 5b.C of the Initial Study Assessment Guidelines?</li> </ol>		х				x			
2) Be consistent with the applicable General Plan Goals and Policies for Item 5b of the Initial Study Assessment Guidelines?		x				х			

#### Impact Discussion:

**5B-1.** The evaluation pertains to the introduction of incompatible land uses in areas adjacent to off-site agricultural lands and off-site crop production. Tangerine, avocado, and orange orchards are located approximately 464 feet west of the western property line of the camp and approximately 1,025 feet southwest of the proposed location of Machon Village. These off-site agricultural operations are not expected to adversely impact the daily use of the camp by campers and employees. As such, project-specific and cumulative impacts related to agricultural land use incompatibility is less than significant.

**5B-2.** The project is consistent with the applicable Ventura County General Plan Policies for Item 5b of the Ventura County Initial Study Assessment Guidelines.

### Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro		npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
6. Scenic Resources (PIng.)									
Will the proposed project:									
a) Be located within an area that has a scenic resource that is visible from a public viewing location, and physically alter the scenic resource either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects?		x				x			
b) Be located within an area that has a scenic resource that is visible from a public viewing location, and substantially obstruct, degrade, or obscure the scenic vista, either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects?		x				x			
c) Be consistent with the applicable General Plan Goals and Policies for Item 6 of the Initial Study Assessment Guidelines?		x				х			

### Impact Discussion:

**6a. and 6b.** The camp has been in operation on the project site 1969. As such, the existing developed areas of the camp have been a part of the public views for more than 50 years. The southeastern and northwestern portions of APN 010-0-060-070 and southeastern portions of APN 010-0-060-030 are located within the Scenic Resource Protection (SRP) overlay zone. The existing camp and proposed undeveloped parcel where the Machon Village will be located are not located within the SRP overlay zone. (RMA GIS; March 2022). The project site is located more than half a mile north of State Highway 150, an eligible scenic highway. APN 010-0-060-070 and APN 010-0-060-030

are proposed to be included within the boundary of the CUP for passive recreation, specifically hiking on existing trails. No structures or vegetation removal is proposed. Therefore, the proposed uses of these parcels for recreational activity will not create a new adverse impact on public views.

The project site is visible from Cozy Dell, Pratt to Foothill and the Foothill Trails that are located north and northeast of the project site and are part of the United States Los Padres National Forest trail system. Public views of the camp from these trails are intermittent due to the topography of the site in relation to these trails. Existing camp structures and outdoor activity areas are located more than 600 feet north of Fairview Road, a public road, and are screened by existing dense vegetation. The existing structures and outdoor activity areas do not create a new adverse impact on public views.

The proposed Machon Village is setback more than 2000 feet north of Fairview Road. Although located adjacent to the western property line where there is less dense vegetation and based on the distance from Fairview Road and the intermittent views of the camp from the public trails north of the camp, the applicant will be subject to a standard condition of approval requiring that Machon Village be constructed with colors and materials that will blend in with the surrounding areas (e.g. earth tone colors, non-reflective glass and other non-reflective materials). Views from the western property line are not considered in the evaluation of scenic resource impacts per the *Ventura County Initial Study Assessment Guidelines*, as these views are considered private views. The nearest offsite residences are approximately 85 feet from the eastern property line on APN 010-0-130-150, approximately 963 feet south of the amphitheater on APN 010-0-120-105, approximately 104 feet northeast of the parking area on the Camp property (APN 010-0-110-030) and approximately 205 feet south of the intersection of Camp Ramah Road and Fairview Road (APN 010-0-110-080). Mitigation Measure BIO-4 ensures exterior night lighting will not impact these residential areas.

The entire project site is located within the Ojai Valley Dark Sky Ordinance overlay zone, which regulates exterior lighting within the Ojai Valley. To ensure that any new exterior lighting does not adversely impact the surrounding areas the applicant will be required to submit a lighting plan (refer to item 4e, Mitigation Measure BIO-4 of this initial study) that complies with Section 8109-4.7.4 of the Ventura County NCZO (Ojai Valley Dark Sky Ordinance overlay zone standards).

With implementation of MM BIO-4 and a condition of approval that addresses colors and materials for Machon Village, project-specific and cumulative impacts related to scenic resources is considered less than significant.

**6c.** The project is consistent with the applicable 2040 *Ventura County General Plan* Policies for Item 6 of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS		
7. Paleontological Resources										
Will the proposed project:										
a) For the area of the property that is disturbed by or during the construction of the proposed project, result in a direct or indirect impact to areas of paleontological significance?		x				х				
b) Contribute to the progressive loss of exposed rock in Ventura County that can be studied and prospected for fossil remains?		x				x				
c) Be consistent with the applicable General Plan Goals and Policies for Item 7 of the Initial Study Assessment Guidelines?		x				х				

### Impact Discussion:

**7a.** According to the Preliminary Geotechnical Report prepared for the proposed project (Feffer Geological Consulting, July 7, 2014; Attachment 10), subsurface materials at the project site consist of alluvium and bedrock below fill and colluvium, respectively. In accordance with the *Ventura County Initial Study Assessment Guidelines*, these deposits do not have a strong likelihood of containing paleontological resources.

Ground disturbance will occur as a result of the proposed project with the construction of Machon Village and the reconfiguration of the access road and drop off area. Although the proposed project is unlikely to result in impacts to paleontological resources, during ground disturbance activities the applicant will be subject to a standard condition of approval that will assure the protection of any subsurface resources that are inadvertently encountered. Subject to this condition, if any paleontological remains are uncovered during ground disturbance or construction activities, the applicant shall cease construction in areas of any paleontological find and shall obtain the services of a paleontological consultant or professional geologist who shall assess the find and provide recommendations on the proper disposition of the site. The applicant shall obtain the Planning Director's written concurrence of the recommended disposition of the site before resuming construction activities and implement the agreed upon recommendations. Project-specific and cumulative impacts related to paleontological resources is less than significant.

**7c.** The project is consistent with the applicable *Ventura County General Plan Policies* for Item 7 of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro		npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
8A. Cultural Resources - Archaeological									
Will the proposed project:									
<ol> <li>Demolish or materially alter in an adverse manner those physical characteristics that account for the inclusion of the resource in a local register of historical resources pursuant to Section 5020.1(k) requirements of Section 5024.1(g) of the Public Resources Code?</li> </ol>		x				x			
2) Demolish or materially alter in an adverse manner those physical characteristics of an archaeological resource that convey its archaeological significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for the purposes of CEQA?			x				х		
3) Be consistent with the applicable General Plan Goals and Policies for Item 8A of the Initial Study Assessment Guidelines?			x				x		

### Impact Discussion:

**8A-1. and 8A-2.** On July 25, 2019, a records search request was sent to California State University Fullerton South Central Coastal Information Center (SCCIC) to

determine if any archaeological surveys have been conducted on the project site. SCCIC determined that an archaeological study had not been conducted and that there may be archaeological resources on the project site. An Archaeological Phase I Report was prepared by Padre and Associates (dated September 2019) to investigate the existence of historical and cultural resources on the project site. The study concluded that there are no cultural resources that exist within the project site.

On December 9, 2019, Planning Division staff received an email communication from Native American Tribal consultant, Julie Tumamail-Stenslie, stating that there were archeological sites in the area. On December 9, 2019, Planning Division staff consulted with Ms. Tumamait-Stenslie regarding how the Phase 1 archeological survey was conducted. On December 12, 2019, Planning Division staff provided a copy of the Phase I Archaeological Report to Ms. Tumamait-Stenslie. The report indicates the Phase I survey was a surface/on-foot survey that did not include shovel tests pits (STPs) or trenching. The project site was examined with parallel transects spaced at 10-meter intervals. Based on Ms. Tumamait-Stenslie's review and lack of subsurface testing, the applicant will be required to obtain a qualified archaeologist and Native American to monitor any subsurface grading, trenching, or construction activities for proposed development on the project site. With the implementation of this mitigation measure CUL-1, project-specific and cumulative impacts will be reduced to a less than significant level.

**8A-3.** The project is consistent with the *Ventura County General Plan Policies* for item 8A of the *Ventura County Initial Study Assessment Guidelines*.

### Mitigation Measures:

### Mitigation Measure CUL-1: Native American Monitor

**Purpose:** To avoid significant impacts to archeological resources that may exist on the subject property.

**Requirement:** The Applicant shall retain an Archeologist and Native American monitor to monitor all subsurface grading, trenching, or construction activities on the Project site.

**Documentation:** The Archeologist and Native American monitor shall provide a monthly report to the Planning Division summarizing the activities during the reporting period. If no archaeological resources are discovered, the Archeologist and Native American monitor shall submit a brief letter to the Planning Division, stating that no archaeological resources were discovered and that the monitoring activities have been completed.

**Timing:** The Archeologist and Native American monitor shall monitor the Project site during all subsurface grading, trenching, or construction activities. The Native American monitor shall provide the reports monthly during all subsurface grading, trenching, or construction activities.

**Monitoring and Reporting:** The Planning Division reviews the monitoring reports and maintains the monitoring reports in the Project file. The Archeologist and Native American monitor shall monitor the Project site during all subsurface grading, trenching, or construction activities. The Planning Division has the authority to conduct site inspections to ensure that the monitoring activities occur in compliance with this condition, consistent with the requirements of Section 8114-3 of the Ventura County NCZO.

### **Residual Impacts:**

With the implementation of Mitigation Measure CUL-1, project-specific impacts, as well as the proposed project's contribution to significant cumulatively impacts to cultural resources; would be reduced to a less-than-significant level.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
8B. Cultural Resources – Historic (PIng.)									
Will the proposed project:									
<ol> <li>Demolish or materially alter in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources?</li> </ol>		x				x			
2) Demolish or materially alter in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code?		x				x			

3)	Demolish or materially alter in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA?	×		х	
4)	Demolish, relocate, or alter an historical resource such that the significance of the historical resource will be impaired [Public Resources Code, Sec. 5020(q)]?	х		х	

**8A-1. through 8A-3.** The existing structures and buildings are not proposed to be modified. A Historic Resources Report was prepared for the proposed project by San Buenaventura Research Associates (Attachment 11), Historic Resources Report, dated October 5, 2018). According to the report, none of the existing buildings appear to be eligible for listing on the National and California Register of Historical Resources, or eligible as a County Landmark. In accordance with the *Ventura County Initial Study Assessment Guidelines* and in accordance with Section 15063 and Section 15064.5 of the CEQA Guidelines, on April 22, 2019, the Cultural Heritage Board reviewed the proposed project and found that the proposed project would have a less-than-significant project-specific or cumulative impact on historic resources.

**8A-4.** The project is consistent with the applicable *Ventura County General Plan Policies* for Item 8 of the *Ventura County Initial Study Assessment Guidelines*.

#### Mitigation/Residual Impact(s)

Issue (Responsible Department)*		-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
9. Coastal Beaches and Sand Dunes									
Will the proposed project:									

a)	Cause a direct or indirect adverse physical change to a coastal beach or sand dune, which is inconsistent with any of the coastal beaches and coastal sand dunes policies of the California Coastal Act, corresponding Coastal Act regulations, Ventura County Coastal Area Plan, or the Ventura County General Plan Goals, Policies and Programs?	x		х		
b)	When considered together with one or more recently approved, current, and reasonably foreseeable probable future projects, result in a direct or indirect, adverse physical change to a coastal beach or sand dune?			x		
c)	Be consistent with the applicable General Plan Goals and Policies for Item 9 of the Initial Study Assessment Guidelines?	х		x		

**9a. and 9b.** The project site is located more than 10 miles north of the coast. As such, there will not be any project-specific or cumulative impacts related to a coastal beach or sand dune.

**9c.** The project is consistent with the applicable *Ventura County General Plan Policies* for Item 9 of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*		-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
		LS	PS-M	PS	Ν	LS	PS-M	PS	
10. Fault Rupture Hazard (PWA)									
Will the proposed project:									
a) Be at risk with respect to fault rupture in its location within a State of California designated Alquist-Priolo Special Fault Study Zone?	x								

b)	Be at risk with respect to fault rupture in its location within a County of Ventura designated Fault Hazard Area?	x				
c)	Be consistent with the applicable General Plan Goals and Policies for Item 10 of the Initial Study Assessment Guidelines?	х		х		

Any discussion of potential impacts of seismic and geologic hazards to the proposed project is provided for informational purposes only and is neither required by CEQA nor subject to its requirements.

**10a. and 10b.** There are no known active or potentially active faults extending through the proposed project based on State of California Earthquake Fault Zones in accordance with the Alquist-Priolo Earthquake Fault Zoning Act and Ventura County General Plan Policy HAZ-4.1. Furthermore, no habitable structures are proposed within 50 feet of a mapped trace of an active fault. There will not be any project-specific or cumulative impacts related to fault rupture.

**10c.** The project is consistent with the applicable *Ventura County General Plan* for Item 10 of the *Ventura County Initial Study Assessment Guidelines.* 

### Mitigation/Residual Impact(s)

Issue (Responsible Department)*		-	npact De Effect**	gree			tive Imp Of Effec	
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
11. Ground Shaking Hazard (PWA)								
Will the proposed project:								
a) Be built in accordance with all applicable requirements of the Ventura County Building Code?		x				х		
<ul> <li>b) Be consistent with the applicable General Plan Goals and Policies for Item 11 of the Initial Study Assessment Guidelines?</li> </ul>		x				х		

Any discussion of potential impacts from seismic and geologic hazards is provided for informational purposes only and is neither required by CEQA nor subject to its requirements.

**11a.** The property will be subject to moderate to strong ground shaking from seismic events on local and regional fault systems. The County of Ventura Building Code (2019) adopted from the California Building Code, Chapter 16, Section 1613, requires structures be designed to withstand this ground shaking. The Geotechnical Investigation, prepared by Feffer Geological Consulting, dated July 7, 2014 (Attachment 10), provides the structural seismic design criteria (Page 9) for the proposed project and may be required to be updated to the Building Code in effect at the time of building permit issuance. The requirements of the building code will reduce the effects of ground shaking to less than significant. As such, project-specific and cumulative impacts related to ground shaking is less than significant.

**11b.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 11 of the *Ventura County Initial Study Assessment Guidelines*.

### Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree		Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS		
12. Liquefaction Hazards (PWA)										
Will the proposed project:										
<ul> <li>a) Expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving liquefaction because it is located within a Seismic Hazards Zone?</li> </ul>	х									
b) Be consistent with the applicable General Plan Goals and Policies for Item 12 of the Initial Study Assessment Guidelines?					x					

### Impact Discussion:

Any discussion of potential impacts of seismic and geologic hazards on the proposed project is provided for informational purposes only and is neither required by CEQA nor subject to its requirements.

**12a.** The project site is not located within a potential liquefaction zone based on the State of California Seismic Hazards Maps for the County of Ventura<sup>8</sup>. This map is used as the basis for delineating the potential liquefaction hazards within the County. The Feffer Geotechnical Report dated July 7, 2014, page 11 (Attachment 10), indicates the project site is not within a Seismic Hazard Zone. There will not be any project-specific or cumulative impacts related to liquefaction.

**12b.** The project is consistent with the applicable *Ventura County General Plan* for Item 12 of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

None.

	Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
		Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
13	. Seiche and Tsunami Hazards (PWA)									
Wi	Il the proposed project:									
a)	Be located within about 10 to 20 feet of vertical elevation from an enclosed body of water such as a lake or reservoir?	х								
b)	Be located in a mapped area of tsunami hazard as shown on the County General Plan maps?	x								
c)	Be consistent with the applicable General Plan Goals and Policies for Item 13 of the Initial Study Assessment Guidelines?	х				х				

# Impact Discussion:

<sup>&</sup>lt;sup>8</sup> https://www.conservation.ca.gov/cgs/maps-data

Any discussion of potential impacts of seismic and geologic hazards to the proposed project is provided for informational purposes only and is neither required by CEQA nor subject to its requirements.

**13a and 13b.** The project site is not located adjacent to a closed or restricted body of water based on aerial imagery review (Planning GIS; March 2022) and is not subject to seiche hazard. The nearest known closed body of water is approximately 20 miles southwest of the project site (Lake Casitas). The project is also not mapped within a tsunami inundation zone based on the Tsunami Inundation Map for Emergency Planning for the State of California County of Ventura, dated February 15, 2009<sup>9</sup>. As such, there will not be any project-specific or cumulative impact from potential seiche and tsunami hazards.

**13c.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 13 of the *Ventura County Initial Study Assessment Guidelines*.

### Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree		act t**		
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
14. Landslide/Mudflow Hazard (PWA)								
Will the proposed project:								
a) Result in a landslide/mudflow hazard, as determined by the Public Works Agency Certified Engineering Geologist, based or the location of the site or project within, or outside of mapped landslides, potentia earthquake induced landslide zones, and geomorphology of hillside terrain?	x							
<ul> <li>b) Be consistent with the applicable Genera Plan Goals and Policies for Item 14 of the Initial Study Assessment Guidelines?</li> </ul>					х			

### Impact Discussion:

9

https://www.conservation.ca.gov/cgs/Documents/Tsunami/Maps/Tsunami\_Inundation\_Oxnard\_Quad\_Ventura.pdf

Any discussion of potential impacts of seismic and geologic hazards to the proposed project is provided for informational purposes only and is neither required by CEQA nor subject to its requirements.

**14a.** The project site is located in a hillside area of the unincorporated Ventura County area of Ojai. Based on analysis conducted by the California Geological Survey as part of California Seismic Hazards Mapping Act, 1991, Public Resources Code Sections 2690-2699.6, the project site is in a potential seismically induced landslide zone. The Geotechnical Investigation Report, prepared Feffer Geological Consulting, dated July 7, 2104, page 10 (Attachment 10), indicates that the slopes ascending from the proposed project have adequate factors of safety. Further, in response to Ventura County, Feffer Geological provided an addendum to their report with updated project plans, dated October 16, 2017, page 4 (Attachment 10), indicating the project site has a low potential for debris flow and thus no mitigation is required. There will not be any project-specific or cumulative impacts related to landslide hazards.

**14b.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 14 of the *Ventura County Initial Study Assessment Guidelines*.

### Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*			npact De Effect**	gree	Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
15. Expansive Soils Hazards (PWA)								
Will the proposed project:								
a) Expose people or structures to potentia adverse effects, including the risk of loss injury, or death involving soil expansio because it is located within a soil expansive hazard zone or where soils wit an expansion index greater than 20 ar present?	, 1 5 1	x						
<ul> <li>b) Be consistent with the applicable General Plan Goals and Policies for Item 15 of th Initial Study Assessment Guidelines?</li> </ul>		х				x		

### Impact Discussion:

Any discussion of potential impacts of seismic and geologic hazards to the proposed project is provided for informational purposes only and is neither required by CEQA nor subject to its requirements.

**15a.** The Geotechnical Investigation, prepared by Feffer Geological Consultants, dated July 7, 2014 (Attachment 10), indicates the soils expansion potential is low to medium. Future development of the project site will be subject to the requirements of the Ventura County Building Code adopted from the California Building Code in effect at the time of construction, that requires mitigation of potential adverse effects of expansive soils. Project-specific and cumulative impacts related to expansive soils is considered to be less than significant.

**15b.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 15 of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

None.

	Issue (Responsible Department)*		-	npact De Effect**	gree		act t**		
		Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
16. \$	Subsidence Hazard (PWA)								
Will	the proposed project:								
í a ii k	Expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving subsidence because it is located within a subsidence hazard zone?	х							
F	Be consistent with the applicable General Plan Goals and Policies for Item 16 of the Initial Study Assessment Guidelines?	х				х			

### Impact Discussion:

Any discussion of potential impacts of seismic and geologic hazards to the proposed project is provided for informational purposes only and is neither required by CEQA nor subject to its requirements.

**16a.** The subject property is not within the probable subsidence hazard zone as delineated on the United States Geological Survey Areas of Land Subsidence in California Map (December 7, 2018)<sup>10</sup>. In addition, the project will not require oil or gas withdrawal. There will not be any project-specific or cumulative impacts related to subsidence hazards.

**16b.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 16 of the *Ventura County Initial Study Assessment Guidelines.* 

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*			npact De Effect**	gree		act t**		
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
17a. Hydraulic Hazards – Non-FEMA (PWA)								
Will the proposed project:								

<sup>&</sup>lt;sup>10</sup> https://ca.water.usgs.gov/land\_subsidence/california-subsidence-areas.html

1) Result in a potential erosion/siltation hazard			
<ol> <li>Result in a potential erosion/siltation hazard and flooding hazard pursuant to any of the following documents (individually, collectively, or in combination with one another):         <ul> <li>2007 Ventura County Building Code Ordinance No.4369</li> <li>Ventura County Land Development Manual</li> <li>Ventura County Subdivision Ordinance</li> <li>Ventura County Subdivision Ordinance</li> <li>Ventura County Non-Coastal Zoning Ordinance</li> <li>Ventura County Non-Coastal Zoning Ordinance</li> <li>Ventura County Standard Land Development Specifications</li> <li>Ventura County Road Standards</li> <li>Ventura County Watershed Protection District Hydrology Manual</li> <li>County of Ventura Stormwater Quality Ordinance, Ordinance No. 4142</li> <li>Ventura County Hillside Erosion Control Ordinance, Ordinance No. 3539 and Ordinance No. 3683</li> <li>Ventura County Municipal Storm Water NPDES Permit</li> <li>State General Construction Permit</li> <li>State General Industrial Permit</li> <li>National Pollutant Discharge</li> </ul> </li> </ol>	X	X	
Elimination System (NPDES)?			
2) Be consistent with the applicable General Plan Goals and Policies for Item 17A of the Initial Study Assessment Guidelines?	x	x	

**17A-1.** The additional impervious area due to proposed construction at the project site would be less than 2 percent of the existing development as indicated in the November 9, 2018, Lewis Engineering Drainage Report (page 3; Attachment 12). Runoff will be by overland flow into the existing grassy field south of the proposed location of the Machon Village, where it will be detained similar to the present condition.

To ensure runoff is discharged in accordance with Ventura County Building Code, Ventura County Public Works Agency, Watershed Protection District, and national and state standards from proposed development, the applicant will be subject to a standard condition of approval that will require the submittal of drainage plans and hydrologic and hydraulic calculations, which are prepared by a registered civil engineer, to the Public Works Agency's Development and Inspection Services Division for review and approval. The plans shall address quantities of water, water flow rates, major water courses, drainage areas and patterns, diversions, collection systems, flood hazard areas, sumps, debris basins, detention facilities, drainage courses, and mitigation measures devised to manage the drainage. In addition, the hydrologic and hydraulic calculations shall include evidence that all the buildable sites, such as Machon Village, will be protected from flooding based on a one percent annual chance storm. With the implementation of this standard condition of approval, impacts to erosion or flooding would not occur as a result of the proposed project. Project-specific and cumulative impacts related to Non-FEMA hydraulic hazards are considered less than significant.

**17A-2.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 17A of the *Ventura County Initial Study Assessment Guidelines.* 

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree			tive Impa Of Effec	
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
17b. Hydraulic Hazards – FEMA (WPD)								
Will the proposed project:								
<ol> <li>Be located outside of the boundaries of a Special Flood Hazard Area and entirely within a FEMA-determined 'X-Unshaded' flood zone (beyond the 0.2% annual chance floodplain: beyond the 500-year floodplain)?</li> </ol>	x				х			
2) Be located outside of the boundaries of a Special Flood Hazard Area and entirely within a FEMA-determined 'X-Shaded' flood zone (within the 0.2% annual chance floodplain: within the 500-year floodplain)?	x				х			
<ol> <li>Be located, in part or in whole, within the boundaries of a Special Flood Hazard Area (1% annual chance floodplain: 100-year), but located entirely outside of the boundaries of the Regulatory Floodway?</li> </ol>	x				х			

4)	Be located, in part or in whole, within the boundaries of the Regulatory Floodway, as determined using the 'Effective' and latest available DFIRMs provided by FEMA?	Х		х		
5)	Be consistent with the applicable General Plan Goals and Policies for Item 17B of the Initial Study Assessment Guidelines?	Х		x		

**17B-1. through 17B-4.** According to the FEMA Flood Map Service website,<sup>11</sup> the project site is located within the Zone X Unshaded floodplain as shown on FEMA Flood Insurance Rate Map Panel 06111C0559E (Effective Date 01/10/2010). As such, the project site is not located in the 100-year or 500-year floodplain. There will not be any project-specific or cumulative impacts related to flood hazards.

**17B-5.** The project is consistent with the *Ventura County General Plan* Policies for item 17B of the *Ventura County Initial Study Assessment Guidelines*.

#### Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*		-	npact De Effect**	gree		act t**		
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
18. Fire Hazards (VCFPD)								
Will the proposed project:								
a) Be located within High Fire Hazard Areas/Fire Hazard Severity Zones or Hazardous Watershed Fire Areas?		x				х		
<ul> <li>b) Be consistent with the applicable General Plan Goals and Policies for Item 18 of the Initial Study Assessment Guidelines?</li> </ul>		x				x		

#### Impact Discussion:

<sup>&</sup>lt;sup>11</sup> https://msc.fema.gov/portal/home

**18a.** The project site is within a Very High Fire Hazard Severity Zone under the jurisdiction of the California Department of Forestry and Fire Protection (Cal Fire<sup>12</sup>). The applicant will be subject to a standard condition of approval that will require compliance with the requirements of the current Ventura County Building Code and the Ventura County Fire Code, which require fuel modification adjacent to a structure's footprint cleared for a distance of 100 feet or to the property line if less than 100 feet. All grass and brush will be required to be removed a distance of 10 feet on each side of all access road(s)/driveway(s) within the project. With the implementation of this standard condition of approval, project-specific and cumulative impacts related to fire hazards is less than significant.

**18b.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 18 of the *Ventura County Initial Study Assessment Guidelines.* 

# Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**					
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS		
19. Aviation Hazards (Airports)										
Will the proposed project:										
a) Comply with the County's Airport Comprehensive Land Use Plan and pre- established federal criteria set forth in Federal Aviation Regulation Part 77 (Obstruction Standards)?	x				х					
b) Will the proposed project result in residential development, a church, a school, or high commercial business located within a sphere of influence of a County airport?	х				х					
c) Be consistent with the applicable General Plan Goals and Policies for Item 19 of the Initial Study Assessment Guidelines?	х				х					

### Impact Discussion:

**19a. and 19b.** The proposed project is not located within the sphere of influence of Oxnard, Camarillo, Santa Paula or Naval Base Ventura County airports. The nearest

<sup>&</sup>lt;sup>12</sup> http://www.fire.ca.gov/fire\_prevention/fhsz\_maps\_ventura

airport to the project site is the Santa Paula airport, located approximately 19.2 miles southeast of the project site. The proposed project will not result in development of a church, a school, or a high commercial business located within a sphere of influence of a County airport. The proposed project will not involve any obstructions to navigable airspace as all proposed development will be limited to a height of 35-feet in accordance with Section 8106-1.1 of the Ventura County NCZO (The Machon Village is proposed at 26 feet, 6 inches in height). Therefore, the proposed project will comply with the County's Airport Comprehensive Land Use Plan and pre-established federal criteria set forth in Federal Aviation Regulation Part 77 (Obstruction Standards). There will not be any project-specific or cumulative impacts related aviation hazards.

**19c.** The proposed project would be consistent with the *Ventura County General Plan* Policies for item 19 of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*		-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
		LS	PS-M	PS	Ν	LS	PS-M	PS	
20a. Hazardous Materials/Waste – Materials (B	EHD/F	ire)							
Will the proposed project:									
<ol> <li>Utilize hazardous materials in compliance with applicable state and local requirements as set forth in Section 20a of the Initial Study Assessment Guidelines?</li> </ol>	x				х				
2) Be consistent with the applicable General Plan Goals and Policies for Item 20a of the Initial Study Assessment Guidelines?	x				x				

### Impact Discussion:

**20a-1.** The continued operation and maintenance of the camp will not utilize hazardous materials which require permitting or inspection from Ventura County Environmental Health Division/Certified Unified Program Agency. As such, there will not be any project-specific or cumulative impacts related to hazardous materials.

**20a-2.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 20a of the *Ventura County Initial Study Assessment Guidelines.* 

# Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
		LS	PS-M	PS	Ν	LS	PS-M	PS	
20b. Hazardous Materials/Waste – Waste (EHD	))								
Will the proposed project:									
<ol> <li>Comply with applicable state and local requirements as set forth in Section 20b of the Initial Study Assessment Guidelines?</li> </ol>	x				х				
2) Be consistent with the applicable General Plan Goals and Policies for Item 20b of the Initial Study Assessment Guidelines?	х				х				

# Impact Discussion:

**20b-1.** The proposed project is not considered an activity that generates hazardous waste. There will not be any project-specific or cumulative impacts related to hazardous wastes.

**20b-2.** The proposed project will be consistent with the applicable *Ventura County General Plan* Policies for Item 20b of the *Ventura County Initial Study Assessment Guidelines*.

# Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro		npact De Effect**	gree	Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
21. Noise and Vibration								
Will the proposed project:								

-							
a)	Either individually or when combined with other recently approved, pending, and probable future projects, produce noise in excess of the standards for noise in the Ventura County General Plan Goals, Policies and Programs (Section 2.16) or the applicable Area Plan?		Х			х	
b)	Either individually or when combined with other recently approved, pending, and probable future projects, include construction activities involving blasting, pile-driving, vibratory compaction, demolition, and drilling or excavation which exceed the threshold criteria provided in the Transit Noise and Vibration Impact Assessment (Section 12.2)?		Х			Х	
c)	Result in a transit use located within any of the critical distances of the vibration- sensitive uses listed in Table 1 (Initial Study Assessment Guidelines, Section 21)?	x			х		
d)	Generate new heavy vehicle (e.g., semi- truck or bus) trips on uneven roadways located within proximity to sensitive uses that have the potential to either individually or when combined with other recently approved, pending, and probable future projects, exceed the threshold criteria of the Transit Use Thresholds for rubber-tire heavy vehicle uses (Initial Study Assessment Guidelines, Section 21-D, Table 1, Item No. 3)?	х			Х		
e)	Involve blasting, pile-driving, vibratory compaction, demolition, drilling, excavation, or other similar types of vibration-generating activities which have the potential to either individually or when combined with other recently approved, pending, and probable future projects, exceed the threshold criteria provided in the Transit Noise and Vibration Impact Assessment [Hanson, Carl E., David A. Towers, and Lance D. Meister. (May 2006) Section 12.2]?	x			Х		

f) Be consistent with the applicable General Plan Goals and Policies for Item 21 of the Initial Study Assessment Guidelines?		х		Х		
	I					1

#### **Baseline Conditions:**

Camp Ramah programs and activities have the potential to generate noise in excess of Ventura County General Plan Policy HAZ-9.2 and Ojai Valley Area Plan Policies OV-54.1 and OV-54.2 noise thresholds. Outdoor activities are conducted throughout the year and include the use of amplified noise equipment used to provide campers instructions or for entertainment (i.e., music) which could occur nightly until 10:00 p.m. except Café Ezra which operates until approximately 11:00 p.m on Thursday nights for staff throughout the summer sessions.

In October 2019, the applicant submitted a noise assessment (Attachment 13) that evaluated noise and vibration impacts from the construction of the proposed Machon Village and the use of an outdoor sound amplification system during camp activities and programs. Noise measurements were taken during Memorial Day Weekend 2016. The noise assessment concluded that General Plan noise thresholds were exceeded in the amphitheater and at the tennis court / basketball courts during Israeli Dance. Mitigation measures (noise blankets at the basketball court / tennis court and positioning the speakers away from the amphitheater stage and eastern property line) were recommended that would reduce noise impacts to a less than significant level (Refer to mitigation measures N-1 and N-2, below)., On December 16 2019, the proposed project was discussed at an Ojai Valley Municipal Advisory Committee meeting where several neighbors voiced their concerns that noise from the camp programs and activities could be heard throughout the Fairview Road neighborhood and that noise limits and noise attenuating blankets at the tennis courts that cover the entire height of the tennis court fencing should be implemented when the amplification system is in use. In response to the neighbor's concerns, the applicant submitted an updated noise assessment in February 2020 (Attachment 13), which evaluated noise impacts from the proposed project and included an additional mitigation measure in the form of sound monitoring for the amplification system (refer to mitigation measure N-3, below). In February 2020, the Camp requested that Dudek conduct noise measurements at three offsite locations to determine the noise impact on offsite residences from use of the amplification system (Exhibit 14). Noise measurements were taken during President's Day 2020, during Israeli Scouts, which is the camp's busiest event of the year. The details of these two noise assessments are discussed below. Finally, at the request of the Planning Division, in September 2020 the applicant submitted a memorandum that clarified certain points (i.e. the number of portable speakers at the softball field, basketball court and amphitheater, and whether there is an impact at the western

property line from Israeli dance) made in the February 2020 noise assessment (Exhibit 15).

The existing Camp Ramah operations are a noise generation source which contributes to the ambient noise of the surrounding rural environment. In order to characterize existing noise levels associated with Camp Ramah operations, noise measurements were performed to record ambient sound levels at four locations along the Camp Ramah property boundary and at three offsite locations for a period of 96 hours. The locations of all noise measurements were chosen where changes in noise levels could result from project implementation<sup>13</sup>. These onsite noise measurements were taken between May 27, 2016, and May 28, 2016 (i.e., Memorial Day Weekend) (Exhibit 13, Figure 2). The measurements included an approximately 24-hour period before a Memorial Day Weekend session at the Camp; two 24-hour measurements while the Camp was in session; and a final 24-hour period following the Memorial Day Weekend Session. Noise generating activities during seasonal preparation included vegetation clearing activities and the use of heavy equipment and chainsaws, which resulted in the highest recorded sound levels over the 4-day period, and a gathering on May 30 and 31, 2016 at 11:00 a.m. The analyses noted the following noise measurements: (1) at the eastern property boundary, adjacent to the on-site reservoir and adjacent off-site residence, existing noise levels ranged from 45 dBA to 47 dBA; (2) at a bench near the northern property boundary, in the eastern portion of the site, between the main campus and closest off-site residence to the northeast, existing noise levels ranged from 46 dBA to 51 dBA; (3) at the northern limit of the developed central portion of the Camp Ramah property, adjacent to the Camp Ramah manager residence, existing noise levels ranged from 47 dBA to 49 dBA; and, (4) adjacent to the existing basketball/tennis courts and soccer field (the soccer field being adjacent to the south side of the proposed location for the new Machon Village), existing noise levels ranged from 46 dBA to 53 dBA (Attachment 13, and Figure 2). The offsite measurements were taken between February 14, 2020, and February 18, 2020 (i.e., President's Day Weekend), before the arrival of participants and extended a full day after the departure of camp attendees (Exhibit 14). The events occurring onsite when the noise measurements were taken include: the President's Day weekend 2020 when the camp was in session; an outdoor song contest in the amphitheater; a sport tournament; and a ceremony at the baseball field. The offsite noise measurements were taken at the following properties: (1) 1447 Foothill Road (MP1), which is located northeast of the camp on a hill that overlooks the camp; (2) 406 Fairview Road (MP2), which is immediately south of the camp entrance; and (3) 312 Fairview Road (MP3), which is immediately southeast of the camp entrance (Attachment 14, Exhibit 1). The survey concluded that continuous measurements at the three properties, there were 7 instances where a recorded sound level exceeded the

<sup>&</sup>lt;sup>13</sup> A Soft dB Piccolo 3 (American National Standards Institute) Type 2 Integrating Sound Level Meters and a Soft dB Piccolo 2 calibrated with a Larson Davis Model CAL150 calibrator were used to perform the noise measurements. Noise measurements represent Community Noise Equivalent Level (CNEL) values for the four days of measurements, at all locations.

General Plan noise thresholds: one instance at 312 Fairview Road (55.5 dBA at 2:00 pm), two instances at 1447 Foothill Road (57.4 dBA at 2:00 p.m. and 59 dBA at 4:00 p.m.), and four instances at 406 Fairview Road (49.0 dBA at 5:00 a.m., 58.9 dBA at 3:00 p.m., 51.7 dBA at 9:00 p.m. and 50.2 dBA at 10:00 p.m.)<sup>14</sup>.

Noise generated from Fairview Road is from residential traffic that is nominal given the density of the surrounding area. The on-site parking area and bus drop off point is located more than 600 feet from Fairview Road south of the softball field. At this distance, the traffic noise from Fairview Road would not exceed exterior noise levels specified in County General Plan Policy of the Initial Study Assessment Guidelines Thresholds (discussed in item 21a and 21b, below).

#### Impact Discussion:

**21a. and 21b.** The methodology used in determining whether or not a project will result in a significant noise impact requires a determination as to whether the proposed use is a "noise generator" or a "noise sensitive use." With the exception of construction noise (which is evaluated separately in this Initial Study below), the continued use of the camp is considered a noise generator. This determination is based on the *Ventura County Initial Study Assessment Guidelines* and Ventura County General Plan Policy HAZ-9.2 The analysis of noise impacts focuses on operational and construction-related noise that would affect the surrounding open space areas north of the camp and the residential uses located south, east, and west of the camp.

The Camp has operated onsite since 1969 and operates summer camp sessions and a series of programs and activities during the non-summer months. The nearest offsite residences are approximately 85 feet from the eastern property line on APN 010-0-130-150, approximately 963 feet south of the amphitheater on APN 010-0-120-105, approximately 104 feet northeast of the parking area on the Camp property (APN 010-0-110-030), and approximately 205 feet south of the intersection of Camp Ramah Road and Fairview Road (APN 010-0-110-080). Anthropogenic noise has a relatively low frequency however when the camp population moves outdoors, noise levels increase and can be heard at offsite locations. Noise at Camp Ramah also originates from stationary sources including mechanical equipment and use of outdoor sound amplification systems. These sources may affect noise-sensitive land uses located adjacent to the project site.

<sup>&</sup>lt;sup>14</sup> There were isolated sound level exceedances recorded at MP2. One exceedance occurred between 5 AM and 6 AM, when no activity was occurring at Camp Ramah. Another set of isolated exceedances also occurred at MP2 between 9:00 p.m. and 11:00 p.m. on Sunday Night, which coincides with the time of the Final Ceremony. There was no exceedance at the other two properties (MP2 and MP3). If the Final Ceremony was the source of the sound levels recorded at MP2 between 9:00 p.m. and 11:00 p.m., sound amplification systems used at this event in the future would be governed by Mitigation Measure Noise N-3.

Based upon the Ventura County General Plan Hazards and Safety Element, the project would result in a significant noise impact if:

- (1) New noise generators, proposed to be located near any noise sensitive use, measured at the exterior wall of the building, exceed any of the following standards:
  - a. LEQ1H of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
  - b. LEQ1H of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.
  - c. L<sub>EQ</sub>1H of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

Machon Village would be located on APN 010-0-170-310, adjacent to the north side of the Director's house and approximately 1,150 feet north and 300 feet west of the nearest off-site residential use. The proposed prep-kitchen that would serve Machon Village includes mechanical equipment, such as HVAC compressors and a roof-mounted exhaust blower. The noise study concluded that based on the anticipated manufacture specifications for this equipment, peak sound levels would be 52 dBA at 3.3 feet from the HVAC and 56 dBA at 3.3 feet from the blower. The average combined noise levels from equipment operations along the common property boundary for the camp and neighboring properties resulted in an estimated 30 dBA  $L_{EQ}$  (adjacent to western property line), or 28 dBA  $L_{EQ}$  (adjacent to eastern property line). These measurements are below the noise thresholds included in General Plan Policy HAZ-9.2 (discussed in detail below). Accordingly, there would not be any noise and vibration impact from the use of mechanical equipment at Machon Village.

The proposed project would include noise associated with amplified sound systems (portable-hand held acoustic speech amplifier, amplified music, microphones, speakers) and an emergency alarm system that is tested monthly during the summer camp sessions. Amplified sound systems will operate between 9:00 a.m. and 10:00 p.m. except for Café Ezra which closes at 11:00 p.m. on Thursdays during the summer sessions (see below).

Amplified sound and music are used for the following regularly scheduled camp programs:

• <u>Café Ezra</u>: The café is a social meeting place where staff meet weekly on Thursdays, and low level music is provided for ambiance. Café Ezra closes at 11:00 p.m. and is located between the infirmary and pre-school building. Outdoor

noise associated with Café Ezrah is not expected to exceed the Ventura County General Plan Hazards and Safety Element noise thresholds noted above.

- <u>Israeli Dance Night</u>: one night per week during summer camp session (8 total) from 9:00 p.m. to approximately 10:00 p.m. and is held at the tennis/basketball courts.
- <u>Performance Night</u>: once per camp session, campers perform in the amphitheater from 7:30 p.m. to 9:30 p.m.

Sound equipment locations are as follows (refer to Attachment 3, Site Plan):

- <u>Main Dining Hall:</u> Four fixed speakers: one speaker each at the north, south, east and west corners at the dining hall on the lawn;
- <u>Café Ezra</u>: A portable speaker is used for music.
- Fire pit at Boy's Tent Area: One portable speaker facing southwest;
- <u>Basketball Courts</u>: Three portable speakers oriented north;
- <u>Amphitheater</u>: Four fixed speakers: two speakers at the stage corners, and two speakers situated at the half-way point on either side of the seating area facing northeast and northwest;
- <u>Girl's Gazebo</u>: One fixed speaker, oriented downward from the ceiling;
- <u>Emergency Alarm System</u>: Four fixed speakers: immediately south of the central Dining Hall, facing north, west, south, and east; and,

The Noise Assessment concluded that the proposed use of the sound systems during the programs and activities described above may affect noise sensitive uses that surround the project site (Attachment 13). Daily speaker operation (i.e., announcements) between the hours of 9:00 a.m. and 10:00 p.m. would comply with the General Plan Noise Policy threshold of 50 dBA  $L_{EQ}$ . (Attachment 13, Table 4). General Plan noise level thresholds would not be exceeded any time at the Boy's Tent Area fire pit and Girls Gazebo.

The Noise Assessment concluded that noise levels associated with the Performance Nights would exceed the General Plan noise threshold  $L_{EQ}1H$  of 50dB(A) during any hour from 7:00 p.m. to 9:30 p.m. as the Performance Night sound levels could reach 85 dBA at 21 feet away from the speakers in the amphitheater. Mitigation Measures N-1 would require that the applicant face the amphitheater speaker to the northwest to ensure daily operational levels of the speaker would remain below the General Plan ambient noise threshold levels. Israeli Dance Nights would exceed the General Plan noise threshold of 45 dBA  $L_{EQ}$  from 10:00 p.m. to 6:00 a.m. For the Israeli Dance Night

sound levels could reach up to 85 dBA at 21 feet away from the speakers that are facing northward at the southern basketball court boundary.

The noise levels during these camp programs and activities for the closest adjacent property boundary to the north, east, and west would exceed the General Plan Noise threshold described above at the following locations:

Average Noise Level During Night-time Programs and Activities										
Program/Activity	West Property Line	North Property Line	East Property Line	GP Threshold	Complies with GP?					
Café Ezra	27	17	35		Yes					
Israeli Dance at the basketball courts	46	43	39	45dB(A) or ambient noise	No					
Performance Night at the amphitheater	32	43	61	level plus 3dB(A)	No					
Ambient (L <sub>EQ</sub> Hour)	37	35	35							

As indicated in the table above, the calculated noise levels for the Israeli Dance activity at the western property boundary would exceed the applicable night-time General Plan threshold in the period from 10:00 p.m. to 6:00 a.m. (45 dBA  $L_{EQ}$ ). The Performance Night at the eastern property line program would exceed evening General Plan thresholds from 7:00 p.m. to 10:00 p.m. (61 dBA  $L_{EQ}$ ). These impacts are considered potentially significant. However, with the positioning of speakers to the northwest at the amphitheater, the installation of noise attenuation devices at the basketball courts, installation of noise monitoring devices for amplified sound equipment, noise impacts would be mitigated to a less than significant level (refer to mitigation measures N-1 through N-3 below).

With the implementation of these mitigation measures, noise levels associated with Israeli Dance Nights and Performance Nights would fall below ambient noise levels and be consistent General Plan Noise Thresholds.

\*Note noise levels at the southern property line do not exceed the General Plan noise thresholds.

Daily operational noise, daytime camp activities/programs, and vehicle traffic would not exceed the General Plan noise threshold of  $L_{EQ}1H$  of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.

To ensure that noise attenuation is maintained in compliance with the General Plan, the applicant will be required to designate a contact person(s) to respond to complaints from citizens and the County which are related to the permitted uses of this CUP. The

designated contact person shall be available, via telecommunication, 24 hours a day during which an event is taking place at the subject property (Mitigation Measure N-4).

With implementation of recommended Mitigation Measures N-1 through N-4, potentially significant noise impacts will be reduced to less than significant.

**21c. and 21d.** The proposed project does not involve the creation of a vibrationgenerating transit use. The proposed project will not result in a transit use located within any of the critical distances of the vibration-sensitive uses listed in Table 1 (*Initial Study Assessment Guidelines*, Section 21). The proposed project will not involve the use of semi-trucks. Access to the project site is from Fairview Road (a paved public road) to Camp Ramah Road (a paved private road). Non summer month campers and visitors would be bussed to the project site or arrive in personal vehicles. The on-site parking area and bus drop off point is located more than 600 feet from Fairview Road. At this distance, the traffic noise would not exceed exteriors noise levels specified in County General Plan Policy HAZ-9.2 of the Initial Study Assessment Guidelines Thresholds. Therefore, the proposed project does not have the potential to exceed the threshold criteria of the transit use thresholds.

The proposed project will not involve the use of heavy vehicle (e.g., semi- truck) trips on uneven roadways located within proximity to sensitive uses that have the potential to either individually or when combined with other recently approved, pending, and probable future projects, exceed the threshold criteria of the Transit Use Thresholds for rubber-tire heavy vehicle uses (*Initial Study Assessment Guidelines*, Section 21-D, Table 1, Item No. 3). Therefore, the proposed project will not have a project-specific vibratory impact and will not make a cumulatively considerable contribution to a significant cumulative vibratory impact, related to the use of rubber-tire heavy vehicle uses.

**21e.** The Initial Study Assessment Guidelines Transit Noise and Vibration Impact Assessment states that the "level of construction vibration analysis will be determined by factors related to the scale of the project and the sensitivity of the surrounding land use" (p. 12-10). The proposed Machon Village would be located approximately 300 feet west of the nearest off-site residential use. Construction activities associated with the Machon Village will be subject to a standard condition of approval to ensure that the proposed development will comply the Ventura County General Plan Policy HAZ-9.2 and Construction Noise Threshold Criteria and Control Plan (2010). The applicant will be required to limit construction activity to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday, and from 9:00 a.m. to 7:00 p.m., Saturday, Sunday, and State holidays. Construction equipment maintenance shall be limited to the same hours. Therefore, the proposed project will not have a project-specific vibratory impact and will not make a cumulatively considerable contribution to a significant cumulative vibratory impact, related to vibration-generating activities.

**21f.** With implementation of Mitigation Measures N-1 through N-4, the proposed project will result in less than significant impacts resulting from noise and is consistent with the applicable *Ventura County General Plan Goals and Policies* for Item 21 of the Ventura County Initial Study Assessment Guidelines. Pursuant to the requirements for the Ventura County General Plan Policy HAZ-9.2, Construction Noise Threshold Criteria and Control Plan (2010a), this Initial Study evaluated the noise impacts of the proposed project on the project site.

# Mitigation Measures:

### Mitigation Measure N-1: Speaker Location and Orientation at the Amphitheater

**Purpose:** To ensure that the use of the outdoor amplification system at the amphitheater is in compliance with Ventura County General Plan Policy HAZ-9.2.

**Requirement:** The applicant shall place two speakers at the stage corners, and two speakers at the half-way point on either side of the seating area facing northeast and northwest. The speakers shall be oriented northwest. No amphitheater speakers shall be oriented toward the eastern property boundary.

**Documentation:** The applicant shall provide a site plan and photo documentation that identifies the location of the speakers in compliance with this mitigation measure. A notice shall be placed on the speaker system that indicates that the location and installation requirements noted above shall be adhered to at all times when the speakers are in use.

**Timing:** The applicant shall submit a site plan and photo documentation that depicts the location of the speakers for review and approval to the Planning Division prior to the issuance of the Zoning Clearance for use inauguration.

**Monitoring and Reporting:** The Planning Division has the authority to inspect the site to ensure location and orientation of speakers and that the Notice is readily visual to the operator in accordance with Section 8114-3.4 of the Ventura County NCZO.

### Mitigation Measure N-2: Noise Attenuation at Basketball Court

**Purpose:** To ensure that the use of outdoor amplification system at the basketball court is in compliance with Ventura County General Plan Policy HAZ-9.2.

**Requirement:** Acoustic blankets (e.g., BBC-EXT-R-2 Noise Barrier / Sound Absorber Sound Blankets<sup>15</sup>, or comparable noise attenuation blanket of the same dimensions) shall be installed on the western, northern, and eastern sides of the 10-foot high tennis

<sup>&</sup>lt;sup>15</sup> Attachment 12, Appendix G

court fence (which is adjacent to the north side of the basketball courts) for all outdoor programs and activities that extend past 9:00 p.m. The blankets must be installed one hour before the start of any activities or programs at basketball courts, have no gaps and shall extend from the ground to a height of 10 feet above the ground. The sound blankets shall have a sound transmission class (STC) rating of a minimum of 25<sup>16</sup>.

**Documentation:** The manufacture specifications of the acoustical blankets to be used at the tennis court shall be submitted to the Planning Division for review and approval. The applicant shall prepare a written procedure for camp staff that outlines the protocol for placing the acoustical blankets on the fencing along the western, northern, and eastern sides of the tennis courts. The applicant shall provide the written procedures including but not limited to, the manufacture's specifications of the acoustical blankets, who is responsible for installation and removal, and the location of these instructions, to the Planning Division for review and approval.

**Timing:** The applicant shall submit the manufacture's specifications of the blankets and written procedures for review and approval to the Planning Division prior to the issuance of the Zoning Clearance for use inauguration. Acoustical blankets shall be installed prior to the outdoor program and activity at the tennis courts.

**Monitoring and Reporting:** The Planning Division has the authority to inspect the project site in accordance with Section 8114-3.4 of the Ventura County NCZO to ensure that the acoustical blankets have been installed and the written procedures and instructions are being implemented.

#### Mitigation Measure N-3: Noise Monitor and Sound Monitoring System

**Purpose:** To ensure that project-generated noise does not exceed the maximum acceptable noise levels for sensitive receptors that are located within proximity to the project site, pursuant to the Ventura County General Plan Noise Policy HAZ-9.2.

**Requirement:** The maximum acceptable noise levels received by a noise sensitive receptor, measured at the exterior wall of the building, shall not exceed any of the following standards:

- a. Leq1H of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.;
- b. Leq1H of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.; and
- c. Leq1H of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

<sup>&</sup>lt;sup>16</sup> An integer rating of how well a building partition attenuates airborne sound.

Outdoor programs that use amplified sound equipment at the Amphitheater, Dining Hall and tennis/basketball courts shall end at 10:00 pm. In order to ensure noise levels do not exceed the maximum noise level set forth above, the applicant shall acquire and install a sound monitoring system on the exterior amplification systems. The sound monitoring systems shall include a noise level meter (e.g., Tadeto Digital Sound Level Meter Portable Sound Meter 30dB to 130dB MAX or Quest Soundpro Sound Level Meter SE-DL Series, or comparable device) set at the "A-weighting, slow response" setting, and a noise dosimeter (e.g., Quest Edge 5 Personal Noise Dosimeter, or comparable device). The sound monitoring systems and signal processor unit shall have a maximum speaker output set no higher than the level which would maintain sound levels at or below 50 dBA Leq1H at the closest residence.

Outdoor amplified sound equipment used to provide low-level ambient music at Café Ezra shall be shut off at 11:00 pm. Maximum speaker output shall be set no higher than the level which would maintain sound levels at or below 45 dBA Leq1H at the closest residence.

Following installation of the amplified sound equipment, the applicant shall conduct the required verification measurements of the installed system, properly program the signal processor unit of each system, and complete sound pressure level measurements with the programmed signal processor units, to ensure the sound levels adhere to the requirements noted above.

A designated noise monitor shall ensure the approved protocol is being implemented and maintained to achieve compliance with the noise standards set forth above.

**Documentation:** The applicant shall submit the manufacturer's specifications of the amplified sound equipment and sound monitoring system, and documentation verifying noise from outdoor amplified sound equipment was adequately modeled to the closest offsite sensitive receptor. The applicant will provide the Planning Division the name of the noise monitor for ensuring the system is functioning properly.

**Timing:** The applicant shall monitor the system throughout the life of the permit during outdoor Camp programs and activities that involve amplified sound to ensure that the system is operating properly so that noise levels do not exceed the maximum acceptable noise levels pursuant to the Ventura County General Plan Policy HAZ-9.2.

**Monitoring and Reporting:** The Planning Division has the authority to periodically confirm that noise monitoring is occurring during Camp Ramah programs and activities, consistent with the requirements of Section 8114-3 of the Ventura County NCZO.

Mitigation Measure N-4: Contact Person for Noise Complaints

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

**Requirement:** The applicant 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. The designated contact person shall be available, via telecommunication, 24 hours a day during which an event is taking place at the subject property.

**Documentation:** The applicant 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 applicant'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 applicant shall provide the Planning Division the contact information of the applicant's field agent(s) for the Project file. If the address or phone number of the applicant's field agent(s) should change, or the responsibility is assigned to another person, the applicant shall provide Planning Division staff with the new information in writing within three calendar days of the change in the applicant's field agent.

**Monitoring and Reporting:** The Planning Division maintains the contact information provided by the applicant in the Project file. The Planning Division has the authority to periodically confirm the contact information consistent with the requirements of Section 8114-3 of the Ventura County NCZO.

### **Residual Impacts:**

With the implementation of Mitigation Measures N-1 though N-4, project-specific and cumulative impacts to noise will be less than significant.

Issue (Responsible Department)*		Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**			
		LS	PS-M	PS	Ν	LS	PS-M	PS	
22. Daytime Glare									
Will the proposed project:									
a) Create a new source of disability glare or discomfort glare for motorists travelling along any road of the County Regional Road Network?	x				х				

<ul> <li>b) Be consistent with the applicable General Plan Goals and Policies for Item 22 of the Initial Study Assessment Guidelines?</li> </ul>					x				
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**22a.** Existing camp structures and outdoor activity areas are located more than 100 feet north of Fairview Road, a public road, and are screened by existing dense vegetation. The proposed Machon Village is setback more than 2000 feet north of Fairview Road. Proposed development will not be visible or create a new source of glare or discomfort to motorists traveling along Fairview Road. Camp Ramah programs and activities occur throughout various areas within the camp and would also not be visible from Fairview Road. In addition, MM BIO-4 requires a Lighting Plan to ensure exterior lighting is directed downward and does not spillover to adjoining properties or open space areas. As such, Camp Ramah programs and activities will not be visible to motorists traveling along any road of the County Regional Road Network. Project-specific and cumulative impacts related to daytime glare is less-than-significant.

**22b.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 22 of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
23. Public Health (EHD)								
Will the proposed project:								
<ul> <li>a) Result in impacts to public health from environmental factors as set forth in Section 23 of the Initial Study Assessment Guidelines?</li> </ul>		x				х		
b) Be consistent with the applicable General Plan Goals and Policies for Item 23 of the Initial Study Assessment Guidelines?		x				х		

#### Impact Discussion:

**23a.** The proposed project includes the continued use and maintenance of camp programs and activities, which includes the use of a swimming pool and meals that are prepared on site in the existing kitchen facilities. Additionally, Ventura County licensed food truck vendors may provide food. Swimming pools and food facilities are regulated and permitted by the Ventura County Environmental Health Division (EHD), Community Services Section. The facility operator and all food handlers must comply with all applicable state and local requirements related to food safety and sanitation. The swimming pool must be maintained and operated according to all state and local requirements for public pools. The Machon Village shall be reviewed and approved by EHD Community Services staff prior to beginning construction. Compliance with all codes and regulations related to food facilities, swimming pools, and organized camps will reduce potential public health impacts to less than significant.

**23b.** The proposed project is consistent with the applicable *Ventura County General Plan* Policies for Item 23 of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
24. Greenhouse Gases (VCAPCD)								
Will the proposed project:								
a) Result in environmental impacts from greenhouse gas emissions, either project specifically or cumulatively, as set forth in CEQA Guidelines §§ 15064(h)(3), 15064.4, 15130(b)(1)(B) and -(d), and 15183.5?		х				х		

## Impact Discussion:

**24a.** The 10,000 MTCO2e/yr (metric tons of carbon dioxide equivalent) threshold of significance applied to projects as recommended by the VCAPCD has been adopted by multiple agencies within the broader southern California region for use in evaluating discretionary projects involving stationary sources, including the South Coast Air Quality Management District (SQAQMD) [adopted by the SCAQMD Governing Board, December 5, 2008], San Diego County, and the Santa Barbara Air Pollution Control District (Santa Barbara County APCD CEQA Guidelines, adopted April 30, 2015).

As there would not be any increase in camp activities, the number of campers or staff, operational emission impacts on regional and local air quality related to Vehicle Miles Traveled (VMT) would be less than significant.

The amount of greenhouse gases anticipated from this project will be a small fraction of the levels being considered by the VCAPCD for greenhouse gas significance threshold (10,000 MTCO2e/yr). As such project-specific and cumulative impacts to greenhouse gases are less than significant.

## Mitigation/Residual Impact(s):

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
25. Community Character (PIng.)									
Will the proposed project:									
a) Either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable probable future projects, introduce physical development that is incompatible with existing land uses, architectural form or style, site design/layout, or density/parcel sizes within the community in which the project site is located?		x				x			
b) Be consistent with the applicable General Plan Goals and Policies for Item 25 of the Initial Study Assessment Guidelines?		x				x			

## Impact Discussion:

**25a.** The project site is surrounded by open space, agricultural, and residential uses. Parcels located to the southeast, south, and east of the site include residential development and open space. Parcels west of the project site are currently in agricultural production with tangerine and avocado orchards. The nearest offsite residences are approximately 85 feet from the eastern property line on APN 010-0-130-150, approximately 963 feet south of the amphitheater on APN 010-0-120-105, approximately 104 feet northeast of the parking area on the Camp property (APN 010-0-110-030) and approximately 205 feet south of the intersection of Camp Ramah Road

and Fairview Road (APN 010-0-110-080). Machon Village would be located on APN 010-0-170-310, adjacent to the north side of the Director's house and approximately 1,150 feet north and 300 feet west of the nearest off-site residential use.

The project site is currently developed as a camp and includes approximately 100,727 sq. ft. of existing structures. Approximately 3,602 sq. ft. of the existing square footage is associated with the unpermitted sports courts, meditation deck with shade structure and dining hall shade structures which will be permitted as part of the proposed project. Approximately 15,887 sq. ft. of accessory structures (Machon Village and legalization of existing structures) are proposed to be built on site. All of the lots associated with the proposed project encompass 431.45 acres with two zoning designations, OS-80 and RE-20. The maximum building coverage requirements of the OS-80 ac and RE-20 ac zone districts are 5 percent and 25 percent respectively. Existing and proposed development in the OS-80 and RE-20 zones has a maximum building coverage of 0.0027% (16,091 sq. ft.) and a 0.28% (95,245 sq. ft.) respectively.

Camp Ramah is situated is an open space area that includes wide expansive areas of native vegetation and oak trees. The camp has been operating onsite since 1969. Buildings and structures have been constructed to blend in with the natural environment using wood and earth tone colors. The architecture of the cabins is characteristic of a small house or cottage of simple design and construction, providing modest overnight accommodations. The proposed Machon Village will be in character with the existing structures and surrounding open space. The character of the adjoining community will not be substantially altered with the proposed project. To ensure proposed development is compatible with the existing camp facilities and blends in with the natural environment and character of the community, the applicant will be required to incorporate natural materials, earth tones colors, and non-reflective paints and glass at Machon Village.

The entire project site is located within the Ojai Valley Dark Sky Ordinance overlay zone, which regulates exterior lighting within the Ojai Valley. Existing lighting meets the requirements of Section 8109-4.7.2 (Existing Lighting) and 8109-4.7.4 (General Standards) of the Ventura County NCZO. To ensure that any new exterior lighting does not adversely impact the surrounding areas and is consistent with the exterior lighting requirements of the Ojai Valley Dark Sky Ordinance overlay zone (NCZO Section 8109-4.7.4), the applicant will be required to submit a lighting plan (refer to item 4e, Mitigation Measure BIO-4 of this initial study). Specifically, the applicant must ensure that all lighting is shielded downward and does not exceed 850 lumens. Upward facing display lights, outdoor spotlights and laser lights are prohibited, pursuant to Sections 8109-4.7.3 (b) (Prohibited Lighting) and 8109-4.7.4 (a) (Shielding and Direction of Luminaires) of the Ventura County NCZO.

On December 16, 2019, the proposed project was presented to the Ojai Valley Municipal Advisory Committee. Property owners living near and adjacent to Camp

Ramah voiced their concerns regarding outdoor events being leased to third parties. and loud and raucous noise late at night or from non-camp related programs and activities. All programs and activities that occur on the Camp Ramah project site are governed by the camp CUP for which Camp Ramah is wholly responsible and liable.

To ensure that noise impacts originating from Camp Ramah programs and activities comply with the noise thresholds listed in General Plan Policy HAZ-9.2, campers, staff and guests will be required to adhere to the following requirements: 1) only camp provided amplification equipment may be used and operated; 2) there will be a designated contact person for noise complaints; 3) the amplification system will be equipped with a sound attenuating device that will lower the sound when the speaker exceeds a specified noise measurement; and, 4) the amplification system is restricted to the amphitheater, girl's gazebo, Boys Tent area, tennis court / basketball courts with sound blankets, and dining hall patio/lawn area (refer to Noise Mitigation Measures N1 through N-4 in item 21a above).

In order to resolve noise complaints, the applicant will be required to designate a contact person(s) to respond to complaints from citizens and the County which are related to the permitted uses of this CUP. The designated contact person shall be available, via telecommunication, 24 hours a day during which an event is taking place at the subject property (refer to Mitigation Measure N-4 in item 21 above). With implementation of Mitigation Measures BIO-4, N-1 through N-4 and the standard condition of approval noted above, impacts related to community character will be less than significant.

Therefore, the project-specific and cumulative impacts related to community character impact are less-than-significant.

**25b.** The proposed project would be consistent with the *Ventura County General Plan* Policies for Item 25 of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*		-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
26. Housing (PIng.)								
Will the proposed project:								

a)	<ul> <li>Eliminate three or more dwelling units that are affordable to:</li> <li>moderate-income households that are located within the Coastal Zone; and/or,</li> <li>lower-income households?</li> </ul>	x		Х	
b)	Involve construction which has an impact on the demand for additional housing due to potential housing demand created by construction workers?	х		х	
c)	Result in 30 or more new full-time- equivalent lower-income employees?	х		х	
d)	Be consistent with the applicable General Plan Goals and Policies for Item 26 of the Initial Study Assessment Guidelines?	х		х	

**26a.** The proposed project will not eliminate any existing dwelling units. Therefore, the proposed project will not create a project-specific impact, and will not make a cumulatively considerable contribution to a significant cumulative impact, related to the elimination of existing housing.

**26b.** As stated in the *Ventura County Initial Study Assessment Guidelines* (p. 146), any project that involves construction has an impact on the demand for additional housing due to potential housing demand created by construction workers. However, construction worker demand is a less-than-significant project-specific impact, and does not qualify as a cumulatively considerable contribution to a significant cumulative impact, related to the demand for new housing, because construction work is short-term and there is a sufficient pool of construction workers within Ventura County and the Los Angeles metropolitan regions. Therefore, Project-specific and cumulative impacts related to the demand for construction worker housing are less than significant.

**26c.** There are 37 daytime staff during the non-summer months and approximately 348 daytime and overnight staff during the summer months that will continue to work at the camp. The proposed project will not result in 30 or more new full-time-equivalent lower-income employees, as the proposed project will not facilitate the development of a new commercial, institutional, industrial, or other employees and seasonal staff will not change as

a result of the proposed project. Therefore, project-specific and cumulative impacts related to the demand for housing for employees associated with an employment-generating use is less than significant.

**26d.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 26 of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
27a(1). Transportation & Circulation - Roads a	nd H	ighwa	ys - Leve	el of S	ervice	e (LOS)	(PWA)	
Will the proposed project:								
a) Cause existing roads within the Regional Road Network or Local Road Network that are currently functioning at an acceptable LOS to function below an acceptable LOS?		х				x		

## **Baseline Existing Setting**

The camp will continue to operate a summer camp during the summer months (June to August) that is staffed with 348 daytime and overnight employees and counselors. The summer camp hosts a total of approximately 1,200 campers (600 – 650 per session) over two, four-week sessions and within these sessions, four 2-week and one 1-week session. The camp will also continue to operate approximately 90 programs and activities for adult and youth campers during the non-summer months that is staffed by 37 daytime employees. Based on the 2019 operational data provided by the applicant (Attachment 5), Associated Transportation Engineers (ATE) estimated that the baseline trip generation for the summer months is 213 Average Daily Trips (ADT) and 80 ADT during non-summer months; for a total of 293 ADT (December 16, 2021, ATE Traffic Study; Attachment 16). For the Summer months, 58 a. m. peak hour trips and 58 p.m. peak hour trips occur. For the non-summer months, 19 a.m. peak hour trips and 20 p.m. peak hour trips occur. These employee commute trips will continue to occur on the weekdays during peak hours on State Route 33 but do not constitute new trips as they are part of the baseline setting. Youth groups with counselors arrive and depart by bus for non-summer programs and events.

For the summer camp, the majority of campers arrive and depart by bus (55-passenger capacity), a few arrive and depart via private vehicle. Forty-four charter bus loads are required to accommodate the arrival and departure of 1,200 youth campers over all sessions. Three times per week groups of campers are taken on day trips..

#### Impact Discussion:

**27a(1)-a.** The proposed project will not generate additional traffic on the local public roads and the Regional Road Network or have the potential to alter the existing level of service on these roadways.

The California Natural Resources Agency has adopted new CEQA Guidelines that require an analysis of VMT, which measures the per capita number of car trips generated by a project and distances cars will travel to and from a project, rather than congestion levels at intersections (level of service or "LOS," graded on a scale of A - F). Ventura County will only require LOS analysis to determine consistency with the County's General Plan policies. LOS will not be assessed for CEQA purposes.

Trip- or tour-based VMT analysis is recommended over boundary-based VMT analysis as the established and most appropriate methodology for analyzing VMT impacts under CEQA. Trip-based assessment of VMT captures the full extent of the vehicle trip length, including the portion that extends beyond the jurisdictional boundary. VMT impacts are assessed by quantifying trips to or from a jurisdiction, which start or end within the jurisdiction. Conversely, a boundary-based assessment of VMT impacts is quantified by the length of the vehicle trips that occur within the boundaries of a jurisdiction.

Based on the Office of Planning and Research (OPR) Screening Criteria under Senate Bill (SB) 743, if a proposed land use project is consistent with Policies CTM-1.1 and CTM-1.2 of the Ventura County General Plan and the Regional Transportation Plan/Sustainable Communities Strategy (SCS) regionally adopted by (Southern California Association of Governments (SCAG)), projects that generate or attract fewer than 110 trips per day are presumed to have a less-than-significant impact on VMT. As no new trips would be generated by the proposed project, the project is consistent with General Plan policies CTM-1.1 (Vehicle Miles Traveled (VMT) Standards and CEQA Evaluation) and CTM-1.2 (Projects with Significant Transportation Impacts). Projectspecific and cumulative impacts related to VMT is considered less than significant.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro	Project Impact Degree Cumulative In Of Effect** Degree Of Eff							
	N LS PS-M PS N LS PS-M						PS		
27a(2). Transportation & Circulation - Roads a (PWA)	27a(2). Transportation & Circulation - Roads and Highways - Safety and Design of Public Roads								
Will the proposed project:									

<ul> <li>a) Have an Adverse, Significant Project-Specific or Cumulative Impact to the Safety and Design of Roads or Intersections within the Regional Road Network (RRN) or Local Road Network (LRN)?</li> </ul>	x x	

**27a(2)-a.** The proposed project does not have the potential to alter the level of safety of roadways and intersections located near the project site. The public roads located in the vicinity of the project site meet current Public Works Agency design and safety standards. Project-specific and cumulative impacts related to the safety/design of County roads are less than significant.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
27a(3). Transportation & Circulation - Roads 8 (VCFPD)	Higl	nways	– Safety	v & De	sign o	of Priva	ite Acces	S
a) If a private road or private access is proposed, will the design of the private road meet the adopted Private Road Guidelines and access standards of the VCFPD as listed in the Initial Study Assessment Guidelines?		х				х		

b) Will the project be consistent with the applicable General Plan Goals and Policies for Item 27a(3) of the Initial Study Assessment Guidelines?	x		x		
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**27a(3)-a.** Access to the project site is from Fairview Road, a public road. Secondary access will continue to be taken from an on-site road adjacent to the western property line that also connects to Fairview Road. This secondary access will be extended to the proposed Machon Village. The VCFPD reviewed the proposed project and determined that the extension of this road meets the minimum VCFPD access standards for safety and design of private roads. Project-specific and cumulative impacts, related to the safety and design of private access are less than significant.

**27a(3)-a.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 27a(3) of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
27a(4). Transportation & Circulation - Roads &	& Highways - Tactical Access (VCFPD)							
Will the proposed project:								
a) Involve a road or access, public or private, that complies with VCFPD adopted Private Road Guidelines?		x				x		
<ul> <li>b) Be consistent with the applicable General Plan Goals and Policies for Item 27a(4) of the Initial Study Assessment Guidelines?</li> </ul>		x				х		

#### Impact Discussion:

27a(4)-a. Access to the project site is from Fairview Road, a public road. Secondary access will continue to be obtained from an on-site road adjacent to the western

property line that connects to Fairview Road. This secondary access will be extended to the proposed Machon Village. The VCFPD reviewed the proposed project and determined that all roads meet the minimum VCFPD Access standards. Project-specific and cumulative impacts related to tactical access are less than significant.

**27a(4)-b.** The proposed project is consistent with the applicable Ventura County General Plan Policies for Item 27a(4) of the Ventura County Initial Study Assessment Guidelines.

## Mitigation/Residual Impact(s)

None.

	Issue (Responsible Department)*	Pro		npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
		Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
27	b. Transportation & Circulation - Pedestrian	/Bicy	vcle Fa	acilities (	PWA/	Ping.)				
Wi	II the proposed project:									
1)	Will the Project have an Adverse, Significant Project-Specific or Cumulative Impact to Pedestrian and Bicycle Facilities within the Regional Road Network (RRN) or Local Road Network (LRN)?		x				x			
2)	Generate or attract pedestrian/bicycle traffic volumes meeting requirements for protected highway crossings or pedestrian and bicycle facilities?		x				x			
3)	Be consistent with the applicable General Plan Goals and Policies for Item 27b of the Initial Study Assessment Guidelines?		x				х			

## Impact Discussion:

**27b-1. and 27b-2.** The proposed project will not generate additional bicycle and pedestrian traffic on the local public roads and the Regional Road Network. There are no pedestrian and/or bicycle crossings on Fairview Road or Camp Ramah Road. Furthermore, the most appropriate County Road standard for roadways in rural areas

does not require pedestrian facilities (sidewalks) and/or bicycle facilities (bike lanes). There are no designated bicycle trails within or adjacent to the project site. The continued operation and use of the camp will not generate pedestrian or bicycle traffic and will not adversely affect existing pedestrian and bicycle facilities. Guests and campers will travel to the site by either private car or bus provided by the camp. Project-specific and cumulative impacts related to pedestrian and bicycle facilities/traffic are less than significant.

**27b-3.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 27b of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
27c. Transportation & Circulation - Bus Transi	t								
Will the proposed project:									
<ol> <li>Substantially interfere with existing bus transit facilities or routes, or create a substantial increase in demand for additional or new bus transit facilities/services?</li> </ol>	x				х				
2) Be consistent with the applicable General Plan Goals and Policies for Item 27c of the Initial Study Assessment Guidelines?	х				х				

## Impact Discussion:

**27c-1.** The nearest bus stop is located at the corner of Ojai Avenue and Canada Street in the City of Ojai, approximately 0.6 miles southeast of the project site. The proposed project will not interfere with existing bus routes and schedules, as campers and guests will travel to the site by private bus and private vehicles. As a result, there will not be a net increase in demand for public bus transit facilities. There will not be any project-specific or cumulative impact related to bus transit facilities/services.

**27c-2.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 27c of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS
27d. Transportation & Circulation - Railroads								
Will the proposed project:								
1) Individually or cumulatively, substantially interfere with an existing railroad's facilities or operations?	х				х			
2) Be consistent with the applicable General Plan Goals and Policies for Item 27d of the Initial Study Assessment Guidelines?	х				х			

## Impact Discussion:

**27d-1.** The nearest railroad line is the Southern Pacific line, which is located more than 13 miles southeast of the project site. The proposed project will not interfere with existing railroad facilities or operation. There will not be any project-specific or cumulative impacts related to railroad facilities or operations.

**27d-2.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 27d of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
27e. Transportation & Circulation – Airports (A	Airpo	rts)							
Will the proposed project:									
1) Have the potential to generate complaints and concerns regarding interference with airports?	x				х				
2) Be located within the sphere of influence of either County operated airport?	x				х				
3) Be consistent with the applicable General Plan Goals and Policies for Item 27e of the Initial Study Assessment Guidelines?	x				х				

**27e-1. and 27e-2.** The nearest airport is the Santa Paula airport, located approximately 19.2 miles southeast of the project site. The project site is not located within the sphere of influence of a county airport, nor does the project have the potential to generate complaints or concerns regarding airport operation. Furthermore, the proposed structures will not exceed the maximum height of 35 feet allowed by Section 8106-1.1 of the Ventura County NCZO. There will not be any project-specific or cumulative impacts related to interference with airports.

**27e-3.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 27e of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro		npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
27f. Transportation & Circulation - Harbor Facilities (Harbors)									

Will the proposed project:	
<ol> <li>Involve construction or an operation that will increase the demand for commercial boat traffic and/or adjacent commercial boat facilities?</li> </ol>	x x
2) Be consistent with the applicable General Plan Goals and Policies for Item 27f of the Initial Study Assessment Guidelines?	x x

**27f-1.** The project site is located more than 10 miles from the nearest harbor facility, which is Ventura Harbor. Based on this distance, the proposed project will not adversely impact or increase the demand for commercial boat traffic and/or adjacent commercial boat facilities. There will not be any project-specific or cumulative impacts related to existing harbor facilities or operations.

**27f-2.** The proposed project is consistent with the applicable *Ventura County General Plan* Policies for Item 27f of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	Project Impact Degree Of Effect**				Cumulative Imp Degree Of Effe			
		LS	PS-M	PS	Ν	LS	PS-M	PS	
27g. Transportation & Circulation - Pipelines									
Will the proposed project:									
1) Substantially interfere with, or compromise the integrity or affect the operation of, an existing pipeline?	x				x				
2) Be consistent with the applicable General Plan Goals and Policies for Item 27g of the Initial Study Assessment Guidelines?	x				x				

#### Impact Discussion:

**27g-1.** There are no oil and gas facilities, nor any major or minor pipelines located on or in the vicinity of the project site (RMA GIS; March 2022). The nearest major pipeline is located approximately 8 miles southeast of the project site. The proposed project will not compromise or interfere with the operation of an existing pipeline. There, will not be any project-specific or cumulative impacts related to pipelines.

**27g-2.** The proposed project is consistent with the applicable *Ventura County General Plan* Policies for Item 27g of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
28a. Water Supply – Quality (EHD)									
Will the proposed project:									
<ol> <li>Comply with applicable state and local requirements as set forth in Section 28a of the Initial Study Assessment Guidelines?</li> </ol>	x				x				
2) Be consistent with the applicable General Plan Goals and Policies for Item 28a of the Initial Study Assessment Guidelines?	x				x				

## Impact Discussion:

**28a-1.** Domestic water supply for the proposed project will be provided by an existing connection to CMWD. Existing connection and water availability for new construction was verified by a letter from CMWD dated November 12, 2020. The proposed project will not have any project-specific or cumulative impacts related to domestic water supply.

**28a-2.** The proposed project is consistent with the applicable *Ventura County General Plan* Policies for Item 28a of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
28b. Water Supply – Quantity (WPD)									
Will the proposed project:									
1) Have a permanent supply of water?		x				х			
2) Either individually or cumulatively whe combined with recently approved, curren and reasonably foreseeable probable futur projects, introduce physical developmer that will adversely affect the water supply quantity of the hydrologic unit in which th project site is located?	, e t -	x				х			
<ol> <li>Be consistent with the applicable General Plan Goals and Policies for Item 28b of th Initial Study Assessment Guidelines?</li> </ol>		x				х			

## Impact Discussion:

**28b-1.** Refer to Section 2A of this initial study.

**28b-2.** The proposed project will not introduce physical development that would adversely affect the water supply quantity of the hydrologic unit in which the project site is located and is considered to have a less than significant impact.

**28b-3.** The project is consistent with the applicable *Ventura County General Plan* Goals and Policies for Item 28b of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
28c. Water Supply - Fire Flow Requirements (									
Will the proposed project:									
1) Meet the required fire flow?		х				х			
2) Be consistent with the applicable General Plan Goals and Policies for Item 28c of the Initial Study Assessment Guidelines?		x				х			

**28c-1.** VCFPD has determined that the required fire flow is approximately 1,500 gallons per minute at 20 pounds per square inch (psi) for a minimum 2-hour duration. VCFPD requires that a minimum flow of 1,000 gallons per minute shall be provided from any one hydrant. To ensure that the required fire flow is achieved and maintained throughout the duration of the proposed project, the applicant will be required to install and maintain fire hydrants capable of meeting the required fire flow and duration as noted above. Project-specific and cumulative impacts related to fire flow are less than significant.

**28c-2.** The proposed project is consistent with the applicable *Ventura County General Plan* Policies for Item 28c of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Project Impact Degree         Cumulative Impact           Of Effect**         Degree Of Effect**									
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS		
29a. Waste Treatment & Disposal Facilities - Individual Sewage Disposal Systems (EHD)										
Will the proposed project:										

<ol> <li>Comply with applicable state and local requirements as set forth in Section 29a of the Initial Study Assessment Guidelines?</li> </ol>	х		х		
2) Be consistent with the applicable General Plan Goals and Policies for Item 29a of the Initial Study Assessment Guidelines?	х		х		

**29a-1.** The existing camp parcels are currently served by the OVSD. Thus, an on-site wastewater treatment system (i.e. septic system) will not be utilized. The Applicant will need to obtain an amendment to the OVSD Sphere of influence and annexation into the OVSD for wastewater service for the Machon Village, as it is proposed to be constructed on an open space parcel that is out of the sphere of influence of OVSD or obtain an Out of Area Service Agreement. The OVSD will need to provide a conditional Will Serve Letter for the extension of wastewater service to Machon Village prior to use inauguration. There will not be any project-specific or cumulative impacts related to an on-site wastewater treatment system.

**29a-2.** The proposed project is consistent with the applicable *Ventura County General Plan* Policies for Item 29a of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**						
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS			
29b. Waste Treatment & Disposal Facilities - Sewage Collection/Treatment Facilities (EHD) Will the proposed project:											
<ol> <li>Comply with applicable state and local requirements as set forth in Section 29b of the Initial Study Assessment Guidelines?</li> </ol>		x				x					

2) Be consistent with the applicable General Plan Goals and Policies for Item 29b of the Initial Study Assessment Guidelines?       X       X
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**29b-1.** The existing camp parcels are currently served by the OVSD. The Applicant will need to obtain an amendment to the OVSD Sphere of influence and annexation into the OVSD for wastewater service for the Machon Village, as it is proposed to be constructed on an open space parcel that is out of the sphere of influence of OVSD or obtain an Out of Area Service Agreement. The OVSD will need to provide a conditional Will Serve Letter for the extension of wastewater service to Machon Village prior to use inauguration. Project-specific and cumulative impacts related to Sewage Collection/Treatment Facilities is considered less than significant.

**29b-2.** The proposed project is consistent with the applicable *Ventura County General Plan Policies* for Item 29b of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**					
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS		
29c. Waste Treatment & Disposal Facilities - Solid Waste Management (PWA)										
Will the proposed project:										
<ol> <li>Have a direct or indirect adverse effect on a landfill such that the project impairs the landfill's disposal capacity in terms of reducing its useful life to less than 15 years?</li> </ol>		x				х				
2) Be consistent with the applicable General Plan Goals and Policies for Item 29c of the Initial Study Assessment Guidelines?		x				х				

#### Impact Discussion:

**29c-1.** As required by California Public Resources Code (PRC) 41701, Ventura County's Countywide Siting Element (CSE), adopted in June 2001 and updated annually, confirms Ventura County has at least 15 years of disposal capacity available for waste generated by in County projects.

Ventura County Ordinance Code (VCOC) Division 4, Chapter 7, Article 3 requires all proposed projects that include construction and/or demolition activities to reuse, salvage, recycle, or compost a minimum of 65 percent of the solid waste generated by their project. The Public Works Agency, Integrated Waste Management Division's waste diversion program (Form B Recycling Plan / Form C Report) ensures this 65 percent diversion goal is met prior to issuance of a final Zoning Clearance for use inauguration consistent with the Ventura County General Plan Policy HAZ-5.2. In addition, the proposed project will be consistent with the Ojai Valley Area Plan Policy OV-27.1 that encourages practices that reduce the volume of waste disposed of in landfills. Thus, project-specific and cumulative impacts related to solid waste disposal capacity are considered less than significant.

**29c-2.** The proposed project is consistent with the *Ventura County General Plan* Policies for Item 29c of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**						
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS			
29d. Waste Treatment & Disposal Facilities - Solid Waste Facilities (EHD)											
Will the proposed project:											
1) Comply with applicable state and local requirements as set forth in Section 29d of the Initial Study Assessment Guidelines?	x				x						
2) Be consistent with the applicable General Plan Goals and Policies for Item 29d of the Initial Study Assessment Guidelines?	x				x						

Impact Discussion:

**29d-1.** The proposed project does not involve a solid waste operation or facility. The proposed project will not have any project-specific or cumulative impacts related to solid waste operation facilities.

**29d-2.** The project is consistent with the applicable *Ventura County General Plan Policies* for Item 29d of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

	Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
		Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
30	. Utilities									
Wi	II the proposed project:									
a)	Individually or cumulatively cause a disruption or re-routing of an existing utility facility?		x				х			
b)	Individually or cumulatively increase demand on a utility that results in expansion of an existing utility facility which has the potential for secondary environmental impacts?		х				х			
c)	Be consistent with the applicable General Plan Goals and Policies for Item 30 of the Initial Study Assessment Guidelines?		х				х			

## Impact Discussion:

**30a. and 30b.** The project site will continue to be served by Southern California Edison. The proposed project will not cause a disruption or re-routing of an existing utility facility. The construction of Machon Village will create an increase in the demand for electricity. However, the increase in electrical demand is not considered substantial such that it would create an adverse impact for the surrounding residential areas. To ensure that impacts from the project remain less than significant, the applicant will be required to minimize energy consumption with the installation of energy efficient lighting throughout the camp (refer to Mitigation Measure BIO-4). The applicant will also be subject to a standard condition of approval that requires all new utilities lines be placed

underground. Project-specific and cumulative impacts related to existing utility facilities or is less than significant.

**30c.** The project is consistent with the applicable *Ventura County General Plan* Policies for Item 30 of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
31a. Flood Control Facilities/Watercourses - W	s - Watershed Protection District (WPD)								
Will the proposed project:									
1) Either directly or indirectly, impact flood control facilities and watercourses by obstructing, impairing, diverting, impeding, or altering the characteristics of the flow of water, resulting in exposing adjacent property and the community to increased risk for flood hazards?		x				х			
2) Be consistent with the applicable General Plan Goals and Policies for Item 31a of the Initial Study Assessment Guidelines?		x				х			

## Impact Discussion:

**31a-1.** The project site is situated upstream of and next to McDonald Canyon Drain, which is a Ventura County Watershed Protection District jurisdictional redline channel. No direct connections to this Ventura County Watershed Protection District channel are proposed as a result of the project. Approximately 3,602 sq. ft. of unpermitted built structures will be legalized and approximately 12,285 sq. ft. of new buildings (i.e., Machon Village) will be built (a total of 15,887 sq. ft. of accessory structures). Estimated earthwork includes 1,190 cubic yards of cut and 322 cubic yards of fill with excess soil balanced onsite. Impacts from increased impervious area and stormwater drainage design will be required to be reduced to a less-than-significant level under the conditions imposed by the County of Ventura Public Works Agency, Engineering Services Department, Development & Inspection Services Division, by reference to

Appendix J of the Ventura County Building Code. These conditions require the proposed development to be designed, so that runoff from the proposed project site will be released at no greater rate than the undeveloped flow rate, and in such manner as to not cause an adverse impact downstream in peak velocity or duration. Watershed Protection District staff reviewed the proposed project design and determined that the project design implemented with the conditions mentioned above reduces the direct and indirect project-specific and cumulative impacts to flood control facilities and watercourses. As such, project-specific and cumulative impacts related to redline channels under the jurisdiction of the Ventura County Watershed Protection District are less than significant.

**31a-2.** The project is consistent with applicable *Ventura County General Plan Policies* for Item 31a of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro		npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
31b. Flood Control Facilities/Watercourses - Other Facilities (PWA)									
Will the proposed project:									
<ol> <li>Result in the possibility of deposition of sediment and debris materials within existing channels and allied obstruction of flow?</li> </ol>	x					x			
2) Impact the capacity of the channel and the potential for overflow during design storm conditions?	x				х				
<ol> <li>Result in the potential for increased runoff and the effects on Areas of Special Flood Hazard and regulatory channels both on and off site?</li> </ol>	x				x				
4) Involve an increase in flow to and from natural and man-made drainage channels and facilities?		x				х			

**31b-1. and 31b-2.** The proposed project preserves the existing runoff and local drainage patterns. The project and subsequent runoff will be maintained in the present condition. The proposed project will not create an obstruction of flow in the existing drainage as runoff from the project site will maintain the drainage conditions that presently exist.

The proposed project will not impact the capacity of the downstream channel (McDonald Canyon Drain) or increase the potential for channel overflow during design storm conditions. Runoff is by overland flow into a grassy field similar to the present condition.

**31b-3.** and **31b-4.** The proposed project will result in a small increase in flow from the existing conditions as the runoff from impervious surfaces will be by overland flow into the existing grassy field south of the proposed Machon Village at the same rate as the present condition. There will be no adverse effects to Areas of Special Flood Hazard, regulatory channels, and natural and man-made channels. Project-specific and cumulative impacts related to drainage facilities not under the jurisdiction of the Watershed Protection District are less than significant.

**31b-5.** The project is consistent with applicable *Ventura County General Plan Policies* for Item 31b of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*		-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
32. Law Enforcement/Emergency Services (Sheriff)									
Will the proposed project:									

a) Have the potential to increase demand for law enforcement or emergency services?	х		Х	
b) Be consistent with the applicable General Plan Goals and Policies for Item 32 of the Initial Study Assessment Guidelines?	х		х	

**32a.** Camp Ramah programs and activities have the potential to increase demand for law enforcement or emergency services. Programs and activities (especially events that involve the use of amplified music and consumption of alcohol), which are similar to the proposed events that have occurred within the Ventura County Sheriff's Department's jurisdiction, have resulted in increased calls to the Ventura County Sheriff's Department. Security personnel will be provided by Camp Ramah staff. Alcohol is not provided or made available for any scheduled non-summer camp program or activity or during the summer camp session. Therefore, project-specific and cumulative impacts related to law enforcement / emergency services is less than significant.

**32b.** The project is consistent with applicable *Ventura County General Plan* Policies for Item 32b of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*	Pro	-	npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
33a. Fire Protection Services - Distance and R	espo	onse (V	/CFPD)						
Will the proposed project:									
<ol> <li>Be located in excess of five miles, measured from the apron of the fire station to the structure or pad of the proposed structure, from a full-time paid fire department?</li> </ol>	x				х				

2) Require additional fire stations and personnel, given the estimated response time from the nearest full-time paid fire department to the project site?	х		х		
3) Be consistent with the applicable General Plan Goals and Policies for Item 33a of the Initial Study Assessment Guidelines?	Х		х		

**33a-1.** and **33a-2.** The nearest fire station to the project site is Ventura County Fire Station 21, addressed at 1201 Ojai Avenue in Ojai, which is located approximately 3.1 miles southeast of the project site. The distance from Fire Station 21 to the project site is adequate, and the creation of a new or expansion of an existing fire station or additional equipment will not be required as a result of the proposed project. There will not be any project-specific or cumulative impacts related to fire protection services.

**33a-3.** The project is consistent with applicable *Ventura County General Plan* Policies for Item 33a of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

Issue (Responsible Department)*		Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
33b. Fire Protection Services – Personnel, Equ	uipmo	ent, ar	nd Facilit	ies (V	CFPD	)			
Will the proposed project:									
1) Result in the need for additional personnel?	х				х				
2) Magnitude or the distance from existing facilities indicate that a new facility or additional equipment will be required?	x				х				
3) Be consistent with the applicable General Plan Goals and Policies for Item 33b of the Initial Study Assessment Guidelines?	х				х				

**33b-1. and 33b-2.** Ventura County Fire Station 21 is located approximately 3.1 miles to the southeast of the project site. Based on this distance from an existing fire station, the need for additional fire personnel is not required. There will not be any project-specific impact or cumulative impact related to the need for additional fire personnel, a new fire station, or additional equipment.

**33b-3.** The project is consistent with applicable *Ventura County General Plan* Policies for Item 33b of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*		Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**				
		LS	PS-M	PS	Ν	LS	PS-M	PS		
34a. Education - Schools										
Will the proposed project:	ĺ									
<ol> <li>Substantially interfere with the operations of an existing school facility?</li> </ol>	х				х					
2) Be consistent with the applicable General Plan Goals and Policies for Item 34a of the Initial Study Assessment Guidelines?	х				х					

## Impact Discussion:

**34a-1.** The closest schools to the project site are the Ojai Valley School, located approximately 2.2 miles southeast of the project site, and Nordhoff High School, located approximately 2.1 miles to the southwest of the project site. The camp will operate throughout the year. All programs and activities occur onsite and travel to and from the site will not occur during school peak pick-up and drop-off times because the youth camp is during the summer and the non-summer camp programs are scheduled so that arrivals and departures avoid impacts to area schools. No increase in the student population will not occur. There will not be any project-specific or cumulative impacts related to schools.

**34a-2.** The project is consistent with applicable *Ventura County General Plan* Policies for Item 33a of the *Ventura County Initial Study Assessment Guidelines*.

## Mitigation/Residual Impact(s)

None.

	Issue (Responsible Department)*		Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**				
		Ν	LS	PS-M	PS	Ν	LS	PS-M	PS		
34	b. Education - Public Libraries (Lib. Agency	)									
Wi	II the proposed project:										
1)	Substantially interfere with the operations of an existing public library facility?	х									
2)	Put additional demands on a public library facility which is currently deemed overcrowded?	х									
3)	Limit the ability of individuals to access public library facilities by private vehicle or alternative transportation modes?	х									
4)	In combination with other approved projects in its vicinity, cause a public library facility to become overcrowded?					х					
5)	Be consistent with the applicable General Plan Goals and Policies for Item 34b of the Initial Study Assessment Guidelines?	х				х					

## Impact Discussion:

**34b-1. through 34b-4.** The nearest public library is Ojai Library, located approximately 2.1 southeast of the project site. The proposed project does not include physical development that could impede any roadways or alternative transportation facilities that afford access to a public library. All new development will occur on the project site. Furthermore, the proposed project does not include the introduction of a new use (e.g., new permanent housing) that has the potential to substantially increase the population and create a corresponding demand for new library facilities.

The proposed project will not put additional demands on a public library facility, and the proposed project will not cause a public library facility to become overcrowded. There will not be any project-specific or cumulative impacts related to library services.

**34b-5.** The project is consistent with applicable *Ventura County General Plan* Policies for Item 34b of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*		Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**			
		LS	PS-M	PS	Ν	LS	PS-M	PS	
35. Recreation Facilities (GSA)									
Will the proposed project:									
a) Cause an increase in the demand for recreation, parks, and/or trails and corridors?		x				x			
<ul> <li>b) Cause a decrease in recreation, parks, and/or trails or corridors when measured against the following standards: <ul> <li>Local Parks/Facilities</li> <li>5 acres of developable land (less than 15% slope) per 1,000 population;</li> <li>Regional Parks/Facilities</li> <li>5 acres of developable land per 1,000 population; or,</li> <li>Regional Trails/Corridors</li> <li>2.5 miles per 1,000 population?</li> </ul> </li> </ul>		x				x			
c) Impede future development of Recreation Parks/Facilities and/or Regional Trails/Corridors?		x				x			
<ul> <li>d) Be consistent with the applicable General Plan Goals and Policies for Item 35 of the Initial Study Assessment Guidelines?</li> </ul>		x				x			

## Impact Discussion:

**35a. through 35c.** Approximately seven acres of the existing camp is located on United States Forest Service land (APNs 010-0-070-030 and 010-0-070-300). The Cozy Dell, Pratt to Foothill, and the Foothill Trails are located adjacent to the project site and are part of the United States Los Padres National trail system. The public use of these trails will continue. The proposed project will not adversely impact the use and accessibility of the existing trails. There are no parks located within the vicinity of the project site. Therefore, project-specific and cumulative impacts related to recreational facilities will be less than significant.

**35d.** The project is consistent with applicable *Ventura County General Plan* Goals and Policies for Item 35 of the *Ventura County Initial Study Assessment Guidelines.* 

## Mitigation/Residual Impact(s)

None.

# Topics Not Covered by County Initial Study Assessment Guidelines: State CEQA Guidelines Topics

	Issue (Responsible Department)*		Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**			
		Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
36	. Tribal Cultural Resources									
W	ould the project:									
a)	Cause a substantially adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is graphically defined in terms of size, scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.			Х			Х			
b)	Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k)? or		х				х			

<ul> <li>c) A resource determined by the Lead Agency, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.</li> </ul>		x			х			
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**36a.** through **38c**. As stated in item 8 a above, an Archaeological Phase I Report was prepared by Padre and Associates (dated September 2019) to investigate the existence of historical and cultural resources on the project site. The study concluded that there are no cultural resources that exist within the project site. However, on December 9, 2019, Planning Division staff consulted with Native American Tribal Consultant Ms. Tumamait-Stenslie regarding how the Phase 1 archeological survey was conducted. As the Phase I survey was a surface/on-foot survey that did not include shovel tests pits (STPs) or trenching and lack of subsurface testing, Ms. Tumamait-Stenslie's concluded there would be potentially significant but mitigable impacts to cultural resources. Impacts would be reduced to a less than significant level by the applicant obtaining a qualified archaeologist and Native American would be required onsite to monitor any subsurface grading, trenching, or construction activities for future development on the project site (Refer to mitigation measure CUL-1).

According to the Historic Resources Report that was prepared for the proposed project by San Buenaventura Research Associates (Attachment 11), none of the existing buildings appear to be eligible for listing on the National and California Register of Historical Resources, or eligible as a County Landmark. Therefore, project-specific and cumulative impacts related to tribal cultural resources is less than significant.

#### Mitigation/Residual Impact(s)

With the implementation of this mitigation measure CUL-1, project-specific and cumulative impacts will be reduced to a less than significant level.

Issue (Responsible Department)*	Pro		npact De Effect**	gree	Cumulative Impact Degree Of Effect**				
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
37. Wildfire									

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	x
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	x x
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	x x
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	x x

**37a. through 37d.** The project site is within a Very High Fire Hazard Severity Zone under the jurisdiction of the Cal Fire. The nearest fire station (Station 21) is located approximately 3.1 miles southeast of the project site.. VCFPD requires that a minimum flow of 1,000 gallons per minute shall be provided from any one hydrant. To ensure that the required fire flow (1,500 gallons per minute at 20 pounds per square inch (psi) for a minimum 2-hour duration) is achieved and maintained throughout the duration of the proposed project, the applicant will be required to install and maintain fire hydrants capable of meeting the required fire flow and duration as noted above. The applicant will also be required to clear and maintain a fuel modification area adjacent to a structure's footprint for a distance of 100 feet or to the property line if less than 100 feet, and all grass and brush will be required to be removed a distance of 10 feet on each side of all access road(s)/driveway(s) within the project. With the implementation of these standard conditions of approval. the project would be consistent with the applicable Ventura County General Plan fire-related goals and policies. Finally, the Ventura County

Public Works Agency—Land Development Services analyzed the proposed project and determined that it would not result in adverse effects with regard to slope instability, landslides, drainage, or flooding. Project-specific and cumulative impacts related to wildfire hazards is less than significant.

## Mitigation/Residual Impact(s)

None.

Issue (Responsible Department)*		Project Impact Degree Of Effect**				Cumulative Impact Degree Of Effect**			
	Ν	LS	PS-M	PS	Ν	LS	PS-M	PS	
38. Energy									
Would the project:									
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?		x				x			
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?		x				x			

## Impact Discussion:

**38a.** and **38b.** The proposed project includes energy efficiency features which would reduce the consumption of energy resources. All commercial on-road and off-road diesel vehicles used during the construction phase are subject to the idling limits required by applicable California State laws and VCAPCD Rules and Regulations. The Machon Village would be designed to comply with Title 24 energy conservation requirements. All new windows would be dual glazed. All lighting fixtures would include LED elements and occupancy sensor switches. All appliance (washer, dryer, microwave, cooktop) would be Energy Star certified.

The policies and programs of the Ventura County General Plan do not compel privatelyinitiated discretionary development to comply with specific renewable energy or energy efficiency standards or requirements. Therefore, the proposed project would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy or conflict with a known local renewable or energy efficiency plan. Project-specific and cumulative impacts related to energy resources is less than significant.

## Mitigation/Residual Impact(s)

None.

\*Key to the agencies/departments that are responsible for the analysis of the items above:

Airports - Department Of Airports EHD - Environmental Health Division Harbors - Harbor Department PWA - Public Works Agency AG. - Ågricultural Department VCFPD - Fire Protection District Lib. Agency - Library Services Agency Sheriff - Sheriff's Department VCAPCD - Air Pollution Control District GSA - General Services Agency Plng. - Planning Division WPD – Watershed Protection District

#### \*\*Key to Impact Degree of Effect:

N - No Impact

- LS Less than Significant Impact
- PS-M Potentially Significant but Mitigable Impact

PS – Potentially Significant Impact

## **Section C – Mandatory Findings of Significance**

		Yes	No
1.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		х
2.	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future).		х
3.	Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effect of other current projects, and the effect of probable future projects. (Several projects may have relatively small individual impacts on two or more resources, but the total of those impacts on the environment is significant.)		х

4. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	х

## Findings Discussion:

- 1. As stated in Section B, Items 4 of this initial study, the proposed project would potentially have significant impacts on biological resources and noise. However, with the imposition of the mitigation measures as defined in item 4a (Tree Protection Plan; BIO-1, Tree Health Monitoring and Reporting; BIO-2, Scrub Habitat and Oak Woodland Construction Exclusion Fencing; BIO-3) and item 4e (Lighting Plan) related to potential impacts would be mitigated to less-than-significant both on project-specific and cumulative levels. The proposed project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
- 2. The proposed project does not have the potential to achieve short-term goals to the disadvantage of long-term environmental goals.
- 3. As stated in Section B of this initial study, with the implementation of the recommended Mitigation Measures, the proposed project will not make a cumulatively considerable contribution to a significant cumulative impact.
- As stated in Section B of this initial study, the proposed project will have at most a less-than-significant impact with regard to adverse effects, either directly or indirectly, on human beings.

### Section D – Determination of Environmental Document

### Based on this initial evaluation:

[]	I find the proposed project <b>could not</b> have a significant effect on the environment, and a <b>Negative Declaration</b> should be prepared.
[ <b>X</b> ]	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measure(s) described in Section B of the Initial Study will be applied to the project. A <b>Mitigated Negative Declaration</b> should be prepared.
[]	I find the proposed project, individually and/or cumulatively, MAY have a significant effect on the environment and an <b>Environmental Impact Report</b> (EIR) is required.*
[]	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An <b>Environmental Impact Report</b> is required, but it must analyze only the effects that remain to be addressed.*
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project, <b>nothing further is required</b> .

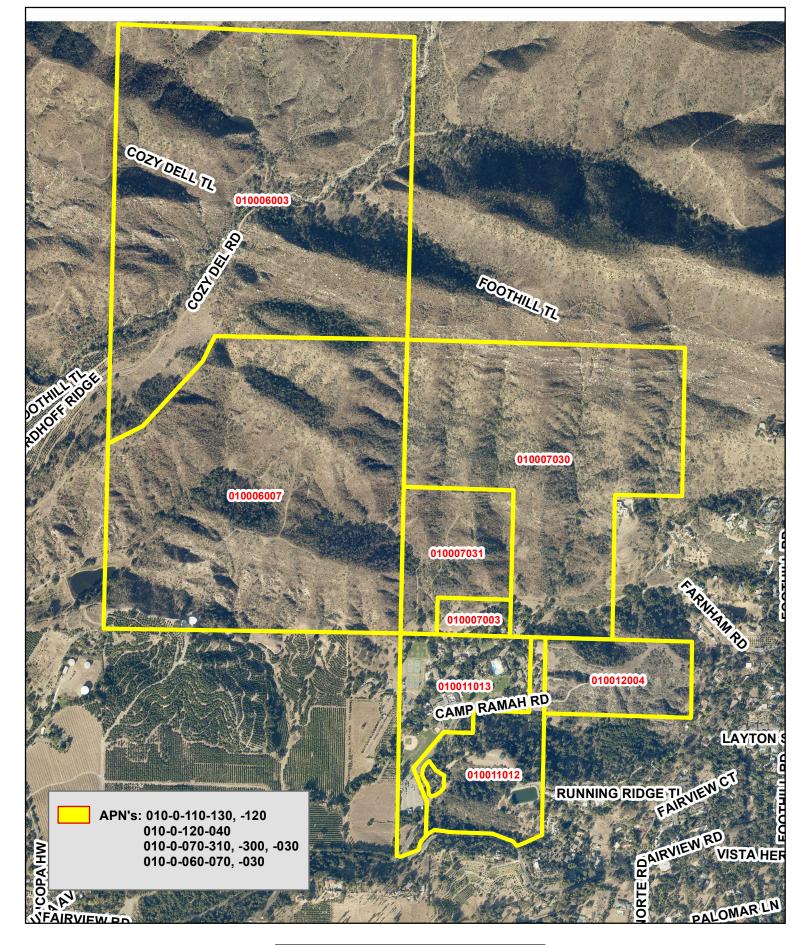
Kristina Boero, Senior Planner

4-14-2022

Date

### **Attachments:**

Attachment 1	Aerial Location Map
Attachment 2	Maps
Attachment 3	Project Plans and speaker location plan





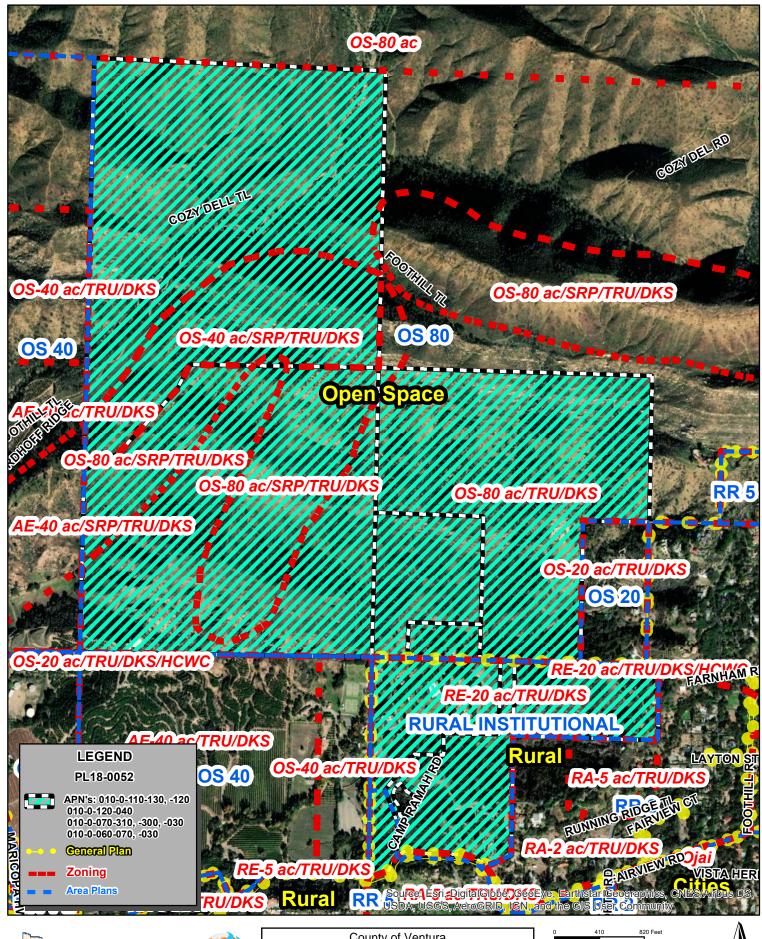


County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 1 - Aerial Location Map

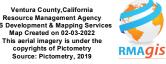
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1,000 Feet



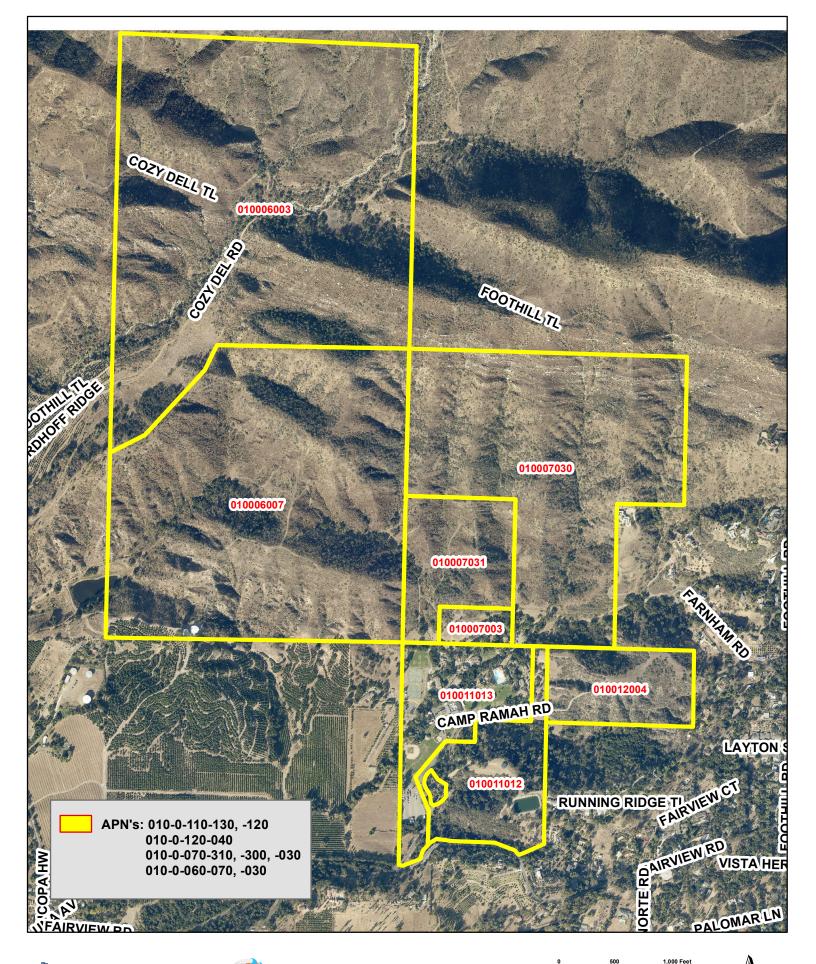


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County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 2 - Maps 0 410 820 Feet Disclaimer: This Map was created by the Ventura County Resourc Management Agency, Mapping Services - GIS which is designed public agencies. The County does no twarrant the accuracy of this mapand no decision involving a risk of economic loss or physical injury should be made in reliance thereon.

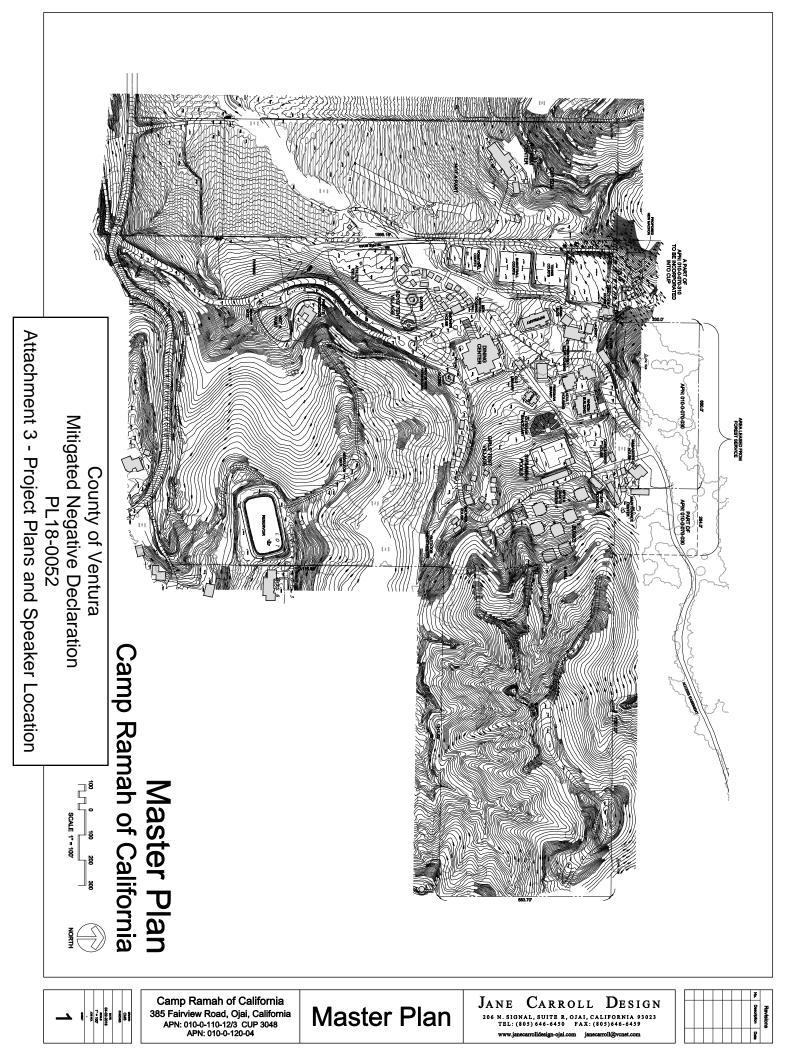


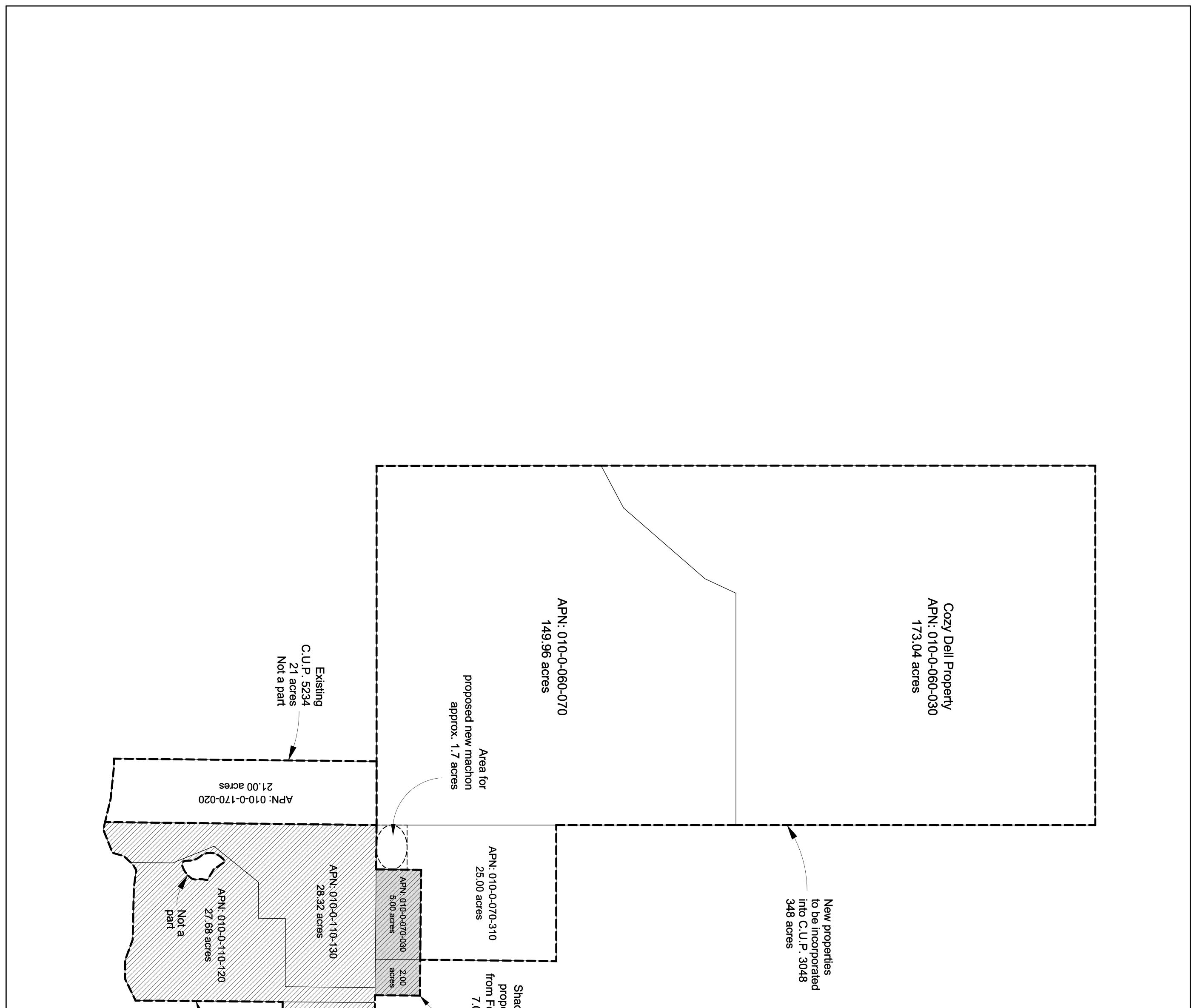






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300 SCALE 1" = 300'

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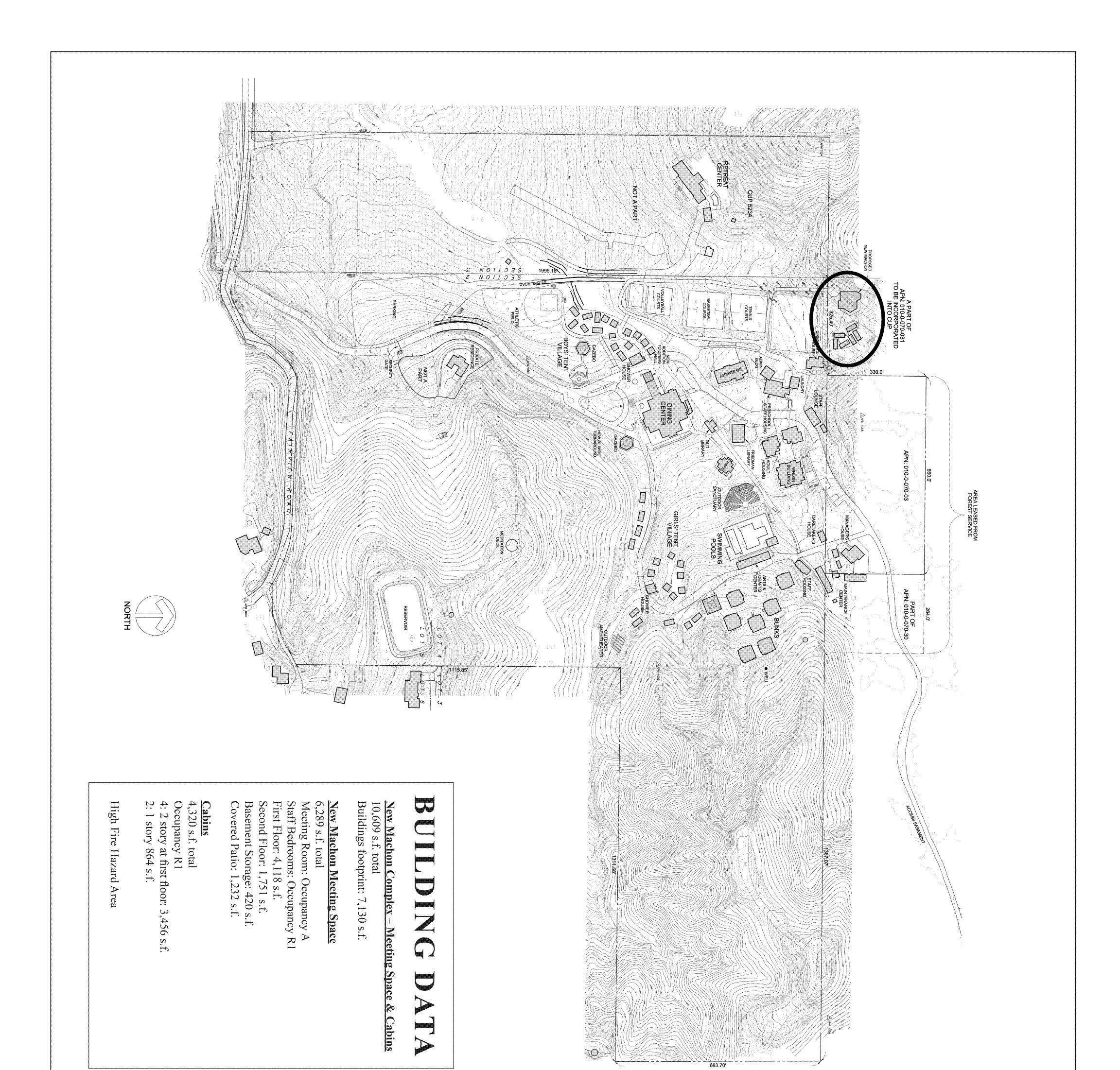
# CALE 1"= 300' 60' 90' NORTH

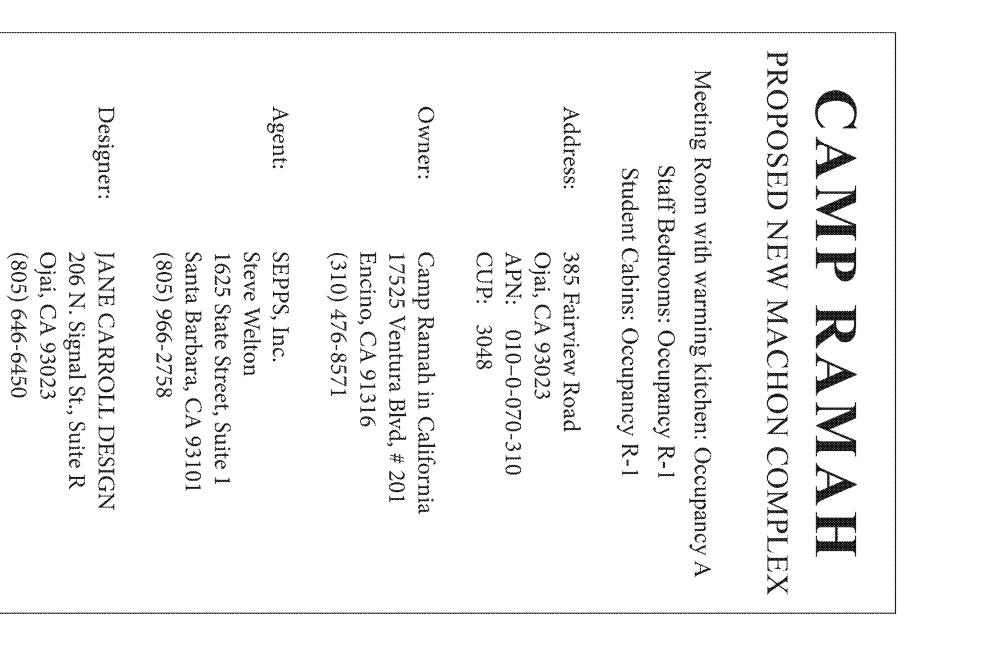
Existing C.U.P. 3048 83.45 acres

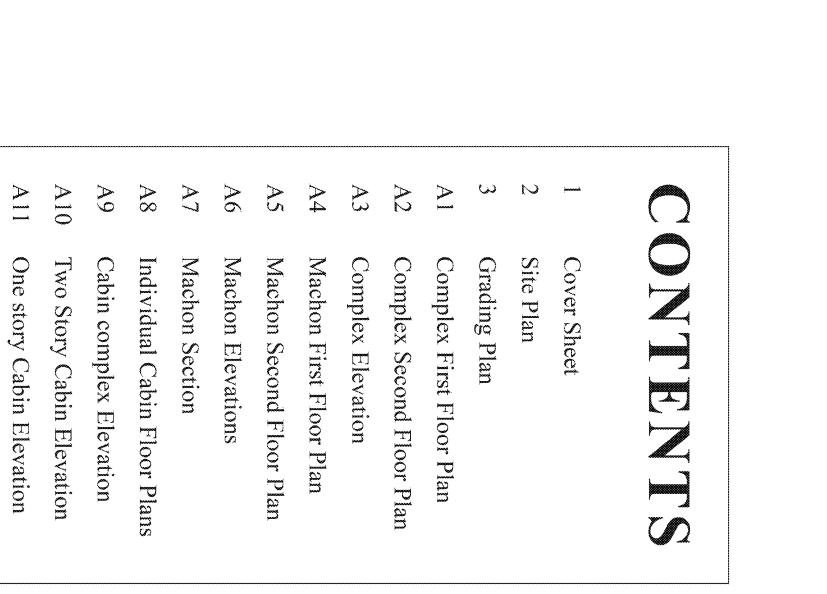
APN: 010-0-120-040 20.45 acres

Shaded area is property leased from Forest Service 7.00 acres

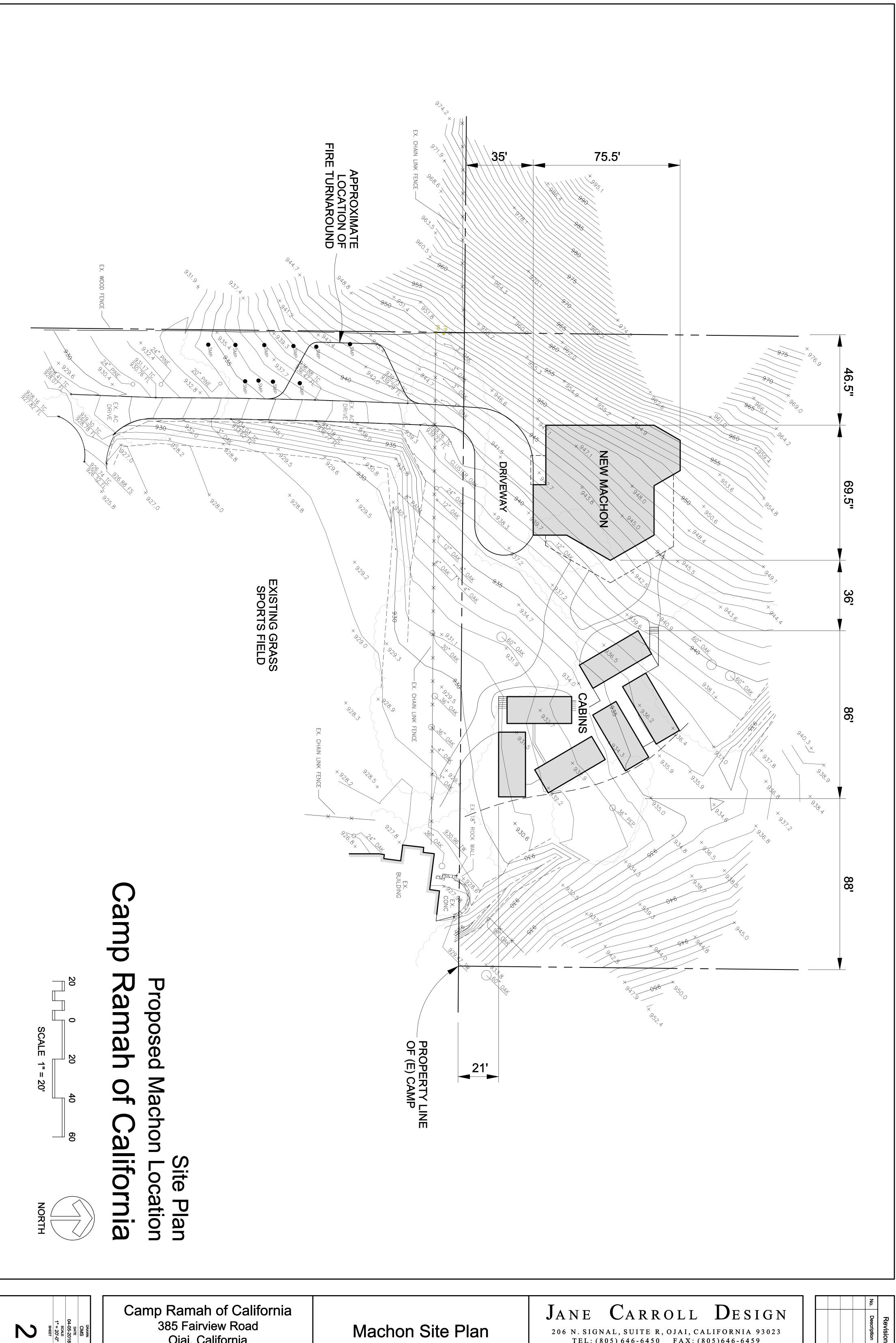












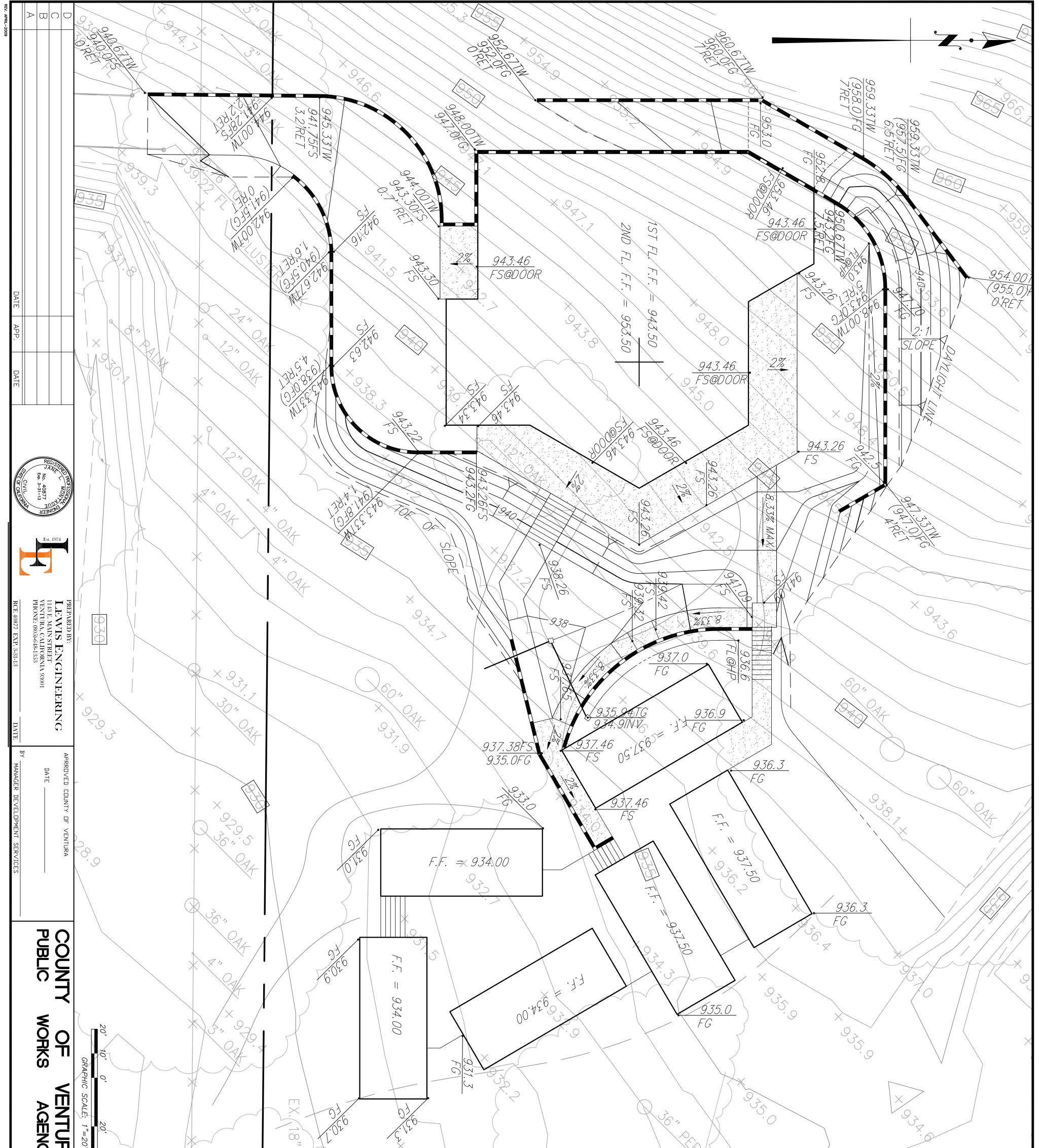
Description Revisions Date

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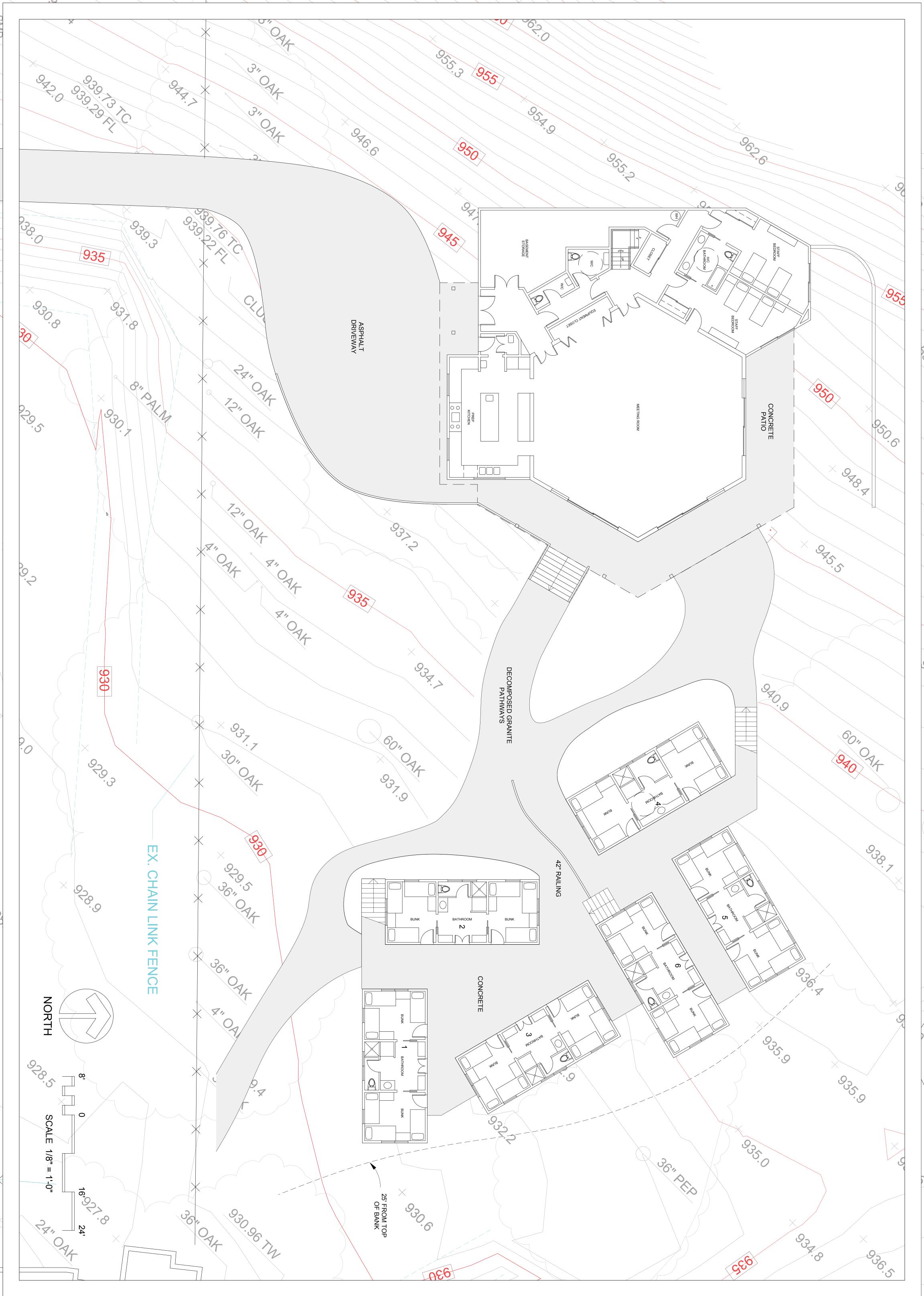
www.janecarrolldesign-ojai.com janecarroll@vcnet.com

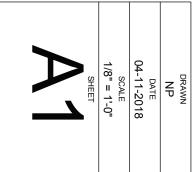
Ojai, California APN:

Machon Site Plan



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DRAINAGE PLAN <b>CAMP RAMAH</b> 385 FAIRVIEW RD. OJAI CA.	EARTHWORK QUANTILES         QUANTITES:       CUT       1190       CY       FLL       322       CY         EARTHWORK QUANTITES       RE ESTIMATES ONLY. THEY ARE THE CALCULATED QUANTITES BASED ON THE DIFFERENCE BETWEEN EXSTING GROUND ELEVATIONS AND ROUGH GRADE ELEVATIONS AND THEY MAKE NO PROVISIONS FOR STRIPPING, SHRINKAGE, SETTLEMENT, NOR STRUCTURAL EXCANATIONS. THEREFORE, THE ACTUAL VOLUME OF EARTH MOVED MAY BE DIFFERENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EARTHWORK QUANTITES FOR HIMSELF AND SHALL NOT RELY ON THESE ESTIMATES FOR PAYMENT PURPOSES. NO CERTIFICATION AS TO THE EARTHWORK BALANCE OR ACCURACY IS IMPLIED.		EXISTING UTILITIES AND FACILITIES. UTILITIES AND FACILITIES ABOVE AND BELOW THE GROUND ARE LOCATED FROM THE BEST AVAILABLE RECORD INFORMATION. THE CONTRACTOR SHALL TAKE DUE PRE- CAUTIONARY MEASURES TO PROTECT THE UTILITIES OR FACILITIES SHOWN ON THE PLANS FROM HARM. ATTENTION IS DIRECTED TO POSSIBLE EXISTENCE OF UNDER- GROUND UTILITIES OR FACILITIES NOT KNOWN TO THE ENGINEER OR IN A LOCATION DIFFERENT FROM THAT WHICH IS SHOWN ON THE PLANS. THE CONTRACTOR SHALL TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND FACILITY, OR TO AVOID INTERFERING WITH THEIR SERVICE. THE CONTRACTOR SHALL CONTACT THE REGIONAL NOTIFICATION CENTER (UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA AT 1-800-422-4133) AT LEAST TWO (2) WORKING DAYS BEFORE STARTING ANY EXCAVATION, AND OBTAIN AN INQUIRY IDENTIFICATION NUMBER. TOPOGRAPHY AND BOUNDARY SHOWN IS BASED ON AN A FIELD SURVEY DATED	GRADE OF 2 HORIZONTAL TO 1 VERTICA. LL NOT EXCEED 2 HORIZONTAL TO 1 VEL SHALL BE PLANTED WITH APPROVED PEL RIOR TO FINAL INSPECTION. HAN 1% EXCEPT FOR PAVED SURFACES. DATION LINE OF ANY STRUCTURE IS REQ DATION LINE OF ANY STRUCTURE IS REQ	SUCH FACILITIES ENCOUNTERED SHALL BE REMOVED AND THE DEPRESSIONS PROPERLY FILLED AND COMPACTED UNDER OBSERVATION OF THE SOLS ENGINEER. AREA WITH EXISTING SLOPES GREATER THAN 5:1 WHICH ARE TO RECIEVE FILL MATERIAL SLOPES AND SHALL EXTEND THROUGH THE LOOSE SURFACE SOLS. THE TOE OF ALL FILL INSTALLATION OF THE KEYWAY SHALL BE PER THE SOLS ENGINEER'S RECOMMENDATION, AND PER DETAIL C, SHEET 1. FILL MATERIAL SHALL BE SPREAD IN LIFTS NOT EXCEEDING 8-INCHES IN COMPACTED THICKNESS, MOISTENED OR DRIED AS NECESSARY TO NEAR OPTIMUM MOISTURE CONTENT AND COMPACTED BY AN APPROVED METHOD. FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% MAXIMUM DENSITY. LOOSELY BACKFILLED GEOLOGIC TRENCHES REQUIRE RECOMPACTION. SOME FILL AREAS MAY REQUIRE COMPACTION TO A GREATER DENSITY AS CALLED FOR IN THE SOLLS REPORT.	THE SOILS ENGINEER SHALL PROVIDE OBSERVATION AND TESTING DURING GRADING OPERATIONS IN THE FIELD AND SHALL SUBMIT A FINAL REPORT STATING THAT ALL EARTHWORK WAS PROPERLY COMPLETED AND IS SUBSTANTIALLY IN CONFORMANCE WITH REQUIREMENTS OF THE COUNTY GRADING ORDINANCE. AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION (EXCEPT TREES INDICATED TO REMAIN), INCLUDING ROOTS AND OTHER UNSUITABLE MATERIAL FOR A STRUCTURAL FILL, THEN SCARIFIED (PER SOILS REPORT) PRIOR TO PLACING OF ANY FILL (CALL GRADING INSPECTOR FOR INITIAL INSPECTION). A THOROUGH SEARCH SHALL BE MADE FOR ALL ABANDONED MAN-MADE FACILITIES SUCH AS SEPTIC TAMK SYSTEM FILTI OF WATER STORAGE TAMKS AND PIPELINES OF CONDUTS. ANY	OCCUPYING BUILDINGS IN THE VICINITY OF THE JOB SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST RESULTING FROM HIS GRADING OPERATIONS. BEFORE BEGINNING WORK REQUIRED EXPORTING OR IMPORTING OF MATERIALS, THE CON SHALL OBTAIN APPROVAL FROM COUNTY DEPARTMENT OF PUBLIC WORKS (ROADS DIVIS ALL RECOMMENDATIONS OF THE SOILS REPORT PREPARED BY DATED	<b>GENERAL NOTES</b> ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (S.S.P. W.C.). ADDITIONAL REFERENCE IS MADE TO THE VENTURA COUNTY BUILDING CODE WHICH ADOPTS BY REFERENCE CBC CHAPTER 33 APPENDIX J. EXCAVATION AND GRADING, THE VENTURA COUNTY STANDARD LAND DEVELOPMENT SPECIFICATIONS, AND THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (S.P.P. W.C.) CONTRACTOR SHALL NOTIFY THE COUNTY GRADING INSPECTOR AND THE SOILS ENGINEER AT LEAST 48 HOURS BEFORE START OF ANY GRADING WORK. THEY SHALL BE NOTIFIED OF THE TIME AND LOCATION OF THE PRE-CONSTRUCTION CONFERENCE. CONTRACTOR SHALL EMPLOY ALL LABOR, EQUIPMENT AND METHODS REQUIRED TO PREVENT HIS OPERATIONS FROM PRODUCING DUST IN AMOUNTS DAMAGING TO ADJACENT PROPERTY, CULTIVATED VEGETATION AND DOMESTIC ANIMALS OR CAUSING A NUISANCE TO PREVENT.
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Camp Ramah of California 385 Fairview Road Ojai, California APN:

First Floor Plan

JANE CARROLL DESIGN 206 N. SIGNAL, SUITE R, OJAI, CALIFORNIA 93023

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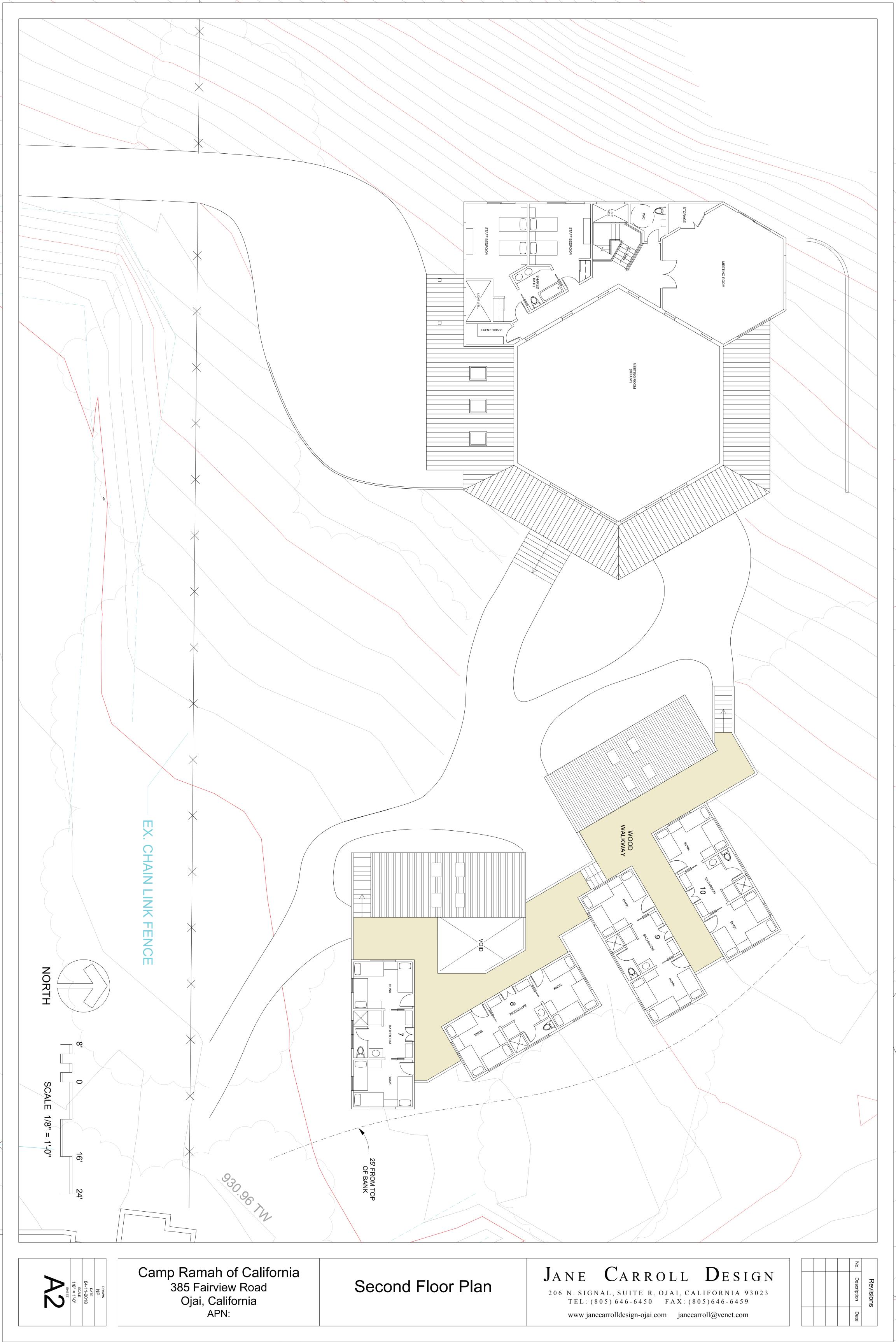
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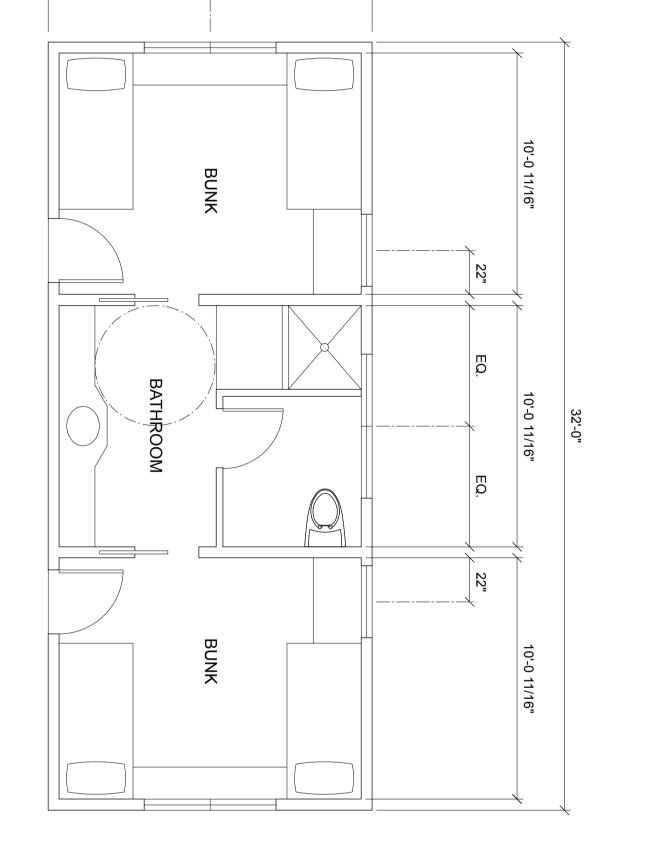
Revisions

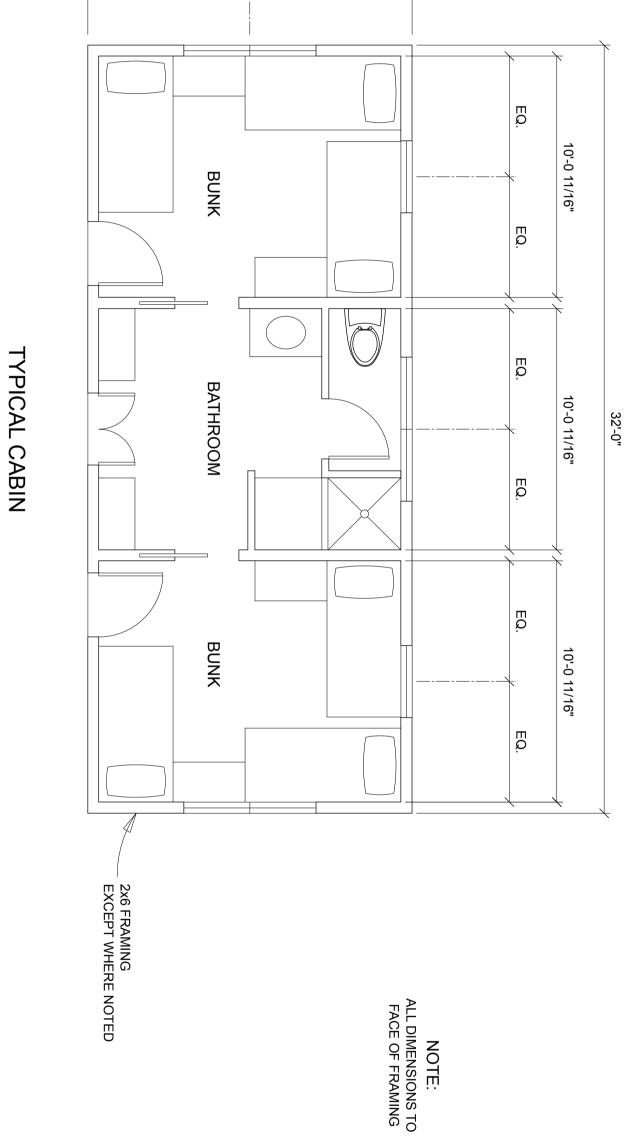
www.janecarrolldesign-ojai.com janecarroll@vcnet.com



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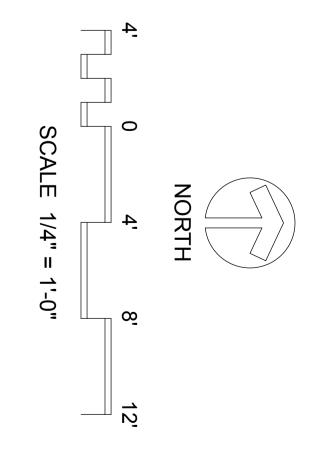




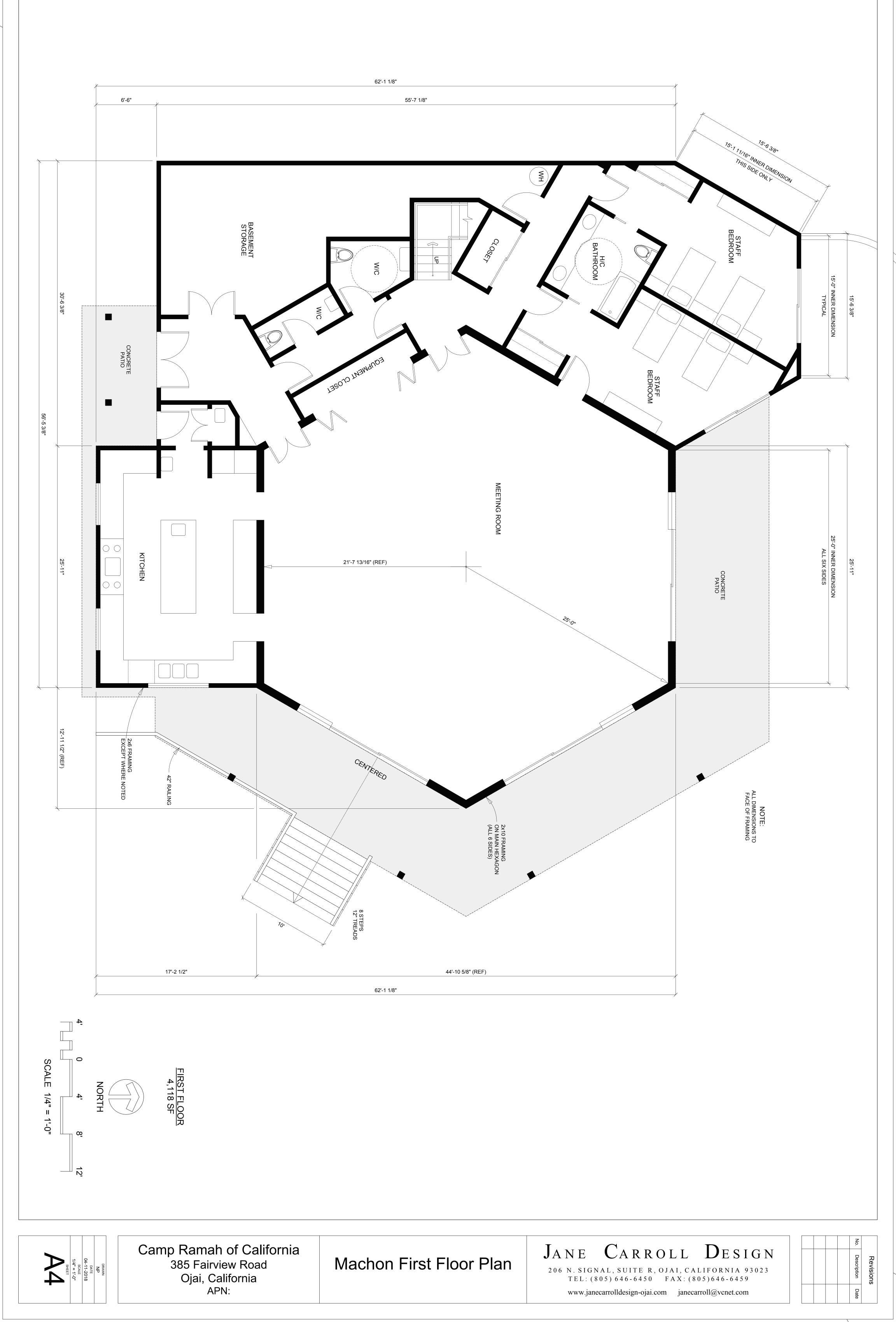


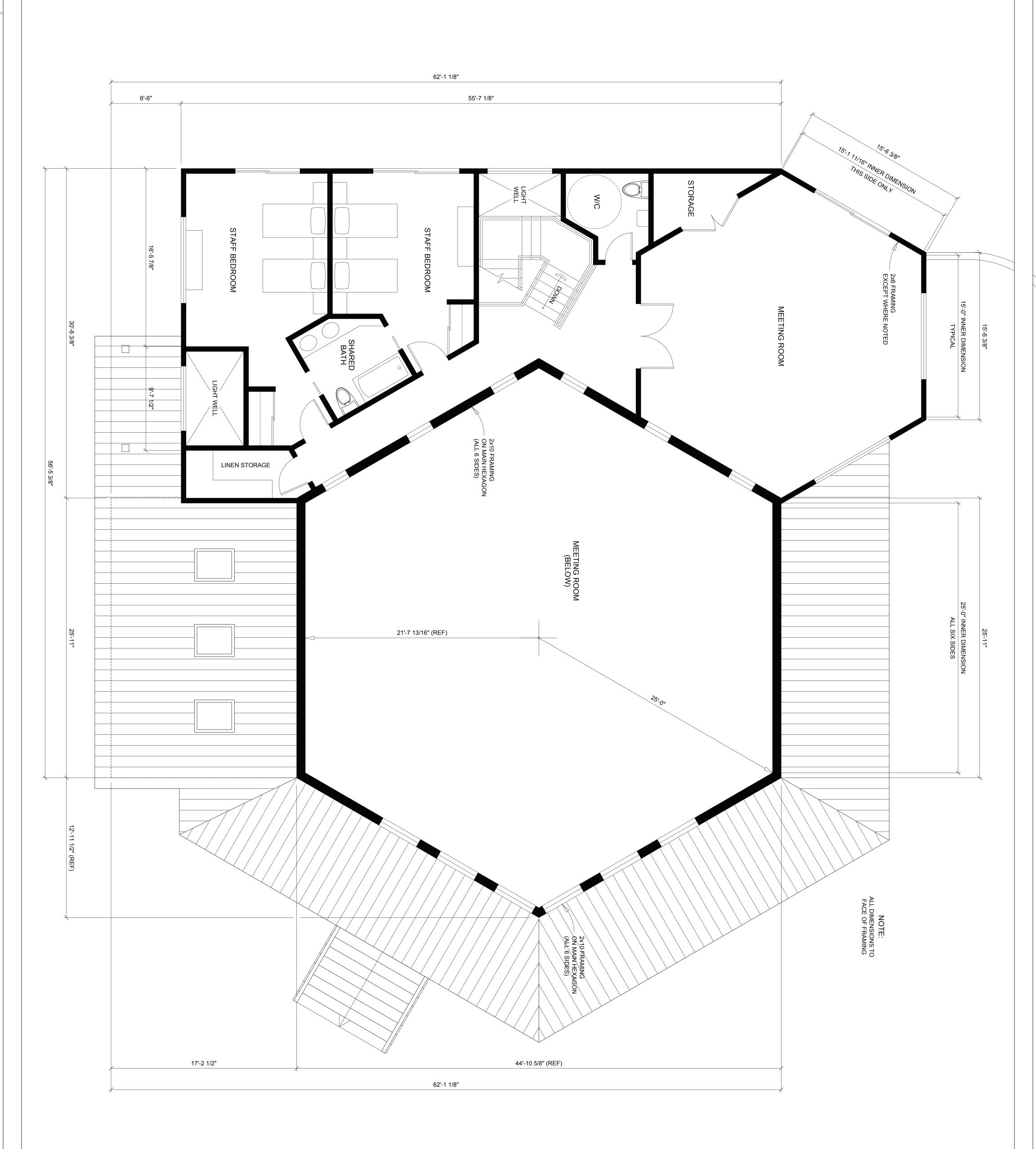
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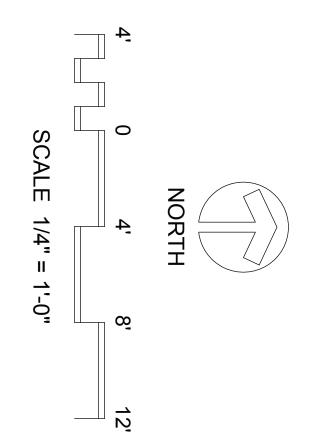
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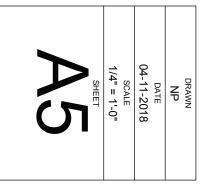












Camp Ramah of California
385 Fairview Road

SECOND FLOOR 1,751 SF

> Ojai, California APN:

Machon Second Floor Plan



No.

Description

Date

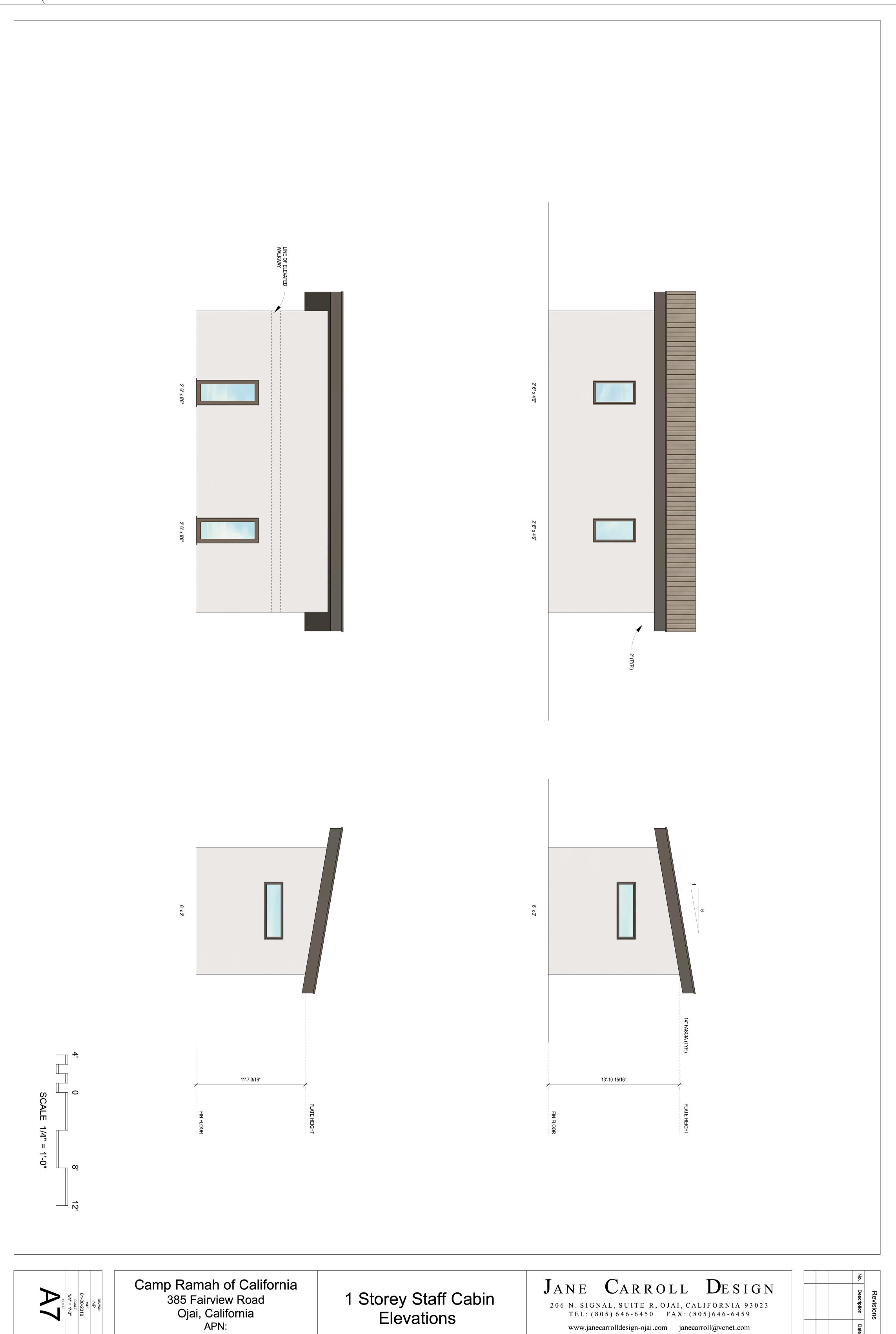
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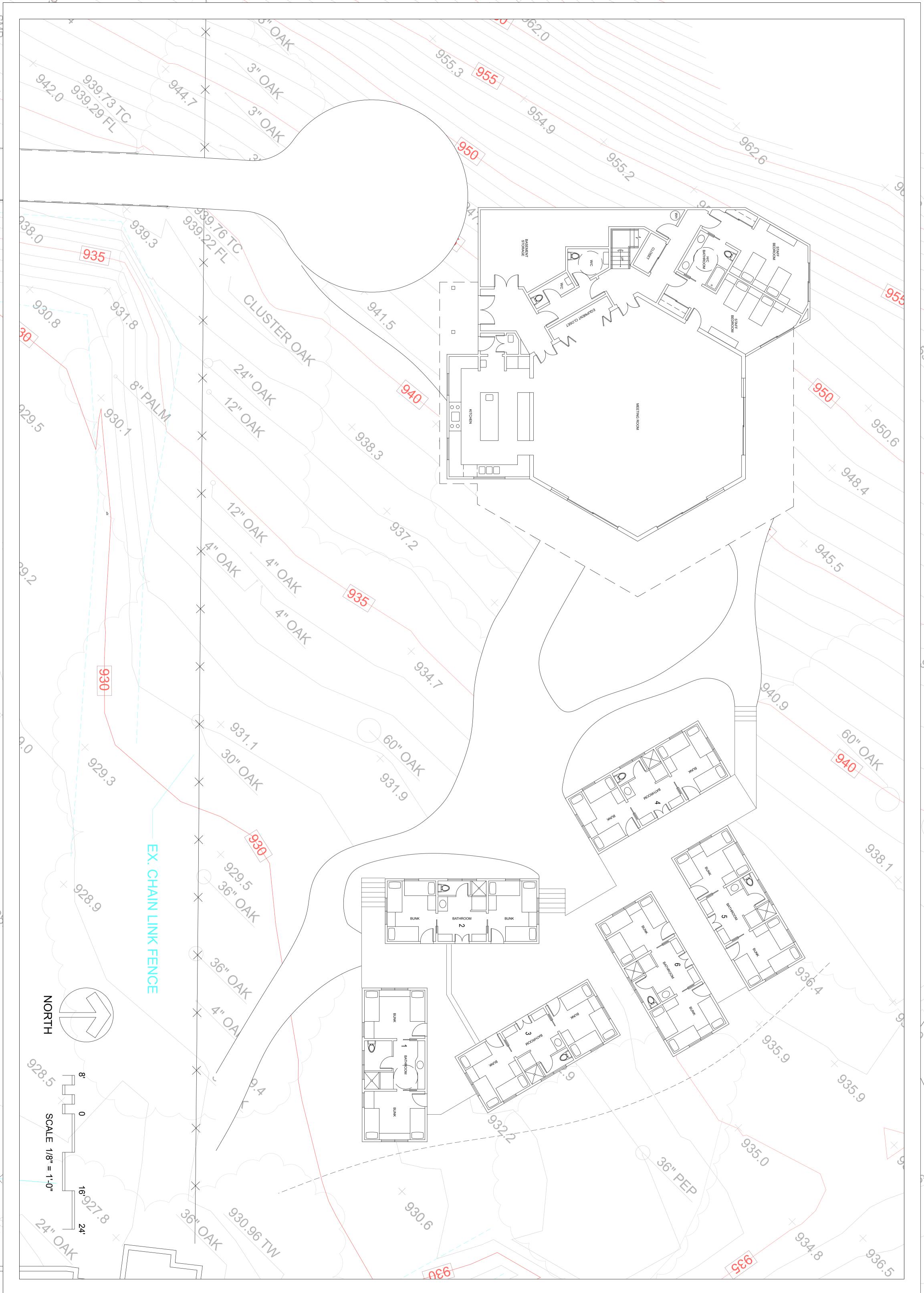
206 N. SIGNAL, SUITE R, OJAI, CALIFORNIA 93023 TEL: (805) 646-6450 FAX: (805) 646-6459

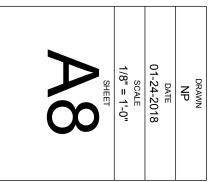
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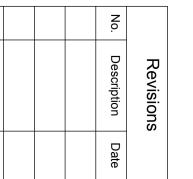
Camp Ramah of California 385 Fairview Road Ojai, California APN:

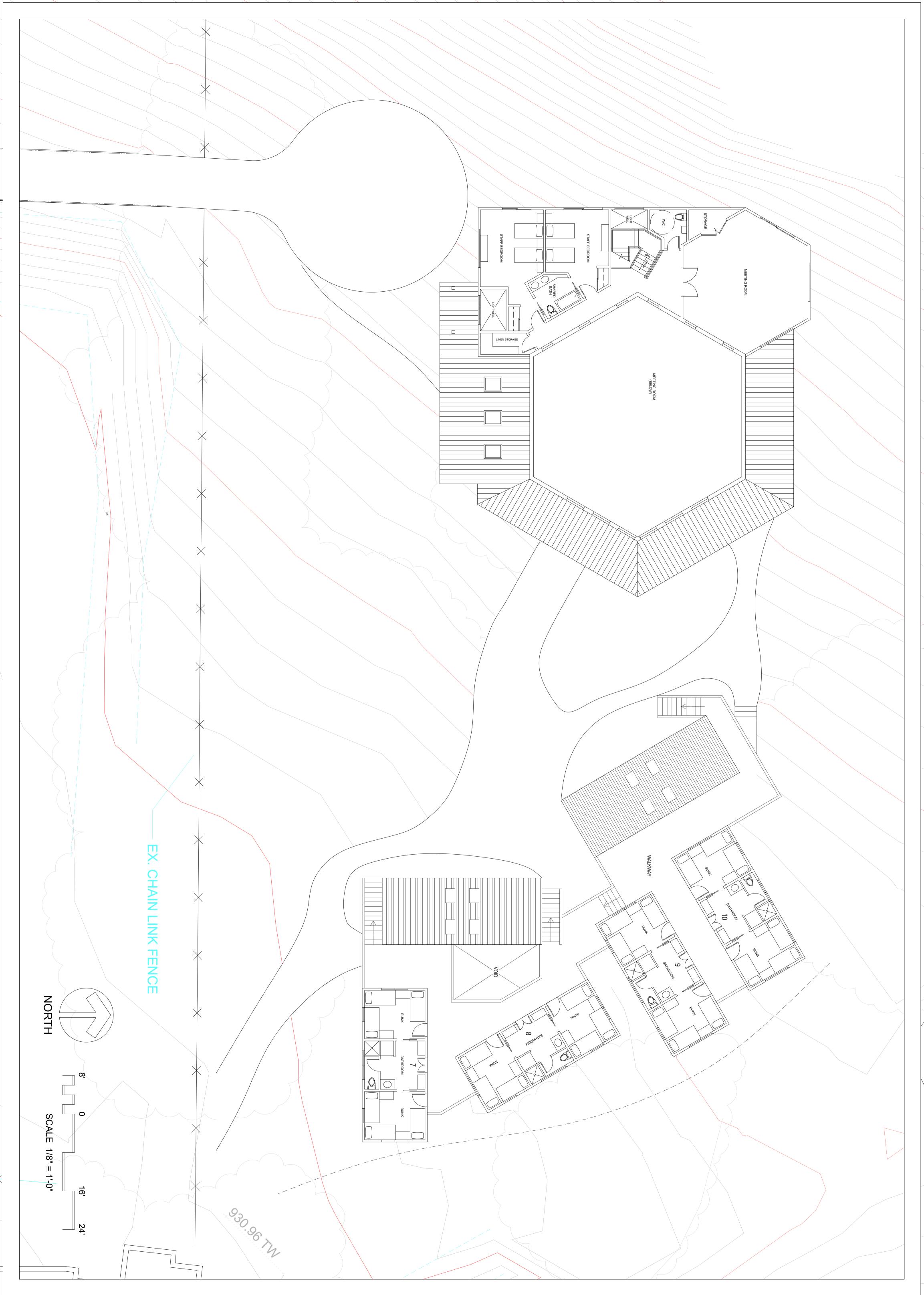
First Floor Plan

JANE CARROLL DESIGN 206 N. SIGNAL SUITE R. OJAL CALIFORNIA 93023

206 N. SIGNAL, SUITE R, OJAI, CALIFORNIA 93023 TEL: (805) 646-6450 FAX: (805) 646-6459

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DRAWN NP DATE 01-24-2018 SCALE 1/8" = 1'-0" SHEET	
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Camp Ramah of California 385 Fairview Road Ojai, California APN:

Second Floor Plan

JANE CARROLL DESIGN 206 N. SIGNAL, SUITE R, OJAI, CALIFORNIA 93023 TEL: (805) 646-6450 FAX: (805)646-6459 No. Description

Date

Revisions

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Ojai, California APN:

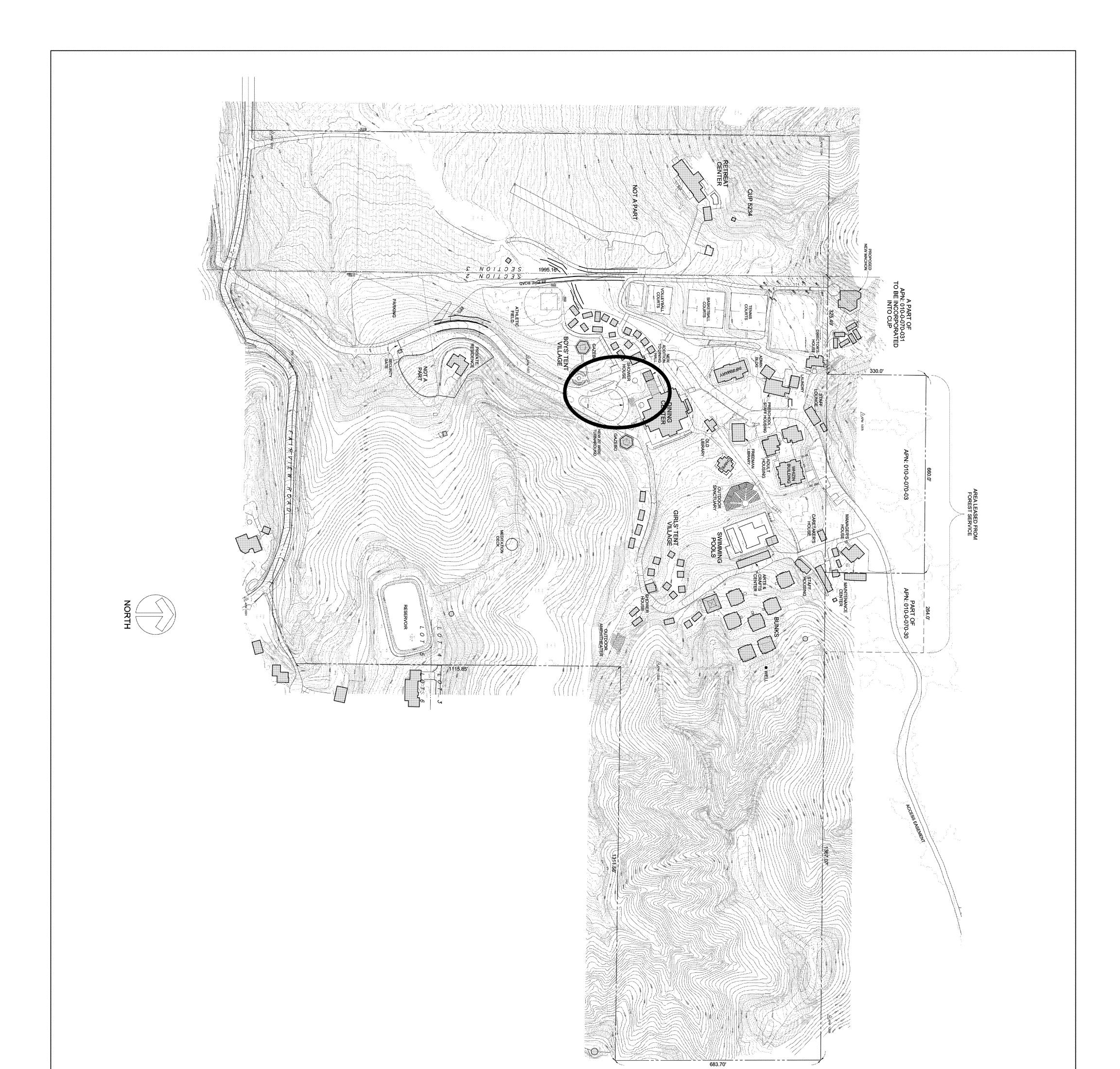
206 N. SIGNAL, SUITE R, OJAI, CALIFORNIA 93023 TEL: (805) 646-6450 FAX: (805) 646-6459

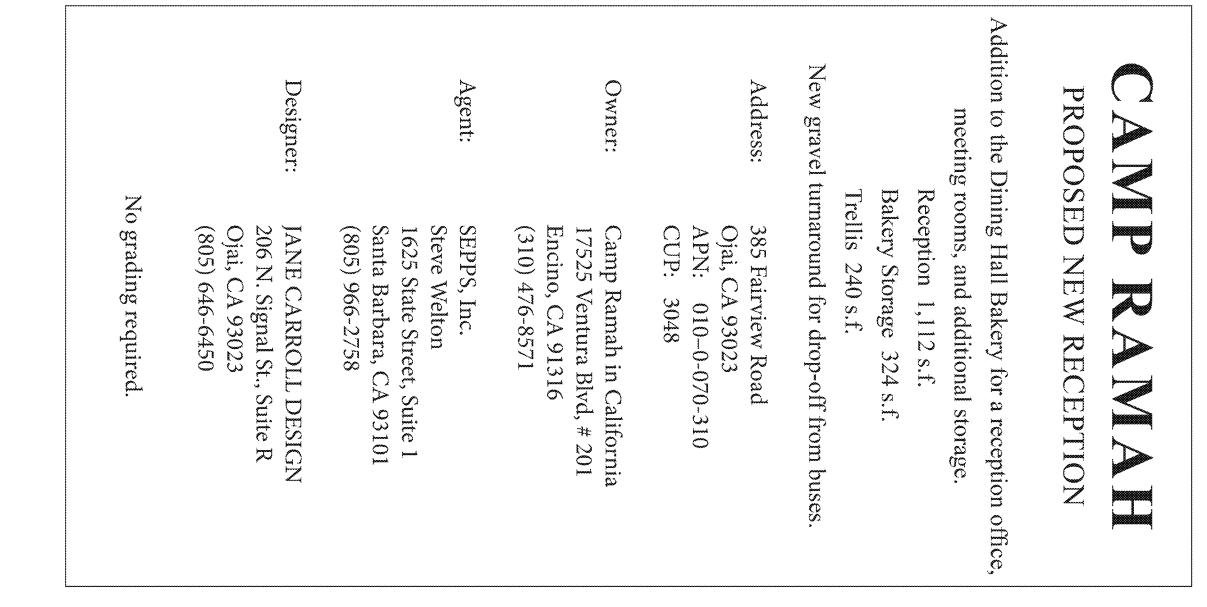
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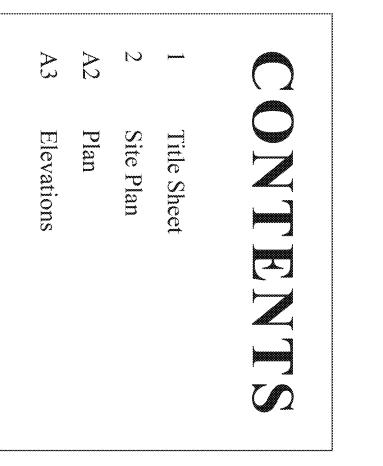
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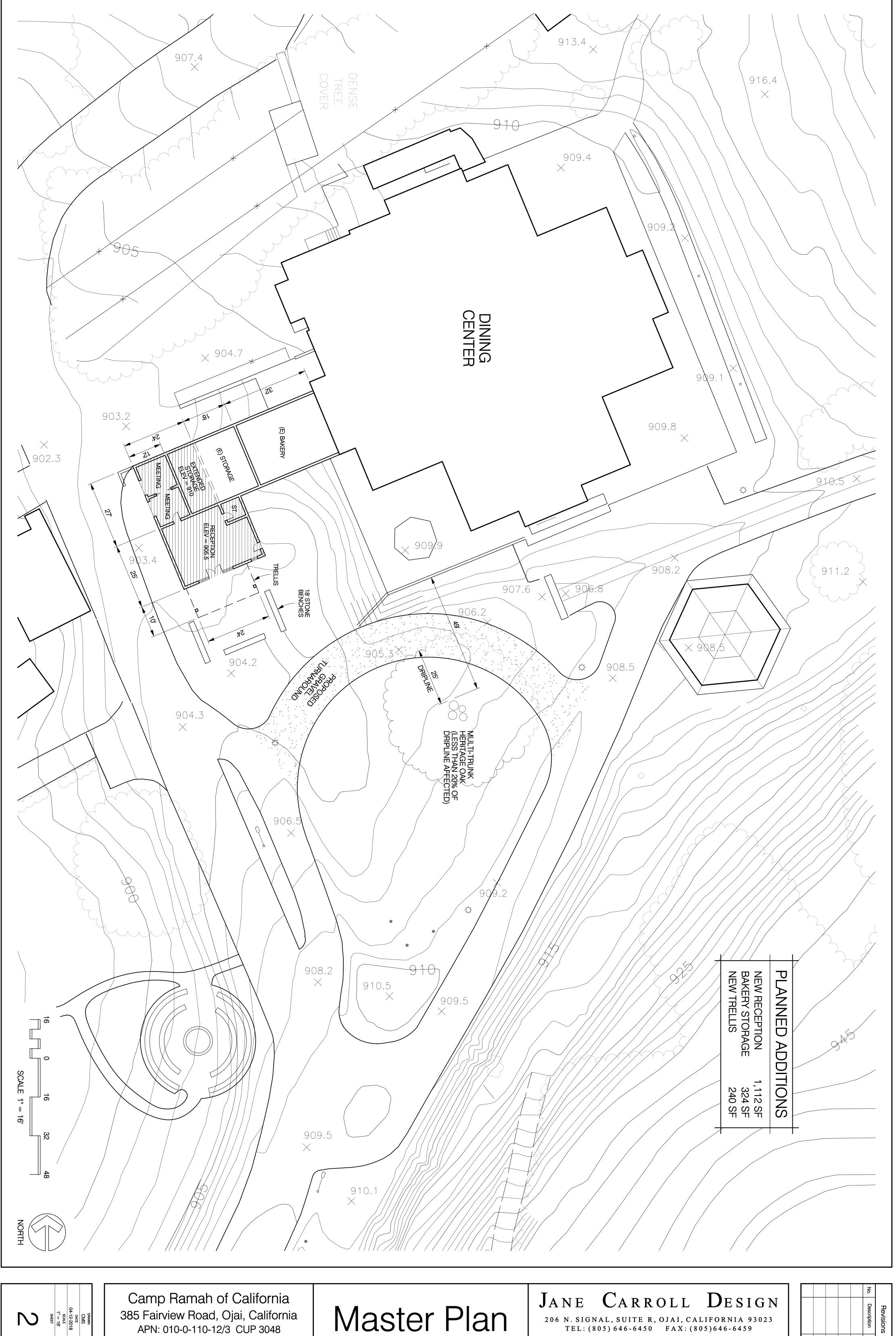
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DRAWN CHECKED DATE 04-04-18 SHEET SHEET	Camp Ramah of California 385 Fairview Road, Ojai, California 93023	NEW RECEPTION	JANE CARROLL DESIGN 206 N. SIGNAL, SUITE R, OJAI, CALIFORNIA 93023 TEL: (805) 646-6450 FAX: (805)646-6459	No. Description
			www.janecarrolldesign-ojai.com janecarroll@vcnet.com	Date



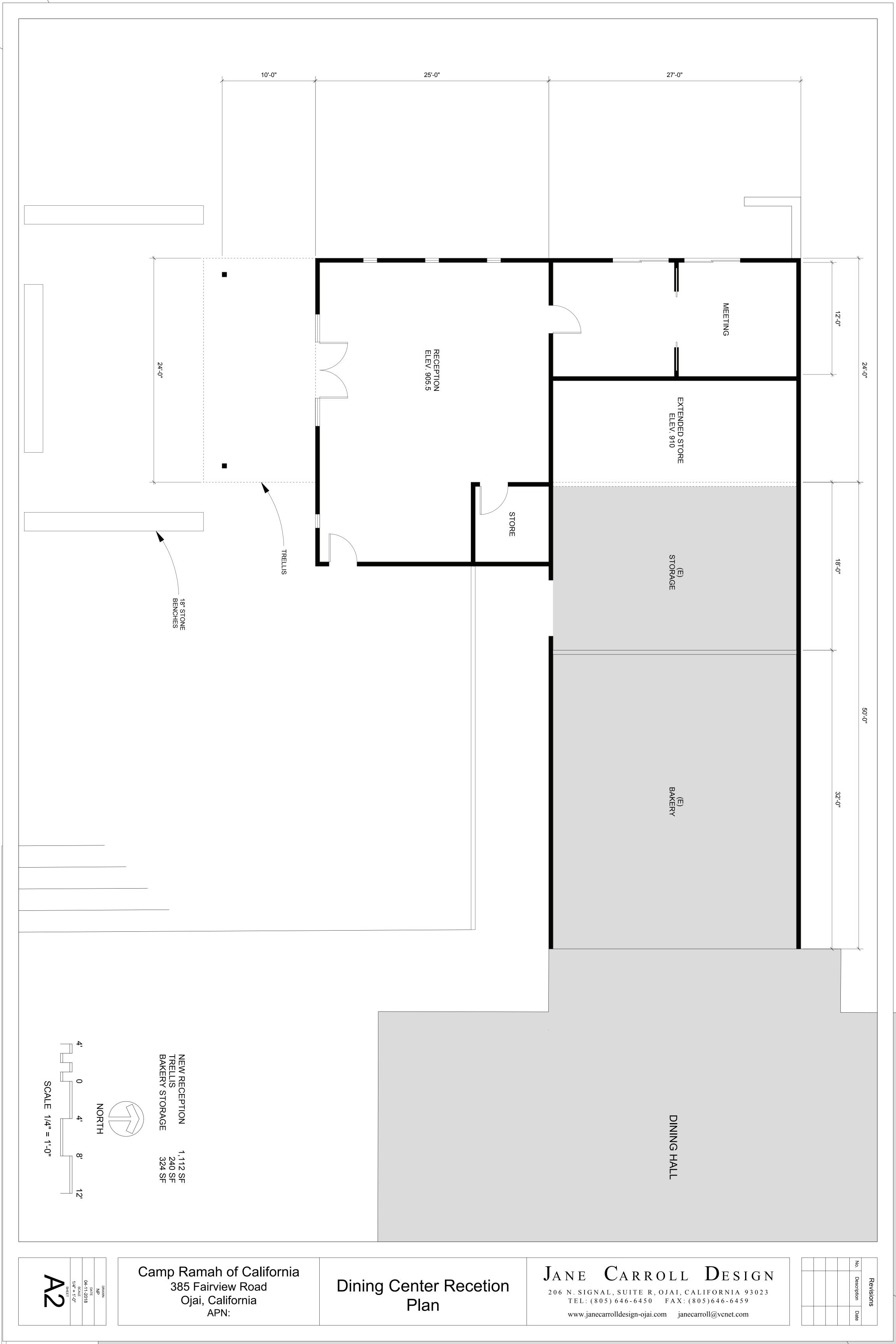
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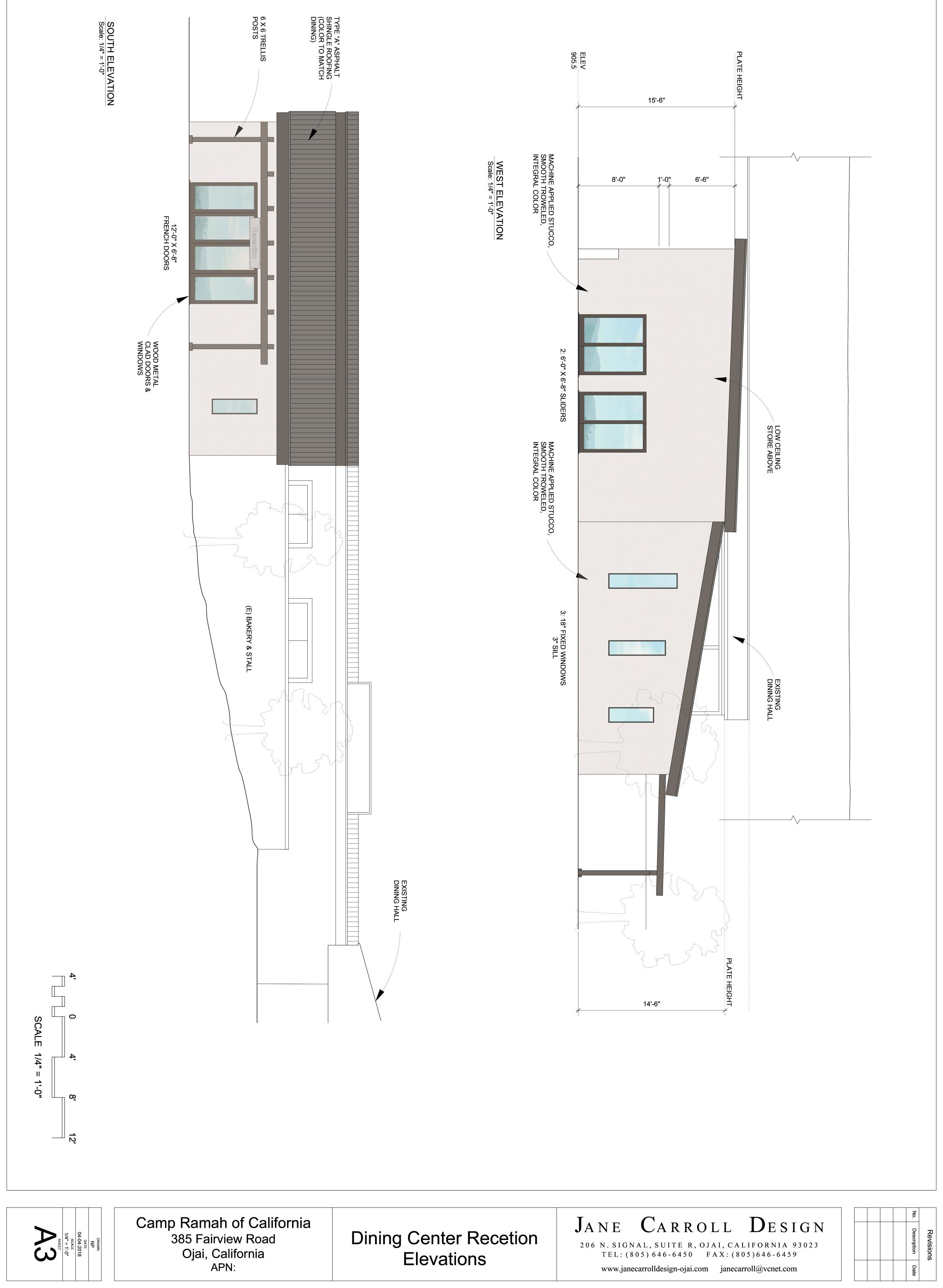
APN: 010-0-120-04

206 N. SIGNAL, SUITE R, OJAI, CALIFORNIA 93023 TEL: (805) 646-6450 FAX: (805) 646-6459

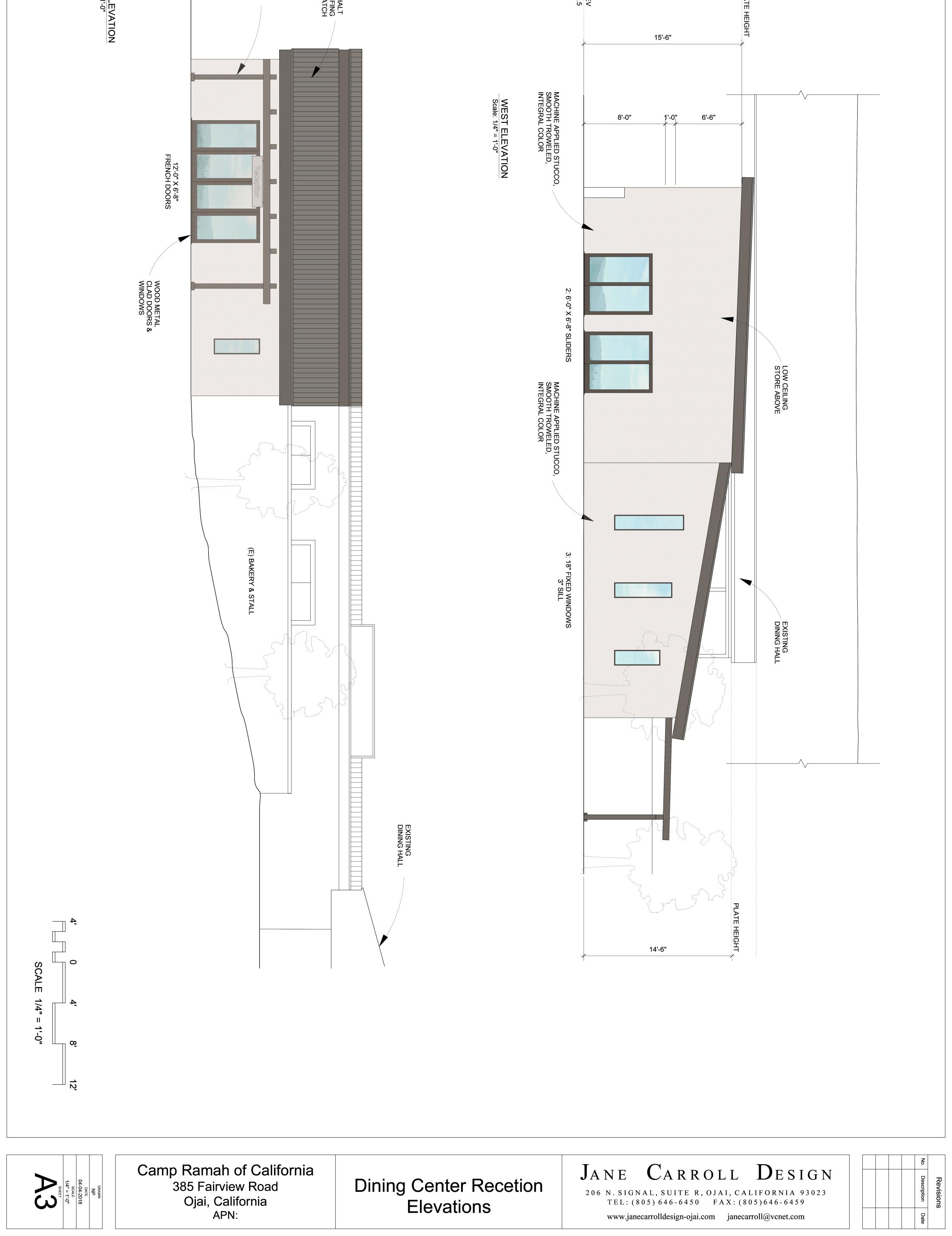
www.janecarrolldesign-ojai.com janecarroll@vcnet.com

Date











### 920 De La Vina Street, Santa Barbara, CA 93101 Voice (805) 966-2877 • FAX (805) 966-2628 Smith Engineering Associates

Date: Project: Camp Ramah Retreat 455 Fairview Site Lighting July 26, 2017 **Existing Conditions Report** 

and make recommendations for improvements. Introduction Our goal in this study was to review the existing exterior lighting in the camp

### Luminance Levels

at various locations on site to judge the adequacy and aesthetic compatibility of the existing design. Measurements and photos were taken throughout the site during one late evening visit. One purpose of our study was to measure the existing nighttime light levels at various locations on site to judge the adequacy and aesthetic

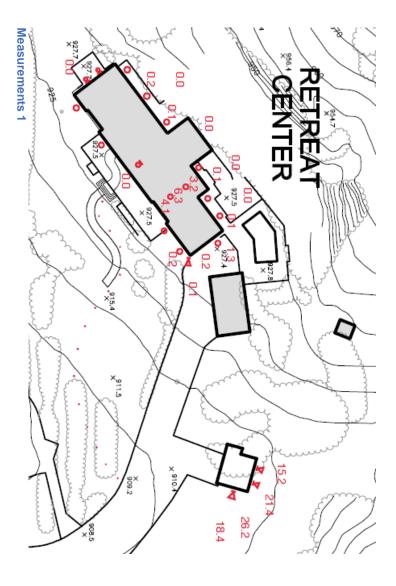
benchmark or common standard. In the lighting industry, that standard is provided by the Illuminating Engineer's Society (IES). IES publishes kids' camp, but we can use recommendations for some similar applications applications. IES does not actually have recommendations specifically for a recommendations for luminance levels for a wide variety of sites To judge lighting illumination levels, we need to compare them to some and

<ul> <li>Crosswalls traversing roadways in the middle of long blocks and at streat intersections should be provided with additional illumination.</li> <li>For approximate values in footcandles, multiply by 0.1, For pedestrian identification at a distance. Values at 18 meters (6 leet) above water.</li> </ul>	Walkways distant from roadways and Type B bikeways. Walkways,bikeways, and statiways Pedestrian tunnels	Sidewalks (roadside) and Type A bikeways: Commercial areas Intermediate areas Residential areas	Walkway Minimi and Bikeway Horizo Classification (
in the middle ided with add andles, multij a distance. Va	<b>4</b> ω σ	∾ 6 10	Minimum Average Horizontal Levels (Eavg)
of long blocks and Itional illumination. ply by 0.1. Ilues at 1.8 meters	51 4 01	5 ≭ 22	Average Vertical Levels For Special Pedestrian Security (Eavg)‡

Activity	Horizontal Footcandles	ootcandles	Uniformity (Maximum
	Minimum	Average	
Bicycle paths*	0.2	1.0	4.0
Game areas			
Children's Play	0.5	2.0	6.0
Croquet	1.0	5.0	6.0
Horseshoes	1.0	5.0	6.0
Jungle Gyms†	0.5	2.0	4.0
Swings and Seesaws	0.5	2.0	6.0
Washer Pitching	1.0	5.0	4.0
Jogging Trails			
General	0.2	1.0	4.0
Bridges and Tunnels†	1.0	2.0	4.0
Traffic Areas	1.0	2.0	4.0
Lawn Area	0.2	0.5	6.0
Nature Trails	0.2	0.5	6.0
Pavilions, covered	0.5	2.0	4.0
Picnic, uncovered	0.2	1.0	4.0
Rest Rooms			
Exteriort	0,5	2.0	4.0
Interior	1.0	5.0	6.0

Based on these recommended practices, I would say (5Lux) would be appropriate for most areas of the site. a target of 0.5ftc

site. The following images show a sampling of the measurements I took at the



### Glare Control/Uplighting

are a few important excerpts from the ordinance: requirement is unlikely to be an issue because of the very large site. prohibits uplighting, and sets maximum levels at property lines. ordinance. goal is very important in Ojai, and is even codified in the City of Ojai lighting no light should project above the horizontal plane of the fixture. be taken in design to prevent light from travelling upward to the sky, little or emphasis to eliminate as much off-site light spill as possible. In recent years, exterior lighting design practices have shifted to add an The ordinance requires strict control of light trespass off site Care should This design The last Here

## Sec. 10-2.16.503. Applicability.

as motion sensors and timers to control non-essential lighting planning permit after the effective date of the ordinance codified in this article shall or public right-of-way installed, modified, or replaced requiring a building or (a) feasible through the use of directional lighting, fixture location and height, as well be fully shielded. In addition, light pollution shall be reduced to the maximum leve All outdoor light fixtures maintained upon private property, public property,

compliance with this article. outdoor lighting of the building being altered shall be reviewed and brought into percent of the valuation of the existing building being altered or added, then all Ξ When the valuation of development or redevelopment, exceeds twenty-five

Municipal Code). forth in the City's Sign Standards (Article 16 of Chapter 2 of Title 10 of the City <u>ि</u> Signs are not subject to this Article. Regulations for lighting of signs are set

glare and light trespass. lighting is encouraged to be modified or retrofitted to be fully shielded to eliminate glare and light trespass onto adjacent properties. In addition, such pre-existing provide for directed light shall be directed downward so as to eliminate or reduce <u>a</u> Any outdoor light fixtures existing as of the effective date of this article that

Sec. 10-2.16.504. General requirements.

as windows, mirrors, or other reflective surfaces must not permit light pollution. in subsection (i), below. Further, any fixed objects that reflect or diffract light, such that the shielding does not permit light trespass in excess of those amounts set forth æ All outdoor light fixtures shall be installed and maintained in such a manner

intended purpose. Automated control methods such as motion sensors and timers, shall be utilized if needed to comply. hours (in the case of non-residential properties) and/or when not in use for the All non-essential outdoor light fixtures shall be turned off after business

a Outdoor light fixtures used for outdoor recreational facilities:

shielded fixtures and directional lighting methods shall be utilized to limit light Ξ of the intended recreational activity. Community Development Director, without diminishing the performance standards pollution, glare and light trespass to a reasonable level, as determined by the to the visibility required in the intended recreational activity. In such cases, partially Shall be fully shielded except when such shielding would cause impairment

<u>(</u> vision might cause a hazard and toward neighboring residential areas. minimize light pollution extending toward roadways where impairment of motorist Illumination from recreational facility light fixtures shall be shielded to

event that is in progress as of 10 P.M. between 10 P.M. and sunrise, except to complete a specific organized recreational  $\overline{\omega}$ That are not required to be shielded, as noted above, shall not be illuminated

may be retained; however, any such lighting shall be turned off between 10:00 p.m. and sunrise downward, or that otherwise do not meet the new exterior lighting requirements, 60 All existing outdoor light fixtures that are not fully shielded and directed

Sec. 10-2.16.505. Exemptions.

provisions of this article. alteration of outdoor light fixtures shall be made unless it thereafter conforms to the codified in this article, provided, however, that no replacement or structural (a) All outdoor light fixtures existing prior to the effective date of the ordinance

### Existing Installed Lighting

darkness quickly at the edge of its radius. Some examples of well-designed requirements of these standards, as it is downward-directed and fades to Most of the existing lighting at Camp Ramah Retreat is designed to meet the fixtures are:



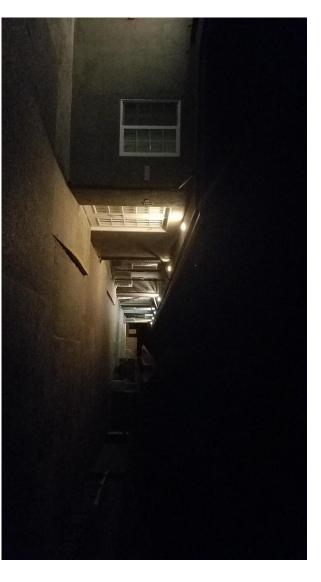
Downward-directed path lighting.



Downlights under building overhang.



Bright downlights, placed in covered area.



Downlights along exterior of building, fading quickly beyond edge of building.

However, there are a few existing fixtures that allow quite a bit of light to travel skyward. These "light-polluting" fixtures are:

Camp Ramah Retreat 455 Fairview – Existing Conditions Report page 5 of 18



Small globe light with shield, blocking much of the problematic upward-directed light.



night by default. Bright flood lights directed largely at empty patch of dead grass, highly visible from above property. These fixtures should not be on throughout the

# Other Specific Design Observations

fixture has experienced some sort of internal failure, and removal is the main retreat building there is a large, non-functional floodlight. The necessary, a different fixture type would be preferable. recommended. If replacement of lighting in that location is deemed There is another area that I would recommend changing. On the corner of



Non-functional floodlight, visible to the right of the working downlight.

### Control options/Dimming

good addition in some of the more brightly lit areas. isn't possible using the existing fixtures, but by-level switching might be a of the lighting in late evening or dims the lights to lower output. Dimming the Ojai ordinance, require two level control that either shuts down a portion meaning that all of the exterior lighting runs all night. Current codes, and It appeared to me that the entire site was operating on photocell control

# Summary/Recommendations

general, I would recommend replacing some of the existing lighting fixtures benefits with more modern LED powered fixtures. That change would have several The retreat center could benefit from fixture upgrades and replacements. In

- completely paying for the replacement costs over time. Greater energy efficiency would save electrical costs, offsetting or even
- use of the lighting energy, putting the light where it is needed instead of horizontally below the plane of the fixture. New fixtures would be cut-off style that direct light mostly downward or Doing that will make better

with the ordinance. shining it up towards the sky, and will bring those lights into compliance

LED lighting is dimmable as a standard feature. Fixtures can often be specified with integral controls that respond to motion or dim the lighting in the late evening hours.

are roughly in order of importance, in my opinion, but can be realigned to Specifically, I would bring up the following changes as possible candidates to improve the lighting at Camp Ramah Retreat. These recommendations meet your priorities.

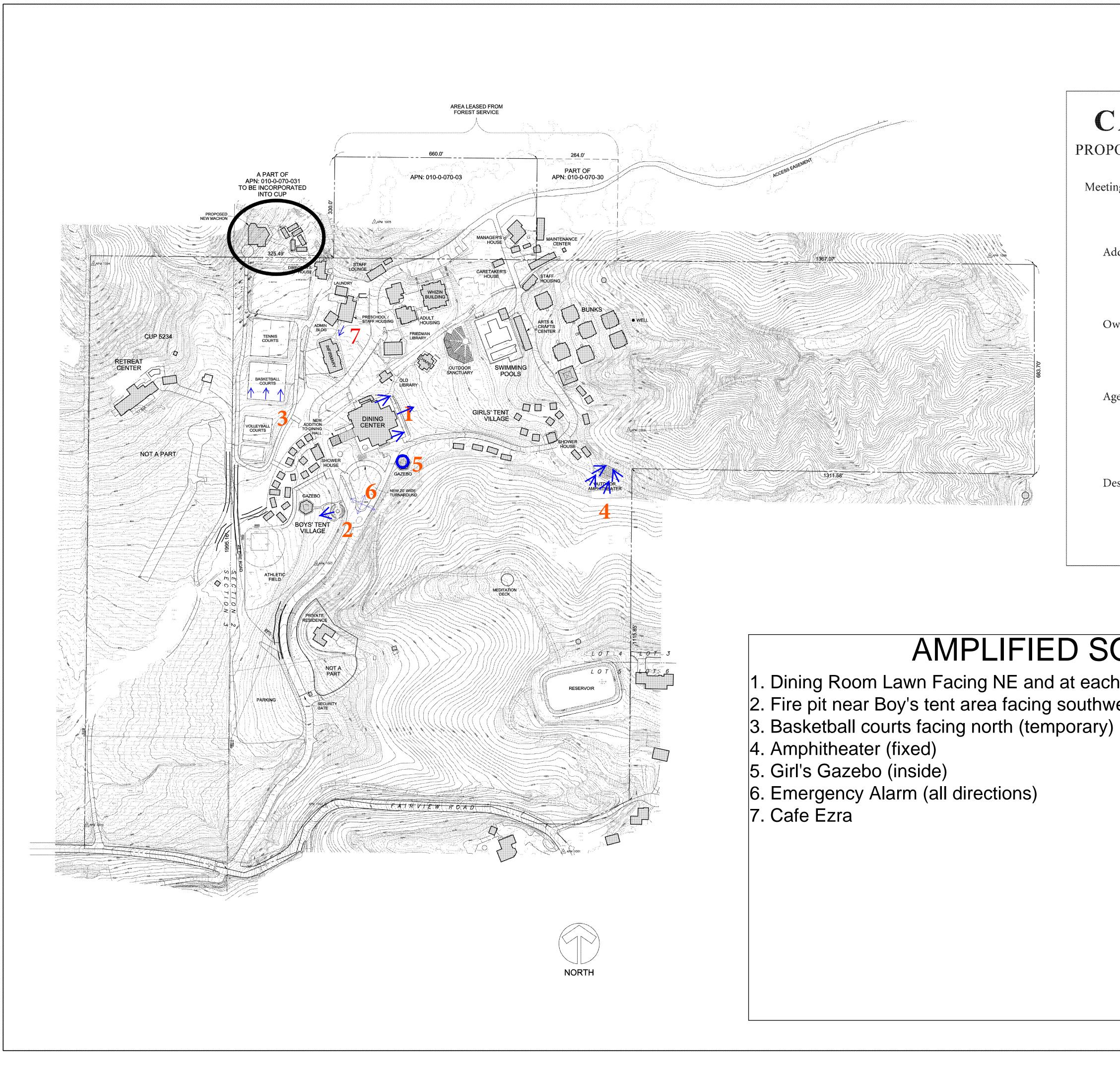
- are "full-cutoff" style which don't shine any light upward. need light, or reduces them in areas that are over lit. could be done in a way that doesn't reduce the light levels in areas that Replace existing building mounted floodlights with LED flood lights that I believe this
- help bring the lighting into compliance with the state energy code, and Add a lighting control strategy that reduces lighting in the very late night hours, or operates the fixtures from motion controls. This change would would reduce late night spill lighting to the neighborhood.

answering any more specific questions you may have. my findings and recommendations. I look forward to hearing from you and Please review this report and let me know if you have any questions about

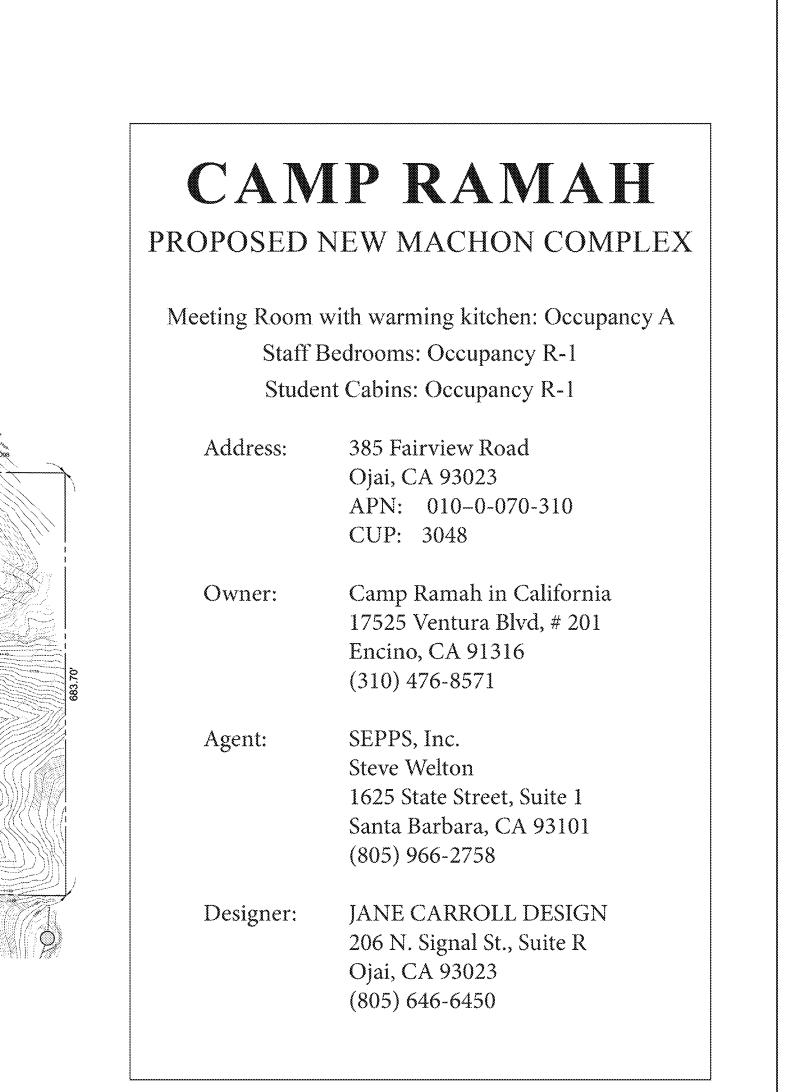
Sincerely,

Fairs Om. h

Brian S. Smith, PE



- 6. Emergency Alarm (all directions)



### AMPLIFIED SOUND

1. Dining Room Lawn Facing NE and at each corner (fixed) 2. Fire pit near Boy's tent area facing southwest (temporary)



Revisions

Description Date



Kenneth A. Knight Consulting LLC Registered Consulting Arborist #507 69 Calaveras Avenue Goleta, CA 93117 H (805) 968-8523 W (805)252-1952 kennethknight@cox.net www.goletaarborists.com

Arborist Report for Camp Ramah New Machon 385 Fairview Road

Ojai, CA 93023

### Agency:

County of Ventura

Resource Management Agency

**Planning Division** 

800 S. Victoria Avenue

Ventura Ca 93009

805 654-2488

**Consulting Arborist** 

Ken Knight, Registered Consulting Arborist #507

69 Calaveras Avenue

Goleta CA 93117

805 252-1952

February 7, 2019

### Table of Contents

	<u>ltem</u>	Page	
1.	Background	-	3
2.	Site Observations	-	4
	Figure 1 - New Machon Site Plan		5
	Figure 2 - Aerial view maps of numbered trees around project site		6
3.	Tree Condition and Impact table	· <b>-</b>	9
4.	Individual Tree analysis		10
5.	Appraisals		47
6.	Discussion and Recommendations		49
7.	Appraisals		50
8.	Tree Protection Plan (Separate document)		

### 1. Background

### - Contact Information

Property Owner – Camp Ramah Administrative Offices, 17525 Ventura Blvd., #201, Encino CA 91316, (310) 476-8571

Project Applicant – Jane Carroll Design, 206 N. Signal Street, R, Ojai CA. 93023, phone 805 646-6450 www.janecarrolldesign-ojai.com

<u>Arborist</u> – Ken Knight, Registered Consulting Arborist #507, Board Certified Master Arborist WE6394BM, ISA Risk Assessment Qualified

- Project Location – 385 Fairview Road, Ojai, CA 93023 phone 805 646-4301

Assessor parcel number: 010-0-110-120 and 010-0-070-310

- <u>Assignment</u> The proposed project involves six additional cabins and an educational Machon building at Camp Ramah at a site north of an existing soccer field. An Arborist Report is required by the County of Ventura to identify protected trees within 20 feet of the proposed development. This report assesses the general health of the trees to be protected, potential effects of the project on the trees, and proposed mitigation measures to minimize disturbance to the tree during construction. This report is limited in that no current or proposed underground utilities were evaluated as part of this report.
- <u>Inspection Dates</u> I visited the site numerous times between September 2015, and January 28, 2019. The site map used for this report is the 4-5-18 Camp Ramah New Machon Plot Plan, 1" = 20', prepared by Jane Carroll Design

- Historical Conditions Before and After the Thomas Fire

I have been inventorying and monitoring Camp Ramah trees since 2015. My original Arborist report for this project was prepared June 21, 2016. At the time, the proposed location was on the soccer field, but a specific site had not been finalized. I prepared a report that included trees all around the proposed site, with the intention of preparing a final report once the project site progressed.

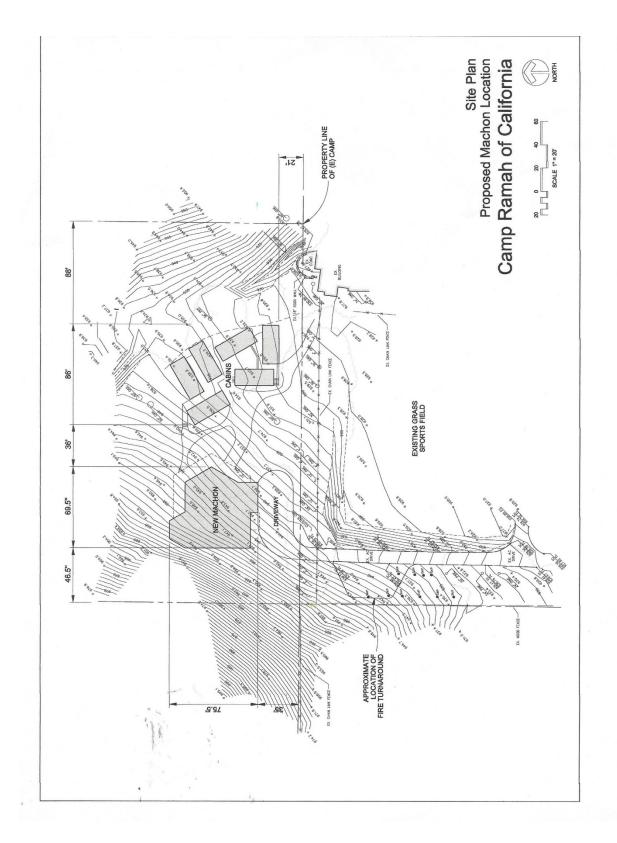
In late 2016, after a five-year drought period, western pine beetles began attacking the mature Aleppo Pines. In late 2016, eleven Aleppo pines (Numbers 398-406, 408, 409) were killed by beetles and removed in the area southwest of this proposed project. Camp Ramah officials hired pest control applicators in 2017 and no further pines have been lost.

In late December 2017, I visited the project site to identify impacts from the Thomas Fire. The fire did not proceed beyond the northern boundary of this project past trees 598 and 599. Firefighters created a fire break just south of this area. Using bull dozers, they pushed over and destroyed oak trees 476 and 477, as well as knocking over and destroying tree 479 when entering/exiting the area via the access driveway. Since the tree removals were caused by acts of nature, I have not included any mitigations requirements for them.

## **Site Observations**

- 1. I initially reviewed many of these trees in September 2015 as part of a larger risk assessment of Camp Ramah trees, and then reviewed and expanded the number of trees for this study over several years, which is why the tree numbering system is out of sequence. This report replaces my original June 21, 2016 Arborist Report for a similar project in a different location of the camp.
- 2. The report identifies 12 Coast Live Oak (Quercus agrifolia) trees 9.5 inches in girth or greater within 20 feet of the project.
- 3. A visual assessment of the tree health and structural integrity was part of this assignment. My visual examination of the crown, trunk and root crown indicates most trees are in good to excellent health. However, most of these trees are exhibiting reduced leaf density due to the cumulative effects of years of drought conditions, and trees 598 and 599 are recovering from leaf scorching during the 2017 Thomas Fire. I did not detect any diseases or insects that would threaten the lives of the trees.
- 4. All trees reviewed have been given a unique number numbered metal tag attached to the tree that corresponds to the map in this report.
- The proposed development is in an area north of a soccer field that was used as a fire break during the Thomas Fire. Four trees are proposed for removal as a result of this project. Depending upon final construction plans, seven additional trees are within 20' of proposed construction areas.
- 6. The Fire Department require widening of the existing 10.5-foot west access road to fifteen feet wide. This report assumes that the existing road will be widened on the east side to avoid disturbing trees 407, 410 and 411. These mature pine trees are not classified as protected but are worthy of being retained at the owner's option. Road widening is anticipated to cause of the removal of protected trees 437, 438, 478 and 480.
- 7. Five trees in this report qualify for heritage status, three of which will be within 20 feet of proposed construction.





Page | 5 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

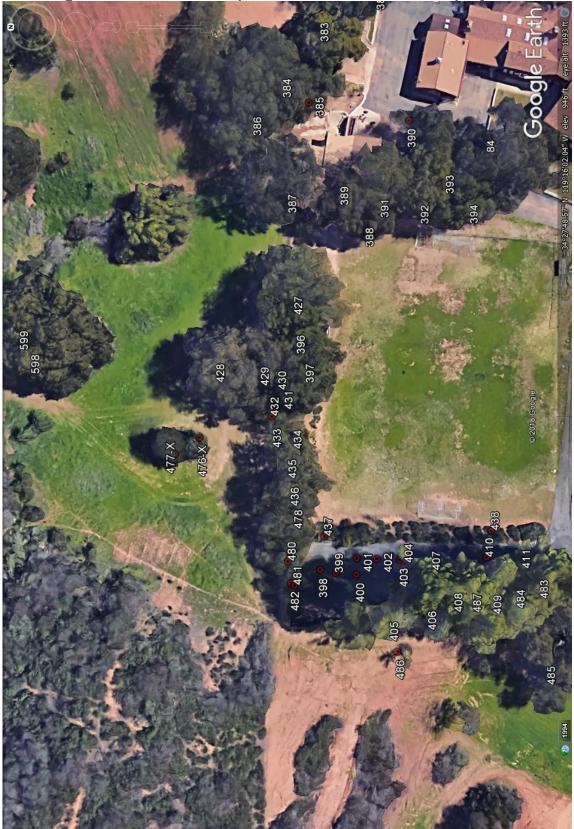
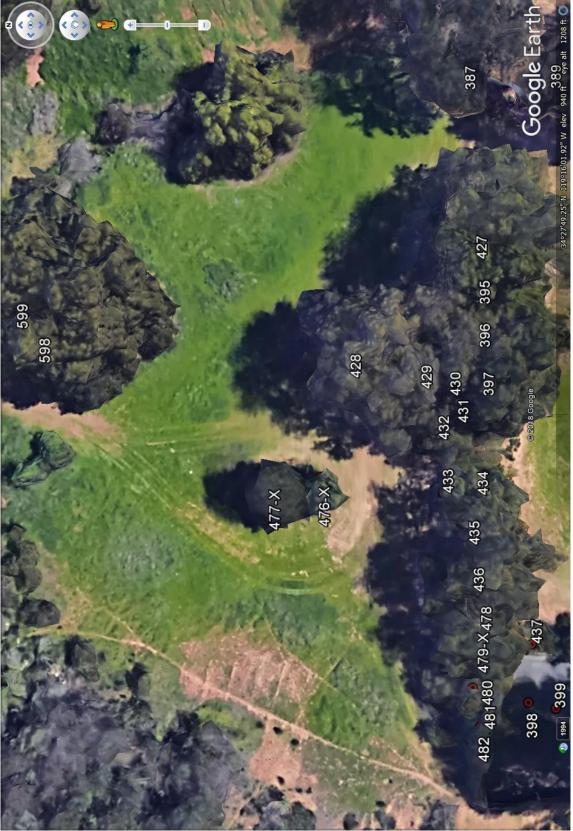


Figure 2 - Aerial view map of numbered trees around project site

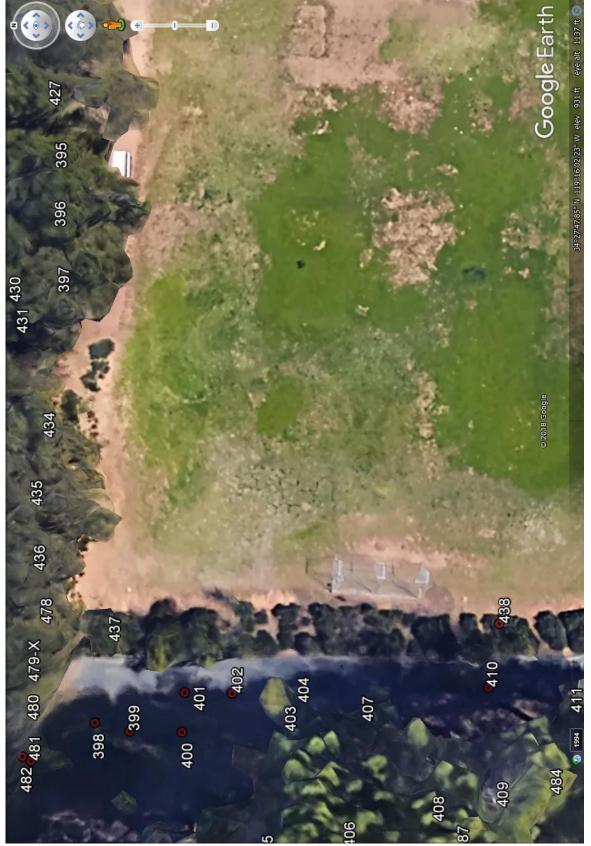
Page | 6 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Closer view of North side of project area.



Page | 7 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Closer view of south side of project area.



Page | 8 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree #	Genus	Species	Girth- "	Heritage	Hazardous	Vitality	Impacts	Fencing	Notes
387	Quercus	agrifolia	97	Yes	no	В	None	Optional	
395	Quercus	agrifolia	115	Yes	no	В	None	Optional	
396	Quercus	agrifolia	62	no	no	В	None	Optional	
397	Quercus	agrifolia	80	no	no	В	None	Optional	
407	Pinus	halepensis	45	no	no	В	Not protected	Optional	
410	Pinus	halepensis	75	no	no	В	Not protected	Optional	
411	Pinus	halepensis	52	no	no	В	Not protected	Optional	
427	Quercus	agrifolia	43	no	no	В	None	Optional	Multi trunk
428	Quercus	agrifolia	160	Yes	no	В	See TPP	Yes	
429	Quercus	agrifolia	9.5	no	no	В	None	Optional	
430	Quercus	agrifolia	15	no	no	В	None	Optional	
431	Quercus	agrifolia	10.5	no	no	В	None	Optional	
432	Quercus	agrifolia	11.5	no	no	В	None	Optional	
433	Quercus	agrifolia	38	no	no	В	None	Optional	
434	Quercus	agrifolia	37	no	no	В	None	Optional	
435	Quercus	agrifolia	86	no	no	В	See TPP	Yes	
436	Quercus	agrifolia	56	no	no	В	See TPP	Yes	Multi trunk
437	Quercus	agrifolia	15	no	no	В	Removal	No	
438	Quercus	agrifolia	43	no	no	В	Removal	No	Multi-trunk
478	Quercus	agrifolia	10.5	no	no	В	Removal	No	Multi trunk
480	Quercus	agrifolia	22	no	no	В	Removal	No	Multi trunk
481	Quercus	agrifolia	17	no	no	В	See TPP	Yes	Multi trunk
482	Quercus	agrifolia	22	no	no	В	See TPP	Yes	Multi trunk
598	Quercus	agrifolia	164	Yes	no	С	See TPP	Yes	Multi trunk
599	Quercus	agrifolia	343	Yes	no	С	See TPP	Yes	Multi trunk

## 3. Tree Condition and Impact Table

## Previous tree sites destroyed by fire or insects

		acon oyea by	,	100010					
398	Pinus	halepensis	62	no	no	Removed	None	No	Beetles
399	Pinus	halepensis	50	no	no	Removed	None	No	Beetles
400	Pinus	halepensis	43	no	no	Removed	None	No	Beetles
401	Pinus	halepensis	72	no	no	Removed	None	No	Beetles
402	Pinus	halepensis	55	no	no	Removed	None	No	Beetles
403	Pinus	halepensis	45	no	no	Removed	None	No	Beetles
404	Pinus	halepensis	55	no	no	Removed	None	No	Beetles
405	Pinus	halepensis	40	no	no	Removed	None	No	Beetles
406	Pinus	halepensis	45	no	no	Removed	None	No	Beetles
408	Pinus	halepensis	62	no	no	Removed	None	No	Beetles
409	Pinus	halepensis	90	Yes	no	Removed	None	No	Beetles
476	Quercus	agrifolia	37	no	no	Removed	None	No	Destroyed during fire
477	Quercus	agrifolia	39	no	no	Removed	None	No	Destroyed during fire
479	Quercus	agrifolia	10.5	no	no	Removed	None	No	Destroyed during fire

## 4. Individual Tree Analysis

Tree Number:	387
Species:	Coast Live Oak (Quercus agrifolia)
Number of Trunks:	1
Girth at 54":	97" (DBH 31") - Heritage
Height	30'
Dripline	40'
Observations:	Scaffold limbs 90 degrees over residence
Overall Health:	Good
Project Impact:	None
Recommendations:	Optional fence around dripline + 5' =45' during construction, mulch
and the second	





Page | 10 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	395
Species:	Coast Live Oak (Quercus agrifolia)
Number of Trunks:	2
Girth at 54":	115" (DBH 14" + 23" = 37") - Heritage
Height	40'
Dripline	50'
Observations:	Crown raised, overextended branches, one scaffold leaning at 45 degrees
Overall Health:	Good
Project Impact:	None
Recommendations:	Optional fence around dripline + 5' = 55' during construction, mulch



Page | 11 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	396
Species:	Coast Live Oak (Quercus agrifolia)
Number of Trunks:	1
Girth at 54":	62" (DBH 20")
Height	40'
Dripline	40'
Observations:	Crown raised, reduced, next to table
Overall Health:	Good
Project Impact:	None
Recommendations:	Optional fence around dripline + 5' = 45" during construction, mulch



Page | 12 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number: 397 Coast Live Oak (Quercus agrifolia) Species: Number of Trunks: 1 80" (DBH 26") Girth at 54": Height Dripline 40' 45' Observations: Crown raised, overextended branches, next to table Overall Health: Good Project Impact: None Recommendations: Optional fence around dripline + 5' = 50' during construction, mulch



Page | 13 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	398
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	1
Girth at 54":	62" (DBH 20")
Height	60'
Dripline	35'
Observations:	Leaning 30" girth trunk removed to improve safety
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None







Page | 14 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	399
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	1
Girth at 54":	50" (DBH 16")
Height	65'
Dripline	30'
Observations:	Lower dead branches have been removed
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None





Page | 15 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number: Species: Number of Trunks: Girth at 54": Height Dripline Observations: Overall Health: Project Impact:	400 Aleppo Pinus – Pinus halepensis 1 43" (DBH 14") 65' 30' Lower dead branches have been removed Died from insect infestation and removed None
Recommendations:	None



Page | 16 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	401
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	1
Girth at 54":	72" (DBH 23")
Height	80'
Dripline	30'
Observations:	Upper codominant trunk has been removed for structural safety
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None







Page | 17 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	402
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	1
Girth at 54":	55" (DBH 18")
Height	80'
Dripline	30'
Observations:	South codominant trunk removed for structural safety
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None







Page | 18 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	403
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	1
Girth at 54":	45" (DBH 15")
Height	70'
Dripline	30'
Observations:	South codominant trunk removed for structural safety
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None



Page | 19 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number: 404 Aleppo Pinus – Pinus halepensis Species: Number of Trunks: 1 Girth at 54": 55" (DBH 18") Height 80' Dripline 30' Dead branches removed for safety to people Died from insect infestation and removed Observations: Overall Health: Project Impact: None Recommendations: None





Page | 20 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	405
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	1
Girth at 54":	40" (DBH 13")
Height	80'
Dripline	30'
Observations:	Dead branches removed for safety to people
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None



Page | 21 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	406
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	2
Girth at 54":	45" (DBH 12" + 13"")
Height	70'
Dripline	30'
Observations:	12" DBH lower trunk removed for structural safety
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None







Page | 22 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	407
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	2
Girth at 54":	45" (DBH 16" + 18" = 34") – Not a protected tree
Height	80'
Dripline	30'
Observations:	Two trunks cabled for structural safety. Root crown located about two feet from curb.
Overall Health:	Good
Project Impact:	Minimal if road widened on east side. See TPP
Recommendations:	Install fence along west side of road during construction, mulch





Page | 23 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	408
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	2
Girth at 54":	62" (DBH 20")
Height	70'
Dripline	30'
Observations:	20% trunk lean
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None



Page | 24 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number:	409
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	1
Girth at 54":	90" (DBH 29") - Heritage
Height	60'
Dripline	30'
Observations:	two trunks 19", 10", codominant branches
Overall Health:	Died from insect infestation and removed
Project Impact:	None
Recommendations:	None



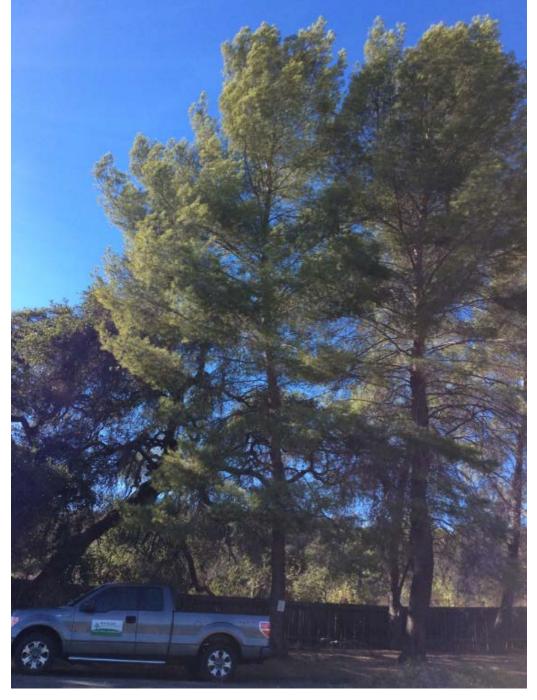
Page | 25 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number 410 Species: Aleppo Pinus – Pinus halepensis Number of Trunks: 1 Girth at 54": 75" (DBH 24")- Not a protected tree Height 70' Dripline 40' Observations: Codominant branches. Root crown located about two feet from curb. Overall Health: Good Project Impact: Minimal if road widened on east side. See TPP Install fence along west side of road during construction, mulch Recommendations:



Page | 26 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	411
Species:	Aleppo Pinus – Pinus halepensis
Number of Trunks:	1
Girth at 54":	52" (DBH 17") – Not a protected tree
Height	60'
Dripline	50'
Observations:	Root crown located approximately two feet from curb.
Overall Health:	Good
Project Impact:	Minimal if road widened on east side. See TPP
Recommendations:	Install fence along west side of road during construction, mulch



Page | 27 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	427
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	5
Girth at 54":	43" (6",9",11",10", 7")
Height	25'
Dripline	25'
Observations:	Appears to be regrowth from a stump, located 6' east of tree 395 on the fence line
Overall Health:	Good
Project Impact:	No impact
Recommendations:	Install fence around dripline + 5' = 30' during construction, mulch





Page | 28 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number 428 Species: Coast Live Oak - Quercus agrifolia Number of Trunks: 1 Girth at 54": 160" - Heritage Height 40' Dripline 50' Observations: Located 29' north of tree 397, northern branches resting on ground Overall Health: Good Cabin to be constructed 30' west of tree affecting about 15% of CRZ. See TPP. Project Impact: Recommendations: Install fence around dripline during construction, 5' 55' + mulch =







Page | 29 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	429
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	1
Girth at 54":	9.5"
Height	15'
Dripline	15'
Observations:	Located 29' west of tree 397 and 12' north of the fence
Overall Health:	Good
Project Impact:	None
Recommendations:	Install fence around dripline + 5' = 20' during construction, mulch







Page | 30 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	430
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	1
Girth at 54":	15"
Height	20'
Dripline	20'
Observations:	Codominant branches. Located 1' south of tree 429 and 11' north of the fence
Overall Health:	Good
Project Impact:	No impact
Recommendations:	Install fence around dripline + 5' = 25' during construction, mulch



Page | 31 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	431
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	1
Girth at 54":	10.5"
Height	20'
Dripline	20'
Observations:	Codominant branches. Located 2' southeast of tree 430 and 9' north of the fence
Overall Health:	Good
Project Impact:	None
Recommendations:	Install fence around dripline + 5' = 25' during construction, mulch





Page | 32 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

432 Coast Live Oak – Quercus agrifolia 1 11.5" 20' Located 5' west of tree 430 and 10' north of the fence Good None Install fence around dripline + 5' = 20' during construction, mulch









Page | 33 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number 433 Coast Live Oak - Quercus agrifolia Species: Number of Trunks: 1 Girth at 54": 38" Height Dripline 30' 35' Observations: Located 1'north of fence, 16' west of tree 432 west of tree 430 and 10' north of the fence Overall Health: Good Project Impact: None Recommendations: Install fence around dripline + 5' = 40' during construction, mulch





Page | 34 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number 434 Coast Live Oak - Quercus agrifolia Species: Number of Trunks: 1 Girth at 54": 37" Height Dripline 30' 35' Located just north of fence, 16' west of tree 433 Observations: Overall Health: Good Project Impact: None Recommendations: Install fence around dripline + 5' = 40' during construction, mulch



Page | 35 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

435 Coast Live Oak – Quercus agrifolia 1 86" 35' 35' Located just north of fence, 5' west of tree 434 Good None

Install fence around dripline + 5' = 40' during construction, mulch









Page | 36 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

436 Coast Live Oak - Quercus agrifolia 56" 25' 25' Located on fence line, 15' west of tree 435 Good Approximately 10% CRZ impact from driveway construction north of tree. See TPP. Install fence around dripline + 5' = 30' during construction, mulch.



7





Page | 37 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	437
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	1
Girth at 54":	15"
Height	20'
Dripline	22'
Observations:	Located 21" south of fence and 5' east of service road
Overall Health:	Good
Project Impact:	Likely to be removed due to road widening
Recommendations:	Remove and mitigate with planting of ten 15-gallon Coast Live Oaks.



Page | 38 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

438 Coast Live Oak - Quercus agrifolia 7" and 7" = 17" 15' 15' Located 9' south of goal and 5' east of service road Good Likely to be removed if access road widened on the east side Remove and replace with ten 15-gallon Coast Live Oaks



2





Page | 39 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number 476 Coast Live Oak - Quercus agrifolia Species: Number of Trunks: 1 37" (12" DBH) Girth at 54": Height Dripline 25' 25" Observations: 55' north of fence, north of tree 432 Destroyed Overall Health: Project Impact: Tree destroyed during the Thomas Fire by firefighters cutting firebreaks. Recommendations: None







Page | 40 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number Species: Number of Trunks: Girth at 54": Height Dripline Observations: Overall Health: Project Impact:	<ul> <li>477</li> <li>Coast Live Oak – Quercus agrifolia</li> <li>1</li> <li>39" (13" DBH)</li> <li>20'</li> <li>35"</li> <li>73' north of fence, 18' north of tree 476</li> <li>Destroyed</li> <li>Tree destroyed by firefighters creating firebreak during Thomas Fire</li> </ul>
Project Impact: Recommendations:	Tree destroyed by firefighters creating firebreak during Thomas Fire none









Page | 41 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	478
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	9
Girth at 54":	10.5" (3" DBH)
Height	15'
Dripline	15"
Observations:	2' south of fence, 5' southwest of tree 436
Overall Health:	Good
Project Impact:	Likely to be removed as part of road widening project
Recommendations:	Remove and replace with ten 15-gallon Coast Live Oaks







Page | 42 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number 479 Coast Live Oak - Quercus agrifolia Species: Number of Trunks: 1 Girth at 54": 10.5" (3" DBH) Height Dripline 15' 15" Observations: 3' south of fence, 8' west of edge of road at north end Destroyed by firefighters creating fire break during Thomas Fire Overall Health: Project Impact: None Recommendations: None







Page | 43 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	480
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	2
Girth at 54":	10" + 12" = 22" (7.5" DBH)
Height	20'
Dripline	15"
Observations:	3' north of fence,
Overall Health:	Good
Project Impact:	Possible if road widened
Recommendations:	Remove and replace with

replace with ten 15-gallon Coast



Page | 44 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Live Oaks

Tree Number 481 Coast Live Oak - Quercus agrifolia Species: Number of Trunks: 2 Girth at 54": 10" + 7" = 17" (5.5" DBH) Height Dripline 20' 15" Observations: 1' north of fence, Overall Health: Good Potential impact to 20% of CRZ. See TPP Install fence around dripline + 5' = 20' during construction, mulch Project Impact: Recommendations:







Page | 45 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number Species: Number of Trunks: Girth at 54": Height Dripline Observations: Overall Health: Project Impact: Recommendations: 482 Coast Live Oak – Quercus agrifolia 2 10" + 12" = 22" (7.5" DBH) 15' 2' north of fence, Good None Install fence around dripline + 5' = 20' during construction, mulch







Page | 46 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	598
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	1
Girth at 54":	164" (52.5" DBH)
Height	35'
Dripline	45"
Observations:	5 <sup>th</sup> trunk failed, 40% foliage burns from Thomas Fire
Overall Health:	Fair - Recovering well from fire
Project Impact:	Located 28' from northern most new cabin impacting about 20% of CRZ. See TPP.
Recommendations:	Install fence around dripline + 5' = 50' during construction, mulch





Page | 47 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

Tree Number	599
Species:	Coast Live Oak – Quercus agrifolia
Number of Trunks:	2
Girth at 54":	7.5 + 4.5" = 12" (4" DBH)
Height	35'
Dripline	45"
Observations:	30% foliage scorched during Thomas Fire
Overall Health:	Fair -Recovering well from fire
Project Impact:	Located 28' from northern most new cabin impacting about 20% of CRZ. See TPP
Recommendations:	Install fence around dripline $+ 5' = 50'$ during construction, mulch





Page | 48 of 71- Ken Knight RCA #507, Camp Ramah New Machon Arborist Report

### **5** Appraisals

Tree apraisals for trees 428,435, 436, 437, 438, 478, 480, 481, 482, 598 and 599 are attached to this report as Attachment 1.

#### 6 Discussion

None additional

#### 7 Recommendations

- a. Prepare tree protection plans for seven trees; 428, 435, 436, 481, 482, 598, 599.
- b. Remove trees 437, 438, 478, and 480. Replace each tree with ten fifteen gallon Coast Live Oak trees (Total 40 trees) to be planted elsewhere on Camp Ramah property.
- c. Implement the attached Tree Protection Plan
- d. Install optional fencing for trees outside of the 20' construction zone area..

#### **8 Tree Protection Plans**

The Tree Protection Plan is a separate document.

Sincerely,

Ken Knight

Ken Knight, Registered Consulting Arborist #507

Attachment 1 – Tree Appraisals for trees 428, 435, 436, 437, 438, 478, 480, 481, 482, 598, 599

#### Attachment 1a - Appraisal of Value of Coast Live Oak Tree # 428

To establish value of the Coast Live Oak tree #428 at Camp Ramah New Machon site that will have construction impacts within 20' of the trunk, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. The tree is in a rural portion of the camp that is seldom unused. The health of the tree is good. Ventura county classifies this tree as a Heritage Tree.

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural camp in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$60,600</u>. For details, see the following worksheet.

Tree 428 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9 <sup>th</sup> edition			
-	Site:Camp Ramah New Machon, 385 Fairview Road, Ojai, CA 93023Situation:Establish value of tree within 20' of construction		
1.	Species		Quercus agrifolia
2.	<ol> <li>Condition rating Based upon observations of the health and structure made on Jan pruning.</li> </ol>		50% uary 28, 2019. Tree needs extensive structural
3.	Trunk diamet Measured 5	ter 64" above grade	51.0"
4.	Location ratir Based upon	ng n the location in a seldom used section of the camp.	50%
5.	Species ratin Based upon	ng n guidelines provided in Species Classification & Group	100% Assignment
6.	Replacement Based upon	t Tree Size a guidelines in Species Classification & group Assignm	12.56 ent for a Group1 tree.
7.	<ol> <li>Replacement tree cost \$1482 Based on guidelines in Species Classification and Group Assignment for a median cost of a 60-inch tree inclutax and delivery.</li> </ol>		+ -
8.	Installation c	ost	\$1482
9.	<ol> <li>Installed cost \$2964</li> <li>Based upon guidelines provided in Species Classification &amp; Group Assignment for the installed cost of a 60" tree (twice replacement cost).</li> </ol>		+
10.	Unit tree cos Based upon	t guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree
11.	Appraised tru Taken from	unk area Table 4-4, 9 <sup>th</sup> edition for a 51" tree	2042
12.	Appraised tru Line 11 – Iir	unk area increase (over 24" box) ne 6	2029.44
13.	Basic tree co Line 12 x Li	ost ne 10 + Line 9	\$242,437.92
14.	Appraised va (Line 13 x l	alue Line 2 x Line 4 x Line 5, rounded to the nearest \$50	\$60,600

#### Attachment 1b - Appraisal of Value of Coast Live Oak Tree # 435

To establish value of the Coast Live Oak tree #435 at Camp Ramah New Machon site in an area where construction impacts will come within 20' of the trunk, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. The tree is in a rural portion of the camp that is seldom unused. The health of the tree is good.

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural camp in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$16,050</u>. For details, see the following worksheet.

Tr	Tree 435 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9th edition			
-	te: tuation:	Camp Ramah New Machon, 385 Fairview Road, Oja Establish value of tree within 20' of construction	i, CA 93023	
1.	Species		Quercus agrifolia	
2.		ing observations of the health and structure made on Ja	50% nuary 28, 2019. Needs substantial structural	
3.	Trunk diamet Measured 5	ter 4" above grade	26.0"	
4.	Location ratir Based upon	ng the location in a seldom used section of the camp.	50%	
5.	Species ratin Based upon	g guidelines provided in Species Classification & Group	100% Assignment	
6.	<ol> <li>Replacement Tree Size 12.56</li> <li>Based upon guidelines in Species Classification &amp; group Assignment for a Group1 tree.</li> </ol>			
7.	7. Replacement tree cost \$1482 Based on guidelines in Species Classification and Group Assignment for a median cost of a 60-inch tree includin tax and delivery.		+ -	
8.	Installation co	ost	\$1482	
9.	<ol> <li>Installed cost \$2964</li> <li>Based upon guidelines provided in Species Classification &amp; Group Assignment for the installed cost of a 60" bo tree (twice replacement cost).</li> </ol>		+	
10.	Unit tree cost Based upon	t guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree	
11.	Appraised tru Taken from	ink area Table 4-4, 9 <sup>th</sup> edition for a 23" tree	531	
12.	Appraised tru Line 11 – lin	unk area increase (over 60" box) ne 6	4518.44	
13.	Basic tree co Line 12 x Li	st ne 10 + Line 9	64,139.92	
14.	Appraised va (Line 13 x L	llue Line 2 x Line 4 x Line 5, rounded to the nearest \$50	\$16,050	

#### Attachment 1c - Appraisal of Value of Coast Live Oak Tree # 436

To establish value of the Coast Live Oak tree #436 at Camp Ramah New Machon site in an area where construction impacts will come within 20' of the trunk, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. The tree is in a rural portion of the camp that is seldom unused. The health of the tree is good.

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural camp in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$12,612</u>. For details, see the following worksheet.

Tree 436 Appraisal worksheet – Taken from a form found in "Guide for Plant Appraisal, 9" edition			
	Site:Camp Ramah New Machon, 385 Fairview Road, Ojai, CA 93023Situation:Establish value of tree within 20' of construction		
15.	Species		Quercus agrifolia
16.	16. Condition rating 50% Based upon observations of the health and structure made on January 28, 2019. Several 2" to 3" diameter trunk/branches were destroyed during the Thomas Fire by Firefighters constructing fire breaks. Needs substantial structural pruning.		
17.	Trunk diamete Measured 54	er 4" above grade	23.0"
18.	Location ratin Based upon	g the location in a seldom used section of the camp.	50%
19.	Species rating Based upon	g guidelines provided in Species Classification & Group	100% Assignment
20.	Replacement Based upon	Tree Size guidelines in Species Classification & group Assignme	12.56 ent for a Group1 tree.
21.	Replacement Based on gu tax and deliv	idelines in Species Classification and Group Assignme	\$1482 ent for a median cost of a 60-inch tree including
22.	Installation co	st	\$1482
23.		guidelines provided in Species Classification & Group eplacement cost).	\$2964 Assignment for the installed cost of a 60" box
24.	Unit tree cost Based upon	guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree
25.	Appraised tru Taken from	nk area Table 4-4, 9 <sup>th</sup> edition for a 23" tree	415
26.	Appraised tru Line 11 – line	nk area increase (over 60" box) e 6	402.44
27.	Basic tree cos Line 12 x Lir	st ne 10 + Line 9	\$50,451.92
28.	Appraised val (Line 13 x L	ue ine 2 x Line 4 x Line 5, rounded to the nearest \$50	\$12,612

#### Attachment 1d - Appraisal of Value of Coast Live Oak Tree # 437

To establish value of the Coast Live Oak tree #437 proposed for removal at Camp Ramah New Machon site, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. There are minor root issues in relation to the health of the tree, mostly due to compaction of the area around the roots as a portion of its root system is under impermeable surfaces (paved access road) and compacted surfaces (soccer field). The health of the tree is good,

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural camp in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$900</u>. For details, see the following worksheet.

Tree 437 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9 <sup>th</sup> edition			
-	Site:Camp Ramah New Machon, 385 Fairview Road, Ojai, CA 93023Situation:Establish value of tree proposed for removal		
1.	Species		Quercus agrifolia
2.	Condition rati Based upon	ing observations of the health and structure made on Jan	65% uary 28, 2019
3.	Trunk diamet Measured 5	er 4" above grade	5.0"
4.	4. Location rating 50% Based upon the proximity to the access road that inhibits growth of a portion of the root zone. Also, the tree is on a hillside close to a soccer field with compacted soil that is seldom visited for shade.		
5.	Species ratin Based upon	g guidelines provided in Species Classification & Group	100% Assignment
6.	Replacement Based upon	t Tree Size guidelines in Species Classification & group Assignme	12.56 ent for a Group 2 tree.
7.	Replacement Based on gu tax and deliv	uidelines in Species Classification and Group Assignme	\$450 ent for a median cost of a 36-inch tree including
8.	Installation co	ost	\$450
9.		guidelines provided in Species Classification & Group eplacement cost).	\$900 Assignment for the installed cost of a 36" box
10.	Unit tree cost Based upon	t guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree
11.	Appraised tru Taken from	ink area Table 4-4, 9 <sup>th</sup> edition for a 5" tree	20
12.	Appraised tru Line 11 – lin	ink area increase (over 24" box) le 6	7.44
13.	Basic tree co Line 12 x Lir	st ne 10 + Line 9	\$1777.92
14.		placement value .ine 2 x Line 4 x Line 5, rounded to the nearest \$50	\$600, say \$900 replacement cost

#### Attachment 1e - Appraisal of Value of Coast Live Oak Tree # 438

To establish value of the Coast Live Oak tree #438 proposed for removal at Camp Ramah New Machon site, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. There are minor root issues in relation to the health of the tree, mostly due to compaction of the area around the roots as a portion of its root system is under impermeable surfaces (paved access road) and compacted surfaces (soccer field). The health of the tree is good,

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural camp in Ojai. It provides no shade to buildings in the area. The major factor in a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$900</u>. For details, see the following worksheet.

Tree 438 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9th edition			
	te: tuation:	Camp Ramah New Machon, 385 Fairview Road, Oja Establish value of tree proposed for removal	ii, CA 93023
1.	Species		Quercus agrifolia
2.	Condition rat Based upor	ing observations of the health and structure made on Jan	65% juary 28, 2019
3.	Trunk diam Measured 5	eter 64" above grade	5.0"
4.	<ol> <li>Location rating 50%</li> <li>Based upon the proximity to the access road that inhibits growth of a portion of the root zone. Also, the tree is on a hillside close to a soccer field with compacted soil that is seldom visited for shade.</li> </ol>		
5.	Species ratin Based upor	ng n guidelines provided in Species Classification & Group	100% Assignment
6.	Replacemen Based upor	t Tree Size a guidelines in Species Classification & group Assignm	12.56 ent for a Group 2 tree.
7.	Replacemen Based on gr tax and deli	uidelines in Species Classification and Group Assignme	\$450 ent for a median cost of a 36-inch tree including
8.	Installation c	ost	\$450
9.		t o guidelines provided in Species Classification & Group replacement cost).	\$900 Assignment for the installed cost of a 36" box
10.	Unit tree cos Based upor	t n guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree
11.	Appraised tru Taken from	unk area Table 4-4, 9 <sup>th</sup> edition for a 5" tree	20
12.	Appraised tru Line 11 – Iir	unk area increase (over 24" box) ne 6	7.44
13.	Basic tree co Line 12 x Li	ost ne 10 + Line 9	\$1777.92
14.		placement value Line 2 x Line 4 x Line 5, rounded to the nearest \$50	\$600, say \$900 replacement cost

#### Attachment 1f - Appraisal of Value of Coast Live Oak Tree # 478

To establish value of the Coast Live Oak tree #478 proposed for removal at Camp Ramah New Machon site, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. There are minor root issues in relation to the health of the tree, mostly due to compaction of the area around the roots as a portion of its root system is under impermeable surfaces (paved access road) and compacted surfaces (soccer field). The health of the tree is good,

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural camp in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$900.</u> For details, see the following worksheet.

Tree 478 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9 <sup>th</sup> edition			
Site:Camp Ramah New Machon, 385 Fairview Road, Ojai, CA 93023Situation:Establish value of tree proposed for removal		i, CA 93023	
1.	Species		Quercus agrifolia
2.	Condition rat Based upon	ing observations of the health and structure made on Jan	65% uary 28, 2019
3.	Trunk diamet Measured 5	ter 4" above grade	3.3"
4.	<ol> <li>Location rating (50%+50%+50%)</li> <li>Based upon the proximity to the access road that inhibits growth of a portion of the root zone. Also, the tree is on a fence line that is seldom visited.</li> </ol>		
5.	Species ratin Based upon	g guidelines provided in Species Classification & Group	100% Assignment
6.	Replacement Based upon	t Tree Size guidelines in Species Classification & group Assignme	12.56 ent for a Group 2 tree.
7.	Replacement Based on gu tax and deliv	uidelines in Species Classification and Group Assignme	\$450 ent for a median cost of a 36-inch tree including
8.	Installation co	ost	\$450
9.		t guidelines provided in Species Classification & Group eplacement cost).	\$900 Assignment for the installed cost of a 36" box
10.	Unit tree cost Based upon	t guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree
11.	Appraised tru Taken from	ink area Table 4-4, 9 <sup>th</sup> edition for a 4" diameter tree	13
12.	Appraised tru Line 11 – lin	unk area increase (over 24" box) ne 6	0.44
13.	Basic tree co Line 12 x Li	st ne 10 + Line 9	\$951.92
14.	Appraised re (Line 13 x L	placement value Line 2 x Line 4 x Line 5, rounded to the nearest \$50	\$350, say \$900 replacement cost

#### Attachment 1g- Appraisal of Value of Coast Live Oak Tree # 480

To establish value of the Coast Live Oak tree #480 proposed for removal at Camp Ramah New Machon site, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. There are minor root issues in relation to the health of the tree, mostly due to compaction of the area around the roots as a portion of its root system is under impermeable surfaces (paved access road) and compacted surfaces (soccer field). The health of the tree is good,

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural area in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$1,700.</u> For details, see the following worksheet.

Tree 480 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9 <sup>th</sup> edition			
-	te: tuation:	Camp Ramah New Machon, 385 Fairview Road, Oja Establish value of tree proposed for removal	i, CA 93023
1.	Species		Quercus agrifolia
2.	Condition rati Based upon	ing observations of the health and structure made on Jan	65% uary 28, 2019
3.	Trunk diamet Measured 5	ter 4" above grade	7.0"
4.	Based upon a fence line	ng (50%+50%+50%) the proximity to the access road that inhibits growth o that is seldom visited. Approximately 40% of its roo g the Thomas Fire.	
5.	Species ratin Based upon	g guidelines provided in Species Classification & Group	100% Assignment
6.	Replacement Based upon	t Tree Size guidelines in Species Classification & group Assignme	12.56 ent for a Group 2 tree.
7.	Replacement Based on gu tax and deliv	uidelines in Species Classification and Group Assignme	\$850 ent for a median cost of a 48-inch tree including
8.	Installation co	ost	\$850
9.		t guidelines provided in Species Classification & Group eplacement cost).	\$1700 Assignment for the installed cost of a 48" box
10.	Unit tree cost Based upon	t guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree
11.	Appraised tru Taken from	Ink area Table 4-4, 9 <sup>th</sup> edition for a 7" diameter tree	38
12.	Appraised tru Line 11 – lin	unk area increase (over 24" box) ne 6	25.44
13.	Basic tree co Line 12 x Lir	st ne 10 + Line 9	\$4701.92
14.		placement value Line 2 x Line 4 x Line 5, rounded to the nearest \$50	\$1500, say \$1,700 cost of replacement

#### Attachment 1h- Appraisal of Value of Coast Live Oak Tree # 481

To establish value of the Coast Live Oak tree #481 at Camp Ramah New Machon site in an area where construction impacts will come within 20' of the trunk, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. The health of the tree is good,

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural area in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$500.</u> For details, see the following worksheet.

Tree 481 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9 <sup>th</sup> edition				
Site: Situation:	Camp Ramah New Machon, 385 Fairview Road, Ojai, CA 93023 Establish value of tree within 2o' of construction			
1. Species		Quercus agrifolia		
2. Condition ra Based upo	ating on observations of the health and structure made on Ja	55% nuary 28, 2019		
3. Trunk diam Measured	eter 54" above grade	5.4"		
Based upo	<ul> <li>Location rating (50%+50%+50%)</li> <li>Based upon the proximity to the access road that inhibits growth of a portion of the root zone. Also, the tree is on a fence line that is seldom visited.</li> </ul>			
5. Species rat Based upo	ing on guidelines provided in Species Classification & Grou	100% p Assignment		
	ent Tree Size on guidelines in Species Classification & group Assignn	12.56 nent for a Group 2 tree.		
7. Replaceme Based on tax and de	guidelines in Species Classification and Group Assignn	\$450 nent for a median cost of a 36-inch tree including		
8. Installation	cost	\$450		
	est on guidelines provided in Species Classification & Grou e replacement cost).	\$900 p Assignment for the installed cost of a 36" box		
10. Unit tree co Based upo	ost on guidelines provided in Species Classification & Grou	\$118 p Assignment, Group 1 tree		
11. Appraised t Taken fror	trunk area m Table 4-4, 9 <sup>th</sup> edition for a 7" diameter tree	20		
12. Appraised t Line 11 –	trunk area increase (over 36" box) line 6	7.44		
13. Basic tree of Line 12 x	cost Line 10 + Line 9	\$1777.92		
	replacement value ( Line 2 x Line 4 x Line 5, rounded to the nearest \$50	\$500		

#### Attachment 1i- Appraisal of Value of Coast Live Oak Tree # 482

To establish value of the Coast Live Oak tree #482 at Camp Ramah New Machon site in an area where construction impacts will come within 20' of the trunk, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. The health of the tree is good,

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural area in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$1,300.</u> For details, see the following worksheet.

Tree 482 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9th edition				
Site: Situat		Camp Ramah New Machon, 385 Fairview Road, Ojai, CA 93023 Establish value of tree within 20' of construction		
1. Sp	ecies	Quercus agrifolia		
	ndition rating ased upon observations of the health and structure made on Janu	55% Jary 28, 2019		
-	ink diameter easured 54" above grade	7.0"		
В	Location rating (50%+50%+50%) 50% Based upon the proximity to the access road that inhibits growth of a portion of the root zone. Also, the tree is on a fence line that is seldom visited.			
	ecies rating ased upon guidelines provided in Species Classification & Group	100% Assignment		
	placement Tree Size ased upon guidelines in Species Classification & group Assignme	12.56 nt for a Group 2 tree.		
В	placement tree cost ased on guidelines in Species Classification and Group Assignme x and delivery.	\$850 nt for a median cost of a 48-inch tree including		
8. Ins	tallation cost	\$850		
В	talled cost ased upon guidelines provided in Species Classification & Group ee (twice replacement cost).	\$1700 Assignment for the installed cost of a 36" box		
	it tree cost ased upon guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree		
	praised trunk area aken from Table 4-4, 9 <sup>th</sup> edition for a 7" diameter tree	38		
	praised trunk area increase (over 36" box) ne 11 – line 6	25.44		
	sic tree cost ne 12 x Line 10 + Line 9	\$4701.92		
	praised replacement value Line 13 x Line 2 x Line 4 x Line 5, rounded to the nearest \$50	\$1300		

#### Attachment 1j - Appraisal of Value of Coast Live Oak Tree # 598

To establish value of the Coast Live Oak tree #598 at Camp Ramah New Machon site that will have construction impacts within 20' of the trunk, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. The Thomas Fire scorched 40% of the leaves on this tree, but it seems to be recovering well. The tree is in a rural portion of the camp along a path that is seldom unused. The health of the tree is Fair. Ventura County classifies this tree as a Heritage Tree.

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural camp in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$62,998</u>. For details, see the following worksheet.

Tree 598 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9 <sup>th</sup> edition					
Site: Situation:		Camp Ramah New Machon, 385 Fairview Road, Ojai, CA 93023 Establish value of tree within 20' of construction			
1.	Species		Quercus agrifolia		
2.	Condition rat Based upor needed.	ting n observations of the health and structure made on Ja	50% nuary 28, 2019. Substantial structural pruning		
3.	Trunk diame Measured 5	ter 54" above grade	52.0"		
4.		ng (50%+70%+60%) n the location in a seldom used section of the camp.	50%		
5.	Species ratir Based upor	ng n guidelines provided in Species Classification & Group	100% Assignment		
6.	Replacemen Based upor	t Tree Size n guidelines in Species Classification & group Assignm	12.56 ent for a Group1 tree.		
7.	Replacement tree cost \$1482 Based on guidelines in Species Classification and Group Assignment for a median cost of a 60-inch tree including tax and delivery.				
8.	Installation c	ost	\$1482		
9.		t n guidelines provided in Species Classification & Group replacement cost).	\$2964 Assignment for the installed cost of a 60" box		
10.	Unit tree cos Based upor	t n guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree		
11.	Appraised tru Taken from	unk area Table 4-4, 9 <sup>th</sup> edition for a 51" tree	2123		
12.	Appraised tru Line 11 – lir	unk area increase (over 24" box) ne 6	2110.44		
13.	Basic tree co Line 12 x Li	ost ine 10 + Line 9	\$251,995.92		
14.	Appraised va (Line 13 x l	alue Line 2 x Line 4 x Line 5, rounded to the nearest \$50	\$62,998		

#### Attachment 1k - Appraisal of Value of Coast Live Oak Tree # 599

To establish value of the Coast Live Oak tree #599 at Camp Ramah New Machon site that will have construction impacts within 20' of the trunk, I employed the standard methods found in **Guide for Plant Appraisal**, 9<sup>th</sup> edition (published in 2000 by the International Society of Arboriculture, Savoy, IL). Although the 10<sup>th</sup> edition to the Guide has been published, it is still undergoing review and development of supporting regional valuation committees, so the 9<sup>th</sup> edition is still being widely used. In addition, I referred to **Species Classification and Group Assignment** (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in Southern California inland influence.

The Species Classification and Group Assignment lists recommended species ratings and evaluations. The Coast Live Oak is a native tree well adapted to this area.

Condition reflects the health and structural integrity of the tree. The Thomas Fire scorched 30% of the leaves on this tree, but it seems to be recovering well. The tree is in a rural portion of the camp along a path that is seldom unused. The health of the tree is Fair. Ventura County classifies this tree as a Heritage Tree.

The location factor considers the site, placement and contribution of a tree in its surrounding landscape. In this case, the tree is in a rural camp in Ojai. It provides no shade to buildings in the area. The major reason for a lower location rating is it is in an area seldom visited by people.

<u>Based on my assessment I established the value of the tree at \$187,960</u>. For details, see the following worksheet.

Tree 599 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9 <sup>th</sup> edition				
Site:Camp Ramah New Machon, 385 Fairview Road, Ojai, CA 93023Situation:Establish value of tree within 20' of construction				
1.	Species		Quercus agrifolia	
2.	Condition rati Based upon needed.	ing observations of the health and structure made on Jar	50% nuary 28, 2019. Substantial structural pruning	
3.	Trunk diamet Measured 5	er 4" above grade	109.0"	
4.		ng (50%+70%+60%) the location in a seldom used section of the camp.	50%	
5.	Species rating Based upon	g guidelines provided in Species Classification & Group	100% Assignment	
6.	Replacement Based upon	Tree Size guidelines in Species Classification & group Assignme	12.56 ent for a Group1 tree.	
7.	Replacement Based on gu tax and deliv	uidelines in Species Classification and Group Assignme	\$1482 ent for a median cost of a 60-inch tree including	
8.	Installation co	ost	\$1482	
9.	Installed cost Based upon tree (twice re	guidelines provided in Species Classification & Group eplacement cost).	\$2964 Assignment for the installed cost of a 60" box	
10.	Unit tree cost Based upon	guidelines provided in Species Classification & Group	\$118 Assignment, Group 1 tree	
11.	Appraised tru Taken from	ink area Table 4-4, 9 <sup>th</sup> edition for a 90" tree	6359	
12.	Appraised tru Line 11 – lin	ink area increase (over 24" box) e 6	6346.44	
13.	Basic tree co Line 12 x Lir	st ne 10 + Line 9	\$751,843	
14.	Appraised va (Line 13 x L	lue .ine 2 x Line 4 x Line 5, rounded to the nearest \$50	\$187,960	

#### Tree 599 Appraisal Worksheet – Taken from a form found in "Guide for Plant Appraisal, 9<sup>th</sup> edition

### Camp Ramah New Machon Tree Protection Plan

#### 1. Background Information

Property Owner – Camp Ramah Administrative Offices, 17525 Ventura Blvd., #201, Encino CA 91316, (310) 476-8571

Project Applicant – Jane Carroll Design, 206 N. Signal Street, R, Ojai CA. 93023, phone 805 646-6450 www.janecarrolldesign-ojai.com

Arborist – Ken Knight, Registered Consulting Arborist #507, Board Certified Master Arborist WE6394BM, ISA Risk Assessment Qualified – phone (805)252-1952, email kennethknight@cox.net

Project Location – 385 Fairview Road, Ojai, CA 93023 phone 805 646-4301

Assessor parcel number: 010-0-110-120 and 010-0-070-310

Assignment - The proposed project involves six additional cabins and an educational Machon building at Camp Ramah at a site north of an existing soccer field. A Tree Protection Plan is required by the County of Ventura to identify protected trees within 20 feet of the proposed development. Trees covered under the TPP include trees 428, 435, 436, 481, 482 598, and 599. Trees 437, 438, 478 and 4480 are proposed for removal with replacement plantings on site.

#### 2. Tree condition and Impact Table Tree Condition and Impact Table Tree # Genus Species Girth- " Heritage Hazardous Vitality Impacts Fencing Notes 387 Quercus agrifolia 97 Yes None Optional no В 115 395 Quercus agrifolia Yes В None Optional no 62 В 396 Quercus agrifolia None Optional no no 397 Quercus agrifolia 80 В None Optional no no Not protected 407 В Pinus halepensis 45 no no Optional Not protected 410 Pinus halepensis 75 no В Optional no Not protected 52 В 411 Pinus halepensis Optional no no 427 В Multi trunk Quercus agrifolia 43 None Optional no no See TPP 428 Quercus agrifolia 160 Yes no В Yes 429 Quercus 9.5 В None Optional agrifolia no no 430 Quercus agrifolia 15 В None Optional no no 431 В Optional Quercus agrifolia 10.5 None no no 432 В Quercus agrifolia 11.5 None Optional no no 433 38 В Quercus None Optional agrifolia no no 434 Quercus agrifolia 37 В None Optional no no 435 Quercus agrifolia 86 В See TPP Yes no no 436 Quercus 56 В See TPP Yes Multi trunk agrifolia no no В 437 Quercus agrifolia 15 Removal No no no 438 43 В Multi-trunk Quercus agrifolia Removal No no no 478 Quercus agrifolia 10.5 no no В Removal No Multi trunk 480 Quercus agrifolia 22 В Removal No Multi trunk no no 481 Quercus 17 В See TPP Multi trunk agrifolia no Yes no 22 See TPP 482 В Quercus agrifolia Yes Multi trunk no no See TPP С 598 Quercus agrifolia 164 Yes Yes Multi trunk no

Page | 1 of 9 https://d.docs.live.net/3de697a8bd752da4/Documents/Ken Knight/2019/Camp Ramah/2-7-19 Camp Ramah New Machon Tree Protection Plan-TPP.docx

no

Yes

С

See TPP

Yes

Multi trunk

343

agrifolia

599

Quercus

- 3. Tree Protection Construction standards Pre-Construction
  - a. Pre-construction Meeting

The project arborist shall attend a pre-construction meeting with the contractors to explain the tree protection and monitoring requirements as outlined in the approved TPP.

b. Tree Protection Fencing

Prior to any clearing, grubbing, trenching, grading, or any land disturbances, tree protection fencing must be installed as follows:

i. Type

The fencing shall be temporary, readily visible, and a minimum of 4-feet high. The fencing shall effectively: 1) keep the foliage, crown, branch structure and trunk clear from damage by equipment, materials or disturbances; 2) preserve roots and soil in an intact and non-compacted state; and 3) identify the TPZ zone.

ii. Signage

One English language and one Spanish language, readily-visible, durable, waterproof sign shall be installed on the fence in 4 equidistant locations around each individual protected tree. Signs placed on fencing around a stand of protected trees shall be placed at approximately 50-foot intervals. The size of each sign must be a minimum of 16 inches wide and must contain the wording below. The lettering in the word "WARNING" (and Spanish equivalent) must be in capital letter at least 2 inches in height: the phrase "TREE PROTECTION ZONE" must be in capital letters at least 1 inches size; all other lettering must be at least ½ inch in size

# WARNING

## TREE PROTECTION ZONE

Entry prohibited. This fence shall remain in place throughout the entire construction period. To report violations, contact VENTURA COUNTY CONDITION COMPLIANCE: 805/654-2457

# **ADVERTENCIA**

## **ZONA DE PROTECCION DE ARBOLES**

Entrasa prohibida. Esta cerca debe permanecer En su lugar durante el period de construccion Para reporta violaciones, contacte al ENFORZAMIENTO DE PERMISOS DEL CONDADO DE VENTURA-805/654-2457

c. Verify Fencing Installation

Verification that tree protection fencing has been installed pursuant to the approved TPP shall be provided to County before construction commences.

**During Construction** 

- a. Tree Protection Zone Restrictions
  - No ground disturbance, grading, trenching, construction activities or structural development shall occur within the tree protection zone (TPZ) except as specifically authorized by this permit and the approved TPP.
  - No equipment, soil or construction materials shall be placed within the TPZ. No oil, gasoline, chemicals, paints, solvents, or other damaging materials may be deposited within the TPZ or in drainage channels, swales or areas that may lead to the TPZ.
  - Unless otherwise directed by the project arborist, all work done within the TPZ, including brush clearance, digging, trenching and planting, shall be done with hand tools or small hand-held power tools that are of a depth and design that will not cause root damage.
  - Where trenching or digging within the TPZ is specifically permitted, the work shall be conducted in a manner that minimizes root damage, as directed by an arborist.
  - Grade changes outside of the TPZ shall not significantly alter drainage to protected trees. Grading within the TPZ shall use methods that minimize root damage and ensure that roots are not cut off from air. Where erosion may be a factor, return and protect the original grade or otherwise stabilize the soil.
  - Protected trees shall not be used for posting signs, electrical wires or pulleys; for supporting structures; and shall be kept free of nails, screws, rope, wires, stakes and other unauthorized fastening devices or attachments.
- b. Tree Care

For existing trees during construction, a 3-4" layer of organic mulch 6' from the trunk to 5" outside the dripline is recommended.

- c. Pruning
  - Pruning shall be in compliance with the International society of Arboriculture (ISA) latest edition of Tree Pruning Best Management Practices, and the latest edition of the American National Standards Institute (ANSI) A-300 standards for tree pruning.
  - ii. No live tissue may be removed from protected trees solely for the purpose of altering the appearance of a tree.
  - iii. No tree pruning is recommended without the approval of the project arborist.
- d. Arborist Monitoring

An arborist shall be onsite to monitor all grubbing, trenching, digging, grading and construction activities within the TPZ. Additionally, the arborist shall perform the following duties:

- iv. Perform weekly inspections of tree protection fencing during grading or construction in the vicinity of protected trees and report deficiencies immediately to the Planning Division. If construction-related dust has accumulated on protected tree foliage, notify the Permittee and the Planning division that foliage should be hosed off.
- v. Produce and submit to the Planning Division monthly reports summarizing the above weekly inspections.
- vi. Stop or divert all work when deficiencies require mediation and notify the Planning Division within 24 hours.
- vii. Inform the Planning Division when tree protection fencing may be removed

e. Unanticipated Tree Damage Reporting

The permittee shall submit unanticipated damage reports to the Planning Division within 24 hours of occurrence or discovery of the damage.

Post-construction

a. Arborist Monitoring

Annual monitoring reports shall be prepared by an arborist, for (two years after project construction for construction damage monitoring, 5 years after planting for TPR offsets, 7 years after planting for oak woodlands mitigation planning), which address the success of protection measures and the overall condition of (encroached-upon, planted, transplanted) trees (describe/list the specific trees) relative to their condition prior to project construction. If any trees are found to be in serious decline (i.e., "D" status, or "C" status if pre-construction status was "A"), the arborist's report must include a Damaged Tree Addendum to the TPP which recommends offsets and any associated additional monitoring.

- i. An arborist shall inspect tree installations within 1 week of planting to verify that installations occurred according to the TPP specifications. CHANGE THIS
- ii. An arborist shall monitor any replacement or transplanted trees annually for compliance with the health performance targets in the approved TPP.
- iii. An arborist shall produce and submit to the Planning Division a final report when all TPP requirements have been satisfied (final report will release financial assurance).
- 4. Tree Impact Offsets

Trees 437, 438, 478 and 480 present unavoidable conflicts with proposed access road improvements and are recommended for removal. All the trees are relatively young. Mitigation to oak woodlands is proposed at a rate of ten fifteen- gallon Coast Live Oak (Quercus agrifolia) to be planted on site for each of the four trees to be removed for a total of forty replacement trees.

a. Replacement Planting or Transplanting

Replacement planting or transplanting offsets shall conform to the following:

- i. The Permittee shall ensure that replaced or transplanted trees live and maintain the performance targets specified in the approved TPP for a period of 7 years.
- The Permittee shall offset by way of in lieu fees, unless otherwise approved by the Planning Director, any replacement or transplanted tree that dies or does not meet its TPP performance targets within the 7-year monitoring period.
- b. In lieu Fees

In lieu fees are not proposed.

c. Unanticipated Damage

If tree damage occurs, either during construction or the post-construction monitoring period, which is not already addressed in the TPP, an arborist-prepared Damaged Tree Addendum shall be submitted to the Planning division which outlines how the damaged trees will be offset.

5. Tree Removal Standards

The felling of protected trees shall be done in a manner that avoids damage to remaining protected trees. The stumps of any tree removed within the TPZ of remaining trees shall be

ground down to just below the ground surface level and not excavated, unless that area is proposed for excavation as part of the development plan.

- 6. Planting Standards for Replacement and Transplant Trees
  - Replacement Trees

-Forty replacement Quercus agrifolia (Coast Live Oak) trees will be planted as replacement trees. There are multiple sites on Cap Ramah for planting. Planting standards will conform to ANSI A300 Tree Planting Standards (latest version), and ISA Tree Planting Best Management Practices, latest edition.

Transplant Trees

-No transplant trees are proposed.

Both Replacement and Transplant Trees:

Except for an establishment period after tree planting, no irrigation water shall be applied within a 6-foot radius of both protected oak tree trunks.

Planting within the TPZ of protected oaks is discouraged. Any plantings within the TPZ of protected oak trees shall be of compatible species requiring minimal irrigation. No planting shall occur within a 6-foot radius of protected oak tree trunks. Plant varieties that are susceptible to avocado root rot or oak root fungus should be avoided.

The Permittee shall ensure that protected oak tree trunk areas are properly drained and that water does not pool in the TPZ.

No extensive soil compacting activities shall occur in the TPZ.

7. Other Recommendations

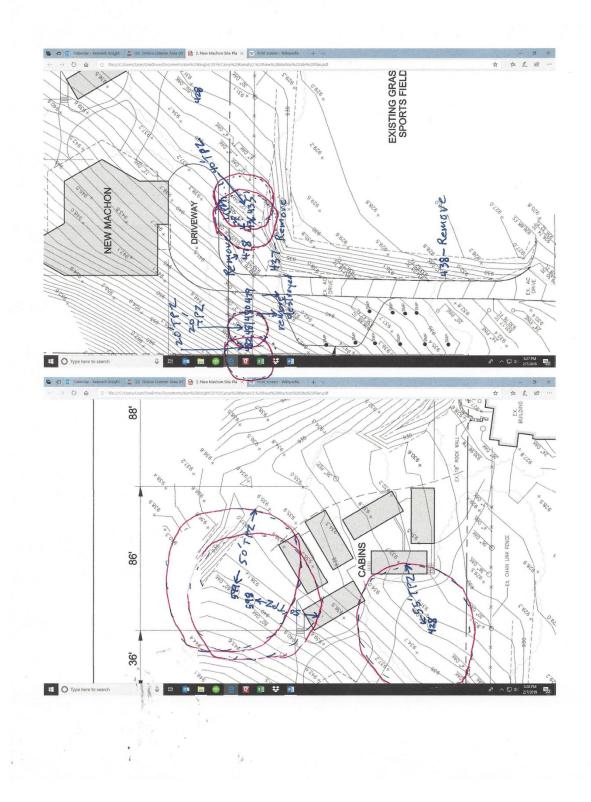
An arborist approved irrigation and maintenance schedule will be implemented until the trees are established.

- 8. Inspections Schedule
- Financial Assurance to Guarantee Protected Trees Offsets/Mitigation
   If protected trees are felled or damaged and require offsets/mitigation and planting new trees
   onsite is the approved offset/mitigation measure, the Permittee shall:
  - a) Post a financial assurance to cover the costs of planting and maintaining the offset trees for a period of 7 years. The financial assurance may consist of cash, a time certificate of deposit, letter of credit, or bond in a form satisfactory to the Planning Director. The amount of the financial assurance shall be based upon the TPP's appraised value of the affected trees. The financial assurance shall designate the Ventura County Planning division as the beneficiary of the instrument.
  - b) Upon satisfactory completion of the provisions of the TPP for which the financial assurance is made, the County of Ventura shall reassign the financial assurance to the Permittee. If the Permittee fails to carry out the provisions of the TPP, the county shall use the financial assurance to pay the costs associated with correcting the failure. If the amount of the financial assurance exceeds the cost and expense incurred by offsetting the loss or damage of the protected trees, the County shall refund the Permittee the remaining balance. If the amount of the financial assurance is less than the cost and expense incurred by the County for the offsets, the Permittee shall be liable to the County for the difference.
- Restrictive Covenants to Guarantee Protected Tree Offsets/Mitigation
   If protected trees are damaged and require offsets/mitigation and planting new trees onsite is the approved offset/mitigation measure, the Permittee shall record against the parcels(s)

governed by this permit a restrictive covenant indicating that the Planning Division has authorized development on the subject property subject to terms and conditions that restrict the use of that property.

The restrictive covenant shall be recorded by the Permittee on a form provided by the Planning Division and shall conform to the requirements outlined in the County's Content Requirements for Tree Protection Plans document. The restrictive covenant shall include the planting instructions and performance targets required by the TPP for tree replacement planting and shall be imposed as covenants and restrictions on the use of the property. The term of the restriction shall be 7 years as indicated in the TPP. The restrictive covenant shall include a legal description of the parcel(s) governed by this permit. In addition, the restrictive covenant shall:

- a. Prohibit removal or transplanting of replacement or transplanted trees without a permit modification;
- b. Restrict activities within the tree protection zone of replacement or transplanted trees;
- c. Require appropriate care of replacement or transplanted trees.
- d. Commit any future landowners to the tree protection conditions of this permit, including posting of financial assurances, tree monitoring and reporting: and
- e. Designate the County of Ventura as a beneficiary of the restrictive covenant in order to allow court action by the county if necessary.
- 11. Attachments
  - a. Arborist Report
  - b. Tree appraisals



Page | 7 of 9 https://d.docs.live.net/3de697a8bd752da4/Documents/Ken Knight/2019/Camp Ramah/2-7-19 Camp Ramah New Machon Tree Protection Plan-TPP.docx

1. Arborist's Information

<u>Arborist</u> – Ken Knight, Registered Consulting Arborist #507, Board Certified Master Arborist WE6394BM, ISA Risk Assessment Qualified – phone (805)252-1952, email kennethknight@cox.net

- Tree Dripline and Tree Protection Zone Trunk locations, and tree protection zone (TPZ) are listed on the site plan and in the arborist's report.
- Heritage or Historical Trees
   Trees 428, 598 and 599 meet the criteria for Heritage Trees.
- 4. Tree Impacting Work/Features As identified in the TPP
- 5. TPZ Landscaping

None proposed

- 6. Tree Protection Fencing location and Specifications As outlined in the TPP
- 7. Other Tree Protection Measures
- 8. Notes and Details

#### Submittal Schedule

Document/Offset	Date Requirement	Specific Submittal Date
Unanticipated Damage Report	Permittee shall submit within 24 hours of	
	occurrence or discovery of damage	
TPP Damaged Tree Addendum	Permittee shall submit within 30 days of the	
	damaging incident or discovery of the damage	
In Lieu Fees	The Permittee shall submit these fees within	
	30 days of approval of any TPP Damaged Tree	
	Addendum (if applicable) and prior to the	
	issuance of a Zoning Clearance for	
	construction. If in lieu fees will be paid to an	
	approved conservation agency, a Tree	
	Mitigation Plan and contract from the	
	conservation must be submitted at the same	
	time.	
On-Site Tree Planting	Planting of onsite offset/mitigation trees shall	
	occur within 90 days approval of any TPP	
	Damaged Tree Addendum (if applicable) and	
	prior to the issuance of a Zoning Clearance for	
	Construction.	
Annual reports	The first report shall be due one year after	
	receipt by the Planning Division of proof that	
	the required trees have been planted.	
Financial Assurance	The Permittee shall submit within 30 days of	
	approval of any TPP Damaged Tree Addendum	
	(if applicable) and prior to the issuance of a	
	Zoning Clearance for Construction.	
Restrictive Covenant	The restrictive covenant shall be recorded	
	prior to the issuance of a Zoning Clearance for	
	Construction and within 30 days of approval of	
	any TPP Damaged Tree Addendum (if	
	applicable) and prior to the issuance of a	
	Zoning Clearance for Construction. Within 5	
	days of recordation, the Permittee shall	
	provide the Planning Division with a copy of the recorded Restrictive covenant.	

# Camp Ramah 2019 Events Table

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Event Summary	Buddhist meditation study retreat. Primarily held indoors.	Buddhist meditation study retreat. Primarily held indoors.	National Ramah Convention. Ramah staff in attendance as well as in charee of morenaming	Children's Jewish Program, all children. Study and sports	Study, services, sports, and programming for youth in the Jewish community. Includes Ramah Summer Staff.	Study, services, sports, and programming for youth in the Jewish community. Includes Ramah Summer Staff.	Family Camp for Adat Ari El Temple. Roughly 60% of attendees are age 16 and under. Stabbat services. study, and snorts.	Retteat for senior staff of I os Anoeles Temple Primarily held indoore	Rabbinical students study retreat	Jewish study for teenagers as well as shorts	Family camp for toddlers.	Family camp retreat for synagogue, study, sports	All children, sports and nature study	Conejo Valley School District, students from middle and elementary schools come to camp ~100-180 Weekly for outdoor and science education.	Program for kids to study Israeli culture and history, along with sports and entertainment programmine.	Jewish study and sports for teenagers	lewish High School. Students come for shabbat services snorts and endy	College Jewish study group	Family Camp for Sinai Religious School. Roughly 50% of attendees are age 16 and under. Ramah Summer Staff included.	Family Camp for synagogue. Roughly 60% of attendees are age 16 and under. Shabbat services. study and sports	Tewish study for teenagets as well as shorts	Adult Women's AA group, study and therapy. Primarily held indoors.	Family camp for synagogue. Roughly 60% of attendees are age 16 and under. Shabbat services, study, and sports, Ramah Summer staff included	Family Camp for toddlets. Run by Ramah staff	Family camp retreat for synagogue, roughtly 60% under 16, study, sports
Est. Attendees	71	90	135	59	400	249	190	23		94		76	25	~100-180 Weekly	~750-850		275	50	195	175			136	100	
GROUP	Path of Bliss	Path of Bliss	Weinstein Institute	Congregation B'nai B'rith of SB School retreat	USY Kadima Kinnus	NFTY	Adat Ari El	Wilshire Executive Staff	Hazon	JCA Shalom- Sinai Teen	ECFC	Stephen Wise Family Camp	Fulcrum	Conejo Valley	Friends of Israeli Scouts	Adelson School	Shalhevet	UCLA Hillel	Sinai Religious School Camp	PJ Library	LA Hebrew High (LAHH)	Roxanne Retreat (McNally)	Congregation Ner Tamid	ECFC / Shomrei Torah	Shomrei Torah Family Camp
DATE	Dec 27, 2018 - Jan 2, 2019	3-Jan-19	Jan 3-5, 2019	Jan 11-13, 2019	Jan 25-27, 2019	Jan 19-20, 2019	Jan 19-20, 2019	Jan 27-28, 2019	Jan 31-Feb 3, 2019	Feb 1-3, 2019	Feb 1-3, 2019	Feb 8-10, 2019	Feb 9-10, 2019	Feb 11 - April 11, 2019	Feb 13-18, 2019	Feb 20-22, 2019	Feb 22-23, 2019	Feb 23-24, 2019	March 1-3, 2019	March 8-10, 2019	March 8-10, 2019	March 8-10, 2019	March 15-17, 2019	March 15-17, 2019	March 15-17, 2019

County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 5 - Camp Ramah Programs and Activities (2019)

Page 1

# Camp Ramah 2019 Events Table

		2	
DATE	GROUP	Est. Attendees	Event Summary
March 18-20, 2019	Santa Barbara Adventure	47	
March 18-22 2019	Barrier V. C	+/	Aut condren, sports and nature study
March 27 24 2010	Dapuste I oga Group	226	Retteat for adults to study Yoga practice.
MALCH 22-24, 2017	I emple Beth Am	291	Family Camp, roughly 50% of attendees are age 16 and under. Jewish study component.
March 28-29, 2019	Fulcrum	43	
March 28-April 5, 2019	Dacific Gestalt Institute		
Match 20.31 2010	A AMALE OCSIAIL ALISULUIE	00	Conterence for therapists, study. Primarily held indoors.
107 CT C CT TTO THE	Kuach INashim	70	Ramah community women's retreat for Jewish study.
Арні 5-7, 2019	Sinai Family Camp	229	Family Camp for Sinai Day School. Roughly 60% of attendees are age 16 and under. Jewish study componanat.
April 8-11, 2019	Baptiste Yoga Group	156	Retreat for adults to study Yrom morize
April 10-14, 2019	RYLA	340	Study and warming for Voud I all all all all all all all all all a
April 18-27, 2019	Passover	300	Promemine for lawich Chudian Duran Leadership program.
April 29- May 3, 2019	Animal Equality	33	Adult tetreot for minut sicher annu Duiment 1.11:1
April 29- May 3, 2019	Bodhi Path Meditation	27	Adult meditation study group. Primarily held indoors.
May 3-5, 2019	Ross Goldberg Bar Mitzvah	208	Ramah Summer Staff hired to run programming. family are Ramah alumnae. Torah study
May 10-12, 2019	IKAR	215	Jewish Community for youth in Los Angeles, shabbat services, sports, and study. Includes
May 14-15, 2019	Mariposa Middle School	75	All children encure and control at 1-
May 17, 2019	Fulcrum	75	All children shours and mature sound
May 17-19, 2019	ECFC - Adat Ari El	130	Family Camb for roddlers
May 17-19, 2019	VBS Day School	108	Family Camp for VBS Day School Day School. Roughly 60% of attendees are age 16 and under. Shibbat services study and snorts
May 23-27, 2019	Frtiends of Temeli Scours		Program for kids to study Israeli culture and history, along with sports and entertainment
May 29-May 31, 2019	Wolf Adventure	000-001-2	programming. All children and an and a statements of the statement of the statement of the statement of the statement of the
May 31-June 2, 2019	Robbins Wedding	JA 165	An cumurcu, sports and nature study
June 3-12, 2019	A-Camp		raumy are rautan atumm. Raman Summer start and alumni included
June 18-August 14, 2019	Summer		Camp Ior adult LGD I Q women. Sports & entertainment.
June 23-27, 2019	Legacy Heritage (Kol Haot)		Adult Tewish Shidy more an during summer come Drimouily hold in door.
July 8, 2019	Jomsky Bat Mitzvah		Bar Mitzvah celebration during summer camp, no overnicht
August 16-19, 2019	Ohr Lanu		Family Camp for Ramah Special Needs campers.
August 19-25, 2019	Camp in Harmony	660	Campers ages 6-15 from underprivledged backgrounds (many homeless), counselors include Rambh summer staff Shorts entertioners of a contract of the state of the state of the state of the state of the
Sept 4-6, 2019	Fulcrum - Curtis		All children, sports and nature study
Sept 4-6, 2019	Fulcrum - Calvary		All children sports and nature study
Sept 6-8, 2019	Sinai Teen Center		Retreat for children from Sinai Temple
Sept 11-13, 2019	Fulcrum - Buckley		All children, sports and nature study
			· · ·

# Camp Ramah 2019 Events Table

DATE	GROUP	Est. Attendees	Event Summary
Sept 13-15, 2019	Jewish Federation of Greater LA	75	Jewish study and prooramming for adults Drimorily held indones
Sept 13-15, 2019	Fulcrum - Claremont McKenna	60	All children enous and contrological addition is a successful children enous and contrological definition of the second control control control definition of the second control contr
Sept 19, 2019	Celebrate I ifa	20	
Sent 20-22 2010	T and T and T and T and T and T	00	Lay group for children, sports and nature study
0 - 20 20 2010	Los Cerritos Middle School	73	All children, sports and nature study
Sept 20-22, 2019	Lowe Bar Mitzvah	171	Ramah Summer Staff hired to run programming, family are Ramah alumni. Torah study.
Sept 23-25, 2019	Fulcrum - TVT	80	All children, sports and nature study
Sept 25-27, 2019	Fulcrum - Brentwood	60	All children, sports and nature study
Sept 27-29, 2019	Women's Spirituality Retreat	50	Women's AA tetteat study. Primarijy held indoors
Sept 27-29, 2019	Men's Recovery Retreat	19	Adult Men's AA group study and therapy Primarily held indoore
Sept 30- Oct 7, 2019	Baptiste Yoga Group	68	Retreat for adults to study voga practice. Primarily held indoors.
Oct 25-27, 2019	NFTY	182	Study, services, sports, and programming for youth in the Jewish community. Includes Ramah Summer Staff.
Oct 11-13, 2019	Boren Bat Mitzvah	108	Ramah Summer Staff hired to run programming family are Romoh chimmi Touch and-
Oct 18-20, 2019	Camp Yoga	103	Retreat for adults to study Yoos marchice
October 23, 2019	Celebrate Life	38	Day group for children shorts and nature study
Oct 25-27, 2019	ECFC	100	Family Camp for toddlers
Oct 25-27, 2019	Adat Ari-El JLC	50	Children's Tewish Propriation and shorts
Nov 1-4, 2019	CamPowerment	190	Adult programming for women Includes study components
Nov 6-7, 2019	Stephen Wise 6th Graders	40	All children, shorts and nature study
Nov 7-9, 2019	Fulcrum - Manhattan Beach USD	55	All children, sports and nature study
November 8-9, 2019	Greenfield Elementary	55	All children, sports and nature study
Nov 8-10, 2019	Congregation B'nai B'rith of SB Families	66	Family Camp for synapoon. Shahhat Services shudy shorts
Nov 8-10, 2019	<b>T</b> SU		Study, services, sports, and programming for vouth in the Jewish community.
Nov 12, 2019	OUHSD	30	Day group for children drugs and alcohol prevention, no overnight
Nov 15-17, 2019	YULA	239	Jewish High School. Students come for shabbat services, sports, and study.
Nov 22-24, 2019	Mizel Bat Mitzvah	140	Ramah Summer Staff hired to run programming, family are Ramah alumni. Torah study.
December 6-7, 2019	Milken	688	Jewish Day School. Students and teachers come for sports as well as Shabbat services and study.
9-Dec-19	OUHSD	30	Day group for children drugs and alcohol prevention. no overnight
11-Dec-19	OUHSD		Day group for children drugs and alcohol prevention, no overnight
12-Dec-19	OUHSD	30	Day group for children drugs and alcohol brevention. no overnicht
December 13-15, 2019	Shomrei Torah Children	24	Children's Jewish Program, all children. Study and sports
December 13-15, 2019	Adat Ari El	118	Family Camp for Adat Ari El Day School. Roughly 60% of attendees are age 16 and under. Stabibut services study and shores
December 13-15, 2019	Temple Aliyah Children		Family camp retreat for synapopue, roughtly 60% under 16 study shorts
17-Dec-19	OUHSD	30	Day group for children drugs and alcohol brevention. no overnicht
December 20-23, 2019	Machon Reunion	100	Camper reunion run by Ramah staff.
December 20-22, 2019	Ezra Reunion	30	Ramah summer camp staff and campers

Page 3

DATE	GROUP	Est. Cars	Est. Bus	Note
Dec 27, 2018 - Jan 2, 2019	Path of Bliss	50	0	
Jan 3-5, 2019	Weinstein Institute	70	0	
Jan 11-13, 2019 Jan 19-20, 2019	Congregation B'nai B'rith of SB School retreat NFTY	0	1 4	
Jan 19-20, 2019	Adat Ari El	5	4	
Jan 25-27, 2019	USY Kadima Kinnus	10	6	
Jan 27-28, 2019	Wilshire Executive Staff	20	0	
Jan 31-Feb 3, 2019	Hazon	30	0	
Feb 1-3, 2019	JCA Shalom- Sinai Teen	40	0	
Feb 1-3, 2019	ECFC	30	0	
Feb 8-10, 2019	Stephen Wise Family Camp	40	0	
Feb 9-10, 2019	Fulcrum	0	1	
Feb 13-18, 2019	Friends of Israeli Scouts	50	20	
Feb 11 - April 11, 2019	Conejo Valley	5	3	8 sessions
Feb 20-22, 2019	Adelson School	5	1	1
Feb 22-23, 2019	Shalhevet	5	5	
Feb 23-24, 2019	UCLA Hillel Sinai Religious School Camp	0	1	-
March 1-3, 2019 March 8-10, 2019	Roxanne Retreat (McNally)	70 25	0	
March 8-10, 2019	LA Hebrew High (LAHH)	23	2	
March 8-10, 2019	PJ Library	70	0	
March 15-17, 2019	Congregation Ner Tamid	60	0	
March 15-17, 2019	ECFC Shomrei Torah	35	0	
March 15-17, 2019	Shomrei Torah Family Camp	25	0	
March 18-20, 2019	Santa Barbara Adventure	2	1	
March 18-22, 2019	- Baptiste Yoga Group	100	0	
March 22-24, 2019	Temple Beth Am	100	0	
March 28-April 5, 2019	Pacific Gestalt Institute	30	0	
March 28-29, 2019	Fulcrum	2	1	
March 29-31, 2019	Ruach Nashim	50	0	
April 5-7, 2019	Sinai Family Camp	140	0	
April 8-11, 2019	Baptiste Yoga Group	100	0	
April 10-14, 2019	RYLA	5	7	
April 18-27, 2019	Passover	140	0	12 shuttle bus trips during the week
April 29- May 3, 2019 April 29- May 3, 2019	Animal Equality Bodhi Path Meditation	25 20	0	
May 3-5, 2019	Ross Goldberg Bar Mitzvah	100	0	
May 10-12, 2019	IKAR	5	4	
May 14-15, 2019	Mariposa Middle School	0	2	
May 17-19, 2019	ECFC - Adat Ari El	40	0	
May 17-19, 2019	VBS Day School	30	0	
17-May-19	Fulcrum	2	1	
May 23-27, 2019	Friends of Israeli Scouts	50	20	
May 29-May 31, 2019	Wolf Adventure	2	1	
May 31-June 2, 2019	Robbins Wedding	50	0	
June 3-12, 2019	A-Camp	150	4	
June 23-27, 2019	. Legacy Heritage (Kol Haot)	0	2	
June 18-August 14, 2019	Summer	SPECIAL	SPECIAL	Special See below
8-Jul-19	Jomsky Bat Mitzvah	0	0	
August 16-19, 2019	Ohr Lanu	20	0	
August 19-25, 2019 Sept 4-6, 2019	Camp in Harmony	30 0	7	
Sept 4-6, 2019	Fulcrum - Calvary Fulcrum - Curtis	4	1	
Sept 6-8, 2019	Sinai Teen Center	0	1	
Sept 11-13, 2019	Fulcrum - Buckley	2	2	
Sept 13-15, 2019	Fulcrum - Claremont McKenna	5	1	
Sept 13-15, 2019	Jewish Federation of Greater LA	60	0	
19-Sep-19	Celebrate Life	0	1	
Sept 20-22, 2019	Lowe Bar Mitzvah	50	1	
Sept 20-22, 2019	Los Cerritos Middle School	2	2	
Sept 23-25, 2019	Fulcrum - TVT	2	2	
Sept 25-27, 2019	Fulcrum - Brentwood	2	1	
Sept 27-29, 2019	Men's Recovery Retreat	19	0	
Sept 27-29, 2019	Women's Spirituality Retreat	30	0	
Sept 30- Oct 7, 2019 Oct 11-13, 2019	Baptiste Yoga Group Boren Bat Mitzvah	40	0	
Oct 18-20, 2019	Camp Yoga	40 50	0	
23-Oct-19	Camp Toga Celebrate Life	0	1	
Oct 25-27, 2019	Adat Ari-El JLC	30	0	
Oct 25-27, 2019	ECFC	20	0	
Oct 25-27, 2019	NFTY	2	4	
Nov 1-4, 2019	CamPowerment	100	0	
Nov 6-7, 2019	Stephen Wise 6th Graders	0	1	
Nov 7-9, 2019	Fulcrum - Manhattan Beach USD	1	1	
November 8-9, 2019	Greenfield Elementary	0	1	
Nov 8-10, 2019	USY Communication Print of CP Familia	5	3	
Nov 8-10, 2019	Congregation B'nai B'rith of SB Families OUHSD	20	0	
12-Nov-19 Nov 15-17, 2019	YULA	0 20	4	
	Mizel Bat Mitzvah	50	0	
	ATALCT AND ATTICATOR	40	10	
Nov 22-24, 2019	Milken		10	<i>r</i> .
Nov 22-24, 2019 December 6-7, 2018	Milken OUHSD	0		
Nov 22-24, 2019	OUHSD	0		14
Nov 22-24, 2019 December 6-7, 2018 9-Dec-19		0 0 0	1 1 1	1
Nov 22-24, 2019 December 6-7, 2018 9-Dec-19 11-Dec-19	OUHSD OUHSD OUHSD Temple Aliyah Children	0	1	
Nov 22-24, 2019 December 6-7, 2018 9-Dec-19 11-Dec-19 12-Dec-19 December 13-15, 2018 December 13-15, 2018	OUHSD OUHSD OUHSD Temple Aliyah Children Shomrei Torah Children	0	1 1	
Nov 22-24, 2019 December 6-7, 2018 9-Dec-19 11-Dec-19 12-Dec-19 December 13-15, 2018 December 13-15, 2018	OUHSD OUHSD OUHSD Temple Aliyah Children Shomrei Torah Children Adat Ari El	0 0 20 10 50	1 1 0	
Nov 22-24, 2019           December 6-7, 2018           9-Dec-19           11-Dec-19           12-Dec-19           December 13-15, 2018           December 13-15, 2018           December 13-15, 2018           I7-Dec-19	OUHSD OUHSD OUHSD Temple Aliyah Children Shomrei Torah Children Adat Ari El OUHSD	0 0 20 10 50 0	1 1 0 0 0 1	
Nov 22-24, 2019           December 6-7, 2018           9-Dec-19           11-Dec-19           12-Dec-19           December 13-15, 2018           December 13-15, 2018           December 13-15, 2018           December 13-15, 2018           December 13-15, 2018	OUHSD OUHSD OUHSD Temple Aliyah Children Shomrei Torah Children Adat Ari El OUHSD Erra Reunion	0 0 20 10 50 0 22	1 0 0 0 1 0	
Nov 22-24, 2019           December 6-7, 2018           9-Dec-19           11-Dec-19           12-Dec-19           December 13-15, 2018           December 13-15, 2018           December 13-15, 2018           17-Dec-19	OUHSD OUHSD OUHSD Temple Aliyah Children Shomrei Torah Children Adat Ari El OUHSD	0 0 20 10 50 0	1 1 0 0 0 1	

Summer Camp

4-week Camp (2 sessions) 2-week camp (4 sessions)

100\* 0

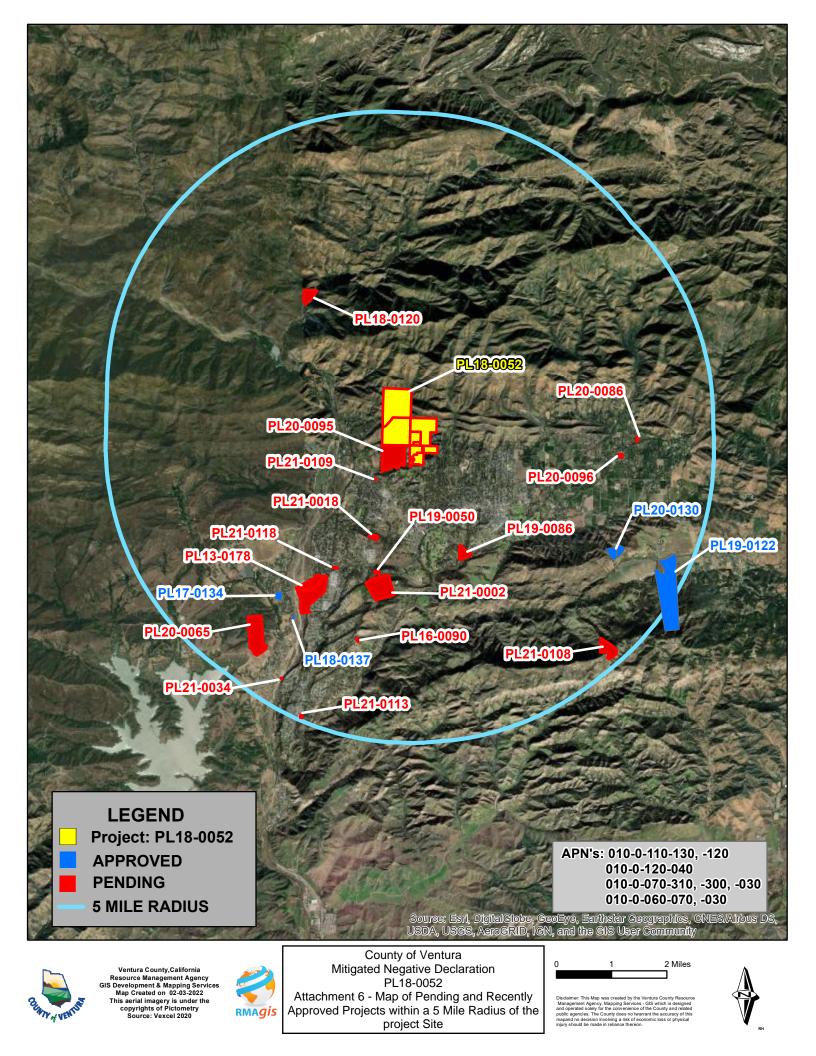
1

16 3

\*Between sessions, some staff leave and return. Others stay. Here, assuming all come and go twice

Notes: 1 These numbers are estimates provided by Camp Ramah staff based on their experience with these camps 2 At these events, guests arrive and stay for the duration of the event except as noted. 3 This chart does not include kitchen, admin, security staff that may come and during the work week. This has been provided separately.

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621 CHAPALA STREET SANTA BARBARA, CALIFORNIA 93101 T 805.963.0651 F 805.963.2074

#### MEMORANDUM

То:	Randy Michaels
From:	Hanna Dodd, P.E.
Subject:	Response to PL 18-0052
Date:	10/15/2018
Attachment(s):	Camp Ramah Existing Accounts with Casitas Municipal Water District, Camp Ramah Estimated Attendance Record 9/2017 – 8/2018, Casitas Municipal Water District Meter Data for Camp Ramah

On June 1, 2018, the Ventura County Watershed Protection District (VCWPD) – Groundwater Resources Section (County) wrote a letter to Camp Ramah requesting clarifications about the Camp's Major Modification to its existing Condition Use Permit (CUP) before Ventura County approves the Major Modification.

This memorandum provides responses to the four (4) items requested by VCWPD – Groundwater Resources Section in their June 1, 2018 letter.

### 1 Major Modification Project Description

Camp Ramah in California, Inc. (Camp) requested approval from Ventura County for a Major Modification to its existing Conditional Use Permit (CUP 3048). The Major Modification would include:

- Machon "Village" Space: New 10,609 square-foot space consisting of six (6) new cabins with a central gathering area to include counselor sleeping quarters, prep kitchen, meeting spaces, storage and restrooms.
- Reception/Storage Area: A 1,151 square-foot reception/storage area added to the existing Dining Hall.
- **Drop-off Area:** Reconfiguration of existing drop-off area.
- Adding Parcels to CUP: Incorporating three (3) recently purchased parcels into the CUP (Figure 1: APNs 010-0-060-030, 010-0-060-070, & 0100-070-310).

It should be noted that Major Modification will not increase the number of camp guest or staff; the additional buildings add a new programing space for the existing 11<sup>th</sup> grade campers.

County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 7 - Dudek Water Allocation Report, dated October 15, 2018

## 2 Responses to VCWPD – Groundwater Resources Section

Based on the information provided to the County before June 1, 2018, the County could not determine whether the proposed project would have a significant impact on available groundwater and water supply resources. In their June 1, 2018 letter to the Camp, the County requested the following additional information:

- 1. Clarify whether the allocation from the Casitas Municipal Water District (District) is for one parcel or all of the site's parcels and submit evidence of water allocations for the other parcels (if applicable);
- 2. Submit a Projected Water Demand (water requirements) for the project with verifiable water demand rates; and,
- 3. Provide total water use from all sources from a representative base period of at least 10 years to allow for adequate water analysis. The water use data must be copies of the original District water bills or printed on District letterhead to serve as empirical evidence of actual water usage.
- 4. Provide any metered groundwater extraction data if available.

This section gives responses to these four (4) items.

#### 2.1 Casitas Municipal Water District Allocation

In order to confirm the water allocation from the District for the Camp, the District was asked to provide information about Camp's current water allocation for any Camp water accounts. In September 2018, the District provided information to confirm the water allocations associated with the Camp's two existing water accounts with the District, which confirmed an allocation of 37.05 AFY for the Camp's main camp parcels (APNs 010-0-110-130, 101-0-110-120, 010-0-120-040, 010-0-070-030). The allocation information provided by the District for this response is included in **Attachment A. Table 1** provides the water use allocations for each of the Camp accounts and the parcels associated with each account, as provided by the District. **Figure 1** presents the parcel layout for the Camp.

The allocation value provide by the District in September 2018 is different than that from information the District previously provided the County in the Will Serve Letter dated March 16, 2018. The allocation data previously provided to the County from the District (29 AFY for APN 010-0-110-130) did not take into consideration a transfer of allocation from one parcel (APN 010-0-170-020) to the Camp's main camp parcels which occurred in September 2017. With the transfer, the Camp's main parcels have an allocation of 37.05 AFY.

-		
Parcel APN(s)	Account No.	District Water Allocation (AFY)
010-0-110-130 010-0-110-120 010-0-120-040 010-0-070-030	41-25674-00	37.05
010-0-170-020	40-25682-01	9.04
010-0-070-310	-	-
010-0-060-070	-	-
010-0-060-030	-	-

Table 1: Camp Ramah's Water Allocation from District

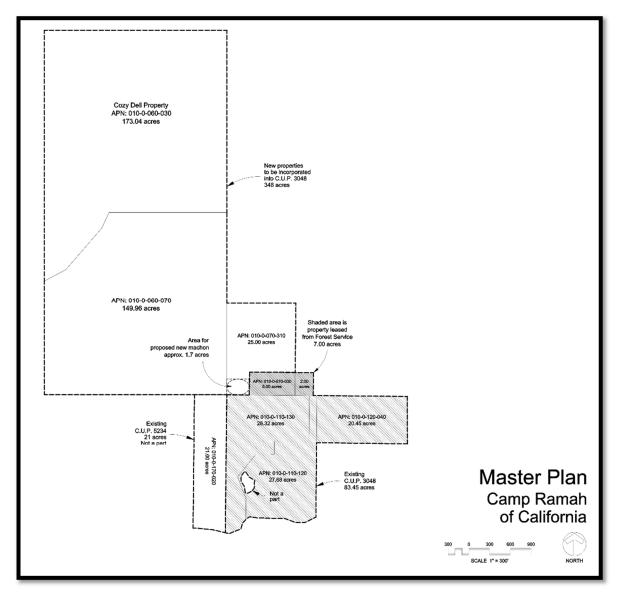


Figure 1 - Parcel Map

#### 2.2 Projected Water Demand

The annual project water demand for Camp Ramah after the Major Modification is calculated by summing the total estimated water use of the Camp, which includes usage by camp guests and staff (people), swimming pool evaporation, reservoir evaporation and irrigation.

#### 2.2.1 Estimated Water Use by Camp Guests and Staff

Since the Major Modification will not increase the number of camp guests and staff, the total number of people at Camp Ramah in future years is not expected to increase; therefore, recent guest and staff count information was used to project water usage consumption. Camp guest attendance records from September 2017 to August 2018 (**Attachment B**) were approximately 7,800 campers. There were 315 temporary staff for the summer camp between mid-June 2018 and mid-August 2018. There were 21 permanent staff working at Camp Ramah all year round.

**Table 2** presents a monthly calculation of the average amount of people at the Camp Ramah in any given month. Their monthly water usage was calculated to account for the water usage of camp guests, permanent staff and temporary staff over a one year period. The monthly averages of people assumed that a person who was only at Camp Ramah for one week during the month averaged out to one fourth (1/4) of a person for that month. Each average person was assumed to use 55 gallons per day (i.e. the required indoor per person water use goal for the year 2025 in California SB 606 and AB 1668, which is a value many California cities like San Francisco and Santa Cruz already meet). This calculation projected that people at Camp Ramah would use approximately 21 AFY.

Month	Year	Estimate Average Number of Guests	Estimated Average Number of Temporary Staff	Permanent Staff	Estimated Average Number of People	Estimated Water Use (AF)
September	2017	124	0	21	145	0.7
October	2017	175	0	21	196	1.0
November	2017	69	0	21	90	0.5
December	2017	50	0	21	71	0.4
January	2018	194	0	21	215	1.1
February	2018	238	0	21	259	1.2
March	2018	209	0	21	230	1.2
April	2018	116	0	21	137	0.7
May	2018	363	0	21	384	2.0
June	2018	923	158	21	1,101	5.6
July	2018	470	315	21	806	4.2
August	2018	258	158	21	436	2.3
-					Annual Total	21

#### Table 2: Estimated Water Use of People at Camp Ramah

#### 2.2.2 Swimming Pool Evaporation

Camp Ramah has two (2) swimming pools that are filled all year round. The total surface area of the two (2) swimming pools is 0.13 acres.

Pan evaporation data from the Western Regional Climate Center's (WRCC) Southwest Climate and Environmental Information Collaborative (SCENIC) closest station to Camp Ramah, Cachuma Lake station, was found from September 2017 to August 2018 (**Table 3**). The yearly total pan evaporation was 81 inches. Assuming that the swimming pools also lost 81 inches (i.e. 6.75 feet) of water per year to evaporation, the swimming pools would lose approximately 1 AFY to evaporation, which would need to be replenished by District water.

Month	Year	Monthly Pan Evaporation (inch)
September	2017	11.6
October	2017	7.6
November	2017	4.0
December	2017	3.7
January	2018	3.5
February	2018	3.9
March	2018	5.4
April	2018	5.5
May	2018	7.7
June	2018	8.8
July	2018	10.1
August	2018	9.1
	Annual Total	81

# Table 3: WRCC SCENIC CachumaLake Station Pan Evaporation

#### 2.2.3 Estimated Reservoir Evaporation

Camp Ramah has a 3 million gallon reservoir that is used to supply water to all fire hydrants at the Camp as well as supply the irrigation system. The reservoir is uncovered and has a surface area of 0.68 acres.

Assuming that the reservoir lost 81 inches (i.e. 6.75 feet) of water per year to evaporation (like the Cachuma Lake WRCC SCENIC Station), the reservoir would lose approximately 4.6 AFY to evaporation, which would need to be replenished by District water.

#### 2.2.4 Estimated Irrigation Demand

Camp Ramah has five (5) irrigated landscape areas that total 6.5 acres of irrigated land, as presented in **Table 4**. According to Camp records, all 6.5 acres are Bermuda grass.

Description	Area (acres)
Baseball field	3.00
Dining hall lawn	2.75
Adult housing/library	0.18
Climbing frame lawn	0.30
Bunks	0.27
Total	6.50

#### Table 4: Camp Ramah's Irrigated Land

Camp Ramah is located in the North Central Plateau & Central Coast Range (Zone 10) Reference Evapotranspiration ( $ET_0$ ) Zone as defined by the California Irrigation Management Information System (CIMIS). Zone 10 has an annual reference evapotranspiration of 49.1 inches. Bermuda grass has an annual average crop coefficient ( $K_c$ ) of 0.6<sup>1</sup>.

Therefore, Camp Ramah's total irrigated land is projected to require 16 AFY<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Meyer et al. 1985. Irrigation of turfgrass below replacement of evapotranspiration as a means of water conservation: determining crop coefficient of turfgrasses, pp. 357-364 in: F. Lemaire (ed.) Proc. 5th Intl. Turfgrass Research Conf., Avignon, France, July 1985. INRA Publications, Versailles, France. <sup>2</sup>  $ET_o^*K_c^*Area = (49.1 \text{ inch/year})^*(1 \text{ foot } / 12 \text{ inch})^*(0.6)^*(6.5 \text{ acre}) = 16 \text{ AFY}$ 

#### 2.2.5 Total Projected Water Demand

Total projected water demand for the Camp is the sum of the estimated water use by camp guests and staff, swimming pool evaporation, reservoir evaporation and landscape irrigation. As shown in **Table 5**, the Camp's projected annual demand is estimated at 42.6 AFY.

Type of Use	Projected Water Demand (AFY)
Indoor water use of people	21
Swimming pool evaporation	1
Reservoir evaporation	4.6
Irrigation demand	16
Annual Total	42.6

# Table 5: Camp Ramah's Projected Water Demand

#### 2.3 Total Water Use from Representative Base Period

The District was asked to provide Camp Ramah's monthly meter data from 2008 to 2018. Meter data associated with account 41-25674-00 was obtained from the District (**Attachment C**). The monthly meter data was from August 2008 to July 2018 (missing the months of December 2009 and April 2014). The District began meter data reports for Camp Ramah in August 2008; therefore, there are no meter data for January 2008 through July 2008. The annual water use summary of this meter data is listed in **Table 6.** The average monthly water use from 2008 to 2018 was 3.6 AFY. Therefore, the annual average water use was approximately 43 AFY.

Year	Metered Water Use (AFY)	Average Monthly Water Use (AFY)
2008	21**	4.2
2009	49*	4.5
2010	40	3.3
2011	40	3.3
2012	47	3.9
2013	55	4.6
2014	45*	4.1
2015	31	2.6
2016	29	2.4
2017	39	3.2
2018	21**	3.0

#### Table 6: Camp Ramah's Water Use from District Meter Data

\* Missing one month of water use from annual total water use

\*\* Missing more than one month of water use from annual total water use

#### 2.4 Metered Groundwater Data

Camp Ramah's well (SWN 04N23W02D01) did not produce any water since it was installed on March 31, 2016. The well is not anticipated to produce water in the near future; therefore, well information was not included in this memorandum.

### 3 Conclusions

Based on the information provided herein, it is concluded:

- 1. The District allocation for the main camp account (District Account 41-25674-00) is 37.05 AFY.
- 2. The Projected Water Demand for all the current uses of Camp Ramah is estimated at 42.6 AFY.
- 3. As presented in Table 6, the Camp's historical water use averages to 43 AFY.
- 4. Camp Ramah's groundwater well is not producing water.

In conclusion, **Table 6** shows that while there are at most eight (8) of the last ten (10) years were Camp Ramah's water use was above the main camp of Camp Ramah's allocation of 37.05 AFY (assuming 2018 has an annual total greater than 37 AFY), Camp Ramah has used less than its 37.05 AFY allocation in the two (2) of the three (3) most recent years (2015 & 2016). Since the Major Modification will not increase the number of campers or land irrigated, Camp Ramah is expected to follow this recent trend and maintain water use under 37.05 AFY for 2018 and beyond.

# Attachment A

Camp Ramah Existing Accounts with Casitas Municipal Water District

Allocation Information :	Summary	
File Edit Options Help	yaken kanan dara kalendar kanan k	
ব্য		
Account Number 4	1-25674-00 🖉 CAMP	RAMAH IN CALIFORNIA     385     FAIRVIEW RD
' Allocation Method Total Annual Allocation Current Stage Dwellings on Property Annual Essential Usage Annual NonEssential Usa Penalty Per Unit Over Allo		t x 435.6 = 16139 units Stage Reduction 0.90 = Current Annual Non-Essential 14525
	Monthly Non-E	Essential Annual Allocation Percentages
Jul 0.00	Aug Sep Oct	Nov Dec Jan Feb Mar Apr May Jun 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00
	Monthly All	ocation Calculation at Current Rates
Jul Essential 0 Non-Essential 0 Total 0	Aug         Sep         Oct           0         0         0         0           0         0         0         0         0	Nov         Dec         Jan         Feb         Mar         Apr         May         Jun           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         14525           0         0         0         0         0         0         14525           Calculation Detail         Calculati
		Clear
	View	ckelley

Allocation Information Summary
File Edit Options Help
ओ
Account Number 40-25682-01 CAMP RAMAH IN CALIFORNIA
Allocation Info
Allocation Method Annual
Total Annual Allocation 9.04 acre-feet x 435.6 = 3938 units
Current Stage 0.90
Dwellings on Property 1.00
Annual Essential Usage 0
Annual NonEssential Usage 3938 x Current Stage Reduction 0.90 = Current Annual Non-Essential 3544
Penalty Per Unit Over Allocation 5.00
Monthly Non-Essential Annual Allocation Percentages
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00
Monthly Allocation Calculation at Current Rates
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun
Essential 0 0 0 0 0 0 0 0 0 0 0 0 0
Non-Essential 0 0 0 0 0 0 0 0 0 0 0 0 3544
Total 0 0 0 0 0 0 0 0 0 0 0 3544
Utility Account Calculation Detail
Clear
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# Attachment B

Camp Ramah Estimated Attendance Record 9/2017 – 8/2018



DATE	GROUP	Estimated Number of Guests	Type of Rental
September 15 - 17, 2017	Mizel/Goldin Bat Mitzvah	350	Jewish Community
September 22 -24, 2017	Ventura College Stdnt Govt Retreat	25	Local Community
September 20 -24, 2017	Tune Up Fitness	120	Rental
October 13 - 15, 2017	Chinese Evangelical	75	Local Community
October 20 - 22, 2017	Sinai Temple Teen Center	75	Jewish Community
October 27 - 29, 2017	Camp Yoga	150	Rental
October 17 - 19, 2017	Molly Menashe Bat Mitzvah	400	Jewish Community
November 10 - 12, 2017	USY LTE	150	Jewish Community
November 10 - 12, 2017	Congregation B'nai B'rith of SB	125	Local Community
December 1-3, 2017	Adat Ari El JLC	75	Jewish Community
December 1-3, 2017	Shomrei Torah Shabbaton (Joint with TA)	75	Jewish Community
December 1-3, 2017	Temple Aliyah Shabbaton (Joint with ST)	50	Jewish Community
January 4-7, 2018	Weinstein Institute/Lay Leaders Shabbaton	115	Jewish Community
January 12-14, 2018	Adat Ari El Family Camp	175	Jewish Community
January 19-20,2018	Congregation B'nai B'rith of Santa Barbara	50	Local Community
January 19-20,2018	USY/Kadima Kinnus Shabbaton	235	Jewish Community
January 19-20,2018	Ramah Children	70	Internal
January 26-28,2018	The Roxanne Retreat	30	Rental
January 26-28,2018	Stephen S. Wise Shabbaton	100	Jewish Community
February 2-4, 2018	Congregation Ner Tamid	75	Jewish Community
February 2-4, 2018	Sinai Religious School Shabbaton	125	Jewish Community
February 14-19, 2018	Israeli Scouts	750	Jewish Community
March 2-4, 2018	Adat Ari El Day School	200	Jewish Community
March 2-4, 2018	Ezra Weekend	20	Internal
March 9-11, 2018	ECFC	75	Internal
March 9-11, 2018	Temple Israel Women's Retreat	40	Jewish Community
March 16-18, 2018	Sinai Temple Family Retreat	200	Jewish Community
March 23-25, 2018	Light/Levine Wedding	300	Jewish Community
April 13-15, 2018	California School Educators Association	100	Local Community
April 13-15, 2018	ECFC	75	Internal
April 19-22, 2018	Rotary Youth Leadership Awards	240	Local Community
April 27-29, 2018	Ruach Nashim	50	Internal
May 4-6, 2018	IKAR	250	Jewish Community
May 11-13, 2018	Temple Beth Am LA	200	Jewish Community
May 14-22, 2018	A-Camp	300	Rental
May 24-28, 2018	Israeli Scouts	700	Jewish Community
June 1-3, 2018	Reynolds Wedding	300	Jewish Community
June 8-10, 2018	Spitzer Wedding	300	Jewish Community
June 6, 2018	Mattes Bar Mitzvah	50	Jewish Community
June 12-August 17, 2018	Summer	1000	Internal
	TOTA	L 7800	



# Attachment C

Casitas Municipal Water District Meter Data

for Camp Ramah



service.	100 20 P-M		ETERS	Meter: 27925			····		
		Read		Total	and the second	nand		Reading	
Month	Date	Previous	Current	Consumption	Read	Consumption	Flag	Source	Occupa
ear : 2018							1		
Jul	08/01/2018	404815	407585		37.0500		Regular	Hand Held	00
Jun	07/02/2018	402640	404815	2175	37.0500		Regular	Hand Held	00
May	06/01/2018	401310	402640	1330	37.0500		Regular	Hand Held	00
Apr	05/01/2018	400790	401310	520	37.0500	37.0500	Regular	Hand Held	00
Mar	04/02/2018	399935	400790	855	37.0500	37.0500	Regular	Hand Held	00
Feb	03/01/2018	399485	399935	450	37.0500	37.0500	Regular	Hand Held	00
Jan	02/01/2018	398335	399485	1150	37.0500	37.0500	Regular	Hand Held	00
ear: 2017	Total 12								· · · · · · · · · · · · · · · · · · ·
Dec	01/02/2018	397385	398335	950	37.0500	37.0500	Regular	Hand Held	00
Nov	12/01/2017	396400	397385	985	37.0500	37.0500	Regular	Hand Held	00
Oct	11/02/2017	395075	396400	1325	37.0500	37.0500	Regular	Hand Held	00
Sep	10/09/2017	393306	395075	1769	37.0500	37.0500	Regular	Manual Read	00
Aug	09/06/2017	390785	393306	2521	29.0200	29.0200	Regular	Manual Read	00
Jul	08/02/2017	388120	390785	2665	29.0200	29.0200	Regular	Hand Held	00
Jun	07/03/2017	385400	388120	2720	29.0200	29.0200	Regular	Hand Held	00
May	06/01/2017	383890	385400	1510	29.0200		Regular	Hand Held	00
Apr	05/02/2017	382750	383890	1140	29.0200		Regular	Hand Held	00
Mar	04/03/2017	381985	382750	765	29.0200		Regular	Hand Held	00
Feb	03/01/2017	381605	381985	380	29.0200		Regular	Hand Held	00
Jan	02/01/2017	381405	381605	200	29.0200		Regular	Hand Held	00
ar : 2016		301403	301003	200	29.0200	29.0200	Regular		1 00
Dec	01/03/2017	380385	381405	1020	29.0200	20 0200	Regular	Hand Held	00
Nov	12/02/2016	380385	380385	1020	29.0200		Regular	Hand Held	00
							-		
Oct	11/02/2016	378775	380210	1435	29.0200		Regular	Hand Held	00
Sep	10/03/2016	378370	378775	405	29.0200		Regular	Hand Held	00
Aug	09/02/2016	376435	378370	1935	29.0200		Regular	Hand Held	00
Jul	08/05/2016	373600	376435	2835	29.0200		Regular	Hand Held	00
Jun	07/03/2016	372030	373600	1570	29.0200		Regular	Hand Held	00
May	06/03/2016	370525	372030	1505	29.0200	29.0200	Regular	Hand Held	00
Apr	05/04/2016	370135	370525	390	29.0200	29.0200	-	Hand Held	00
Mar	04/05/2016	369970	370135	165	29.0200	29.0200	Regular	Hand Held	00
Feb	03/02/2016	369625	369970	345	29.0200	29.0200	Regular	Hand Held	00
Jan	02/02/2016	368825	369625	800	29.0200	29.0200	Regular	Hand Held	00
ar : 2015	Total 12	t			·				I
Dec	01/04/2016	368500	368825	325	29.0200	29.0200	Regular	Hand Held	00
Nov	12/02/2015	367810	368500	690	29.0200	29.0200	Regular	Hand Held	00
Oct	11/02/2015	366550	367810	1260	29.0200	29.0200	Regular	Hand Held	00
Sep	10/02/2015	365870	366550	680	29.0200	29.0200	-	Hand Held	00
Aug	09/02/2015	364450	365870	1420	29.0200	29.0200	-	Hand Held	00
Jul	08/04/2015	362275	364450	2175	29.0200	29.0200	-	Hand Held	00
Jun	07/06/2015	359770	362275	2505	34.8200	34.8200	-	Hand Held	00
May	06/01/2015	357660	359770	2110			Regular	Hand Held	00
Apr	05/04/2015	357015	357660	645			Regular	Hand Held	00
Mar	04/02/2015	356725	357000	290			Regular	Hand Held	00
Feb	03/02/2015	356460	356725	290			Regular	Hand Held	00
	02/02/2015	355435	356460	1025			Regular	Hand Held	00
Jan		300430	300400	1025			rtegulai		0
ar : 2014		AFFCCA	055.05				Decular	111	
Dec	01/06/2015	355380	355435	55			Regular	Hand Held	00
Nov	12/04/2014	354545	355380	835			Regular	Hand Held	00
Oct	11/03/2014	353660	354545	885			Regular	Hand Held	00
Sep	10/06/2014	352175	353660	1485			Regular	Hand Held	00
Aug	09/03/2014	350010	352175	2165			Regular	Hand Held	00
Jul	08/04/2014	346230	350010	3780			Regular	Hand Held	00
Jun	07/02/2014	341890	346230	4340			Regular	Hand Held	00
May	06/03/2014	340080	341890	1810			Regular	Hand Held	00

ervice:	100 20 P-M		TERS	Meter: 279258				
		Read		Total	Demand		Reading	1111
Month	Date	Previous	Current	Consumption	Read Consumption	Flag	Source	Occupar
Mar	04/03/2014	338550	339160	610		Regular	Hand Held	00
Feb	03/05/2014	337975	338550	575		Regular	Hand Held	00
Jan	02/04/2014	335005	337975	2970		Regular	Hand Held	00
ar : 2013	Total 12							
Dec	01/02/2014	333670	335005	1335		Regular	Hand Held	00
Nov	12/03/2013	332960	333670	710		Regular	Hand Held	00
Oct	11/04/2013	328860	332960	4100	·····	Regular	Hand Held	00
Sep	10/01/2013	326955	328860	1905		Regular	Hand Held	00
Aug	09/04/2013	325195	326955	1760		Regular	Hand Held	00
Jul	08/02/2013	320310	325195	4885		Regular	Hand Held	00
Jun	07/02/2013	316170	320310	4140		Regular	Hand Held	00
	06/04/2013	315140	316170	1030		- La		
May			315140	3200		Regular	Hand Held	00
Apr	05/02/2013	311940				Regular	Hand Held	00
Mar	04/04/2013	311270	311940	670		Regular	Hand Held	00
Feb	03/06/2013	310860	311270	410		Regular	Hand Held	00
Jan	02/06/2013	309270	310860	1590		Regular	Hand Held	00
ar : 2012								
Dec	01/09/2013	308840	309270	430		Regular	Hand Held	00
Nov	12/03/2012	308525	308840	315		Regular	Hand Held	00
Oct	11/08/2012	304615	308525	3910		Regular	Hand Held	00
Sep	10/02/2012	302630	304615	1985		Regular	Hand Held	00
Aug	09/06/2012	299700	302630	2930		Regular	Hand Held	00
Jul	08/01/2012	297170	299700	2530		Regular	Hand Held	00
Jun	07/05/2012	293630	297170	3540		Regular	Hand Held	00
May	06/01/2012	293015	293630	615		Regular	Hand Held	00
Apr	05/01/2012	292435	293015	580		Regular	Hand Held	00
Mar	04/02/2012	289575	292435	2860		Regular	Hand Held	00
Feb	03/02/2012	289075	289575	500	· · · · · · · · · · · · · · · · · · ·	Regular	Hand Held	
								00
Jan	02/07/2012	288725	289075	350		Regular	Hand Held	00
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Dec	01/05/2012	288155	288725	570		Regular	Hand Held	00
Nov	12/08/2011	286920	288155	1235		Regular	Hand Held	00
Oct	11/09/2011	283500	286920	3420		Regular	Hand Held	00
Sep	10/07/2011	282695	283500	805		Regular	Hand Held	00
Aug	09/06/2011	281360	282695	1335		Regular	Hand Held	00
Jul	08/09/2011	276620	281360	4740		Regular	Hand Held	00
Jun	07/01/2011	275040	276620	1580		Regular	Hand Held	00
May	06/06/2011	273480	275040	1560		Regular	Hand Held	00
Apr	05/03/2011	272035	273480	1445		Regular	Hand Held	00
Mar	04/07/2011	271790	272035	245		Regular	Hand Held	00
Feb	03/08/2011	271545	271790	245		Regular	Hand Held	00
Jan	02/07/2011	271305	271545	240		Regular	Hand Held	00
ar : 2010		271000	211070	270	I			
		270050	271205	355	I	Dogular	Hand Hald	
Dec	01/04/2011	270950	271305			Regular	Hand Held	00
Nov	12/03/2010	269695	270950	1255		Regular	Hand Held	00
Oct	11/07/2010	267550	269695	2145		Regular	Hand Held	00
Sep	10/02/2010	265530	267550	2020		Regular	Hand Held	00
Aug	08/30/2010	262240	265530	3290		Regular	Hand Held	00
Jul	07/31/2010	258910	262240	3330		Regular	Hand Held	00
Jun	06/30/2010	256535	258910	2375	······································	Regular	Hand Held	00
May	06/08/2010	256030	256535	505		Regular	Hand Held	00
Apr	05/11/2010	254670	256030	1360		Regular	Hand Held	00
Mar	04/06/2010	254310	254670	360		Regular	Hand Held	00
• · · · · ·						-		
-eb	03/04/2010	254100	254310	210		Regular	Hand Held	00

Year : 2009 Total 12

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	<u>100 20 P-M</u>	Read		Meter: 2792 Total	Dem	and		Reading	
Month	Date	Previous	Current	Consumption	Read	Consumption	Flag	Source	Occupant
Nov	12/09/2009	252800	253745	945		<u></u>	Regular	Hand Held	00
Oct	11/13/2009	251390	252800	1410			Regular	Hand Held	00
Sep	10/13/2009	250055	251390	1335			Regular	Hand Held	00
Aug	09/15/2009	246440	250055	3615			Regular	Hand Held	00
Jul	08/11/2009	241445	246440	4995			Regular	Hand Held	00
Jun	07/07/2009	238095	241445	3350			Regular	Hand Held	00
May	06/08/2009	235855	238095	2240			Regular	Hand Held	00
Apr	05/07/2009	235140	235855	715			Regular	Hand Held	00
Mar	04/10/2009	233145	235140	1995			Regular	Hand Held	00
Feb	03/04/2009	232960	233145	185			Regular	Hand Held	00
Jan	02/09/2009	232385	232960	575		·····	Regular	Hand Held	00
ar : 2008	Total 5					*******	1	L	
Dec	01/09/2009	232195	232385	190			Regular	Hand Held	00
Nov	12/08/2008	230650	232195	1545			Regular	Hand Held	00
Oct	11/04/2008	228550	230650	2100			Regular	Hand Held	00
Sep	10/09/2008	225835	228550	2715			Regular	Hand Held	00
Aug	09/07/2008	223210	225835	2625			Regular	Hand Held	00
				Avg 1536		Avg 10		L	even see

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#### ADDENDUM

То:	Katy Vanderwyk, Camp Ramah
From:	Hanna Dodd, P.E.
Subject:	Addendum to 2018 Water Memorandum "Response to PL 18-0052"
Date:	11/12/2020
cc:	
Attachment(s):	A - Response to PL 18-0052 (dated 10/15/2018), B – Ventura County Ordinance

This addendum provides Camp Ramah with the following components:

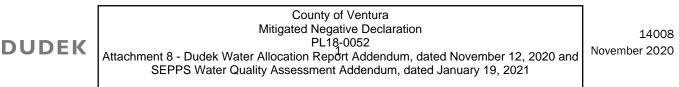
- 1. Describes extra water usage anticipated due to requested number of Outdoor Events at Camp Ramah,
- 2. Summarizes Camp Ramah's current well production, and
- 3. Determines Camp Ramah's total estimated water usage given item #1 & #2 above.

### 1 Background

In 2018, a memorandum entitled "Response to PL 18-0052" (Attachment A) was submitted to Ventura County (County) as part of Camp Ramah's Major Modification to its existing Condition Use Permit (CUP). The 2018 memorandum included:

- 1. A description of the Major Modification,
- 2. Clarification on which Camp Ramah parcels get an allocation from Casitas Municipal Water District (District),
- 3. Projected Water Demand from the following data:
  - a) Domestic Water Use by Camp Staff and Guests,
  - b) Swimming Pool Evaporation,
  - c) Reservoir Evaporation, and
  - d) Irrigation Demand.
- 4. Total Camp Ramah Water Use from District Meter Data (2008-2018), and
- 5. A Statement that Camp Ramah's Well did not produce any water since it was installed in 2016.

After completion of the 2018 memorandum, Ventura County has enacted a new ordinance (**Attachment B**) for modification of existing Condition Use Permits (CUPs). The new ordinance involves accounting for Outdoor Events in CUPs. The ordinance defines "Outdoor Events" as "an outdoor event held in a stationary location on a privately owned parcel... at which the primary event activities occur outside of structures...except for those [events] that are



either separately regulated..., addressed by a permit or entitlement". Camp Ramah has requested to host Outdoor Events in their Major Modification to their CUP and therefore, is subject to this new ordinance.

Additionally, since completion of the 2018 memorandum, Camp Ramah's well (SWN 04N23W02D01) has started producing water.

Given this new information, this addendum updates 2018 memorandum items #3a and #5 (above) to update Camp Ramah's total projected water demand.

# 2 Outdoor Event Estimated Additional Water Usage

The 2018 memorandum estimated that the annual domestic water use at Camp Ramah would be 21 acre-feet per year (AFY). This estimated annual water usage accounted for six (6) Outdoor Events from September 2017 to August 2018 that totaled 26 days of Outdoor Events.

From January 2019 to December 2019, there were six (6) Outdoor Events that totaled 29 days of Outdoor Events.

Therefore, the two-year average annual amount of days of Outdoor Events Camp Ramah currently host is 28 days.

Date	No. of Event Days	Group	Estimated No. of Guests	Included in 2018 Memo			
Sept 20-24, 2017	5	Tune Up Fitness	120	Y			
Oct 27-29, 2017	3	Camp Yoga	150	Y			
Mar 23-25, 2018	3	Light/Levine Wedding	300	Y			
May 14-22, 2018	9	A-Camp	300	Y			
Jun 1-3, 2018	3	Reynolds Wedding	300	Y			
Jun 8-10, 2018	3	Spitzer Wedding	300	Y			
Mar 18-22, 2019	5	Baptiste Yoga Group	226	Ν			
Apr 8-11, 2019	4	Baptiste Yoga Group	156	Ν			
May 31- Jun 2, 2019	3	Robbins Wedding	165	Ν			
Jun 3-12, 2019	10	A-Camp	432	Ν			
Oct 18-20, 2019	3	Camp Yoga	103	Ν			
Nov 1-4, 2019	4	CamPowerment	190	Ν			

#### Table 1: Outdoor Events (9/2017-12/2019)

Camp Ramah has requested that Ventura County allow Camp Ramah to host 35 days of Outdoor Events annually. Therefore, Camp Ramah is asking for an additional 9 days of Outdoor Events on top of the 26 days of Outdoor Events accounted for in the 2018 memorandum.

**Table 2** compares the days of Outdoor Events requested and the days of Outdoor Events in the 2018 memorandumby size of event.

### DUDEK

	2018 Memo		Requested by Camp Ramah	Difference Between Requested and 2018
Event Size	No. of Events	No. of Event Days	No. of Event Days	No. of Event Days
Large (351 to 500 guests)	4	18	16	-2
Medium (201 to 350 guests)	0	0	9	+9
Small (80 to 200 guests) <sup>1</sup>	2	8	10	+2
Total	6	26	35	+9

#### Table 2: Outdoor Events by Size

<sup>1</sup> Since Camp Ramah has lots under common ownership with a combined area of greater than 250 acres, Section 8107-46 of the County ordinance does not apply to events attended by less than 100 attendees (a term that includes the guests, staff, vendors and any other persons in attendance). Since there are 21 permanent staff working at Camp Ramah, this means that events with attendance under 80 guests do not fall under the requirements of Section 8107-46 of the ordinance.

Since the nine (9) additional days of Outdoor Events fall into the Medium and Small event size categories, it is reasonable to assume that Camp Ramah is requesting an additional 7 days of Outdoor Events with 350 guests and an additional 2 days of Outdoor Events with 200 guests. Assuming that 21 permanent Camp staff are at Camp Ramah on these additional nine (9) Outdoor Event days and each person uses 55 gallons per day (i.e. the required indoor per person water use goal for the year 2025 in California SB 606 and AB 1668), the additional nine (9) days of Outdoor Events would produce an additional 0.5 AFY on top of the 21 AFY found in the 2018 memorandum, as detailed in **Table 3**; resulting in a total annual estimated domestic water use at Camp Ramah (including the 35 days of Outdoor Events Camp Ramah requested) of 22 AFY.

#### Table 3: Additional Estimated Water Use from Requested Outdoor Events

Event Size	No. of Additional Event Days	Estimate Number of Guests	Estimated Average Number of Temporary Staff	Permanent Staff	Estimated Average Number of People	Additional Estimated Water Use (AF)
Medium (201 to 350 guests)	7	350	0	21	371	0.4
Small (80 to 200 guests) <sup>1</sup>	2	200	0	21	221	0.1
Total Additional Estimated Water Use						

 $^{1}$  Since Camp Ramah has lots under common ownership with a combined area of greater than 250 acres, Section 8107-46 of the County ordinance does not apply to events attended by less than 100 attendees (a term which includes the guests, staff, vendors and any other persons in attendance). Since there are 21 permanent staff working at Camp Ramah, this means that events under 80 guests do not fall under the requirements of Section 8107-46 of the ordinance.

## 3 Well Production

Camp Ramah's on-site well (SWN 04N23W02D01) was installed on March 31, 2016 and began producing water in July 2019. Since producing water (487 days), the on-site well has produced 430,239 gallons or an average of 0.99 AFY.

Date	Meter Reading (gal)
10/30/2020	430,239
10/29/2020	429,836
6/27/2020	329,391
6/26/2020	328,874
6/5/2020	305,179
6/4/2020	304,527
3/27/2020	249,541
3/26/2020	248,710
2/28/2020	224,852
2/27/2020	224,212
1/31/2020	198,058
1/30/2020	197,447
12/31/2019	169,661
12/30/2019	169,037
12/3/2019	144,342
12/2/2019	143,974
11/1/2019	111,469
10/31/2019	110,689
9/27/2019	72,585
7/1/2019	0

#### Table 4: Well Production Data

# 4 Total Projected Water Demand

In the 2018 memorandum, maximum annual total projected water demand for Camp Ramah was 42.6 AFY. Outdoor Events are estimated to add an additional 0.5 AFY of domestic water demand to those previously projected in the 2018 memorandum. Camp Ramah's 16-month on-site well production average is currently 0.99 AFY. Therefore, given the revised Outdoor Event and well supply data, the maximum projected annual water demand for Camp Ramah is 42.1 AFY.

## 5 Conclusions

Although additional Outdoor Events increase Camp Ramah's annual water demand by 0.5 AFY, this increase in water demand is offset by the annual well production of 0.99 AFY. This new well production lowers the projected maximum annual water demand for Camp Ramah to 42.1 AFY.

Although this new projected maximum annual water demand is above the District allocation of 37.05 AFY, the metered water demand from District bills was well below the 37.05 AFY allocation in four of the last five years (2015, 2016, 2018, 2019). Camp Ramah is expected to follow this recent trend and maintain water use under 37.05 AFY for 2020 and beyond.

Year	Metered Water Use (AFY)	Average Monthly Water Use (AFY)
2008	21**	4.2
2009	49*	4.5
2010	40	3.3
2011	40	3.3
2012	47	3.9
2013	55	4.6
2014	45*	4.1
2015	31	2.6
2016	29	2.4
2017	39	3.2
2018	32	2.7
2019	31	2.6
2020	6**	1.0

#### Table 5: Camp Ramah's Water Use from District Meter Data

\* Missing one month of water use from annual total water use

\*\* Missing more than one month of water use from annual total water use

# Attachment A

Response to PL 18-0052

621 CHAPALA STREET SANTA BARBARA, CALIFORNIA 93101 T 805.963.0651 F 805.963.2074

#### MEMORANDUM

То:	Randy Michaels
From:	Hanna Dodd, P.E.
Subject:	Response to PL 18-0052
Date:	10/15/2018
Attachment(s):	Camp Ramah Existing Accounts with Casitas Municipal Water District, Camp Ramah Estimated Attendance Record 9/2017 – 8/2018, Casitas Municipal Water District Meter Data for Camp Ramah

On June 1, 2018, the Ventura County Watershed Protection District (VCWPD) – Groundwater Resources Section (County) wrote a letter to Camp Ramah requesting clarifications about the Camp's Major Modification to its existing Condition Use Permit (CUP) before Ventura County approves the Major Modification.

This memorandum provides responses to the four (4) items requested by VCWPD – Groundwater Resources Section in their June 1, 2018 letter.

### 1 Major Modification Project Description

Camp Ramah in California, Inc. (Camp) requested approval from Ventura County for a Major Modification to its existing Conditional Use Permit (CUP 3048). The Major Modification would include:

- Machon "Village" Space: New 10,609 square-foot space consisting of six (6) new cabins with a central gathering area to include counselor sleeping quarters, prep kitchen, meeting spaces, storage and restrooms.
- Reception/Storage Area: A 1,151 square-foot reception/storage area added to the existing Dining Hall.
- **Drop-off Area:** Reconfiguration of existing drop-off area.
- Adding Parcels to CUP: Incorporating three (3) recently purchased parcels into the CUP (Figure 1: APNs 010-0-060-030, 010-0-060-070, & 0100-070-310).

It should be noted that Major Modification will not increase the number of camp guest or staff; the additional buildings add a new programing space for the existing 11<sup>th</sup> grade campers.

## 2 Responses to VCWPD – Groundwater Resources Section

Based on the information provided to the County before June 1, 2018, the County could not determine whether the proposed project would have a significant impact on available groundwater and water supply resources. In their June 1, 2018 letter to the Camp, the County requested the following additional information:

- 1. Clarify whether the allocation from the Casitas Municipal Water District (District) is for one parcel or all of the site's parcels and submit evidence of water allocations for the other parcels (if applicable);
- 2. Submit a Projected Water Demand (water requirements) for the project with verifiable water demand rates; and,
- 3. Provide total water use from all sources from a representative base period of at least 10 years to allow for adequate water analysis. The water use data must be copies of the original District water bills or printed on District letterhead to serve as empirical evidence of actual water usage.
- 4. Provide any metered groundwater extraction data if available.

This section gives responses to these four (4) items.

#### 2.1 Casitas Municipal Water District Allocation

In order to confirm the water allocation from the District for the Camp, the District was asked to provide information about Camp's current water allocation for any Camp water accounts. In September 2018, the District provided information to confirm the water allocations associated with the Camp's two existing water accounts with the District, which confirmed an allocation of 37.05 AFY for the Camp's main camp parcels (APNs 010-0-110-130, 101-0-110-120, 010-0-120-040, 010-0-070-030). The allocation information provided by the District for this response is included in **Attachment A. Table 1** provides the water use allocations for each of the Camp accounts and the parcels associated with each account, as provided by the District. **Figure 1** presents the parcel layout for the Camp.

The allocation value provide by the District in September 2018 is different than that from information the District previously provided the County in the Will Serve Letter dated March 16, 2018. The allocation data previously provided to the County from the District (29 AFY for APN 010-0-110-130) did not take into consideration a transfer of allocation from one parcel (APN 010-0-170-020) to the Camp's main camp parcels which occurred in September 2017. With the transfer, the Camp's main parcels have an allocation of 37.05 AFY.

-			
Parcel APN(s)	Account No.	District Water Allocation (AFY)	
010-0-110-130 010-0-110-120 010-0-120-040 010-0-070-030	41-25674-00	37.05	
010-0-170-020	40-25682-01	9.04	
010-0-070-310	-	-	
010-0-060-070	-	-	
010-0-060-030	-	-	

Table 1: Camp Ramah's Water Allocation from District

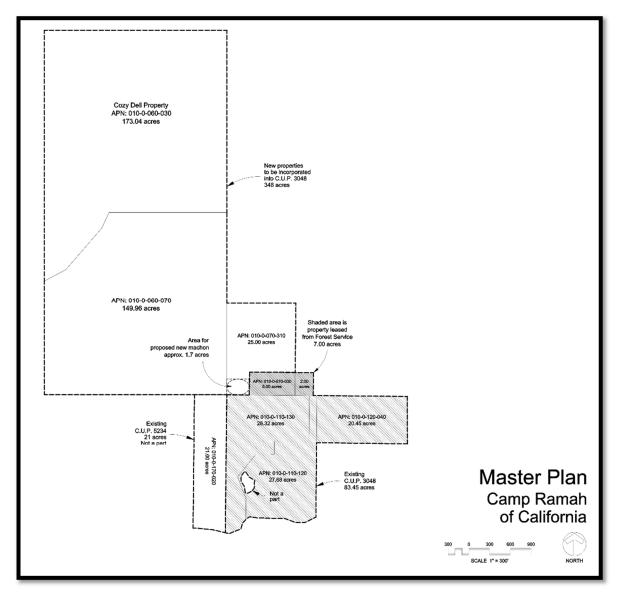


Figure 1 - Parcel Map

### 2.2 Projected Water Demand

The annual project water demand for Camp Ramah after the Major Modification is calculated by summing the total estimated water use of the Camp, which includes usage by camp guests and staff (people), swimming pool evaporation, reservoir evaporation and irrigation.

#### 2.2.1 Estimated Water Use by Camp Guests and Staff

Since the Major Modification will not increase the number of camp guests and staff, the total number of people at Camp Ramah in future years is not expected to increase; therefore, recent guest and staff count information was used to project water usage consumption. Camp guest attendance records from September 2017 to August 2018 (**Attachment B**) were approximately 7,800 campers. There were 315 temporary staff for the summer camp between mid-June 2018 and mid-August 2018. There were 21 permanent staff working at Camp Ramah all year round.

**Table 2** presents a monthly calculation of the average amount of people at the Camp Ramah in any given month. Their monthly water usage was calculated to account for the water usage of camp guests, permanent staff and temporary staff over a one year period. The monthly averages of people assumed that a person who was only at Camp Ramah for one week during the month averaged out to one fourth (1/4) of a person for that month. Each average person was assumed to use 55 gallons per day (i.e. the required indoor per person water use goal for the year 2025 in California SB 606 and AB 1668, which is a value many California cities like San Francisco and Santa Cruz already meet). This calculation projected that people at Camp Ramah would use approximately 21 AFY.

Month	Year	Estimate Average Number of Guests	Estimated Average Number of Temporary Staff	Permanent Staff	Estimated Average Number of People	Estimated Water Use (AF)
September	2017	124	0	21	145	0.7
October	2017	175	0	21	196	1.0
November	2017	69	0	21	90	0.5
December	2017	50	0	21	71	0.4
January	2018	194	0	21	215	1.1
February	2018	238	0	21	259	1.2
March	2018	209	0	21	230	1.2
April	2018	116	0	21	137	0.7
May	2018	363	0	21	384	2.0
June	2018	923	158	21	1,101	5.6
July	2018	470	315	21	806	4.2
August	2018	258	158	21	436	2.3
-					Annual Total	21

#### Table 2: Estimated Water Use of People at Camp Ramah

#### 2.2.2 Swimming Pool Evaporation

Camp Ramah has two (2) swimming pools that are filled all year round. The total surface area of the two (2) swimming pools is 0.13 acres.

Pan evaporation data from the Western Regional Climate Center's (WRCC) Southwest Climate and Environmental Information Collaborative (SCENIC) closest station to Camp Ramah, Cachuma Lake station, was found from September 2017 to August 2018 (**Table 3**). The yearly total pan evaporation was 81 inches. Assuming that the swimming pools also lost 81 inches (i.e. 6.75 feet) of water per year to evaporation, the swimming pools would lose approximately 1 AFY to evaporation, which would need to be replenished by District water.

Month	Year	Monthly Pan Evaporation (inch)	
September	2017	11.6	
October	2017	7.6	
November	2017	4.0	
December	2017	3.7	
January	2018	3.5	
February	2018	3.9	
March	2018	5.4	
April	2018	5.5	
May	2018	7.7	
June	2018	8.8	
July	2018	10.1	
August	2018	9.1	
	Annual Total	81	

## Table 3: WRCC SCENIC CachumaLake Station Pan Evaporation

#### 2.2.3 Estimated Reservoir Evaporation

Camp Ramah has a 3 million gallon reservoir that is used to supply water to all fire hydrants at the Camp as well as supply the irrigation system. The reservoir is uncovered and has a surface area of 0.68 acres.

Assuming that the reservoir lost 81 inches (i.e. 6.75 feet) of water per year to evaporation (like the Cachuma Lake WRCC SCENIC Station), the reservoir would lose approximately 4.6 AFY to evaporation, which would need to be replenished by District water.

#### 2.2.4 Estimated Irrigation Demand

Camp Ramah has five (5) irrigated landscape areas that total 6.5 acres of irrigated land, as presented in **Table 4**. According to Camp records, all 6.5 acres are Bermuda grass.

Description	Area (acres)
Baseball field	3.00
Dining hall lawn	2.75
Adult housing/library	0.18
Climbing frame lawn	0.30
Bunks	0.27
Total	6.50

#### Table 4: Camp Ramah's Irrigated Land

Camp Ramah is located in the North Central Plateau & Central Coast Range (Zone 10) Reference Evapotranspiration ( $ET_0$ ) Zone as defined by the California Irrigation Management Information System (CIMIS). Zone 10 has an annual reference evapotranspiration of 49.1 inches. Bermuda grass has an annual average crop coefficient ( $K_c$ ) of 0.6<sup>1</sup>.

Therefore, Camp Ramah's total irrigated land is projected to require 16 AFY<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Meyer et al. 1985. Irrigation of turfgrass below replacement of evapotranspiration as a means of water conservation: determining crop coefficient of turfgrasses, pp. 357-364 in: F. Lemaire (ed.) Proc. 5th Intl. Turfgrass Research Conf., Avignon, France, July 1985. INRA Publications, Versailles, France. <sup>2</sup>  $ET_o^*K_c^*Area = (49.1 \text{ inch/year})^*(1 \text{ foot } / 12 \text{ inch})^*(0.6)^*(6.5 \text{ acre}) = 16 \text{ AFY}$ 

#### 2.2.5 Total Projected Water Demand

Total projected water demand for the Camp is the sum of the estimated water use by camp guests and staff, swimming pool evaporation, reservoir evaporation and landscape irrigation. As shown in **Table 5**, the Camp's projected annual demand is estimated at 42.6 AFY.

Type of Use	Projected Water Demand (AFY)
Indoor water use of people	21
Swimming pool evaporation	1
Reservoir evaporation	4.6
Irrigation demand	16
Annual Total	42.6

# Table 5: Camp Ramah's Projected Water Demand

#### 2.3 Total Water Use from Representative Base Period

The District was asked to provide Camp Ramah's monthly meter data from 2008 to 2018. Meter data associated with account 41-25674-00 was obtained from the District (**Attachment C**). The monthly meter data was from August 2008 to July 2018 (missing the months of December 2009 and April 2014). The District began meter data reports for Camp Ramah in August 2008; therefore, there are no meter data for January 2008 through July 2008. The annual water use summary of this meter data is listed in **Table 6.** The average monthly water use from 2008 to 2018 was 3.6 AFY. Therefore, the annual average water use was approximately 43 AFY.

Year	Metered Water Use (AFY)	Average Monthly Water Use (AFY)
2008	21**	4.2
2009	49*	4.5
2010	40	3.3
2011	40	3.3
2012	47	3.9
2013	55	4.6
2014	45*	4.1
2015	31	2.6
2016	29	2.4
2017	39	3.2
2018	21**	3.0

#### Table 6: Camp Ramah's Water Use from District Meter Data

\* Missing one month of water use from annual total water use

\*\* Missing more than one month of water use from annual total water use

#### 2.4 Metered Groundwater Data

Camp Ramah's well (SWN 04N23W02D01) did not produce any water since it was installed on March 31, 2016. The well is not anticipated to produce water in the near future; therefore, well information was not included in this memorandum.

### 3 Conclusions

Based on the information provided herein, it is concluded:

- 1. The District allocation for the main camp account (District Account 41-25674-00) is 37.05 AFY.
- 2. The Projected Water Demand for all the current uses of Camp Ramah is estimated at 42.6 AFY.
- 3. As presented in Table 6, the Camp's historical water use averages to 43 AFY.
- 4. Camp Ramah's groundwater well is not producing water.

In conclusion, **Table 6** shows that while there are at most eight (8) of the last ten (10) years were Camp Ramah's water use was above the main camp of Camp Ramah's allocation of 37.05 AFY (assuming 2018 has an annual total greater than 37 AFY), Camp Ramah has used less than its 37.05 AFY allocation in the two (2) of the three (3) most recent years (2015 & 2016). Since the Major Modification will not increase the number of campers or land irrigated, Camp Ramah is expected to follow this recent trend and maintain water use under 37.05 AFY for 2018 and beyond.

# Attachment A

Camp Ramah Existing Accounts with Casitas Municipal Water District

Allocation Information :	Summary	
File Edit Options Help	yaken kanan dara kalendar kanan k	
ব্য		
Account Number 4	1-25674-00 🖉 CAMP	RAMAH IN CALIFORNIA     385     FAIRVIEW RD
' Allocation Method Total Annual Allocation Current Stage Dwellings on Property Annual Essential Usage Annual NonEssential Usa Penalty Per Unit Over Allo		t x 435.6 = 16139 units Stage Reduction 0.90 = Current Annual Non-Essential 14525
	Monthly Non-E	Essential Annual Allocation Percentages
Jul 0.00	Aug Sep Oct	Nov Dec Jan Feb Mar Apr May Jun 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00
	Monthly All	ocation Calculation at Current Rates
Jul Essential 0 Non-Essential 0 Total 0	Aug         Sep         Oct           0         0         0         0           0         0         0         0         0	Nov         Dec         Jan         Feb         Mar         Apr         May         Jun           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         14525           0         0         0         0         0         0         14525           Calculation Detail         Calculati
		Clear
	View	ckelley

Allocation Information Summary
File Edit Options Help
ओ
Account Number 40-25682-01 CAMP RAMAH IN CALIFORNIA
Allocation Info
Allocation Method Annual
Total Annual Allocation 9.04 acre-feet x 435.6 = 3938 units
Current Stage 0.90
Dwellings on Property 1.00
Annual Essential Usage 0
Annual NonEssential Usage 3938 x Current Stage Reduction 0.90 = Current Annual Non-Essential 3544
Penalty Per Unit Over Allocation 5.00
Monthly Non-Essential Annual Allocation Percentages
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00
Monthly Allocation Calculation at Current Rates
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun
Essential 0 0 0 0 0 0 0 0 0 0 0 0 0
Non-Essential 0 0 0 0 0 0 0 0 0 0 0 0 3544
Total 0 0 0 0 0 0 0 0 0 0 0 3544
Utility Account Calculation Detail
Clear
View ckelley

# Attachment B

Camp Ramah Estimated Attendance Record 9/2017 – 8/2018



DATE	GROUP	Estimated Number of Guests	Type of Rental
September 15 - 17, 2017	Mizel/Goldin Bat Mitzvah	350	Jewish Community
September 22 -24, 2017	Ventura College Stdnt Govt Retreat	25	Local Community
September 20 -24, 2017	Tune Up Fitness	120	Rental
October 13 - 15, 2017	Chinese Evangelical	75	Local Community
October 20 - 22, 2017	Sinai Temple Teen Center	75	Jewish Community
October 27 - 29, 2017	Camp Yoga	150	Rental
October 17 - 19, 2017	Molly Menashe Bat Mitzvah	400	Jewish Community
November 10 - 12, 2017	USY LTE	150	Jewish Community
November 10 - 12, 2017	Congregation B'nai B'rith of SB	125	Local Community
December 1-3, 2017	Adat Ari El JLC	75	Jewish Community
December 1-3, 2017	Shomrei Torah Shabbaton (Joint with TA)	75	Jewish Community
December 1-3, 2017	Temple Aliyah Shabbaton (Joint with ST)	50	Jewish Community
January 4-7, 2018	Weinstein Institute/Lay Leaders Shabbaton	115	Jewish Community
January 12-14, 2018	Adat Ari El Family Camp	175	Jewish Community
January 19-20,2018	Congregation B'nai B'rith of Santa Barbara	50	Local Community
January 19-20,2018	USY/Kadima Kinnus Shabbaton	235	Jewish Community
January 19-20,2018	Ramah Children	70	Internal
January 26-28,2018	The Roxanne Retreat	30	Rental
January 26-28,2018	Stephen S. Wise Shabbaton	100	Jewish Community
February 2-4, 2018	Congregation Ner Tamid	75	Jewish Community
February 2-4, 2018	Sinai Religious School Shabbaton	125	Jewish Community
February 14-19, 2018	Israeli Scouts	750	Jewish Community
March 2-4, 2018	Adat Ari El Day School	200	Jewish Community
March 2-4, 2018	Ezra Weekend	20	Internal
March 9-11, 2018	ECFC	75	Internal
March 9-11, 2018	Temple Israel Women's Retreat	40	Jewish Community
March 16-18, 2018	Sinai Temple Family Retreat	200	Jewish Community
March 23-25, 2018	Light/Levine Wedding	300	Jewish Community
April 13-15, 2018	California School Educators Association	100	Local Community
April 13-15, 2018	ECFC	75	Internal
April 19-22, 2018	Rotary Youth Leadership Awards	240	Local Community
April 27-29, 2018	Ruach Nashim	50	Internal
May 4-6, 2018	IKAR	250	Jewish Community
May 11-13, 2018	Temple Beth Am LA	200	Jewish Community
May 14-22, 2018	A-Camp	300	Rental
May 24-28, 2018	Israeli Scouts	700	Jewish Community
June 1-3, 2018	Reynolds Wedding	300	Jewish Community
June 8-10, 2018	Spitzer Wedding	300	Jewish Community
June 6, 2018	Mattes Bar Mitzvah	50	Jewish Community
June 12-August 17, 2018	Summer	1000	Internal
	TOTA	L 7800	



# Attachment C

Casitas Municipal Water District Meter Data

for Camp Ramah



service.	100 20 P-M		ETERS	Meter: 27925					
		Read		Total	and the second	nand		Reading	
Month	Date	Previous	Current	Consumption	Read	Consumption	Flag	Source	Occupa
ear : 2018							1		
Jul	08/01/2018	404815	407585		37.0500		Regular	Hand Held	00
Jun	07/02/2018	402640	404815	2175	37.0500		Regular	Hand Held	00
May	06/01/2018	401310	402640	1330	37.0500		Regular	Hand Held	00
Apr	05/01/2018	400790	401310	520	37.0500	37.0500	Regular	Hand Held	00
Mar	04/02/2018	399935	400790	855	37.0500	37.0500	Regular	Hand Held	00
Feb	03/01/2018	399485	399935	450	37.0500	37.0500	Regular	Hand Held	00
Jan	02/01/2018	398335	399485	1150	37.0500	37.0500	Regular	Hand Held	00
ear: 2017	Total 12								· · · · · · · · · · · · · · · · · · ·
Dec	01/02/2018	397385	398335	950	37.0500	37.0500	Regular	Hand Held	00
Nov	12/01/2017	396400	397385	985	37.0500	37.0500	Regular	Hand Held	00
Oct	11/02/2017	395075	396400	1325	37.0500	37.0500	Regular	Hand Held	00
Sep	10/09/2017	393306	395075	1769	37.0500	37.0500	Regular	Manual Read	00
Aug	09/06/2017	390785	393306	2521	29.0200	29.0200	Regular	Manual Read	00
Jul	08/02/2017	388120	390785	2665	29.0200	29.0200	Regular	Hand Held	00
Jun	07/03/2017	385400	388120	2720	29.0200	29.0200	Regular	Hand Held	00
May	06/01/2017	383890	385400	1510	29.0200		Regular	Hand Held	00
Apr	05/02/2017	382750	383890	1140	29.0200		Regular	Hand Held	00
Mar	04/03/2017	381985	382750	765	29.0200		Regular	Hand Held	00
Feb	03/01/2017	381605	381985	380	29.0200		Regular	Hand Held	00
Jan	02/01/2017	381405	381605	200	29.0200		Regular	Hand Held	00
ar : 2016		301403	301003	200	29.0200	29.0200	Regular		1 00
Dec	01/03/2017	380385	381405	1020	29.0200	20 0200	Regular	Hand Held	00
Nov	12/02/2016	380385	380385	1020	29.0200		Regular	Hand Held	00
							-		
Oct	11/02/2016	378775	380210	1435	29.0200		Regular	Hand Held	00
Sep	10/03/2016	378370	378775	405	29.0200		Regular	Hand Held	00
Aug	09/02/2016	376435	378370	1935	29.0200		Regular	Hand Held	00
Jul	08/05/2016	373600	376435	2835	29.0200		Regular	Hand Held	00
Jun	07/03/2016	372030	373600	1570	29.0200		Regular	Hand Held	00
May	06/03/2016	370525	372030	1505	29.0200	29.0200	Regular	Hand Held	00
Apr	05/04/2016	370135	370525	390	29.0200	29.0200	-	Hand Held	00
Mar	04/05/2016	369970	370135	165	29.0200	29.0200	Regular	Hand Held	00
Feb	03/02/2016	369625	369970	345	29.0200	29.0200	Regular	Hand Held	00
Jan	02/02/2016	368825	369625	800	29.0200	29.0200	Regular	Hand Held	00
ar : 2015	Total 12	t			·				I
Dec	01/04/2016	368500	368825	325	29.0200	29.0200	Regular	Hand Held	00
Nov	12/02/2015	367810	368500	690	29.0200	29.0200	Regular	Hand Held	00
Oct	11/02/2015	366550	367810	1260	29.0200	29.0200	Regular	Hand Held	00
Sep	10/02/2015	365870	366550	680	29.0200	29.0200	-	Hand Held	00
Aug	09/02/2015	364450	365870	1420	29.0200	29.0200	-	Hand Held	00
Jul	08/04/2015	362275	364450	2175	29.0200	29.0200	-	Hand Held	00
Jun	07/06/2015	359770	362275	2505	34.8200	34.8200	-	Hand Held	00
May	06/01/2015	357660	359770	2110			Regular	Hand Held	00
Apr	05/04/2015	357015	357660	645			Regular	Hand Held	00
Mar	04/02/2015	356725	357000	290			Regular	Hand Held	00
Feb	03/02/2015	356460	356725	290			Regular	Hand Held	00
	02/02/2015	355435	356460	1025			Regular	Hand Held	00
Jan		300430	300400	1025			ricyulai		0
ar : 2014		AFFCCA	055.05				Decular	111	
Dec	01/06/2015	355380	355435	55			Regular	Hand Held	00
Nov	12/04/2014	354545	355380	835			Regular	Hand Held	00
Oct	11/03/2014	353660	354545	885			Regular	Hand Held	00
Sep	10/06/2014	352175	353660	1485			Regular	Hand Held	00
Aug	09/03/2014	350010	352175	2165			Regular	Hand Held	00
Jul	08/04/2014	346230	350010	3780			Regular	Hand Held	00
Jun	07/02/2014	341890	346230	4340			Regular	Hand Held	00
May	06/03/2014	340080	341890	1810			Regular	Hand Held	00

ervice:	100 20 P-M		TERS	Meter: 279258				
		Read		Total	Demand		Reading	1111
Month	Date	Previous	Current	Consumption	Read Consumption	Flag	Source	Occupar
Mar	04/03/2014	338550	339160	610		Regular	Hand Held	00
Feb	03/05/2014	337975	338550	575		Regular	Hand Held	00
Jan	02/04/2014	335005	337975	2970	······································	Regular	Hand Held	00
ar : 2013	Total 12							
Dec	01/02/2014	333670	335005	1335		Regular	Hand Held	00
Nov	12/03/2013	332960	333670	710		Regular	Hand Held	00
Oct	11/04/2013	328860	332960	4100	·····	Regular	Hand Held	00
Sep	10/01/2013	326955	328860	1905		Regular	Hand Held	00
Aug	09/04/2013	325195	326955	1760		Regular	Hand Held	00
Jul	08/02/2013	320310	325195	4885		Regular	Hand Held	00
Jun	07/02/2013	316170	320310	4140		Regular	Hand Held	00
	06/04/2013	315140	316170	1030		- La		
May			315140	3200		Regular	Hand Held	00
Apr	05/02/2013	311940				Regular	Hand Held	00
Mar	04/04/2013	311270	311940	670		Regular	Hand Held	00
Feb	03/06/2013	310860	311270	410		Regular	Hand Held	00
Jan	02/06/2013	309270	310860	1590		Regular	Hand Held	00
ar : 2012								
Dec	01/09/2013	308840	309270	430		Regular	Hand Held	00
Nov	12/03/2012	308525	308840	315		Regular	Hand Held	00
Oct	11/08/2012	304615	308525	3910		Regular	Hand Held	00
Sep	10/02/2012	302630	304615	1985		Regular	Hand Held	00
Aug	09/06/2012	299700	302630	2930		Regular	Hand Held	00
Jul	08/01/2012	297170	299700	2530		Regular	Hand Held	00
Jun	07/05/2012	293630	297170	3540		Regular	Hand Held	00
May	06/01/2012	293015	293630	615		Regular	Hand Held	00
Apr	05/01/2012	292435	293015	580		Regular	Hand Held	00
Mar	04/02/2012	289575	292435	2860		Regular	Hand Held	00
Feb	03/02/2012	289075	289575	500	· · · · · · · · · · · · · · · · · · ·	Regular	Hand Held	
								00
Jan	02/07/2012	288725	289075	350		Regular	Hand Held	00
ar : 2011		222.122				1		
Dec	01/05/2012	288155	288725	570		Regular	Hand Held	00
Nov	12/08/2011	286920	288155	1235		Regular	Hand Held	00
Oct	11/09/2011	283500	286920	3420		Regular	Hand Held	00
Sep	10/07/2011	282695	283500	805		Regular	Hand Held	00
Aug	09/06/2011	281360	282695	1335		Regular	Hand Held	00
Jul	08/09/2011	276620	281360	4740		Regular	Hand Held	00
Jun	07/01/2011	275040	276620	1580		Regular	Hand Held	00
May	06/06/2011	273480	275040	1560		Regular	Hand Held	00
Apr	05/03/2011	272035	273480	1445		Regular	Hand Held	00
Mar	04/07/2011	271790	272035	245		Regular	Hand Held	00
Feb	03/08/2011	271545	271790	245		Regular	Hand Held	00
Jan	02/07/2011	271305	271545	240		Regular	Hand Held	00
ar : 2010		271000	211070	270	I			
		270050	071005	355	I	Dogular	Hand Hald	
Dec	01/04/2011	270950	271305			Regular	Hand Held	00
Nov	12/03/2010	269695	270950	1255		Regular	Hand Held	00
Oct	11/07/2010	267550	269695	2145		Regular	Hand Held	00
Sep	10/02/2010	265530	267550	2020		Regular	Hand Held	00
Aug	08/30/2010	262240	265530	3290		Regular	Hand Held	00
Jul	07/31/2010	258910	262240	3330		Regular	Hand Held	00
Jun	06/30/2010	256535	258910	2375	······································	Regular	Hand Held	00
May	06/08/2010	256030	256535	505		Regular	Hand Held	00
Apr	05/11/2010	254670	256030	1360		Regular	Hand Held	00
Mar	04/06/2010	254310	254670	360		Regular	Hand Held	00
• · · · · ·						-		
-eb	03/04/2010	254100	254310	210		Regular	Hand Held	00

Year : 2009 Total 12

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Service: 100 20 P-M-OTHER METERS Read			Meter: 2792 Total	Dem	and				
Month	Date	Previous	Current	Consumption	Read	Consumption	Flag	Source	Occupant
Nov	12/09/2009	252800	253745	945			Regular	Hand Held	00
Oct	11/13/2009	251390	252800	1410			Regular	Hand Held	00
Sep	10/13/2009	250055	251390	1335			Regular	Hand Held	00
Aug	09/15/2009	246440	250055	3615			Regular	Hand Held	00
Jul	08/11/2009	241445	246440	4995			Regular	Hand Held	00
Jun	07/07/2009	238095	241445	3350			Regular	Hand Held	00
May	06/08/2009	235855	238095	2240			Regular	Hand Held	00
Apr	05/07/2009	235140	235855	715			Regular	Hand Held	00
Mar	04/10/2009	233145	235140	1995			Regular Hand Held		00
Feb	03/04/2009	232960	233145	185			Regular Hand Held		00
Jan	02/09/2009	232385	232960	575		·····	Regular	Hand Held	00
ar : 2008	Total 5					*******	1		
Dec	01/09/2009	232195	232385	190			Regular	Hand Held	00
Nov	12/08/2008	230650	232195	1545			Regular	Hand Held	00
Oct	11/04/2008	228550	230650	2100			Regular	Hand Held	00
Sep	10/09/2008	225835	228550	2715			Regular	Hand Held	00
Aug	09/07/2008	223210	225835	2625			Regular	Hand Held	00
				Avg 1536		Avg 10		ι	ana para.

# Attachment B

Ventura County Ordinance

## ORDINANCE NO. 4526

#### AN ORDINANCE OF THE COUNTY OF VENTURA, STATE OF CALIFORNIA, AMENDING DIVISION 8, CHAPTER 1, ARTICLES 2, 5, 7 AND 11 OF THE VENTURA COUNTY ORDINANCE CODE, NON-COASTAL ZONING ORDINANCE, REGARDING REGULATION OF OUTDOOR EVENTS, PERMIT PROCESSING AND APPROVAL STANDARDS FOR OUTDOOR EVENTS AND ASSEMBLY USES, PERMIT CONDITIONING REQUIREMENTS FOR ALL DISCRETIONARY PERMITS, AND PERMIT MODIFICATION AND REVOCATION STANDARDS FOR ALL DISCRETIONARY PERMITS

The Board of Supervisors of the County of Ventura ("County") ordains as follows:

#### Section 1

#### **ARTICLE 2 – DEFINITIONS**

Article 2, Section 8102-0 – Application of Definitions, of the Ventura County Ordinance Code is hereby amended to add the following definition in appropriate alphabetical order:

<u>Hazardous Fire Area</u> – See definition in the Ventura County Fire Code which is incorporated herein by this reference.

Article 2, Section 8102-0 – Application of Definitions, of the Ventura County Ordinance Code is hereby amended to delete the definition "<u>Festivals, Animal Shows, Receptions,</u> and <u>Similar Events, Temporary Outdoor</u>" and to replace it with the definition "<u>Outdoor</u> <u>Events</u>" in appropriate alphabetical order as follows:

<u>Outdoor Events</u> – An outdoor event held in a stationary location on a privately owned parcel in the Open Space, Agricultural Exclusive, Rural Agricultural, or Commercial Planned Development zone at which the primary event activities occur outside of structures, such as harvest festivals; carnivals; historic re-enactments; animal events; art shows; athletic events; concerts; craft fairs; farmer's markets; receptions; ceremonies; fundraisers; social, political, spiritual or organizational gatherings; and similar events except for those that are either separately regulated under this Chapter, addressed by a permit or entitlement issued under this Chapter or that occur at a permitted school or college. See outdoor event regulations in Sec. 8107-46.

Article 2, Section 8102-0 – Application of Definitions, of the Ventura County Ordinance Code is hereby amended to revise the definition of "<u>Assembly Use</u>" to read as follows:

<u>Assembly Use</u> – A building or structure where groups or individuals voluntarily meet to pursue their common social, educational, religious, or other interests. For the purposes of this definition, assembly uses do not include Outdoor Events, Conference Centers/Convention Centers, Amusement and Recreational Facilities, Equestrian Centers, or Sport and Athletic Recreational Facilities.

#### Section 2

#### **ARTICLE 5 – PERMITTED USES**

Article 5, Section 8105-4 – Permitted Uses in Open Space, Agricultural, Residential and Special Purpose Zones, is hereby amended to delete the land use category "<u>Festivals</u>, <u>Animal Shows, Receptions, and Similar Events, Temporary Outdoor</u>" and to replace it with the land use category "<u>Outdoor Events</u>" in appropriate alphabetical order as follows:

	PERMIT REQUIREMENTS BY ZONE									
LAND USE CATEGORY	OS	AE	RA	RE	RO	<b>R1</b>	<b>R2</b>	RPD	RHD	ТР
<b>Outdoor Events</b>										
If Event Meets	E	E	E							
Criteria And										
Requirements of										
Sec. 8107-46.3										
If Event Does Not		_								
Meet Criteria And	ЦШ									
Requirements of										
Sec. 8107-46.3										

Article 5, Section 8105-5 – Permitted Uses in Commercial and Industrial Zones, is hereby amended to delete the land use category "<u>Festivals, Animal Shows, Receptions, and Similar Events, Temporary Outdoor</u>" and to replace it with the land use category "<u>Outdoor</u>" <u>Events</u>" in appropriate alphabetical order as follows:

	PERMIT REQUIREMENTS BY ZONE							
LAND USE CATEGORY	CO	<b>C1</b>	CPD	<b>M1</b>	M2	M3		
Festivals, Animal Shows,								
<b>Receptions, and Similar</b>								
Events, Temporary								
Outdoor				6				

	PERMIT REQUIREMENTS BY ZONE							
LAND USE CATEGORY	CO	<b>C</b> 1	CPD	<b>M1</b>	<b>M2</b>	M3		
Outdoor Events								
If Event Meets Criteria			E					
And Requirements of								
Sec. 8107-46.3								
If Event Does Not								
Meet Criteria And								
Requirements of Sec.								
8107-46.3								

#### Section 3

#### **ARTICLE 7 – STANDARDS FOR SPECIFIC USES**

Article 7 – Standards for Specific Uses of the Ventura County Ordinance Code is hereby amended by adding a new Section 8107-46 – Outdoor Events, to read as follows:

#### Sec. 8107-46.1 – Purpose

The purpose of this Sec. 8107-46 is to regulate outdoor events to ensure they are compatible with surrounding land uses and are not detrimental to public health and safety or the environment. This Sec. 8107-46 does not apply to any event that is either (a) attended by 75 or fewer total "attendees" (a term which, as used in this Sec. 8107-46, includes guests, staff, vendors, and any other persons in attendance) over the course of an event on a lot smaller than 250 acres, or (b) attended by 100 or fewer attendees over the course of an event on a lot suder common ownership, totals 250 or more acres. This Sec. 8107-46 also does not apply to any event at which the primary event activities occur within dwellings or other structures. Whether or not an outdoor event is regulated by this Sec. 8107-46, the use of fireworks, large tents, bonfires or other structures or activities presenting a fire hazard may require approval by the Ventura County Fire Protection District.

#### Sec. 8107-46.2 – No Authorization for Installation of Permanent Structures, Equipment or Impervious Surfaces

The construction or installation of permanent structures, equipment or impervious surfaces shall not be authorized under this Sec. 8107-46 in conjunction with an outdoor event use.

#### Sec. 8107-46.3 – Outdoor Events Exempt from Permitting

No Zoning Clearance or other land use approval or entitlement is required under this Chapter for an outdoor event that meets all of the following criteria. An outdoor event authorized under this Sec. 8107-46.3 shall comply with all requirements set forth below:

- a. Criteria. The event does not exceed the applicable attendee limit set forth below:
  - (1) For a parcel of less than five acres, the total number of attendees over the course of an event is greater than 75 but does not exceed 150, or such larger number if (i) both the event and the number of attendees are such that the use is customarily incidental, appropriate and subordinate to a principal use of the parcel and (ii) no consideration in any form is provided for allowing use of the parcel for the event; or
  - (2) For a parcel of five acres or greater, the total number of attendees over the course of an event is greater than 75 but does not exceed 250, or such larger number if (i) both the event and the number of attendees are such that the use is customarily incidental, appropriate and subordinate to a principal use of the parcel and (ii) no consideration in any form is provided for allowing use of the parcel for the event; or
  - (3) For a parcel that is either greater than 250 acres or, when combined with other contiguous parcels under common ownership, totals 250 or more acres, the total number of attendees over the course of an event is greater than 100 but does not exceed 350, or such larger number if (i) both the event and the number of attendees are such that the use is customarily incidental, appropriate and subordinate to a principal use of the parcel and (ii) no consideration in any form is provided for allowing use of the parcel for the event; and
  - (4) The event occurs on a legal lot.
- b. Requirements. The event shall comply with all of the following requirements:
  - (1) No vehicle shall be parked within a 15-foot diameter of the trunk of any Protected Tree as defined in Sec. 8107-25.2.
  - (2) Offsite vehicle parking may occur on public roads and rights-of-way only as legally permitted.
  - (3) Each event may only occur between the hours of 8:00 a.m. and 10:00 p.m. in one calendar day. If set up and/or breakdown cannot be completed on the day of the event between 8:00 a.m. and 10:00 p.m., set up may occur the day prior to the event between the hours of 8:00 a.m. and 5:00 p.m., and breakdown may occur the day after the event between the hours of 8:00 a.m. and 5:00 p.m.
  - (4) No amplified noise or music shall occur before 10:00 a.m. or after 10:00 p.m.

- (5) No event shall occur in a Hazardous Fire Area unless and until the event host contacts the Ventura County Fire Protection District and agrees to comply with its fire hazard-related ordinances and policies for the event.
- (6) At least one portable restroom and hand washing station shall be provided for each 50 attendees.
- (7) All temporary lighting for the event, except for market/string lighting, shall be hooded and/or directed downward to prevent spillover.

c. Limitation on Number of Permit-Exempt Events. The number of Permit-Exempt Outdoor Events that may occur pursuant to this Sec. 8107-46.3 is as follows:

- For a parcel less than 250 acres, no more than five outdoor events meeting the applicable attendee limit of this Sec. 8107-46.3 are held at the parcel each calendar year; or
- (2) For a parcel that is either greater than 250 acres or, when combined with other contiguous parcels under common ownership, totals 250 or more acres, no more than ten outdoor events meeting the applicable attendee limit of this Sec. 8107-46.3 are held at the parcel each calendar year.

#### Sec. 8107-46.4 – Conditionally Permitted Outdoor Events

A Conditional Use Permit is required to authorize an outdoor event that is not exempt from permitting pursuant to, or does not meet all requirements set forth in, Sec. 8107-46.1 or 8107-46.3. A Conditional Use Permit may authorize up to 60 outdoor events per calendar year on a lot during an initial term. If the initial term is completed, a Conditional Use Permit may be renewed through a permit modification to allow up to 90 events per calendar year on the lot during each subsequent term. A Conditional Use Permit shall have a 5-year initial term, or such shorter term as requested by the applicant. If the initial term is completed, a Conditional Use Permit may be renewed through permit modifications with subsequent terms of 10 years each, or such shorter terms as requested by the applicant.

#### Sec. 8107-46.5 – Processing and Consideration of Conditionally Permitted Outdoor Event Permit Applications

a. No application for a Conditional Use Permit pursuant to Sec. 8107-46.4 shall be accepted for processing if final violations (i.e., violations that were not timely appealed or were confirmed after timely appeal) have been issued for holding two or more outdoor events on the parcel within the previous 24 months without a Conditional Use Permit if required pursuant to Sec. 8107-46.4.

- b. Applications for all Conditional Use Permits under Sec. 8107-46.4, and applications for all discretionary modifications thereto, not involving legislative actions shall be processed in accordance with the time limits set forth in the Permit Streamlining Act (Gov. Code, § 65920 et seq.), regardless of whether or not the proposed outdoor event use constitutes "development" as defined by Government Code section 65927. Failure to comply with any time limit set forth in the Permit Streamlining Act shall not constitute a basis for the denial of any such permit application.
- c. The permit approval standards set forth in Sec. 8111-1.2.1.1b (Permit Approval Standards for Outdoor Events and Assembly Uses) and, if applicable to the proposed project, additional standards set forth in Sec. 8111-1.2.1.2 (Additional Standards for AE Zone), Sec. 8111-1.2.1.3 (Compliance with Other Documents), Sec. 8111-1.2.1.7 (Additional Standards for Overlay Zones), and Sec. 8111-1.2.1.7 (Additional Standards for Cultural Heritage Sites) shall be applied to all applications seeking a Conditional Use Permit pursuant to Sec. 8107-46.4 and applications for all discretionary modifications thereto.

#### Section 4

#### ARTICLE 11: ENTITLEMENTS – PROCESS AND PROCEDURES

Article 11, Section 8111-1.2.1.1 of the Ventura County Ordinance Code is hereby amended so that the section title reads as follows:

#### Sec. 8111-1.2.1.1a. – General Permit Approval Standards

Article 11, Section 8111-1.2.1.1b. – Permit Approval Standards for Outdoor Events and Assembly Uses, is hereby added to the Ventura County Ordinance Code to read as follows:

## Sec. 8111-1.2.1.1b. – Permit Approval Standards for Outdoor Events and Assembly Uses

Conditional Use Permits authorizing outdoor events and assembly uses shall be granted if all billed fees and charges for processing the application that are due for payment have been paid and if all of the following standards are met. An application for a Conditional Use Permit shall not be denied on the basis of the content of protected expression associated with the proposed use. The applicant shall have the burden of proving to the satisfaction of the appropriate decision-making authority that the following standards can be met. Specific factual findings shall be made by the decision-making authority to support the conclusion that each of these standards, if applicable, can be satisfied.

- a. The proposed use is compliant with applicable provisions of the County's General Plan and of Division 8, Chapter 1 of the Ventura County Ordinance Code;
- b. The proposed use can coexist in relative proximity, and is not expected to unduly interfere with, the existing land uses of the surrounding area as determined based on the following land use factors:
  - (1) 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; and
  - (2) Whether the proposed use would generate vehicular traffic affecting the level of service of a road segment or intersection located within one mile of the proposed use as determined pursuant to Section 27a(1), "Transportation & Circulation Roads and Highways Levels of Service (LOS)," of the County's Initial Study Assessment Guidelines, as such section may be amended or renumbered;
- c. The proposed use would not be detrimental to public health and safety as determined based on the following land use factors:
  - (1) Whether public and private roads and driveways used to access the site of the proposed use can safely accommodate all vehicular traffic associated with the proposed use, including emergency vehicles, and meet all applicable requirements of the Ventura County Fire Code; and
  - (2) Whether the proposed use or site of the proposed use would create risk of harm to persons, nearby properties, or the environment based on fire hazards, geologic hazards, flood hazards, hazardous materials, or increased risk of vandalism or trespass that cannot be controlled through reasonable event security.
- d. The proposed use will occur on a legal lot; and
- e. The proposed use is approved in accordance with the California Environmental Quality Act and all other applicable laws.

If all standards cannot be satisfied, specific written factual findings shall be made by the decision-making authority to support that conclusion.

### Article 11, Section 8111-2.5 – Review and Conditioning of Applications, of the

Ventura County Ordinance Code is hereby amended to read as follows:

#### Sec. 8111-2.5 – Review and Conditioning of Applications

Applications and proposed uses shall be reviewed for the appropriate environmental document and also by various County departments as well as interested parties such as cities and special districts which are involved in the review and conditioning of projects.

Article 11, Section 8111-4.2 – Decision Options, of the Ventura County Ordinance Code is hereby amended to read as follows:

#### Sec. 8111-4.2 – Decision Options

The decision-making authority hearing a discretionary matter may approve, deny or modify, wholly or partly, the request being reviewed. The authority may impose such reasonable conditions necessary to ensure that the project satisfies the applicable standards of permit approval. In the absence of any provision to the contrary in a decision granting a request, said request is granted as set forth in the application. All conditions and restrictions applied to a decision on an application request not appealed shall automatically continue to govern and limit the subject use or structure unless the action of the decisionmaking authority clearly indicates otherwise.

Article 11, Section 8111-6.2 – Modification, Suspension and Revocation for Cause, of the Ventura County Ordinance Code is hereby amended to read as follows:

#### Sec. 8111-6.2 – Modification, Suspension and Revocation for Cause

Any permit or variance heretofore or hereafter granted may be modified or revoked, or its use suspended, by the same decision-making authority and procedure which would normally approve the permit or variance under this Chapter. An application for such modification, suspension or revocation may be filed by any person or entity listed in Sec. 8111-2.1 or by any other aggrieved person. The applicant for such modification, suspension or revocation shall have the burden of proving one or more of the following causes:

- a. That any term or condition of the permit or variance has not been complied with;
- b. That the property subject to the permit or variance, or any portion thereof, is or has been used or maintained in violation of any statute, ordinance, law or regulation;

- c. That the use for which the permit or variance was granted has not been exercised for at least 12 consecutive months, has ceased to exist, or has been abandoned:
- d. That the use for which the permit or variance was granted has been so exercised as to constitute a public nuisance;
- e. That the permittee has failed to pay any fees, charges, fines, or penalties associated with processing or enforcing the permit; or
- f. That the permittee has failed to comply with any enforcement requirement established in Article 14.

#### Section 5 Severability

If any subsection, sentence, clause, phrase or word of the Ordinance is for any reason held to be invalid by a court of competent jurisdiction, such decisions shall not affect the validity of the remaining portions of this Ordinance. The Ventura County Board of Supervisors hereby declares that it would have passed and adopted this Ordinance, and each and all provisions hereof, irrespective of the fact that one or more provisions may be declared invalid.

#### Section 6 Effective Date

This Ordinance shall become effective 30 days after adoption.

PASSED AND ADOPTED this 17th day of July, 2018 by the following vote:

AYES:

Supervisors

Bennitt, Parks ong

NOES:

ABSENT:

SUPERVISO



ATTEST:

MICHAEL POWERS Clerk of the Board of Supervisors County of Ventura, State of California

Ś h By Deputy Clerk of the Board



19 January 2021

County of Ventura Resource Management Agency Attn: Ms. Kristina Boero 800 S. Victoria Avenue #1740 Ventura, CA 93009

#### Subject: Water Quantity Assessment - Addendum Case No. PL18-0052; Camp Ramah

Dear Ms. Boero:

With regards to the Water Addendum sent to Ventura County RMA dated 11/12/2020, we wish to provide the following clarification:

The memorandum refers to the Ventura County Outdoor Events ordinance and states that Camp Ramah is subject to this ordinance. However, as the camp is located in RE Zoning and does not meet the qualifications for an Outdoor Events CUP, all events will be incorporated into and the responsibility of the camp under the Camp Ramah CUP. Therefore, while the Dudek report and memorandum reference and discusses 35 outdoor events, an Outdoor Events CUP is not required for the reasons stated above.

The water data provided in the Memorandum is still relevant because it provides updated water consumption data that validate the previous conclusions. Additionally, the memorandum provides information regarding the additional water generated from the operation of a water well on the property since July 2019.

This clarification does not change the conclusion that "Camp Ramah is expected ... to maintain water use under 37.05 AFY for 2020 and beyond." Using data from Table 5 of the memorandum, it can be shown that the average annual metered water use from 2015-2019 in AFY was 32.4 AFY.

If you have any questions, please do not hesitate to contact me at (805) 966-2758 x111.

Sincerely, SUZANNE ELLEDGE PLANNING & PERMITTING SERVICES, INC.

Steve Welton, AICP Senior Planner

#### **Initial Study Biological Assessment**

### UPDATED BIOLOGICAL ASSESSMENT OF PROPOSED CAMP RAMAH EXPANSION PROJECT, 385 FAIRVIEW ROAD, OJAI, VENTURA COUNTY, CALIFORNIA



#### **Prepared for:**

Suzanne Elledge Planning & Permitting Services 1625 State Street, Suite 1 Santa Barbara, California 93101

Contact: Steve Welton (805) 966-2758

20 February 2019

Prepared by:

Hunt & Associates Biological Consulting Services 5290 Overpass Road, Suite 108 Santa Barbara, California 93111

Contact: Lawrence E. Hunt (805) 967-8512

County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 9 - Initial Study Biological Assessment, prepared by Hunt and Associates Biological Consulting Services February 20, 2019 Original ISBA report date: 8 August 2017 Revision report date(s): 20 February 2019 Case number (to be entered by Planning Div.): Permit type: Applicant: Case Planner (to be entered by Planning Div.): Total parcel(s) size: Assessor Parcel Number(s): APN 010-007-031 Development proposal description: New Construction for Camp Ramah

#### Prepared for Ventura County Planning Division by:

As a Qualified Biologist, approved by the Ventura County Planning Division, I hereby certify that this Initial Study Biological Assessment was prepared according to the Planning Division's requirements and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge.

Qualified Biologist (signature):			Date: 11 June 2018
Name (printed): Lawrence E. Hunt	Title: Consulting Biologist	Company: Hunt & Consulting Service	Associates Biological s
Phone: (805) 689-7423	email: anniella@verizon.net		
Other Biologist (signature):			Date:
Name (printed):	Title:	Company:	
Phone:	email:		
Role:			

# Initial Study Checklist

This Biological Assessment DID provide adequate information to make recommended CEQA findings regarding potentially significant impacts.

	Project Impact Degree of Effect N LS PS-M* PS			Cumulative Impact Degree of Effect				
				N	LS	PS-M*	PS	
Biological Resources			Х		Х			
Species			Х		Х			
Ecological Communities			Х		Х			
Habitat Connectivity	Х	X			Х			

N: No impact

LS: Less than significant impact

PS-M: Potentially significant unless mitigation incorporated.

PS: Potentially significant

\* DO NOT check this box unless the Biological Assessment provided information adequate enough to develop mitigation measures that reduce the level of impact to less than significant.

# UPDATED BIOLOGICAL ASSESSMENT OF PROPOSED CAMP RAMAH EXPANSION PROJECT, 385 FAIRVIEW ROAD, OJAI, VENTURA COUNTY, CALIFORNIA



## **Prepared** for:

Suzanne Elledge Planning & Permitting Services 1625 State Street, Suite 1 Santa Barbara, California 93101

Contact: Steve Welton (805) 966-2758

#### 11 June 2018

## **Prepared by:**

Hunt & Associates Biological Consulting Services 5290 Overpass Road, Suite 108 Santa Barbara, California 93111

Contact: Lawrence E. Hunt (805) 967-8512

# Contents

Summ	ary.		6
Sectio	n 1:	Construction Footprint Description	6
Sectio	n 2:	Survey Area Description and Methodology	7
2	2.1	Survey Purpose	7
2	2.2	Survey Area Description	7
2	2.3	Methodology	11
Sectio	n 3:	The Biological Inventory	14
3	8.1	Ecological Communities	14
3	8.2	Species	21
3	3.3	Wildlife Movement and Connectivity	29
Sectio	n 4:	Impact Assessment	30
4	.1	Sufficiency of Biological Data	30
4	.2	Impacts and Mitigation	30
Sectio	n 5:	Photos	37
Appen	dix	1: Summary of Biological Resource Regulations	40
Appen	dix	2: Observed Species Tables	48
Maps			
Project	t Loc	cation Map	10
		Jrvey	
		munities	
		d Wetlands	
•		nnostivity.	
Attach		nnectivity	ZŎ
Allauli	mei	113	

A. List of California Natural Diversity Database (CNDDB)-tracked species with recorded occurrences within at least a 10-mile radius of the project site – See Table on p. 22.

# Summary

Camp Ramah of California is a summer camp located at 385 Fairview Avenue, approximately 1.4 air miles northwest of the City of Ojai. Camp Ramah proposes to construct six sleeping quarters (bunks) and a separate building containing a meeting room and staff offices on approximately 0.60 acres of open space adjacent to developed camp facilities in the northwestern section of the Camp property (Fig. 1). Hunt & Associates Biological Consulting Services prepared a Biological Assessment of the proposed project in August 2017 (Hunt & Associates, 2017). This report was updated in February 2018 because "existing conditions" in the project area were significantly altered in December 2017 by crews fighting the Thomas Fire.

Potential special-status plants found in the project area included several small scrub oaks in the understory of coast live oak woodland in the southwestern portion of the project area. These were tentatively identified as Nuttall's scrub oak, *Q. dumosa*, a CNPS List 1B.1 species (Rare, Threatened, or Endangered in CA), or hybrids between *Q. dumosa* and the common scrub oak (*Q. berberidifolia*). Two special-status birds (Watch List species), Nuttall's woodpecker and oak titmouse occur as residents in and around the project site. A number of animals classified as Species of Special Concern in California have a moderate to high potential of occurring onsite. No Federal- or State-listed (threatened or endangered) species were observed or are expected to occur or around the proposed project area.

There are no wetlands within the project area, but an unnamed seasonal tributary of McDonald Canyon Creek that may contain USACE and/or CDFW jurisdictional areas runs approximately 25 feet east of the project area footprint.

The project elements have been sited to reduce impacts to adjacent native plant communities from required fire fuel management zones.

There are no Class I impacts to biological resources associated with the proposed project. A number of Class II impacts to biological resources were identified and mitigation measures are proposed to avoid or minimize these impacts to less than significant levels.

# **Section 1: Construction Footprint Description**

Construction Footprint Definition (per the Ventura County Planning Division): The construction footprint includes the proposed maximum limits of temporary or permanent direct land or vegetation disturbance for a project including such things as the building pad(s), roads/road improvements, grading, septic systems, wells, drainage improvements, fire hazard brush clearance area(s), tennis courts, pools/spas, landscaping, storage/stockpile areas, construction staging areas, fire department turnarounds, utility trenching and other grading areas. The construction footprint on some types of projects, such as mining, oil and gas exploration or agricultural operations, may be quite different than the above.

## **Development Proposal Description:**

Camp Ramah of California proposes to construct six new sleeping quarters (bunks) and a separate building containing a meeting room and staff offices on approximately 0.60 acres of open space immediately adjacent to developed portions of the Camp. The site will be accessed by an existing paved road/track that parallels the western border of a soccer field. Widening improvements to this driveway will remove four (4) small (3-inch to 7.5-inch dbh) coast live oak trees. No other trees will be removed for the project, and precautions will be taken to protect oaks adjacent to the project area from disturbance (see tree-specific recommendations in Knight, 2019). Most of 0.60-acre project

area footprint will be graded for this project. Fire fuel management zones extending 100 feet outward from all structures will be created and maintained for the lifetime of the project and will encompass approximately 1.9 acres in addition to the 0.60-acre project site proper. The fire fuel modification zones will extend into adjacent native plant communities.

#### **Construction Footprint Size**

The project area proper (project footprint) encompasses approximately 0.60 acres. The 100-foot fire fuel management zone around the project footprint encompasses approximately 1.9 acres.

#### Project Design for Impact Avoidance or Minimization

The project elements within the project footprint have been clustered to reduce the size of the footprint and have been sited to minimize the amount of grading required, especially on shallow slopes in the western portion of the project area. The footprint also has been sited to avoid removal of mature coast live oak and other native trees (see Knight, 2019), and to maintain a minimum 25-foot buffer from a seasonal tributary of McDonald Canyon Creek that runs east of the project area.

#### Zoning

The project area is zoned RE-20; the fire fuel modification zone around the western and northern sides of the project footprint is zoned OS-20 and OS-80.

#### Elevation

Project area surface elevations range between 925 feet and 955 feet above sea level.

# **Section 2: Survey Information**

## 2.1 Survey Purpose

Discretionary actions undertaken by public agencies are required to demonstrate compliance with the California Environmental Quality Act (CEQA). The purpose of this Initial Study Biological Assessment (ISBA) is to gather enough information about the biological resources associated with the proposed project, and their potential to be impacted by the project, to make a CEQA Initial Study significance finding for biological resources. In general, ISBA's are intended to:

- Provide an inventory of the biological resources on a project site and the values of those resources.
- Determine if a proposed project has the potential to impact any significant biological resources.
- Recommend project redesign to avoid, minimize or reduce impacts to significant biological resources.
- Recommend additional studies necessary to adequately assess potential impacts and/or to develop adequate mitigation measures.
- Develop mitigation measures, when necessary, in cases where adequate information is available.

## 2.2 Survey Area Description

Survey Area Definition (per the Ventura County Planning Division): The physical area a biologist evaluates as part of a biological assessment. This includes all areas that could potentially be subject to direct or indirect impacts from the project, including, but not limited to: the construction footprint; areas that would be subject to noise, light, dust or runoff generated by the project; any required buffer areas (e.g., buffers surrounding

wetland habitat). The construction footprint plus a 100 to 300-foot buffer—beyond the required fire hazard brush clearance boundary—(or 20-foot from the cut/fill boundary or road fire hazard brush clearance boundary – whichever is greater) is generally the size of a survey area. Required off-site improvements—such as roads or fire hazard brush clearance—are included in the survey area. Survey areas can extend off the project's parcel(s) because indirect impacts may cross property lines. The extent of the survey area shall be determined by the biologist in consultation with the lead agency.

The survey area for this report encompassed the 0.6-acre project area footprint, the 100-foot fire fuel management zone around the footprint, and a 250-foot radius around the 100-foot fire fuel management zone. Thus, the survey area totals approximately 4.5 acres.

### Survey Area 1 (SA1)

#### Location

The survey area totals approximately 4.5 acres and is located approximately 0.3 air miles N of Fairview Road in the northwestern portion of Camp Ramah. The southern portion of the survey area included developed portions of Camp Ramah while the northern, western, and eastern portions of the survey area included open space vegetated by non-native annual grassland, coast live oak woodland, and chaparral.

The survey area did not coincide with parcel boundaries or other site features because the parcel boundaries were irrelevant. Rather, the survey extended approximately 250 feet beyond the 100-foot fire fuel management zone in order to fully evaluate biological resources and impacts. The survey area was not flagged.

#### Survey Area Environmental Setting

The survey area straddles the interface between a portion of the relatively flat floodplain of McDonald Canyon Creek, a seasonal drainage, and the lower, south-facing slopes of the Topa Topa Mountain Range. There are no wetlands within the proposed project area. A seasonal tributary of McDonald Canyon Creek runs north-south approximately 25 feet east of the project footprint. The proposed project footprint currently supports open space: non-native annual grassland and coast live oak woodland (and single mature oaks). Chaparral and non-native annual grassland occurs on slopes immediately west, north, and east of the project area. A soccer field and other Camp facilities border the project area on the south and southeast. An old, disused paved driveway/dirt track parallels the western side of the soccer field up to the southern border of the project area.

The project area footprint lies mostly on the floodplain, with small portions extending onto shallow slopes west of the project area proper. The project area slopes gently to the south-southeast and is drained by a poorly-developed seasonal tributary of McDonald Canyon Creek. Currently, the project area is undeveloped open space, as are the slopes bordering the western and northern side of the area. Sloping ground east of the seasonal drainage appeared to have been dry farmed in the recent past and currently supports ruderal, non-native annual grassland.

Chaparral is the predominant vegetation type covering the slopes west, north, and northeast of the project area. Patches of coast live oak woodland occur in the southern portions of the project area and extend southwestward and southward and southeastward throughout Camp Ramah. Non-native annual grassland, disturbed by infrequent disking, occurs east of the project area. A seasonal tributary of McDonald Canyon Creek separates the project area from this grassland. Extensive citrus orchards occur several hundred feet southwest of the project

area and are separated from it by chaparral. Developed portions of Camp Ramah cover several dozen acres south and southeast of the project area.

#### Surrounding Area Environmental Setting

The project area sits at the base of the Topa Topa Mountains and abuts extensive open space on the south-facing slope of this range. Large portions of these slopes, including parcels abutting the northeast corner of Camp Ramah are managed by the U.S. Forest Service. The land west, south, and southeast of Camp Ramah has been converted to a mixture of agriculture and low-density single-family residential lots of varying sizes.

### Cover

Percent native vegetation: 55% Percent non-native vegetation: 35% Percent recently burned: 30% Percent ag/grazing: 0% Percent bare ground/cleared/graded: 30% Percent buildings, paved roads and other impervious cover: 20%



Figure 1. Project location. Northwest of the City of Ojai. Highway 33 is yellow line at left.

Initial Study Biological Assessment Report for Camp Ramah Expansion Project



**Figure 2.** Survey area (purple line). Project area footprint is outlined in red. The light blue line shows the approximate centerline of a seasonal tributary of McDonald Canyon Creek that runs just east of the project area. All other lines show approximate parcel boundaries. Camp Ramah buildings are visible in lower right quadrant.

## 2.3 Methodology

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	Survey Date & Details								
Survey Key	Survey Date	Survey Area Map Key	Survey Type	Time Period	Methods/Constraints	GPS	Surveyor		
SD 1	1/16/2017	SA 1	ISBA	8:00 am- 10:30 am	Walking transects; entire site was surveyed	Garmin, GPSmap, Model 60CSx; +-8 ft accuracy	Lawrence E. Hunt		
SD 2	3/13/2017	SA 1	Botanical	9:00 am- 12:45 pm	Random walk; entire site was surveyed	Garmin, GPSmap, Model 60CSx; +-8 ft accuracy	Lawrence E. Hunt		
SD 3	5/5/2017	SA 1	Botanical	10:30 am- 2:15 pm	Random walk; entire site was surveyed	Garmin, GPSmap, Model 60CSx; +-8 ft accuracy	Lawrence E. Hunt		

SD 4	2/16/2018	SA 1	ISBA	9:15 am- 2:15 pm	Random walk; entire site was surveyed	Garmin, GPSmap, Model 60CSx; +-8 ft accuracy	Lawrence E. Hunt
ISBAInitial Study Biological Assessment BotanicalBotanical Survey							

# **Section 3: The Biological Inventory**

See Appendix One for an overview of the types of biological resources that are protected in Ventura County.

## 3.1 Ecological Communities: Plant Communities, Physical Features and Wetland

## **Plant Communities**

Locally important or rare plant communities <u>were found</u> within the survey area(s).

### Major Plant Communities Summary

Four vegetation alliances (Sawyer et al., 2008) occur in the survey area:

 <u>Quercus agrifolia Woodland Alliance</u>. This association is the Coast Live Oak Woodland of Holland (1986). Coast live oaks border the proposed project area on the south, east, and north as single trees and clumps of trees. Prior to development in this area, aok woodlands probably would have been the dominant community on the relatively flat floodplain of McDonald Canyon Creek. Dominant trees include coast live oak (*Quercus agrifolia*). Understory shrubs include elderberry (*Sambucus mexicana*), California man-root (*Marah fabaceus*), and poison oak (*Toxicodendron diversilobum*), with an herbaceous ground cover dominated by brome grasses (see next association).

Two other species of oaks also occur in and adjacent to the proposed project area. Several individuals of a Scrub oak (tentatively identified as *Q. berberidifolia*) occur adjacent to coast live oak woodland in the southwestern portion of the project area. Scrub oaks also were found in adjacent chaparral on slopes west of the project area. These scrub oaks appeared to show hybrid characteristics of *Q. berberidifolia* x *Q. dumosa* (Nuttall's scrub oak) the latter listed by the CA Native Plant Society as a List 1B.1 species (see Table 1). A single, 12-inch dbh canyon live oak (*Q. chrysolepis*), occurs in the approximate center of the project area (Fig. 4). This species also is a dominant species in chaparral in the Transverse Range in northern Ventura County (Sawyer, et al. 2008). This canyon live oak and all suspected scrub oaks in the project area were removed by fire-fighting activities during the Thomas Fire in December 2017.

• <u>Bromus diandrus Semi-Natural Herbaceous Stand</u>. This is the Non-Native Annual Grassland/Ruderal of Holland (1986). This is the most extensive plant association in the

proposed project area. Dominants include ripgut brome (*Bromus diandrus*), rattail fescue (*Vulpia myuros*), hare barley (*Hordeum murinum*), red brome (*Bromus rubens*), wild oats (*Avena* sp.), redstem filaree (*Erodium cicutarium*), wild radish (*Raphanus sativa*), and annual wildflowers, including fiddleneck (*Amsinckia menziesii*), truncate-leaved lupine (*Lupinus truncatus*), sky lupine (*Lupinus nanus*), tuberous skullcap (*Scutellaria tuberosa*), soap lily (*Chlorogalum pomeridianum var. pomeridianum*), telegraph weed (*Heterotheca grandiflora*), black mustard (*Brassica nigra*), Mediterranean mustard (*Hirschfeldia incana*), horehound (*Marrubium vulgare*), Italian thistle (*Carduus pycnocephalus*), and other species. Much of this habitat within the project area, as well as extensive areas southwest and east of the project area, were cleared (graded) by fire crews during the Thomas Fire in December 2017.

- <u>Malacothamnus fasciculatus Shrubland Alliance.</u> This is the Bush Mallow Scrub of Holland, 1986). This very diverse type of chaparral occurs on slopes west, north, and northeast of the proposed project area and is the most extensive vegetation type around the project area. Dominant shrub species here include (in order of dominance): chaparral mallow (*Malacothamnus fasciculatus*), laurel sumac (*Malosma laurina*), black sage (*Salvia mellifera*), bigpod ceanothus (*Ceanothus megacarpus*), elderberry (*Sambucus mexicanus*), redberry (*Rhamnus crocea*), deerweed (*Lotus scoparius*), and birchleaf mountain mahogany (*Cercocarpus montanus* [= *C. betuloides*]). Extensive areas of the Topa Topa Mountains that support this and other chaparral associations, including the northwestern quadrant of the survey area for this report, burned completely in the Thomas Fire of December 2017.
- Baccharis salicifolia Shrubland Alliance. This is the Mule-fat Scrub community of Holland (1986). This plant community is closely associated with the channel bed and banks of the unnamed tributary of McDonald Canyon Creek that borders the eastern side of the proposed project area. Shrub species predominate and the physiognomy is generally open in most places along the subject reach of the creek: mule-fat (*Baccharis salicifolia*), elderberry (*Sambucus mexicana*), horehound (*Marrubium vulgare*), poison oak (*Toxicodendron diversilobum*), and non-native grasses. Chaparral shrubs, such as black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), and chaparral mallow (*Malacothamnus fasciculatus*), are common here, also. All of the vegetation associated with this seasonal drainage adjacent to the project area was removed and the channel was completely filled with soil by fire crews during the Thomas Fire in December 2017.

Undifferentiated Exotic Vegetation and Ornamental Shrubland is present immediately southwest, south, and southeast of the surveyed area, and includes lawn (soccer field), Brazilian pepper (*Schinus molle*), ornamental geranium (*Pelargonium* sp.), oleander (*Oleander* sp.), unidentified pines (*Pinus* sp.), and other non-native species.

*Graded/Cleared* land now occurs over large portions of the project area and in areas southwest and east of the project area that were previously vegetated with non-native annual grassland as a result of fire-fighting activities in December 2017. Fire crews also created a number of firebreaks through grassland and chaparral west, north, and east of the project area.

*Urban/Disturbed or Built-Up Land* occurs south and southeast of the surveyed area (Camp Ramah proper, with buildings, campgrounds, roadways, parking lots, athletic fields, etc.).

*Agricultural* lands (citrus orchards) occur several hundred feet southwest of the surveyed area and cover extensive portions of the McDonald Canyon Creek floodplain.

			Plant	Commu	nities			
Map Key (1)	SVC Alliance	SVC Association	Misc. (2)	Status (3)	Condition (4)	Acres Total	Acres Impacte d	Comments (5)
PC1	Coast Live Oak Woodland (Quercus agrifolia)	Quercus agrifolia- Sambucus mexicana- Toxicodendron diversilobum		LIC, G5, S4	Disturbed	0.57	0.57	Disturbed by invasive landscaping and previous vegetation management practices; impacts come from fire fuel mgmt. practices
PC2	Ripgut brome Semi-Natural Herbaceous Stand	Bromus diandrus-Vulpia myuros- Erodium cicutarium			Graded- No Permits Assumed; Burned	0.92	0.92	Most of this vegetation association in project area graded and cleared by firefighting crews in Dec 2017
PC3	Bush mallow Shrubland Alliance ( <i>Malacothamnus</i> <i>fasciatus</i> )	Malacothamnus fasciatus- Malosma laurina-Salvia mellifera		G4, S4	Burned	0.58	0.58	Found outside of, but adjacent to project area on slopes; burned during Thomas Fire in Dec 2017; impacts come from fire fuel mgmt. practices
PC4	Mule-fat Shrubland Alliance ( <i>Baccharis</i> <i>salicifolia</i> )	Baccharis salicifolia- Sambucus mexicana- Toxicodendron diversilobum		G5, S4	Graded- No Permits Assumed; Burned	0.05	0.02	Associated with unnamed tributary of McDonald Canyon Creek; reach adjacent to project area graded and channel filled by firefighting crews in Dec 2017
PC5			Ornamental Shrubland			0.26	0.0	Landscaping planted along S border of project area, in coast live oak woodland
PC6			Built-Up Land			0.10	0.02	Camp Ramah and existing paved roads
	<u> </u>				Totals	2.48	2.09	
ESHA CDFG G1 G2 G3	Locally Imp Environme Rare: or S1 Critically In or S2 Imperiled ( or S3 Vulnerable or S4 Low Vulne	ntally Sensitive Hal nperiled Globally or Globally or Subnatic to extirpation or ex	oitat Areas (Co Subnationally onally (state)	(state)	,	e)		

G5 or S5..... Not Vulnerable

Cal OWA...... Protected by the California Oak Woodlands Act

## **Environmentally Sensitive Habitat Areas (ESHA)**

ESHA is "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Public Resources Code § 30107.5). ESHA includes coastal dunes, beaches, tidepools, wetlands, creek corridors, and certain upland habitats in the Santa Monica Mountains (Ventura County Coastal Area Plan).

Habitats that meet the definition of ESHA were not found within the survey area(s).

## Waters and Wetlands

See Appendix One for an overview of the local, state and federal regulations protecting waters, wetlands and riparian habitats. Wetlands are complex systems; delineating their specific boundaries, functions and values generally takes a level of effort beyond the scope of an Initial Study Biological Assessment (ISBA). The goal of the ISBA with regard to waters and wetlands is simply to identify whether they may exist or not and to determine the potential for impacts to them from the proposed project. This much information can be adequate for designing projects to avoid impacts to waters and wetlands. Additional studies are generally warranted to delineate specific wetland boundaries and to develop recommendations for impact minimization or impact mitigation measures.

Waters and/or wetlands were found within the survey area(s).

### Waters and Wetlands Summary

An approximately 125-foot long reach of an unnamed tributary of McDonald Canyon Creek runs northsouth about 35 feet east of the eastern edge of the project area. This highly seasonal drainage supports poorly-developed *Baccharis salicifolia* Shrubland Alliance. There are no riparian trees associated with this drainage. Shrub species predominate and the physiognomy is generally open in most places along the subject reach of the creek: mule-fat (*Baccharis salicifolia*), elderberry (*Sambucus mexicana*), horehound (*Marrubium vulgare*), poison oak (*Toxicodendron diversilobum*), and non-native grasses. Chaparral shrubs, such as black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), and chaparral mallow (*Malacothamnus fasciculatus*), are common here, also. Habitat quality along this reach is low, but it connects to better-developed riparian scrub habitat upstream of the project area. The drainage enters a buried culvert as it passes through Camp Ramah before connecting with the main stem of McDonald Canyon Creek. The project area reach is dry except during and immediately following storm events. All of the vegetation associated with this seasonal drainage along the reach adjacent to the proposed project area was cleared and the channel was completely filled with soil by fire crews to create a fire break during the Thomas Fire in December 2017.

The proposed project construction footprint has been sited to maintain a minimum 30-35-foot buffer from this seasonal drainage. The proposed project will not directly impact the drainage, but restoring and replanting the reach affected by fire-fighting activities is part of the proposed project.

	Waters and Wetlands									
Map Key (1)	Wetland Type (2)	Wetland Name (if any)	Wetland Status (3) (if known)	Wetland Size (4)	Hydrologic Status (5)	Primary Water Source (6)				
W1	Stream/ drainage	Unnamed	Unknown	125 linear ft run east of project area; entire tributary drainage is about 1,050 linear ft long	Dry	Runoff				
USACE U.S. Army Corps of Engineers regulated										
CDFG California Department of Fish & Game regulated County County General Plan protected wetland										

### Waters and Wetlands

WPD ......Co. Watershed Protection District (red-line stream)

	Waters and Wetlands (continued)						
Map Key	County Wetland Significanc e (7)	Wetland Distance from Project (8)	Comments (9)				
W1	Unknown, but probably Insignificant	30-35 ft E of project area	<b>125 ft-long reach adjacent to project site was completely filled with soil and associated vegetation was removed by fire crews during Thomas Fire in December 2017 to create a firebreak.</b> Drainage is a highly seasonal tributary of McDonald Canyon Creek. Supports very patchy mule-fat ( <i>Baccharis salicifolia</i> ) and non-native annual grasses; poor riparian habitat development. Drainage enters buried culvert 60 ft east of SE corner of project area footprint for distance of 80 ft before 'daylighting' again. Confluence with main channel of McDonald Canyon Creek is approximately 460 feet further downstream from 'daylight' point				

	Water/Wetland Buffers							
Мар	Recommended	Comments						
Key (1)	Buffer (2)							
W1B1	35 ft	The habitat value of this drainage, especially the reach adjacent to the project area, is very low because the drainage channel, banks, and associated vegetation, are poorly developed. Moreover, vegetation along the reach adjacent to the project area was cleared and the channel completely filled with soil by fire-fighting crews constructing a firebreak during the Thomas Fire in December 2017. Restoration of the affected reach, including restoration of native, locally-occurring riparian scrub vegetation will significantly improve this habitat over existing conditions, and so a 35-foot buffer from project area elements will provide adequate protection of wildlife habitat values in the restored reach.						

### **Plant Community Map:**

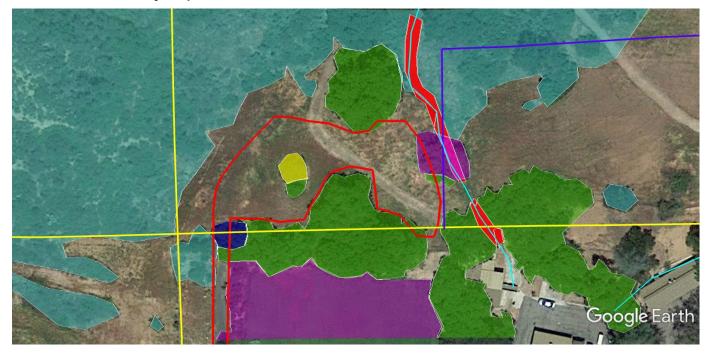


Figure 3. Plant Community Map--Pre-Thomas Fire. Imagery date 14 April 2017. Project area outlined in red.

*Quercus agrifolia* Woodland Alliance (PC1) shown in green; circular, dark blue and yellow polygons show former locations of possible *Quercus berberidifolia x Q. dumosa* hybrids, and mature canyon live oak, respectively. All were removed by fire crews during Thomas Fire in Dec. 2017.

Bromus diandrus Semi-Natural Herbaceous Stand (PC2): uncolored areas.

Malacothamnus fasciculatus Shrubland Alliance (PC3), shown in light blue.

Baccharis salicifolia Shrubland Alliance (PC4), shown in red.

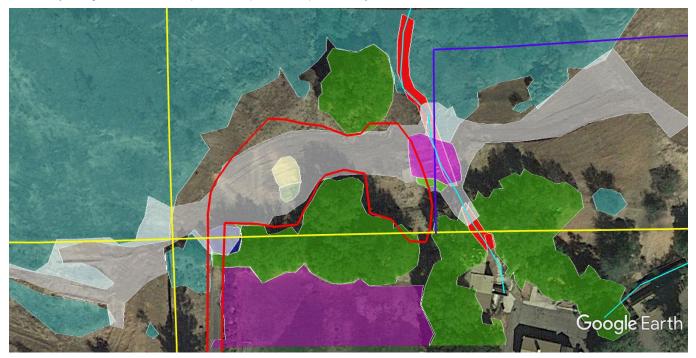
Ornamental plantings (PC5), such as lawn grass and pepper trees (Schinus molle) shown in purple.

Camp Ramah buildings (PC6) are visible in lower right corner.

Parcel boundaries are shown by yellow and dark blue lines (approximate).

Seasonal tributary of McDonald Canyon Creek shown by light blue lines.

Initial Study Biological Assessment Report for Camp Ramah Expansion Project



**Figure 4. Plant Community Map--post-Thomas Fire.** Vegetation polygons as in Fig. 3. Imagery dated 12 January 2018. A firebreak (east-west-trending white swath) was bulldozed through the project area in mid-December 2017 in advance of the fire. All vegetation within this polygon, including scrub oaks and the canyon live oak, was removed and a 100-foot long reach of a tributary of McDonald Canyon Creek (pale blue line) was filled with soil. Bush Mallow Shrubland (PC3-light blue) and Rig-gut Brome Semi-Natural Herbaceous Stand (PC2-uncolored areas) burned in the Thomas Fire in December 2017.



**Figure 5. Wetlands and Wetland Buffer Map.** Unnamed tributary of McDonald Canyon Creek shown in light blue (W1). White overlay shows proposed 25-35-foot buffer/restoration area adjacent to project area (W1B1).

## 3.2 Plant and Wildlife Species

**Plants.** A list of plant species observed in the survey area is included in Appendix 2. Fourteen specialstatus plants have been found within a five-mile radius of the project area (see table below). Several small scrub oaks, tentatively identified as Nuttall's scrub oaks (*Quercus dumosa*) or a hybrid between *dumosa* and the common scrub oak (*Q. berberidifolia*), were found in 2017 in the understory of coast live oak woodland in the southwestern portion of the project area and in chaparral on slopes west and north of the project area (Hunt & Associates, 2017) (see Fig. 3). According to some authors, Nuttall's scrub oaks occur at lower and more coastal locations than the common scrub oak (Pavlik, et al. 1991; Smith, 1998). However, Nuttall's scrub oak has been collected north, east, and south of the project area (CalFlora, 2017; Table 1). Because of the proximity of these records, the scrub oaks found in the project area in 2017 were assumed to be Nuttall's scrub oak or possibly *dumosa x berberidifolia* hybrids. **Fire suppression activities by several governmental agencies in December 2017 removed all or nearly all of the scrub oaks that were present in the southwestern portion of the project area (see Fig. 4).** 

None of the other special-status species evaluated in Table 1 were observed in the project area footprint or in the survey area. Overall, floristic diversity in the project area is low compared to that found in scrub habitat on adjacent slopes because it is mostly covered by annual grassland which is dominated by nonnative, invasive species.

**Protected Trees.** A large canyon live oak tree in the center of the project area was removed by firefighting crews creating a firebreak during the Thomas Fire in December 2017. Widening the existing driveway to access the project area will remove approximately four (4) coast live oaks with trunk diameters at breast height (dbh) ranging between 3 and 7.5 inches. None of these trees qualify for listing as "Protected Trees", but larger coast live oaks adjacent to the southern and northern portions of the project area qualify a "Protected Trees" and will be protected per the recommendations in the Arborist's Report (see Knight (2019) for detailed information on the location, size, condition, and protective measures for these trees).

	Protected Trees							
Map Key (1)	Species (2)	Common Name	Girth (3) (circumference)	Impact (4)				
PC1 on Fig. 3	Quercus agrifolia	Coast live oak	See separate Arborist's Report (Knight, 2019)	Encroachment				

## Wildlife Species and Bird Nests

See Appendix One for definitions of the types of special status species that have federal, state or local protection and for more information on the regulations that protect birds' nests.

Special status species were observed or have a moderate to high potential to occur within the survey area(s).

Habitat suitable for nests of birds protected under the Migratory Bird Treaty Act <u>does exist</u> within the survey area(s).

## **Special Status Species Summary**

		Observed a	and Potentially	Occurrin	g Special Status Species	S
Map Key (1)	Survey/ Source (2)	Scientific Name (3)	Common Name	Species' Status (4)	Potential to Occur (5)	Habitat Requirements (6)
				PLANTS		
	CNDDB	Astragalus didymocarpus var. milesianus	Mile's milk-vetch	List 1B.2	Low potential to occur in project area; moderate potential to occur in scrub habitats in fire fuel mgmt. area	Coastal sage scrub; clay soils.
	CNDDB	Atriplex seranana var. davidsonii	Davidson's saltbush	List 1B.2	None. Perennial shrub, would have been observed, if present	Riparian scrub/coastal sage scrub
	CNDDB	Calochortus catalinae	Catalina mariposa lily	List 4.2	Low potential to occur in project area; moderate to high potential to occur in scrub habitats in fire fuel mgmt. area	Chaparral, coastal sage scrub, woodland, grassland.
	CNDDB	Calochortus fimbriatus	Catalina mariposa lily	List 1B.3	Low potential to occur in project area; moderate to high potential to occur in scrub habitats in fire fuel mgmt. area	Chaparral; clay soils.
	CNDDB	Calochortus plummerae	Plummer's mariposa lily	List 4.2	Low potential to occur in project area; moderate to high potential to occur in scrub habitats in fire fuel mgmt. area	Chaparral, coastal sage scrub, grassland; rocky soils.
	CNDDB	Frittilaria ojaiensis	Ojai frittilary	List 1B.2	Low potential to occur in project area; moderate to high potential to occur in scrub habitats in fire fuel mgmt. area	Found in sandy loam soil in chamise chaparral (burned in 1985); N-facing chaparral with <i>Ceanothus oliganthus</i> and <i>C. crassifolius;</i> N- facing slope along creek, and N-facing slope in mesic habitat.
	CNDDB	Horkelia cuneata var. puberula	Mesa horkelia	1B.1	Low potential to occur in project area; moderate to high potential to occur in scrub habitats in fire fuel mgmt. area	Sandy soils.
	CNDDB	Lepidium virginicum var. robinsonii	Robinson's pepper grass	4.3	Low potential to occur in project area; moderate potential to occur in scrub habitats in fire fuel mgmt. area	Chaparral, coastal sage scrub.

		Observed a	and Potentially	Occurrin	g Special Status Species	6
	CNDDB	Monardella hypoleuca ssp. hypoleuca	White-veined monardella	1B.3	Low potential to occur in project area; moderate to high potential to occur in scrub habitats in fire fuel mgmt. area	Chaparral, woodland
	CNDDB	Navarretia ojaiensis	Ojai navarretia	List 1B.1	Low potential to occur in project area; moderate to high potential to occur in scrub habitats in fire fuel mgmt. area	Found in sparse grassland openings in chaparral; clay soil; sparse grassland in openings in Coast Live Oak Alliance and <i>Ceanothus-</i> <i>Cercocarpus</i> Alliance; clay soils
	CNDDB	Navarretia peninsularis	Baja navarretia	List 1B.2	Low potential to occur in project area; moderate to high potential to occur in scrub habitats in fire fuel mgmt. area	Grassland meadow
	CNDDB	Nolina cismontana	Chaparral nolina	List 1B.2	None. Perennial shrub; would have been observed, if present	Chaparral/coastal sage scrub on soils derived from Sespe Red Bed Formation
SS1	SD1-3	Quercus dumosa	Nuttall's scrub oak	List 1B.1	Tentative Observation. Scrub oaks tentatively identified as either <i>Quercus</i> <i>dumosa</i> or hybrids between <i>dumosa</i> and common scrub oak, <i>Q. berberidifolia</i> observed at SW edge of project area beneath <i>Q.</i> <i>agrifolia</i> canopy. All trees removed by fire crews during Thomas Fire in December 2017	Chaparral
	CNDDB	Sidalcea neomexicana	Salt Spring checkerbloom	List 2B.2	Low potential to occur in project area; moderate potential to occur in scrub habitats in fire fuel mgmt. area	Riparian scrub/coastal sage scrub
			,	ANIMALS		
		Haplotrema caelatum	Slotted lancetooth snail	LIS	Low potential to occur in project area; moderate potential in scrub habitats in fire fuel mgmt. area	May occur beneath cover objects (logs, rocks, etc.) or in decaying yucca plants in scrub habitats west, north, and northeast of project area.

	Observed and	d Potentially (	Occurring	g Special Status Species	5
Hunt, pers. observ.; Roth and Sadeghia (2003)	Various species of shoulderband snails, genus <i>Helminthoglypta</i> , including <i>H.</i> <i>phlyctaena</i> (Zaca shoulderband), <i>H. traskii traskii</i> (Trask shoulderband), <i>H. tudiculata</i> <i>convicta</i> (southern shoulderband), <i>H. venturensis</i> (Ventura shoulderband), and <i>H. willetti</i> (Matilija shoulderband)	Shoulderband snails	LIS	Low potential to occur in project area because of lack of suitable microhabitat; moderate to high potential in scrub habitats in fire fuel mgmt. area	Systematics, distribution, and habitat preferences of these species are poorly known; one or more of these species may occur on-site beneath cover objects (logs, rocks, etc.) or in decaying yucca plants and cactus patches in scrub habitats west, north, and northeast of project area.
CNDDB	Bombus crotchii	Crotch's bumble bee	SSC/E	Low potential; has not been observed in region in 70+ years	Grassland and scrub habitats west, north, and northeast of project area contain suitable foraging habitat.
CNDDB	Phrynosoma blainvillei	Coast horned lizard	SSC	Moderate potential	High potential in scrub habitats in and around project area.
CNDDB	Aspidoscelis tigris stejnegeri	Coastal whiptail	SSC	Moderate potential	High potential in scrub habitats west, north, and northeast of project area and in open woodlands in project area.
CNDDB	Anniella (cf A. stebbinsi)	California legless lizard	SSC	Moderate to high potential	High potential in sandy loam soils in woodland and scrub habitats within and around the project area.
CNDDB	Diadophis punctatus modestus	San Bernardino ringneck snake	SSC	Moderate to high potential	High potential in woodland and scrub habitats in and around project area.
CNDDB	Salvadora hexalepis virgultea	Coast patch- nosed snake	SSC	Moderate potential	High potential in scrub habitats in and around project area.
CNDDB	Thamnophis hammondii	Two-striped garter snake	SSC	Low potential	Moderate potential in chaparral and mule-fat scrub habitat in and around project site.
CNDDB	Accipiter cooperi	Cooper's hawk	BCC	Moderate to high potential	Probable nesting species in trees on and around project area
CNDDB	Accipiter striatus	Sharp- shinned hawk	BCC	Moderate to high potential	Fall transient and wintering individuals likely in woodlands on and around project site

		Observed and	d Potentially (	Occurrin	g Special Status Specie	S
	CNDDB	Elanus leucurus	White-tailed kite	FP	Low potential	Potential foraging species on and around project area; no fall/winter communal roosts known from immediate area
	CNDDB	Aquila chrysaetos	Golden eagle	FP	Moderate to high potential	May forage over slopes west, north, and northeast of project area from montane roosts/nests
	CNDDB	Falco mexicanus	Prairie falcon	BCC	Moderate to high potential	May forage over slopes west, north, and northeast of project area/from montane roosts/nests
	CNDDB	Calypte costae	Costa's hummingbird	LIS	Moderate to high potential	Possible spring/summer migrant to project area
	CNDDB	Selasphorus rufus	Rufous hummingbird	LIS	Moderate to high potential	Probable breeder in or around project area
	CNDDB	Selasphorus sasin	Allen's hummingbird			Probable breeder in or around project area
SS2	Observed	Picoides nuttallii	Nuttall's woodpecker	LIS	Observed	Observed in oaks in project area during field surveys for this document
	CNDDB	Sphyrapicus ruber	Red-breasted sapsucker	LIS	Moderate to high potential	Probable foraging and possible nesting species in woodlands around project area
	CNDDB	Lanius Iudovicianus	Loggerhead shrike	SSC	Moderate to high potential	Observed in scrub habitat north of project area during field surveys for this document
SS3	Observed	d Baeolophus Oak titmous inornatus		LIS	Observed	Observed in oaks in project area during field surveys for this document
	CNDDB	Setophaga petechia	Yellow warbler	SSC	Moderate potential	Potential foraging species in willows and riparian scrub habitats around project area
	CNDDB	Aimophila ruficeps canescens	Southern California rufous- crowned sparrow	BCC	Moderate to high potential	Potential foraging/nesting species in rocky scrub habitats west, north, and northeast of project area
	CNDDB	Amphispiza belli belli	Bell's sage sparrow	BCC	Moderate to high potential	Potential foraging/nesting species in scrub habitats west, north, and northeast of project area

	Observed an	d Potentially C	Occurring	g Special Status Species	S
CNDDB	Chondestes grammacus	Lark sparrow	LIS	Moderate to high potential	Potential foraging species in grassland and scrub habitats in and around project area
CNDDB	Ammodramus savannarum	Grasshopper sparrow	SSC	Moderate to high potential	Potential foraging species in grasslands and lawns in and around project area
CNDDB	Carduelis Iawrencei	Lawrence's goldfinch	LIC	Moderate to high potential	Potential foraging species in scrub habitats west, north, and northeast of project area
CNDDB	Antrozous pallidus	Pallid bat	SSC	Moderate potential	May forage in grassland, woodland, and open scrub habitats in and around project area; suitable roosts (buildings or structures) occur in vicinity of project area
CNDDB	Corynorhinus townsendii	Townsend's big-eared bat	SSC	Moderate potential	May occasionally forage in scrub and woodland habitats in and around project area from off-site roosts
CNDDB	Choeronycteris mexicana	Mexican long- tongued bat	SSC	Low potential	May occasionally forage in scrub and woodland habitats in and around project area from off-site roosts
CNDDB	Eumops perotis californicus	Western mastiff bat	SSC	Low potential	May occasionally forage in scrub and woodland habitats in and around project area from off-site roosts
CNDDB Lasiurus blossevillii		Red bat	SSC	Moderate potential	May forage in grassland, woodland, and open scrub habitats in and around project area; suitable roosts (buildings) occur in vicinity of project area
 CNDDB	Lasiurus cinereus	Hoary bat	SSC	Moderate potential	May forage in grassland, woodland, and open scrub habitats in and around project area; suitable roosts (buildings) occur in vicinity of project area
CNDDB	Myotis volans	Long-legged bat	SSC	Moderate potential	May occasionally forage in scrub and woodland habitats in and around project area from off-site roosts

Observed and Potentially Occurring Special Status Species								
	CNDDB	Chaetodipus californicus femoralis	Dulzura pocket mouse	SSC	Moderate to high potential	Probable resident in scrub habitats west, north, and northeast of project area		
	CNDDB	Neotoma lepida intermedia	San Diego woodrat	SSC	Moderate potential	Probable resident in scrub habitats west, north, and northeast of project area. No stick nests were observed in or adjacent to the project area		
	CNDDB	Lepus californicus bennettii	San Diego black-tailed jackrabbit	SSC	Low potential	Possible resident in scrub habitats west, north, and northeast of project area		
	CNDDB	Taxidea taxus	American badger	PF	Moderate potential	Uncommon resident of scrub, open woodland, and grassland habitats, including undisturbed floodplains, in project region. One or more badgers may include scrub habitat west, north, and northeast of project area in large home range.		
	CNDDB	Felis concolor	Mountain lion	PF	Moderate to high potential	One or more lions likely include project area in home range		

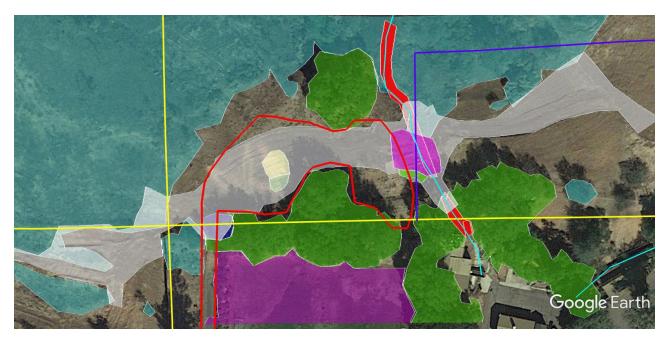
	Special Status Species (continued)						
Мар Кеу	Adequate Habitat Onsite	Adequate Habitat Size (7)	Acreage Impacted	Comments (8)			
SS1	Yes	Yes	0.1	Scrub oaks found in and adjacent to project area removed in December 2017 by firefighting crews during Thomas Fire.			
SS2	Yes	Yes	0.0	One or more Nuttall's woodpeckers observed in coast live oak trees during surveys; nesting not observed, but nesting habitat present. The four coast live oaks to be removed are too small to harbor nest holes of this species.			
SS3	Yes	Yes	0.0	Three oak titmouse observed foraging in mature coast live oaks in project area during surveys. No mature live oaks are to be removed by proposed project. The four coast live oaks to be removed are too small to harbor nests of this species.			

#### **Special Status Species (continued)**

opecial otatus opecies (continued)						
FEFederal Endangered						
FTFederal Threatened						
FCFederal Candidate Species						
FSCFederal Species of Concern						
SFPCalifornia Fully Protected Species						
SECalifornia Endangered						
STCalifornia Threatened						
SRCalifornia Rare						
SSCCalifornia Species of Special Concern						
CDFG/NatureServe Rank						
G1 or S1 - Critically Imperiled Globally or Subnationally (state)						
G2 or S2 - Imperiled Globally or Subnationally (state)						
G3 or S3 - Vulnerable to extirpation or extinction Globally or Subnationally (state)						
California Rare Plant Rank (RPR)						
RPR 1A - California Native Plant Society/CDFG listed as presumed to be extinct						
RPR 1B - California Native Plant Society/CDFG listed as rare or endangered in California and elsewhere						
RPR 2 - California Native Plant Society/CDFG listed as rare or endangered in California but more common						
elsewhere						
RPR 3 - California Native Plant Society/CDFG listed as in need of more information.						
RPR 4 - California Native Plant Society/CDFG listed as of limited distribution or infrequent throughout a broader area						
in California.						
LISLocally Important Species						
Rare plant records also taken from: www.rareplants.cnps.org; and www.calflora.org,						

### Nesting Bird Summary

There is a high potential for one or more migratory and resident bird species to nest in and around the project area, especially in the mature coast live oaks that are common here and form open oak woodlands in places. There also is the potential for swallows (cliff, violet-green, northern rough-winged) and black phoebes to nest under eaves of buildings on the Camp Ramah campus.



**Figure 6.** Special-status species and habitat connectivity map. Scrub oaks, tentatively identified as either Nuttall's scrub oak (*Quercus dumosa*) or hybrids between this species and the more widespread scrub oak (*Quercus berberidifolia*), were found in the purple area in the southwest corner of the project area (red outline). Fire-fighting activities during the Thomas Fire in December 2017 (white polygon) completely removed these scrub oaks. Nuttall's woodpeckers

and oak titmouse were observed in coast live oaks and oak woodlands in and around the project area (green polygons). See Figure 4 for explanation of other polygons.

## 3.3 Wildlife Movement and Connectivity

(Initial Study Checklist D)

Wildlife movement or connectivity features, or evidence thereof, <u>were not found</u> within the survey area(s).

#### **Connectivity Features**

No, the nearest documented Corridor is the Ventura River floodplain, which runs in a north-south direction approximately 1.25 miles west of the project area. The project area lies at interface between built-up areas (Camp Ramah and low-density residential lots and agriculture) and open space on south-facing slopes of Topa Topa Mountains. The poorly-developed, highly seasonal tributary of McDonald Canyon Creek that runs about 25 feet east of the project area is not a wildlife corridor because it has no discernible riparian corridor or aquatic features that would facilitate or concentrate wildlife movements.

	Connectivity Features							
Map Key (1)	Type of Connectivity Feature (2)	Description (3)	Species Observed (4)	Evidence (5)	Functional Group/Species Expected (6)	Habitats Connected (7)	Comments	
C1	corridor	watercourse	many species	tracks, scat, direct observations	fish, amphibians, reptiles, birds, mammals	Matilija Creek watershed; N Fk Matilija Creek watershed; Ventura River watershed, Pacific Ocean	River floodplain runs north-to south approximately 1.25 air miles W of the project area	

- **Crossing Structures Table.** Not Applicable. There are no roadways proposed with this project; project will use existing access road. See discussion under Connectivity Barriers (below) for more information.
- **Connectivity Barriers Table**. Not Applicable. There are no barriers to dispersal in or around the project area. The project area is open space that abuts extensive open spaces to the west, north, and east. The southern portion of the project area abuts developed parts of Camp Ramah, including driveways, internal access roads, and parking lots. These roadways are narrow and have an enforced speed limit of 20 mph, which is unlikely to cause road kills or present barriers to dispersal. See Figure 6 for existing habitat connectivity.

# Section 4: Recommended Impact Assessment & Mitigation

## 4.1 Sufficiency of Biological Data

#### Additional information needed to make CEQA findings and develop mitigation measures:

The project area and survey area have been adequately surveyed at times of the year that maximize species detection, if present. The information presented herein is sufficient to make CEQA findings. No additional surveys are recommended.

#### Additional biology-related surveys or permits needed prior to issuance of land use permit:

1603 Streambed Alteration Agreement (Restoration Category) from CA Department of Fish and Wildlife needed for restoration of unnamed tributary of McDonald Canyon Creek that was damaged by CalFire and other firefighting crews in December 2017 during the Thomas Fire.

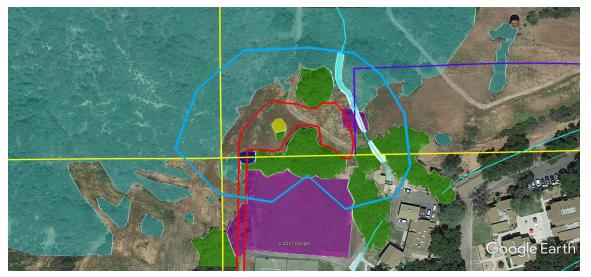
## 4.2 Impacts and Mitigation

#### Impacts

*Impact BIO-1 (Impacts to Native Habitats Adjacent to the Project Area).* The project footprint has been sited to minimize or avoid impacts to native trees, drainages, and slopes. However, grading and construction of the proposed project could significantly disturb about 0.25 acres of scrub and grassland habitats adjacent to the project footprint. The use of non-native landscaping for the project has the potential to degrade plant and wildlife communities if invasive species that were planted as landscaping were to escape cultivation and disperse to adjacent areas. These habitats may support one or more special-status species. *These are significant impacts that can be mitigated to less than significant levels (Class II).* 

*Impact BIO-2 (Impacts to Special-Status Plants in Fire Fuel Modification Zones).* Approximately 1.9 acres of chaparral occurs within the 100-foot fire fuel management zone that the Fire Department requires around structures to create and maintain "defensible spaces". Fire fuel modification activities could significantly impact special-status plants, native plant communities, including riparian scrub, chaparral, and individual coast live oak trees through direct removal of native vegetation and by creating and maintaining ideal conditions for spreading invasive, non-native species (Fig. 7). Aggressive non-native grasses, such as fountain grass (*Pennisetum setaceum*), can rapidly invade disturbed habitats and can prevent native shrubs and grasses from re-colonizing disturbed sites. The resulting grass-dominated community is more fire-prone than the original scrub habitat it replaced. Additionally, non-native plants do not support the insect fauna that birds and other wildlife use as food sources.

A number of the special-status plant and animal species listed in the tables above are rare, threatened, or endangered taxa that have a moderate to high likelihood of occurring in scrub habitats on slopes west, north, and northeast of the project area. These species, if present, could be eliminated or significantly disturbed by fire fuel modification practices (Fig. 7). *These are significant impacts that can be mitigated to less than significant levels (Class II).* 



**Figure 7.** 100-foot fire fuel management zone (pale blue line) around proposed project area (red line). Vegetation: chaparral (light blue); oak woodland (green); riparian scrub (white); non-native annual grassland (uncolored); ornamental/landscaping (purple). CUP-related boundaries are shown in yellow and dark blue.

*Impact BIO-3 (Impacts to Individual Oak Trees within Project Footprint – Class II).* The proposed project has been sited to minimize impacts to oak woodland and individual oak trees. A patch of oak woodland, composed of dozens of coast live oak trees (*Quercus agrifolia*) that range in size from 1-inch dbh to over 12 inches dbh, occurs along the southern side of the project area (see figures in Knight, 2019). Prior to the Thomas Fire in December 2017, there was a 12-inch dbh canyon live oak (*Quercus chrysolepis*) and a 10-inch dbh coast live oak in the center of the proposed project area. (yellow and green polygon Figure 7). These trees were removed by fire crews during construction of a firebreak through the proposed project area.

Impacts to oaks from the proposed project may come from three sources: a) grading and construction along the southern edge of the project area could impact the root zones of individual coast live oaks; b) widening the existing driveway to access the proposed project area will remove 4 small coast live oaks (3 inches to 7.5 inches dbh), and; c) fire fuel modification activities after during operation of the project could damage mature oak trees, decrease structural heterogeneity, remove smaller trees, and reduce or eliminate seedling recruitment and understory development. *These are significant impacts that can be mitigated to less than significant levels (Class II).* 

*Impact BIO-4 (Impacts to Federal and/or State Jurisdictional Wetlands and Riparian Habitat).* The proposed project was designed to avoid impacts to the seasonal tributary of McDonald Canyon Creek by establishing a minimum 35-foot wide buffer between the drainage and the project footprint. However, fire suppression activities by several governmental agencies in December 2017 impacted approximately 1,519 s.f. (0.035 acres) of potential Federal (U.S. Army Corps of Engineers) and State (CA Department of Fish and Wildlife) jurisdictional areas along an approximately 125-foot long reach of the unnamed seasonal tributary of McDonald Canyon Creek, east of the proposed project area. An approximately 125-foot long reach of the channel was completely filled with soil and associated riparian scrub vegetation on both sides of the creek was removed to create a firebreak. The buried reach of the channel will have to be reconfigured, stabilized, and restored. *These are significant impacts that can be mitigated to less than significant levels through habitat restoration (Class II).* 

*Impact BIO-5 (Impacts to Ground-Dwelling Animals, Special-Status Plants and Wildlife Species, and Nesting Birds).* Approximately 0.60 acres of non-native annual grassland will be graded or otherwise disturbed in the proposed project area. An additional 1.9 acres of chaparral and individual coast live oaks could be affected by fire fuel management practices in a 100-foot wide zone around the project area. The tables above list a variety of special-status invertebrates and vertebrates that could

Initial Study Biological Assessment Report for Camp Ramah Expansion Project

occur within or around the project area and the scrub and woodland habitats around the project area. Some of these species are ground-dwelling, i.e., they are found within the soil beneath leaf litter and woody debris and have little ability to disperse out of the project area footprint. These may include gastropods, reptiles, and small mammals that can be directly impacted by ground disturbance. Gastropods, specifically land snails, are expected to occur beneath cover objects and in leaf litter beneath oak trees in the project area. Sandy loam soils that occur throughout the project area are suitable for California legless lizards (genus *Anniella*), which are known from the region and could be killed by grading. Small mammals also could be impacted by grading. Oak woodland and riparian scrub south and east of the project area may provide nesting habitat for a number of special-status, as well as non-regulated bird species. Noise and increased human presence during grading and construction could disrupt bird nesting activity. *These are significant impacts that can be mitigated to less than significant levels (Class II).* 

*Impact BIO-6 (Impacts to Water Quality in Unnamed Tributary of McDonald Canyon Creek).* Surface runoff from the proposed project is likely to be directed into the unnamed tributary of McDonald Canyon Creek that borders the eastern edge of the project area. This could transport sediment-laden runoff into the drainage from the site and could erode the bed and banks of the creek at the entry point(s). These are significant impacts that can be mitigated to less than significant levels (Class II).

*Impact BIO-7 (Use of Rodenticides).* Grassland, scrublands, and woodlands within and around the project area supports pocket gophers, chipmunks, California ground squirrels, cricetid mice, pocket mice, kangaroo rats, woodrats. A wide variety of raptors and carnivores depend on these rodent populations for food, including white-tailed kites, Cooper's hawks, golden eagles, American badgers, bobcats, coyotes, mountain lions, and other species. The use of rodenticides in the project area during construction and especially during long-term occupancy could reduce rodent populations that are critical food resources for special-status raptors and carnivores and could directly poison these predators as the rodenticide moves through the food chain. *This is a Class II impact that can be mitigated to less than significant levels.* 

*Impact BIO-8 (Loss of Non-Regulated Wildlife).* The proposed project has the potential to destroy the nests of non-regulated species of ground-nesting birds that may use the subject property (e.g., sparrows; killdeer, western meadowlarks, etc.), and disrupt nesting behavior of tree-nesting species that may nest in oaks in and around the project area. A number of common, generalist terrestrial species, such as western fence lizard (*Sceloporus occidentalis*), western skink (*Eumeces skiltonianus*), southern alligator lizard (*Elgaria multicarinata*), gopher snake (*Pituophis melanoleucus*), common kingsnake (*Lampropeltis getulus*), western rattlesnake (*Crotalus oreganus*), and a number of small mammal species likely occur in the project area and could be killed or injured during grading of the site. *This is an adverse impact that can be further mitigated to minimize impacts to unregulated wildlife populations (<i>Class III*).

*Impact BIO-9 (Night-Lighting).* Because of the small size and location of the project site, lighting in the parking areas and Assembly Building, including the residence, could disturb raptor nesting, roosting, and foraging behavior and nocturnal wildlife behavior in open space areas west, north, and northeast of the project area. *Interference with movement patterns, nesting, foraging, and/or roosting behavior of non-regulated and protected wildlife is a significant impact that can be mitigated to less than significant levels (Class II).* 

*Impact BIO-10 (Trash).* Trash generated during construction and project occupancy could be an attractive nuisance for wildlife. *Trash accumulation is a significant impact that can be mitigated to less than significant levels (Class II).* 

*Impact BIO-11 (Building Architecture).* Project design elements, such as overhanging eaves, could attract cliff swallows, house finches, and other birds to opportunistically nest on buildings. Removing or otherwise disturbing active bird nests of any species is a violation of the Federal Migratory Bird Treaty Act and the State Fish and Game Code because it diminishes the reproductive effort of these species. *This is a Class II impact that can be mitigated to less than significant levels.* 

**Mitigation Measures.** The following mitigation measures are numbered in association with impacts identified in the previous section.

**Mitigation Measure BIO-1a (Delineate disturbance limits):** Orange construction fencing (4-6 ft high) shall be installed at the surveyed grading limits and along the 25-foot creek buffer along the east side of the project area. Fencing shall be installed prior to initial grading or any other soil disturbance. Silt fence shall be installed along the base of the orange construction perimeter and buffer fencing to prevent small animals from entering the construction footprint and to conform to Storm Water Pollution Prevention Plan requirements to prevent sediment-laden runoff from entering the drainage. Installation of the fencing shall be supervised by a qualified biologist. Both types of fencing shall be maintained for the duration of construction and final landscaping.

**Mitigation Measure BIO-1b (Use native plant for landscaping):** The landscape architect for the project shall design a planting plan that uses only native, locally-occurring plant species to create landscaping that has both aesthetic value and value to wildlife and will not pose a hazard to native vegetation in open space areas. Native plants shall be used for landscaping for the life of the project. A qualified biologist shall review and approve planting plans prior to implementation.

**Mitigation Measure BIO-1c (Chemicals):** Fertilizers, herbicides, and/or pesticides shall not be used on any landscaping of the project site. Only organic methods, such as composting, mulching, and hand-pulling of weeds shall be used for the life of the project.

Mitigation Measure BIO-2a (Fire Fuel Management Plan): Fire fuel management practices could pose a significant impact to native plant communities, special-status plants, and wildlife communities if they are not implemented properly. Prior to issuing a development permit, a qualified biologist should prepare a Fire Fuel Management Plan that details methods for achieving fire safety while preserving the integrity and function of native plant communities on the various parcels to the maximum extent feasible and that ensures that consistent fire fuel management practices are applied across the parcels. The Plan should focus on removing and controlling invasive, non-native vegetation, conserving native vegetation in the modification zones, especially annual species, and developing fuel management practices that will discourage or prevent non-native grasses and other non-native invasive species from dominating areas in the fire fuel management zones. Landowner education of sustainable fire fuel clearance practices should be a component of these plans. Because the 0 to 30-foot- and 30 to 100-foot fuel management zones get different vegetation treatments, the 30-foot boundary should be permanently staked in the field. The boundaries of the 100-foot fuel management zone should likewise be permanently marked in the field to prevent fire fuel modification activities from occurring further than 100 feet from structures. This Plan should be reviewed by the local Fire Marshall for consistency with fire fuel management practices prior to approval.

**Mitigation Measure BIO-2b (Fire fuel management practices impacting scrub oaks):** Concurrent with development of the FFMP, a qualified biologist shall locate and field-mark any scrub oaks within the 100-foot fuel modification zone. Scrub oaks within the 100-foot fire fuel management zones shall not be mowed, trimmed, or otherwise disturbed during fuel modification activities. The occurrence of these trees is naturally sparse and leaving them intact would likely not increase fire fuel loads.

**Mitigation Measure BIO-2c (Scrub oak recruitment):** Mowing, weed-whipping, or other vegetation management activities that are designed to reduce the standing biomass of ground cover vegetation in the fire fuel management zones shall avoid scrub oak seedlings and saplings to the maximum extent possible in order to encourage natural oak recruitment. Scrub oaks in the fire fuel management zones should be flagged for avoidance before vegetation clearing activities begin each year.

**Mitigation Measure BIO-3a (Replacement for loss of four (4) coast live oaks ranging in size from 3 inches to 7.5 inches dbh due to driveway widening):** A certified arborist has determined that four small coast live oaks, ranging in size from 3 inches to 7.5 inches dbh, will be removed as a result of widening the existing driveway into the project site, and has recommended that the loss of these trees be mitigated at a 10:1 ratio by planting 40 15-gallon coast live oaks elsewhere on the Camp Ramah property, including the planting restoration area for the impacted reach of McDonald Canyon Creek (see

Mitigation Measure BIO-4). These trees should be grown from acorns collected on the Camp Ramah site to preserve genetic integrity.

**Mitigation Measure BIO-3b (Nesting birds):** Regardless of the seasonal timing of grading and/or construction, a qualified biologist shall survey trees within and surrounding the project area to assess bird nesting, including occupation by resident, cavity-nesting birds. The biologist shall determine if construction is likely to impact nesting or resident occupation and, if so, shall contact CDFW to determine an appropriate course of action.

**Mitigation Measure BIO-3c (Protection of oak root zones):** Concurrent with fencing the grading limits (Mitigation Measure BIO-2a), orange construction fencing shall be placed at the drip line of all oaks to be protected and shall be maintained for the duration of construction and final landscaping. A certified arborist shall be present during all grading work that occurs beneath the dripline of coast live oak trees in order to avoid unnecessary damage to coast live oak trees and their roots. See tree-specific recommendations in Knight, 2019.

**Mitigation Measure BIO-3d (Permeable paving):** Permeable paving shall be used for all parking areas that encroach into the dripline of oak trees. The paving shall be designed to capture oils and other automobile products and reduce the presence of these hydrocarbons and oils in surface runoff.

**Mitigation Measure BIO-3e (Fire fuel modification):** Oak trees adjacent to the proposed project area may have to be limbed up to six feet above ground in order to conform to fire fuel modification requirements. A certified arborist shall supervise all initial trimming activities. Such activities shall be timed to occur between 1 August and 15 September, in order to avoid the nesting season for birds.

**Mitigation Measure BIO-4 (Channel Restoration):** A qualified biologist shall prepare a brief *Riparian Habitat Restoration Plan* that details how the affected reach of the unnamed tributary of McDonald Canyon Creek will be re-configured, stabilized, and restored. All work shall be conducted under permits obtained from the California Department of Fish and Wildlife (Streambed Alteration Agreement) and a U.S. Army Corps of Engineers (Nationwide Permit).

**Mitigation Measures BIO-5a (Salvage of gastropods and legless lizards):** A qualified biologist shall monitor initial grading for the driveway and building pads and shall salvage all native land snails and California legless lizards that might be uncovered by soil disturbance. The biologist shall consult with the equipment operator prior to commencing grading, to maximize the likelihood of observing individuals, if uncovered. Land snails and lizards, if in good condition, shall be relocated to suitable soils and microhabitats out of the disturbance footprint; if killed, they shall be collected and deposited in the Santa Barbara Museum of Natural History or University of California-Santa Barbara collections.

**Mitigation Measure BIO-5b (Nesting birds):** Grading and other construction activities involving heavy equipment shall be timed to occur between 1 July and 1 March in order to avoid potential impacts to nesting birds. If the nesting season (Mar-July) cannot be avoided, then a qualified biologist shall survey the project area and all trees within a 300-foot radius of the project area no more than two weeks prior to ground-disturbing activities. If active nests are found, the biologist shall contact CDFW to determine an appropriate course of action, which could, depending on the species involved, include delaying noise-producing activities until nesting has been completed.

**Mitigation Measure BIO-5c (Bats):** Oak trees on and around the project area may provide temporary (seasonal) roosts for bats. Prior to the start of grading or any construction activities, a qualified biologist shall conduct an acoustic survey to assess bat activity on-site. If bats are found roosting in oak trees in or within a 50-foot radius of the project area, the biologist shall confer with CDFW staff to determine how to proceed.

**Mitigation Measure BIO-6 (Avoiding soil erosion from surface runoff):** Site drainage shall be designed to avoid the need for concrete channels or other modifications to the existing seasonal unnamed tributary on the east edge of the project area. Storm drain outfalls, if necessary, shall be designed to flow into vegetated swales located in the 25-foot creek buffer. Hardscaping, if necessary to prevent soil erosion, shall consist of ungrouted rock rip-rap.

**Mitigation Measure BIO-7 (Prohibit rodenticides):** Because of the small size of the project site and its location adjacent to regionally important wildlife habitat, rodenticides shall be banned from use anywhere on-site during construction and building occupancy, i.e., for the life of the project. Only mechanical traps (snap-traps) shall be used to control rodents, if necessary.

**Mitigation Measure BIO-8a (Timing of grading for vegetation removal):** Vegetation removal and/or construction shall be timed to avoid the nesting season for raptors and other birds, generally 1 February-15 September. If this is not feasible, a qualified biologist shall conduct a series of surveys for nesting birds starting no more than four weeks and no less than one week prior to construction. Measures to protect active nest shall be evaluated by a qualified biologist on a case-by-case basis, but could include maintaining a minimum 50-foot buffer around active non-raptor nests and 300-foot buffer around raptor nests. All active nests shall be monitored weekly until the young have fledged.

**Mitigation Measure BIO-8b (Supervision of initial grading):** A qualified biologist shall direct the initial site clearing to include having a bulldozer or grader make several passes to first remove vegetation (grasses and shrubs) from development envelope, then the upper six inches of soil in two lifts of three inches/lift in order to capture and relocate any lizards, snakes, and/or small mammals that are found in good condition. Individuals that are killed during grading and are in good condition shall be collected for accession into the zoology collections of the Santa Barbara Museum of Natural History and/or the University of California-Santa Barbara.

**Mitigation Measure BIO-8c (Environmental training):** A qualified biologist shall conduct a preconstruction meeting on-site for all construction personnel prior to commencing any grading or construction activities. The purpose of the meeting will be to discuss biological sensitivities associated with the project, permit conditions, BMPs to avoid or minimize environmental impacts, and other topics. The biological monitor shall conduct "tailgate" sessions to review these issues, as-needed. The biologist shall also perform regular site inspections to ensure permit compliance, subject to County requirements.

**Mitigation Measure BIO-9 (Limits on lighting):** Night-lighting throughout the site shall use the lowest wattage and least number of lights consistent with safety. All lighting shall be shielded and directed downward and away open space west, north, and northeast of the project area, in order to minimize light pollution of adjacent areas.

**Mitigation Measure BIO-10 (Trash pickup):** Trash receptacles shall be provided and maintained for the duration of construction and trash pick-up throughout the project area shall occur daily. Site clean-up shall be a routine component of maintenance and trash receptacles shall be emptied immediately following any social functions during project occupancy.

**Mitigation Measure BIO-11 (Bird-friendly architecture):** Impacts can be reduced or avoided by designing structures to make them less attractive to nesting birds, or by installing bird netting beneath eaves before nests have been constructed. The project shall be designed to incorporate structural components that do not promote nesting by swallows, finches, or other birds (no eaves on buildings or use of netting under eaves, etc.).

## A. Species

Project: PS-M; Cumulative: N

Significance Finding – Project Impacts: See previous section.

Significance Finding – Cumulative Impacts: See previous section.

### **Avoidance and Minimization Measures**

Project footprint and size has been modified to avoid or minimize impacts to coast live oaks and unnamed drainage.

MM: See BIO-1A, 1B, 1C, 2C, 3A, 3B, 3C, 3D, 3E, 5B, 5C, AND 11 in previous section.

### **B. Ecological Communities**

Project: PS-M; Cumulative: N

Sensitive Plant Communities: See MM BIO-2a, 2b, 4, 6, 7, 8a, and 8b in previous section.

Waters and Wetlands: See MM BIO-4 in previous section. Environmentally Sensitive Habitat Areas – Not applicable.

## C. Habitat Connectivity (migration corridors)

Project: N; Cumulative: N

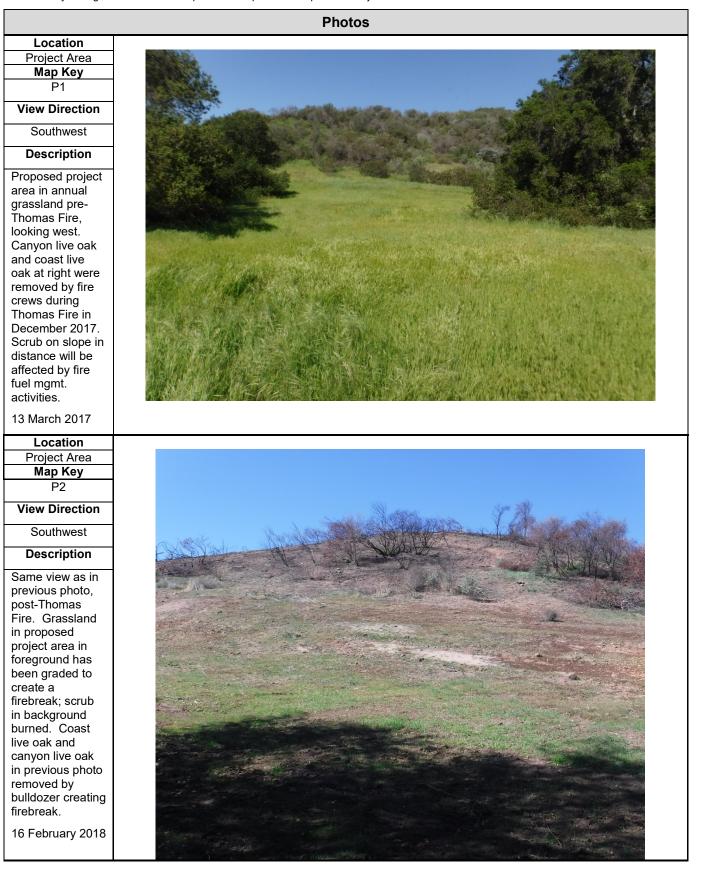
Not Applicable.

# **Section 5: Photos**

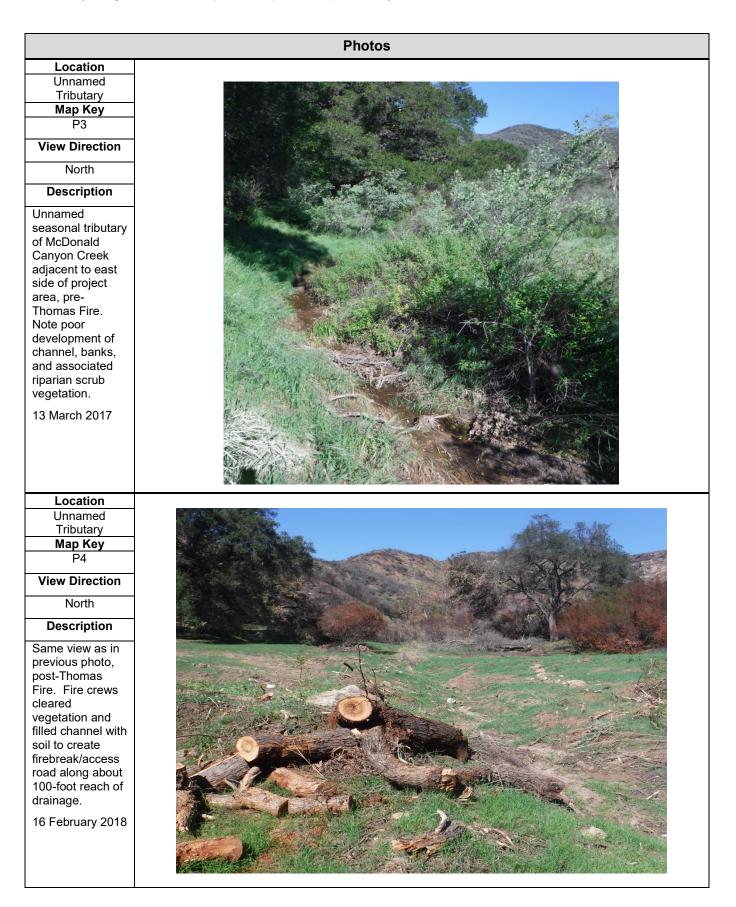


**Figure 7. Photodocumentation locations.** Project area outlined in red. Seasonal drainage in light blue. Yellow and dark blue lines denote parcel boundaries. Image date 14 April 2017.

Initial Study Biological Assessment Report for Camp Ramah Expansion Project



Initial Study Biological Assessment Report for Camp Ramah Expansion Project



# Appendix One Summary of Biological Resource Regulations

The Ventura County Planning Division, as "lead agency" under CEQA for issuing discretionary land use permits, uses the relationship of a potential environmental effect from a proposed project to an established regulatory standard to determine the significance of the potential environmental effect. This Appendix summarizes important biological resource regulations which are used by the Division's biologists (consultants and staff) in making CEQA findings of significance:

Sensitive Status Species Regulations Nesting Bird Regulations Plant Community Regulations Tree Regulations Waters and Wetlands Regulations Coastal Habitat Regulations Wildlife Migration Regulations Locally Important Species/Communities Regulations

## **Sensitive Status Species Regulations**

#### Federally Protected Species

Ventura County is home to 29 federally listed endangered and threatened plant and wildlife species. The U.S. Fish and Wildlife Service (USFWS) regulates the protection of federally listed endangered and threatened plant and wildlife species.

**FE (Federally Endangered):** A species that is in danger of extinction throughout all or a significant portion of its range.

FT (Federally Threatened): A species that is likely to become endangered in the foreseeable future.

**FC (Federal Candidate):** A species for which USFWS has sufficient information on its biological status and threats to propose it as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

**FSC (Federal Species of Concern):** A species under consideration for listing, for which there is insufficient information to support listing at this time. These species may or may not be listed in the future, and many of these species were formerly recognized as "Category-2 Candidate" species.

The USFWS requires permits for the "take" of any federally listed endangered or threatened species. "Take" is defined by the USFWS as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct; may include significant habitat modification or degradation if it kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering."

The Endangered Species Act (ESA) does not provide statutory protection for candidate species or species of concern, but USFWS encourages conservation efforts to protect these species. USFWS can set up voluntary Candidate Conservation Agreements and Assurances, which provide non-Federal landowners (public and private) with the assurance that if they implement various conservation activities to protect a given candidate species, they will not be subject to additional restrictions if the species becomes listed under the ESA.

#### State Protected Species

The California Department of Fish and Game (CDFG) regulates the protection of endangered, threatened, and fully protected species listed under the California Endangered Species Act. Some species may be jointly listed under the State and Federal Endangered Species Acts.

**SE (California Endangered):** A native species or subspecies which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

**ST (California Threatened):** A native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and

management efforts required by this chapter. Any animal determined by the commission as "rare" on or before January 1, 1985, is a "threatened species."

**SFP (California Fully Protected Species):** This designation originated from the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians, reptiles, and birds. Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations.

**SR (California Rare):** A species, subspecies, or variety of plant is rare under the Native Plant Protection Act when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Animals are no longer listed as rare; all animals listed as rare before 1985 have been listed as threatened.

**SSC (California Species of Special Concern):** Animals that are not listed under the California Endangered Species Act, but which nonetheless 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist.

The CDFG requires permits for the "take" of any State-listed endangered or threatened species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the California Fish and Game Commission determines to be endangered or threatened. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

The California Native Plant Protection Act protects endangered and rare plants of California. Section 1908, which regulates plants listed under this act, states: "no person shall import into this state, or take, possess, or sell within this state, except as incident to the possession or sale of the real property on which the plant is growing, any native plant, or any part or product thereof, that the commission determines to be an endangered native plant or rare native plant, except as otherwise provided in this chapter."

Unlike endangered, threatened, and rare species, for which a take permit may be issued, California Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

The California Endangered Species Act does not provide statutory protection for California species of special concern, but they should be considered during the environmental review process.

#### California Rare Plant Ranks (RPR)

Plants with 1A, 1B, 2 or 4 should always be addressed in CEQA documents. Plants with a RPR 3 do not need to be addressed in CEQA documents unless there is sufficient information to demonstrate that a RPR 3 plant meets the criteria to be listed as a RPR 1, 2, or 4.

**RPR 1A:** Plants presumed to be extinct because they have not been seen or collected in the wild in California for many years. This list includes plants that are both presumed extinct in California, as well as those plants which are presumed extirpated in California. A plant is extinct in California if it no longer occurs in or outside of California. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

**RPR 1B:** Plants that are rare throughout their range with the majority of them endemic to California. Most of the plants of List 1B have declined significantly over the last century.

**RPR 2:** Plants that are rare throughout their range in California, but are more common beyond the boundaries of California. List 2 recognizes the importance of protecting the geographic range of widespread species.

Plants identified as RPR 1A, 1B, and 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing.

**RPR 3:** A review list for plants for which there is inadequate information to assign them to one of the other lists or to reject them.

RPR 4: A watch list for plants that are of limited distribution in California.

#### Global and Subnational Rankings

Though not associated directly with legal protections, species have been given a conservation status rank by NatureServe, an international non-profit conservation organization that is the leading source for information about

rare and endangered species and threatened ecosystems. The Ventura County Planning Division considers the following ranks as sensitive for the purposes of CEQA impact assessment (G = Global, S = Subnational or State):

G1 or S1 - Critically Imperiled

G2 or S2 – Imperiled

G3 or S3 - Vulnerable to extirpation or extinction

#### Locally Important Species

Locally important species' protections are addressed below under "Locally Important Species/Communities Regulations."

For lists of some of the species in Ventura County that are protected by the above regulations, go to <u>http://www.ventura.org/rma/planning/ceqa/bio\_resource\_review.html</u>.

## **Migratory Bird Regulations**

The Federal Migratory Bird Treaty Act (MBTA) and the California Department of Fish and Game (CDFG) Code (3503, 3503.5, 3511, 3513 and 3800) protect most native birds. In addition, the federal and state endangered species acts protect some bird species listed as threatened or endangered. Project-related impacts to birds protected by these regulations would normally occur during the breeding season, because unlike adult birds, eggs and chicks are unable to escape impacts.

The MBTA implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and Russia for the protection of migratory birds, which occur in two of these countries over the course of one year. The Act maintains that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (Title 50 of the Code of Federal Regulations, Section 10.13 as updated by the 1983 American Ornithologists' Union (AOU) Checklist and published supplements through 1995 by the USFWS).

CDFG Code 3513 upholds the MBTA by prohibiting any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA. In addition, there are CDFG Codes (3503, 3503.5, 3511, and 3800) which further protect nesting birds and their parts, including passerine birds, raptors, and state "fully protected" birds.

NOTE: These regulations protect almost all native nesting birds, not just sensitive status birds.

## **Plant Community Regulations**

Plant communities are provided legal protection when they provide habitat for protected species or when the community is in the coastal zone and qualifies as environmentally sensitive habitat area (ESHA).

#### Global and Subnational Rankings

Though not associated directly with legal protections, plant communities have been given a conservation status rank by NatureServe, an international non-profit conservation organization that is the leading source for information about rare and endangered species and threatened ecosystems. The Ventura County Planning Division considers the following ranks as sensitive for the purposes of CEQA impact assessment (G = Global, S = Subnational or State):

G1 or S1 - Critically Imperiled

G2 or S2 - Imperiled

G3 or S3 - Vulnerable to extirpation or extinction

#### CDFG Rare

Rare natural communities are those communities that are of highly limited distribution. These communities may or may not contain rare, threatened, or endangered species. Though the Native Plant Protection Act and the California Endangered Species Act provide no legal protection to plant communities, CDFG considers plant communities that are ranked G1-G3 or S1-S3 (as defined above) to be rare or sensitive, and therefore these plant communities should be addressed during CEQA review.

#### Environmentally Sensitive Habitat Areas

The Coastal Act specifically calls for protection of "environmentally sensitive habitat areas" or ESHA, which it defines as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5).

ESHA has been specifically defined in the Santa Monica Mountains. For ESHA identification in this location, the Coastal Commission, the agency charged with administering the Coastal Act, has described the habitats that are considered ESHA. A memo from a Coastal Commission biologist that describes ESHA in the Santa Monica Mountains can be found at: <u>http://www.ventura.org/rma/planning/cega/bio\_resource\_review.html</u>.

#### Locally Important Communities

The Ventura County Initial Study Assessment Guidelines defines a locally important community as one that is considered by qualified biologists to be a quality example characteristic of or unique to the County or region, with this determination being made on a case-by-case basis. The County has not developed a list of locally important communities, but has deemed oak woodlands to be a locally important community through the County's *Oak Woodland Management Plan*.

## **Tree Regulations**

Selected trees are protected by the Ventura County Tree Protection Ordinance, found in Section 8107-25 of the Ventura County Non-Coastal Zoning Ordinance. This ordinance, which applies in the unincorporated areas of the County outside the coastal zone, regulates—through a tree permit program—the removal, trimming of branches or roots, or grading or excavating within the root zone of a "protected tree." Individual trees are the focus of the ordinance, while oak woodlands are additionally protected as "locally important communities."

The ordinance allows removal of five protected trees (only three of which can be oaks or sycamores; none of which can be heritage or historical trees) through a ministerial permit process. Removal of more/other than this may trigger a discretionary tree permit.

If a proposed project cannot avoid impacts to protected trees, mitigation of these impacts (such as replacement of lost trees) is addressed through the tree permit process—**unless the impacts may affect biological resources beyond the tree itself**, such as to sensitive status species that may be using the tree, nesting birds, the tree's role as part of a larger habitat, etc. These secondary impacts have not been addressed through the tree permit program and must be addressed by the biologist in the biological assessment in accordance with the California Environmental Quality Act (CEQA).

A tree permit does not, however, substitute as mitigation for impacts to oak woodlands. The Public Resources Code requires that when a county is determining the applicability of CEQA to a project, it must determine whether that project "may result in a conversion of oak woodlands that will have a significant effect on the environment." If such effects (either individual impacts or cumulative) are identified, the law requires that they be mitigated. Acceptable mitigation measures include, but are not limited to, conservation of other oak woodlands through the use of conservation easements and planting replacement trees, which must be maintained for seven years. In addition, only 50% of the mitigation required for significant impacts to oak woodlands may be fulfilled by replanting oak trees.

The following trees are protected in the specified zones. Girth is measured at 4.5 feet from the midpoint between the uphill and downhill side of the root crown.

PROTECTED TREES							
Common Name/Botanical Name	Girth Standard	Applicable Zones					
(Genus species)	(Circumference)						
		All Base Zones	<u>SRP1</u>				
Alder ( <i>Alnus</i> all species)	9.5 in.		Х				
Ash ( <i>Fraxinus</i> all species)	9.5 in.		Х				
Bay (Umbellularia californica)	9.5 in.		Х				

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Cottonwood ( <i>Populus</i> all species)	9.5 in.		Х
Elderberry (Sambucus all species)	9.5 in.		Х
Big Cone Douglas Fir ( <i>Pseudotsuga macrocarpa</i> )	9.5 in.		Х
White Fir (Abies concolor)	9.5 in.		Х
Juniper (Juniperus californica)	9.5 in.		Х
Maple (Acer macrophyllum)	9.5 in.		Х
Oak (Single) (Quercus all species)	9.5 in.	Х	Х
Oak (Multi) ( <i>Quercus</i> all species)	6.25 in.	Х	Х
Pine ( <i>Pinus</i> all species)	9.5 in.		Х
Sycamore ( <i>Platanus</i> all species)	9.5 in.	Х	Х
Walnut ( <i>Juglans</i> all species)	9.5 in.		Х
Historical Tree <sup>3</sup> (any species)	(any size)	Х	Х
Heritage Tree <sup>4</sup> (any species)	90.0 in.	Х	Х

X Indicates the zones in which the subject trees are considered protected trees.

1. SRP - Scenic Resource Protection Overlay Zone

2. SHP - Scenic Highway Protection Overlay Zone

3. Any tree or group of trees identified by the County or a city as a landmark, or identified on the Federal or California Historic Resources Inventory to be of historical or cultural significance, or identified as contributing to a site or structure of historical or cultural significance.

4. Any species of tree with a single trunk of 90 or more inches in girth or with multiple trunks, two of which collectively measure 72 inches in girth or more. Species with naturally thin trunks when full grown or naturally large trunks at an early age, or trees with unnaturally enlarged trunks due to injury or disease must be at least 60 feet tall or 75 years old.

## Waters and Wetlands Regulations

Numerous agencies control what can and cannot be done in or around streams and wetlands. If a project affects an area where water flows, ponds or is present even part of the year, it is likely to be regulated by one or more agencies. Many wetland or stream projects will require three main permits or approvals (in addition to CEQA compliance). These are:

- 404 Permit (U.S. Army Corps of Engineers)
- 401 Certification (California Regional Water Quality Control Board)
- Streambed Alteration Agreement (California Department of Fish and Game)

For a more thorough explanation of wetland permitting, see the Ventura County's "Wetland Project Permitting Guide" at <u>http://www.ventura.org/rma/planning/ceqa/bio\_resource\_review.html</u>.

#### 404 Permit (U.S. Army Corps of Engineers)

Most projects that involve streams or wetlands will require a 404 Permit from the U.S. Army Corps of Engineers (USACE). Section 404 of the federal Clean Water Act is the primary federal program regulating activities in wetlands. The Act regulates areas defined as "waters of the United States." This includes streams, wetlands in or next to streams, areas influenced by tides, navigable waters, lakes, reservoirs and other impoundments. For nontidal waters, USACE jurisdiction extends up to what is referred to as the "ordinary high water mark" as well as to the landward limits of adjacent Corps-defined wetlands, if present. The ordinary high water mark is an identifiable natural line visible on the bank of a stream or water body that shows the upper limit of typical stream flow or water level. The mark is made from the action of water on the streambank over the course of years.

**Permit Triggers:** A USACE 404 Permit is triggered by moving (discharging) or placing materials—such as dirt, rock, geotextiles, concrete or culverts—into or within USACE jurisdictional areas. This type of activity is also referred to as a "discharge of dredged or fill material."

#### 401 Certification (Regional Water Quality Control Board)

If your project requires a USACE 404 Permit, then you will also need a Regional Water Quality Control Board (RWQCB) 401 Certification. The federal Clean Water Act, in Section 401, specifies that states must certify that any activity subject to a permit issued by a federal agency, such as the USACE, meets all state water quality standards. In California, the state and regional water boards are responsible for certification of activities subject to USACE Section 404 Permits.

**Permit Trigger:** A RWQCB 401 Certification is triggered whenever a USACE 404 Permit is required, or whenever an activity could cause a discharge of dredged or fill material into waters of the U.S. or wetlands.

#### Streambed Alteration Agreement (California Department of Fish and Game)

If your project includes alteration of the bed, banks or channel of a stream, or the adjacent riparian vegetation, then you may need a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG). The California Fish and Game Code, Sections 1600-1616, regulates activities that would alter the flow, bed, banks, channel or associated riparian areas of a river, stream or lake. The law requires any person, state or local governmental agency or public utility to notify CDFG before beginning an activity that will substantially modify a river, stream or lake.

**Permit Triggers:** A Streambed Alteration Agreement (SAA) is triggered when a project involves altering a stream or disturbing riparian vegetation, including any of the following activities:

- Substantially obstructing or diverting the natural flow of a river, stream or lake
- Using any material from these areas
- · Disposing of waste where it can move into these areas

Some projects that involve routine maintenance may qualify for long-term maintenance agreements from CDFG. Discuss this option with CDFG staff.

#### Ventura County General Plan

The Ventura County General Plan contains policies which also strongly protect wetland habitats.

Biological Resources Policy 1.5.2-3 states:

Discretionary development that is proposed to be located within 300 feet of a marsh, small wash, intermittent lake, intermittent stream, spring, or perennial stream (as identified on the latest USGS 7<sup>1</sup>/<sub>2</sub> minute quad map), shall be evaluated by a County approved biologist for potential impacts on wetland habitats. Discretionary development that would have a significant impact on significant wetland habitats shall be prohibited, unless mitigation measures are adopted that would reduce the impact to a less than significant level; or for lands designated "Urban" or "Existing Community", a statement of overriding considerations is adopted by the decision-making body.

Biological Resources Policy 1.5.2-4 states:

Discretionary development shall be sited a minimum of 100 feet from significant wetland habitats to mitigate the potential impacts on said habitats. Buffer areas may be increased or decreased upon evaluation and recommendation by a qualified biologist and approval by the decision-making body. Factors to be used in determining adjustment of the 100 foot buffer include soil type, slope stability, drainage patterns, presence or absence of endangered, threatened or rare plants or animals, and compatibility of the proposed development with the wildlife use of the wetland habitat area. The requirement of a buffer (setback) shall not preclude the use of replacement as a mitigation when there is no other feasible alternative to allowing a permitted use, and if the replacement results in no net loss of wetland habitat. Such replacement shall be "in kind" (i.e. same type and acreage), and provide wetland habitat of comparable biological value. On-site replacement shall be preferred wherever possible. The replacement plan shall be developed in consultation with California Department of Fish and Game.

## **Coastal Habitat Regulations**

Ventura County's Coastal Area Plan and the Coastal Zoning Ordinance, which constitute the "Local Coastal Program" (LCP) for the unincorporated portions of Ventura County's coastal zone, ensure that the County's land

use plans, zoning ordinances, zoning maps, and implemented actions meet the requirements of, and implement the provisions and polices of California's 1976 Coastal Act at the local level.

#### Environmentally Sensitive Habitats

The Coastal Act specifically calls for protection of "environmentally sensitive habitat areas" or ESHA, which it defines as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5).

Section 30240 of the Coastal Act states:

- (a) "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas."
- (b) "Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas."

There are three important elements to the definition of ESHA. First, a geographic area can be designated ESHA either because of the presence of individual species of plants or animals or because of the presence of a particular habitat. Second, in order for an area to be designated as ESHA, the species or habitat must be either rare or it must be especially valuable. Finally, the area must be easily disturbed or degraded by human activities.

Protection of ESHA is of particular concern in the southeastern part of Ventura County, where the coastal zone extends inland (~5 miles) to include an extensive area of the Santa Monica Mountains. For ESHA identification in this location, the Coastal Commission, the agency charged with administering the Coastal Act, has described the habitats that are considered ESHA. A memo from a Coastal Commission biologist that describes ESHA in the Santa Monica Mountains can be found at: <u>http://www.ventura.org/rma/planning/ceqa/bio\_resource\_review.html</u>.

The County's Local Coastal Program outlines other specific protections to environmentally sensitive habitats in the Coastal Zone, such as to wetlands, riparian habitats, dunes, and upland habitats within the Santa Monica Mountains (M Overlay Zone). Protections in some cases are different for different segments of the coastal zone.

Copies of the Coastal Area Plan and the Coastal Zoning Ordinance can be found at: <u>http://www.ventura.org/rma/planning/Programs/local.html</u>.

## Wildlife Migration Regulations

The Ventura County General Plan specifically includes wildlife migration corridors as an element of the region's significant biological resources. In addition, protecting habitat connectivity is critical to the success of special status species and other biological resource protections. Potential project impacts to wildlife migration are analyzed by biologists on a case-by-case basis. The issue involves both a macro-scale analysis—where routes used by large carnivores connecting very large core habitat areas may be impacted—as well as a micro-scale analysis—where a road or stream crossing may impact localized movement by many different animals.

## Locally Important Species/Communities Regulations

Locally important species/communities are considered to be significant biological resources in the Ventura County General Plan.

#### Locally Important Species

The Ventura County General Plan defines a Locally Important Species as a plant or animal species that is not an endangered, threatened, or rare species, but is considered by qualified biologists to be a quality example or unique species within the County and region. The following criteria further define what local qualified biologists have determined to be Locally Important Species:

#### Locally Important Animal Species Criteria

Taxa for which habitat in Ventura County is crucial for their existence either globally or in Ventura County. This includes:

• Taxa for which the population(s) in Ventura County represents 10 percent or more of the known extant global distribution; or

- Taxa for which there are five or fewer *element occurrences*, or less than 1,000 individuals, or less than 2,000 acres of habitat that sustains populations in Ventura County; or,
- Native taxa that are generally declining throughout their range or are in danger of extirpation in Ventura County.

#### Locally Important Plant Species Criteria

 Taxa that are declining throughout the extent of their range AND have five (5) or fewer element occurrences in Ventura County.

The County maintains a list of locally important species, which can be found on the Planning Division website at: <a href="http://www.ventura.org/rma/planning/ceqa/bio">http://www.ventura.org/rma/planning/ceqa/bio</a> resource review.html. This list should not be considered comprehensive. Any species that meets the criteria qualifies as locally important, whether or not it is included on this list.

#### Locally Important Communities

The Ventura County Initial Study Assessment Guidelines defines a locally important community as one that is considered by qualified biologists to be a quality example characteristic of or unique to the County or region, with this determination being made on a case-by-case basis. The County has not developed a list of locally important communities. Oak woodlands have however been deemed by the Ventura County Board of Supervisors to be a locally important community.

The state passed legislation in 2001, the Oak Woodland Conservation Act, to emphasize that oak woodlands are a vital and threatened statewide resource. In response, the County of Ventura prepared and adopted an Oak Woodland Management Plan that recommended, among other things, amending the County's Initial Study Assessment Guidelines to include an explicit reference to oak woodlands as part of its definition of locally important communities. The Board of Supervisors approved this management plan and its recommendations.

Appendix Two

## **Observed Species Tables**

Species Observed							
Scientific Name (Species or Genus)	Common Name	Native (1)	Notes (2)				
PLANTS							
Quercus agrifolia	Coast live oak	X					
Sambucus mexicanus	Blue elderberry	X					
Toxicodendron diversilobum	Poison oak	X					
Marah fabaceus	Manroot	X					
Q. dumosa, or Q. berberidifolia x dumosa	Scrub oak or Nuttall's scrub oak hybrid	X					
Quercus chrysolepis	Canyon live oak	X					
Bromus diandrus	Rip-gut brome						
Vulpia myuros	Rattail fescue						
Hordeum murinum	Hare barley						
Bromus rubens	Red brome						
Avenua sp.	Wild oat						
Erodium cicutarium	Filaree						
Raphanus sativa	Wild radish						
Amsinckia sp.	Fiddleneck	X					
Lupinus truncata	Truncate Iupine	X					
Lupinus nanus	Sky lupine	X					
Scutellaria tuberosa	Tuberous skullcap	X					
Chlorogalum pomeridianum	Soap lily	X					
Heterotheca grandiflora	Telegraph weed	X					
Brassica nigra	Black mustard						
Hirshcfeldiana incana	Mediterranean mustard						
Marrubium vulgare	Common horehound						
Carduus pycnocephalus	Italian thistle						
Malacothamnus fascicularis	Chaparral mallow	X					
Baccharis salicifolia	Mule-fat	X					
Malosma laurina	Laurel sumac	X					
Salvia mellifera	Black sage	X					
Ceanothus megacarpus	Bigpod ceanothus	X					
Rhamnus crocea	Redberry	X					
Lotus scoparius	Deerweed	X					
Cercocarpus montanus	Mountain-mahogany	X					
Schinus molle	Brazilian pepper						

Pinus canariensis	Canary Island pine		
Pelargonium sp.	Ornamental geranium		
FUNGI			
Unid. mushroom	fungus	Х	
ANIMALS		·	
Invertebrates			
Helix aspera	European brown snail		
Eleodes sp.	Darkling beetle	Х	
Fish – None			
Amphibians – None			
Reptiles			
Elgaria coeruleus	Southern alligator lizard	Х	Observed
Sceloporus occidentalis	Western fence lizard	Х	Observed
Birds			
	Turkey vulture	Х	Observed
	Red-tailed hawk	Х	Observed
	California quail	Х	Observed
	Mourning dove	Х	Observed
	Anna's hummingbird	Х	Observed
	Allen's hummingbird	Х	Observed
	Acorn woodpecker	Х	Observed
	Northern flicker	Х	Observed
	Nuttall's woodpecker	Х	Observed
	Downy woodpecker	Х	Observed
	Black phoebe	Х	Observed
	Say's phoebe	Х	Observed
	Ash-throated flycatcher	X	Observed
	Western kingbird	X	Observed
	Hutton's vireo	X	Observed
	Western scrub-jay	X	Observed
	American crow	X	Observed
	Cliff swallow	X	Observed
	Wrentit	X	Observed

	Bushtit	Х	Observed
	House wren	Х	Observed
	Bewick's wren	Х	Observed
	Western bluebird	Х	Observed
	American robin	Х	Observed
	Northern mockingbird	Х	Observed
	California thrasher	Х	Observed
	European starling		Observed
	Cedar waxwing	X	Observed
	Yellow-rumped warbler	Х	Observed
	Townsend's warbler	Х	Observed
	California towhee	Х	Observed
	Spotted towhee	Х	Observed
	Song sparrow	Х	Observed
	White-crowned sparrow	Х	Observed
	Dark-eyed junco	Х	Observed
	Black-headed grosbeak	Х	Observed
	House finch	Х	Observed
Mammals			
Thomomys bottae	Botta's pocket gopher	Х	Digs
Spermophilus beecheyi	California ground squirrel	Х	Digs
Sciurus occidentalis	Western grey squirrel	Х	Observed
Sylvilagus bachmani	Brush rabbit	Х	Scat
Neotoma macrotis	Big-eared woodrat	Х	Stick nest
Odocoileus hemionus	Black-tailed deer	Х	Scat

File No. 1426-44



July 7, 2014

Camp Ramah in California 17525 Ventura Blvd #201 Encino, CA 91316

Att: Randy Michaels, Director of Finance & Administration

Subject:

#### **GEOTECHNICAL INVESTIGATION**

Proposed Construction of New Residence Buildings and Accessory Structure 385 Fairview Road, Ojai, CA 93024

Dear Mr. Michaels,

As requested, Feffer Geological Consultants performed a geotechnical investigation at the subject site. The purpose of this investigation was to evaluate the geotechnical conditions at the site in the areas of the proposed construction and to provide geotechnical parameters for design and construction of the proposed project.

Based on our investigation, it is our opinion that the proposed construction is feasible from a geotechnical standpoint provided the recommendations contained herein are incorporated into the project plans and specifications. This report should be reviewed in detail prior to proceeding further with the planned development. When final plans for the proposed construction become available, they should be forwarded to this office for review and comment.

We appreciate the opportunity to be of service. Should you have any questions regarding the information contained in this report, please do not hesitate to contact us.

Sincerely,

FEFFER GEOLOGICAL CONSULTING, INC.

Joshua R. Feffer Principal Engineering Geologist C.E.G. 2138

Distribution: Addressee-(3)



Dan Daneshfar Principal Engineer P.E. 68377

County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 10 - Feffer Geotechnical Report, dated July 7, 2014, Addendum, dated October 17, 2017 and Responses to Application Incompleteness determination, dated October 29, 2018

#### **INTRODUCTION**

#### 1.1 <u>PURPOSE</u>

The purpose of this investigation was to evaluate the existing geotechnical conditions at the subject site and to provide design and construction criteria for the proposed development.

#### 1.2 <u>SCOPE OF SERVICES</u>

The scope of work performed during this investigation involved the following;

- Research and review of available pertinent geotechnical literature;
- Subsurface exploration consisting of the excavation of four hand excavated test pits (TP1, TP2, TP3, TP4);
- Sampling and logging of the subsurface soils;
- Laboratory testing of selected soil samples collected from the subsurface exploration to determine the engineering properties of the soil;
- Engineering and geologic analysis of the field and laboratory data; and
- Preparation of this report presenting our findings, conclusions, and recommendations for the proposed construction.

#### 1.3 <u>SITE DESCRIPTION</u>

The project site is located north side of Fairview Road in the City of Ojai, California (Figure 1). The subject site consists of consisting of various buildings and facilities located on a southward sloping property (Figure 2). The subject site is surrounded by undeveloped land and single family residences. Surface drainage is by sheet flow to the south or rear of the property.

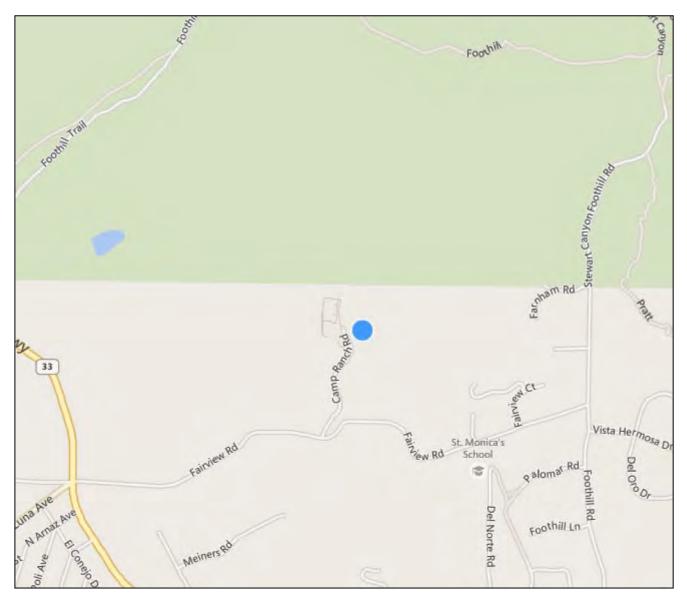


Figure 1. Location map of the site.



Figure 2. Aerial photo of site.

#### 1.5 **PROPOSED CONSTRUCTION**

Based on the information provided to us, the project will consist of the construction of a housing structure along the area adjacent to the tennis courts within the existing soccer field and construction of an accessory structure to the east of the soccer field. A Site Plan and Cross Sections showing the proposed development are included in Appendix C.

#### **INVESTIGATION**

#### 2.1 <u>GENERAL</u>

Our field investigation was performed on June 19, 2014 and included excavating four test pits and obtaining samples of the earth materials. Our investigation also included laboratory testing of selected soil samples. A brief summary of these various tasks are provided below.

#### 2.2 FIELD EXPLORATION

The subsurface investigation performed at the site consisted of excavating four test pits by use of hand labor. The purpose of the exploratory test pits was to determine the existing subsurface conditions and to collect subsurface soil in the areas of the proposed construction and throughout the site.

The test pits were excavated to a maximum depth of five below the existing ground surface.

The soil materials encountered in Test Pits 1-3 consisted of fill, over alluvium; test pit 4 consisted of colluvium over bedrock.

A review of Regional Geological Maps indicates that the material underlying the subject site is comprised of Quaternary Age Alluvium (Qya1)(Qg) and Sespe Formation (Tsp) bedrock consisting of sandstone.

The test pits were logged by our field geologist using both visual and tactile means. Both bulk and relatively undisturbed soil samples were obtained.

The approximate locations of the test pits are shown on the attached Site Plan included in Appendix C. Detailed test pit logs are presented in Appendix A.

#### 2.3 <u>LABORATORY TESTING</u>

Laboratory testing was performed on representative samples obtained during our field exploration. Samples were tested for the purpose of estimating material properties for use in subsequent engineering evaluations. Testing included in-place moisture and density, hydro-response-swell/collapse, shear strength testing and corrosion. A summary of the laboratory test results is included in Appendix B.

The physical properties of the soils were tested at Soil Labworks, LLC; Chemical testing was performed at HDR Schiff.

The undersigned geologist and engineer have reviewed the data and concur and accept it.

#### 3.0 <u>SITE GEOLOGY, SEISMICITY, POTENTIAL HAZARDS</u>

#### 3.1 <u>SITE GEOLOGY</u>

Regional Geologic Maps<sup>1</sup> (Figure 3) and the subsurface exploration indicated that the property is underlain by Quaternary Age Alluvium (Qya1)(Qg) and Sespe Formation (Tsp) bedrock consisting of sandstone overlain by a thin veneer of fill, and colluvium. Descriptions of the materials encountered in our exploratory test pits are described below.

#### 3.1.1 <u>Fill</u>

The fill consists of fine grained sandy silt which is brown to red brown, slightly moist to moist and dense containing roots. The fill observed was as deep as three feet in the northern portion of the soccer field.

#### 3.1.2 <u>Qya1/Qg</u>

The alluvium consists of admixtures of silt, sands and gravel. The alluvium varies from brown to redbrown. The alluvium is slightly moist to moist, dense containing minor roots.

#### 3.1.3 <u>Colluvium</u>

The colluvium consists of gravelly silty sand and gravelly sand which varies from red-brown to red, orange and pink, slightly moist to moist and dense. The colluvium observed was as deep as one foot in test pit four.

#### 3.1.4 <u>Bedrock</u>

The bedrock encountered consists of Sespe Formation sandstone that is orange, brown and purple, medium to coarse grained with rounded and subrounded cobbles up to 2.5", dry, dense to very hard and massive. There is no out of slope bedding condition at the subject site or on the surrounding slopes.

#### 3.2.3 Groundwater

Groundwater was not encountered during the recent excavations. This area of Ojai is not known to have a high groundwater table. Historically highest groundwater in this area of Ojai is estimated to be more than 40 feet below the ground surface (Plate 1.2, *Historically Highest Groundwater Contours and Borehole Log Data Locations, Matilija 7<sup>1</sup>/<sub>2</sub> Minute Quadrangle in Seismic Hazard Zone Report for the Matilija Quadrangle, SHZR-064* 

<sup>&</sup>lt;sup>1</sup> Matilija 7<sup>1</sup>/<sub>2</sub> Minute Quadrangle in Seismic Hazard Zone Report for the Matilija Quadrangle, SHZR-064.

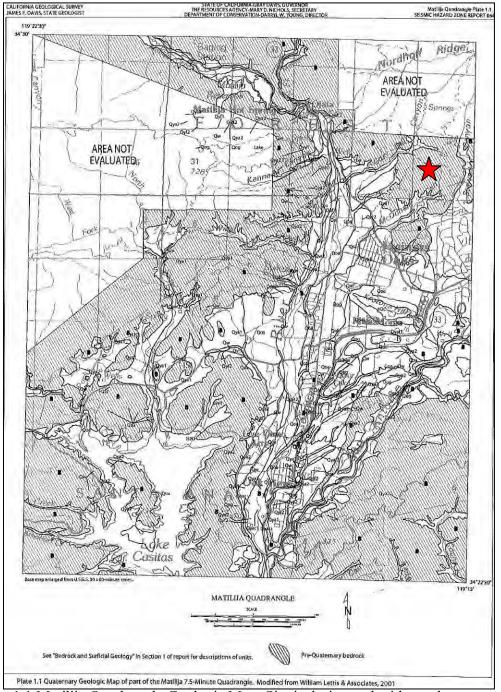


Figure 3. Plate 1.1 Matilija Quadrangle Geologic Map. Site is designated with a red star.

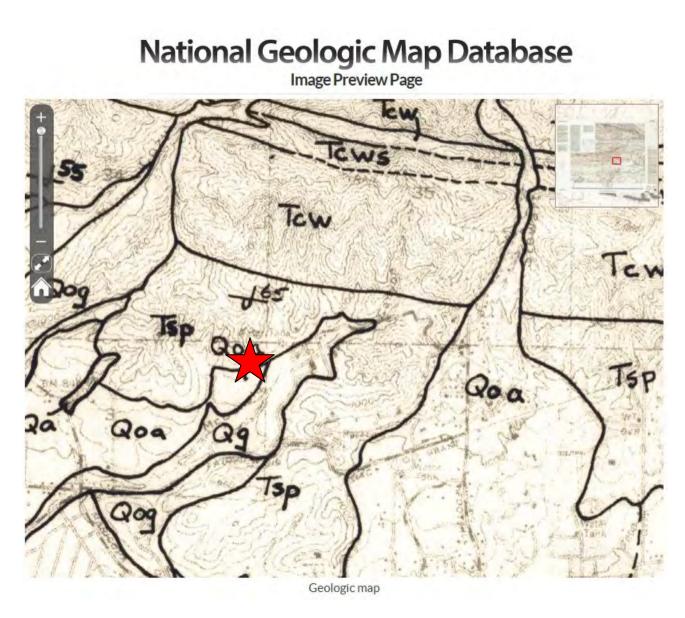


Figure 4. Portion of Matilija 7<sup>1</sup>/<sub>2</sub> Minute Quadrangle Geologic map. Site is designated with a red star.

#### 3.3 <u>SEISMICITY</u>

A risk common to all areas of Southern California that should not be overlooked is the potential for damage resulting from seismic events (earthquakes). The site is located within a seismically active area, as is all of Southern California. Although we are not aware of any active faults on or within the immediate vicinity of the site, earthquakes generated on large regional faults such as the San Andreas Fault could affect the site.

The closest known potentially active faults to the site are the east-west trending, Santa Ynez Fault, located within two kilometers. Since no active faults cross the property, the surface rupture hazard at the site is very low. Due to the distance from the coastline the site is not susceptible to the effects of tsunamis and seiches.

The subject site is not located in an area designated as being potentially affected by earthquake-induced liquefaction but the northern off site slope is mapped as being subject to earthquake-induced landsliding.

#### 3.4 <u>2013 CALIFORNIA BUILDING CODE CONSIDERATIONS</u>

The proposed development may be designed in accordance with seismic considerations contained in the 2013 California Building Code, Section 1613, the following parameters may be considered for design:

#### **Stiff Soil:**

Mapped Spectral Response Acceleration Parameters:

	$S_S$	:	2.224g
	$\mathbf{S}_1$	:	0.837g
Site Class:	D	:	Stiff Soil
Site Coefficients:	Fa	:	1.0
	$F_{v}$	:	1.5
Maximum Considered Eart	hquake	Spectr	ral Response
Acceleration Parameters:			
	$S_{MS}$	:	2.224g

$S_{MS}$	•	2.224g
$S_{M1}$	:	1.256g
Accelera	tion	Parameters:
$\mathbf{S}_{\mathrm{DS}}$	:	1.483g
$\mathbf{S}_{\mathrm{D1}}$	:	0.837g
	$S_{M1}$ Accelera $S_{DS}$	$S_{M1}$ : Acceleration $S_{DS}$ :

#### Very Dense Soil and Soft Rock:

Mapped Spectral Response Acceleration Parameters:

	$S_S$	:	2.224g
	$\mathbf{S}_1$	:	0.837g
Site Class:	С	:	Very Dense Soil and Soft Rock
Site Coefficients:	Fa	:	1.0
	$F_{v}$	:	1.3
Maximum Considered Earth	hquake S	Spectral	Response
Acceleration Parameters:	$S_{MS}$	:	2.224g
	$S_{M1}$	:	1.089g
Design Spectral Response A	Accelera	tion Par	ameters:
	$S_{DS}$	:	1.483g
	$\mathbf{S}_{\mathrm{D1}}$	:	0.726g

#### GEOTECHNICAL CONSIDERATIONS

#### 4.1 <u>SUBSURFACE SOIL CONDITIONS</u>

Subsurface materials at the site consist of alluvium and bedrock below fill and colluvium respectively. On the subject property there was up to three of fill over alluvium and up to one foot of colluvium over bedrock. Laboratory testing indicates that the alluvium and bedrock has a low potential for consolidation and hydrocollapse and is stable. The following paragraph provides general discussions about settlement and expansive soil activity.

#### 4.2 <u>SETTLEMENT</u>

Our investigation indicated that the consolidation and hydrocollapse potential of the alluvium and bedrock at the depth of the proposed construction is low. Recommendations are presented below to mitigate the settlement hazard associated with consolidation of the near surface soils.

#### 4.3 EXPANSIVE SOIL

The on-site, near surface soil was found to possess low to medium expansive characteristics based upon field soil classifications.

#### 4.4 <u>SLOPE STABILITY</u>

The slope above the proposed accessory structure is oriented at a gradient of 3:1 (horizontal to vertical) and is as high as fifty-seven feet.

Cross section B-B' (Appendix C) was developed from the site topographic map. Gross slope stability analysis was performed for the existing slope, as depicted in the attached Geologic Cross Section B-B' by a Taylor's Analysis. The analysis indicates that 2:1 degree slopes in the bedrock have a factor of safety of 1.5 at a height of 98.8 feet; therefore the existing fifty-seven foot high 3:1 slope calculates as stable.

#### 5.0 <u>CONCLUSIONS AND RECOMMENDATIONS</u>

#### 5.1 <u>BASIS</u>

Conclusions and recommendations contained in this report are based upon information provided, information gathered, laboratory testing, engineering and geologic evaluations, experience, and judgment. Recommendations contained herein should be considered minimums consistent with industry practice. More rigorous criteria could be adopted if lower risk of future problems is desired. Where alternatives are presented, regardless of what approach is taken, some risk will remain, as is always the case. Usually the lowest risk is associated with the greatest cost.

#### 5.2 <u>SITE SUITABILITY</u>

The site is within an area including completed housing and building developments. Geotechnical exploration, analyses, experience, and judgment result in the conclusion that the proposed development is suitable from a geotechnical standpoint.

It is our opinion that the site can be improved without hazard of landslide, slippage, or settlement, and improvement can occur without similar adverse impact on adjoining properties. Realizing this expectation will require adherence to good construction practice, agency and code requirements, the recommendations in this report, and possible addendum recommendations made after plan review and at the time of construction.

Based on the results of our subsurface investigation and due to the over-consolidated nature of the alluvial deposits and bedrock, the potential for liquefaction at the site during earthquake shaking is considered to be nil. The location of the proposed construction is not located within an area identified as being within a liquefaction zone (*Ojai* 7<sup>1</sup>/<sub>2</sub> *Minute Quadrangle in Seismic Hazard Zone Report for the Ojai Quadrangle*, SHZR-072).

It should be realized that the purpose of the seismic design utilizing the above parameters is to safeguard against major structural failures and loss of life, but not to prevent damage altogether. Even if the structural engineer provides designs in accordance with the applicable codes for seismic design, the possibility of damage cannot be ruled out if moderate to strong shaking occurs as a result of a large earthquake. This is the case for essentially all structures in Southern California.

#### **EARTHWORK**

#### 5.4.1 General

The existing natural alluvium, bedrock and/or a future compacted fill cap can be used for support of any new footings. Where fill is intended for structural support, the compacted fill cap should extend at least three feet below the bottom of footings and five feet out of the building footprint. If the proposed construction will require grading of the site; it should be done in accordance with good construction practice, minimum code requirements and recommendations to follow. Grading criteria are included within Appendix D.

#### 5.4.2 Site Preparation and Grading

The material at the subject site consists of fill over alluvium and colluvium over bedrock. The foundation for the development should derive support from the alluvium or bedrock or a future compacted fill cap. Prior to the start of grading operations, utility lines within the project area, if any, should be located and marked in the field so they can be rerouted or protected during site development. All debris and perishable material should be removed from the site. Although currently not anticipated, all permanent cut and fill slopes should not be constructed steeper than 2:1.

If fill is to be placed, the upper six to eight inches of surface exposed by the excavation should be scarified; moisture conditioned to two to four percent over optimum moisture content, and compacted to 90 percent relative compaction<sup>2</sup>. If localized areas of relatively loose soils prevent proper compaction, over-excavation and re-compaction will be necessary.

The fill shall be compacted to at least 90 percent of the maximum laboratory density for the material used. The maximum density shall be determined by ASTM D 1557-12 or equivalent. On site fill is adequate for use as fill.

#### 5.4.3 Excavation Characteristics

The test pits did encounter hard, cemented bedrock. Excavation difficulty is a function of the degree of weathering and amount of fracturing within the bedrock. The bedrock generally becomes harder and more difficult to excavate with increasing depth. Hard cemented layers are also known to occur at random locations and depths and may be encountered during foundation excavation. Should a hard cemented layer be encountered, coring or the use of jackhammers may be necessary.

<sup>&</sup>lt;sup>2</sup> Relative compaction refers to the ratio of the in-place dry density of soil to the maximum dry density of the same material as obtained by the "modified proctor" (ASTM D1557-12) test procedure.

#### FOUNDATION SUPPORT

#### 5.5.1 <u>New Structures</u>

All proposed structural foundations shall be embedded within the alluvium or bedrock or a future compacted fill cap in accordance with the recommendations presented below. Geologic conditions on the site are favorable for the proposed construction. For an individual structure, all footings should be embedded in the same material (alluvium, bedrock, or new fill).

Foundation support for the new structures could be derived by utilizing conventional shallow foundations embedded within the alluvium or bedrock or a future compacted fill cap. Allowable design parameters for foundations are provided below.

Minimum depth for interior and exterior footing (Measured from lowest adjacent grade) Minimum width.	
For Bedrock:	
Bearing pressure	
a. Sustained loads (lbs. per square foot)	00 psf
Resistance to lateral loads	
a. Passive soil resistance (lbs. per cubic ft.)	
Within bedrock	00 pcf
Maximum allowable	00 psf
b. Coefficient of sliding friction	0.45
For Compacted Fill:	
Bearing pressure	
a. Sustained loads (lbs. per square foot)2,0	00 psf
Resistance to lateral loads	
a. Passive soil resistance (lbs. per cubic ft.)	
Within compacted fill	50 pcf
Maximum allowable	-
c. Coefficient of sliding friction	-
For Alluvium:	
Bearing pressure	
a. Sustained loads (lbs. per square foot)	00 psf
Resistance to lateral loads	
a. Passive soil resistance (lbs. per cubic ft.)	
Within alluvium	50 pcf
Maximum allowable	1
d. Coefficient of sliding friction	-
	0.50

July 7, 2014 Page 14

The allowable bearing pressures are for dead plus long-term live loads and include a factor-of-safety of at least 1.5.

Increases in the bearing value of the Bedrock are allowable at a rate of 400 pounds per square foot for each additional foot of footing width to a maximum of 4,000 pounds per square foot. For bearing calculations, the weight of the concrete in the footing may be neglected.

The bearing value shown above is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces. When combining passive and friction for lateral resistance, the passive component should be reduced by one third.

All continuous footings should be reinforced with a minimum of four #4 steel bars; two placed near the top and two near the bottom of the footings. Footing excavations should be cleaned of all loose soil, moistened, free of shrinkage cracks and approved by the geologist and geotechnical engineer prior to placing forms, steel or concrete.

Based on the anticipated building loads footings designed and constructed in accordance with the soil criteria included within the referenced report are expected to settle less than  $\frac{1}{4}$  to  $\frac{1}{2}$  inch in a distance of 20 feet. Differential settlement is expected to be less than  $\frac{1}{4}$  inch. The total and differential settlements are within acceptable and allowable tolerances for conventional foundations.

5.6

#### **RETAINING WALLS**

#### 5.6.1 <u>Retaining Wall</u>

Although not currently contemplated cantilevered retaining walls up to 12 feet high that support fill, alluvium, bedrock and approved retaining wall backfill, may be designed for an equivalent fluid pressure of 30 pounds per cubic foot for level backfill. Restrained retaining walls that are pinned at the top by a non-yielding floor should be designed for an at-rest pressure. The design at-rest earth pressure on restrained basement walls is 60 pcf. Retaining walls should be provided with a subdrain or weepholes covered with a minimum of 12 inches of <sup>3</sup>/<sub>4</sub> inch crushed gravel.

It is recommended that retaining walls be waterproofed. Waterproofing design and inspection of its installation is not the responsibility of the geotechnical engineer. A qualified waterproofing consultant should be retained in order to recommend a product or method, which would provide protection to below grade walls.

#### 5.6.2 <u>Waterproofing</u>

Moisture affecting retaining walls is one of the most common post-construction complaints. Poorly applied or omitted waterproofing can lead to efflorescence or standing water inside the building. Efflorescence is a process in which a powdery substance is produced on the surface of the concrete by the evaporation of water. The white powder usually consists of soluble salts such as gypsum, calcite,

and/or halite (common salt). Efflorescence is common to retaining walls and generally does not affect their strength or integrity.

It is recommended that retaining walls be waterproofed. Waterproofing design and inspection of its installation is not the responsibility of the geotechnical engineer. A qualified waterproofing consultant should be retained in order to recommend a product or method, which would provide protection to below grade walls.

As aforementioned, the architect, structural engineer, or other qualified waterproofing consultant should develop the actual waterproofing details.

#### 5.6.3 <u>Retaining Wall Drainage</u>

Retaining walls that use a subdrain should have the subdrain pipe surrounded with a minimum of 12 inches of gravel, and a compacted fill blanket or other seal at the surface. The project structural engineer will incorporate an appropriately designed wall back-drain system for the purpose of mitigating potential for hydrostatic and/or seepage forces. Certain types of subdrain pipe are not acceptable to the various municipal agencies, it is recommended that prior to purchasing sub drainage pipe, the type and brand be verified and cleared with the proper municipal agencies. Sub drainage pipes should daylight and outlet to an acceptable location.

#### 5.6.4 Retaining Wall Backfill

The onsite earth materials are acceptable for use as retaining wall backfill. Any required backfill should be mechanically compacted in layers not more than 8 inches thick, to at least 90% (or 95%) of the maximum dry density obtained using test method ASTM D 1557-12 or equivalent. Flooding or jetting is not permitted. Proper compaction of the backfill will be necessary to reduce settlement of overlying walks and paving. Some settlement of required backfill should be anticipated, and any utilities supported therein should be designed to accept differential settlement, particularly at the points of entry to the structure.

Gravel or onsite earth materials will be utilized for backfill. If gravel is used, the upper 24 inches of backfill should consist of more cohesive material to minimize surface infiltration. Retaining wall backfill should be capped with a paved surface drain or pavement

It should be pointed out that the use of heavy compaction equipment in close proximity to retaining walls can result in excess wall movement and/or soil loadings exceeding design values. In this regard, care should be taken during backfilling operations.

#### **TEMPORARY EXCAVATIONS**

All vertical cuts shall be inspected by our office to verify geologic continuity.

Un-shored vertical cuts to a height of five feet (5') may be made in soil materials at the site. Un-shored cuts in excess of five feet (5') shall be sloped at a gradient of no steeper than 1:1 (horizontal to vertical) for the portion of the excavation above the vertical cut.

#### 5.8 <u>SLAB-ON-GRADE</u>

If a slab-on-grade is used for the interior of the building it should be a minimum of four inches thick and reinforced with No. 4 bars at 16 inches on center, both ways. If it is desired to minimize vapor transmission through the slab, then the slab should be underlain by a 10-mil Visqueen plastic membrane sandwiched between two, two-inch thick layers of sand. The sand should contain sufficient fines to allow light compaction (e.g. drum roller) to an unyielding condition. The plastic Visqueen barrier should be sealed at all splices, around plumbing, and at the perimeter of slab areas. Every effort should be made to provide a continuous barrier and care should be taken to not puncture the membrane. The splices between layers should be generously staggered.

#### 5.9 EXTERIOR FLATWORK

Whenever planned, exterior flatwork should be placed directly on alluvium or over at least a two-foot blanket of approved compacted fill. Five inch net sections with #4 bars at 18 inches o.c.e.w. are also advised. Control joints should be planned at not more than twelve foot spacing for larger concrete areas. Narrower areas of flatwork such as walkways should have control joints planned at not greater than 1.5 times the width of the walkway. Recommendations provided above for interior slabs can also be used for exterior flatwork, but without a sand layer or Visqueen moisture barrier. Additionally, it is also recommended that at least 12-inch deepened footings be constructed along the edges of larger concrete areas.

Movement of slabs adjacent to structures can be mitigated by doweling slabs to perimeter footings. Doweling should consist of No. 4 bars bent around exterior footing reinforcement. Dowels should be extended at least two feet into planned exterior slabs. Doweling should be spaced consistent with the reinforcement schedule for the slab. With doweling, 3/8-inch minimum thickness expansion joint material should be provided. Where expansion joint material is provided, it should be held down about 3/8 inch below the surface. The expansion joints should be finished with a color matched, flowing, flexible sealer (e.g., pool deck compound) sanded to add mortar-like texture. As an option to doweling, an architectural separation could be provided between the main structures and abutting appurtenant improvements.

#### 5.10 CONCRETE

Testing of the soil indicates that sulfate levels are negligible (35 ppm) and therefore Type II concrete may be used. We recommend that the low permeable concrete be utilized at the site to limit moisture transmission through slab and foundation. For this purpose, the water/cement ratio to be used at the site should be limited to 0.5 (0.45 preferred). Limited use (subject to approval of mix designs) of a water reducing agent may be included to increase workability. The concrete should be properly cured to minimize risk of shrinkage cracking. The code dictates at least seven days of moist curing. Two to three weeks is preferred to minimize cracking. One-inch hard rock mixes should be provided. Pea gravel mixes are specifically not recommended but could be utilized for relatively non-critical improvements (e.g., flatwork) and other improvements provided the mix designs consider limiting shrinkage.

Contractors/other designers should take care in all aspects of designing mixes, detailing, placing, finishing, and curing concrete. The mix designers and contractor are advised to consider all available steps to reduce cracking. The use of shrinkage compensating cement or fiber reinforcing should be considered. Mix designs proposed by the contractor should be considered subject to review by the project engineer.

#### 5.11 DRAINAGE

Drainage should be directed away from structures via non-erodible conduits to suitable disposal areas. Two percent drainage is recommended directly away from structures however minimum building code requirements should be followed. All enclosed planters should be provided with a suitably located drain or drains and/or flooding protection in the form of weep holes or similar. Preferably, structures should have roof gutters and downspouts tied directly to the area drainage system.

#### 5.12 PLAN REVIEW

When detailed grading and structural plans are developed, they should be forwarded to this office for review and comment.

#### 5.13 <u>AGENCY REVIEW</u>

All soil, geologic, and structural aspects of the proposed development are subject to the review and approval of the governing agency(s). It should be recognized that the governing agency(s) can dictate the manner in which the project proceeds. They could approve or deny any aspect of the proposed improvements and/or could dictate which foundation and grading options are acceptable.

#### 5.14 <u>SUPPLEMENTAL CONSULTING</u>

During construction, a number of reviews by this office are recommended to verify site geotechnical conditions and conformance with the intentions of the recommendations for construction. Although not all possible geotechnical observation and testing services are required by the governing agencies, the more site reviews requested, the lower the risk of future site problems. The following site reviews are advised, some of which will probably be required by the agencies.

Preconstruction/pregrading meeting	Advised
Cut and/or shoring observation	Required
Periodic geotechnical observations and testing during grading	Required
Reinforcement for all foundations	Advised
Slab subgrade moisture barrier membrane	Advised
Slab subgrade rock placement	Advised
Presaturation checks for all slabs in primary structure areas	Required
Presaturation checks for all slabs for appurtenant structures	Advised
Slab steel placement, primary and appurtenant structures	Advised
Compaction of utility trench backfill	Advised

Unless otherwise agreed to in writing, all supplemental consulting services will be provided on an asneeded, time-and-expense, fee schedule basis.

#### 5.15 **PROJECT SAFETY**

The contractor is the party responsible for providing a safe site. This consultant will not direct the contractor's operations and cannot be responsible for the safety of personnel other than his own representatives on site. The contractor should notify the owner if he is aware of and/or anticipates unsafe conditions. If the geotechnical consultant at the time of construction considers conditions unsafe, the contractor, as well as the owner's representative, will be notified. Within this report the terminology safe or safely may have been utilized. The intent of such use is to imply low risk. Some risk will remain, however, as is always the case.

#### **REMARKS**

Only a portion of subsurface conditions have been reviewed and evaluated. Conclusions, recommendations and other information contained in this report are based upon the assumptions that subsurface conditions do not vary appreciably between and adjacent to observation points. Although no significant variation is anticipated, it must be recognized that variations can occur.

This report has been prepared for the sole use and benefit of our client. The intent of the report is to advise our client on geotechnical matters involving the proposed improvements. It should be understood that the geotechnical consulting provided and the contents of this report are not perfect. Any errors or omissions noted by any party reviewing this report, and/or any other geotechnical aspect of the project, should be reported to this office in a timely fashion. The client is the only party intended by this office to directly receive the advice. Subsequent use of this report can only be authorized by the client. Any transferring of information or other directed use by the client should be considered "advice by the client."

Geotechnical engineering is characterized by uncertainty. Geotechnical engineering is often described as an inexact science or art. Conclusions and recommendations presented herein are partly based upon the evaluations of technical information gathered, partly on experience, and partly on professional judgment. The conclusions and recommendations presented should be considered "advice." Other consultants could arrive at different conclusions and recommendations. Typically, "minimum" recommendations have been presented. Although some risk will always remain, lower risk of future problems would usually result if more restrictive criteria were adopted. Final decisions on matters presented are the responsibility of the client and/or the governing agencies. No warranties in any respect are made as to the performance of the project.

#### **APPENDIX 'A'**

**Test Pits** 

GRAPHIC LOG			APPRO	APPROXIMATE SCALE : 1"=5' TEST				EST EXCAVATION : 1				
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	10												
								1	1	1			
RING		SAMPLE DEPTH	Blows	LOCATION : Slope Above Driveway DESCRIPTION: Classification (USCS), color, moisture, consistency etc.									
		1 2 3 4 5 6 7 6 7 8 9 10 11 12 13 14		<ul> <li>0-6" Colluvium: Gravelly silty sand, red-brown, yellow, slightly moist to moist, dense, minor roots, sub-rounded gravel</li> <li>6"-1'Soil: Gravelly sand, red, orange ,pink, slightly moist, very hard, rounded and sub-rounded gravel up to 2.5"</li> <li>1-2' Bedrock: Sandstone-Conglomerate, matrix supported, orange, brown, purple, dry, hard, some rounded cobbles</li> <li>End At 2', No Fill, No Water, No caving</li> </ul>									
FEFFER GEO CONSULTING						NG	F.N. 1426-44		Ca	mp Ramah	PLATE		

### **APPENDIX 'B'**

Laboratory Testing



SL14.1670 June 25, 2014

Feffer Geological Consulting 1990 S. Bundy Drive 4<sup>th</sup> Floor Los Angeles, California 90025

Attn: Joshua R. Feffer

Subject: Laboratory Testing

Site: 385 Fairview Road Ojai, CA

Job: FEFFER/CAMP RAMAH

Laboratory testing for the subject property was performed by Soil Labworks, LLC., under the supervision of the undersigned Engineer in conjunction with a geotechnical investigation. Samples of the earth materials were obtained from the subject property by personnel of Feffer Geological Consulting and transported to the laboratory of Soil Labworks for testing and analysis. The laboratory tests performed are described and results are attached.

Services performed by this facility for the subject property were conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

Respectfully Submitted:

SOIL LABWORKS, LLC





# APPENDIX

# Laboratory Testing

## Sample Retrieval - Hand Labor

Samples of earth materials were obtained by driving a thin-walled steel sampler with successive blows of a drop hammer. The earth material was retained in brass rings of 2.416 inches inside diameter and 1.00 inch height. The samples were stored in closefitting, water-tight containers for transportation to the laboratory.

## Moisture Density

The field moisture content and dry density were determined for each of the soil samples. The dry density was determined in pounds per cubic foot following ASTM 2937-10. The moisture content was determined as a percentage of the dry soil weight conforming to ASTM 2216-10. The results are presented below in the following table. The percent saturation was calculated on the basis of an estimated specific gravity. Description of earth materials used in this report and shown on the attached Plates were provided by the client.

Test Pit/Boring No.	Sample Depth (Feet)	Soil Type	Dry Density (pcf)	Moisture Content (percent)	Percent Saturation (Gs=2.65)
TP1	11/2	Fill	107.3	9.1	45
TP1	41⁄2	Alluvium	119.1	12.2	83
TP2	2	Alluvium	117.8	11.1	73
TP3	2	Alluvium	102.8	5.6	25
TP3	4	Alluvium	114.1	5.4	32
TP4	0-6″	Colluvium	106.2	6.3	30
TP4	1.5-2	Bedrock	118.6	5.7	38

## Shear Strength

The peak and ultimate shear strengths of the colluvium, alluvium and bedrock were determined by performing consolidated and drained direct shear tests in conformance with ASTM D3080/D3080M-11. The tests were performed in a strain-controlled machine manufactured by GeoMatic. The rate of deformation was 0.01 inches per minute. Samples were sheared under varying confining pressures, as shown on the "Shear Test Diagrams," B-Plates. The moisture conditions during testing are shown on the following table and on the B-Plates. The samples indicated as saturated were artificially saturated in the laboratory. All saturated samples were sheared under submerged conditions.



### Shear Strength (continued)

Test Pit/ Boring No.	Sample Depth (Feet)	Dry Density (pcf)	As-Tested Moisture Content (percent)
TP4	0-6″	106.2	20.7
TP2	2	117.8	16.4
TP4	1.5-2	118.6	17.8

### Consolidation

One-dimensional consolidation tests were performed on samples of the alluvium in a consolidometer manufactured by GeoMatic in conformance with ASTM D2435/D2435M-11. The tests were performed on 1-inch high samples retained in brass rings. The samples were initially loaded to approximately ½ of the field over-burden pressure and then unloaded to compensate for the effects of possible disturbance during sampling. Loads were then applied in a geometric progression and resulting deformation recorded. Water was added at a specific load to determine the effect of saturation. The results are plotted on the "Consolidation Test," C-Plates.

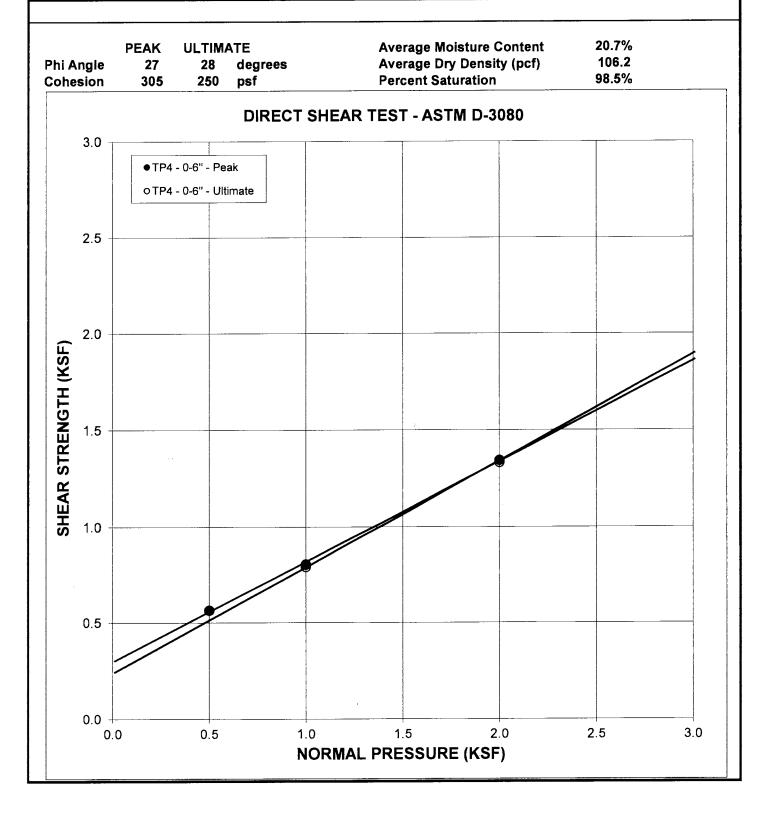


# **SHEAR DIAGRAM B-1**

JN: <u>SL14.1670</u> CONSULTANT <u>JAI</u> CLIENT: <u>Feffer/Camp Ramah - 385 Fairview Road</u>

EARTH MATERIAL:

COLLUVIUM



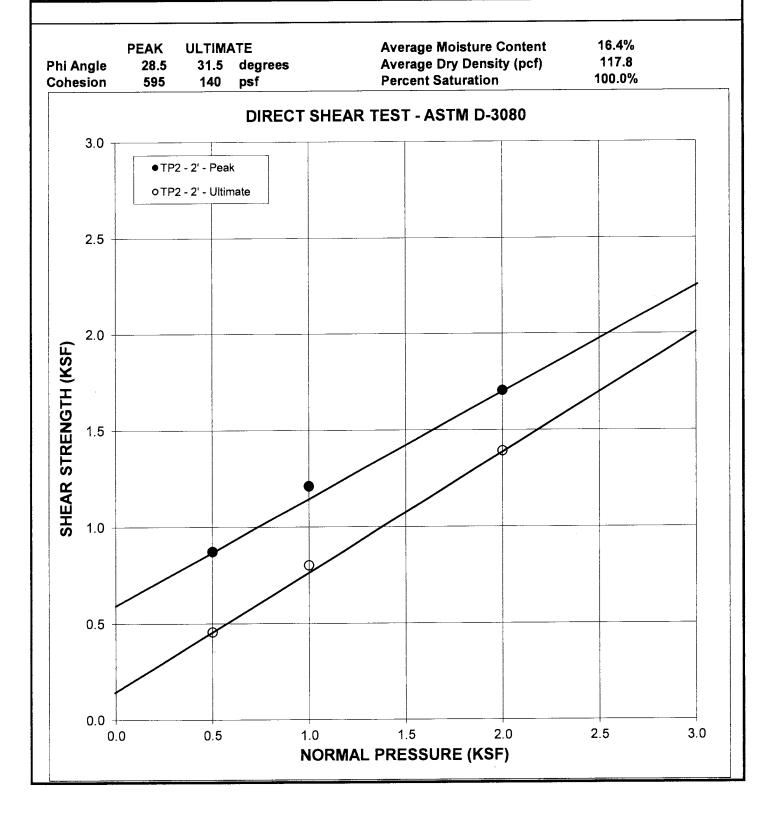


# SHEAR DIAGRAM B-2

JN: <u>SL14.1670</u> CONSULTANT <u>JAI</u> CLIENT: <u>Feffer/Camp Ramah - 385 Fairview Road</u>

EARTH MATERIAL:

ALLUVIUM



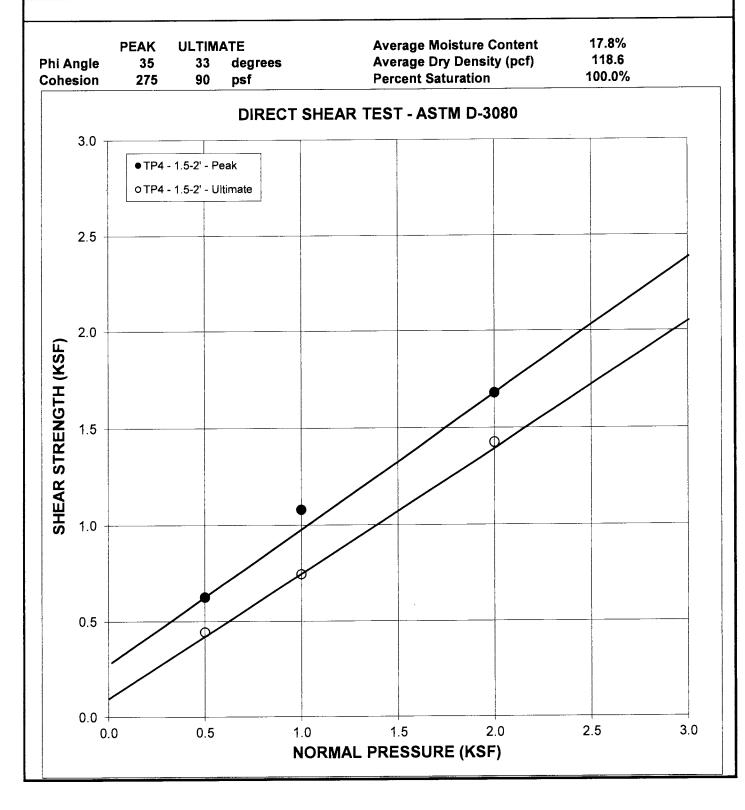


# **SHEAR DIAGRAM B-3**

JN: <u>SL14.1670</u> CONSULTANT <u>JAI</u> CLIENT: <u>Feffer/Camp Ramah - 385 Fairview Road</u>

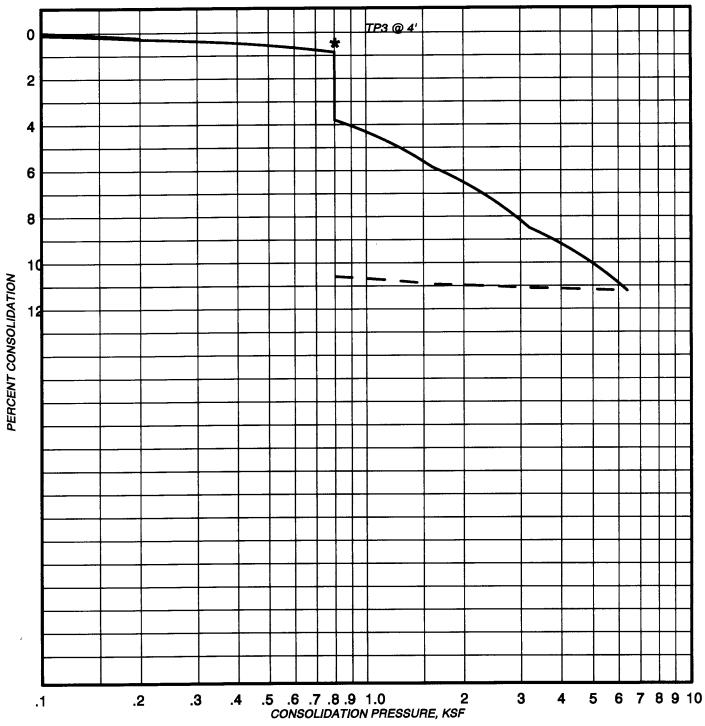
EARTH MATERIAL:

**BEDROCK** 



# CONSOLIDATION TEST PROJECT: FEFFER/CAMP RAMAH

SAMPLE: TP3 @ 4'



ALLUVIUM

\* Water Added

## **Table 1 - Laboratory Tests on Soil Samples**

#### Feffer Geological Camp Ramah Your #1426-44, HDR Lab #14-0459LAB 30-Jun-14

#### Sample ID

			@ 0-3'	
<b>Chemical Analys</b>	ses			
Cations				
calcium	Ca <sup>2+</sup>	mg/kg	na	
magnesium	$Mg^{2+}$	mg/kg	na	
sodium	Na <sup>1+</sup>	mg/kg	na	
potassium	$K^{1+}$	mg/kg	na	
Anions				
carbonate	CO3 <sup>2-</sup>	mg/kg	na	
bicarbonate	$HCO_3^{1}$	mg/kg	na	
fluoride	$F^{1-}$	mg/kg	na	
chloride	$Cl^{1-}$	mg/kg	na	
sulfate	$SO_4^{2-}$	mg/kg	6.9	
phosphate	PO <sub>4</sub> <sup>3-</sup>	mg/kg	na	
Other Tests				
ammonium	$\mathrm{NH_4}^{1+}$	mg/kg	na	
nitrate	NO3 <sup>1-</sup>	mg/kg	na	
sulfide	<b>S</b> <sup>2-</sup>	qual	na	
Redox		mV	na	

Electrical conductivity in millisiemens/cm and chemical analysis were made on a 1:5 soil-to-water extract. mg/kg = milligrams per kilogram (parts per million) of dry soil. Redox = oxidation-reduction potential in millivolts ND = not detected

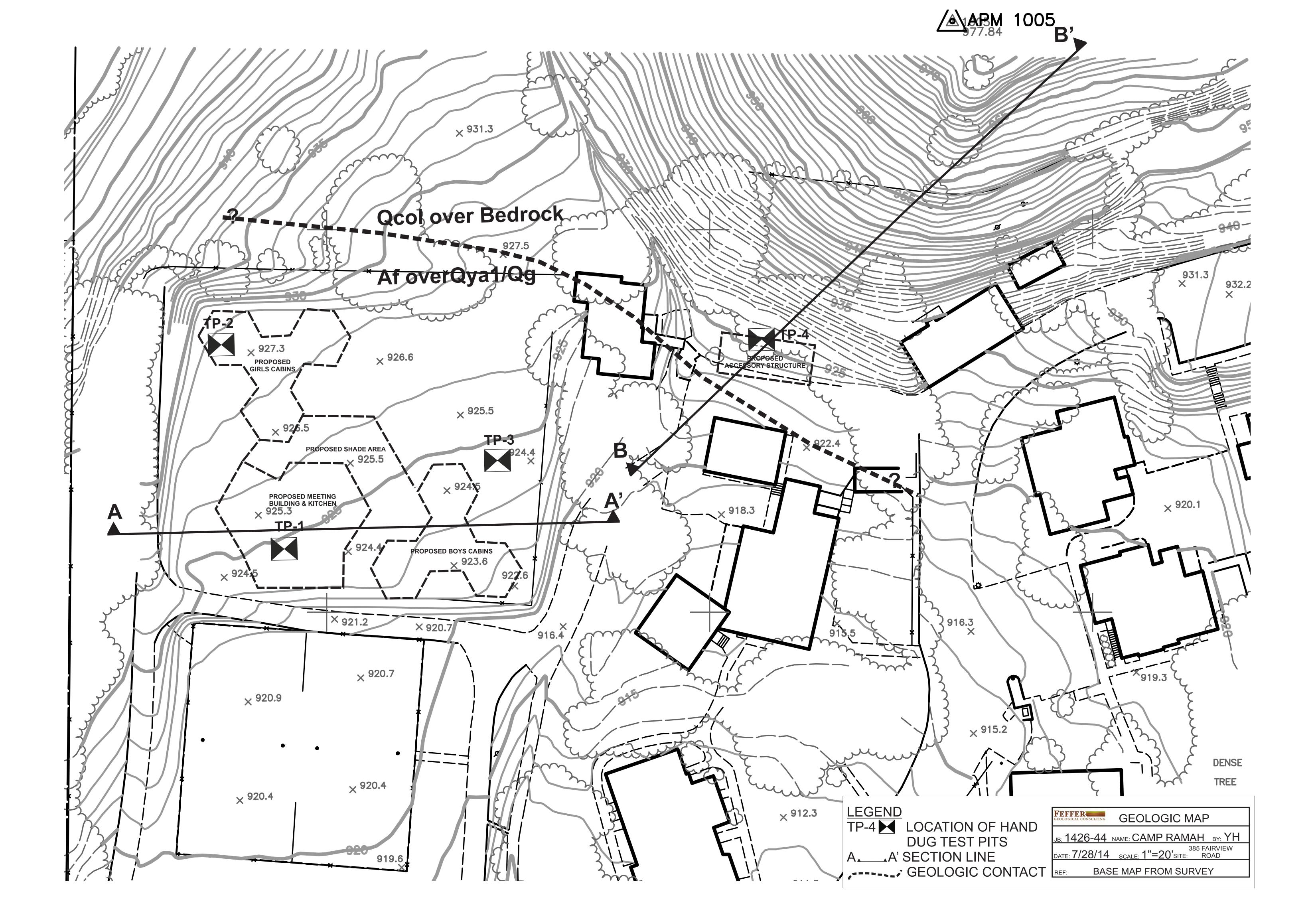
na = not analyzed

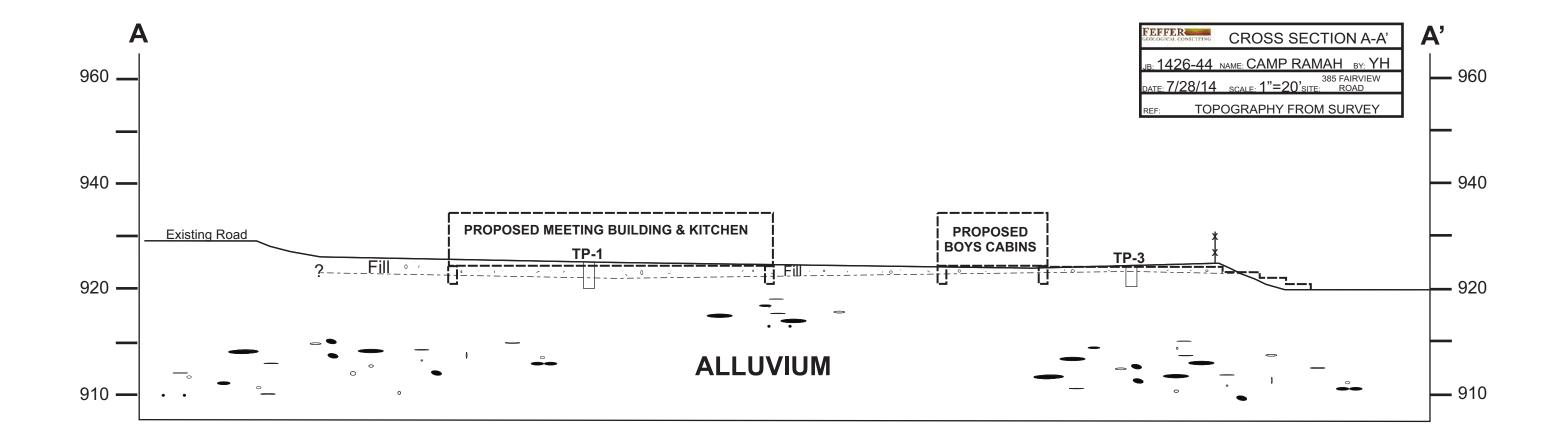
## **APPENDIX 'C'**

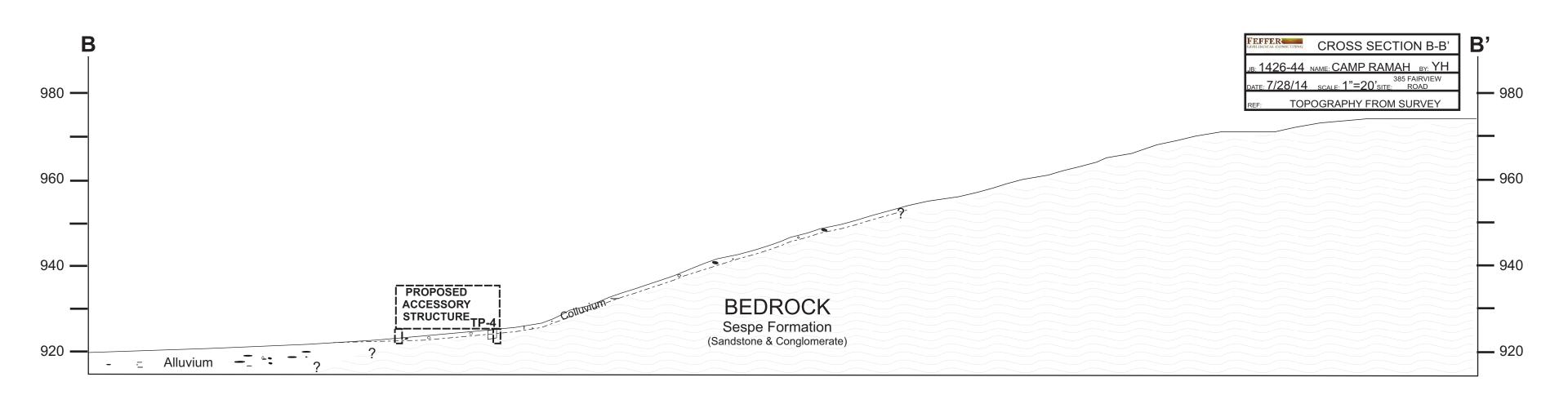
Geologic Map & Cross Sections



JATION OF HAND         G TEST PITS         JB: 1426-44 NAME: CAMP RAMAH BY: YH         385 FAIRVIEW         STON LINE         DLOGIC CONTACT	GEOLOGICAL CONSULTING GEOLOGIC MAP
	385 FAIRVIEW







# APPENDIX 'D'

**Grading Specifications** 

### STANDARD GRADING SPECIFICATIONS

These specifications present the usual and minimum requirements for grading operations performed under our supervision.

#### GENERAL

1) The Geotechnical Engineer and Engineering Geologist are the developer's representative on the project.

2) All clearing, site preparation or earth work performed on the project shall be conducted by the contractor under the supervision of the Geotechnical Engineer.

3) It is the contractor's responsibility to prepare the ground surface to receive the fills to the satisfaction of the Geotechnical Engineer and to place, spread, mix, water, and compact the fill in accordance with the specifications of the Geotechnical Engineer. The contractor shall also remove all material considered unsatisfactory by the Geotechnical Engineer.

4) It is the contractor's responsibility to have suitable and sufficient compaction equipment on the job site to handle the amount of fill being placed. If necessary, excavation equipment will be shut down to permit completion of compaction. Sufficient watering apparatus will also be provided by the contractor, with due consideration for the fill material, rate of placement and time of year.

5) A final report shall be issued by our firm outlining the contractor's conformance with these specifications.

#### SITE PREPARATION

1) All vegetation and deleterious materials such as rubbish shall be disposed of off-site. Soil, alluvium or rock materials determined by the Geotechnical Engineer as being unsuitable for placement in compacted fills shall be removed and wasted from the site. Any material incorporated as a part of a compacted fill must be approved by the Geotechnical Engineer.

2) The Engineer shall locate all houses, sheds, sewage disposal systems, large trees or structures on the site or on the grading plan to the best of his knowledge prior to preparing the ground surface.

Any underground structures such as cesspools, cisterns, mining shafts, tunnels, septic tanks, wells, pipe lines, or others not located prior to grading are to be removed or treated in a manner prescribed by the Geotechnical Engineer.

3) After the ground surface to receive fill has been cleared, it shall be scarified, disced or bladed by the contractor until it is uniform and free from ruts, hollows, hummocks or other uneven features which may prevent uniform compaction.

The scarified ground surface shall then be brought to optimum moisture, mixed as required, and compacted as specified. If the scarified zone is greater than twelve inches (12") in depth, the excess shall be removed and placed in lifts restricted to six inches (6").

Prior to placing fill, the ground surface to receive fill shall be inspected, tested and approved by the Geotechnical Engineer.

#### PLACING, SPREADING AND COMPACTION OF FILL MATERIALS

The selected fill material shall be placed in layers which when compacted shall not exceed six inches
 (6") in thickness. Each layer shall be spread evenly and shall be thoroughly mixed during the spreading to insure uniformity of material and moisture of each layer.

2) Where the moisture content of the fill material is below the limits specified by the Geotechnical Engineer, water shall be added until the moisture content is as required to assure thorough bonding and thorough compaction.

3) Where the moisture content of the fill material is above the limits specified by the Geotechnical Engineer, the fill materials shall be aerated by blading or other satisfactory methods until the moisture content is adequate.

#### **COMPACTED FILLS**

1) Any material imported or excavated on the property may be utilized in the fill, provided each material has been determined to be suitable by the Geotechnical Engineer. Roots, tree branches or other matter missed during clearing shall be removed from the fill as directed by the Geotechnical Engineer.

2) Rock fragments less than six inches (6") in diameter may be utilized in the fill, provided:

- a) They are not placed in concentrated pockets.
- b) There is a sufficient percentage of fine-grained material to surround the rocks.
- c) The distribution of the rocks is supervised by the Geotechnical Engineer.

3) Rocks greater than six inches (6") in diameter shall be taken off-site, or placed in accordance with the recommendations of the Geotechnical Engineer in areas designated as suitable for rock disposal. Details for rock disposal such as location, moisture control, percentage of rock placed, will be referred to in the "Conclusions and Recommendations" section of the geotechnical report.

If the rocks greater than six inches (6") in diameter were not anticipated in the preliminary geotechnical and geology report, rock disposal recommendations may not have been made in the "Conclusions and Recommendations" section. In this case, the contractor shall notify the Geotechnical Engineer if rocks greater than six inches (6') in diameter are encountered. The Geotechnical Engineer will than prepare a rock disposal recommendation or request that such rocks be taken off-site.

4) Representative samples of materials to be utilized as compacted fill shall be analyzed in the laboratory by the Geotechnical Engineer to determine their physical properties. If any materials other than that previously tested is encountered during grading, the appropriate analysis of this material shall be conducted by the Geotechnical Engineer as soon as possible.

Material that is spongy, subject to decay or otherwise considered unsuitable shall not be used in the compacted fill.

5) Each layer shall be compacted to a minimum of ninety percent (90%) of the maximum density in compliance with the testing method specified by the controlling governmental agency (ASTM D-1557).

If compaction to a lesser percentage is authorized by the controlling governmental agency because of a specific land use or expansive soil conditions, the area to receive fill compacted to less than ninety percent (90%) shall either be delineated on the grading plan or appropriate reference made to the area in the geotechnical report.

6) Compaction shall be by sheeps foot roller, multi-wheeled pneumatic tire roller, or other types of acceptable rollers. Rollers shall be of such design that they will be able to compact the fill to the specified density. Rolling shall be accomplished while the fill material is at the specified moisture content. The final surface of the lot areas to receive slabs-on-grade should be rolled to a smooth, firm surface.

7) Field density tests shall be made by the Geotechnical Engineer of the compaction of each layer of fill. Density tests shall be made at intervals not to exceed two feet (2') of fill height provided all layers are tested. Where the sheeps foot rollers are used, the soil may be disturbed to a depth of several inches and density readings shall be taken in the compacted material below the disturbed surface. When these readings indicate the density of any layer of fill or portion thereof is below the required ninety percent (90%) density, the particular layer or portion shall be reworked until the required density has been obtained.

8) Buildings shall not span from cut to fill. Cut areas shall be over excavated and compacted to provide a fill mat of three feet (3').

#### FILL SLOPES

1) All fills shall be keyed and benched through all top soil, colluvium, alluvium, or creep material into sound bedrock or firm material where the slope receiving fill exceeds a ratio of five (5) horizontal to one (1) vertical, in accordance with the recommendations of the Geotechnical Engineer.

2) The key for side hill fills shall be a minimum of fifteen feet (15') within bedrock or firm materials, unless otherwise specified in the geotechnical report.

3) Drainage terraces and subdrainage devices shall be constructed in compliance with the ordinances of the controlling governmental agency, or with the recommendations of the Geotechnical Engineer.

4) The Contractor will be required to obtain a minimum relative compaction of ninety percent (90%) out to the finish slope face of fill slopes, buttresses, and stabilization fills. This may be achieved by either over-building

the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment, or by any other procedure which produces the required compaction.

5) All fill slopes should be planted or protected from erosion by methods specified in the geotechnical report and by the governing agency.

6) Fill-over-cut slopes shall be properly keyed through topsoil, colluvium, or creep material into rock or firm materials. The transition zone shall be stripped of all soil prior to placing fill.

#### CUT SLOPES

1) The Engineering Geologist shall inspect all cut slopes excavated in rock, lithified, or formation material at vertical intervals not exceeding ten feet (10').

2) If any conditions not anticipated in the preliminary report such as perched water, seepage, lenticular or confined strata of a potentially adverse nature, unfavorably inclined bedding, joints, or fault planes, are encountered during grading, these conditions shall be analyzed by the Engineering Geologist and Geotechnical Engineer; and recommendations shall be made to treat these problems.

3) Cut slope that face in the same direction as the prevailing drainage shall be protected from slope wash by a non-erosive interceptor swale placed at the top of the slope.

4) Unless otherwise specified in the geological and geotechnical report, no cut slopes shall be excavated higher or steeper than that allowed by the ordinances of the controlling governmental agencies.

5) Drainage terraces shall be constructed in compliance with the ordinances of controlling governmental agencies, or with the recommendations of the Geotechnical Engineer or Engineering Geologist.

#### **GRADING CONTROL**

1) Inspection of the fill placement shall be provided by the Geotechnical Engineer during the progress of grading.

2) In general, density tests should be made at intervals not exceeding two feet (2') of fill height or every five hundred (500) cubic yards of fill placed. These criteria will vary depending on soil conditions and the size of the job. In any event, an adequate number of field density tests shall be made to verify that the required compaction is being achieved.

3) Density tests should also be made on the surface materials to receive fill as required by the Geotechnical Engineer.

4) All clean-out, processed ground to receive fill, key excavations, subdrains, and rock disposal must be inspected and approved by the Geotechnical Engineer prior to placing any fill. It shall be the Contractor's responsibility to notify the Geotechnical Engineer when such areas are ready for inspection.

#### CONSTRUCTION CONSIDERATIONS

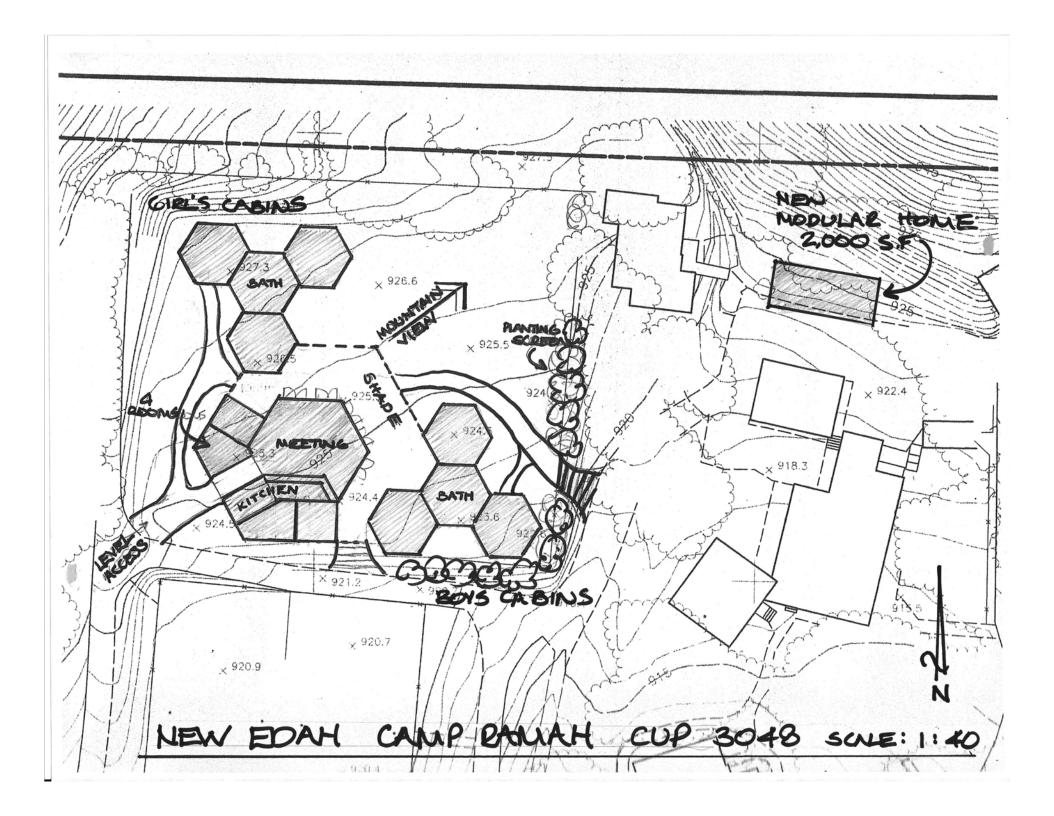
1) Erosion control measures, when necessary, shall be provided by the Contractor during grading and prior to the completion and construction of permanent drainage controls.

2) Upon completion of grading and termination of inspections by the Geotechnical Engineer, no further filling or excavating, including that necessary for footings, foundations, large tree wells, retaining walls, or other features shall be performed without the approval of the Geotechnical Engineer or Engineering Geologist.

3) Care shall be taken by the contractor during final grading to preserve any berms, drainage terraces, interceptor swales, or other devices of a permanent nature on or adjacent to the property.

## **APPENDIX 'E'**

**Architectural Development Plans** 





# **APPENDIX 'F'**

**Engineering Analysis** 



STABILITY - TAYLOR'S METHOD

IC: <u>1426-44</u> CONSULT: <u>YMH</u> CLIENT: <u>CAMP RAMAH</u>

CALCULATION SHEET #

CALCULATE THE MAXIMUM HEIGHT TO WHICH UNIFORM SLOPES ARE GROSSLY STABLE USING TAYLOR'S METHOD FOR THE STABILITY OF EARTHEN EMBANKMENTS (*FUNDAMENTALS OF SOIL MECHANICS*).

## **CALCULATION PARAMETERS**

EARTH MATERIAL: BEDROCK SHEAR DIAGRAM: B3 COHESION: 275 p PHI ANGLE: 35 c DENSITY (w): 139 p

275 psf 35 degrees 139 pcf SAFETY FACTOR: SLOPE ANGLE: Cd Base (C/fs): PhiD = atan(tan(phi)fs) =

1.7 26.6 degrees 161.8 psf 22.4 degrees

INTERPOLATE STABILITY NUMBER (sn) FROM TAYLOR'S CHARTS:

				SLC	PE ANGLES			
	Degrees	20	30	40	50	60	70	80
	5	0.090	0.110	0.130	0.145	0.160	0.185	0.210
$\sim$	10	0.045	0.075	0.100	0.120	0.140	0.160	0.188
PhiD	15	0.020	0.045	0.070	0.095	0.115	0.140	0.168
<u>а</u>	20	0.000	0.025	0.050	0.075	0.098	0.120	0.150
	25	0.000	0.010	0.033	0.055	0.080	0.105	0.130
		FROM C		sn =	<u>0.012</u>	_		
	SAFE SL	OPE HEI	GHT =		<u>98.8</u>	feet		
				w x (sn)				

THE CALCULATION INDICATES THAT UNIFORM 2:1 SLOPES IN BEDROCK ARE STABLE (FS > 1.7) UP TO 98.8 FEET. THEREFORE, THE EXISTING 57 FOOT HIGH 3:1 SLOPE IS GROSSLY STABLE.



October 16, 2017

File No. 1426-44

Camp Ramah in California 17525 Ventura Blvd #201 Encino, CA 91316

Att: Randy Michaels, Director of Finance & Administration

Subject: <u>ADDENDUM LETTER FOR UPDATED PLANS</u> 385 Fairview Road, Ojai, CA 93024

Reference: <u>GEOTECHNICAL INVESTIGATION</u> Proposed Construction of New Residence Buildings and Accessory Structure 385 Fairview Road, Ojai, CA 93024 By Feffer Geological Consulting, dated July 7, 2014

Dear Mr. Michaels,

Feffer Geological previously prepared a report for the construction of New Residence Buildings and Accessory Structure for the subject site. The proposed construction has not occurred at the subject site.

New updated plans have been prepared for an enlarged development that is now located farther to the north.

Three additional test pits were excavated on October 2, 2017 to a maximum depth of ten and a half feet the soils encountered in the test pits were consistent with the previous exploration; Quaternary Age Alluvium (Qya1) and Sespe Formation (Tsp) bedrock consisting of sandstone-conglomerate.

An updated geotechnical map and additional cross sections depicting the new development are appended to this addendum letter.

All of our previous recommendations remain the same from the report dated July 7, 2014.

Recommendations as provided in the original report are reiterated below.

All proposed footings shall be embedded within the alluvium or bedrock or a future compacted fill in accordance with the recommendations below.

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#### **New Structures**

All proposed structural foundations shall be embedded within the alluvium or bedrock or a future compacted fill cap in accordance with the recommendations presented below. Geologic conditions on the site are favorable for the proposed construction. For an individual structure, all footings should be embedded in the same material (alluvium, bedrock, or new fill).

Foundation support for the new structures could be derived by utilizing conventional shallow foundations embedded within the alluvium or bedrock or a future compacted fill cap. Allowable design parameters for foundations are provided below.

Minimum depth for interior and exterior footing (Measured from lowest adjacent grade)
For Bedrock:
Bearing pressure
a. Sustained loads (lbs. per square foot)
Resistance to lateral loads
a. Passive soil resistance (lbs. per cubic ft.)
Within bedrock
Maximum allowable
b. Coefficient of sliding friction0.45
For Compacted Fill: Bearing pressure a. Sustained loads (lbs. per square foot)2,000 psf
Resistance to lateral loads
a. Passive soil resistance (lbs. per cubic ft.)
Within compacted fill
Maximum allowable
For Alluvium:
Bearing pressure
a. Sustained loads (lbs. per square foot)2,000 psf
Resistance to lateral loads a. Passive soil resistance (lbs. per cubic ft.) Within alluvium

October 16, 2017 Page 3

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The allowable bearing pressures are for dead plus long-term live loads and include a factor-of-safety of at least 3.0.

Increases in the bearing value of the Bedrock are allowable at a rate of 400 pounds per square foot for each additional foot of footing width to a maximum of 4,000 pounds per square foot. For bearing calculations, the weight of the concrete in the footing may be neglected.

The bearing value shown above is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces. When combining passive and friction for lateral resistance, the passive component should be reduced by one third.

All continuous footings should be reinforced with a minimum of four #4 steel bars; two placed near the top and two near the bottom of the footings. Footing excavations should be cleaned of all loose soil, moistened, free of shrinkage cracks and approved by the geologist and geotechnical engineer prior to placing forms, steel or concrete.

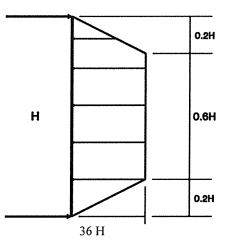
Based on the anticipated building loads footings designed and constructed in accordance with the soil criteria included within the referenced report are expected to settle less than ¼ to ½ inch in a distance of 20 feet. Differential settlement is expected to be less than ¼ inch. The total and differential settlements are within acceptable and allowable tolerances for conventional foundations.

#### **RETAINING WALLS**

Cantilevered retaining walls up to 12 feet high that support fill, Older Alluvium, bedrock and approved retaining wall backfill, may be designed for an equivalent fluid pressure of 43 pounds per cubic foot for level backslopes.

Restrained walls should be designed for an at-rest earth pressure of 60 pcf. Restrained braced retaining walls that are pinned at the top by a non-yielding floor should be designed for the trapezoidal pressure distribution noted in the figure below. The uniform trapezoidal pressure may be assumed over the central six tenths of the wall height. The pressure may be decreased to zero at the top and bottom of the wall.

#### TRAPEZOIDAL DISTRIBUTION OF PRESSURE



Retaining walls should be provided with a subdrain or weepholes covered with a minimum of 12 inches of <sup>3</sup>/<sub>4</sub> inch crushed gravel.

It is recommended that retaining walls be waterproofed. Waterproofing design and inspection of its installation is not the responsibility of the geotechnical engineer. A qualified waterproofing consultant should be retained in order to recommend a product or method, which would provide protection to below grade walls.

Cantilevered retaining walls higher than six feet need to consider a seismic surcharge from the Design Earthquake. According to the City of Los Angeles, the seismic surcharge should be calculated using a factor of safety of 1.0 with the PGA corresponding to  $\frac{1}{2}$  of  $\frac{2}{3}$ rds of the PGA<sub>M</sub>. The PGA<sub>M</sub> is 0.817 and therefore the corresponding seismic design value is 0.27g.

A seismic surcharge for retaining walls designed for active conditions is considered. For a 12 foot high retaining wall, the static design force is equal to  $3.10 \text{ kips} (12 \text{ ft}^2 * 43 \text{ pcf}/2)$ .

For a ground motion of 0.27g and a FS of 1.0, the enclosed calculations indicate an unbalanced force under seismic conditions from the Maximum Considered Earthquake is 1814.5 pounds or 1.8 kips. Since the static design force is higher than the seismic force an additional seismic surcharge need not be added.

#### Waterproofing

Moisture affecting retaining walls is one of the most common post-construction complaints. Poorly applied or omitted waterproofing can lead to efflorescence or standing water inside the building. Efflorescence is a process in which a powdery substance is produced on the surface of the concrete by the evaporation of water. The white powder usually consists of soluble salts such as gypsum, calcite, and/or halite (common salt). Efflorescence is common to retaining walls and generally does not affect their strength or integrity.

October 16, 2017 Page 5

It is recommended that retaining walls be waterproofed. Waterproofing design and inspection of its installation is not the responsibility of the geotechnical engineer. A qualified waterproofing consultant should be retained in order to recommend a product or method, which would provide protection to below grade walls.

As aforementioned, the architect, structural engineer, or other qualified waterproofing consultant should develop the actual waterproofing details.

#### **Retaining Wall Drainage**

Retaining walls that use a subdrain should have the subdrain pipe surrounded with a minimum of 12 inches of gravel, and a compacted fill blanket or other seal at the surface. The project structural engineer will incorporate an appropriately designed wall back-drain system for the purpose of mitigating potential for hydrostatic and/or seepage forces. Certain types of subdrain pipe are not acceptable to the various municipal agencies, it is recommended that prior to purchasing sub drainage pipe, the type and brand be verified and cleared with the proper municipal agencies. Sub drainage pipes should daylight and outlet to an acceptable location.

#### **Retaining Wall Backfill**

The onsite earth materials are acceptable for use as retaining wall backfill. Any required backfill should be mechanically compacted in layers not more than 8 inches thick, to at least 90% (or 95%) of the maximum dry density obtained using test method ASTM D 1557-12 or equivalent. Flooding or jetting is not permitted. Proper compaction of the backfill will be necessary to reduce settlement of overlying walks and paving. Some settlement of required backfill should be anticipated, and any utilities supported therein should be designed to accept differential settlement, particularly at the points of entry to the structure.

Gravel or onsite earth materials will be utilized for backfill. If gravel is used, the upper 24 inches of backfill should consist of more cohesive material to minimize surface infiltration. Retaining wall backfill should be capped with a paved surface drain or pavement

It should be pointed out that the use of heavy compaction equipment in close proximity to retaining walls can result in excess wall movement and/or soil loadings exceeding design values. In this regard, care should be taken during backfilling operations.

#### **TEMPORARY EXCAVATIONS**

All vertical cuts shall be inspected by our office to verify geologic continuity.

Un-shored vertical cuts to a height of eight feet (8') may be made in earth materials at the site. Un-shored cuts in excess of eight feet (8') shall be sloped at a gradient of no steeper than 1:1 (horizontal to vertical) for the portion of the excavation above the vertical cut. ×

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#### **2016 CALIFORNIA BUILDING CODE CONSIDERATIONS**

The proposed development may be designed in accordance with seismic considerations contained in the 2016 California Building Code, Section 1613, the following parameters may be considered for design:

Latitude and Longitude of Site (34.45866°N, 119.26489°W)

Mapped Spectral Response Acceleration Parameters:

	$S_S$	:	2.210
	$S_1$	:	0.835g
Site Class:	D	:	Stiff Soil
Site Coefficients:	Fa	:	1.0
	$F_v$	:	1.5

Maximum Considered Earthquake Spectral Response Acceleration Parameters:

$S_{MS}$	:	2.210g
S <sub>M1</sub>	:	1.252g

Design Spectral Response Acceleration Parameters:

${f S}_{DS} {f S}_{D1}$	:	1.473g 0.835g
PGA <sub>M</sub>	:	0.817g

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October 16, 2017 Page 7

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File No. 1426-44 385 Fairview Road

We appreciate the opportunity to be of service. Should you have any questions regarding the information contained in this report, please do not hesitate to contact us.

Sincerely, FEFFER GEØLOGICAL CONSULTING, INC. 5NAL No. 2138 Jøshua R. Feffer Principal Engineering Geologie Certified Engineering Geologist C.E.G. 2138 OF CALLE Distribution: Addressee-(1)

Dan Daneshfar Principal Engineer P.E. 68377

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	CLIENT: Camp Ramah	<u></u>
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	FEFFER C	ΞEC	O CON	SULTI	NG	F.N.	1426-44		Ca	amp Ramah	PLATE	

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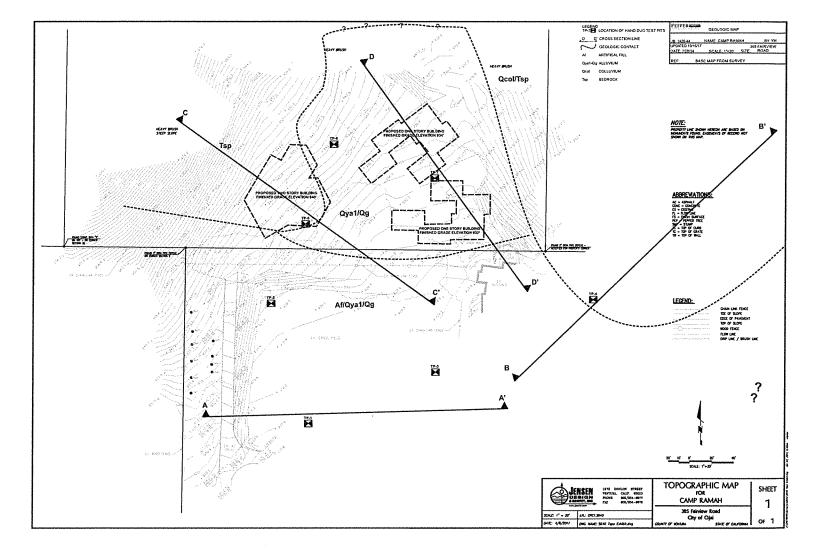
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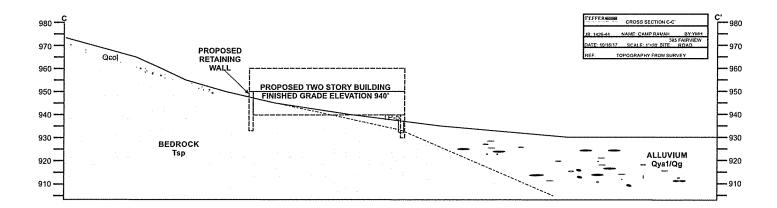
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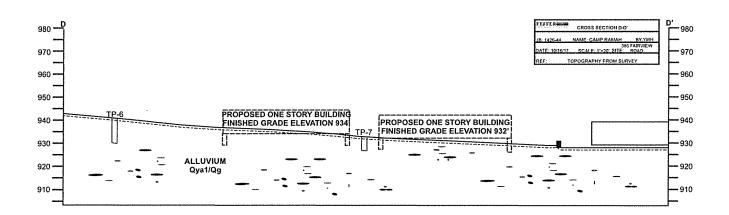






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October 29, 2018

File No. 1426-44

Camp Ramah in California 17525 Ventura Blvd #201 Encino, CA 91316

Att: Randy Michaels, Director of Finance & Administration

Subject: <u>RESPONSE TO VENTURA COUNTY</u> Determination of Application Incompleteness Major Modification to Conditional Use Permit (CUP) No. 3048 Case No. PL18-0052, Camp Ramah

Reference: GEOTECHNICAL INVESTIGATION Proposed Construction of New Residence Buildings and Accessory Structure 385 Fairview Road, Ojai, CA 93024 By Feffer Geological Consulting, dated July 7, 2014

ADDENDUM LETTER FOR UPDATED PLANS

385 Fairview Road, Ojai, CA 93024 By Feffer Geological Consulting, dated October 16, 2017 October 29, 2018 Page 2

Dear Mr. Michaels,

The following is a response to questions by the County of Ventura. The items are reiterated below.

We appreciate the opportunity to be of service. Should you have any questions regarding the information contained in this report, please do not hesitate to contact us.

Sincerely,

FEFFER GEOLOGICAL CONSULTING, INC.

No. 2138 Joshua R. Feffer Principal Engineering Geologie Certified Engineering C.E.G. 2138 Geologist OFCALI

Distribution: Addressee–(1)

Dan Daneshfar Principal Engineer P.E. 68377



#### Item 8

Geological Report: Please provide a signed copy of the report (Feffer Geological Consulting, dated July 7, 2014) by the responsible soil engineer and geologist. In addition, the plates in the back of the report do not appear to be at the correct scale. Please provide an updated, signed report, and plates to scale.

#### Response

A copy of the 2014 report is attached to this response.

#### Item 9

Please address the hazard of debris flow with respect to the location of the proposed Machan village. The Feffer Report was prepared in 2017, prior to the occurrence of the Thomas Fire that affected the Camp Ramah site. Provide an updated report that addresses the debris flow impact and provide mitigation as necessary.

#### Response

Updated plans show the structures will be constructed into the base of the ascending slope. A Map showing the extent of the Thomas Fire Burn Area by Cal Fire and shown on http://www.fire.ca.gov/general/firemaps is shown below.



We visited the subject site and took photos of the area above the new proposed buildings. These photos are included at the back of this response. The slope above the proposed campground shows no evidence of recent burn, is in good condition, and covered with chaparral.

The subject site is not located within an "Area of Minimal Flood Zone" per FEMA maps and is outside of a flood zone per the County of Ventura GIS.

October 29, 2018 Page 4

The proposed buildings are located several feet above the adjacent small channel and outside of the direct flow path. It is our opinion that the potential for debris flow is low and mitigation is not required.

#### Item 10

Please address the hydro-consolidation of the alluvial materials (3% upon saturation @ 800 pounds per square foot [psf]) of one of the higher in-place density alluvial materials and the recommendation to place 2,000 psf on this material. Please discuss and revise the 2014 and 2017 Feffer Geological Report, as necessary.

#### Response

The proposed two-story building is underlain by bedrock and all foundations should extend into the bedrock. For structures located in that area that is underlain by alluvium, the soil should be removed and recompacted to a minimum of 90% relative compaction to a depth of 3 feet below the proposed footings and five feet outside the building footprint.

#### Item 11

Please discuss why a City of Los Angeles standard has relevance on a project in the County of Ventura (Feffer Report dated October 16, 2017, page 4). Also, the seismic force is an added force to the static force. Thus, the last sentence under retaining walls discussion on page 4 should be explained and revised as necessary.

#### Response

Cantilevered retaining walls up to 12 feet high that support fill, Older Alluvium, bedrock and approved retaining wall backfill, may be designed for an equivalent fluid pressure of 43 pounds per cubic foot for level backslopes.

Restrained walls should be designed for an at-rest earth pressure of 60 pcf. The increase in lateral pressure due to earthquake loading can be estimated using the Mononobe-Okabe theory, as described by Seed and Whitman (1970). The estimated dynamic lateral force increase (due to seismic loading) for either restrained or unrestrained walls may be taken as 10H pounds per square foot of wall. The centroid of the dynamic lateral force increase should be applied at a distance of  $0.6 \times H$  above the base of the wall. The distribution of the resultant dynamic lateral force can be assumed to be an invert triangle (base of the triangle at top of the wall).

To estimate the total dynamic lateral force, the dynamic lateral force increase should be added to the static earth pressure force computed using an active (not at-rest) lateral earth pressure of 43 pcf, equivalent fluid weight.



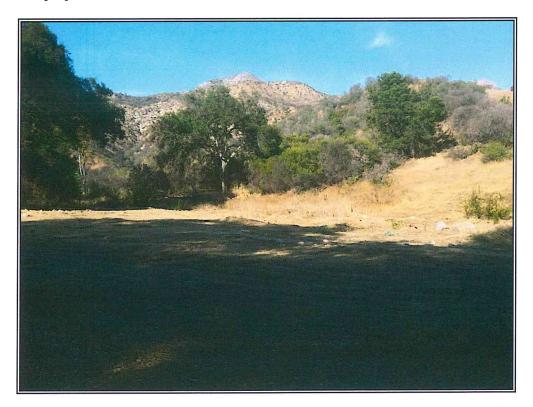
View of the slope above the proposed structures



View of the proposed construction area



View of the proposed construction area in relation to the small channel



View of the proposed construction area.

- c. Provide total water use from all sources from a representative base period of at least 10 years to allow for adequate water analysis. The water use data must be copies of the original Casitas water bills or printed on Casitas letterhead to serve as empirical evidence of actual water usage.
- d. Provide any metered groundwater extraction data if available.

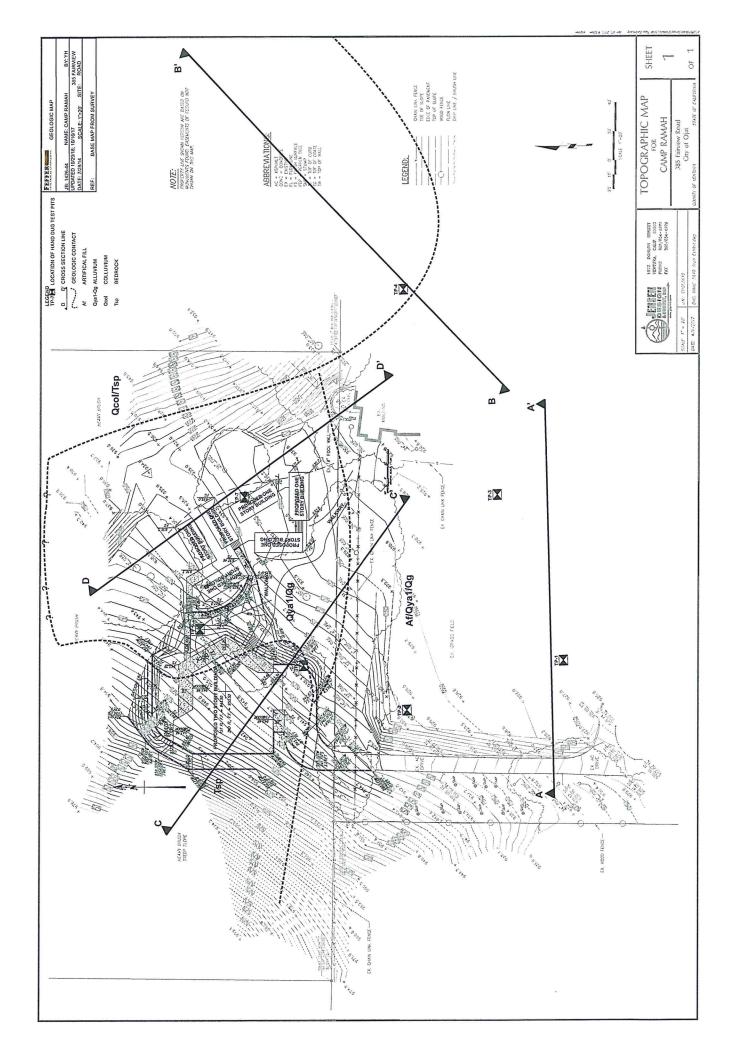
# Ventura County Public Works Agency Engineering Services Department: Jim O'Tousa, (805) 654-2034 or jim.o'tousa@ventura.org

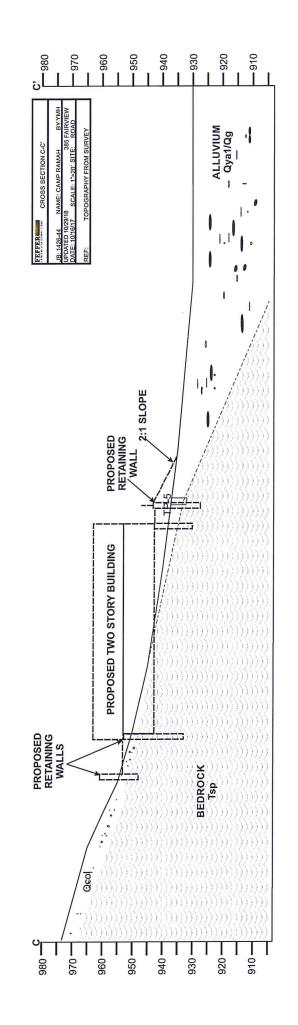
- 8. <u>Geological Report</u>: Please provide a signed copy of the report (Feffer Geological Consulting, dated July 7, 2014) by the responsible soil engineer and geologist. In addition, the plates in the back of the report do not appear to be at the correct scale. Please provide an updated, signed report and plates to scale.
- 9. Please address the hazard of debris flow with respect to the location of the proposed Machon village. The Feffer Report was prepared in 2017, prior to the occurrence of the Thomas Fire that affected the Camp Ramah site. Provide an updated report that addresses the debris flow impact and provide mitigation as necessary.
- Please address the hydro-consolidation of the alluvial materials (3% upon saturation @ 800 pounds per square foot [psf]) of one of the higher in-place density alluvial materials and the recommendation to place 2,000 psf on this material. Please discuss and revise the 2014 and 2017 Feffer Geological Report, as necessary.
- 11. Please discuss why a City of Los Angeles standard has relevance on a project in the County of Ventura (Feffer Report dated October 16, 2017, page 4). Also the seismic force is an added force to the static force. Thus, the last sentence under retaining walls discussion on page 4 should be explained and revised as necessary.

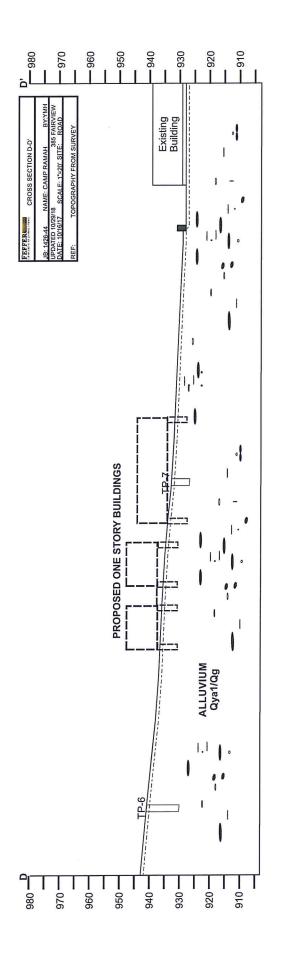
The Ventura County Public Works Agency Advanced Planning Floodplain Section is in the process of reviewing the CUP application. Any correspondence from this County Agency will be provided to you once their review of the project is complete.

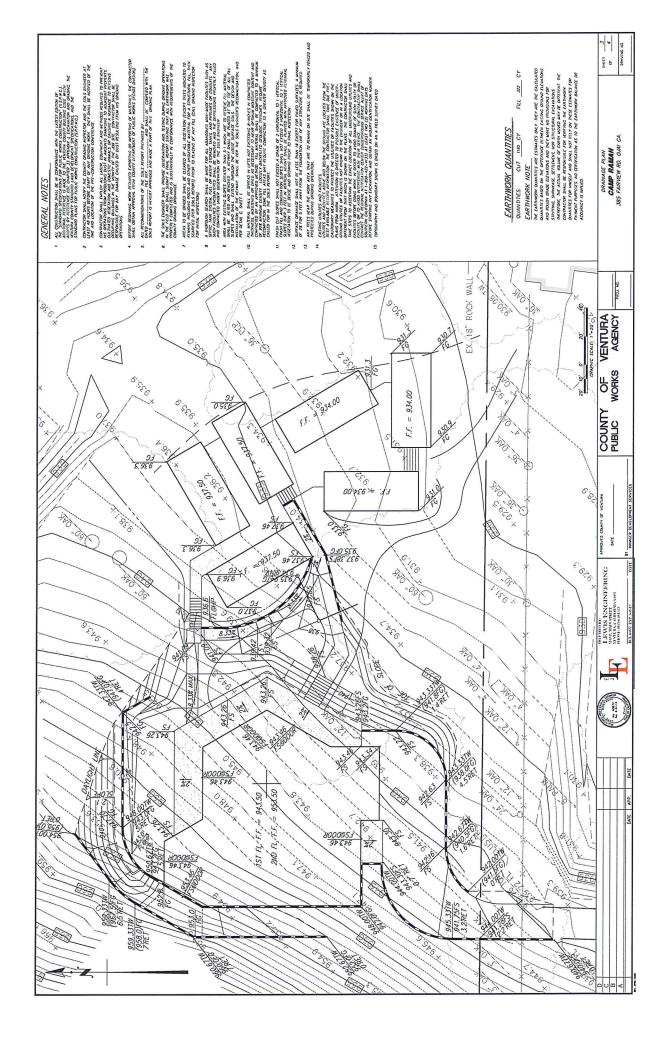
The Ventura County Public Works Agency Transportation Department is in the process of reviewing the CUP application. Any correspondence from this County Department will be provided to you once their review of the project is complete.

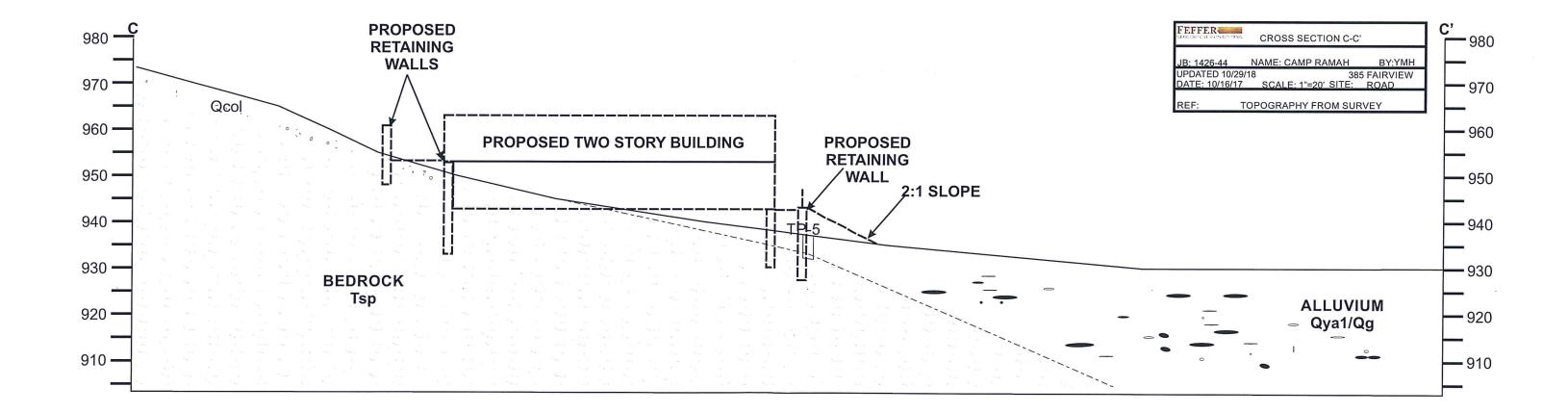
When you have gathered all of the information requested above, please submit the information to Kristina Boero, the case planner, to begin the next 30-day review period. Submittal directly to another department or agency may not start the second 30-day review period, resulting in processing delays for your permit application.

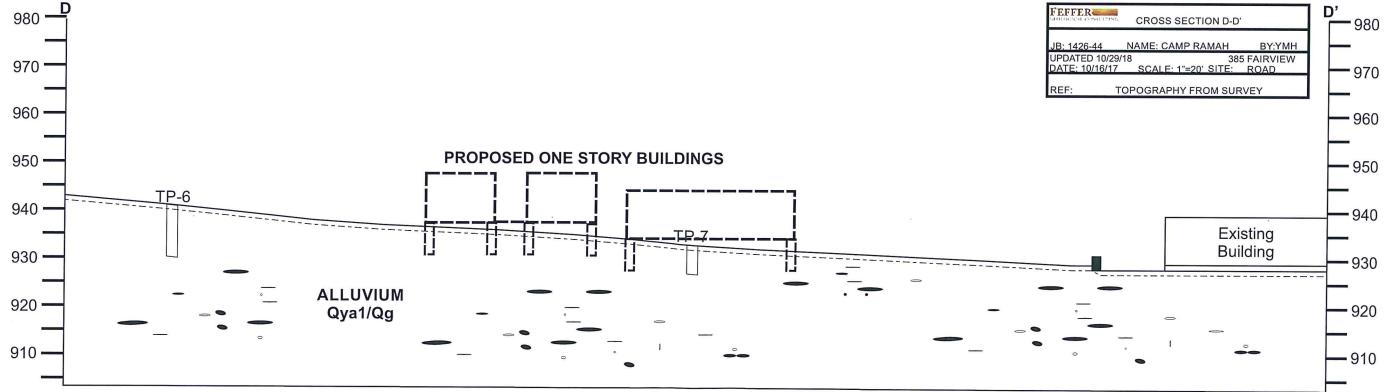


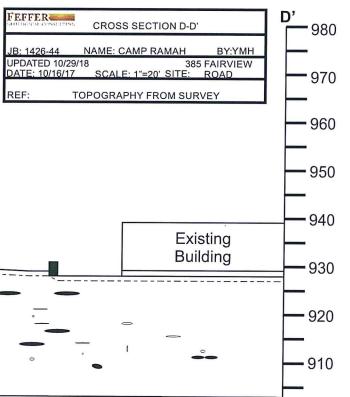












# Historic Resources Report 385 Fairview Road, Ojai (Camp Ramah)

5 October 2018

# **Prepared for:**

Camp Ramah in California 385 Fairview Road Ojai CA 93023

## **Prepared by:**



County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 11 - Historical Resources Report, prepared by San Buenaventura Research Associates, October 5, 2018

### **Executive Summary**

This report was prepared for the purpose of assisting the County of Ventura in their compliance with the California Environmental Quality Act (CEQA) as it relates to historic resources, in connection on a 28.32 acre parcel located at 385 Fairview Road in the unincorporated Ventura County section of the Ojai Valley (APN 010-0-110-130). The property is the location of Camp Ramah. [Figure 1]

This report assesses the historical and architectural significance of potentially significant historic properties in accordance with the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR) Criteria for Evaluation, and County of Ventura criteria.

This report was prepared by San Buenaventura Research Associates of Santa Paula, California, Judy Triem, Historian; and Mitch Stone, Preservation Planner, for Camp Ramah in California, and is based on a field investigation and research conducted in July-September, 2018.

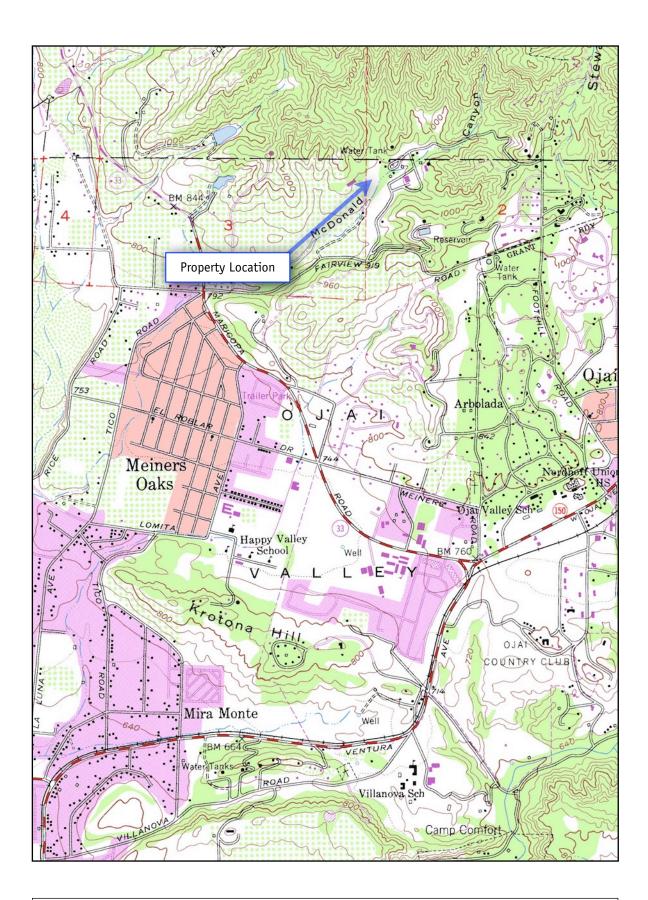
San Buenaventura Research Associates provides qualified Historian and Architectural Historian services, in accordance with *Secretary of the Interior's Professional Qualifications* (36 CFR 61). The conclusions contained herein represent the professional opinions of San Buenaventura Research Associates, and are based on the factual data available at the time of its preparation, the application of the appropriate local, state and federal regulations, and best professional practices.

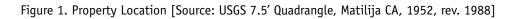
#### Summary of Findings

None of the evaluated buildings on this property appear to be eligible for listing on the NRHP, the CRHR, or for designation as a County of Ventura Landmark.

#### **Report Contents**

1.	Administrative Setting	1					
	Ventura County Landmark Criteria						
	Ventura County Site of Merit Criteria						
2.	Impact Thresholds and Mitigation	3					
3.	Historical Setting	4					
4.	Potential Historic Resources	8					
5.	Eligibility of Historic Resources	11					
	National and California Registers: Significance and Eligibility						
	Ventura County Eligibility						





### 1. Administrative Setting

The California Environmental Quality Act (CEQA) requires evaluation of project impacts on historic resources, including properties "listed in, or determined eligible for listing in, the California Register of Historical Resources [or] included in a local register of historical resources." A resource is eligible for listing on the California Register of Historical Resources if it meets any of the criteria for listing, which are:

- 1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
- 2. Associated with the lives of persons important to local, California or national history;
- 3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values; or
- 4. Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

By definition, the California Register of Historical Resources (CRHR) also includes all "properties formally determined eligible for, or listed in, the National Register of Historic Places," and certain specified State Historical Landmarks. The majority of formal determinations of NRHP eligibility occur when properties are evaluated by the Office of Historic Preservation in connection with federal environmental review procedures (Section 106 of the National Historic Preservation Act of 1966). Formal determinations of eligibility also occur when properties are nominated to the NRHP, but are not listed due to a lack of owner consent.

The criteria for determining eligibility for listing on the National Register of Historic Places (NRHP) have been developed by the National Park Service. Eligible properties include districts, sites, buildings and structures,

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

According to the NRHP standards, in order for a property that is found to be significant under one or more of the criteria to be considered eligible for listing, the "essential physical features" that define the property's significance must be present. The standard for determining if a property's essential physical features exist is known as *integrity*, which is defined for the NRHP as "the ability of a property to convey its significance." The CRHR defines integrity as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance." (National Register Bulletin 15; California OHP Technical Assistance Bulletin 6)

For purposes of both the NRHP and CRHR, an integrity evaluation is broken down into seven "aspects." The seven aspects of integrity are: *Location* (the place where the historic property was constructed or the place where the historic event occurred); *Design* (the combination of elements that create the form, plan, space, structure, and style of a property); *Setting* (the physical environment of a historic property); *Materials* (the physical elements that were combined or deposited during a particular period of time and in a particular

pattern or configuration to form a historic property); *Workmanship* (the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory); *Feeling* (a property's expression of the aesthetic or historic sense of a particular period of time), and; *Association* (the direct link between an important historic event or person and a historic property).

It is not required that significant property possess all aspects of integrity to be eligible; depending upon the NRHP and CRHR criteria under which the property derives its significance, some aspects of integrity might be more relevant than others. For example, a property nominated under NRHP Criterion A and CRHR Criterion 1 (events), would be likely to convey its significance primarily through integrity of location, setting and association. A property nominated solely under NRHP Criterion C and CRHR Criterion 3 (design), would usually rely primarily upon integrity of design, materials and workmanship.

While the NRHP guidelines and the CRHR regulations include similar language with respect to the aspects of integrity, the latter guidelines also state "it is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register." Further, according to the NRHP guidelines, the integrity of a property must be evaluated at the time the evaluation of eligibility is conducted. Integrity assessments cannot be based on speculation with respect to historic fabric and architectural elements that may exist but are not visible to the evaluator, or on restorations that are theoretically possible but which have not occurred. (National Register Bulletin 15; CCR §4852 (c); California OHP Technical Assistance Bulletin 6)

The minimum age criterion for the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) is 50 years. Properties less than 50 years old may be eligible for listing on the NRHP if they can be regarded as "exceptional," as defined by the NRHP procedures, or in terms of the CRHR, "if it can be demonstrated that sufficient time has passed to understand its historical importance" (Chapter 11, Title 14, §4842(d)(2))

Historic resources as defined by CEQA also includes properties listed in "local registers" of historic properties. A "local register of historic resources" is broadly defined in §5020.1 (k) of the Public Resources Code, as "a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution." Local registers of historic properties come essentially in two forms: (1) surveys of historic resources conducted by a local agency in accordance with Office of Historic Preservation procedures and standards, adopted by the local agency and maintained as current, and (2) landmarks designated under local ordinances or resolutions. These properties are "presumed to be historically or culturally significant... unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant." (PRC §§ 5024.1, 21804.1, 15064.5)

#### Ventura County Landmark Criteria

An improvement, natural feature, or site may become a designated landmark if it meets one the following criteria:

- 1. It exemplifies or reflects special elements of the County's social, aesthetic, engineering, architectural or natural history;
- It is associated with events that have made a significant contribution to the broad patterns of Ventura County or its cities, regional history, or the cultural heritage of California or the United States;

- 3. It is associated with the lives of persons important to Ventura County or its cities, California, or national history;
- 4. It has yielded, or has the potential to yield, information important to the prehistory or history of Ventura County or its cities, California or the nation;
- 5. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;
- 6. Integrity: Establish the authenticity of the resource's physical identity by evidence of lack of deterioration and significant survival of the characteristics that existed during its period of importance. This shall be evaluated with regard to the retention of location, design, setting, materials, workmanship.

#### Ventura County Site of Merit Criteria

Sites of Merit satisfy the following criteria:

- 1. Sites of historical, architectural, community or aesthetic merit which have not been designated as landmarks or points of interest, but which are deserving of special recognition; and
- 2. County approved surveyed sites with a National Register status code of 5 or above.

#### 2. Impact Thresholds and Mitigation

According to the Public Resources Code, "a project that may cause a substantial change in the significance of an historical resource is a project that may have a significant effect on the environment." The Public Resources Code broadly defines a threshold for determining if the impacts of a project on an historic property will be significant and adverse. By definition, a substantial adverse change means, "demolition, destruction, relocation, or alterations," such that the significance of an historical resource would be impaired. For purposes of NRHP eligibility, reductions in a property's integrity (the ability of the property to convey its significance) should be regarded as potentially adverse impacts. (PRC §21084.1, §5020.1(6))

Further, according to the CEQA Guidelines, "an historical resource is materially impaired when a project... [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources [or] that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant."

The lead agency is responsible for the identification of "potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource." The specified methodology for determining if impacts are mitigated to less than significant levels are the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings and the Secretary of the Interior's Standards for Rehabilitating Historic Buildings (1995)*, publications of the National Park Service. (CCR §15064.5(b)(3))

#### 3. Historical Setting

The property known historically as El Rancho Rinconada was so named by J.D. Reyes and Howard Bald during the time it was owned by Howard Bald's parents, George and Catherine Bald. It is unknown if any buildings existed on the 77 acre property when the Balds sold it to Loring Farnum in 1912.<sup>1</sup>

Loring Farnum was born in 1882 in New Haven, Connecticut to a prominent New England family. His father, Dr. George Bronson Farnam, a graduate of Yale Medical School in 1869, who had been chronically ill since his youth, married Carolina Bucklin Wells in 1870. They had seven children, Loring being the youngest.<sup>2</sup>

It was probably through the family's connections to Yale, where their uncle Henry W. Farnam was a professor, that they became acquainted with Sherman Day Thacher, whose father was also a Yale professor. During the 1880s Thacher purchased 160 acres on the eastern end of the Ojai Valley. The first building on what would later become the campus of The Thacher School was Sherman Thacher's three-room home constructed on this property in 1888. Loring Farnam's brother Henry became Thacher's first pupil in 1889.<sup>3</sup>

Loring Farnam attended Yale University in 1889, but apparently did not graduate. He might well have been introduced to the Ojai Valley around that time, when his brother was under the tutelage of Sherman Thacher. In any event Farnam had moved to Ojai by 1912, apparently for health reasons. He purchased El Rancho Rinconada from George and Catherine Bald, and took up ranching, an occupation reflected in the 1920 census, where he was listed as a fruit and dairy farmer. Farnam raised Guernsey dairy cattle and belonged to the American Guernsey Cattle Club, exhibiting some of his stock at the state fair.

Farnam apparently inherited a tendency towards frail health from his father. A nurse lived with him for many years until his death in 1931, at age 49, in a hospital in San Francisco. His remains were returned to Connecticut where he was interred at Evergreen Cemetery in New Haven. Two years after his death, in 1933, El Rancho Rinconada was sold by Oliver Reardon, administrator of the Farnum estate, to Charlie Vaughn White and Jennie Lena White. Prior to buying this property, White worked in the oil industry as a drilling superintendent for Shell Oil Company.<sup>4</sup>

The Whites owned the property for only a few years, selling it to Louis and Evelyn Brown Boyle in 1939. According to a contemporary account, the property at that time consisted of 77 acres, with 37 acres suitable

<sup>4</sup> Ventura County Official Records. Ventura County Directory, 1934.

<sup>&</sup>lt;sup>1</sup> Bald, Howard. *Reminiscences of Early Ojai (No.4)*. OjaiHistory.com. Ventura County Official Records, Book 132, page 591.

<sup>&</sup>lt;sup>2</sup> Farnam, Charles. *History of the des. of John Whitman of Weymouth, Mass.* New Haven, Connecticut: 1889. Vol. 52, p. 309.

<sup>&</sup>lt;sup>3</sup> Makepeace, LeRoy McKim. *Sherman Thacher and His School*. New Haven: Yale University Press, 1941.

for planting in citrus or avocados, a seven-room stucco residence, a milking barn, garage, tool house, as well as pheasant, pigeon, and poultry pens. With the property sale the Whites moved to Pennsylvania. <sup>5</sup>

Louis Morris Boyle was born in 1890 in Humboldt, Allen County, Kansas. His father, Willis J. Boyle, was in the iron manufacturing business. The family, including his mother Millie and brother, moved to Los Angeles when Louis was just a year old. His father joined friends who established the California Metal and Novelty Company, a small sheet-metal business that later became Boyle Manufacturing Company. Both Louis and his brother worked for the company. In 1939 the company was sold to Columbia Steel Company, a subsidiary of United States Steel. Louis purchased El Rancho Rinconada with the proceeds of the sale. Census records indicate that Boyle and his wife Evelyn, son Louis Jr., and daughter Beverly remained in their home in Los Angeles until at least 1940, or perhaps they maintained homes in both Los Angeles and Ojai.

During his ownership El Rancho Rinconada also became known as Orchid Town. Louis Boyle credited his mother for his interest in plants. He worked alongside her in their garden as a child and thought at that time he would like to be in the nursery business. Raising cymbidium orchids started out as a hobby, but quickly turned into a business, expanding to over fifty thousand plants growing under the trees on El Rancho Rinconada, and eventually under lath houses constructed for the purpose.

Boyle applied an active imagination to the development of Orchid Town, creating Western false front buildings to hide the large expanses of lath houses required to grow his flowers. Designed by Boyle himself, the buildings were constructed using parts scavenged from other buildings and scrapyards. He created a "Main Street" consisting of a two-story hotel, post office, a carriage house, jail, library, school, and community church, among others, furnishing them with antiques and Western curios. [Figures 2, 3] <sup>6</sup>

The visual affect was similar to a Western movie set, appearing authentic from the outside, but the buildings were for the most part little more than false fronts attached to the lath houses. At least two fountains were also constructed by Boyle. His imaginative efforts turned Orchid Town into a modest tourist attraction, though it was evidently created more for more his own amusement.

The question has often been asked of me: How did you conceive the idea to build Cymbidium Orchid Town? ... We had our Rancho and I was buying Cymbidium orchid plants and we just had to have a place to put them. ... I had seen just a lot of ordinary lath houses ... that had little or no appeal to me. So I decided ... we would camouflage the front so as to have something a little different, with an early atmosphere.

Now I wish I could say, "The Town was built when we bought our rancho." No, it is just the town of make-believe that we created and had lot of fun in building.  $^{7}$ 

<sup>6</sup> Boyle, 1952.

<sup>7</sup> Boyle, 1952: pp. 154-55, 158.

 <sup>&</sup>lt;sup>5</sup> Ventura County Official Records, Book 585, page 392.
 Oxnard Daily Courier, 2-19-1939.
 Louis M. Boyle. Out West, Growing Cymbidium Orchids and Other Flowers, The Story of El Rancho Rinconada. Los Angeles: Times Mirror Press, 1952.

Mason, David. "Orchid Town was an attraction in the '40s and '50s." Originally published in the *Ojai Valley News* 6-11-1999, as reproduced at ojaihistory.com.

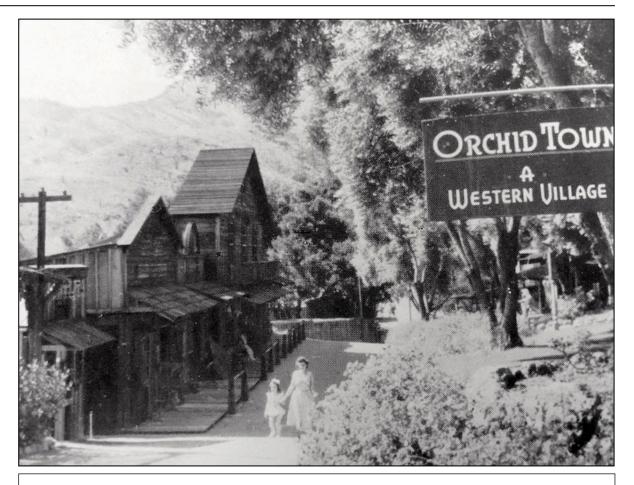


Figure 2. Orchid Town "Main Street" circa 1950 [Source: Boyle, 1952]

Much of the "town" was destroyed by a brushfire in 1948, but was soon rebuilt.

Boyle chose an opportune moment for entering this business; during the 1940s and 1950s cymbidium orchids were extremely popular and in high demand for corsages. Louis Boyle sold his orchids throughout the country, especially in the Chicago area, and exhibited them in flower shows around California as well. It is said that he was the largest and most successful producer of cymbidium orchids in the world during the 1940s and 1950s, though this claim is unverified.<sup>8</sup>

In 1952 Louis Boyle, having reduced his ranching activity due to rheumatoid arthritis, wrote a complete history of his cymbidium business and Orchid Town. He died the following year, in August 1953.<sup>9</sup>

In 1955 El Rancho Rinconada was sold out of his estate to Edward H. Smith. Over the next few years Smith marketed the property as Orchid Town Guest Ranch. It is unclear if he continued the orchid business itself.

<sup>&</sup>lt;sup>8</sup> Fry, Patricia, Elise DePuydt and Craig Walker. *The Ojai Valley. An illustrated History*. Ojai, California: Ojai Valley Museum, 2017 (3rd edition), pp. 298-99. *Oxnard Press-Courier*, 3-29-1947.

<sup>&</sup>lt;sup>9</sup> California Death Index.

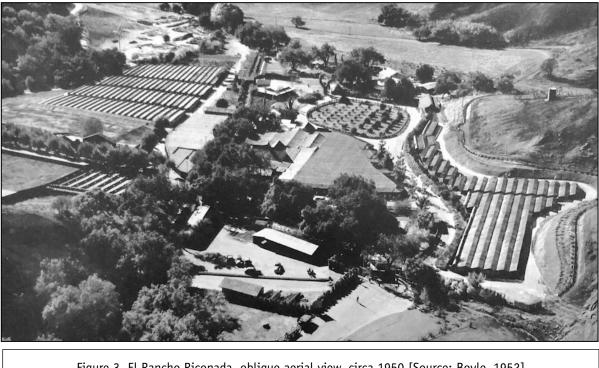


Figure 3. El Rancho Riconada, oblique aerial view, circa 1950 [Source: Boyle, 1952]

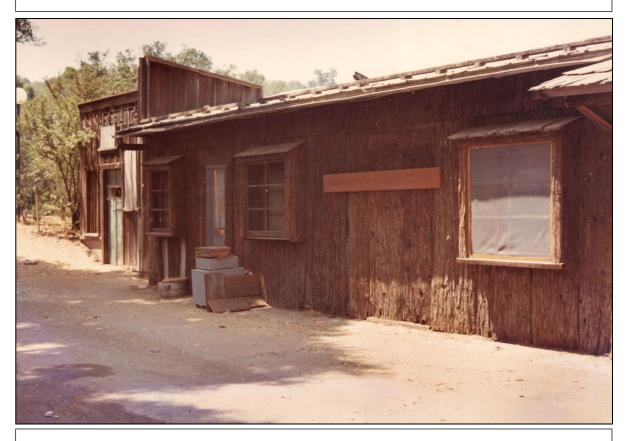


Figure 4. Portion of Orchid Town "Main Street" as it appeared circa 1970 [Source: Camp Ramah]

Smith also owned two other businesses, the Ojai Travel Service, and the Ed Smith Company. By the late 1950s the property was also being marketed, probably only briefly, as the Orchid Guest Home, offering furnished homes for retirement living. The proprietor was listed as Ruby Brown, although the property continued to be owned by Edward Smith until his death in 1969. The property was then sold to the present owners, Camp Ramah.<sup>10</sup>

Camp Ramah was originally established on the grounds of the Foothills Hotel in 1955 by the United Synagogues of America as a Jewish youth camp. Outgrowing the old hotel building, which was demolished during the 1970s, the camp relocated to El Rancho Rinconada with the purchase of the property in 1969. A substantial building program ensued during the 1970s to develop the property with camp facilities, including numerous dormitories, tent cabins, recreation facilities, and administrative and support buildings. Several of the buildings inherited from the prior owners of El Rancho Rinconada were adapted, altered and reused for the camp facilities. It is unclear if lath houses constructed by Louis Boyle for orchid culture were removed during this time or previously by Edward Smith. [Figure 4] <sup>11</sup>

### 4. Potential Historic Resources

The property consists of approximately 75 buildings, including residences, offices, staff housing, dormitories, tent cabins, swimming pool, and support buildings, constructed between 1924 the early 2000s. The large majority of buildings on the property today date from after it was purchased by the United Synagogue of America for use as Camp Ramah in 1969. These later buildings, constructed starting in 1972, will not be described in this report as they are less than 50 years of age. [Figure 5]

**[1]** Admin/Preschool/Laundry Cluster. This grouping consists of three, single-story buildings. The largest features an irregular plan with medium-pitched gable roofs, and is clad in wood lap siding. A river rock exterior chimney is attached on the southwestern elevation. Windows are mainly aluminum sliders with faux muntins. This building was originally constructed as a residence, circa 1924 according to Assessor Records, which would place it during the ownership of the property by Loring Farnam. Photos of the residence taken during the Boyle property ownership indicate that the residence was clad in board and batten in that time. The building is used today as administrative offices for Camp Ramah. A gable-roofed building located to the north of the residence is also clad in wood lap siding and features wood sash windows. It was originally used as a garage but has been remodeled and converted for use as a laundry. Located to the east of the former residence is a small building with a gable roof constructed of river rock. This building is referred to in Boyle (1952) as the "Stone Cool House" and in Assessor records as the "Meat House." A number of former window openings are blocked with concrete and stone. [Photos 1-4]

[2] Staff Lounge. This single story building features a compound gable roof with a raised gable monitor running along entire ridge line. Windows are primarily wood casements. Siding is vertically scored plywood panels replacing original board and batten siding. Assessor records state this building was constructed in 1924. It was used as an office and library by Boyle, though its purpose prior to that time is not known. The building is located above a river rock wall. [Photo 5]

<sup>&</sup>lt;sup>10</sup> Long Beach Independent Star-News, 10-11-1959.

<sup>&</sup>lt;sup>11</sup> Fry, 2017: p. 102.

## Historic Resources Report 385 Fairview Road, Ojai (Camp Ramah)

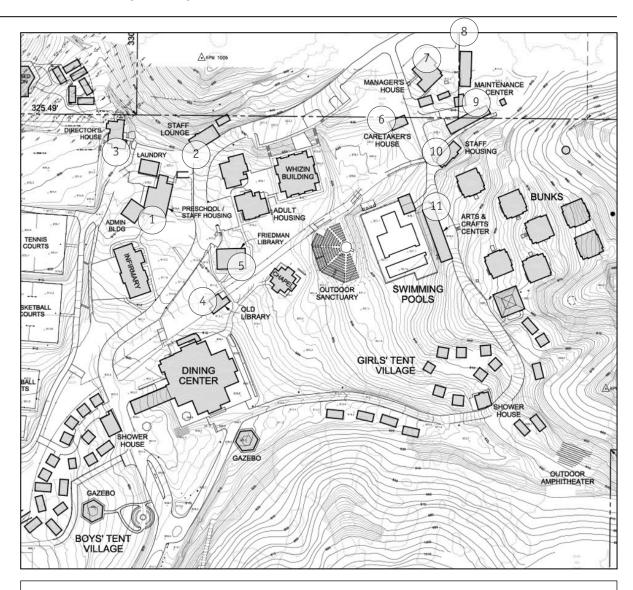


Figure 5. Site Plan [Source: Jane Carroll Design, annotations by SBRA]

**[3] Director's House.** This single-story building with an irregular plan features a combination of gable, hip and shed roof shapes, aluminum windows, and is sided mainly with plywood. No record of its date of construction could be found, but it appears to be a building from perhaps the 1920s or 1930s that has been substantially altered to its current appearance and configuration. [Photo 6]

**[4] Old Library.** This small gable-roofed building features an irregular plan, wood frame casement and large single-light fixed windows, and is clad in plywood siding. Assessor records indicate that it was constructed around 1939, during the Boyle property ownership. The likely original use was as a secondary residence. The original siding was rough cedar planks. [Photo 7]

**[5] Friedman Library.** This roughly rectangular-plan single story building features a somewhat tall central gable roofed mass surrounded by lower shed-roofed wings and porches. Windows are primarily wood frame. Siding is vertically-scored plywood, replacing the original board and batten. Assessor records indicate that it

was constructed around 1939, during the Boyle property ownership. The likely original use was as a secondary residence. Two additions were made to the building in 1991. [Photo 8]

**[6] Caretaker's House.** This very small residence features an L-plan and a variety of medium-pitched gable and shed roofs. Windows are aluminum frame with faux muntins. Siding is plywood. No record of its date of construction could be found, but it appears to be a building from perhaps the 1920s or 1930s that has been substantially altered to its current appearance and configuration. [Photo 9]

**[7] Manager's House and Garage.** This single-story residence with a detached garage features an irregular plan with hipped and hipped-gable roofs. It it is clad in wide butt siding. Windows are aluminum frame. The date of construction for this residence could not be determined. Its architectural appearance suggests a circa 1950 construction date, but according to the recollections of a longtime Camp Ramah employee, it was not on the property when it was acquired. [Photos 10, 11]

**[8] Entry Building.** This very small building features a rectangular plan and medium-pitched gable roof and is sided in board and batten. A centered door is flanked by sash windows below a tall "false front" parapet. The date of construction could not be determined, but it was probably constructed by Louis Boyle between 1939 and 1950 as the entry building for Orchid Town. It is the only building remaining from this period that retains any degree of its original "Western village" appearance. [Photo 12]

**[9] Maintenance Yard.** This grouping consists of two gable-roofed utility sheds roofed with corrugated metal and sided with corrugated metal and board and batten. No record of their date of construction could be found, but they appear to be buildings from perhaps the 1920s or 1930s. [Photos 13, 14]

**[10] Staff Housing.** This building features a rectangular plan and medium-pitched gable roof. Windows are aluminum and wood frame. The building is clad in plywood, probably replacing board and batten. No record of its date of construction or original use could be found, but it appears to be a building from perhaps the 1920s or 1930s that has been substantially altered to its current use, appearance and configuration. [Photo 15]

**[11]** Arts and Crafts Center. This single-story building features a rectangular plan and side-facing gable roof and is sided in plywood. No date of construction could be determined, but it appears to be the largest remaining fragment of the Orchid Town "Main Street" constructed by Louis Boyle either between 1939 and 1948, or from the period when reconstruction on the property occurred after the fire of 1948. As originally designed, it was divided into distinct storefronts that featured false front parapets, some with second stories. Siding was a variety of rustic materials including cedar planks clad in bark. This grouping also originally featured the two-story Orchid Town "hotel" at the northern end of the row. The hotel building was removed, along with the parapets, and the original siding materials replaced with plywood after the property was converted to camp use. [Photo 16]

**Miscellaneous Features.** A variety of other features on the property date from either the Orchid Town period or earlier, including a brick wishing well [Photo 17], a fountain assembled out of oyster shells [Photo 18] (vicinity of Manager's House); a stone-lined creek channel with stone bridge abutments [Photo 19]; and large fountain constructed from volcanic rock (vicinity of Library) [Photo 20].

#### 5. Eligibility of Historic Resources

National and California Registers: Significance and Eligibility

**NRHP Criterion A and CRHR Criterion 1.** This property is generally associated with the theme of agriculture in the Ojai Valley, but it is only generally associated with this theme and made no known significant contributions to this theme. Louis Boyle operated El Rancho Rinconada as Orchid Town from 1939 to circa 1952, during which time he transformed the property into his own whimsical version of a Western town, and added other quirky features. In doing so, it appears his intent was mainly to amuse himself, his family and friends, rather than to create an attraction with wider appeal to tourists, as his customers were mainly flower wholesalers in the Chicago area. Few of features that characterized the property from this period remain intact. The false-fronted buildings are substantially altered, and none of the acres of lath house Boyle constructed for his orchid culture business remain.

**NRHP Criterion B and CRHR Criterion 2.** The property is associated with Loring Farnam and Louis Boyle. Neither appear to have made significant contributions to the historical development of the Ojai Valley. Boyle was successful in the business of growing cymbidium orchids, and is claimed to have been the largest grower of these flowers in the world. It appears the source of these claims was Boyle himself, as no independent confirmation could be found.

**NRHP Criterion C and CRHR Criterion 3.** The property is an aggregation of buildings constructed in various architectural styles, mostly constructed or heavily altered after 1969. No individual buildings or the property as a whole embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.

**Summary Conclusion.** None of the evaluated buildings on this property appear to be eligible for listing on the NRHP or CRHR.

#### Ventura County Eligibility

As discussed above, this property does not appear to exemplify and reflect the theme of agriculture in the Ojai Valley (criteria 1 and 2). Also, as above, the property is not associated with the lives of historically significant individuals (criterion 3), nor does it represent a type, period, or method of construction, the work of a master, or possess high artistic value (criterion 5).

**Summary Conclusion.** None of the evaluated buildings on this property appear to be eligible for designation as a County of Ventura Landmark.



Photo 1. Administration Building, southern wing, viewed from south. [6-30-2018]



Photo 2. Administration Building/Preschool, viewed from southeast. [6-30-2018]



Photo 3. Preschool/Laundry, viewed from northeast. [6-30-2018]



Photo 4. Cold Room, viewed from northwest. [6-30-2018].



Photo 5. Staff Lounge, viewed from southwest. [6-30-2018]



Photo 6. Director's House, viewed from southeast. [6-30-2018]



Photo 7. Old Library, viewed from west. [6-30-18]



Photo 8. Friedman Library, viewed from southwest. [6-30-18]



Photo 9. Caretaker's House, viewed from northwest. [6-30-18]



Photo 10. Manager's House, viewed from west. [6-30-18]



Photo 11. Manager's House and garage, viewed from southwest. [6-30-18]



Photo 12. Entry Building, viewed from north. [6-30-18]



Photo 13. Maintenance Yard. [6-30-18]



Photo 14. Photo 13. Maintenance Yard. [6-30-18]



Photo 15. Staff Housing, viewed from west. [6-30-18]



Photo 16. Arts and Crafts Center, viewed from north. [6-30-18]



Photo 17. Wishing Well. [6-30-18]



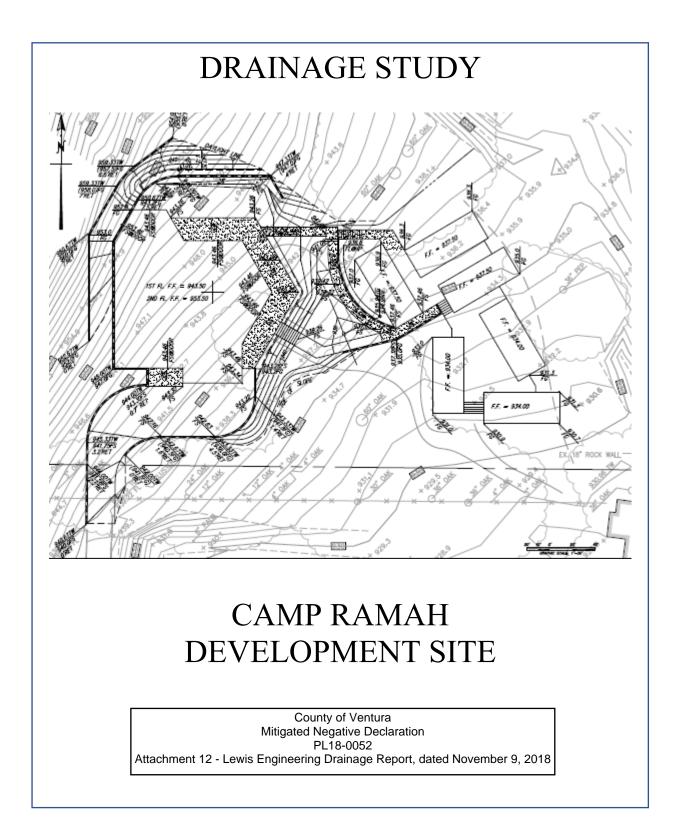
Photo 18. Oyster Shell Fountain. [6-30-18]



Photo 19. Stone-lined creek channel. [6-30-18]



Photo 20. Volcanic rock fountain. [6-30-18]





LEWIS ENGINEERING CIVIL - MUNICIPAL 1 1 4 3 E. MAIN STREET VENTURA, CALIFORNIA 93001 PHONE: (805)-648-1353

### TABLE OF CONTENTS

- SECTION 1 PROJECT DESCRIPTION **SECTION 2 - SITE CONDITIONS** Figure 1: Site Location Map SECTION 3 - EXISTING AND PROPOSED CONDITIONS 3.1: Existing Site Conditions Figure 2: Site Location Detail 3.2: Proposed Site Layout Figure 3: Proposed Site Plan **SECTION 4 - MITIGATION CRITERIA** SECTION 5 - PEAK FLOW ANALYSIS 5.1: Existing Condition Table 5.1: Existing Undeveloped Conditions Peak Flows 5.2: Proposed Condition 
   Table 5.2: Proposed Developed Conditions Peak Flows
   SECTION 6 – DEVELOPED PEAK MITIGATION CRITERIA 
   Table 6.1: Volume Detention Calculations Summary
   Figure 4: Camp Ramah Master Plan SECTION 7 – STORMWATER QUALITY SECTION 8 – SUMMARY & CONCLUSION
- SECTION 9 APPENDICES

Lewis Engineering

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1143 EAST MAIN STREET VENTURA, CALIFORNIA 93001

(805) 648-1353

November 9, 2018

Jane Carroll Design 206 N. Signal Street, R Ojai, CA 93023

RE: PRELIMINARY STORMWATER MANAGEMENT LETTER-REPORT FOR CAMP RAMAH NEW MACHON AND CABINS IN ASSOCIATION WITH CONDITIONAL USE PERMIT APPLICATION

Dear Jane:

This Letter-Report is prepared to address the Stormwater Management requirements associated with the proposed improvement project consisting of the construction of the New Machon meeting space and six cabins (Project). The project is located at 385 FAIRVIEW ROAD, OJAI.

#### Section 1: Project Description

The Project consists of constructing a New Machon meeting space of 6,289 square feet along with six cabins totaling 4,320 square feet for a total floor space of 10,609 square feet. The total footprint area is 7,130 square feet. Construction of walks, paths and retaining walls are proposed.

#### Section 2: Site Conditions

The site lies at the northerly extension of the existing Camp Ramah campus. The area is gently sloping open space with increasing slope gradient to the northwest behind the proposed Machon, and gentler slopes in the cabin area. The site is dotted with oak trees and a small wash on the easterly side.

Adjacent to the site on the west is open space and to the north and east is the Los Padres National Forest. The Project is bordered on the south by Camp Ramah's play field and the director's house and the rest of the Camp Ramah facilities beyond.



Figure 1: Site Location Map

### Section 3: Existing and Proposed Conditions

Section 3 presents the existing site conditions and an overview of the proposed site development.

### **3.1 Existing Site Conditions**

The site flows naturally via overland flow to a small open wash east of the new buildings. This wash continues through the Camp Ramah site, turning westerly and continuing as an open channel along the southerly side of Barnard Ranch, then discharging into a culvert at Fairview Road.

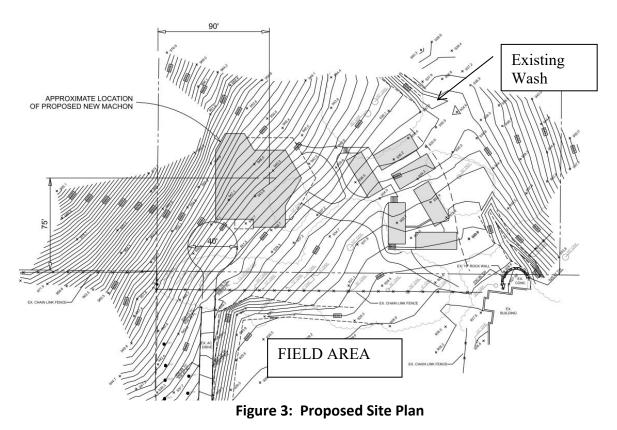


Figure 2: Site Location Detail

The existing site is currently vacant land, with all pervious area, as shown in Figure 2.

### 3.2 Proposed Site Layout

Figure 3 presents the proposed configuration of the developed area and the sport field area directly south (to remain).



#### Section 4: Mitigation Criteria

Mitigation criteria for small projects, i.e. less than 5-acres in size, dictates reduction of the 100-Year Developed condition to 10-year developed condition.

#### Section 5: Peak Runoff Evaluation

The site lies in VCWPD Zone 1 Ventura River Watershed. The site has a 24-hr, 50-year isohyetal of 11" and lies in NOAA Rainfall Zone Vta3 – Ojai. Site statistics and hydrology reference data exhibits are included as Attachment A.

Initial calculations using the VC Time of Concentration (Tc) spreadsheet resulted in error values as the overland flow length and channelized flow are minimal in this evaluation. See Attachment B – Watershed Exhibit, Site Development Area. A minimum Tc was assumed at 5 minutes, a conservative estimate yielding highest intensity values for pre- and post-developed conditions assessments. A summary of Existing and Proposed Conditions follows.

#### 5.1 Existing Conditions

Rainfall intensities based on a Tc of 5 minutes are presented in Table 5.1. Based on Soil No. 1 – NRCS Soil D, Exhibit 5A the corresponding C values were obtained. Resultant peak runoff for each storm event is summarized based on the drainage area of 1.39 acres (refer to Attachment B for delineation). Upstream area to the development is approximately 0.75 acres with the remaining 0.64 acres the approximate developed site area.

Intensity (based on Tc = 5 min)	Intensity (Exhibit 4A)	C (Imp = 0%) (Exhibit 5A – Soil 1)	Q <sub>peak</sub> Calculated (CFS)
		· · · ·	
100-Year	6.612	0.56	5.147
50-Year	5.784	0.55	4.422
25-Year	4.992	0.54	3.747
10-Year	3.996	0.53	2.944

Table 5.1: Existing Undeveloped Conditions Peak Flows

#### 5.2 Proposed Conditions

Using site plan and assuming a 1' overhang for the roof area, the impervious areas of the New Machon Building and Cabins 1-6, including ADA ramps, patio and 1 parking spot = 9213.72 which is approximately 15% of the "site" drainage area. Using Impervious curve of 20% on Exhibit 5A the runoff coefficients for the developed condition are shown in Table 2, as well as the resulting peak flows for each storm event.

Intensity (based on Tc =	Intensity	C (Imp = 20%)	Q <sub>peak</sub>
5 min)	(Exhibit 4A)	(Exhibit 5A – Soil 1)	Calculated (CFS)
100-Year	6.612	0.64	5.88
50-Year	5.784	0.63	5.07
25-Year	4.992	0.62	4.30
10-Year	3.996	0.62	3.44

Table 5.2: Proposed Developed Conditions Peak Flows

Drainage features should be sized to convey the peak runoff of the developed condition. The New Machon developed site runoff enters the existing ball field to the south of the development area and continues as sheet flow across the field.

#### Section 6: Developed Peak Mitigation Criteria

The developed condition results in minor increase in impervious area exists at less than 2% of the existing Camp Ramah development (see **Figure 4: Camp Ramah Master Plan**). Stormwater runoff will continue to flow overland in a southerly direction to the sports field directly to the south where it will be detained in the grassy field as in the current condition.

Small projects mitigate from 100-year developed down to 10-year developed peak condition. Table 6.1 provides the required volume summary.

	calculation Summary Smann	Tojects Less than 5-acres
Volume Calculation	100-year, 24-Hour Depth	10-Year, 24-Hour Depth
Rainfall (in)	12.50	7.75
Yield (in)		4.75
Depression Storage (in)		0.5
Net Yield (in)		4.25
Impervious Area (ac)	9,213.72 (SF)	0.211 ac
Volume Increase – Max Basin Size	= (4.75/12)*0.211	0.0835 ac-ft
		3,638.16 CF

#### Table 6.1: Volume Detention Calculation Summary – Small Projects Less than 5-acres

Approximate field area to the south is 33,922 SF. An inch and a half of storage depth provided in the ball field is 4,240 CF, which exceeds the detention criteria.

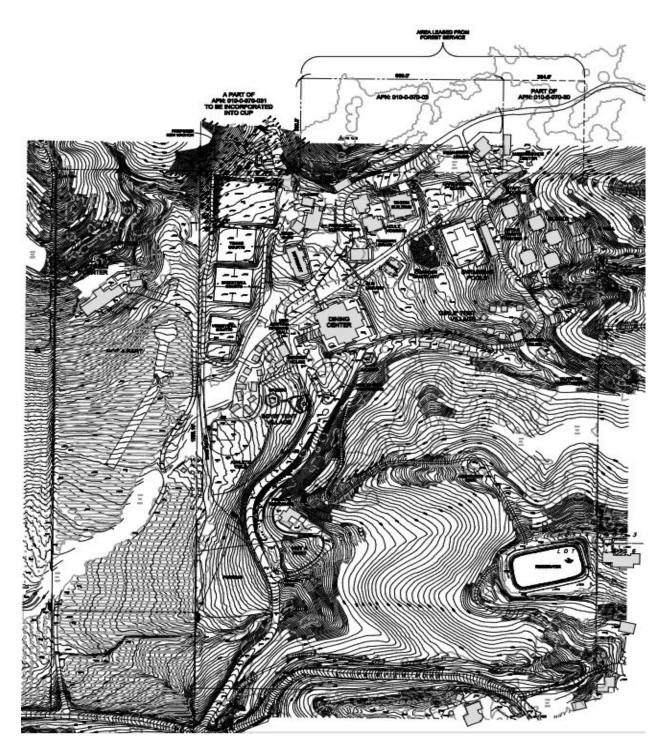


Figure 4: Camp Ramah Master Plan

#### Section 7: Stormwater Quality Considerations

A small increase in impervious area is proposed with the addition of approximately 9,213 square feet of roof area and a parking area. The project is defined as a Redevelopment Project with land disturbing activity that results in the creation of addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site per the Technical Guidance Manual Section 1.5, Applicability. The project's redevelopment results in an alteration of less than 50 percent of impervious surfaces of a previously existing development and therefore must mitigate only the altered portion of the redevelopment project area. The total disturbed area is 16,939 square feet. The project is therefore not subject to the requirements of the Los Angeles Regional Water Quality Control Board for the preparation of a Stormwater Pollution Prevention Plan. The project will be subject to construction BMPs per the County Stormwater High Risk (SW-HR) BMP list.

#### Section 8: Summary & Conclusion

Local drainage patterns are preserved, and no storm water diversions are generated. No erosion concerns are anticipated. The improvements will not adversely impact downstream property owners.

Post-construction stormwater management requirements will be met and construction BMPs will be prescribed by Form SW-HR at the time of grading permit application.

Sincerely,

LEWIS ENGINEERING

Jane Montag

Jane Lewis Montague, P.E., CFM RCE 40877

#### SECTION 9: SUMMARY OF ATTACHMENTS/REFERENCES

ATTACHMENT A – SITE STATISTICS AND HYDROLOGY REFERENCE DATA

-NOAA Rainfall Zone Map and WPD Zone Map -Soil Number -Redline Proximity -Contour Maps (10-year to 100-year) -NOAA Time of Concentration and Intensities for Sub-Areas -Runoff Coefficient Curve for Soil #1

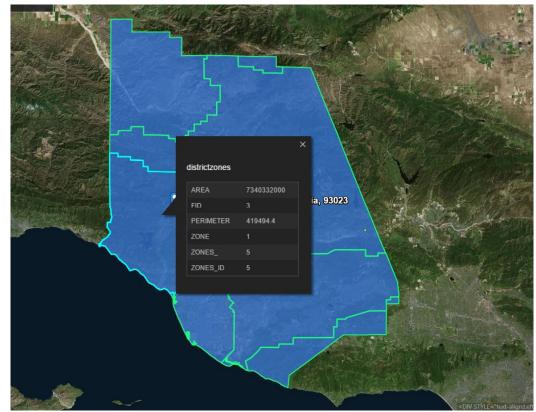
ATTACHMENT B - WATERSHED EXHIBIT, SITE DEVELOPMENT AREA

#### ATTACHMENT A – SITE STATISTICS AND HYDROLOGY REFERENCE DATA

Site Statistics				
Site Area	1.39	acres		
Upstream	0.75	acres		
Develompent Site	0.64	acres		
Buildings Proposed	FOOTPRINT +	1' ROOF OVERHANG		
New Machon	4173.63			
Cabin 1	583.89			
Cabin 2	572.46			
Cabin 3	556.72			
Cabin 4	556.74			
Cabin 5	567.94			
Cabin 6	556.74			
TOTAL ROOF AREA	7568.12			
Impervious Surface				
ADA Ramps	549.98			
Patio	976.91			
ADA Parking	118.71			
TOTAL IMP SURFACE	1645.6			
Total Impervious Area	9213.72	0.211517906		
Percent of Total	0.15	*Use 20% Curve on I	Exhibit 5a	
Hydrology				
Based on Tc = 5 min	Intensity (in/hr)	C <sub>imp</sub> Undeveloped Exhibit 5a-Soil 1	Drainage Area (Acres)	Q <sub>peak</sub> (CFS)
100-Year	6.612	0.56	1.39	5.147
50-Year	5.784	0.55	1.39	4.422
25-Year	4.992	0.54	1.39	3.747
10-Year	3.996	0.53	1,39	2.944
Drainage Area (SF)			60548.4	2.5.1.1
Developed Condition				
Based on Tc = 5min	Intensity (In/hr)	C <sub>imp</sub> Developed Exhibit 5a-Soil 1*	Drainage Area (Acres)	Q <sub>peak</sub> (CFS)
100-Year	6.612	0.64	1.39	5.88
50-Year	5.784	0.63	1.39	5.07
25-Year	4.992	0.62	1.39	4.30
10-Year	3.996	0.62	1.39	3.44



#### NOAA RAINFALL ZONE



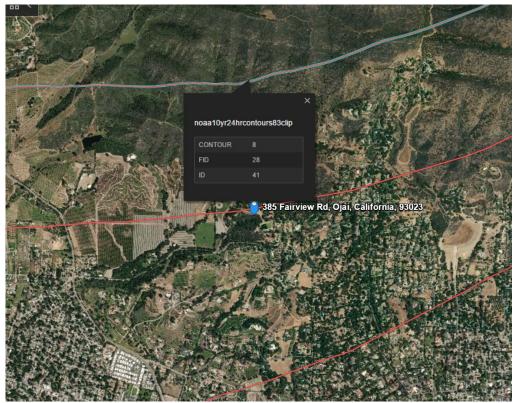
WATERSHED PROTECTION DISTRICT ZONE 1



#### VENTURA COUNTY SOIL NO.



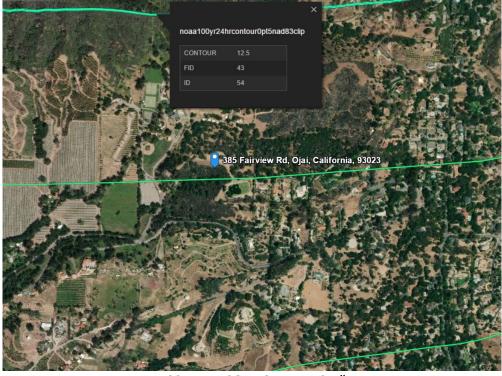
COUNTY REDLINE DOWNSTREAM OF DEVELOPMENT AREA



10-YEAR EVENT ~7.75"

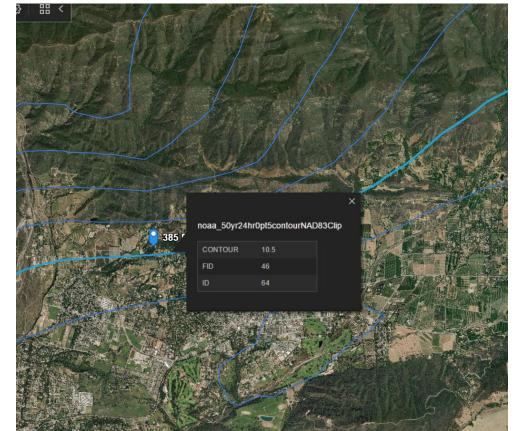
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25-YEAR CONTOUR ~9.5"



100-YEAR CONTOUR - ~12.5"

50-YEAR CONTOUR ~11"



#### **RAINFALL INTENSITY TABLES**

			ITENE	TIES	100.2																						2
		FALL IN	TENS	HE3-	100-11	x																					
NOAA Zone Name	ID														nsities							-					
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
N&S Br. Arroyo Conejo-ASR	Con2	4.524	4.096	3.790	3.561	3.383	3.240	3.069	2.926	2.805	2.702	2.612	2.518	2.435	2.361	2.295	2.236	2.182	2.133	2.089	2.048	2.010	1.976	1.944	1.914	1.885	1.8
Arroyo Las Posas	ALP1	4.404	3.988	3.691	3.468	3.295	3.156	2.989	2.850	2.732	2.631	2.544	2.451	2.368	2.295	2.229	2.170	2.117	2.068	2.024	1.983	1.946	1.911	1.879	1.849	1.821	1.7
Carpenteria Coast	Carp1	6.228	5.640	5.220	4.905	4.660	4.464	4.228	4.032	3.866	3.723	3.600	3.472	3.359	3.259	3.169	3.088	3.015	2.948	2.888	2.832	2.781	2.734	2.690	2.649	2.608	2.5
Conejo Creek	Con3	4.176	3.780	3.497	3.285	3.120	2.988	2.830	2.698	2.586	2.491	2.408	2.325	2.252	2.187	2.129	2.077	2.029	1.987	1.947	1.911	1.878	1.848	1.819	1.793	1.768	1.7
Cuyama	Cuy1	5.556	5.032	4.658	4.377	4.159	3.984	3.773	3.598	3.450	3.322	3.212	3.102	3.004	2.918	2.841	2.771	2.708	2.651	2.598	2.551	2.506	2.466	2.428	2.393	2.356	2.3
Hopper	Hop1	5.580	5.052	4.675	4.392	4.172	3.996	3.785	3.614	3.468	3.344	3.233	3.136	3.050	2.976	2.911	2.851	2.798	2.749	2.704	2.663	2.624	2.589	2.557	2.528	2.496	2.4
Lake Casitas	Vta4	7.140	6.464	5.981	5.619	5.337	5.112	4.843	4.618	4.428	4.265	4.124	3.984	3.860	3.750	3.652	3.563	3.483	3.410	3.343	3.283	3.226	3.175	3.127	3.082	3.038	2.9
Lower Sespe Pole	Sespe4	5.856	5.302	4.906	4.610	4.379	4.194	3.972	3.790	3.635	3.503	3.386	3.284	3.194	3.116	3.046	2.983	2.926	2.874	2.826	2.783	2.742	2.705	2.671	2.639	2.608	2.5
Lower Ventura	Vta6	5.448	4.932	4.563	4.287	4.072	3.900	3.694	3.522	3.377	3.252	3.144	3.039	2.947	2.865	2.792	2.726	2.666	2.612	2.562	2.517	2.475	2.437	2.401	2.368	2.335	2.3
Malibu Coastal	Malbu1	5.136	4.652	4.306	4.047	3.845	3.684	3.489	3.326	3.188	3.070	2.968	2.862	2.769	2.687	2.613	2.546	2.486	2.431	2.381	2.335	2.293	2.254	2.218	2.184	2.151	2.1
N Fk Matilija	Vta2	7.212	6.530	6.043	5.678	5.393	5.166	4.893	4.665	4.472	4.307	4.164	4.038	3.926	3.827	3.738	3.658	3.586	3.520	3.460	3.405	3.354	3.308	3.264	3.224	3.185	3.1
Arroyo Conejo	Con1	4.932	4.468	4.137	3.888	3.695	3.540	3.352	3.196	3.064	2.950	2.852	2.749	2.658	2.577	2.504	2.439	2.380	2.326	2.277	2.233	2.191	2.153	2.118	2.085	2.053	2.0
Ojai	Vta3	6.612	5.988	5.542	5.208	4.948	4.740	4.490	4.282	4.106	3.955	3.824	3.703	3.597	3.502	3.421	3.347	3.281	3.221	3.165	3.115	3.066	3.021	2.979	2.940	2.904	2.8
Oxnard-Nyeland	Rev2	4 104	3716	3 4 3 9	3 231	3 069	2 940	2 785	2 656	2 547	2 453	2 372	2 293	2 223	2 161	2 106	2 056	2 011	1 970	1.932	1 898	1 866	1 837	1 810	1 785	1 758	17
Prince-Arundell	Prin1	4.932	4.466	4.133	3.884	3.689	3.534	3.347	3.191	3.059	2.946	2.848	2.755	2.672	2.599	2.533	2.474	2.421	2.372	2.328	2.287	2.250	2.215	2.183	2.153	2.124	2.0
Revolon-Calleguas	Rev3	3.816	3.454	3.195	3.001	2.851	2.730	2.587	2.467	2.366	2.279	2.204	2.129	2.063	2.005	1.952	1.905	1.862	1.823	1.788	1.756	1.726	1.698	1.672	1.649	1.625	1.6
San Anton-CLarga	Vta5	6.108	5.532	5.121	4.812	4.572	4.380	4.149	3.956	3.793	3.653	3.532	3.417	3.315	3.225	3.144	3.071	3.006	2.946	2.891	2.841	2.795	2.753	2.713	2.677	2.643	2.6
SCR aby Freeman	SCR2	5.064	4.586	4.245	3.989	3.789	3.630	3.437	3.277	3.141	3.025	2.924	2.831	2.748	2.675	2.610	2.551	2.498	2.449	2.405	2.365	2.327	2.293	2.261	2.231	2.202	2.1
SCR to Ocean	SCR3	4.416	4.000	3.703	3.480	3.307	3.168	3.000	2.860	2.742	2.640	2.552	2.469	2.396	2.331	2.273	2.221	2.174	2.131	2.091	2.056	2.022	1.992	1.964	1.937	1.908	1.8
SCR-Lower Piru	SCR1	5.340	4.836	4.476	4.206	3.996	3.828	3.625	3.456	3.313	3.190	3.084	2.985	2.898	2.820	2.751	2.688	2.631	2.580	2.533	2.490	2.450	2.414	2.380	2.349	2.317	2.2
Sespe Aby Bear	Sespe2	6.732	6.096	5.642	5.301	5.036	4.824	4.569	4.356	4.176	4.022	3.888	3.763	3.653	3.555	3.469	3.392	3.322	3.258	3.200	3.147	3.097	3.050	3.007	2.967	2.930	2.8
Sespe Aby Grand	Sespe3	6.180	5.596	5.179	4.866	4.623	4.428	4.193	3.998	3.833	3.691	3.568	3.459	3.362	3.276	3.199	3.130	3.067	3.011	2.959	2.911	2.867	2.827	2.789	2.755	2.722	2.6
Sespe Aby Wheeler	Sespe1	7.380	6.684	6.187	5.814	5.524	5.292	5.012	4.778	4.580	4.411	4.264	4.106	3.966	3.841	3.735	3.640	3.553	3.475	3.403	3.338	3.273	3.214	3.159	3.108	3.060	3.0
Simi Valley	Simi2	5.076	4.596	4.253	3.996	3.796	3.636	3.444	3.284	3.149	3.033	2.932	2.824	2.728	2.643	2.567	2.498	2.436	2.380	2.328	2.281	2.238	2.198	2.160	2.126	2.092	2.0
So Mtn to Mpk	Rev1	4.788	4.334	4.010	3.767	3.577	3.426	3.245	3.095	2.968	2.859	2.764	2.672	2.591	2.519	2.459	2.405	2.356	2.312	2.271	2.234	2.196	2.162	2.129	2.099	2.072	2.0
Todd to Timber	Todd1	6.228	5.640	5.220	4.905	4.660	4.464	4.227	4.030	3.863	3.720	3.596	3.481	3.379	3.290	3.215	3.148	3.086	3.031	2.980	2.933	2.886	2.842	2.802	2.764	2.729	2.6
Jpper Arroyo Simi	Simi1	5.388	4.880	4.517	4.245	4.033	3.864	3.660	3.490	3.346	3.223	3.116	2.992	2.882	2.785	2.697	2.619	2.548	2.483	2.425	2.371	2.321	2.275	2.232	2.193	2.154	2.1
Upper Harmon	Harm1	5.340	4.836	4.476	4.206	3.996	3.828	3.626	3.458	3.316	3.194	3.088	2.988	2.900	2.821	2.751	2.688	2.631	2.579	2.531	2.488	2.448	2.411	2.377	2.345	2.315	2.2
Upper Matilija	Vta1	8.244	7.466	6.910	6.494	6.169	5,910	5.599	5,339	5.119	4,931	4,768	4.592	4.436	4.297	4,174	4.063	3.962	3.871	3,787	3,711	3.640	3.575	3.515	3,459	3.406	3.
Upper Piru	Piru1	5,760	5.216	4.827	4.536	4,309	4.128	3.910	3,728	3.574	3.442	3.328	3.212	3,110	3.019	2,937	2.864	2.798	2.737	2.682	2.632	2.586	2.543	2.503	2.466	2.426	2.3
Upper Sta Paula	StPaul1	6.948	6.294	5.827	5.477	5,204	4.986	4.721	4.501	4.314	4.155	4.016	3.885	3,770	3.668	3,583	3.506	3.437	3.374	3.317	3.264	3,211	3.161	3.116	3.073	3.034	2.9

#### **APPENDIX** A

EXHIBITS

EXHIBIT 4B. NOAA TC RAINFALL INTENSITIES- 50-YR

NOAA Zone Name	ID												Tc (mi	in) / Inte	ensities	(in/hr)											
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	3
N&S Br. Arroyo Conejo-ASR	Con2	4.044	3.660	3.386	3.180	3.020	2.892	2.739	2.612	2.504	2.412	2.332	2.249	2.175	2.109	2.051	1.998	1.950	1.907	1.867	1.831	1.798	1.767	1.738	1.712	1.686	1.663
Arroyo Las Posas	ALP1	3.960	3.586	3.319	3.119	2.963	2.838	2.688	2.563	2.457	2.367	2.288	2.205	2.131	2.065	2.007	1.954	1.906	1.863	1.823	1.787	1.754	1.723	1.694	1.668	1.643	1.61
Carpenteria Coastal	Carp1	5.640	5.108	4.728	4.443	4.221	4.044	3.830	3.652	3.501	3.372	3.260	3.144	3.042	2.951	2.870	2.797	2.731	2.671	2.616	2.566	2.519	2.476	2.437	2.400	2.363	2.32
Conejo Creek	Con3	3.720	3.368	3.117	2.928	2.781	2.664	2.523	2.406	2.307	2.222	2.148	2.074	2.008	1.950	1.899	1.852	1.810	1.772	1.737	1.706	1.676	1.648	1.623	1.599	1.577	1.55
Cuyama	Cuy1	4.788	4.336	4.013	3.771	3.583	3.432	3.250	3.098	2.970	2.859	2.764	2.669	2.586	2.511	2.445	2.385	2.331	2.282	2.237	2.196	2.158	2.123	2.090	2.060	2.029	1.99
Hopper	Hop1	4.992	4.520	4.183	3.930	3.733	3.576	3.387	3.234	3.105	2.994	2.894	2.807	2.730	2.665	2.606	2.554	2.506	2.463	2.423	2.387	2.351	2.320	2.292	2.266	2.238	2.21
Lake Casitas	Vta4	6.324	5.728	5.302	4.983	4.735	4.536	4.296	4.096	3.927	3.782	3.656	3.532	3.423	3.325	3.238	3.160	3.089	3.025	2.966	2.912	2.862	2.817	2.774	2.735	2.696	2.66
Lower Sespe Pole	Sespe4	5.196	4.706	4.356	4.093	3.889	3.726	3.529	3.366	3.229	3.111	3.007	2.917	2.837	2.767	2.704	2.648	2.597	2.550	2.508	2.469	2.433	2.400	2.369	2.341	2.314	2.28
Lower Ventura	Vta6	4.824	4.368	4.042	3.798	3.608	3.456	3.274	3.122	2.994	2.883	2.788	2.695	2.613	2.540	2.475	2.416	2.363	2.315	2.270	2.230	2.193	2.158	2.127	2.097	2.068	2.04
Malibu Coastal	Malbu1	4.536	4.108	3.802	3.573	3.395	3.252	3.080	2.936	2.814	2.710	2.620	2.527	2.445	2.372	2.307	2.248	2.195	2.147	2.102	2.062	2.025	1.990	1.959	1.929	1.900	1.87
N Fk Matilija	Vta2	6.396	5.792	5.361	5.037	4.785	4.584	4.342	4.140	3.969	3.823	3.696	3.583	3.484	3.396	3.317	3.246	3.182	3.123	3.070	3.021	2.976	2.934	2.896	2.860	2.825	2.79
Arroyo Conejo	Con1	4.380	3.964	3.667	3.444	3.271	3.132	2.967	2.830	2.714	2.614	2.528	2.437	2.356	2.284	2.220	2.162	2.110	2.062	2.019	1.979	1.942	1.909	1.877	1.848	1.820	1.79
Ojai	Vta3	5.784	5.238	4.848	4.556	4.328	4.146	3.926	3.743	3.588	3.455	3.340	3.235	3.141	3.059	2.988	2.924	2.866	2.814	2.766	2.722	2.679	2.640	2.603	2.569	2.538	2.50
Oxnard Pin-Nyeland	Rev2	3.708	3.356	3.105	2.916	2.769	2.652	2.512	2.396	2.298	2.213	2.140	2.069	2.006	1.951	1.901	1.856	1.815	1.779	1.745	1.714	1.686	1.659	1.635	1.613	1.588	1.56
Prince-Arundell	Prin1	4.452	4.032	3.732	3.507	3.332	3.192	3.024	2.884	2.766	2.664	2.576	2.491	2.416	2.350	2.291	2.237	2.189	2.145	2.104	2.067	2.034	2.002	1.973	1.946	1.919	1.894
Revolon-Calleguas	Rev3	3.420	3.098	2.868	2.696	2.561	2.454	2.325	2.217	2.126	2.048	1.980	1.913	1.854	1.801	1.754	1.712	1.674	1.639	1.607	1.578	1.551	1.526	1.504	1.482	1.461	1.44
San Anton-CLarga	Vta5	5.400	4.888	4.522	4.248	4.035	3.864	3.660	3.490	3.346	3.223	3.116	3.015	2.925	2.846	2.775	2.711	2.653	2.601	2.553	2.508	2.468	2.431	2.396	2.364	2.334	2.30
SCR aby Freeman	SCR2	4.560	4.130	3.823	3.593	3.413	3.270	3.097	2.953	2.831	2.727	2.636	2.552	2.477	2.411	2.351	2.298	2.250	2.206	2.166	2.129	2.095	2.064	2.035	2.008	1.982	1.95
SCR to Ocean	SCR3	4.044	3.662	3.389	3.185	3.025	2.898	2.745	2.617	2.509	2.416	2.336	2.260	2.193	2.134	2.081	2.033	1.990	1.950	1.914	1.882	1.851	1.823	1.797	1.773	1.746	1.72
SCR-Lower Piru	SCR1	4.728	4.282	3.963	3.725	3.539	3.390	3.211	3.061	2.934	2.826	2.732	2.645	2.567	2.499	2.437	2.382	2.332	2.287	2.245	2.207	2.172	2.140	2.110	2.082	2.054	2.02
Sespe Aby Bear	Sespe2	5.880	5.326	4.930	4.634	4.403	4.218	3.995	3.809	3.652	3.517	3.400	3.291	3.194	3.109	3.034	2.966	2.905	2.850	2.799	2.753	2.708	2.668	2.630	2.595	2.563	2.53
Sespe Aby Grand	Sespe3	5.424	4.912	4.546	4.272	4.059	3.888	3.683	3.512	3.367	3.243	3.136	3.039	2.954	2.878	2.810	2.749	2.694	2.643	2.598	2.556	2.517	2.481	2.448	2.417	2.389	2.36
Sespe Aby Wheeler	Sespe1	6.588	5.966	5.522	5.189	4.929	4.722	4.473	4.265	4.089	3.939	3.808	3.666	3.541	3.430	3.335	3.250	3.173	3.103	3.039	2.981	2.923	2.870	2.820	2.775	2.732	2.693
Simi Valley	Simi2	4.548	4.118	3.811	3.581	3.401	3.258	3.085	2.941	2.819	2.715	2.624	2.527	2.442	2.366	2.298	2.237	2.182	2.131	2.086	2.044	2.005	1.969	1.936	1.905	1.875	1.84
So Mtn to Moorpark	Rev1	4.260	3.858	3.571	3.356	3.188	3.054	2.892	2.757	2.643	2.545	2.460	2.378	2.306	2.242	2.189	2.141	2.097	2.058	2.022	1.989	1.956	1.925	1.896	1.869	1.845	1.82
Todd to Timber	Todd1	5.436	4.922	4.555	4.280	4.065	3.894	3.688	3.517	3.372	3.248	3.140	3.039	2.950	2.871	2.806	2.746	2.693	2.644	2.600	2.559	2.518	2.480	2.444	2.412	2.381	2.35
Upper Arroyo Simi	Simi1	4.776	4.324	4.001	3.759	3.571	3.420	3.240	3.090	2.963	2.854	2.760	2.650	2.553	2.467	2.390	2.321	2.258	2.201	2.149	2.102	2.058	2.017	1.980	1.945	1.910	1.87
Upper Harmon	Harm1	4.824	4.370	4.046	3.803	3.613	3.462	3.279	3.127	2.998	2.888	2.792	2.702	2.622	2.551	2.487	2.430	2.378	2.331	2.288	2.249	2.213	2.179	2.148	2.120	2.093	2.06
Upper Matilija	Vta1	7.428	6.726	6.225	5.849	5.556	5.322	5.040	4.805	4.606	4.436	4.288	4.130	3.991	3.867	3.757	3.657	3.567	3.486	3.411	3.343	3.279	3.221	3.167	3.117	3.070	3.02
Upper Piru	Piru1	4.980	4.510	4.174	3.923	3.727	3.570	3.382	3.225	3.092	2.979	2.880	2.779	2.690	2.611	2.541	2.477	2.419	2.367	2.319	2.276	2.235	2.198	2.164	2.132	2.097	2.06
Upper Sta Paula Ck	StPaul1	6.048	5.476	5.067	4.761	4.523	4.332	4.103	3.912	3,750	3.612	3.492	3.378	3.278	3.189	3.115	3.048	2.987	2.933	2.882	2.837	2,790	2.747	2,707	2.670	2.636	2.60

#### EXHIBITS

#### EXHIBIT 4C. NOAA TC RAINFALL INTENSITIES- 25-YR

NOAA Zone Name	ID	3					-						Tc (m	in) / Inte	nsities	(in/hr)											
	2.11	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	.27	28	29	30
N&S Br. Arroyo		0.570		0.007		0.075	0.500	0.407	0.045						1 070				4 000	1.055	4 000						4 470
Conejo-ASR	Con2	3.576	3.238	2.997	2.816	2.675	2.562	2.427	2.315	2.220	2.139	2.068	1.994	1.928	1.870	1.818	1.771	1.729	1.690	1.655	1.623	1.593	1.565	1.540	1.516	1.494	1.473
Arroyo Las Posas	ALP1	3.528	3.196	2.959	2.781	2.643	2.532	2.398	2.286	2.191	2.110	2.040	1.966	1.900	1.841	1.789	1.742	1.699	1.661	1.625	1.593	1.563	1.536	1.510	1.487	1.464	1.443
Carpenteria	Carp1	5.004	4.530	4.191	3.938	3.740	3.582	3.393	3.235	3.102	2.987	2.888	2.785	2.695	2.614	2.542	2.477	2.418	2.365	2.316	2.272	2.230	2.192	2.157	2.125	2.092	2.061
Conejo Creek	Con3	3.288	2.978	2.757	2.590	2.461	2.358	2.233	2.129	2.041	1.965	1.900	1.834	1.776	1.725	1.679	1.638	1.601	1.567	1.537	1.509	1.482	1.458	1.435	1.414	1.395	1.376
Cuyama	Cuy1	4.068	3.684	3.410	3.204	3.044	2.916	2.762	2.634	2.526	2.433	2.352	2.271	2.200	2.137	2.080	2.029	1.983	1.941	1.903	1.868	1.835	1.805	1.778	1.752	1.725	1.700
Hopper	Hop1	4.368	3.956	3.662	3.441	3.269	3.132	2.966	2.832	2.719	2.622	2.534	2.458	2.390	2.333	2.282	2.236	2.194	2.156	2.121	2.090	2.058	2.032	2.007	1.984	1.959	1.937
Lake Casitas	Vta4	5.580	5.052	4.675	4.392	4.172	3.996	3.785	3.610	3.462	3.334	3.224	3.115	3.018	2.932	2.855	2.786	2.723	2.667	2.615	2.567	2.523	2.483	2.445	2.411	2.377	2.345
Lower Sespe Pole	Sespe4	4.548	4.118	3.811	3.581	3.401	3.258	3.085	2.943	2.823	2.720	2.629	2.549	2.479	2.418	2.363	2.314	2.270	2.229	2.192	2.159	2.127	2.098	2.071	2.046	2.023	2.001
Lower Ventura	Vta6	4.284	3.880	3.591	3.375	3.207	3.072	2.909	2.774	2.659	2.561	2.476	2.394	2.321	2.257	2.199	2.147	2.100	2.057	2.018	1.982	1.950	1.919	1.891	1.865	1.839	1.815
Malibu Coastal	Malbu1	3.984	3.608	3.339	3.138	2.981	2.856	2.705	2.580	2.474	2.383	2.304	2.222	2.150	2.085	2.028	1.976	1.929	1.887	1.848	1.812	1.779	1.749	1.721	1.695	1.669	1.646
N Fk Matilija	Vta2	5.616	5.084	4.704	4.419	4.197	4.020	3.808	3.632	3.483	3.355	3.244	3.145	3.058	2.981	2.911	2.849	2.793	2.741	2.694	2.652	2.612	2.576	2.542	2.510	2.480	2.451
Arroyo Conejo	Con1	3.840	3.476	3.216	3.021	2.869	2.748	2.603	2.482	2.380	2.292	2.216	2.136	2.065	2.002	1.946	1.895	1.849	1.807	1.769	1.735	1.702	1.673	1.645	1.620	1.595	1.572
Ojai	Vta3	4.992	4.520	4.183	3.930	3.733	3.576	3.387	3.230	3.097	2.983	2.884	2.793	2.712	2.641	2.579	2.524	2.475	2.429	2.388	2.350	2.313	2.279	2.247	2.218	2.190	2.165
Oxnard-Nyeland	Rev2	3.312	3.000	2.777	2.610	2.480	2.376	2.251	2.146	2.058	1.982	1.916	1.852	1.796	1.746	1.701	1.661	1.625	1.591	1.561	1.534	1.508	1.484	1.463	1.442	1.420	1.400
Prince-Arundell	Prin1	4.008	3,630	3.360	3,158	3.000	2.874	2.722	2.595	2.488	2.396	2.316	2.240	2.173	2.113	2.060	2.012	1.969	1.929	1.893	1.860	1.830	1.802	1.776	1.751	1.727	1,704
Revolon-Calleguas	Rev3	3.048	2.762	2.558	2.405	2.285	2.190	2.074	1.977	1.895	1.825	1.764	1.704	1.652	1.605	1.563	1.525	1.491	1.460	1.431	1.406	1.382	1.360	1.339	1.320	1.301	1.284
San Anton-CLarga	Vta5	4.704	4.260	3.943	3.705	3.520	3.372	3.194	3.046	2.921	2.813	2.720	2.632	2.553	2.484	2.422	2.366	2.315	2.269	2.227	2.189	2.154	2.121	2.091	2.063	2.036	2.012
SCR aby Freeman	SCR2	4.044	3.662	3.389	3.185	3.025	2.898	2.745	2.617	2.509	2.416	2.336	2.261	2.195	2.137	2.084	2.037	1.994	1.955	1.920	1.888	1.858	1.830	1.804	1.781	1.757	1.735
SCR to Ocean	SCR3	3.648	3.304	3.058	2.874	2,731	2.616	2.479	2.364	2.267	2.184	2.112	2.043	1,983	1.929	1.881	1.838	1,799	1.763	1.731	1.701	1.674	1.648	1.625	1.603	1.579	1.556
SCR-Lower Piru	SCR1	4.128	3,738	3,459	3.251	3.088	2.958	2.801	2.671	2.561	2.466	2.384	2,308	2.240	2.181	2.127	2.079	2.035	1.996	1.960	1.927	1.896	1.868	1.842	1.818	1.793	1.770
Sespe Aby Bear	Sespe2	5.088	4,608	4.265	4.008	3.808	3,648	3,455	3.294	3,158	3.041	2.940	2.846	2,762	2.688	2.623	2.565	2.512	2.464	2.421	2.380	2.342	2.307	2.275	2.244	2.216	2,190
Sespe Aby Grand	Sespe3	4.680	4.238	3.922	3,686	3.501	3,354	3,177	3.029	2.904	2,797	2,704	2.621	2.547	2.482	2.424	2.371	2.323	2.280	2.241	2.205	2,171	2.140	2.112	2.086	2.061	2.038
Sespe Aby Wheeler	Sespe1	5,796	5 2 4 8	4.857	4 563	4.335	4.152	3.933	3 750	3 595	3 463	3 348	3 224	3,114	3.016	2.933	2.858	2,790	2.729	2 673	2.621	2 570	2 5 2 4	2 480	2 4 4 0	2 4 0 3	2.368
Simi Valley	Simi2	4.020	3.640	3.369	3.165	3.007	2.880	2,728	2.602	2.495	2,403	2.324	2,238	2.163	2.095	2.035	1.981	1.932	1.887	1.847	1.810	1.775	1.744	1.714	1.687	1.660	1.635
So Mtn to Moorpark	Rev1	3,756	3.402	3,149	2.960	2.812	2.694	2.551	2,431	2.330	2.243	2.168	2.096	2.032	1.976	1.929	1.887	1.849	1.814	1.782	1.753	1.724	1.696	1.671	1.648	1.626	1.606
Todd to Timber	Todd1	4.692	4.250	3.934	3.698	3.513	3,366	3,188	3.039	2.913	2.805	2,712	2.625	2.549	2,481	2.424	2.373	2.327	2.285	2.246	2.211	2.176	2.143	2.112	2.084	2.058	2.034
Upper Arroyo Simi	Simi1	4.224	3.824	3.538	3.324	3.157	3.024	2.865	2.732	2.620	2.523	2.440	2.343	2.257	2.181	2.113	2.052	1,997	1,946	1.900	1.858	1.819	1,783	1.750	1.719	1.689	1,660
Upper Harmon	Harm1	4.320	3.912	3.621	3.402	3.232	3,096	2.933	2.798	2.683	2.585	2.500	2.419	2.348	2.284	2.227	2.176	2.130	2.088	2.049	2.014	1.982	1,952	1.924	1.898	1.874	1.852
Upper Matilija	Vta1	6.624	5,998	5.551	5.216	4.955	4,746	4,496	4.287	4.110	3,959	3.828	3.687	3.563	3.453	3.354	3.265	3,185	3,112	3.045	2.984	2.928	2.876	2.828	2.783	2.741	2,702
Upper Piru	Piru1	4.248	3.848	3.562	3.348	3,181	3.048	2.887	2.752	2.638	2.541	2.456	2.370	2.295	2.227	2.167	2.113	2.064	2.019	1.979	1.941	1.907	1.876	1.846	1.819	1.790	1.762
Upper Sta Paula	StPaul1	5.172	4.684	4.335	4.074	3.871	3,708	3.513	3.350	3.212	3.094	2.992	2.895	2.808	2.732	2.668	2.611	2.559	2.512	2.469	2.430	2.390	2 353	2.319	2 287	2.258	2.230
oppor ora r duid	ou duit	0.112	1.004	1.000	1.5/4	0.011	000	0.010	0.000	0.616	0.004	2.002	2.555	2.000	2	2.000	2.011	2.000	2.012	2.700	2.700	2.000	2.000	2.010	2.201	2.200	2.200

#### **APPENDIX** A

EXHIBITS

EXHIBIT 4D.	NOAA	TC RAINFALL	INTENSITIES-	10-YR

| ID Tc (min) / Intensities (in/hr) |  |   
   
  |  
   |   |  |  |  |  |   
   
   |   
   |   
   | Tc (n   
   | nin) / Inte   | ensities   | (in/hr)   |  
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| 7                                 | 5  | 6   
   
  | 7  
   | 8   | 9  | 10   | 11   | 12   | 13  
   
   | 14  
   | 15  
   | 16  
   | 17  | 18   | 19  | 20   
   | 21   | 22   | 23  
   | 24  
   | 25   | 26   | 27  | 28   | 29  | 30   |
|                                   | 0.050  |   
   
  | 0.175  
   | 0.007   |  |  |  |  |   
   
   |   
   |   
   | 1017  
   |   |  |   |  
   |  | 1 0 0 0  | 1 0 0 7   
   |   
   |  |  | 1.070   | 1.050  |   |  |
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   |  |  |   |  |   | 1.704  |
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   |   
   |  |  |   |  |   | 1.137  |
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   |   |  |   |  
   |  |  |   
   |   
   |  |  |   |  |   | 1.328  |
| Hop1                              | 3.552  | 3.216   
   
  |  
   | 2.796   | 2.656  |  | 2.410  | 2.301  |   
   
   | 2.130   
   | 2.059   
   | 1.997   
   |   | 1.896  | 1.854   |  
   | 1.783  | 1.752  | 1.724   
   | 1.698   
   | 1.673  | 1.651  | 1.631   |  |   | 1.574  |
| Vta4                              |  |   
   
  |  
   | 3.608   |  | 3.282  | 3.109  | 2.965  |   
   
   | 2.739   
   | 2.648   
   | 2.558   
   | 2.479   | 2.409  | 2.346   |  
   | 2.238  | 2.191  | 2.149   
   |   
   |  |  | 2.010   |  |   | 1.927  |
| Sespe4                            | 3.684  | 3.336   
   
  | 3.087  
   | 2.901   | 2.756  | 2.640  | 2.500  | 2.385  | 2.288   
   
   | 2.205   
   | 2.131   
   | 2.067   
   | 2.010   | 1.961  | 1.917   | 1.877  
   | 1.841  | 1.808  | 1.778   
   | 1.751   
   | 1.725  | 1.702  | 1.680   | 1.660  | 1.641   | 1.623  |
| Vta6                              | 3.564  | 3.226   
   
  | 2.985  
   | 2.804   | 2.663  | 2.550  | 2.416  | 2.305  | 2.211   
   
   | 2.130   
   | 2.060   
   | 1.991   
   | 1.931   | 1.877  | 1.828   | 1.785  
   | 1.746  | 1.710  | 1.677   
   | 1.648   
   | 1.620  | 1.595  | 1.571   | 1.549  | 1.528   | 1.507  |
| Malbu1                            | 3.276  | 2.966   
   
  | 2.745  
   | 2.579   | 2.449  | 2.346  | 2.222  | 2.119  | 2.032   
   
   | 1.957   
   | 1.892   
   | 1.825   
   | 1.765   | 1.713  | 1.665   | 1.623  
   | 1.585  | 1.550  | 1.518   
   | 1.489   
   | 1.462  | 1.437  | 1.414   | 1.392  | 1.372   | 1.352  |
| Vta2                              | 4.584  | 4.150   
   
  | 3.840  
   | 3.607   | 3.427  | 3.282  | 3.109  | 2.965  | 2.843   
   
   | 2.739   
   | 2.648   
   | 2.568   
   | 2.496   | 2.433  | 2.377   | 2.326  
   | 2.280  | 2.238  | 2.200   
   | 2.165   
   | 2.133  | 2.103  | 2.076   | 2.050  | 2.025   | 2.002  |
| Con1                              | 3.132  | 2.836   
   
  | 2.625  
   | 2.466   | 2.343  | 2.244  | 2.126  | 2.028  | 1.945   
   
   | 1.874   
   | 1.812   
   | 1.746   
   | 1.688   | 1.637  | 1.591   | 1.549  
   | 1.511  | 1.477  | 1.446   
   | 1.418   
   | 1.391  | 1.367  | 1.344   | 1.324  | 1.303   | 1.285  |
| Vta3                              | 3.996  | 3.618   
   
  | 3.348  
   | 3.145   | 2.988  | 2.862  | 2.711  | 2.585  | 2.478   
   
   | 2.387   
   | 2.308   
   | 2.235   
   | 2.171   | 2.113  | 2.064   | 2.020  
   | 1.980  | 1.944  | 1.911   
   | 1.880   
   | 1.851  | 1.824  | 1.798   | 1.775  | 1.753   | 1.732  |
| Rev2                              | 2.784  | 2.520   
   
  | 2.331  
   | 2.190   | 2.080  | 1.992  | 1.887  | 1.800  | 1.726   
   
   | 1.663   
   | 1.608   
   | 1.555   
   | 1.507   | 1.465  | 1.428   | 1.394  
   | 1.363  | 1.336  | 1.310   
   | 1.287   
   | 1.266  | 1.246  | 1.228   | 1.211  | 1.192   | 1.175  |
| Prin1                             | 3.384  | 3.066   
   
  | 2.839  
   | 2.668   | 2.536  | 2.430  | 2.301  | 2.193  | 2.102   
   
   | 2.024   
   | 1.956   
   | 1.892   
   | 1.836   | 1.785  | 1.740   | 1.700  
   | 1.663  | 1.630  | 1.600   
   | 1.572   
   | 1.546  | 1.523  | 1.501   | 1.481  | 1.460   | 1.440  |
| Rev3                              | 2.544  | 2.304   
   
  | 2.133  
   | 2.004   | 1,904  | 1.824  | 1.728  | 1.648  | 1.580   
   
   | 1.522   
   | 1.472   
   | 1.422   
   | 1.378   | 1.339  | 1.304   | 1.273  
   | 1.245  | 1.219  | 1.195   
   | 1.174   
   | 1.154  | 1.135  | 1.118   | 1,102  | 1.087   | 1.072  |
| Vta5                              | 3.816  | 3.456   
   
  | 3.199  
   | 3.006   | 2.856  | 2.736  | 2.592  | 2.472  | 2.370   
   
   | 2.283   
   | 2.208   
   | 2.136   
   | 2.072   | 2.016  | 1.965   | 1.920  
   | 1.879  | 1.841  | 1.807   
   | 1.776   
   | 1.747  | 1.721  | 1.696   | 1.673  | 1.652   | 1.632  |
| SCR2                              | 3.360  | 3.042   
   
  | 2.815  
   | 2.645   | 2.512  | 2.406  | 2.279  | 2.173  | 2.083   
   
   | 2.007   
   | 1.940   
   | 1.878   
   | 1.823   | 1.774  | 1.730   | 1.691  
   | 1.655  | 1.623  | 1.594   
   | 1.567   
   | 1.542  | 1.519  | 1.497   | 1.478  | 1.458   | 1.440  |
| SCR3                              | 3,108  | 2.814   
   
  | 2.604  
   | 2.447   | 2.324  | 2.226  | 2.108  | 2.009  | 1.926   
   
   | 1.854   
   | 1.792   
   | 1.734   
   | 1.683   | 1.637  | 1.597   | 1.560  
   | 1.527  | 1,497  | 1.469   
   | 1.444   
   | 1.421  | 1.399  | 1.380   | 1.361  | 1.341   | 1.321  |
| SCR1                              | 3.360  | 3.042   
   
  | 2.815  
   | 2.645   | 2.512  | 2.406  | 2.279  | 2.173  | 2.083   
   
   | 2.007   
   | 1.940   
   | 1.878   
   | 1.823   | 1.774  | 1,730   | 1.691  
   | 1.655  | 1.623  | 1.594   
   | 1.567   
   | 1.542  | 1.519  | 1.497   | 1.478  | 1.458   | 1,439  |
| Sespe2                            | 4.080  | 3.696   
   
  | 3.422  
   | 3.216   | 3.056  | 2.928  | 2.773  | 2.644  | 2.535   
   
   | 2.441   
   | 2.360   
   | 2.284   
   | 2.217   | 2.157  | 2.105   | 2.059  
   | 2.016  | 1,978  | 1.943   
   | 1.911   
   | 1.880  | 1.852  | 1.825   | 1.801  | 1.778   | 1.757  |
| Sespe3                            | 3,744  | 3,390   
   
  | 3,137  
   | 2,948   | 2.800  | 2.682  | 2.540  | 2.421  | 2.321   
   
   | 2.235   
   | 2,160   
   | 2.094   
   | 2.035   | 1.983  | 1.937   | 1.895  
   | 1.857  | 1.823  | 1,791   
   | 1.763   
   | 1.736  | 1.712  | 1,689   | 1.668  | 1.648   | 1.630  |
| Sespe1                            | 4 7 4 0  | 4 292   
   
  | 3 972  
   | 3,732   | 3 545  | 3 396  | 3 2 1 6  | 3 066  | 2 939   
   
   | 2 830   
   | 2,736   
   | 2 635   
   | 2 545   | 2 465  | 2 397   | 2 3 3 6  
   | 2 281  | 2 2 3 0  | 2 184   
   | 2.142   
   | 2.101  | 2 063  | 2 0 2 8   | 1,995  | 1.964   | 1 936  |
| Simi2                             | 3 324  | 3.010   
   
  | 2,786  
   | 2.618   | 2,487  | 2.382  | 2.256  | 2.151  | 2.062   
   
   | 1,986   
   |   
   | 1.849   
   | 1.786   | 1.731  | 1.681   |  
   | 1.595  | 1.559  | 1.525   
   | 1.494   
   | 1.466  | 1.439  | 1.415   | 1.393  | 1.370   | 1.350  |
| Rev1                              | 3 084  | 2 794   
   
  | 2 587  
   | 2 432   | 2 311  | 2214   | 2 097  | 1 999  | 1 916   
   
   | 1 845   
   |   
   | 1 725   
   | 1 672   | 1 625  | 1 587   |  
   |  | 1 492  | 1 465   
   | 1 442   
   | 1 417  | 1 395  | 1 374   | 1 354  | 1 336   | 1.320  |
|                                   | 3 768  | 3 4 1 4   
   
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   |  | 1 721  |   |  |   | 1.633  |
|                                   | 3 480  | 3 152   
   
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   |   |  | 1.743   |  
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   |  | 1470   |   |  |   | 1.369  |
| Harm1                             |  |   
   
  | 3.046  
   | 2.862   | 2,719  | 2.604  |  |  |   
   
   | 2.172   
   |   
   |   
   |   |  | 1.871   |  
   | 1,789  | 1.754  | 1.722   
   | 1.692   
   | 1.665  | 1.640  |   |  |   | 1.556  |
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   |  |  |   |  |   | 1.768  |
|                                   | Con2           ALP1           Carp1           Con3           Cuy1           Hop1           Vta4           Sespe4           Vta6           Malbu1           Vta2           Con1           Vta3           Rev2           Prin1           Rev3           SCR1           ScR3           Sespe1           Simi1           Rev1           Todd11 | 5           Con2         2.952           ALP1         2.9452           ALP1         2.9452           Con3         2.71           4.128         Con3           Con3         2.71           Hop1         3.552           Vla4         4.584           Vla5         3.684           Vla6         3.564           Malbu1         3.522           Vla2         4.584           Con1         3.132           Vla3         3.996           Rev2         2.784           Print         3.384           SCR1         3.308           SCR3         3.108           SCR1         3.324           Rev1         3.244           Rev2         3.244           Rev3         3.346           Sim2         3.324           Rev4         3.084           Sim2         3.324           Rev1         3.084           Sim2         3.324           Rev1         3.084           Sim2         3.324           Rev1         3.084           Sim2         3.324 <t< td=""><td>5         6           Con2         2.952         2.674           ALP1         2.940         2.662           Carp1         4.128         3.740           Carp1         4.128         3.740           Con3         2.712         2.456           Cuy1         3.180         2.880           Hop1         3.552         3.216           Via6         3.564         3.256           Via6         3.564         3.256           Via1         3.996         3.644           Ocn1         3.32         2.836           Via2         4.584         4.150           Con1         3.322         2.836           Via3         3.996         3.672           ScR3         3.081         3.816           ScR3         3.081         3.844           ScR3         3.081         3.844           ScR3         3.081         3.844           ScR3         3.081         3.844           ScR3         3.080         3.662           ScR3         3.081         3.844           ScR3         3.081         3.844           ScR3         3.081         3.844&lt;</td><td>5         6         7           Con2         2.952         2.674         2.475           ALP1         2.940         2.662         2.673         2.672           Carp1         4.128         3.403         2.662         2.673         2.712         2.465         2.273           Cuy1         3.160         2.860         2.662         2.663         2.72         2.662         2.673         2.712         2.662         2.673         2.712         2.662         2.733         2.602         7.633         2.602         7.643         3.840         5.262         2.674         3.840         3.664         3.262         2.865         2.674         3.840         5.662         7.62         2.662         2.764         2.562         2.764         2.662         2.764         2.562         2.764         2.562         2.764         2.562         2.674         3.840         5.662         2.839         2.572         3.317         2.562         2.674         3.840         2.664         2.764         2.520         2.311         7.65         S.678         3.304         2.661         3.563         3.662         2.832         2.837         5.567.83         3.106         2.664         3.662         3.422<!--</td--><td>5         6         7         8           Con2         2.952         2.674         2.475         2.327           ALP1         2.940         2.662         2.463         2.315           Cap1         4.128         3.740         3.463         2.355           Cap1         4.128         3.740         3.463         2.355           Cap1         4.128         3.740         3.463         3.255           Con3         2.712         2.456         2.273         2.136           Cuy1         3.180         2.860         2.666         2.505           Via4         4.554         4.150         3.840         3.606           Seepe4         3.664         3.226         2.965         2.864           Via5         3.966         3.818         3.443         3.840         3.607           Vala         3.564         3.226         2.965         2.864         1.50         3.840         3.607           Vala         3.564         3.263         2.856         2.52         2.466         Vala         3.966         3.618         3.443         3.101           Print         3.344         3.060         3.263         2.652</td><td>5         6         7         8         9           Con2         2.952         2.674         2.475         2.327         2.211           ALP1         2.940         2.662         2.632         2.315         2.190           Carp1         4.128         3.740         2.662         2.632         2.315         2.190           Carp1         4.128         3.740         2.662         2.652         2.53         0.393           Con3         2.712         2.456         2.273         2.182         2.076         2.656           Va4         4.554         4.150         3.840         3.603         3.427         Seepe4         3.644         3.336         3.067         2.912         2.766           Vaa         3.564         3.226         2.682         2.462         2.433         1.423         2.682         1.452         2.682         2.462         2.433         1.432         2.682         1.432         2.682         1.452         2.682         2.462         2.433         1.432         2.682         2.462         3.433         3.662         2.538         2.686         2.536         2.682         2.536         2.682         2.536         2.682         2.536</td></td></t<> <td>5         6         7         8         9         10           Con2         2952         2674         2475         2.327         2.211         2.118           ALP1         2.940         2.662         2.433         2.115         2.199         2.106           Con3         2.712         2.262         2.463         2.315         2.199         2.106           Con3         2.712         2.426         2.273         2.136         2.199         2.109           Cuy1         3.180         2.860         2.505         2.530         2.280         1.200           Mop1         3.552         3.216         2.706         2.565         2.544           V1a4         4.584         4.150         3.401         3.603         3.427         3.282           V1a6         3.564         3.256         2.572         2.449         2.346         V1a2         2.342         2.444         V1a3         3.661         3.603         3.601         3.427         3.282         Con1         3.322         2.246         2.343         2.244         V1a3         3.441         3.661         2.538         2.430         1.932         2.944         V1a3         3.441         3</td> <td>5         6         7         8         9         10         11           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006           ALP1         2.940         2.662         2.632         2.315         2.199         2.106         1.994           Carp1         4.128         3.740         3.463         3.255         3.093         2.964         2.807           Con3         2.712         2.456         2.273         2.138         2.029         1.944         1.841           Cuy1         3.180         2.880         2.666         2.565         2.540         2.410         1.4128           Cuy1         3.180         2.880         2.666         2.565         2.540         2.410           Va4         4.554         4.150         3.401         3.603         3.427         3.222         3.109           Seepe4         3.664         3.265         2.640         2.640         2.440         2.442         2.442         2.442         2.442         2.442         2.442         2.442         2.442         2.442         2.442         2.444         2.444         2.444         2.444         2.444</td> <td>5         6         7         8         9         10         11         12           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.941           Cap1         2.462         2.463         2.315         2.190         2.106         1.941         1.901           Cap1         4.128         3.403         3.255         3.093         2.964         2.807         2.676           Con3         2.712         2.465         2.273         2.136         2.020         1.941         1.811         1.756           Cuy1         3.160         2.865         2.757         2.796         2.565         2.544         2.410         2.301         2.762         2.565         2.544         2.410         2.301         2.765         2.462         2.240         2.260         2.385         2.662         2.562         2.440         2.260         2.385         2.662         2.440         2.600         2.385         2.662         2.446         2.246         2.222         2.119         2.462         2.222         2.119         2.462         2.224         2.126         2.028         1.933         3.966         2.536         2.432<!--</td--><td>5         6         7         8         9         10         11         12         13           Con2         2552         2674         2475         2327         2211         2118         2006         1193         1834           ALP1         2490         2662         2463         2315         2199         2106         1194         101         1822           Camp1         4.128         3740         3463         3255         3039         2944         1201         1526           Con3         2712         2456         2273         1218         2094         1441         1561         644           Cuy1         3.180         2880         2666         2505         2380         2202         1576         2665         2431         201
        2705         2656         2441         2102         2020         1760         2585         2810         2001         2560         2440         1200         2205         2431         2012         2502         2416         2305         2311         2012         2502         2416         2302         2355         2285         2462         2321         2305         2311         2012         2020</td><td>5         6         7         8         9         10         11         12         13         14           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.834         1.767           ALP1         2.940         2.662         2.673         2.315         2.190         1.901         1.822         1.755           Carp1         4.128         3.740         3.463         3.255         3.093         2.964         2.807         2.676         2.565         2.470           Con3         2.712         2.245         2.273         2.132         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.921         1.976         1.941         1.921         1.976         1.941         1.921         1.976         1.941         1.921         1.976         1.934         1.922         1.913         1.949         1.921         1.931         1.931         1.931         1.931         1.931         1.931         1.931<!--</td--><td>5         6         7         8         9         10         11         12         13         144         15           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.706           Carp1         2.462         2.663         2.315         2.190         2.106         1.949         1.901         1.822         1.755         1.696           Carp1         4.128         3.403         3.433         3.255         3.093         2.964         2.807         2.676         2.666         2.470         2.388           Cuy1         3.160         2.866         2.505         2.300         2.804         1.976         1.866         2.150         2.050         1.978         1.899         1.836           Gord3         2.712         2.562         2.544         2.410         3.102         2.050         2.173         2.648         2.100         2.055         2.11         2.103         2.050         2.11         2.103         2.051         1.11         2.031         2.051         2.117         2.030         2.211         2.130         2.050         2.117         2.030</td><td>5         6         7         8         9         10         11         12         13         14         15         16           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.84         1.767         1.708         1.647           ALP1         2.940         2.662         2.463         2.315         2.106         1.964         1.911         1.822         1.755         1.669         1.534           Con3         2.712         2.266         2.303         2.280         2.490         2.666         1.568         1.571         1.684         1.622         1.568         1.514           Cuy1         3.180         2.860         2.666         2.502         2.380         2.280         1.590         1.209         1.300         2.568         1.773         1.680         1.802         1.205         1.300         2.569         1.773         1.680         1.802         1.209         1.300         2.560         1.791         1.200         1.300         2.569         1.412         1.780         1.630         1.793         1.647         1.801         1.822         1.751         1.564         1.413</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17           Con2         2.952         2.674         2.475         2.327         2.211         2.18         2.006         1.913         1.834         1.767         1.708         1.647         1.593           Carp1         4.242         2.662         2.637         2.106         1.994         1.901         1.822         1.756         1.686         1.634         1.777           Carp1         4.128         3.403         3.433         3.255         1.994         1.841         1.756         1.686         1.634         1.578           Con3         2.712         2.666         2.505         2.300         2.804         2.159         1.576         1.577         1.576         1.581         1.570         1.587         1.577         1.577         1.586</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18           Con2         2552         2674         2475         2327         2211         2118         2006         1191         1834         1767         1708         1647         1593         1551           Carp1         4426         2662         2463         2315         2196         2106         1944         101         1822         1755         1696         1634         1579         1531           Con3         2712         2456         2273         1236         2209         1294         1200         1200         1205         1891         144         1466         1424           Cuy1         3180         2860         2506         2470         2084         1200         1200         1200         1200         1200         1401         14466         1424           Seped         3643         336         3607         3201         2562         2441         1201         1202         1201         1201         1201         1201         1201         1201         1201         1201         120</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.834         1.767         1.708         1.147         1.503         1.145         1.502           Carp1         2.402         2.662         2.633         2.325         2.109         1.901         1.822         1.755         1.686         1.634         1.579         1.531         1.472         1.533         1.487         1.533         1.487         1.531         1.447         1.503         1.441         1.466         1.424         1.386         1.773         1.711         1.686         1.624           Con3         2.712         2.265         2.330         2.226         2.131         2.030         2.238         2.303         2.228         2.161         1.106         1.624           Cur3         3.180         2.865         2.447         2.301         2.230         2.230         2.230         2.230         2.230         2.230         2.230         2.230         2.230         <th< td=""><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.708         1.644         1.502         1.463           Carp1         4.242         2.662         2.463         2.2315         2.106         1.904         1.901         1.822         1.755         1.686         1.634         1.544         1.444         1.444         1.448         1.447         1.448         1.446         1.424         3.403         3.433         3.255         1.901         1.821         1.755         1.686         1.634         1.544         1.484         1.448         1.448         1.438         1.868         1.824         1.545         1.847         1.438         1.868         1.854         1.847         1.438         1.868         1.854         1.847         1.438         1.854         1.854         1.854         1.854         1.854         1.854         1.851         1.854         1.854         1.854         1.854         1.854</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21           Con2         2552         2674         2475         2.327         2.211         2.118         2.006         1.13         1.84         1.767         1.708         1.591         1.551         1.647         1.551         1.651         1.551         1.647         1.541         1.457         1.551         1.461         1.413           Con3         2.712         2.562         2.470         1.561         1.647         1.561         1.551         1.461         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.461         1.424         1.361         1.426         1.426         1.521         1.427         1.446         1.431         1.361         1.426         1.424         1.361         1.426         1.426         1.428         1.481         1.763         1.441         1.446         1.441         1.54         1.426         1.441         1.541         1.426         1.428         1.561         1.426         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17      
  18         19         20         21         22           Con2         2.952         2.674         2.475         2.327         2.211         2.210         2.061         193         1.83         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.441         1.411         1.301         1.801         1.625         1.666         1.551         1.646         1.642         1.543         1.443         1.441         1.411         1.302         2.662         2.671         2.568         2.571         2.571         1.511         1.668         1.624         1.544         1.464         1.451         1.531         1.686         1.624         1.544         1.541         1.551         1.52         1.668         1.624         1.544         1.541         1.551         1.520         1.531         1.668         1.624         1.544         1.541         1.551         1.501         1.531         1.668         1.521         1.531         1.531         1.531         1.531         1.531         1.531         <t< td=""><td>5         6         7         8         9         10         11         12         13         14         15         15         17         18         19         20         21         22         23           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.911         1.841         1.767         1.708         1.557         1.551         1.426         1.428         1.362         1.361           Con3         2.712         2.266         2.473         2.106         1.941         1.820         1.751         1.446         1.426         1.999         1.955         1.915           Con3         2.712         2.266         2.730         2.300         2.200         1.200         1.030         1.321         1.446         1.446         1.446         1.446         1.446         1.561         1.52         1.224         1.248           Con3         2.712         2.726         2.562         2.470         2.208         1.200         2.100         1.961         1.941         1.868         1.624         1.586         1.541         1.877         1.724           Con3         2.712         2.562</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24           Con2         2.652         2.674         2.475         2.327         2.211         2.106         1.991         1.834         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.346         1.577         1.531         1.545         1.502         1.463         1.428         1.349         1.476         1.755         1.656         1.545         1.502         1.463         1.428         1.349         1.363         1.573         1.545         1.502         1.463         1.428         1.346         1.54         1.541         1.451         1.386         1.336         1.373         1.717         1.717         1.718         1.55         1.468         1.448         1.448         1.450         1.448         1.448         1.454         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25           Con2         2.652         2.674         2.475         2.327         2.10         2.10         190         133         134         1.767         1.768         1.644         1.444         1.441         1.431         1.301         1.331         1.445         1.464         1.441         1.431         1.301         1.331         1.441</td><td>5         6         7         8         9         10         11         12         13         14         15         15         16         17         18         19         20         21         22         23         24         25         26           Con2         255         2674         2475         2327         211         2118         2006         1101         1824         1765         1550         1565         1565         1551         1471         1486         1431         1380         1351         1390         1351         1390         1351         1390         1351         1390         1351         1324         1290         1756         1656         1505         1508         1531         1470         1480         1431         1380         1351         1321         1249         1249         1248         1245         1232         1303           Con3         2712         2266         2700         2802         1308         1351         1327         1724         1486         1451         1371         1771         1681         1491         1473         1474         1486         1450         1324         1290         1431         1486</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27           Con2         2.652         2.674         2.475         2.327         2.10         1.90         1.82         1.756         1.656         1.654         1.620         1.463         1.428         1.366         1.367         1.341         1.12         1.202         1.645         1.620         1.648         1.471         1.341         1.341         1.756         1.656         1.647         1.653         1.645         1.428         1.346         1.202         1.646         1.647         1.648         1.647         1.648         1.646         1.647</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         28         27         28           Con2         2652         2674         2355         219         2210         190         1901         182         175         1581         1497         1441         130         1324         129         1276         1255         1255         1481         113         130         131         134         126         1276         1256         126         111         126         1265         126         1216         1202         248         129         1284<!--</td--><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29           Con2         255         2674         2475         235         215         219         2106         1994         1301         1314         1301         1312         1324         1291         127         1255         127         1255         125         127         1255         125         127         1255         125         127         1255         127         1255         127         126         126         126         126         124         128         126         126         124         128         126         1</td></td></t<></td></th<></td></td></td> | 5         6           Con2         2.952         2.674           ALP1         2.940         2.662           Carp1         4.128         3.740           Carp1         4.128         3.740           Con3         2.712         2.456           Cuy1         3.180         2.880           Hop1         3.552         3.216           Via6         3.564         3.256           Via6         3.564         3.256           Via1         3.996         3.644           Ocn1         3.32         2.836           Via2         4.584         4.150           Con1         3.322         2.836           Via3         3.996         3.672           ScR3         3.081
        3.816           ScR3         3.081         3.844           ScR3         3.081         3.844           ScR3         3.081         3.844           ScR3         3.081         3.844           ScR3         3.080         3.662           ScR3         3.081         3.844           ScR3         3.081         3.844           ScR3         3.081         3.844< | 5         6         7           Con2         2.952         2.674         2.475           ALP1         2.940         2.662         2.673         2.672           Carp1         4.128         3.403         2.662         2.673         2.712         2.465         2.273           Cuy1         3.160         2.860         2.662         2.663         2.72         2.662         2.673         2.712         2.662         2.673         2.712         2.662         2.733         2.602         7.633         2.602         7.643         3.840         5.262         2.674         3.840         3.664         3.262         2.865         2.674         3.840         5.662         7.62         2.662         2.764         2.562         2.764         2.662         2.764         2.562         2.764         2.562         2.764         2.562         2.674         3.840         5.662         2.839         2.572         3.317         2.562         2.674         3.840         2.664         2.764         2.520         2.311         7.65         S.678         3.304         2.661         3.563         3.662         2.832         2.837         5.567.83         3.106         2.664         3.662         3.422 </td <td>5         6         7         8           Con2         2.952         2.674         2.475         2.327           ALP1         2.940         2.662         2.463         2.315           Cap1         4.128         3.740         3.463         2.355           Cap1         4.128         3.740         3.463         2.355           Cap1         4.128         3.740         3.463         3.255           Con3         2.712         2.456         2.273         2.136           Cuy1         3.180         2.860         2.666         2.505           Via4         4.554         4.150         3.840         3.606           Seepe4         3.664         3.226         2.965         2.864           Via5         3.966         3.818         3.443         3.840         3.607           Vala         3.564         3.226         2.965         2.864         1.50         3.840         3.607           Vala         3.564         3.263         2.856         2.52         2.466         Vala         3.966         3.618         3.443         3.101           Print         3.344         3.060         3.263         2.652</td> <td>5         6         7         8         9           Con2         2.952         2.674         2.475         2.327         2.211           ALP1         2.940         2.662         2.632         2.315         2.190           Carp1         4.128         3.740         2.662         2.632         2.315         2.190           Carp1         4.128         3.740         2.662         2.652         2.53         0.393           Con3         2.712         2.456         2.273         2.182         2.076         2.656           Va4         4.554         4.150         3.840         3.603         3.427         Seepe4         3.644         3.336         3.067         2.912         2.766           Vaa         3.564         3.226         2.682         2.462         2.433         1.423         2.682         1.452         2.682         2.462         2.433         1.432         2.682         1.432         2.682         1.452         2.682         2.462         2.433         1.432         2.682         2.462         3.433         3.662         2.538         2.686         2.536         2.682         2.536         2.682         2.536         2.682         2.536</td> | 5         6         7         8           Con2         2.952         2.674         2.475         2.327           ALP1         2.940         2.662         2.463         2.315           Cap1         4.128         3.740         3.463         2.355           Cap1         4.128         3.740         3.463         2.355           Cap1         4.128         3.740         3.463         3.255           Con3         2.712         2.456         2.273         2.136           Cuy1         3.180         2.860         2.666         2.505           Via4         4.554         4.150         3.840         3.606           Seepe4         3.664         3.226         2.965         2.864           Via5         3.966         3.818         3.443         3.840         3.607           Vala         3.564         3.226         2.965         2.864         1.50         3.840         3.607           Vala         3.564         3.263         2.856         2.52         2.466         Vala         3.966         3.618         3.443         3.101           Print         3.344         3.060         3.263         2.652 | 5         6         7         8         9           Con2         2.952         2.674         2.475         2.327         2.211           ALP1         2.940         2.662         2.632         2.315         2.190           Carp1         4.128         3.740         2.662         2.632         2.315         2.190           Carp1         4.128         3.740         2.662         2.652         2.53         0.393           Con3         2.712         2.456         2.273         2.182         2.076         2.656           Va4         4.554         4.150         3.840         3.603         3.427         Seepe4         3.644         3.336         3.067         2.912         2.766           Vaa         3.564         3.226         2.682         2.462         2.433         1.423         2.682         1.452         2.682         2.462         2.433         1.432         2.682         1.432         2.682         1.452         2.682         2.462         2.433         1.432         2.682         2.462         3.433         3.662         2.538         2.686         2.536         2.682         2.536         2.682         2.536         2.682         2.536 | 5         6         7         8         9         10           Con2         2952         2674         2475         2.327         2.211         2.118           ALP1         2.940         2.662         2.433         2.115         2.199         2.106           Con3         2.712         2.262         2.463         2.315         2.199         2.106           Con3         2.712         2.426         2.273         2.136         2.199         2.109           Cuy1         3.180         2.860         2.505         2.530         2.280         1.200           Mop1         3.552         3.216         2.706         2.565         2.544           V1a4         4.584         4.150         3.401         3.603         3.427         3.282           V1a6         3.564         3.256         2.572         2.449         2.346         V1a2         2.342         2.444         V1a3         3.661         3.603         3.601         3.427         3.282         Con1         3.322         2.246         2.343         2.244         V1a3         3.441         3.661         2.538         2.430         1.932         2.944         V1a3         3.441         3 | 5         6         7         8         9         10         11           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006           ALP1         2.940         2.662         2.632         2.315         2.199         2.106         1.994           Carp1         4.128         3.740         3.463         3.255         3.093         2.964         2.807           Con3         2.712         2.456         2.273         2.138         2.029         1.944         1.841           Cuy1         3.180         2.880         2.666         2.565         2.540         2.410         1.4128           Cuy1         3.180         2.880         2.666         2.565         2.540         2.410           Va4         4.554         4.150         3.401         3.603         3.427         3.222         3.109           Seepe4         3.664         3.265         2.640         2.640         2.440         2.442         2.442         2.442         2.442         2.442         2.442         2.442         2.442         2.442         2.442         2.444         2.444         2.444         2.444         2.444 | 5         6         7         8         9         10         11         12           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.941           Cap1         2.462         2.463         2.315         2.190         2.106         1.941         1.901           Cap1         4.128         3.403         3.255         3.093         2.964         2.807         2.676           Con3         2.712         2.465         2.273         2.136         2.020         1.941         1.811         1.756           Cuy1         3.160         2.865         2.757         2.796         2.565         2.544         2.410         2.301         2.762         2.565         2.544         2.410         2.301         2.765         2.462         2.240         2.260         2.385         2.662         2.562         2.440         2.260         2.385         2.662         2.440         2.600         2.385         2.662         2.446         2.246         2.222         2.119         2.462         2.222         2.119         2.462         2.224         2.126         2.028         1.933         3.966         2.536         2.432 </td <td>5         6         7         8         9         10         11         12         13           Con2         2552         2674         2475         2327         2211         2118         2006         1193         1834           ALP1         2490         2662         2463         2315         2199         2106         1194         101         1822           Camp1         4.128         3740         3463         3255         3039         2944        
1201         1526           Con3         2712         2456         2273         1218         2094         1441         1561         644           Cuy1         3.180         2880         2666         2505         2380         2202         1576         2665         2431         201         2705         2656         2441         2102         2020         1760         2585         2810         2001         2560         2440         1200         2205         2431         2012         2502         2416         2305         2311         2012         2502         2416         2302         2355         2285         2462         2321         2305         2311         2012         2020</td> <td>5         6         7         8         9         10         11         12         13         14           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.834         1.767           ALP1         2.940         2.662         2.673         2.315         2.190         1.901         1.822         1.755           Carp1         4.128         3.740         3.463         3.255         3.093         2.964         2.807         2.676         2.565         2.470           Con3         2.712         2.245         2.273         2.132         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.921         1.976         1.941         1.921         1.976         1.941         1.921         1.976         1.941         1.921         1.976         1.934         1.922         1.913         1.949         1.921         1.931         1.931         1.931         1.931         1.931         1.931         1.931<!--</td--><td>5         6         7         8         9         10         11         12         13         144         15           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.706           Carp1         2.462         2.663         2.315         2.190         2.106         1.949         1.901         1.822         1.755         1.696           Carp1         4.128         3.403         3.433         3.255         3.093         2.964         2.807         2.676         2.666         2.470         2.388           Cuy1         3.160         2.866         2.505         2.300         2.804         1.976         1.866         2.150         2.050         1.978         1.899         1.836           Gord3         2.712         2.562         2.544         2.410         3.102         2.050         2.173         2.648         2.100         2.055         2.11         2.103         2.050         2.11         2.103         2.051         1.11         2.031         2.051         2.117         2.030         2.211         2.130         2.050         2.117         2.030</td><td>5         6         7         8         9         10         11         12         13         14         15         16           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.84         1.767         1.708         1.647           ALP1         2.940         2.662         2.463         2.315         2.106         1.964         1.911         1.822         1.755         1.669         1.534           Con3         2.712         2.266         2.303         2.280         2.490         2.666         1.568         1.571         1.684         1.622         1.568         1.514           Cuy1         3.180         2.860         2.666         2.502         2.380         2.280         1.590         1.209         1.300         2.568         1.773         1.680         1.802         1.205         1.300         2.569         1.773         1.680         1.802         1.209         1.300         2.560         1.791         1.200         1.300         2.569         1.412         1.780         1.630         1.793         1.647         1.801         1.822         1.751         1.564         1.413</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17           Con2         2.952         2.674         2.475         2.327         2.211         2.18         2.006         1.913         1.834         1.767         1.708         1.647         1.593           Carp1         4.242         2.662         2.637         2.106         1.994         1.901         1.822         1.756         1.686         1.634         1.777           Carp1         4.128         3.403         3.433         3.255         1.994         1.841         1.756         1.686         1.634         1.578           Con3         2.712         2.666         2.505         2.300         2.804         2.159         1.576         1.577         1.576         1.581         1.570         1.587         1.577         1.577         1.586</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18           Con2         2552         2674         2475         2327         2211         2118         2006         1191         1834         1767         1708         1647         1593         1551           Carp1         4426         2662         2463         2315         2196         2106         1944         101         1822         1755         1696         1634         1579         1531           Con3         2712         2456         2273         1236         2209         1294         1200         1200         1205         1891         144         1466         1424           Cuy1         3180         2860         2506         2470         2084         1200         1200         1200         1200         1200         1401         14466         1424           Seped         3643         336         3607         3201         2562         2441         1201         1202         1201         1201         1201         1201         1201         1201         1201         1201         120</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.834         1.767         1.708         1.147         1.503         1.145         1.502           Carp1         2.402         2.662         2.633         2.325         2.109         1.901         1.822         1.755         1.686         1.634         1.579         1.531         1.472         1.533         1.487         1.533         1.487         1.531         1.447         1.503         1.441         1.466         1.424         1.386         1.773         1.711         1.686         1.624           Con3         2.712         2.265         2.330         2.226         2.131         2.030         2.238         2.303         2.228         2.161         1.106         1.624           Cur3         3.180         2.865         2.447         2.301         2.230         2.230         2.230         2.230         2.230         2.230         2.230         2.230         2.230         <th< td=""><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.708         1.644         1.502         1.463           Carp1         4.242         2.662         2.463         2.2315         2.106         1.904         1.901         1.822         1.755         1.686         1.634         1.544         1.444         1.444         1.448         1.447         1.448         1.446         1.424         3.403         3.433         3.255         1.901         1.821         1.755         1.686         1.634         1.544         1.484         1.448         1.448         1.438         1.868         1.824         1.545         1.847         1.438         1.868         1.854         1.847         1.438         1.868         1.854         1.847         1.438         1.854         1.854         1.854         1.854         1.854         1.854         1.851         1.854         1.854         1.854         1.854         1.854</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21           Con2         2552         2674         2475         2.327         2.211         2.118         2.006         1.13         1.84         1.767         1.708         1.591         1.551         1.647         1.551         1.651         1.551         1.647         1.541         1.457         1.551         1.461         1.413           Con3         2.712         2.562         2.470         1.561         1.647         1.561         1.551         1.461         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.461         1.424         1.361         1.426         1.426         1.521         1.427         1.446         1.431         1.361         1.426         1.424         1.361         1.426         1.426         1.428         1.481         1.763         1.441        
1.446         1.441         1.54         1.426         1.441         1.541         1.426         1.428         1.561         1.426         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22           Con2         2.952         2.674         2.475         2.327         2.211         2.210         2.061         193         1.83         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.441         1.411         1.301         1.801         1.625         1.666         1.551         1.646         1.642         1.543         1.443         1.441         1.411         1.302         2.662         2.671         2.568         2.571         2.571         1.511         1.668         1.624         1.544         1.464         1.451         1.531         1.686         1.624         1.544         1.541         1.551         1.52         1.668         1.624         1.544         1.541         1.551         1.520         1.531         1.668         1.624         1.544         1.541         1.551         1.501         1.531         1.668         1.521         1.531         1.531         1.531         1.531         1.531         1.531         <t< td=""><td>5         6         7         8         9         10         11         12         13         14         15         15         17         18         19         20         21         22         23           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.911         1.841         1.767         1.708         1.557         1.551         1.426         1.428         1.362         1.361           Con3         2.712         2.266         2.473         2.106         1.941         1.820         1.751         1.446         1.426         1.999         1.955         1.915           Con3         2.712         2.266         2.730         2.300         2.200         1.200         1.030         1.321         1.446         1.446         1.446         1.446         1.446         1.561         1.52         1.224         1.248           Con3         2.712         2.726         2.562         2.470         2.208         1.200         2.100         1.961         1.941         1.868         1.624         1.586         1.541         1.877         1.724           Con3         2.712         2.562</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24           Con2         2.652         2.674         2.475         2.327         2.211         2.106         1.991         1.834         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.346         1.577         1.531         1.545         1.502         1.463         1.428         1.349         1.476         1.755         1.656         1.545         1.502         1.463         1.428         1.349         1.363         1.573         1.545         1.502         1.463         1.428         1.346         1.54         1.541         1.451         1.386         1.336         1.373         1.717         1.717         1.718         1.55         1.468         1.448         1.448         1.450         1.448         1.448         1.454         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25           Con2         2.652         2.674         2.475         2.327         2.10         2.10         190         133         134         1.767         1.768         1.644         1.444         1.441         1.431         1.301         1.331         1.445         1.464         1.441         1.431         1.301         1.331         1.441</td><td>5         6         7         8         9         10         11         12         13         14         15         15         16         17         18         19         20         21         22         23         24         25         26           Con2         255         2674         2475         2327         211         2118         2006         1101         1824         1765         1550         1565         1565         1551         1471         1486         1431         1380         1351         1390         1351         1390         1351         1390         1351         1390         1351         1324         1290         1756         1656         1505         1508         1531         1470         1480         1431         1380         1351         1321         1249         1249         1248         1245         1232         1303           Con3         2712         2266         2700         2802         1308         1351         1327         1724         1486         1451         1371         1771         1681         1491         1473         1474         1486         1450         1324         1290         1431         1486</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27           Con2         2.652         2.674         2.475         2.327         2.10         1.90         1.82         1.756         1.656         1.654         1.620         1.463         1.428         1.366         1.367         1.341         1.12         1.202         1.645         1.620         1.648         1.471         1.341         1.341         1.756         1.656         1.647         1.653         1.645         1.428         1.346         1.202         1.646         1.647         1.648         1.647         1.648         1.646         1.647</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         28         27         28           Con2         2652         2674         2355         219         2210         190         1901         182         175         1581         1497         1441         130         1324         129         1276         1255         1255         1481         113         130         131         134         126         1276         1256         126         111         126         1265         126         1216         1202         248         129         1284<!--</td--><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29           Con2         255         2674         2475         235         215         219         2106         1994         1301         1314         1301         1312         1324         1291         127         1255         127         1255         125         127         1255         125         127         1255         125         127         1255         127         1255         127         126         126         126         126         124         128         126         126         124         128         126         1</td></td></t<></td></th<></td></td> | 5         6         7         8         9         10         11         12         13           Con2         2552         2674         2475         2327         2211         2118         2006         1193         1834           ALP1         2490         2662         2463         2315         2199         2106         1194         101         1822          
Camp1         4.128         3740         3463         3255         3039         2944         1201         1526           Con3         2712         2456         2273         1218         2094         1441         1561         644           Cuy1         3.180         2880         2666         2505         2380         2202         1576         2665         2431         201         2705         2656         2441         2102         2020         1760         2585         2810         2001         2560         2440         1200         2205         2431         2012         2502         2416         2305         2311         2012         2502         2416         2302         2355         2285         2462         2321         2305         2311         2012         2020 | 5         6         7         8         9         10         11         12         13         14           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.834         1.767           ALP1         2.940         2.662         2.673         2.315         2.190         1.901         1.822         1.755           Carp1         4.128         3.740         3.463         3.255         3.093         2.964         2.807         2.676         2.565         2.470           Con3         2.712         2.245         2.273         2.132         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.941         1.921         1.976         1.941         1.921         1.976         1.941         1.921         1.976         1.941         1.921         1.976         1.934         1.922         1.913         1.949         1.921         1.931         1.931         1.931         1.931         1.931         1.931         1.931 </td <td>5         6         7         8         9         10         11         12         13         144         15           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.706           Carp1         2.462         2.663         2.315         2.190         2.106         1.949         1.901         1.822         1.755         1.696           Carp1         4.128         3.403         3.433         3.255         3.093         2.964         2.807         2.676         2.666         2.470         2.388           Cuy1         3.160         2.866         2.505         2.300         2.804         1.976         1.866         2.150         2.050         1.978         1.899         1.836           Gord3         2.712         2.562         2.544         2.410         3.102         2.050         2.173         2.648         2.100         2.055         2.11         2.103         2.050         2.11         2.103         2.051         1.11         2.031         2.051         2.117         2.030         2.211         2.130         2.050         2.117         2.030</td> <td>5         6         7         8         9         10         11         12         13         14         15         16           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.84         1.767         1.708         1.647           ALP1         2.940         2.662         2.463         2.315         2.106         1.964         1.911         1.822         1.755         1.669         1.534           Con3         2.712         2.266         2.303         2.280         2.490         2.666         1.568         1.571         1.684         1.622         1.568         1.514           Cuy1         3.180         2.860         2.666         2.502         2.380         2.280         1.590         1.209         1.300         2.568         1.773         1.680         1.802         1.205         1.300         2.569         1.773         1.680         1.802         1.209         1.300         2.560         1.791         1.200         1.300         2.569         1.412         1.780         1.630         1.793         1.647         1.801         1.822         1.751         1.564         1.413</td> <td>5         6         7         8         9         10         11         12         13         14         15         16         17           Con2         2.952         2.674         2.475         2.327         2.211         2.18         2.006         1.913         1.834         1.767         1.708         1.647         1.593           Carp1         4.242         2.662         2.637         2.106         1.994         1.901         1.822         1.756         1.686         1.634         1.777           Carp1         4.128         3.403         3.433         3.255         1.994         1.841         1.756         1.686         1.634         1.578           Con3         2.712         2.666         2.505         2.300         2.804         2.159         1.576         1.577         1.576         1.581         1.570         1.587         1.577         1.577         1.586</td> <td>5         6         7         8         9         10         11         12         13         14         15         16         17         18           Con2         2552         2674         2475         2327         2211         2118         2006         1191         1834         1767         1708         1647         1593         1551           Carp1         4426         2662         2463         2315         2196         2106         1944         101         1822         1755         1696         1634         1579         1531           Con3         2712         2456         2273         1236         2209         1294         1200         1200         1205         1891         144         1466         1424           Cuy1         3180         2860         2506         2470         2084         1200         1200         1200         1200         1200         1401         14466         1424           Seped         3643         336         3607         3201         2562         2441         1201         1202         1201         1201         1201         1201         1201         1201         1201         1201         120</td> <td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.834         1.767         1.708         1.147         1.503         1.145         1.502           Carp1         2.402         2.662         2.633         2.325         2.109         1.901         1.822         1.755         1.686         1.634         1.579         1.531         1.472         1.533         1.487         1.533         1.487         1.531         1.447         1.503         1.441         1.466         1.424         1.386         1.773         1.711         1.686         1.624           Con3         2.712         2.265         2.330         2.226         2.131         2.030         2.238         2.303         2.228         2.161         1.106         1.624           Cur3         3.180         2.865         2.447         2.301         2.230         2.230         2.230         2.230         2.230         2.230         2.230         2.230         2.230         <th< td=""><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.708         1.644         1.502         1.463           Carp1         4.242         2.662         2.463         2.2315         2.106         1.904         1.901         1.822         1.755         1.686         1.634         1.544         1.444         1.444         1.448         1.447         1.448         1.446         1.424         3.403         3.433         3.255         1.901         1.821         1.755         1.686         1.634         1.544         1.484         1.448         1.448         1.438         1.868         1.824         1.545         1.847         1.438         1.868         1.854         1.847         1.438         1.868         1.854         1.847         1.438         1.854         1.854         1.854         1.854         1.854         1.854         1.851         1.854         1.854         1.854         1.854         1.854</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21           Con2         2552         2674         2475         2.327         2.211         2.118         2.006         1.13         1.84         1.767         1.708         1.591         1.551         1.647         1.551         1.651         1.551         1.647         1.541         1.457         1.551         1.461         1.413           Con3         2.712         2.562         2.470         1.561         1.647         1.561         1.551         1.461         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.461         1.424         1.361         1.426         1.426         1.521         1.427         1.446         1.431         1.361         1.426         1.424         1.361        
1.426         1.426         1.428         1.481         1.763         1.441         1.446         1.441         1.54         1.426         1.441         1.541         1.426         1.428         1.561         1.426         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22           Con2         2.952         2.674         2.475         2.327         2.211         2.210         2.061         193         1.83         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.441         1.411         1.301         1.801         1.625         1.666         1.551         1.646         1.642         1.543         1.443         1.441         1.411         1.302         2.662         2.671         2.568         2.571         2.571         1.511         1.668         1.624         1.544         1.464         1.451         1.531         1.686         1.624         1.544         1.541         1.551         1.52         1.668         1.624         1.544         1.541         1.551         1.520         1.531         1.668         1.624         1.544         1.541         1.551         1.501         1.531         1.668         1.521         1.531         1.531         1.531         1.531         1.531         1.531         <t< td=""><td>5         6         7         8         9         10         11         12         13         14         15         15         17         18         19         20         21         22         23           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.911         1.841         1.767         1.708         1.557         1.551         1.426         1.428         1.362         1.361           Con3         2.712         2.266         2.473         2.106         1.941         1.820         1.751         1.446         1.426         1.999         1.955         1.915           Con3         2.712         2.266         2.730         2.300         2.200         1.200         1.030         1.321         1.446         1.446         1.446         1.446         1.446         1.561         1.52         1.224         1.248           Con3         2.712         2.726         2.562         2.470         2.208         1.200         2.100         1.961         1.941         1.868         1.624         1.586         1.541         1.877         1.724           Con3         2.712         2.562</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24           Con2         2.652         2.674         2.475         2.327         2.211         2.106         1.991         1.834         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.346         1.577         1.531         1.545         1.502         1.463         1.428         1.349         1.476         1.755         1.656         1.545         1.502         1.463         1.428         1.349         1.363         1.573         1.545         1.502         1.463         1.428         1.346         1.54         1.541         1.451         1.386         1.336         1.373         1.717         1.717         1.718         1.55         1.468         1.448         1.448         1.450         1.448         1.448         1.454         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25           Con2         2.652         2.674         2.475         2.327         2.10         2.10         190         133         134         1.767         1.768         1.644         1.444         1.441         1.431         1.301         1.331         1.445         1.464         1.441         1.431         1.301         1.331         1.441</td><td>5         6         7         8         9         10         11         12         13         14         15         15         16         17         18         19         20         21         22         23         24         25         26           Con2         255         2674         2475         2327         211         2118         2006         1101         1824         1765         1550         1565         1565         1551         1471         1486         1431         1380         1351         1390         1351         1390         1351         1390         1351         1390         1351         1324         1290         1756         1656         1505         1508         1531         1470         1480         1431         1380         1351         1321         1249         1249         1248         1245         1232         1303           Con3         2712         2266         2700         2802         1308         1351         1327         1724         1486         1451         1371         1771         1681         1491         1473         1474         1486         1450         1324         1290         1431         1486</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27           Con2         2.652         2.674         2.475         2.327         2.10         1.90         1.82         1.756         1.656         1.654         1.620         1.463         1.428         1.366         1.367         1.341         1.12         1.202         1.645         1.620         1.648         1.471         1.341         1.341         1.756         1.656         1.647         1.653         1.645         1.428         1.346         1.202         1.646         1.647         1.648         1.647         1.648         1.646         1.647</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         28         27         28           Con2         2652         2674         2355         219         2210         190         1901         182         175         1581         1497         1441         130         1324         129         1276         1255         1255         1481         113         130         131         134         126         1276         1256         126         111         126         1265         126         1216         1202         248         129         1284<!--</td--><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29           Con2         255         2674         2475         235         215         219         2106         1994         1301         1314         1301         1312         1324         1291         127         1255         127         1255         125         127         1255         125         127         1255         125         127         1255         127         1255         127         126         126         126         126         124         128         126         126         124         128         126         1</td></td></t<></td></th<></td> | 5         6         7         8         9         10         11         12         13         144         15           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.706      
    Carp1         2.462         2.663         2.315         2.190         2.106         1.949         1.901         1.822         1.755         1.696           Carp1         4.128         3.403         3.433         3.255         3.093         2.964         2.807         2.676         2.666         2.470         2.388           Cuy1         3.160         2.866         2.505         2.300         2.804         1.976         1.866         2.150         2.050         1.978         1.899         1.836           Gord3         2.712         2.562         2.544         2.410         3.102         2.050         2.173         2.648         2.100         2.055         2.11         2.103         2.050         2.11         2.103         2.051         1.11         2.031         2.051         2.117         2.030         2.211         2.130         2.050         2.117         2.030 | 5         6         7         8         9         10         11         12         13         14         15         16           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.84         1.767         1.708         1.647           ALP1         2.940         2.662         2.463         2.315         2.106         1.964         1.911         1.822         1.755         1.669         1.534           Con3         2.712         2.266         2.303         2.280         2.490         2.666         1.568         1.571         1.684         1.622         1.568         1.514           Cuy1         3.180         2.860         2.666         2.502         2.380         2.280         1.590         1.209         1.300         2.568         1.773         1.680         1.802         1.205         1.300         2.569         1.773         1.680         1.802         1.209         1.300         2.560         1.791         1.200         1.300         2.569         1.412         1.780         1.630         1.793         1.647         1.801         1.822         1.751         1.564         1.413 | 5         6         7         8         9         10         11         12         13         14         15         16         17           Con2         2.952         2.674         2.475         2.327         2.211         2.18         2.006         1.913         1.834         1.767         1.708         1.647         1.593           Carp1         4.242         2.662         2.637         2.106         1.994         1.901         1.822         1.756         1.686         1.634         1.777           Carp1         4.128         3.403         3.433         3.255         1.994         1.841         1.756         1.686         1.634         1.578           Con3         2.712         2.666         2.505         2.300         2.804         2.159         1.576         1.577         1.576         1.581         1.570         1.587         1.577         1.577         1.586 | 5         6         7         8         9         10         11         12         13         14         15         16         17         18           Con2         2552         2674         2475         2327         2211         2118         2006         1191         1834         1767         1708         1647         1593         1551           Carp1         4426         2662         2463         2315         2196         2106         1944         101         1822         1755         1696         1634         1579         1531           Con3         2712         2456         2273         1236         2209         1294         1200         1200         1205         1891         144         1466         1424           Cuy1         3180         2860         2506         2470         2084         1200         1200         1200         1200         1200         1401         14466         1424           Seped         3643         336         3607         3201         2562         2441         1201         1202         1201         1201         1201         1201         1201         1201         1201         1201         120 | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.913         1.834         1.767         1.708         1.147         1.503         1.145         1.502           Carp1         2.402         2.662         2.633         2.325         2.109         1.901         1.822         1.755         1.686         1.634         1.579         1.531         1.472         1.533         1.487         1.533         1.487         1.531         1.447         1.503         1.441         1.466         1.424         1.386         1.773         1.711         1.686         1.624           Con3         2.712         2.265         2.330         2.226         2.131         2.030         2.238         2.303         2.228         2.161         1.106         1.624           Cur3         3.180         2.865         2.447         2.301         2.230         2.230         2.230         2.230         2.230         2.230         2.230         2.230         2.230 <th< td=""><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.708         1.644         1.502         1.463           Carp1         4.242         2.662         2.463         2.2315         2.106         1.904         1.901         1.822         1.755         1.686         1.634         1.544         1.444         1.444         1.448         1.447         1.448         1.446         1.424         3.403         3.433         3.255         1.901         1.821         1.755         1.686         1.634         1.544         1.484         1.448         1.448         1.438         1.868         1.824         1.545         1.847         1.438         1.868         1.854         1.847         1.438         1.868         1.854         1.847         1.438         1.854         1.854         1.854         1.854         1.854         1.854         1.851         1.854         1.854         1.854         1.854         1.854</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21           Con2         2552         2674         2475         2.327         2.211         2.118         2.006         1.13         1.84         1.767         1.708         1.591         1.551         1.647         1.551         1.651         1.551         1.647         1.541         1.457         1.551         1.461         1.413           Con3         2.712         2.562         2.470         1.561         1.647         1.561         1.551         1.461         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.461         1.424         1.361         1.426         1.426         1.521         1.427         1.446         1.431         1.361         1.426         1.424         1.361         1.426         1.426         1.428         1.481         1.763         1.441         1.446         1.441         1.54         1.426         1.441         1.541         1.426         1.428         1.561         1.426         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22           Con2         2.952         2.674         2.475         2.327         2.211         2.210         2.061         193         1.83         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.441         1.411         1.301         1.801         1.625         1.666         1.551         1.646         1.642         1.543         1.443         1.441         1.411         1.302         2.662         2.671         2.568         2.571         2.571         1.511         1.668         1.624         1.544         1.464         1.451         1.531         1.686         1.624         1.544         1.541         1.551         1.52         1.668         1.624         1.544         1.541         1.551         1.520         1.531         1.668         1.624         1.544         1.541         1.551         1.501         1.531         1.668         1.521         1.531         1.531         1.531         1.531         1.531         1.531         <t< td=""><td>5         6         7         8         9         10         11         12         13         14         15         15         17         18         19         20         21         22         23           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.911         1.841         1.767         1.708         1.557         1.551         1.426         1.428         1.362         1.361           Con3         2.712         2.266         2.473         2.106         1.941         1.820         1.751         1.446         1.426         1.999         1.955         1.915           Con3         2.712         2.266         2.730         2.300         2.200         1.200         1.030         1.321         1.446         1.446         1.446         1.446         1.446         1.561  
      1.52         1.224         1.248           Con3         2.712         2.726         2.562         2.470         2.208         1.200         2.100         1.961         1.941         1.868         1.624         1.586         1.541         1.877         1.724           Con3         2.712         2.562</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24           Con2         2.652         2.674         2.475         2.327         2.211         2.106         1.991         1.834         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.346         1.577         1.531         1.545         1.502         1.463         1.428         1.349         1.476         1.755         1.656         1.545         1.502         1.463         1.428         1.349         1.363         1.573         1.545         1.502         1.463         1.428         1.346         1.54         1.541         1.451         1.386         1.336         1.373         1.717         1.717         1.718         1.55         1.468         1.448         1.448         1.450         1.448         1.448         1.454         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25           Con2         2.652         2.674         2.475         2.327         2.10         2.10         190         133         134         1.767         1.768         1.644         1.444         1.441         1.431         1.301         1.331         1.445         1.464         1.441         1.431         1.301         1.331         1.441</td><td>5         6         7         8         9         10         11         12         13         14         15         15         16         17         18         19         20         21         22         23         24         25         26           Con2         255         2674         2475         2327         211         2118         2006         1101         1824         1765         1550         1565         1565         1551         1471         1486         1431         1380         1351         1390         1351         1390         1351         1390         1351         1390         1351         1324         1290         1756         1656         1505         1508         1531         1470         1480         1431         1380         1351         1321         1249         1249         1248         1245         1232         1303           Con3         2712         2266         2700         2802         1308         1351         1327         1724         1486         1451         1371         1771         1681         1491         1473         1474         1486         1450         1324         1290         1431         1486</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27           Con2         2.652         2.674         2.475         2.327         2.10         1.90         1.82         1.756         1.656         1.654         1.620         1.463         1.428         1.366         1.367         1.341         1.12         1.202         1.645         1.620         1.648         1.471         1.341         1.341         1.756         1.656         1.647         1.653         1.645         1.428         1.346         1.202         1.646         1.647         1.648         1.647         1.648         1.646         1.647</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         28         27         28           Con2         2652         2674         2355         219         2210         190         1901         182         175         1581         1497         1441         130         1324         129         1276         1255         1255         1481         113         130         131         134         126         1276         1256         126         111         126         1265         126         1216         1202         248         129         1284<!--</td--><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29           Con2         255         2674         2475         235         215         219         2106         1994         1301         1314         1301         1312         1324         1291         127         1255         127         1255         125         127         1255         125         127         1255         125         127         1255         127         1255         127         126         126         126         126         124         128         126         126         124         128         126         1</td></td></t<></td></th<> | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20           Con2         2.952         2.674         2.475         2.327         2.211         2.116         2.006         1.913         1.834         1.767         1.708         1.644         1.502         1.463           Carp1         4.242         2.662         2.463         2.2315         2.106         1.904         1.901         1.822         1.755         1.686         1.634         1.544         1.444         1.444         1.448         1.447         1.448         1.446         1.424         3.403         3.433         3.255         1.901         1.821         1.755         1.686         1.634         1.544         1.484         1.448         1.448         1.438         1.868         1.824         1.545         1.847         1.438         1.868         1.854         1.847         1.438         1.868         1.854         1.847         1.438         1.854         1.854         1.854         1.854         1.854         1.854         1.851         1.854         1.854         1.854         1.854         1.854 | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21           Con2         2552         2674         2475         2.327         2.211         2.118         2.006         1.13         1.84         1.767         1.708         1.591         1.551         1.647         1.551         1.651         1.551         1.647         1.541         1.457         1.551         1.461         1.413           Con3         2.712         2.562         2.470         1.561         1.647         1.561         1.551         1.461         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.461         1.424         1.361         1.426         1.426         1.521         1.427         1.446         1.431         1.361         1.426         1.424         1.361         1.426         1.426         1.428         1.481         1.763         1.441         1.446         1.441         1.54         1.426         1.441         1.541         1.426         1.428         1.561         1.426         1. | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22          
Con2         2.952         2.674         2.475         2.327         2.211         2.210         2.061         193         1.83         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.441         1.411         1.301         1.801         1.625         1.666         1.551         1.646         1.642         1.543         1.443         1.441         1.411         1.302         2.662         2.671         2.568         2.571         2.571         1.511         1.668         1.624         1.544         1.464         1.451         1.531         1.686         1.624         1.544         1.541         1.551         1.52         1.668         1.624         1.544         1.541         1.551         1.520         1.531         1.668         1.624         1.544         1.541         1.551         1.501         1.531         1.668         1.521         1.531         1.531         1.531         1.531         1.531         1.531 <t< td=""><td>5         6         7         8         9         10         11         12         13         14         15         15         17         18         19         20         21         22         23           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.911         1.841         1.767         1.708         1.557         1.551         1.426         1.428         1.362         1.361           Con3         2.712         2.266         2.473         2.106         1.941         1.820         1.751         1.446         1.426         1.999         1.955         1.915           Con3         2.712         2.266         2.730         2.300         2.200         1.200         1.030         1.321         1.446         1.446         1.446         1.446         1.446         1.561         1.52         1.224         1.248           Con3         2.712         2.726         2.562         2.470         2.208         1.200         2.100         1.961         1.941         1.868         1.624         1.586         1.541         1.877         1.724           Con3         2.712         2.562</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24           Con2         2.652         2.674         2.475         2.327         2.211         2.106         1.991         1.834         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.346         1.577         1.531         1.545         1.502         1.463         1.428         1.349         1.476         1.755         1.656         1.545         1.502         1.463         1.428         1.349         1.363         1.573         1.545         1.502         1.463         1.428         1.346         1.54         1.541         1.451         1.386         1.336         1.373         1.717         1.717         1.718         1.55         1.468         1.448         1.448         1.450         1.448         1.448         1.454         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25           Con2         2.652         2.674         2.475         2.327         2.10         2.10         190         133         134         1.767         1.768         1.644         1.444         1.441         1.431         1.301         1.331         1.445         1.464         1.441         1.431         1.301         1.331         1.441</td><td>5         6         7         8         9         10         11         12         13         14         15         15         16         17         18         19         20         21         22         23         24         25         26           Con2         255         2674         2475         2327         211         2118         2006         1101         1824         1765         1550         1565         1565         1551         1471         1486         1431         1380         1351         1390         1351         1390         1351         1390         1351         1390         1351         1324         1290         1756         1656         1505         1508         1531         1470         1480         1431         1380         1351         1321         1249         1249         1248         1245         1232         1303           Con3         2712         2266         2700         2802         1308         1351         1327         1724         1486         1451         1371         1771         1681         1491         1473         1474         1486         1450         1324         1290         1431         1486</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27           Con2         2.652         2.674         2.475         2.327         2.10         1.90         1.82         1.756         1.656         1.654         1.620         1.463         1.428         1.366         1.367         1.341         1.12         1.202         1.645         1.620         1.648         1.471         1.341         1.341         1.756         1.656         1.647         1.653         1.645         1.428         1.346         1.202         1.646         1.647         1.648         1.647         1.648         1.646         1.647</td><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         28         27         28           Con2         2652         2674         2355         219         2210         190         1901         182         175         1581         1497         1441         130         1324         129         1276         1255         1255         1481         113         130         131         134         126         1276         1256         126         111         126         1265         126         1216         1202         248         129         1284<!--</td--><td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29           Con2         255         2674         2475         235         215         219         2106         1994         1301         1314         1301         1312         1324         1291         127         1255         127         1255         125         127         1255         125         127         1255         125         127         1255         127         1255         127         126         126         126         126         124         128         126         126         124         128         126         1</td></td></t<> | 5         6         7         8         9         10         11         12         13         14         15         15         17         18         19         20         21         22         23           Con2         2.952         2.674         2.475         2.327         2.211         2.118         2.006         1.911         1.841         1.767         1.708         1.557         1.551         1.426         1.428         1.362         1.361           Con3         2.712         2.266         2.473         2.106         1.941         1.820         1.751         1.446         1.426         1.999         1.955         1.915           Con3         2.712         2.266         2.730         2.300         2.200         1.200      
  1.030         1.321         1.446         1.446         1.446         1.446         1.446         1.561         1.52         1.224         1.248           Con3         2.712         2.726         2.562         2.470         2.208         1.200         2.100         1.961         1.941         1.868         1.624         1.586         1.541         1.877         1.724           Con3         2.712         2.562 | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24           Con2         2.652         2.674         2.475         2.327         2.211         2.106         1.991         1.834         1.767         1.708         1.647         1.503         1.645         1.502         1.463         1.428         1.346         1.577         1.531         1.545         1.502         1.463         1.428         1.349         1.476         1.755         1.656         1.545         1.502         1.463         1.428         1.349         1.363         1.573         1.545         1.502         1.463         1.428         1.346         1.54         1.541         1.451         1.386         1.336         1.373         1.717         1.717         1.718         1.55         1.468         1.448         1.448         1.450         1.448         1.448         1.454         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1.451         1. | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25           Con2         2.652         2.674         2.475         2.327         2.10         2.10         190         133         134         1.767         1.768         1.644         1.444         1.441         1.431         1.301         1.331         1.445         1.464         1.441         1.431         1.301         1.331         1.441 | 5         6         7         8         9         10         11         12         13         14         15         15         16         17         18         19         20         21         22         23         24         25         26           Con2         255         2674         2475         2327         211         2118         2006         1101         1824         1765         1550         1565         1565         1551         1471         1486         1431         1380         1351         1390         1351         1390         1351         1390         1351         1390         1351         1324         1290         1756         1656         1505         1508         1531         1470         1480         1431         1380         1351         1321         1249         1249         1248         1245         1232         1303           Con3         2712         2266         2700         2802         1308         1351         1327         1724         1486         1451         1371         1771         1681         1491         1473         1474         1486         1450         1324         1290         1431         1486 | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27           Con2         2.652         2.674         2.475         2.327         2.10         1.90         1.82         1.756         1.656         1.654         1.620         1.463         1.428         1.366         1.367         1.341         1.12         1.202         1.645         1.620         1.648         1.471         1.341         1.341         1.756         1.656         1.647         1.653         1.645         1.428         1.346         1.202         1.646         1.647         1.648         1.647         1.648         1.646         1.647 | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         28         27         28           Con2         2652         2674         2355         219         2210         190         1901         182         175         1581         1497         1441         130         1324         129         1276         1255         1255         1481         113         130         131         134         126         1276         1256         126         111         126         1265         126         1216         1202         248         129         1284 </td <td>5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29           Con2         255         2674         2475         235         215         219         2106         1994         1301         1314         1301         1312         1324         1291         127         1255         127         1255         125         127         1255         125         127         1255         125         127         1255         127         1255         127         126         126         126         126         124         128         126         126         124         128         126         1</td> | 5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29           Con2         255         2674         2475         235         215         219         2106         1994         1301         1314         1301         1312         1324         1291         127         1255         127         1255         125         127         1255         125         127         1255         125         127         1255         127         1255         127         126         126         126         126         124         128         126         126         124         128         126         1 |

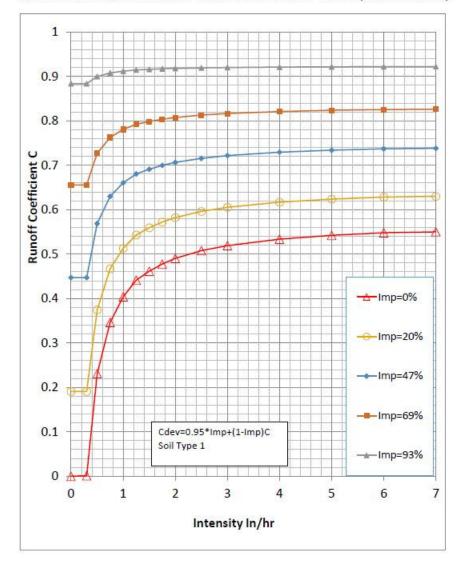
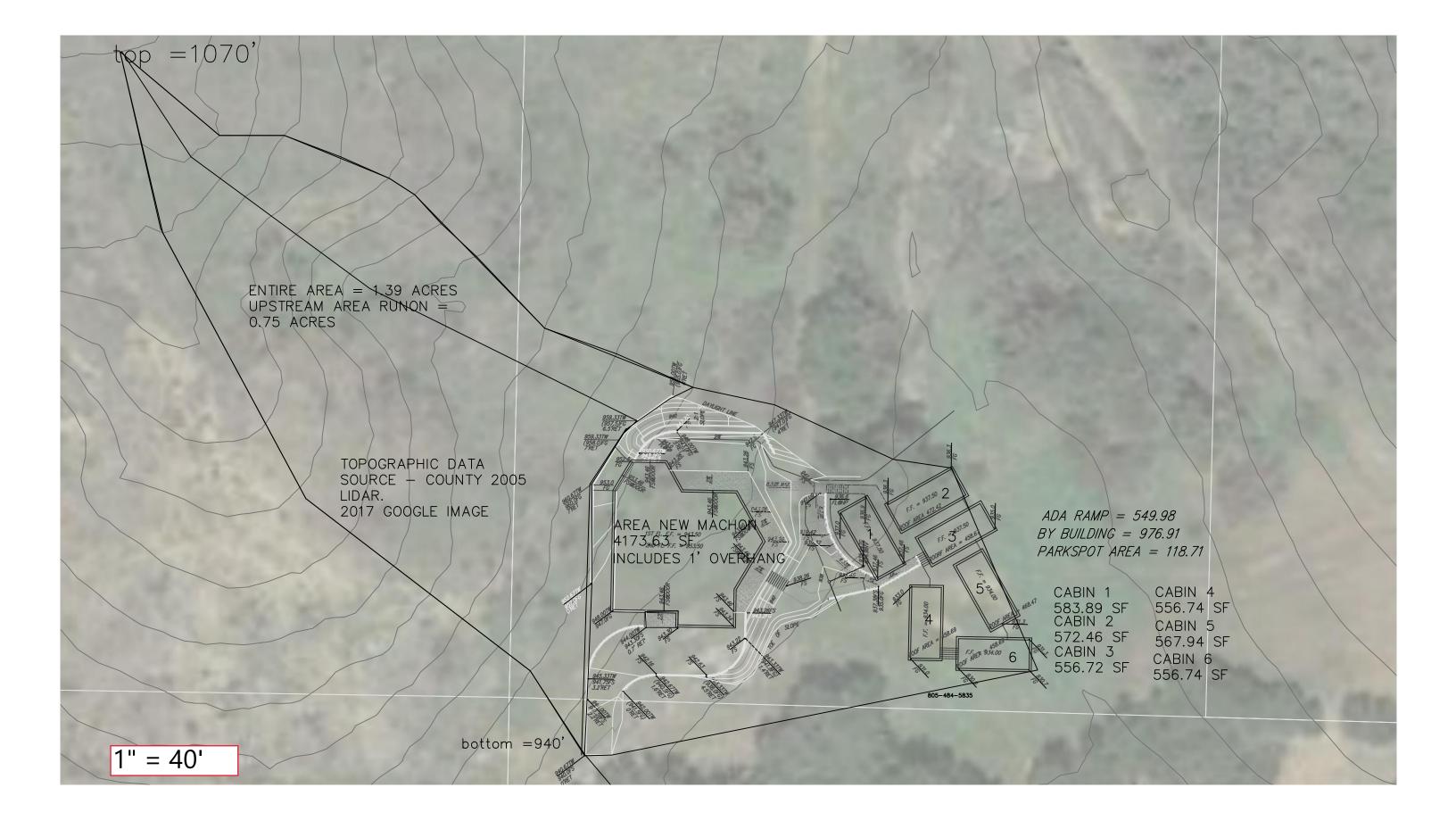


EXHIBIT 5A. UPDATED RUNOFF COEFFICIENT CURVE- SOIL 1 (NRCS TYPE D)

VCWPD Design Hydrology Manual - 2017

Page A-15

### ATTACHMENT B – WATERSHED EXHIBIT, SITE DEVELOPMENT AREA



# REVISED NOISE ASSESSMENT TECHNICAL REPORT for the

Camp Ramah Project Ventura County, California

Prepared for:

## Camp Ramah

Prepared by:

**DUDEK** 621 Chapala Street Santa Barbara, California 93101 *Contact: Jonathan Leech* 

# **FEBRUARY 2020**

County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 13 - Dudek Noise Assessment Technical Reports, dated February 2020 and October 2019

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## TABLE OF CONTENTS

### **Section**

### Page No.

1.0	INTI	RODUCTION	1
	1.1	Purpose	1
	1.2	Project Location and Description	1
		1.2.1 Location	1
		1.2.2 Project Description	3
	1.3	Noise Background and Terminology	6
	1.4	Noise Regulation and Management	8
		1.4.1 State	8
		1.4.2 County of Ventura	9
2.0	EXIS	STING NOISE CONDITIONS	12
3.0	SIG	NIFICANCE CRITERIA	13
	3.1	County of Ventura Noise Significance Criteria	13
4.0	IMP	ACTS AND MITIGATION	
	4.1	Operations Noise Generation	14
		4.1.1 Impact Analysis	14
		4.1.2 Mitigation Measures	
5.0	REF	ERENCES	25

### FIGURES

FIGURE 1	Camp Boundaries And Adjacent Residence Locations2
FIGURE 2	Site Plan And Noise Measurement Locations5

### **APPENDICES**

- A Zoning Map
- B Proposed Machon & Cabins Schematic Diagrams
- C Proposed Speaker Layout Diagram
- D Ambient Noise Measurement Data
- E Mechanical Equipment Calculation Worksheets
- F Outdoor Loudspeaker Calculation Worksheets
- G Sound Blanket Manufacturer Data

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### ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulation
CNEL	community noise equivalent level
dB	decibel
dBA	A-weighted decibel
DOT	U.S. Department of Transportation
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
Hz	hertz
Ldn	day-night sound level
Leq	equivalent sound level
Lmin	minimum sound level
Lmax	maximum sound level
Lxx	percentile exceeded sound level
RMS	root mean square
SR	State Route
VdB	vibration decibels

## 1.0 INTRODUCTION

### 1.1 Purpose

This technical noise report evaluates noise effects of the proposed project which entails a requested minor modification to the Conditional Use Permit for Camp Ramah, Ojai. The requested modification would introduce a limited number of new structures to accommodate an additional grade level of campers, and also proposes installation and use of an outdoor sound amplification system. While structures would be added in order to accommodate another grade level (age group) of campers, Camp Ramah proposes to hold the overall attendance level consistent with current and historic levels. Fewer campers would be accepted within the currently accommodated age levels in order to balance the addition of the new age group.

Noise generation sources from future implementation of the project include mechanical equipment operation associated with the new structures and operation of the outdoor sound amplification system. Neither traffic-related noise levels nor general activity noise levels would be anticipated to increase, given the maintenance of the current and historic attendance or participation population under the proposed modification.

## **1.2 Project Location and Description**

### 1.2.1 Location

The Camp Ramah Ojai property is located within an unincorporated portion of Ventura County, northwest of the City of Ojai. The property address is 385 Fairview Road, and access is provided from a private driveway connecting to Fairview Road. Fairview Road generally forms the southern property boundary, across which are located rural residential lots. The Camp Ramah property is bordered on the east by a residential neighborhood with 5-acre lots, on the north by open space and rural residential parcels, and on the west by the Camp Ramah Retreat center.

Camp Ramah has historically consisted of three parcels of land (Assessor Parcel Numbers [APNs] 010-011-012, 010-011-013, and 010-012-004). The Camp Ramah Retreat occupies an additional parcel (010-017-002), bordering Camp Ramah on the west. Camp Ramah recently purchased the parcel immediately north of the central camp (010-007-031) and the parcel immediately to the north and northwest of the retreat parcel (010-006-007). APN 010-006-007 contains more area than the existing Camp Ramah property, and there are no sensitive noise receptors located in this direction from the main camp (northwest). Therefore, to keep the graphic scale manageable for reference in this report, Figure 1 includes the boundaries for the historic Camp Ramah (APNs - 012, 013 and 004), along with the one new parcel directly to the north of the central camp (010-007-031); Figure 1 does not include the new parcel north of the retreat center (010-006-007). Figure 1 also illustrates adjacent land uses described above.

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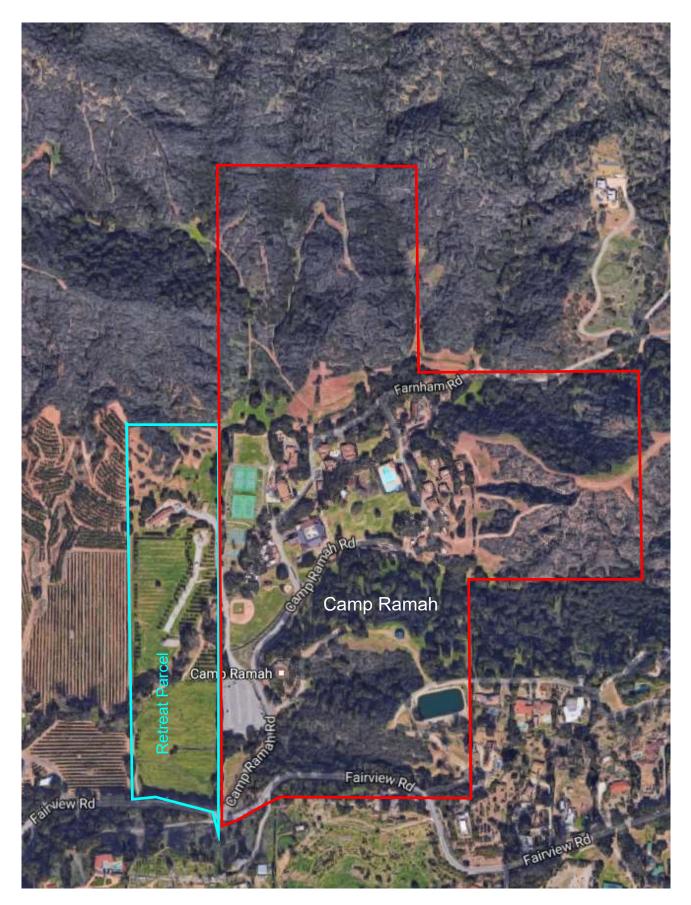


FIGURE 1 CAMP RAMAH & LOCATIONS OF CLOSEST OFF-SITE NOISE SENSITIVE STRUCTURES CAMP RAMAH OJAI - NOISE TECHNICAL REPORT The Camp property is zoned residential (RE-20: Rural Exclusive, 20 acre minimum parcel size); parcels to the south and east carry a designation of rural agriculture (RA-5, RA-2), but are generally developed with low density single family residences; parcels to the north are zoned open space (OS-20 and OS-80) or residential (RE-5); the parcel to the west is zoned open space (OS-40). The zoning map for the project area is included in *Appendix A*.

### 1.2.2 Project Description

The proposed project involves the construction of a new Machon and six new cabin structures (with integrated bathrooms) on the property where there is currently an undeveloped grassy area. Refer to *Figure 2* for the overall site plan, including the area proposed for the location of the new Machon and cabins. These buildings would allow the Camp to add a grade level to the camp experience; however, overall on-site population would not increase due to offsetting decreases proposed in other grade levels already served by the camp.

More detailed schematics for the proposed new Machon and cabins are provided in *Appendix B*. The seven individual structures would include the Machon (with staff sleeping quarters, kitchen, dining common/meeting hall), three cabins for girls, and three cabins for boys. Outdoor mechanical equipment includes one compressor for mini-split HVAC units for each of the six cabins, two compressors for mini-split HVAC units for the Machon, and an exhaust blower for the kitchen.

Summer Camp activities run from early June through mid-August with occasional special private events hosted throughout the calendar year. Noise-generating activities occur in various locations throughout the site, but are primarily concentrated in the center of the property. Within the center portion of the property, the Camp proposes to install and operate an exterior sound amplification system. Operational hours for exterior amplified sound use are proposed to be from 9AM - 10PM, but a limited number of exceptions to this schedule are proposed in order to accommodate specific traditional activities (described in more detail below). *Appendix C* provides a schematic indicating the proposed location of speakers to be included in the system. A brief description of the locations is provided below.

- 1. Main dining room lawn (facing northeast) as well as one speaker on the northern, eastern, and southern corners of the dining building
- 2. Fire pit at the boys tent area (portable or temporary speaker), oriented southwest
- 3. Basketball courts (portable or temporary speaker), oriented north

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- 4. Amphitheater (anticipated to include a pair of speakers at the stage corners, and a pair of speakers at the half-way point on either side of the seating area, facing northeast and northwest)
- 5. Girls gazebo (inside, oriented downward from the ceiling)
- 6. An emergency alarm, with individual speakers facing north, west, south, and east, located immediately south of the central dining facility

Camp Ramah proposes to allow the use of amplified sound in outdoor areas which either extends later than the general 10:00 PM limit, and/or involves the participation by a large portion of the Camp population for the following traditional activities or events.

Café Ezra	One night per week during summer camp season, in the patio and lawn area on the northwest side of the dining hall (amplified sound location #1), low level amplified music, $9:00 - 11:00$ PM
Israeli Dance	One night per week during summer camp season, in the basketball courts area (amplified sound location #3), moderate level amplified music, $9:00 - 10:00 \text{ PM}$
Performance Night	Once per camp session, in the amphitheater (amplified sound location #4), amplified speech and low level music, $7:30 - 9:30$ PM

The potential for sound generation from the proposal would include operation of exterior mechanical equipment and new amplified sound system usage.

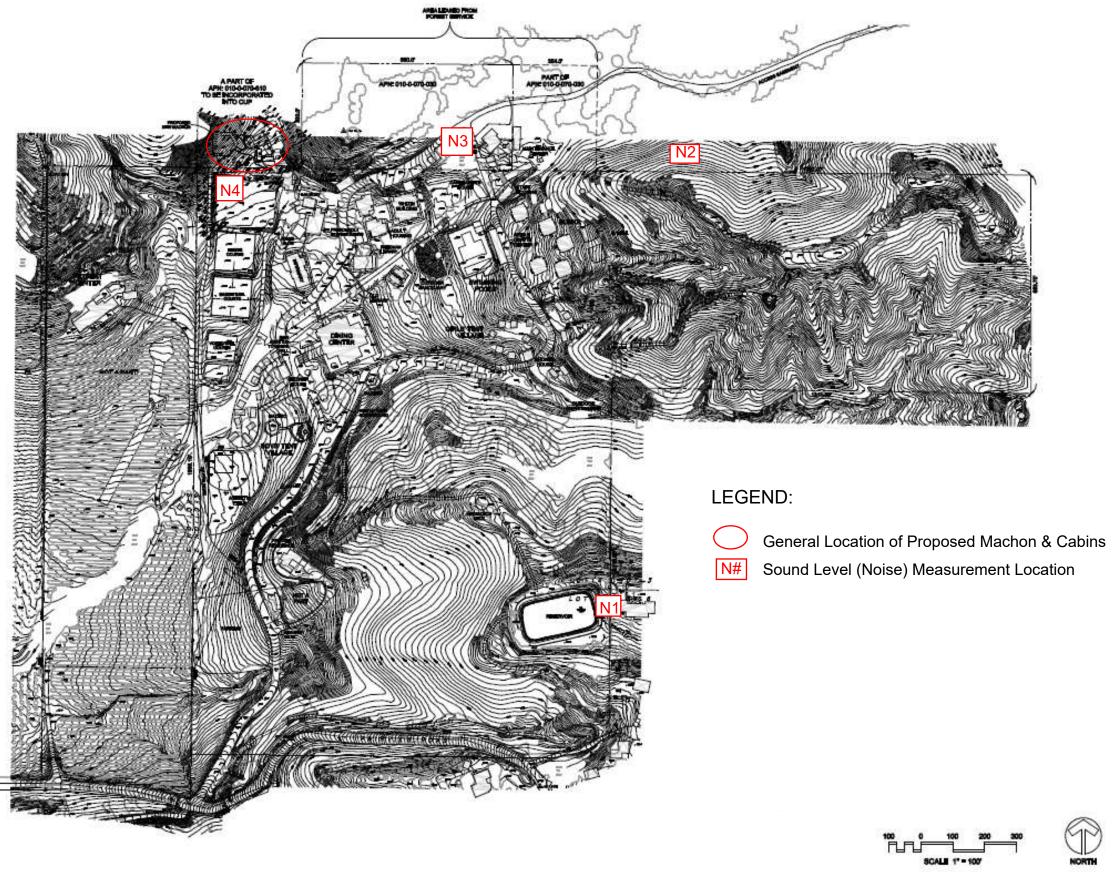




FIGURE 2

CAMP RAMAH SITE PLAN & NOISE MEASUREMENT LOCATIONS

CAMP RAMAH OJAI - NOISE TECHNICAL REPORT

## 1.3 Noise Background and Terminology

### Fundamentals of Environmental Noise

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 20,000 Hz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called "A" weighting is typically used for quieter noise levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the "noise level" and is referenced in units of dBA.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear (U.S. DOT 1980). Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable (EPA 1973). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence. A complete definition of CNEL is provided below.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (Leq), the minimum and maximum sound levels (Lmin and Lmax), the day–night sound level (Ldn), and the CNEL. Below are brief definitions of these measurements and other terminology used in this report.

- *Decibel* (dB) is a unitless measure of sound on a logarithmic scale which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals.
- *A-weighted decibel* (dBA) is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- *Equivalent sound level* (L<sub>eq</sub>) is the constant level that, over a given time period, transmits the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for both the day–night average sound levels (Ldn) and community noise equivalent level (CNEL) scales. "L<sub>eq</sub> 1H" refers to a 1-hour averaging period.
- *Maximum sound level* (Lmax) is the maximum sound level measured during the measurement period.
- *Minimum sound level* (Lmin) is the minimum sound level measured during the measurement period.
- Day-night average sound level (L<sub>dn</sub>) The City of Santa Barbara has historically described community noise levels in terms of the L<sub>dn</sub>. The L<sub>dn</sub> is a 24-hour average A-weighted sound level with a 10 dB penalty added to the nighttime hours from 10:00 p.m. to 7:00 a.m. The 10 dB penalty is applied to account for increased noise sensitivity during the nighttime hours. Resulting values from application of L<sub>dn</sub> versus CNEL rarely differ by more than 1 dB, and therefore these two methods of describing average noise levels are often considered interchangeable.
- *Community noise equivalent level* (CNEL) The County of Santa Barbara describes community noise levels in terms of the CNEL. The CNEL is the average equivalent A-weighted sound level during a 24-hour day. CNEL accounts for the increased noise sensitivity during the evening hours (7 p.m. to 10 p.m.) and nighttime hours (10 p.m. to 7 a.m.) by adding 5 dB to the sound levels in the evening and 10 dB to the sound levels at night. CNEL and L<sub>dn</sub> are often considered equivalent descriptors.

#### **Exterior Noise Distance Attenuation**

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor

vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground.

#### **Structural Noise Attenuation**

Sound levels can also be attenuated by man-made or natural barriers. Solid walls or slopes associated with elevation differences typically reduce noise levels by 5 to 10 dBA (U.S. DOT 1980). Structures can also provide noise reduction by insulating interior spaces from outdoor noise. The outside-to-inside noise attenuation provided by typical residential structures in California is approximately 25 dBA (Caltrans 1980).

## 1.4 Noise Regulation and Management

### 1.4.1 State

### California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

#### California Noise Insulation Standards (CCR Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (CCR Title 24, Part 2). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure is proposed to be located in an area with CNEL (or Ldn) of

60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or Ldn) of at least 45 dBA (California's Title 24 Noise Standards, Chap. 2-35). With respect to the project, the proposed new Macron cabins would generally be considered to comprise lodging facilities, for which a maximum exterior noise exposure of 60 dBA CNEL would be recommended.

#### 1.4.2 County of Ventura

Noise effects of the proposed project on adjacent properties located within the County would be subject to compliance with adopted noise policies and ordinances of the County of Ventura. County noise policies, and their application to project noise analysis, are described below.

#### County of Ventura General Plan – Noise Element

#### 2.16.2 Policies

1. All discretionary development shall be reviewed for noise compatibility with surrounding uses. Noise compatibility shall be determined from a consistent set of criteria based on the standards listed below. An acoustical analysis by a qualified acoustical engineer shall be required of discretionary developments involving noise exposure or noise generation in excess of the established standards. The analysis shall provide documentation of existing and projected noise levels at on-site and off-site receptors, and shall recommend noise control measures for mitigating adverse impacts.

(1) Noise sensitive uses proposed to be located near highways, truck routes, heavy industrial activities and other relatively continuous noise sources shall incorporate noise control measures so that:

a. Indoor noise levels in habitable rooms do not exceed CNEL 45.

b. Outdoor noise levels do not exceed CNEL 60 or Leq1H of 65 dB(A) during any hour.

#### [...]

(4) Noise generators, proposed to be located 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 following standards:

a. Leq1H of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.

b. Leq1H of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.

c. Leq1H of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

Section 2.16.2(4) is not applicable to increased traffic noise along any of the roads identified within the 2020 Regional Roadway Network (Figure 4.2.3) Public Facilities Appendix of the Ventura County General Plan (see 2.16.2-1(1)). In addition, State and Federal highways, all railroad line operations, aircraft in flight, and public utility facilities are noise generators having Federal and State regulations that preempt local regulations.

The primary goal of the above policies is to maintain exterior noise exposure levels not exceeding 60 dBA CNEL for residential land uses. For new noise generation sources not related to transportation, the allowances are slightly more restrictive where existing residences could be exposed to the generated noise.

#### **County of Ventura Noise Ordinance**

Noise impacts from stationary sources are regulated through the County's Noise Ordinance. The County's Noise Ordinance, No. 4124 states:

#### Sec. 6299-1 - Loud or Raucous Noise Prohibition

No person shall create within any residential zone of the County of Ventura any loud or raucous noise which is audible to the human ear during the hours of 9 p.m. to 7 a.m. of the following day, at a distance of 50 feet from the property line of the noise source or 50 feet from any such noise source if the noise source is in a public right-of-way.

#### Sec. 6299-2 – Definitions

For purposes of this Article, the following definitions shall apply:

- a. "Person" mean any individual, association, firm, organization, partnership, corporation or other entity, but does not include any government entity or public utility.
- b. "Residential Zone" means any areas with the unincorporated portion of Ventura County that are zoned:
  - 1. Single-Family Residential (R-l)
  - 2. Two-Family Residential (R-2)
  - 3. Residential Planned Development (R-P-D)
  - 4. Single Family Estate (R-O)

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5. Rural Exclusive (R-E)

6. Coastal Single-Family Residential (C-R-1)

- 7. Coastal Two-Family Residential (C-R-2)
- 8. Coastal Residential Planed Development (C-R-P-D), or

9. Coastal Rural Exclusive (C-R-E),

(as provided in Chapter 1 and Chapter 1.1 of Division 8 of this Code).

c. "Loud or raucous noise" means sounds from: 1) the use or operation of any radio, musical instrument, phonograph, television receiver, video cassette recorder, or any machine or device for the production, reproduction or amplification of the human voice or any other sound or 2) the us or operation of any lawn mower, backpack blower, blower, lawn edger, riding tractor or other mechanical or electrical device or hand tool.

"Audible to the human ear" is not defined within the Noise Ordinance. Generally, noise must be at least 3 dBA greater than background or ambient noise levels in order for it to be "noticeable" to an observer. In a carefully controlled lab environment, some subjects may be able to detect as little as a 1 dBA increase in sound level, but these small changes are easily masked by the number of different noise sources present in an outdoor environment. For the purpose of interpreting the noise ordinance, a noise level at least 2 dBA over the ambient noise level would be considered the threshold for "audible".

#### **County of Ventura Outdoor Events Ordinance**

The County of Ventura in July 2018 adopted an ordinance governing the occurrence of outdoor events involving large attendance (generally an event with more than 75 attendees). The County's Outdoor Events Ordinance, No. 4526 states:

Sec. 8111-1.2.1.lb. -Permit Approval Standards for Outdoor Events and Assembly Uses

Conditional Use Permits authorizing outdoor events and assembly uses shall be granted if all billed fees and charges for processing the application that are due for payment have been paid and if all of the following standards are met. An application for a Conditional Use Permit shall not be denied on the basis of the content of protected expression associated with the proposed use. The applicant shall have the burden of proving to the satisfaction of the appropriate decision-making authority that the following standards can be met. Specific factual findings shall be made by the decision-making authority to support the conclusion that each of these standards, if applicable, can be satisfied.

b. The proposed use can coexist in relative proximity, and is not expected to unduly interfere with, the existing land uses of the surrounding area as determined based on the following land use factors:

(1) 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;

"Louder than ambient noise levels" is not defined within the Outdoor Events Ordinance. For the purpose of interpreting the outdoor event ordinance, a noise level at least 2 dBA over the ambient noise level would be considered the threshold for "louder than ambient".

## 2.0 EXISTING NOISE CONDITIONS

The existing Camp Ramah operations are a noise generation source which contributes to the ambient noise environment of the surrounding rural environment. In order to characterize existing noise levels associated with Camp Ramah operations, four 96-hour noise measurements were performed. Soft dB Piccolo 3 (American National Standards Institute) Type 2 Integrating Sound Level Meters calibrated with a Larson Davis Model CAL150 calibrator were used to record ambient sound levels at various points along the Camp Ramah property boundary where changes in noise levels could result from project implementation. Please refer to *Figure 2* for measurement locations discussed in this section.

The measurements included an approximately 24-hour period before a Memorial Day Weekend session at the Camp; two 24-hour measurements while the Camp was in session; and a final 24-hour period following the Memorial Day Weekend Session.

Please refer to *Figure 2* for the noise measurement locations. Briefly they are: 1) at the eastern property boundary, adjacent to the on-site reservoir and adjacent off-site residence; 2) at a bench near the northern property boundary, in the eastern portion of the site, between the main campus and closest off-site residence to the northeast; 3) at the northern limit of the developed central portion of the Camp Ramah property, adjacent to the Camp Ramah manager residence; and 4) adjacent to the existing tennis courts and soccer field (the soccer field being adjacent to the south side of the proposed location for the new Macron complex). The noise measurement results are presented below in *Table 1* as CNEL values for the four days of measurements, at the four locations. The hourly LEQ values and CNEL calculations are provided in *Appendix D*.

Table 1								
	Existing Ambient Noise Measurement Results							
Location	5/27-5/28/16         5/28-5/29/16         5/29-5/30/16         5/30-5/31/16           dBA CNEL         dBA CNEL         dBA CNEL         dBA CNEL							
1 (Reservoir)	47	45	47	46				
2 (Bench)	51	46	48	47				
3 (Mngr. House)	49	47	48	47				
4 (Soccer)	53	51	52	46				

Weed and dry vegetation clearing activities and seasonal preparation operations were observed on May 27 (Friday) during placement of the sound level meters. Heavy equipment and chain saws were employed for some of these activities, which resulted in the highest recorded sound levels over the 4-day period. The peak Camp activity levels occurred on Sunday, which had the second highest CNEL value for the 4-day period. The 24-hour measurement period following the gathering (from 11 AM Monday 5/30 to 11 AM Tuesday 5/31) is considered a reasonable characterization of ambient noise levels while Camp Ramah is not in session. The difference between the highest and lowest CNEL value for a given location generally only varied by 2-4 dBA over the 4-day measurement period, except adjacent to the soccer field, which varied by 6 dBA CNEL. All of the CNEL values from the measured locations comply with the 60 dBA CNEL exterior noise level criterion for residential land uses.

## 3.0 SIGNIFICANCE CRITERIA

## 3.1 County of Ventura Noise Significance Criteria

Based upon the Ventura County General Plan Noise Element, Noise Ordinance, and Outdoor Events Ordinance, the project would result in a significant impact if:

- The proposed development would generate noise levels in excess of 60 dB(A) CNEL at existing residential properties in the project vicinity.
- (2) The proposed development would generate noise levels at the exterior wall of an existing vicinity residence which exceed:
  - a. Leq1H of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
  - b. Leq1H of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.



- c. Leq1H of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.
- (3) The proposed development would create any loud or raucous noise which is audible to the human ear during the hours of 9 p.m. to 7 a.m. of the following day, at a distance of 50 feet from the property line of the noise source.
- (4) Outdoor events would generate noise levels above ambient levels at vicinity dwellings (residences).

### 4.0 IMPACTS AND MITIGATION

### 4.1 **Operations Noise Generation**

#### 4.1.1 Impact Analysis

The implementation of the project would result in changes to existing noise levels on the project site by developing new stationary sources of noise including mechanical equipment and an outdoor sound amplification system. These sources may affect noise-sensitive vicinity land uses off the project site. The following analysis evaluates noise from proposed new exterior mechanical equipment as well as the proposed sound amplification system.

Although the proposed new Machon and cabins would provide accommodations for a grade level of attendees over and above the grade levels historically served by the Camp, attendance levels for the other grades are proposed to be adjusted downward, such that maximum enrollment or attendance for the Camp would be no greater than existing levels. Because of this, the noise from general activities and vehicular traffic associated with the Camp would not be anticipated to be affected. Consequently, traffic noise and noise from general Camp activities is not evaluated in this report.

#### 4.1.1.1 Outdoor Mechanical Equipment

The proposed location for the new Machon complex is adjacent to the north side of the existing soccer fields, north and somewhat close to the historic northern boundary for the Camp Ramah parcel. However, given the purchase by Camp Ramah of the parcel immediately north of this portion of the Camp, the boundary for the adjacent neighboring property to the north is now located approximately 1,150 feet away from the proposed new Macron location. Also, while the proposed new Macron complex would be located within approximately 60 feet of the western boundary of the Camp Ramah property, the Camp Ramah retreat abuts the Camp to the west, which is under the same ownership as Camp Ramah. Given the common ownership of the Retreat and Camp, the

distance to the closest neighboring property boundary becomes the determinant for analyzing noise levels that could affect neighbors. The distance to the closest neighboring property boundary to the west would be approximately 300 feet from the proposed Macron location.

The proposed Macron complex would consist of seven individual structures, arranged in two groupings. The Macron would be located on the western portion of the site, approximately 300 feet from the closest neighboring property line to the west; approximately 1,200 to the closest property line to the north; and, approximately 2,000 feet from the southern property boundary. The six cabins would be grouped together on the eastern portion of the site clearing, approximately 365 feet from the closest neighboring property line to the west; approximately 1,200 feet from the northern property boundary; approximately 140 feet from the eastern property boundary; and, approximately 2,050 feet from the southern property boundary. Refer to *Appendix B* for the proposed configuration of the Macron and cabins. Outdoor mechanical equipment for the proposed Macron and cabins includes the following.

- a. Eight compressors for mini-split HVAC units for the Machon and cabins (anticipated to be 2-ton units, LG model no. ARUN036GS2 or equivalent). Please refer to Appendix B for a schematic indicating the approximate locations for these compressors. The compressors would be mounted on the ground, adjacent to the structure they would serve. It is anticipated that compressor units 4 and 7 would be installed on the east side of the cabins they serve, thus shielding noise transmission to the west. However, obstructions would not prevent noise from compressor units 1, 2, 3, 5, 6 and 8 from reaching the closest western property boundary. Noise from compressor units 1, 2, 3, 5, 6 and 8 was therefore modelled at the closest western property boundary to the Machon location. It is anticipated that the cluster of cabins themselves would shield sound transmission eastward from the anticipated locations of Compressors 1, 2, 3, and 5. However, obstructions would not prevent noise from compressor units 4, 6, 7 and 8 from reaching the closest eastern property boundary. Noise from compressor units 4, 6, 7 and 8 was therefore modelled at the closest eastern property boundary to the Machon location. Sound levels from each of the compressors could be of potential concern at the southern and northern property boundaries. However, these compressors would be located approximately 1,200 feet from the closest neighboring property line to the north, and 2.050 feet from the southern property boundary; noise from the compressor operation would not be audible at these distances. Thus compressor noise was not modelled at the northern or southern property boundaries.
- b. An exhaust blower would be provided for the kitchen, mounted on the roof of the structure (anticipated to be up to a 40 horsepower turbine exhaust, Vacstar model T4 or equivalent). The peak of the roof would shield sound transmission to the north; the cluster of cabins would shield the blower noise for points along the eastern property boundary; no obstacles

exist between the exhaust blower and west or south property lines. Sound levels would therefore be of potential concern at the western and southern property boundary. However, this exhaust blower would be located approximately 2,050 feet from the southern property line; noise from exhaust blower operations would not be audible at this distance. Therefore, the exhaust blower noise level from the kitchen is only assessed at the closest neighboring property line to the west.

Sound level specifications supplied by the manufacturer are provided in *Table 2* below for the anticipated mechanical equipment described above. For the compressor, note the referenced sound level is the maximum or peak sound level produced by the compressor, operating under full power and maximum load. The average sound level when the units are operating in efficiency mode is approximately 10 dBA less than the peak or maximum level. However, to address the worst-case sound levels for compressor operations, the peak noise rating is used in this analysis. The peak sound level for the exhaust blower operating at the highest speed is also indicated in *Table 2* and is used for the analysis.

Table 2           Anticipated Mechanical Equipment – Sound Level Rating			
Equipment Peak Sound Level (dBA)			
HVAC Compressor Unit (LG model no. ARUN036GS2 or equivalent)	<b>52</b> (at 3.3 feet)		
Exhaust Blower (40 h.p max, Vacstar model T4 or equivalent)	<b>56</b> (at 10 feet)		

In order to assess noise levels from mechanical equipment operations along the common property boundary of the Camp and neighboring properties, distance measurements were completed from the mechanical equipment locations to the nearest property line. Standard acoustic calculations were then performed to determine the distance attenuated noise level at the property line location for each of the mechanical noise sources.

Noise levels at the closest adjacent property boundary are reported separately for the west property line and the east property line, according to the considerations described above. At the western property boundary, contributions were modelled for compressor units 1, 2, 3, 5, 6 and 8 and the kitchen exhaust fan. For the eastern property boundary, contributions were modelled for compressor units 4, 6, 7 and 8. However, in order to demonstrate that combined noise from all mechanical equipment sources with direct exposure at the two property lines would be within

allowable parameters, the sum of the noise levels from all mechanical equipment is also provided at each of the two property boundaries.

The noise levels (Leq) from the individual equipment, and the combined noise levels of all of the equipment, are indicated in *Table 3*. Refer to *Appendix E* for the calculation worksheet.

Table 3         Mechanical Equipment Operation Noise Summary of Results					
	Noise Level at P	roperty Boundary			
Equipment	West Property Line Average Noise Level (dBA Leq)	East Property Line Average Noise Level (dBA Leq)			
Comp #1	13	N/A			
Comp #2	13	N/A			
Comp #3	12	N/A			
Comp #4	N/A	19			
Comp #5	13	N/A			
Comp #6	11	22			
Comp #7	N/A	23			
Comp #8	12	22			
Kitchen Exhaust	29	N/A			
Combined Noise Level	30	28			

The results of the mechanical equipment operations noise analysis indicate that operation of the exterior mechanical equipment would easily comply with the Ventura County Noise Element Policy Criteria and Noise Ordinance restrictions. Mechanical equipment operations noise levels would not exceed 30 dBA  $L_{eq}$  at the adjacent western property line closest to the equipment locations, or 28 dBA  $L_{eq}$  at the adjacent eastern property line closest to the equipment locations, which is well below the most restrictive level of  $L_{eq}$ 1H 45dB(A) during any hour from 10:00 p.m. to 6:00 a.m. It would therefore not be necessary to restrict the hours for mechanical equipment operation associated with the proposed new Machon complex.

The distance from these noise sources to the remaining adjacent property boundaries in each case are more than double the distance used in these calculations, and therefore noise levels from

mechanical equipment operation at the adjacent property boundaries to the north and south are not expected to be audible.

#### 4.1.1.2 Outdoor Speaker System

Camp Ramah proposes to install and operate an outdoor sound amplification system as part of the minor modification to their existing CUP. Operational hours for exterior amplified sound use are proposed to be from 9AM - 10PM, but a limited number of exceptions to this schedule are proposed in order to accommodate specific traditional activities (described in more detail below). *Appendix C* provides a schematic indicating the proposed location of speakers to be included in the system; the numbering below corresponds to the locations identified in the schematic exhibit in *Appendix C*. A brief description of the locations is provided below.

- 1. Main dining room lawn (facing northeast) one speaker apiece on the northern, eastern, and southern corners of the dining building
- 2. Fire pit at the boys tent area (portable or temporary speaker), oriented southwest
- 3. Basketball courts (portable or temporary speaker), oriented north
- 4. Amphitheater (anticipated to include a pair of speakers at the stage corners, and a pair of speakers at the half-way point on either side of the seating area, facing northeast and northwest)
- 5. Girls gazebo (inside, oriented downward from the ceiling)

10:00 PM

6. An emergency alarm, with individual speakers facing north, west, south, and east, located immediately south of the central dining facility

Camp Ramah proposes to allow the use of amplified sound in outdoor areas which extends later than the general 10:00 PM limit, and/or which includes a substantial portion of the Camp population, for the following traditional activities or events.

Café Ezra One night per week during summer camp season, in the patio and lawn area on the northwest side of the dining hall (amplified sound location #1), low level amplified music, 9:00 – 11:00 PM
 Israeli Dance One night per week during summer camp season, in the basketball courts area (amplified sound location #3), moderate level amplified music, 9:00 –

**Performance Night** Once per camp session, in the amphitheater (amplified sound location #4), amplified speech and low level music, 7:30 – 9:30 PM

#### Normal Speaker System Operations (Announcements)

An average sound level for exterior speakers used in an institutional setting (i.e., standard speech announcements) is approximately 65 dBA  $L_{eq}$  measured at 21 feet from the speaker (Sound System Design Reference Manual, JBL, 1999). This level would be applicable to each of the proposed speaker locations for normal operation, which would involve routine announcements (i.e., speech).

The concept of directionality is very important in regard to sound levels produced by loudspeakers. The direction the speaker is pointed, specifically the center of the speaker cone, receives the greatest sound levels from speaker operation. At an angle 60 degrees from the center of the speaker cone, sound levels from speaker operation are 9 dBA less than those in-line with the center of the speaker. At an angle of 90 degrees from the center of the speaker (perpendicular to the speaker direction) sound levels from speaker operation are negligible (Sound System Design Reference Manual, JBL, 1999).

In order to evaluate sound levels at Camp Ramah property boundaries shared with adjacent noisesensitive land uses, speakers oriented toward each property line were identified. If a property line has an exposure less than 60 degrees from the speaker center line of a given speaker, the speaker was assessed using the measured full sound level of the speaker, with appropriate formula for distance attenuation. If a property line has an exposure between 60 degrees and 89 degrees, the speaker source sound level was decreased by 9 dBA, again with appropriate formula for distance attenuation. For a property line at 90 degrees or greater exposure from a given speaker, the speaker was not included in the quantification of noise levels (since the contribution would be negligible). For the amphitheater installation, it is assumed that a speaker would be provided at each of the two the corners of the "stage" and a speaker would also be provided on either side of the seating area, at the midpoint of the seating area.

For the northern Camp Ramah property boundary, there are a number of existing structures located between proposed speaker locations and the property boundary that would provide shielding and attenuation of speaker noise at the property boundary; the analysis does not take into account this structural shielding, and is therefore a conservative evaluation. There are no structures between the amphitheater location and the northern property boundary, and the speakers for the amphitheater would be oriented generally toward the north (northeast and northwest).

The results of the analysis of average noise levels during speaker operation for the closest adjacent property boundary to the north, west, south, and east are presented in *Table 4*. The analysis

assumes all of the proposed speakers are operating simultaneously. Refer to Appendix F for a spreadsheet of the calculations for the speaker analysis.

Table 4           Average Noise Level During Normal Announcements Speaker Operation					
Location	L <sub>eq</sub> dBA	Ambient <sup>1</sup> L <sub>EQ HOUR</sub>			
Eastern Property Boundary	41				
Eastern Property Boundary	29	38			
(West Facing Amphitheater Speakers Only)					
Southerly Property Boundary	27	NA			
Western Property Boundary	31	40			
Northern Property Boundary	34	39			

Table Note: <sup>1</sup> Average hourly sound level from 9-10 PM from four day measurement data.

#### Noise Element Policy Analysis – Normal Speaker System Operations

Referring to *Table 4* above and Noise Element Policy 2.16.2 (4), the calculated noise level at each property boundary for normal operation of the proposed outdoor speaker system (i.e., announcements) would comply with the most restrictive noise limit (45 dBA  $L_{eq}$  applicable in the period from 10 PM to 6 AM). Consequently, normal operation of the sound amplification system as proposed would comply with the Noise Element.

#### Noise Ordinance Policy Analysis – Normal Speaker System Operations

The noise ordinance (Ventura County Municipal Code Sec. 6299-1 - Loud or Raucous Noise Prohibition) prohibits the generation of noise from amplified sound systems which is audible to the human ear during the hours of 9 PM to 7 AM of the following day, at a distance of 50 feet from the property line of the noise source. The amplified sound system, for normal announcements operation, is proposed to be limited to the period from 9 AM to 10 PM. In the period from 9 PM to 10 PM, the amplification system cannot produce sound which is audible at 50 feet from the Camp property lines.

Data from the four day sound level measurements was used to compile the hourly average noise level during the hour of concern, from 9 PM to 10 PM. Measurements were performed at the western, northern, northeastern, and eastern property boundaries. The measurement data for the period from 9-10 PM on four consecutive days was averaged for each of the property boundary

locations; this average is presented Table 4 as the "Ambient  $L_{EQ HOUR}$ " for reference in this policy analysis. Note that the sound levels for normal speaker system operation at the north and west property lines would fall below the recorded average ambient levels. For the south property line, measurements were not taken, but the predicted speaker noise levels would fall below the lowest ambient levels recorded at any of the property boundaries.

For the eastern property boundary, the sound level from all speakers in announcement mode would equal 41 dBA  $L_{EQ}$  compared to the recorded average of 38 dBA  $L_{EQ HOUR}$  from 9-10 PM at this property line. Since this represents up to a 3 dBA increase over ambient, the sound would be considered audible 50 feet from the eastern property boundary, which would constitute a potential conflict with the noise ordinance. However, placing the speakers for the amphitheater along the east side of the stage and seating areas, and orienting these speakers to the northwest (pointing into the audience, and away from the eastern property boundary), would reduce the normal speaker operational levels to 29 dBA  $L_{EQ}$  along the eastern property boundary. This level would fall below ambient, and would therefore comply with the noise ordinance. Refer to the mitigation discussion below regarding the amphitheater speaker placement and orientation.

#### Traditional Events /Activities Speaker Noise Levels

For Café Ezra, it is assumed that sound levels could reach up to 70 dBA  $L_{eq}$  at 21 feet from the speakers (reasonable as a background music level to accompany conversation). It is assumed that speakers at the northeast, east, and southeast of the dining hall would be employed, facing generally eastward. Structures exist between the dining hall and the closest off-site residence to the east, north, northeast, and east; the analysis does not take into account this structural shielding, and is therefore a conservative evaluation.

For the Israeli Dance event, it is assumed that sound levels could reach up to 85 dBA  $L_{eq}$  at 21 feet from the speakers (which would address reasonable amplification for a general dance function, excluding those which would be associated with a live rock concert type of event). It is assumed that three portable speakers would be employed, facing northward along the southern basketball court boundary. Structures exist between the basketball court and the closest off-site residence to the northeast and to the west; the analysis does not take into account this structural shielding, and is therefore a conservative evaluation. There are also structures between the basketball court location and the southern and eastern property boundaries, but the speakers would be oriented away from these directions anyway.

For musical performances in the amphitheater, it is assumed that sound levels could again reach up to 85 dBA  $L_{eq}$  at 21 feet from the speakers (which is considered reasonable for vocal ensemble performances, small musical combos, orchestral performances, and light "rock" music

performances, excluding heavy metal or hard rock bands). Structures exist directly to the north and west of the amphitheater, but the analysis does not take into account any structural shielding. There are no structures between the amphitheater and the closest residences east or northeast.

The results of the analysis of average noise levels during the described traditional activities/events for the closest adjacent property boundary to the north, west, and east are presented in *Table 5*. Refer to *Appendix F* for a spreadsheet of the calculations for the speaker analysis.

Table 5							
Average N	oise Level During Tradi	tional Events/Activities					
Event	Event         West Property Line dBA CNEL         North Property Line dBA CNEL         East Property Line dBA CNEL						
Café Ezra	27	17	35				
Israeli Dance	46	43	39				
Performance Night	32	43	61				
Ambient <sup>1</sup> (LEQ HOUR)	37	35	35				

Table Note: <sup>1</sup> Average hourly sound level from 10-11 PM from four day measurement data.

#### Noise Element Policy Analysis – Traditional Events/Activities

Referring to *Table 5* data, and in accordance with Noise Element Policy 2.16.2 (4), the calculated noise level for the Café' Ezra event at each property boundary would comply with the most restrictive noise limit of 45 dBA  $L_{eq}$ , which is applicable in the period from 10 PM to 6 AM. The Café Ezra event would therefore comply with noise element policies, as proposed. Refer to *Appendix F* for the calculation results.

Again with reference to *Table 5*, the calculated noise levels for the Israeli Dance event at each property boundary would comply with the noise restrictions for the periods 6 AM to 7 PM, and from 7 PM to 10 PM; however, it would exceed the 45 dBA L<sub>eq</sub> applicable in the period from 10 PM to 6 AM. Consequently, sound mitigation would be required in order for the dance event to extend beyond 10 PM; sound mitigation would also be required in order for the Israeli Dance event to comply with the noise ordinance, which is discussed in greater detail below.

Finally, referring to *Table 5*, the calculated noise levels for the Performance Night event would exceed even the most lenient noise restrictions for the periods 6 AM to 7 PM (55 dBA  $L_{eq}$ ) at the east property boundary, with more substantial exceedance of the evening (55 dBA  $L_{eq}$ ) and night-time (45 dBA  $L_{eq}$ ) restrictions. Consequently, sound mitigation would be required in order for the

Performance Night event to take place at any time; sound mitigation would also be required in order for the Performance Night event to comply with the noise ordinance, which is discussed in greater detail below.

#### Noise Ordinance Policy Analysis - Traditional Events/Activities

The noise ordinance (Ventura County Municipal Code Sec. 6299-1 - Loud or Raucous Noise Prohibition) prohibits the generation of noise from amplified sound systems which is audible to the human ear during the hours of 9 PM to 7 AM of the following day, at a distance of 50 feet from the property line of the noise source. We have defined "audible" sound level as being at least 2 dBA greater than the ambient noise level. Data from the four day sound level measurements was used to compile the hourly average noise level during the hour of concern, from 10 PM to 11 PM. The noise ordinance restriction has a start time of 9 PM, however, noise levels were found to be somewhat greater from 9 PM to 10 PM as compared to those in the period 10 PM to 11 PM, so to capture the lowest ambient levels across the proposed event durations, we used the slightly lower ambient noise levels for the 10 PM to 11 PM hour as ambient. The measurement data for the period from 10-11 PM on four consecutive days was averaged for each of the property boundary locations; this average is presented Table 5 as the "Ambient L<sub>EQ HOUR</sub>" for reference in this policy analysis.

Referring to *Table 5* data, and in accordance with VCMC Sec. 6299-1, the calculated noise level for the Café' Ezra event at each property boundary would be less than or equal to the existing average ambient noise level, and therefore would be inaudible compared to ambient noise. Consequently, the Café Ezra event would comply with noise ordinance, as proposed. Refer to *Appendix F* for the calculation results.

Again with reference to *Table 5*, the calculated noise levels for the Israeli Dance event at each property boundary would exceed the existing average ambient noise level by 4 dBA or more; this sound level would be considered audible 50 feet from the eastern property boundary, <u>which would</u> <u>constitute a potential conflict with the noise ordinance</u>. Consequently, sound mitigation would be required in order for the Israeli Dance event to comply with the noise ordinance; refer to the mitigation section below for additional detail.

Finally, referring to *Table 5*, the calculated noise levels for the Performance Night event at the east and north property boundary would exceed the existing average ambient noise level by 8 dBA or more; this sound level would be considered audible 50 feet from the eastern property boundary, which would constitute a potential conflict with the noise ordinance. Consequently, sound mitigation would be required in order for the Performance Night event to comply with the noise ordinance; refer to the mitigation section below for additional detail.

#### 4.1.1.3 Outdoor Events

Camp Ramah is requesting approval for up to thirty-five (35) events per calendar year pursuant to Section 8107-46.4 of the Outdoor Events Ordinance (ODO) where these events are defined as follows:

Events held primarily outdoors that (a) exceed 100 attendees and (b) are not already permitted under the Camp Ramah CUP (i.e., external events). All outdoor activities subject to the OEO will conclude by 10:00 p.m. and will not commence before 8:00 a.m.

Outdoor events as described above are envisioned to include groups hosting daytime retreats featuring access to the sports courts, pool, and hiking trails, possibly with meals served in the dining hall. These type of group functions that do not include a central gathering event would not be anticipated to generate elevated noise levels that would be audible off-site. However, outdoor events could also involve functions that employ the patio and lawn area on the northwest side of the dining hall and including music via the outdoor speaker system (amplified sound location #1). Outdoor events might also take advantage of the amphitheater equipped with sound amplification system, for group presentations, music performances, or similar activities. Noise levels associated with events using these areas is discussed below.

Because the basketball courts and tennis courts are not configured on a full-time basis with speaker systems, these court areas are not likely to be used for outdoor events similar to the Israeli Dance function hosted as part of the Camp Ramah program (and described under 4.1.1.2 above). Therefore, use of the courts to host dances or activities with amplified music is not anticipated, and is not evaluated as part of outdoor events noise levels.

Use of the patio and lawn area on the northwest side of the dining hall as part of an outdoor event would generate the same sound levels evaluated for the Ezra Café activity (section 4.1.1.2). A gathering at the amphitheater facility included as a part of an outdoor event would result in the same sound levels as evaluated for Performance Night (section 4.1.1.2). However, under the OEO, the sound level from the event must be compared against ambient noise levels for any hour in which such an event could occur. Camp Ramah has restricted outdoor events to the hours between 8 a.m. and 10 p.m.

Using the data from the four day sound level measurement program, a composite average sound level for each hour from 8 a.m. to 10 p.m. was calculated for the west, north, and east property boundary of Camp Ramah (correlating to these measurement locations). The lowest average hourly sound level was then identified for each property line, to use as the conservative limit in applying the OEO.

## DUDEK

The results of the analysis of average noise levels during use of the outdoor patio/lawn area adjacent to the dining hall, and for use of the amphitheater, during potential outdoor events are presented in *Table 6*. The reported results are for predicted noise levels at the closest adjacent property boundary to the north, west, and east. Refer to *Appendix F* for a spreadsheet of the calculations for the analysis. The results are compared against the lowest hourly average noise level at the three property boundaries, for determination of compliance with the ODO.

Table 6							
Average Noise Leve	Average Noise Levels Associated With Gathering Areas - Outdoor Events						
Event         West Property Line dBA CNEL         North Property Line dBA CNEL         East Property Line dBA CNEL							
Dining Hall Northwest Patio/Lawn 27 17 35							
Amphitheater	32	43	61				
Ambient <sup>1</sup> (L <sub>EQ HOUR</sub> )         41         38         37							

Table Note: <sup>1</sup>Lowest ambient average hourly sound level between 8 am and 10 pm from four day measurement data.

Referring to *Table 6* data, and in accordance with the OEO, the calculated noise level for the use of the patio and lawn area at the northwest of the dining hall at each property boundary would be less than the lowest existing average ambient noise level within the period from 8 a.m. to 10 p.m., and therefore would be inaudible compared to ambient noise. Consequently, use of the dining hall patio/lawn area during outdoor events would comply with the OEO, as proposed. Refer to *Appendix F* for the calculation results.

Also referring to *Table 6*, the calculated noise levels for use of the amphitheater at the east and north property boundary would exceed the existing average ambient noise level by 5 dBA or more; this sound level would exceed ambient noise levels by greater than 2 dB, <u>which would constitute</u> <u>a potential conflict with the OEO</u>. Consequently, sound mitigation would be required in order for use of the amphitheater during outdoor events to comply with the noise ordinance; refer to the mitigation section below for additional detail.

#### 4.1.2 Mitigation Measures

In order to avoid a significant nuisance noise impact associated with potentially violating the Noise Ordinance or the Outdoor Event Ordinance, the following mitigation measures are required.

#### **MM-1** Routine Speaker Operations / Performance Night Event – Amphitheater Speakers

The speakers for the amphitheater shall be installed at the eastern end of the stage area, and along the eastern side of the seating area, and shall be oriented northwest. No amphitheater speakers shall be oriented toward the eastern property boundary.

#### **MM-2** Israeli Dance Event

Acoustic blankets 8 feet in height shall be installed on the southern fence of the tennis courts (which are adjacent to the north side of the basketball courts) and along the existing fence at the south and east sides of the basketball courts before Israeli Dance events are held there with a planned schedule which goes any later than 9 PM. The blankets must be installed with no gaps, and should extend from the ground to a height of 8 feet above the ground. The sound blankets shall have an STC rating of a minimum of 25.

#### **MM-3 Non-Exempt Outdoor Events**

Camp Ramah shall purchase and employ sound monitoring equipment for the amplifiers to ensure that project generated noise for events subject to the OEO do not exceed the maximum noise levels for sensitive receptors, pursuant to the Ventura County General Plan Noise Policy 2.16.2-1(4). The equipment will have an automatic capability of lowering the sound when noise levels would exceed the prescribed noise threshold of 50dBA Leq1H later than 7:00 p.m., as determined at the closest off-site residences.

#### Significance After Mitigation

Potentially significant nuisance noise impacts would be reduced to <u>less than significant</u> with incorporation of the above mitigation measure. *Table 7* illustrates noise levels with incorporation of the required mitigation measures. Noise levels at property lines would fall below ambient levels, and as such would comply with the noise ordinance and OEO.

Table 7							
	Average Noise Levels With Mitigation						
Event         West Property Line dBA CNEL         North Property Line dBA CNEL         East Property Line dBA CNEL							
Israeli Dance	29						
Performance Night	35	34	29				
Ambient <sup>1</sup> (LEQ HOUR)	37	35	35				

## 5.0 **REFERENCES**

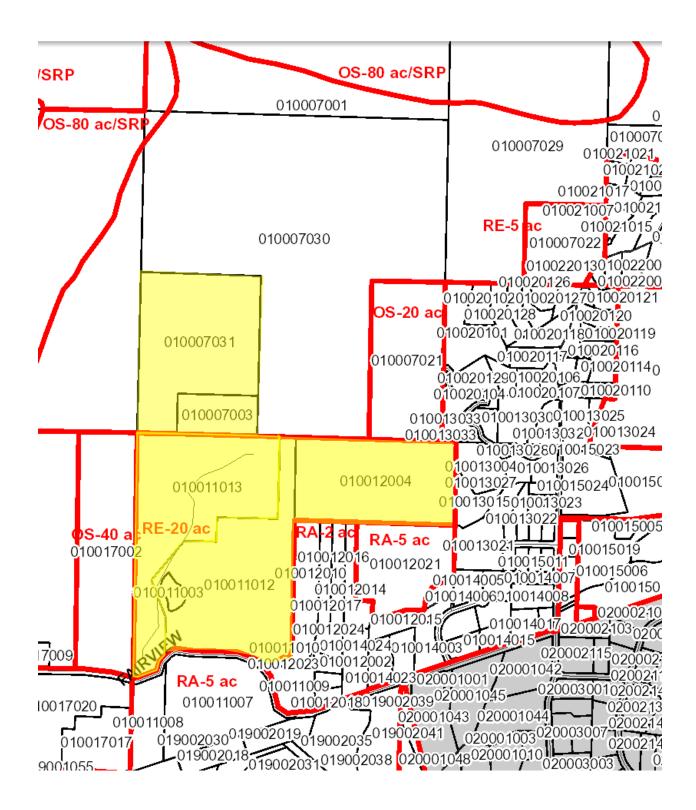
Caltrans (California Department of Transportation). 1980. Fundamentals and Abatement of Highway Traffic Noise. September 1980.

Ventura County General Plan, Noise Element, 2015

Ventura County, Noise Ordinance, 1996

Ventura County Outdoor Event Ordinance, 2018

# APPENDIX A *Zoning Map*



ZONING DESIGNATIONS

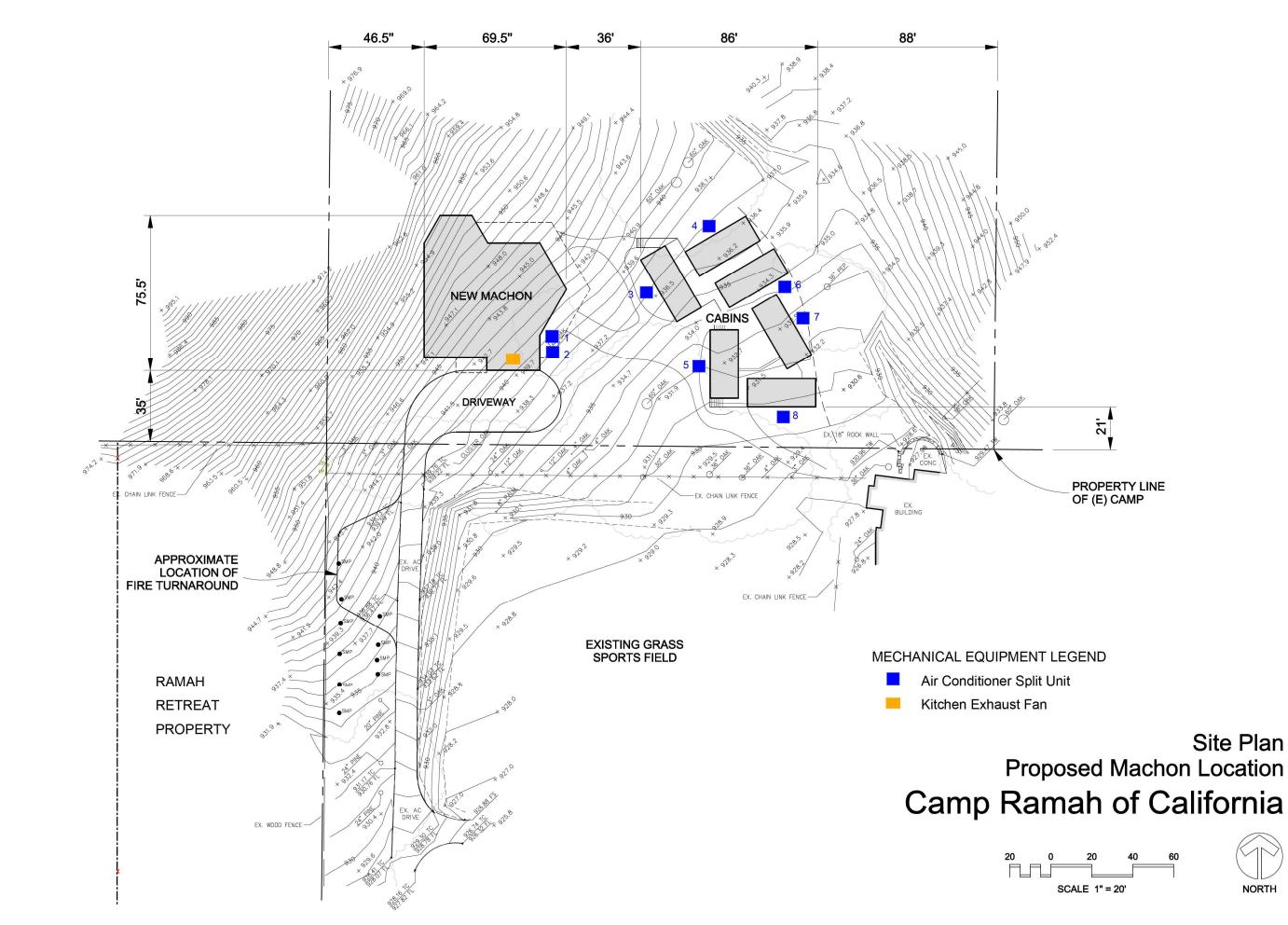
Camp Ramah & Surrounding Properties

## **APPENDIX B**

## Schematic Plans for Proposed Macron Complex







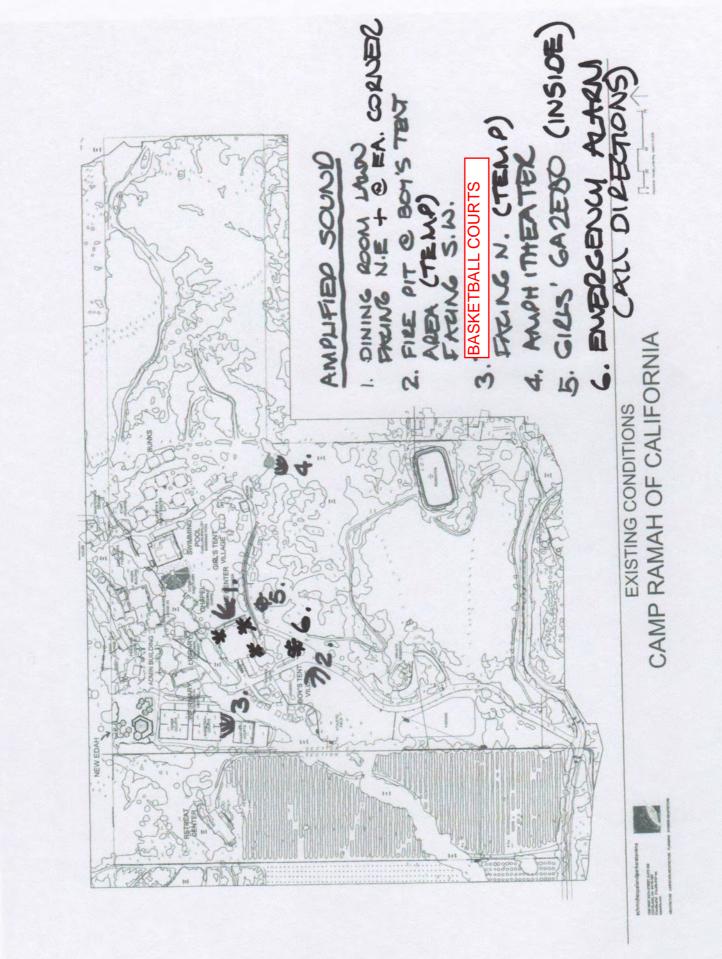


# Site Plan **Proposed Machon Location**

NORTH

# APPENDIX C

## **Proposed Speaker Layout Diagram**



## APPENDIX D Ambient Noise

Measurement Data

Rec 2 to 97				
Date hh:mm	Manager PL	EDAH PL	Reservoir PL	Bench PL
5/27/2016 11:00 1.0 hour	50.4	49.5	45.6	46.6
5/27/2016 12:00 1.0 hour	50.5	46.1	43.3	44.5
5/27/2016 13:00 1.0 hour	44.3	50	43.6	47.1
5/27/2016 14:00 1.0 hour	43.7	47.6	43.7	47.4
5/27/2016 15:00 1.0 hour	47.5	46.2	45.3	46.3
5/27/2016 16:00 1.0 hour	46.7	42.5	41	42.2
5/27/2016 17:00 1.0 hour	45.7	43.3	39.2	42.7
5/27/2016 18:00 1.0 hour	48.2	44.6	39	43.5
5/27/2016 19:00 1.0 hour	44.4	43.4	39.6	40.6
5/27/2016 20:00 1.0 hour	45.3	44.6	38.1	39.3
5/27/2016 21:00 1.0 hour	44.3	49.5	43.6	47.1
5/27/2016 22:00 1.0 hour 5/27/2016 23:00 1.0 hour	36.4 34.4	43.1 42.2	36.4 32.2	40.9 33.2
5/28/2016 0:00 1.0 hour	33.2	42.2	32.2	33.3
5/28/2016 1:00 1.0 hour	33.2	43.6	32	35.5
5/28/2016 2:00 1.0 hour	37	44.2	32	36.5
5/28/2016 3:00 1.0 hour	32.9	44.2	32	33
5/28/2016 4:00 1.0 hour	36.2	45.1	32	33.2
5/28/2016 5:00 1.0 hour	45.9	48.7	45.2	47
5/28/2016 6:00 1.0 hour	43.9	52.2	46.5	51
5/28/2016 7:00 1.0 hour	46.6	51.2	44.4	45.4
5/28/2016 8:00 1.0 hour	42.6	54.6	41.5	42.7
5/28/2016 9:00 1.0 hour	47.7	48.3	46.5	48.1
5/28/2016 10:00 1.0 hour	50.7	46	45.7	49.1
5/28/2016 11:00 1.0 hour	47.1	41.1	46.2	47.2
5/28/2016 12:00 1.0 hour	44.8	54.7	42	43.2
5/28/2016 13:00 1.0 hour	46	61.1	45.3	46.9
5/28/2016 14:00 1.0 hour	47.4	50.1	42.6	46
5/28/2016 15:00 1.0 hour	43.4	50.9	36.2	37.2
5/28/2016 16:00 1.0 hour	42.4	49.4	41.7	42.9
5/28/2016 17:00 1.0 hour	45.5	48	46.6	48.2
5/28/2016 18:00 1.0 hour 5/28/2016 19:00 1.0 hour	42.3 42.3	56 49.6	40.1 38.9	42 40.8
5/28/2016 20:00 1.0 hour	42.5	49.8	36.8	40.8
5/28/2016 21:00 1.0 hour	40.3	35.1	30.8	38.7
5/28/2016 22:00 1.0 hour	37.7	33.1	36.6	37.5
5/28/2016 23:00 1.0 hour	34.2	32	32	33.9
5/29/2016 0:00 1.0 hour	33	32	32.3	33.5
5/29/2016 1:00 1.0 hour	33.8	32	33.8	35.4
5/29/2016 2:00 1.0 hour	33.2	32	32	32.9
5/29/2016 3:00 1.0 hour	32.8	32	32	33.9
5/29/2016 4:00 1.0 hour	35	32	33.8	34
5/29/2016 5:00 1.0 hour	44.2	41.4	39.2	40
5/29/2016 6:00 1.0 hour	41.3	33	40.4	41.3
5/29/2016 7:00 1.0 hour	45.7	41.1	41.5	43.4

	5/29/2016 8:00 1.0 hour	42	30	41.3	41.5
	5/29/2016 9:00 1.0 hour	44	43.4	42.6	43.4
5	5/29/2016 10:00 1.0 hour	44	48.7	46.5	47.4
5	5/29/2016 11:00 1.0 hour	49.6	55.6	48.5	50.4
5	5/29/2016 12:00 1.0 hour	44.2	41.7	43	43.2
	5/29/2016 13:00 1.0 hour	45.6	47	42.5	43.3
	5/29/2016 14:00 1.0 hour	45.8	43.1	44.9	45.8
	5/29/2016 15:00 1.0 hour	45.6	48.1	42.8	44.7
	5/29/2016 16:00 1.0 hour	50.6	43.6	49.9	50.1
	5/29/2016 17:00 1.0 hour	45	42.5	41.1	41.9
	5/29/2016 18:00 1.0 hour	45.9	41.9	39.9	40.8
	5/29/2016 19:00 1.0 hour	39.4	41.6	38.7	40.6
	5/29/2016 20:00 1.0 hour	40.4	39.7	41.5	41.7
	5/29/2016 21:00 1.0 hour	39.7	44.9	37.5	38.3
	5/29/2016 22:00 1.0 hour	34.4	40.1	33.6	34.5
	5/29/2016 23:00 1.0 hour	34.4	36.6	32	33.9
	5/30/2016 0:00 1.0 hour	33.5	34.5	32	32.2
	5/30/2016 1:00 1.0 hour	33.5	34.3	32	32.8
	5/30/2016 2:00 1.0 hour	32.7	33.9	32	32.9
	5/30/2016 3:00 1.0 hour	32.7	33.3	32	33.9
	5/30/2016 4:00 1.0 hour		33.3		34.9
	5/30/2016 5:00 1.0 hour	35.2 45.7	48.5	34.7	45.3
		45.7		44.5	45.3
	5/30/2016 6:00 1.0 hour		50.7	45.3	
	5/30/2016 7:00 1.0 hour	46.8	51.4	45.6	47.5
	5/30/2016 8:00 1.0 hour	46.2	58.2	44.6	44.8
-	5/30/2016 9:00 1.0 hour	44.9	45.5	44	44.8
	5/30/2016 10:00 1.0 hour	44.8	40.1	40.6	41.5
	5/30/2016 11:00 1.0 hour	45.7	39.7	45	46.9
	5/30/2016 12:00 1.0 hour	43.4	45.9	44.1	44.3
	5/30/2016 13:00 1.0 hour	44.1	42.7	43	43.8
	5/30/2016 14:00 1.0 hour	47.3	50	46.2	47.1
	5/30/2016 15:00 1.0 hour	52.7	50.2	51.5	53.4
	5/30/2016 16:00 1.0 hour	44	51	40.9	41.1
	5/30/2016 17:00 1.0 hour	41	43.5	40.1	40.9
	5/30/2016 18:00 1.0 hour	39.1	43.1	36.3	37.2
	5/30/2016 19:00 1.0 hour	39.1	36.9	38.4	40.3
	5/30/2016 20:00 1.0 hour	35.7	36.4	32	32.2
	5/30/2016 21:00 1.0 hour	34.6	32	32	32.8
	5/30/2016 22:00 1.0 hour	32.9	32	32	32.9
5	/30/2016 23:00 1.0 hour	32.7	32	33.8	35.7
	5/31/2016 0:00 1.0 hour	33.1	32.1	32	32.2
	5/31/2016 1:00 1.0 hour	33	32	32.2	33
	5/31/2016 2:00 1.0 hour	32.7	32	32	32.9
	5/31/2016 3:00 1.0 hour	32.5	32	32	33.9
	5/31/2016 4:00 1.0 hour	36.8	33.8	35.8	36
	5/31/2016 5:00 1.0 hour	43.5	40.7	42.8	43.6
	5/31/2016 6:00 1.0 hour	42.6	38	42.1	43

5/31/2016 7:00 1.0 hour	43	38.4	42.5	44.4
5/31/2016 8:00 1.0 hour	46	34	44.8	45
5/31/2016 9:00 1.0 hour	43.5	42.9	42.7	43.5
5/31/2016 10:00 1.0 hour	47.8	52.5	46.6	47.5

	Leq				
Date hh:mm	Fri	Sat	t Sun	Ν	/lon
5/27/2016 11:00		50.4	47.1	49.6	45.7
5/27/2016 12:00		50.5	44.8	44.2	43.4
5/27/2016 13:00		44.3	46	45.6	44.1
5/27/2016 14:00		43.7	47.4	45.8	47.3
5/27/2016 15:00		47.5	43.4	45.6	52.7
5/27/2016 16:00		46.7	42.4	50.6	44
5/27/2016 17:00		45.7	45.5	45	41
5/27/2016 18:00		48.2	42.3	45.9	39.1
5/27/2016 19:00		44.4	42.3	39.4	39.1
5/27/2016 20:00		45.3	41.7	40.4	35.7
5/27/2016 21:00		44.3	40.3	39.7	34.6
5/27/2016 22:00		36.4	37.7	34.4	32.9
5/27/2016 23:00		34.4	34.2	34.4	32.7
5/28/2016 0:00		33.2	33	33.5	33.1
5/28/2016 1:00		33.2	33.8	33	33
5/28/2016 2:00		37	33.2	32.7	32.7
5/28/2016 3:00		32.9	32.8	32.5	32.5
5/28/2016 4:00		36.2	35	35.2	36.8
5/28/2016 5:00		45.9	44.2	45.7	43.5
5/28/2016 6:00		43.9	41.3	46.1	42.6
5/28/2016 7:00		46.6	45.7	46.8	43
5/28/2016 8:00		42.6	42	46.2	46
5/28/2016 9:00		47.7	44	44.9	43.5
5/28/2016 10:00		50.7	44	44.8	47.8
C	NEL	48.9	46.6	48.2	46.7
L	DN	48.4	46.3	48.1	46.6

Manager House Property Line

	Leo	9			
Date hh:mm	Fri		Sat	Sun	Mon
5/27/2016 11:00		49.5	41.1	55.6	39.7
5/27/2016 12:00		46.1	54.7	41.7	45.9
5/27/2016 13:00		50	61.1	47	42.7
5/27/2016 14:00		47.6	50.1	43.1	50
5/27/2016 15:00		46.2	50.9	48.1	50.2
5/27/2016 16:00		42.5	49.4	43.6	51
5/27/2016 17:00		43.3	48	42.5	43.5
5/27/2016 18:00		44.6	56	41.9	43.1
5/27/2016 19:00		43.4	49.6	41.6	36.9
5/27/2016 20:00		44.6	42.4	39.7	36.4
5/27/2016 21:00		49.5	35.1	44.9	32
5/27/2016 22:00		43.1	32	40.1	32
5/27/2016 23:00		42.2	32	36.6	32
5/28/2016 0:00		42.6	32	34.5	32.1
5/28/2016 1:00		43.6	32	34.8	32
5/28/2016 2:00		44.2	32	33.9	32
5/28/2016 3:00		44.2	32	33.3	32
5/28/2016 4:00		45.1	32	38.2	33.8
5/28/2016 5:00		48.7	41.4	48.5	40.7
5/28/2016 6:00		52.2	33	50.7	38
5/28/2016 7:00		51.2	41.1	51.4	38.4
5/28/2016 8:00		54.6	30	58.2	34
5/28/2016 9:00		48.3	43.4	45.5	42.9
5/28/2016 10:00		46	48.7	40.1	52.5
C	CNEL	53.5	51.1	52	46.1
L	DN	53.3	50.8	51.8	46

EDAH PL

	Leq				
Date hh:mm	Fri	Sat	Su	un Mo	n
5/27/2016 11:00		45.6	46.2	48.5	45
5/27/2016 12:00		43.3	42	43	44.1
5/27/2016 13:00		43.6	45.3	42.5	43
5/27/2016 14:00		43.7	42.6	44.9	46.2
5/27/2016 15:00		45.3	36.2	42.8	51.5
5/27/2016 16:00		41	41.7	49.9	40.9
5/27/2016 17:00		39.2	46.6	41.1	40.1
5/27/2016 18:00		39	40.1	39.9	36.3
5/27/2016 19:00		39.6	38.9	38.7	38.4
5/27/2016 20:00		38.1	36.8	41.5	32
5/27/2016 21:00		43.6	37.1	37.5	32
5/27/2016 22:00		36.4	36.6	33.6	32
5/27/2016 23:00		32.2	32	32	33.8
5/28/2016 0:00		32.1	32.3	32	32
5/28/2016 1:00		32	33.8	32	32.2
5/28/2016 2:00		32	32	32	32
5/28/2016 3:00		32	32	32	32
5/28/2016 4:00		32	33.8	34.7	35.8
5/28/2016 5:00		45.2	39.2	44.5	42.8
5/28/2016 6:00		46.5	40.4	45.3	42.1
5/28/2016 7:00		44.4	41.5	45.6	42.5
5/28/2016 8:00		41.5	41.3	44.6	44.8
5/28/2016 9:00		46.5	42.6	44	42.7
5/28/2016 10:00		45.7	46.5	40.6	46.6
CNEL		47.4	44.5	47.1	45.9
LDN		47.2	44.3	46.8	45.8

Reservoir PL

	Leq				
Date hh:mm	Fri	Sa	t Su	in Mo	n
5/27/2016 11:00		46.6	47.2	50.4	46.9
5/27/2016 12:00		44.5	43.2	43.2	44.3
5/27/2016 13:00		47.1	46.9	43.3	43.8
5/27/2016 14:00		47.4	46	45.8	47.1
5/27/2016 15:00		46.3	37.2	44.7	53.4
5/27/2016 16:00		42.2	42.9	50.1	41.1
5/27/2016 17:00		42.7	48.2	41.9	40.9
5/27/2016 18:00		43.5	42	40.8	37.2
5/27/2016 19:00		40.6	40.8	40.6	40.3
5/27/2016 20:00		39.3	38	41.7	32.2
5/27/2016 21:00		47.1	38.7	38.3	32.8
5/27/2016 22:00		40.9	37.5	34.5	32.9
5/27/2016 23:00		33.2	33.9	33.9	35.7
5/28/2016 0:00		33.3	33.5	32.2	32.2
5/28/2016 1:00		35.5	35.4	32.8	33
5/28/2016 2:00		36.5	32.9	32.9	32.9
5/28/2016 3:00		33	33.9	33.9	33.9
5/28/2016 4:00		33.2	34	34.9	36
5/28/2016 5:00		47	40	45.3	43.6
5/28/2016 6:00		51	41.3	46.2	43
5/28/2016 7:00		45.4	43.4	47.5	44.4
5/28/2016 8:00		42.7	41.5	44.8	45
5/28/2016 9:00		48.1	43.4	44.8	43.5
5/28/2016 10:00		49.1	47.4	41.5	47.5
CNEL		50.6	45.8	48	46.9
LDN		50.3	45.5	47.8	46.8

Bench PL

# APPENDIX E

# Noise Calculation Worksheets for Proposed Mechanical Equipment

Exterior HVAC Equipment

Western Adjacent PL in L	
Scenario:	

Line (west side of retreat)

	Source	Source				
	Noise	Reference	Number of	Distance to	Distance	Noise Level
Source	Level	Distance	Units	Nearest Receiver / PL	Attenuation	at Receiver
Compressor 1 (ARUN036GS2)	52	3.3	-	300	39.2	12.8
Compressor 2 (ARUN036GS2)	52	3.3	-	300	39.2	12.8
Compressor 3 (ARUN036GS2)	52	3.3	<del>.                                    </del>	325	39.9	12.1
Compressor 5 (ARUN036GS2)	52	3.3	<del>.                                    </del>	285	38.7	13.3
Compressor 6 (ARUN036GS2)	52	3.3	-	365	40.9	11.1
Compressor 8 (ARUN036GS2)	52	3.3	<del>.                                    </del>	325	39.9	12.1
Kitchen Exhaust	56	10	<del>.    </del>	220	26.8	29.2
					Cumulative	29.7
			Scenario:	Easter Adjacent PL		
	Source	Source				
	Noise	Reference	Number of	Distance to		Noise Level
Source	Level	Distance	Units	Nearest Receiver / PL		at Receiver
Compressor 4 (ARUN036GS2)	52	3.3	-	140	32.6	19.4
Compressor 6 (ARUN036GS2)	52	3.3	-	100		22.4
Compressor 7 (ARUN036GS2)	52	3.3	<del>.                                    </del>	92		23.1
Compressor 8 (ARUN036GS2)	52	3.3	<del>.    </del>	100		22.4

28.0

Cumulative

# APPENDIX F

# **Outdoor Amplified Sound System** Noise Level Calculation Worksheets

#### Scenario: Eastern Property Line

	Source Noise	Source Reference	Number of	Distance to Nearest	Distance	Noise Level at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
Emergency East	65	21	1	865	40.4	24.6
Dining East	65	21	1	755	38.9	26.1
Dining NE	54	13	1	755	44.1	9.9
Dining South	54	13	1	755	44.1	9.9
Amphiteater W1	56	21	1	115	18.5	37.5
Amphiteater W2	56	21	1	115	18.5	37.5

Cumulative LEQ	
Cumulative LEQ Without Amphitheater East-Facing Speakers:	

#### Scenario: Southern Property Line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
Emergency South	65	21	1	1045	42.4	22.6
Boys Tent Village	65	21	1	1035	42.3	22.7
Dining South	65	21	1	1250	44.4	20.6

```
Cumulative LEQ 26.8
```

Scenario: Western Property Line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
Emergency West	65	21	1	670	37.6	27.4
Dining South	65	21	1	650	37.3	27.7
Boys Tent Village	54	13	1	660	42.6	11.4

Cumulative LEQ

30.6

40.8 28.6

Scenario:

rio: Northern Property Line All Speaker Sources

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
Emergency North	65	21	1	1020	42.2	22.8
Dining North	65	21	1	735	38.6	26.4
Dining NE	56	21	1	735	38.6	17.4
Tennis	56	21	1	925	41.1	14.9
Amphiteater W.	65	21	1	745	38.7	26.3
Amphiteater E.	65	21	1	745	38.7	26.3
Amphiteater W.	65	21	1	730	38.5	26.5
Amphiteater E.	65	21	1	730	38.5	26.5

Cumulative LEQ

33.9

		Coonano.				
	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
TC Speaker 1	85	21	1	1760	48.1	36.9
TC Speaker 2	85	21	1	1760	48.1	36.9
TC Speaker 3	85	21	1	1760	48.1	36.9
TC Speaker 4	85	21	1	1760	48.1	36.9
				Cumulative LEC	2	42.9

#### Scenario: Israeli Dance - North Property line

#### Scenario: Israeli Dance - East Property line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
TC Speaker 1	76	21	1	1140	43.4	32.6
TC Speaker 2	76	21	1	1120	43.2	32.8
TC Speaker 3	76	21	1	1080	42.8	33.2
TC Speaker 4	76	21	1	1060	42.6	33.4
-						

Cumulative LEQ

39.1

Scenario: Israeli Dance - West Property line

	Source Noise	Source Reference	Number of	Distance to Nearest	Distance	Noise Level at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
TC Speaker 1	76	21	1	520	34.8	41.2
TC Speaker 2	76	21	1	540	35.3	40.7
TC Speaker 3	76	21	1	580	36.0	40.0
TC Speaker 4	76	21	1	600	36.4	39.6

Cumulative LEQ

46.4

		ocenano.		i toperty line		
	Source Noise	Source Reference	Number of	Distance to Nearest	Distance	Noise Level at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
DH Speaker 1	61	21	1	1750	48.0	13.0
DH Speaker 2	61	21	1	1810	48.4	12.6
DH Speaker 3	61	21	1	1870	48.7	12.3

#### Scenario: Café Ezra - North Property line

Cumulative LEQ 17.4

#### Scenario: Café Ezra - East Property line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
DH Speaker 1	70	21	1	780	39.2	30.8
DH Speaker 2	70	21	1	860	40.3	29.7
DH Speaker 3	70	21	1	940	41.3	28.7

Cumulative LEQ

34.6

Scenario: Café Ezra - West Property line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
DH Speaker 1	61	21	1	810	39.7	21.3
DH Speaker 2	61	21	1	785	39.3	21.7
DH Speaker 3	61	21	1	760	39.0	22.0

Cumulative LEQ

26.5

#### Loudspeaker Noise Evaluation

#### Scenario: Amphitheater Performance - North Property line

		Scenario:	Amphitheater Per	formance - North	n Property line	
Source West Speaker 1 West Speaker 2 East Speaker 1 East Speaker 2	Source Noise Level 76 76 76 76	Source Reference Distance 21 21 21 21	Number of Loudspeakers 1 1 1 1	Distance to Nearest Property Line 745 770 745 770	Distance Attenuation 38.7 39.1 38.7 39.1	Noise Level at Property Line (LEQ dBA) 37.3 36.9 37.3 36.9
				Cumulative LEC	2	43.1
		Scenario:	Amphitheater Per	formance - East	Property line	
Source West Speaker 1 West Speaker 2	Source Noise Level 76 76	Source Reference Distance 21 21	Number of Loudspeakers 1 1	Distance to Nearest Property Line 115 115	Distance Attenuation 18.5 18.5	Noise Level at Property Line (LEQ dBA) 57.5 57.5
			Westerly Facing S	Cumulative LEC Speakers Only:		60.5 Ambient
		Scenario:	Amphitheater Per	formance - Wes	t Property line	
Source West Speaker 1 West Speaker 2	Source Noise Level 76 76	Source Reference Distance 21 21	Number of Loudspeakers 1 1	Distance to Nearest Property Line 1625 1625	Distance Attenuation 47.2 47.2	Noise Level at Property Line (LEQ dBA) 28.8 28.8
				Cumulative LEC	ב	31.8
		Scenario:	Amphitheater Per	formance - Wes	t PL, West Fa	cing Speakers (4)
Source West Speaker 1 West Speaker 2 West Speaker 3 West Speaker 4	Source Noise Level 76 76 76 76	Source Reference Distance 21 21 21 21 21	Number of Loudspeakers 1 1 1 1	Distance to Nearest Property Line 1625 1625 1625 1625	Distance Attenuation 47.2 47.2 47.2 47.2 47.2	Noise Level at Property Line (LEQ dBA) 28.8 28.8 28.8 28.8 28.8
				Cumulative LEC	ב	34.8
		Scenario:	Amphitheater Per	formance - North	nwest Property	/ Line Closest Point
Source West Speaker 1	Source Noise Level 76	Source Reference Distance 21	Number of Loudspeakers 1	Distance to Nearest Property Line 1825	Distance Attenuation 48.5	Noise Level at Property Line (LEQ dBA) 27.5

••••						(== ~ ~ ~ ~ ,
West Speaker 1	76	21	1	1825	48.5	27.5
West Speaker 2	76	21	1	1825	48.5	27.5
West Speaker 3	76	21	1	1825	48.5	27.5
West Speaker 4	76	21	1	1825	48.5	27.5

Cumulative LEQ

# APPENDIX G

# Acoustic Blanket Manufacturer Data



NOISE CONTROL HELP LINE: 1-800-854-2948 M - F 7A.M. - 6P.M. (CENTRAL TIME)

# ACOUSTICAL SURFACES, INC.

CELEBRATING 35 YEARS - SINCE 1980 | SOUND PROOFING | ACOUSTICS | NOISE & VIBRATIO...

What's Your Noise Problem? (http://soundproofing.aco your-problem)

#### (http://www.acousticalsurfaces.com)

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> The Curve System (http://www.acousticalsurfaces.co

> Echo Barrier™ (http://www.acousticalsurfaces.co barrier/echo-barrier.html)

> Echo Eliminator™ (http://www.acousticalsurfaces.co

> Micro-perforated Ceiling & Wall Panels

> (http://www.acousticalsurfaces.co micro-perforated-acousticalpanels/)

> NOISE S.T.O.P. FABRISORB™ (http://www.acousticalsurfaces.co wrapped-wall-panels.html)

> Poly Max™ Polyester Acoustical Panels (http://www.acousticalsurfaces.co wall-panels/wall-panels.html)

> Silk Metal™ (http://www.acousticalsurfaces.co metal/silk-metal-ceiling-wallpanels.html)

Sound Silencer™ (http://www.acousticalsurfaces.co

# Product Line

Acoustical Ceiling Tiles

Acousti-Board

Acousti-Gasket™ Tape (http://www.acousticalsurfaces.co

Acoustical Fabric Selection (http://www.acousticalsurfaces.co

# NOISE S.T.O.P.™ Sound Blankets – Reinforced



Testimonial:

#### BBC-EXT-R-2 Noise Barrier/Sound Absorber Sound Blankets

BBC-EXT-R-2 offers the benefits of both a noise barrier and a sound absorber composite in one product. This BBC product consists of an exterior grade, UV resistant

bonded to a one-pound per sq. ft. reinforced loaded vinyl barrier. The heavy-duty facing is a 10 oz per sq yd vinyl-coated-polyester (VCP) quilted to the sound absorber rather than the standard 4.5 oz facing. Curtain panels are constructed with grommets across the top and bottom and exterior grade Velcro seals along the vertical edges.

**STC** = 33

NRC = .75

Facing Colors on Quilt: Gray, Tan, Black or White

Barrier Colors: Gray, Tan, Olive or Blue Product Testing & Information

> Product Specs (http://www.acoustical

Acoustimetal<sup>™</sup> Perforated Metal Panels (http://www.acousticalsurfaces.co Acoustic Enclosures Acoustic Quilted Curtain Absorptive Quilted Curtains (http://www.acousticalsurfaces.co Curtain Hardware (http://www.acousticalsurfaces.co Echo Barrier (http://www.acousticalsurfaces.co barrier/echo-barrier.html) Enclosures (http://www.acousticalsurfaces.co Exterior Sound Blanket -Reinforced (http://www.acousticalsurfaces.c Insul-Quilt Blankets (http://www.acousticalsurfaces.co quilt.html) Portable Acoustical Enclosures & Screens (http://www.acousticalsurfaces.co QFA Absorptive Exterior Grade Curtain (http://www.acousticalsurfaces.co absorbtive-curtain.html) OFA – Absorptive Ouilted Curtain (http://www.acousticalsurfaces.co Silicone Curtains Acoustic/Soundproof Doors (http://www.acousticalsurfaces.co Acoustic Windows - Inserts Adjustable Cutters - Sprinkler Cutter (http://www.acousticalsurfaces.co cutters/index.htm) Adjustable Door Seals CFAB<sup>™</sup> Cellulose Panels (http://www.acousticalsurfaces.co panel/cellulose-panels.html) dBA Panels (http://www.acousticalsurfaces.co Decorative Fabric Wrapped Panels **Designer Acoustical Curtains** (http://www.acousticalsurfaces.co Echo Eliminator™ Electronics - Sound Level Meters Flooring Underlays Hanging Acoustical Baffles Hvac Products / Silencers Micro-perforated Ceiling & Wall Panels (http://www.acousticalsurfaces.co micro-perforated-acousticalpanels/) Noise Barrier-Noise Blockers **RSIC Sound Isolation Clips** School Noise Management Sealants - Adhesives - Paints & Compounds Softwall - Wallmate Sonex<sup>™</sup> Foam Products Sound Absorbing Foam

1. Exterior Chiller Enclosure Helps Homeowner Maintain Sanity! (http://www.acousticalsurfaces.com/curtan\_stop/pdf/Enclosure.pdf)

2. Acoustical Blanket Saves the Day by Reducing High Pitch Whiny Sound (http://www.acousticalsurfaces.com/curtan\_stop/pdf/testa/Sound-Blanket-High-Pitch-Reduction-Testimonial.pdf)

### **Product Specs**

MATERIAL	Vinyl coated polyester facing on 2" quilted fiberglass & 1 lb/sf reinforced mass loaded vinyl barrier
FEATURES	Effective and durable absorber with mass loaded vinyl barrier option.
APPLICATIONS	Typically used as modular curtain panels in outdoor applications where high abuse resistance or excellent durability as well as maximum longevity and noise reduction is required. Also used as sliding acoustical doors, durable acoustical jacket on fans or valves, as well as a temporary noise barrier on outdoor construction projects.
WEIGHT	1.45 lb/sf
THICKNESS	Nominal 2"
SIZES	Standard Width: 54"; Roll Length 25'
COLORS	Facing Colors on Quilt – Gray, Tan, Black or White Barrier Colors – Gray, Tan, Olive, or Blue

**TEMPERATURE RANGE** 

-20°F to +180°F

#### Click on Images to Enlarge



Front.jpg)

Back.jpg)

Sound Blanket – Sound Transmission Loss – ASTM E90 & E 413							
Frequency	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	STC
BBC-EXT-R-2	14	20	32	41	42	41	33

#### Sound Blanket – Sound Absorption Performance – ASTM C423

Frequency	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	NRC
BBC-EXT-R-2	.45	.96	.87	.66		.20	.75

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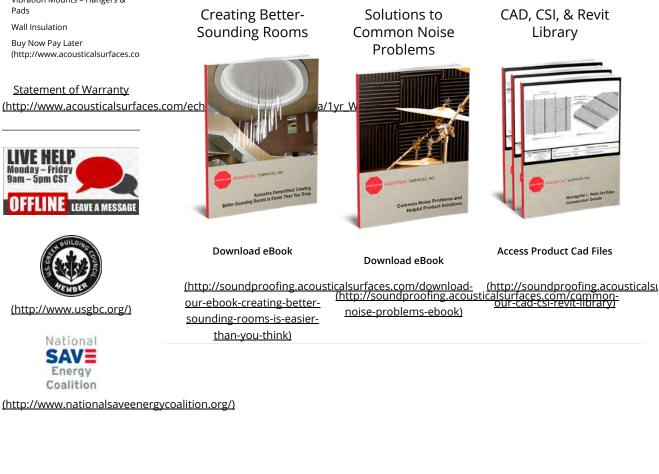
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# REVISED NOISE ASSESSMENT TECHNICAL REPORT for the

Camp Ramah Project Ventura County, California

Prepared for:

# Camp Ramah

Prepared by:

**DUDEK** 621 Chapala Street Santa Barbara, California 93101 *Contact: Jonathan Leech* 

# **OCTOBER 2019**

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# TABLE OF CONTENTS

### **Section**

### Page No.

1.0	INT	RODUCTION	1
	1.1	Purpose	1
	1.2	Project Location and Description	1
		1.2.1 Location	1
		1.2.2 Project Description	3
	1.3	Noise Background and Terminology	6
	1.4	Noise Regulation and Management	8
		1.4.1 State	8
		1.4.2 County of Ventura	9
2.0	EXIS	STING NOISE CONDITIONS	11
3.0	SIG	NIFICANCE CRITERIA	13
	3.1	County of Ventura Noise Significance Criteria	13
4.0	IMP	PACTS AND MITIGATION	13
	4.1	Operations Noise Generation	13
		4.1.1 Impact Analysis	13
		4.1.2 Mitigation Measures	24
5.0	REF	TERENCES	25

# FIGURES

FIGURE 1	Camp Boundaries And Adjacent Residence Locations2
FIGURE 2	Site Plan And Noise Measurement Locations5

# **APPENDICES**

- A Zoning Map
- B Proposed Machon & Cabins Schematic Diagrams
- C Proposed Speaker Layout Diagram
- D Ambient Noise Measurement Data
- E Mechanical Equipment Calculation Worksheets
- F Outdoor Loudspeaker Calculation Worksheets
- G Sound Blanket Manufacturer Data

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# ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulation
CNEL	community noise equivalent level
dB	decibel
dBA	A-weighted decibel
DOT	U.S. Department of Transportation
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
Hz	hertz
Ldn	day-night sound level
Leq	equivalent sound level
Lmin	minimum sound level
Lmax	maximum sound level
Lxx	percentile exceeded sound level
RMS	root mean square
SR	State Route
VdB	vibration decibels

# 1.0 INTRODUCTION

# 1.1 Purpose

This technical noise report evaluates noise effects of the proposed project which entails a requested minor modification to the Conditional Use Permit for Camp Ramah, Ojai. The requested modification would introduce a limited number of new structures to accommodate an additional grade level of campers, and also proposes installation and use of an outdoor sound amplification system. While structures would be added in order to accommodate another grade level (age group) of campers, Camp Ramah proposes to hold the overall attendance level consistent with current and historic levels. Fewer campers would be accepted within the currently accommodated age levels in order to balance the addition of the new age group.

Noise generation sources from future implementation of the project include mechanical equipment operation associated with the new structures and operation of the outdoor sound amplification system. Neither traffic-related noise levels nor general activity noise levels would be anticipated to increase, given the maintenance of the current and historic attendance or participation population under the proposed modification.

# **1.2 Project Location and Description**

### 1.2.1 Location

The Camp Ramah Ojai property is located within an unincorporated portion of Ventura County, northwest of the City of Ojai. The property address is 385 Fairview Road, and access is provided from a private driveway connecting to Fairview Road. Fairview Road generally forms the southern property boundary, across which are located rural residential lots. The Camp Ramah property is bordered on the east by a residential neighborhood with 5-acre lots, on the north by open space and rural residential parcels, and on the west by the Camp Ramah Retreat center.

Camp Ramah has historically consisted of three parcels of land (Assessor Parcel Numbers [APNs] 010-011-012, 010-011-013, and 010-012-004). The Camp Ramah Retreat occupies an additional parcel (010-017-002), bordering Camp Ramah on the west. Camp Ramah recently purchased the parcel immediately north of the central camp (010-007-031) and the parcel immediately to the north and northwest of the retreat parcel (010-006-007). APN 010-006-007 contains more area than the existing Camp Ramah property, and there are no sensitive noise receptors located in this direction from the main camp (northwest). Therefore, to keep the graphic scale manageable for reference in this report, Figure 1 includes the boundaries for the historic Camp Ramah (APNs - 012, 013 and 004), along with the one new parcel directly to the north of the central camp (010-007-031); Figure 1 does not include the new parcel north of the retreat center (010-006-007). Figure 1 also illustrates adjacent land uses described above.

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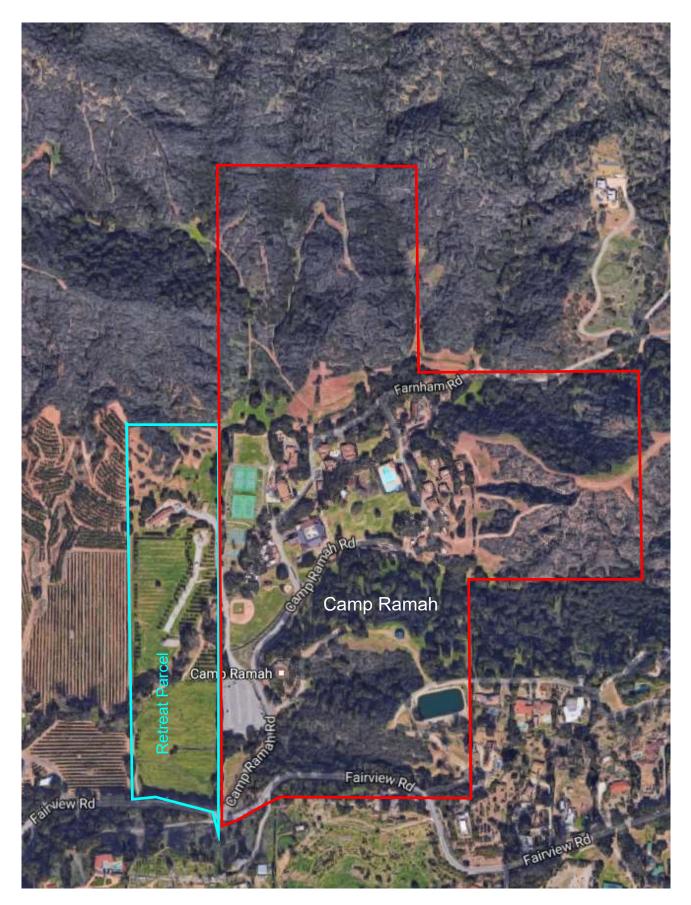


FIGURE 1 CAMP RAMAH & LOCATIONS OF CLOSEST OFF-SITE NOISE SENSITIVE STRUCTURES CAMP RAMAH OJAI - NOISE TECHNICAL REPORT The Camp property is zoned residential (RE-20: Rural Exclusive, 20 acre minimum parcel size); parcels to the south and east carry a designation of rural agriculture (RA-5, RA-2), but are generally developed with low density single family residences; parcels to the north are zoned open space (OS-20 and OS-80) or residential (RE-5); the parcel to the west is zoned open space (OS-40). The zoning map for the project area is included in *Appendix A*.

#### **1.2.2 Project Description**

The proposed project involves the construction of a new Machon and six new cabin structures (with integrated bathrooms) on the property where there is currently an undeveloped grassy area. Refer to *Figure 2* for the overall site plan, including the area proposed for the location of the new Machon and cabins. These buildings would allow the Camp to add a grade level to the camp experience; however, overall on-site population would not increase due to offsetting decreases proposed in other grade levels already served by the camp.

More detailed schematics for the proposed new Machon and cabins are provided in *Appendix B*. The seven individual structures would include the Machon (with staff sleeping quarters, kitchen, dining common/meeting hall), three cabins for girls, and three cabins for boys. Outdoor mechanical equipment includes one compressor for mini-split HVAC units for each of the six cabins, two compressors for mini-split HVAC units for the Machon, and an exhaust blower for the kitchen.

Summer Camp activities run from early June through mid-August with occasional special private events hosted throughout the calendar year. Noise-generating activities occur in various locations throughout the site, but are primarily concentrated in the center of the property. Within the center portion of the property, the Camp proposes to install and operate an exterior sound amplification system. Operational hours for exterior amplified sound use are proposed to be from 9AM - 10PM, but a limited number of exceptions to this schedule are proposed in order to accommodate specific traditional activities (described in more detail below). *Appendix C* provides a schematic indicating the proposed location of speakers to be included in the system. A brief description of the locations is provided below.

- 1. Main dining room lawn (facing northeast) as well as one speaker on the northern, eastern, and southern corners of the dining building
- 2. Fire pit at the boys tent area (portable or temporary speaker), oriented southwest
- 3. Tennis courts (portable or temporary speaker), oriented north

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- 4. Amphitheater (anticipated to include a pair of speakers at the stage corners, and a pair of speakers at the half-way point on either side of the seating area, facing northeast and northwest)
- 5. Girls gazebo (inside, oriented downward from the ceiling)
- 6. An emergency alarm, with individual speakers facing north, west, south, and east, located immediately south of the central dining facility

Camp Ramah proposes to allow the use of amplified sound in outdoor areas which either extends later than the general 10:00 PM limit, and/or involves the participation by a large portion of the Camp population for the following traditional activities or events.

Café Ezra	One night per week during summer camp season, in the patio and lawn area on the northwest side of the dining hall (amplified sound location #1), low level amplified music, $9:00 - 11:00$ PM
Israeli Dance	One night per week during summer camp season, in the tennis courts area (amplified sound location #3), moderate level amplified music, $9:00 - 10:00$ PM
Performance Night	Once per camp session, in the amphitheater (amplified sound location #4), amplified speech and low level music, $7:30 - 9:30$ PM

The potential for sound generation from the proposal would include operation of exterior mechanical equipment and new amplified sound system usage.

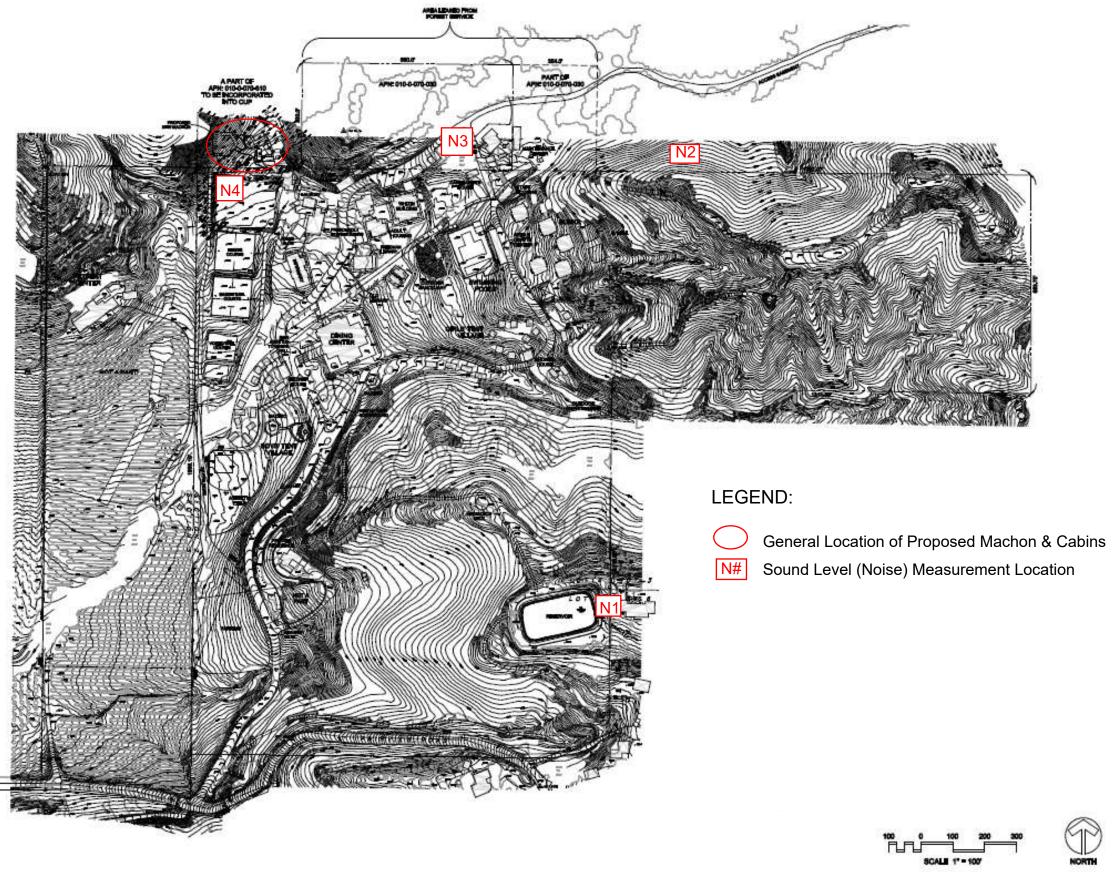




FIGURE 2

CAMP RAMAH SITE PLAN & NOISE MEASUREMENT LOCATIONS

CAMP RAMAH OJAI - NOISE TECHNICAL REPORT

# 1.3 Noise Background and Terminology

#### Fundamentals of Environmental Noise

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 20,000 Hz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called "A" weighting is typically used for quieter noise levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the "noise level" and is referenced in units of dBA.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear (U.S. DOT 1980). Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable (EPA 1973). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence. A complete definition of CNEL is provided below.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (Leq), the minimum and maximum sound levels (Lmin and Lmax), the day–night sound level (Ldn), and the CNEL. Below are brief definitions of these measurements and other terminology used in this report.

- *Decibel* (dB) is a unitless measure of sound on a logarithmic scale which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals.
- *A-weighted decibel* (dBA) is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- *Equivalent sound level* (L<sub>eq</sub>) is the constant level that, over a given time period, transmits the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for both the day–night average sound levels (Ldn) and community noise equivalent level (CNEL) scales. "L<sub>eq</sub> 1H" refers to a 1-hour averaging period.
- *Maximum sound level* (Lmax) is the maximum sound level measured during the measurement period.
- *Minimum sound level* (Lmin) is the minimum sound level measured during the measurement period.
- Day-night average sound level (L<sub>dn</sub>) The City of Santa Barbara has historically described community noise levels in terms of the L<sub>dn</sub>. The L<sub>dn</sub> is a 24-hour average A-weighted sound level with a 10 dB penalty added to the nighttime hours from 10:00 p.m. to 7:00 a.m. The 10 dB penalty is applied to account for increased noise sensitivity during the nighttime hours. Resulting values from application of L<sub>dn</sub> versus CNEL rarely differ by more than 1 dB, and therefore these two methods of describing average noise levels are often considered interchangeable.
- *Community noise equivalent level* (CNEL) The County of Santa Barbara describes community noise levels in terms of the CNEL. The CNEL is the average equivalent A-weighted sound level during a 24-hour day. CNEL accounts for the increased noise sensitivity during the evening hours (7 p.m. to 10 p.m.) and nighttime hours (10 p.m. to 7 a.m.) by adding 5 dB to the sound levels in the evening and 10 dB to the sound levels at night. CNEL and L<sub>dn</sub> are often considered equivalent descriptors.

#### **Exterior Noise Distance Attenuation**

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor

vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground.

#### **Structural Noise Attenuation**

Sound levels can also be attenuated by man-made or natural barriers. Solid walls or slopes associated with elevation differences typically reduce noise levels by 5 to 10 dBA (U.S. DOT 1980). Structures can also provide noise reduction by insulating interior spaces from outdoor noise. The outside-to-inside noise attenuation provided by typical residential structures in California is approximately 25 dBA (Caltrans 1980).

# 1.4 Noise Regulation and Management

### 1.4.1 State

### California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

#### California Noise Insulation Standards (CCR Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (CCR Title 24, Part 2). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure is proposed to be located in an area with CNEL (or Ldn) of

60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or Ldn) of at least 45 dBA (California's Title 24 Noise Standards, Chap. 2-35). With respect to the project, the proposed new Macron cabins would generally be considered to comprise lodging facilities, for which a maximum exterior noise exposure of 60 dBA CNEL would be recommended.

### 1.4.2 County of Ventura

Noise effects of the proposed project on adjacent properties located within the County would be subject to compliance with adopted noise policies and ordinances of the County of Ventura. County noise policies, and their application to project noise analysis, are described below.

#### County of Ventura General Plan – Noise Element

#### 2.16.2 Policies

1. All discretionary development shall be reviewed for noise compatibility with surrounding uses. Noise compatibility shall be determined from a consistent set of criteria based on the standards listed below. An acoustical analysis by a qualified acoustical engineer shall be required of discretionary developments involving noise exposure or noise generation in excess of the established standards. The analysis shall provide documentation of existing and projected noise levels at on-site and off-site receptors, and shall recommend noise control measures for mitigating adverse impacts.

(1) Noise sensitive uses proposed to be located near highways, truck routes, heavy industrial activities and other relatively continuous noise sources shall incorporate noise control measures so that:

a. Indoor noise levels in habitable rooms do not exceed CNEL 45.

b. Outdoor noise levels do not exceed CNEL 60 or Leq1H of 65 dB(A) during any hour.

#### [...]

(4) Noise generators, proposed to be located 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 following standards:

a. Leq1H of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.

b. Leq1H of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.

c. Leq1H of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

Section 2.16.2(4) is not applicable to increased traffic noise along any of the roads identified within the 2020 Regional Roadway Network (Figure 4.2.3) Public Facilities Appendix of the Ventura County General Plan (see 2.16.2-1(1)). In addition, State and Federal highways, all railroad line operations, aircraft in flight, and public utility facilities are noise generators having Federal and State regulations that preempt local regulations.

The primary goal of the above policies is to maintain exterior noise exposure levels not exceeding 60 dBA CNEL for residential land uses. For new noise generation sources not related to transportation, the allowances are slightly more restrictive where existing residences could be exposed to the generated noise.

#### **County of Ventura Noise Ordinance**

Noise impacts from stationary sources are regulated through the County's Noise Ordinance. The County's Noise Ordinance, No. 4124 states:

#### Sec. 6299-1 - Loud or Raucous Noise Prohibition

No person shall create within any residential zone of the County of Ventura any loud or raucous noise which is audible to the human ear during the hours of 9 p.m. to 7 a.m. of the following day, at a distance of 50 feet from the property line of the noise source or 50 feet from any such noise source if the noise source is in a public right-of-way.

#### Sec. 6299-2 – Definitions

For purposes of this Article, the following definitions shall apply:

- a. "Person" mean any individual, association, firm, organization, partnership, corporation or other entity, but does not include any government entity or public utility.
- b. "Residential Zone" means any areas with the unincorporated portion of Ventura County that are zoned:
  - 1. Single-Family Residential (R-l)
  - 2. Two-Family Residential (R-2)
  - 3. Residential Planned Development (R-P-D)
  - 4. Single Family Estate (R-O)

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5. Rural Exclusive (R-E)

6. Coastal Single-Family Residential (C-R-1)

- 7. Coastal Two-Family Residential (C-R-2)
- 8. Coastal Residential Planed Development (C-R-P-D), or

9. Coastal Rural Exclusive (C-R-E),

(as provided in Chapter 1 and Chapter 1.1 of Division 8 of this Code).

c. "Loud or raucous noise" means sounds from: 1) the use or operation of any radio, musical instrument, phonograph, television receiver, video cassette recorder, or any machine or device for the production, reproduction or amplification of the human voice or any other sound or 2) the us or operation of any lawn mower, backpack blower, blower, lawn edger, riding tractor or other mechanical or electrical device or hand tool.

"Audible to the human ear" is not defined within the Noise Ordinance. Generally, noise must be at least 3 dBA greater than background or ambient noise levels in order for it to be "noticeable" to an observer. In a carefully controlled lab environment, some subjects may be able to detect as little as a 1 dBA increase in sound level, but these small changes are easily masked by the number of different noise sources present in an outdoor environment. For the purpose of interpreting the noise ordinance, a noise level at least 2 dBA over the ambient noise level would be considered the threshold for "audible".

# 2.0 EXISTING NOISE CONDITIONS

The existing Camp Ramah operations are a noise generation source which contributes to the ambient noise environment of the surrounding rural environment. In order to characterize existing noise levels associated with Camp Ramah operations, four 96-hour noise measurements were performed. Soft dB Piccolo 3 (American National Standards Institute) Type 2 Integrating Sound Level Meters calibrated with a Larson Davis Model CAL150 calibrator were used to record ambient sound levels at various point along the Camp Ramah property boundary where changes in noise levels could result from project implementation. Please refer to *Figure 2* for measurement locations discussed in this section.

The measurements included an approximately 24-hour period before a Memorial Day Weekend session at the Camp; two 24-hour measurements while the Camp was in session; and a final 24-hour period following the Memorial Day Weekend Session.

Please refer to *Figure 2* for the noise measurement locations. Briefly they are: 1) at the eastern property boundary, adjacent to the on-site reservoir and adjacent off-site residence; 2) at a bench near the northern property boundary, in the eastern portion of the site, between the main campus and closest off-site residence to the northeast; 3) at the northern limit of the developed central portion of the Camp Ramah property, adjacent to the Camp Ramah manager residence; and 4) adjacent to the existing tennis courts and soccer field (the soccer field being adjacent to the south side of the proposed location for the new Macron complex). The noise measurement results are presented below in *Table 1* as CNEL values for the four days of measurements, at the four locations. The hourly LEQ values and CNEL calculations are provided in *Appendix D*.

	Table 1						
	Existing Ambient Noise Measurement Results						
Location	5/27-5/28/16 dBA CNEL	5/28-5/29/16 dBA CNEL	5/29-5/30/16 dBA CNEL	<b>5/30-5/31/16</b> dBA CNEL			
1 (Reservoir)	47	45	47	46			
2 (Bench)	51	46	48	47			
3 (Mngr. House)	49	47	48	47			
4 (Soccer)	53	51	52	46			

Weed and dry vegetation clearing activities and seasonal preparation operations were observed on May 27 (Friday) during placement of the sound level meters. Heavy equipment and chain saws were employed for some of these activities, which resulted in the highest recorded sound levels over the 4-day period. The peak Camp activity levels occurred on Sunday, which had the second highest CNEL value for the 4-day period. The 24-hour measurement period following the gathering (from 11 AM Monday 5/30 to 11 AM Tuesday 5/31) is considered a reasonable characterization of ambient noise levels while Camp Ramah is not in session. The difference between the highest and lowest CNEL value for a given location generally only varied by 2-4 dBA over the 4-day measurement period, except adjacent to the soccer field, which varied by 6 dBA CNEL. All of the CNEL values from the measured locations comply with the 60 dBA CNEL exterior noise level criterion for residential land uses.

# 3.0 SIGNIFICANCE CRITERIA

## 3.1 County of Ventura Noise Significance Criteria

Based upon the Ventura County General Plan Noise Element and Noise Ordinance, the project would result in a significant impact if:

- The proposed development would generate noise levels in excess of 60 dB(A) CNEL at existing residential properties in the project vicinity.
- (2) The proposed development would generate noise levels at the exterior wall of an existing vicinity residence which exceed:
  - a. Leq1H of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
  - b. Leq1H of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.
  - c. Leq1H of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.
- (3) The proposed development would create any loud or raucous noise which is audible to the human ear during the hours of 9 p.m. to 7 a.m. of the following day, at a distance of 50 feet from the property line of the noise source.

# 4.0 IMPACTS AND MITIGATION

### 4.1 **Operations Noise Generation**

#### 4.1.1 Impact Analysis

The implementation of the project would result in changes to existing noise levels on the project site by developing new stationary sources of noise including mechanical equipment and an outdoor sound amplification system. These sources may affect noise-sensitive vicinity land uses off the project site. The following analysis evaluates noise from proposed new exterior mechanical equipment as well as the proposed sound amplification system.

Although the proposed new Machon and cabins would provide accommodations for a grade level of attendees over and above the grade levels historically served by the Camp, attendance levels for the other grades are proposed to be adjusted downward, such that maximum enrollment or attendance for the Camp would be no greater than existing levels. Because of this, the noise from general activities and vehicular traffic associated with the Camp would not be anticipated to be

affected. Consequently, traffic noise and noise from general Camp activities is not evaluated in this report.

#### 4.1.1.1 Outdoor Mechanical Equipment

The proposed location for the new Machon complex is adjacent to the north side of the existing soccer fields, north and somewhat close to the historic northern boundary for the Camp Ramah parcel. However, given the purchase by Camp Ramah of the parcel immediately north of this portion of the Camp, the boundary for the adjacent neighboring property to the north is now located approximately 1,150 feet away from the proposed new Macron location. Also, while the proposed new Macron complex would be located within approximately 60 feet of the western boundary of the Camp Ramah property, the Camp Ramah retreat abuts the Camp to the west, which is under the same ownership as Camp Ramah. Given the common ownership of the Retreat and Camp, the distance to the closest neighboring property boundary becomes the determinant for analyzing noise levels that could affect neighbors. The distance to the closest neighboring property boundary to the west would be approximately 300 feet from the proposed Macron location.

The proposed Macron complex would consist of seven individual structures, arranged in two groupings. The Macron would be located on the western portion of the site, approximately 300 feet from the closest neighboring property line to the west; approximately 1,200 to the closest property line to the north; and, approximately 2,000 feet from the southern property boundary. The six cabins would be grouped together on the eastern portion of the site clearing, approximately approximately 365 feet from the closest neighboring property line to the west; approximately 1,200 feet from the northern property boundary; approximately 140 feet from the eastern property boundary; and, approximately 2,050 feet from the southern property boundary. Refer to *Appendix B* for the proposed configuration of the Macron and cabins. Outdoor mechanical equipment for the proposed Macron and cabins includes the following.

a. Eight compressors for mini-split HVAC units for the Machon and cabins (anticipated to be 2-ton units, LG model no. ARUN036GS2 or equivalent). Please refer to Appendix B for a schematic indicating the approximate locations for these compressors. The compressors would be mounted on the ground, adjacent to the structure they would serve. It is anticipated that compressor units 4 and 7 would be installed on the east side of the cabins they serve, thus shielding noise transmission to the west. However, obstructions would not prevent noise from compressor units 1, 2, 3, 5, 6 and 8 from reaching the closest western property boundary. Noise from compressor units 1, 2, 3, 5, 6 and 8 was therefore modelled at the closest western property boundary to the Machon location. It is anticipated that the cluster of cabins themselves would shield sound transmission eastward from the anticipated

locations of Compressors 1, 2, 3, and 5. However, obstructions would not prevent noise from compressor units 4, 6, 7 and 8 from reaching the closest eastern property boundary. Noise from compressor units 4, 6, 7 and 8 was therefore modelled at the closest eastern property boundary to the Machon location. Sound levels from each of the compressors could be of potential concern at the southern and northern property boundaries. However, these compressors would be located approximately 1,200 feet from the closest neighboring property line to the north, and 2.050 feet from the southern property boundary; noise from the compressor operation would not be audible at these distances. Thus compressor noise was not modelled at the northern or southern property boundaries.

b. An exhaust blower would be provided for the kitchen, mounted on the roof of the structure (anticipated to be up to a 40 horsepower turbine exhaust, Vacstar model T4 or equivalent). The peak of the roof would shield sound transmission to the north; the cluster of cabins would shield the blower noise for points along the eastern property boundary; no obstacles exist between the exhaust blower and west or south property lines. Sound levels would therefore be of potential concern at the western and southern property boundary. However, this exhaust blower would be located approximately 2,050 feet from the southern property line; noise from exhaust blower operations would not be audible at this distance. Therefore, the exhaust blower noise level from the kitchen is only assessed at the closest neighboring property line to the west.

Sound level specifications supplied by the manufacturer are provided in *Table 2* below for the anticipated mechanical equipment described above. For the compressor, note the referenced sound level is the maximum or peak sound level produced by the compressor, operating under full power and maximum load. The average sound level when the units are operating in efficiency mode is approximately 10 dBA less than the peak or maximum level. However, to address the worst-case sound levels for compressor operations, the peak noise rating is used in this analysis. The peak sound level for the exhaust blower operating at the highest speed is also indicated in *Table 2* and is used for the analysis.

Table 2           Anticipated Mechanical Equipment – Sound Level Rating			
Equipment	Peak Sound Level (dBA)		
HVAC Compressor Unit (LG model no. ARUN036GS2 or equivalent)	<b>52</b> (at 3.3 feet)		
Exhaust Blower (40 h.p max, Vacstar model T4 or equivalent)	<b>56</b> (at 10 feet)		

In order to assess noise levels from mechanical equipment operations along the common property boundary of the Camp and neighboring properties, distance measurements were completed from the mechanical equipment locations to the nearest property line. Standard acoustic calculations were then performed to determine the distance attenuated noise level at the property line location for each of the mechanical noise sources.

Noise levels at the closest adjacent property boundary are reported separately for the west property line and the east property line, according to the considerations described above. At the western property boundary, contributions were modelled for compressor units 1, 2, 3, 5, 6 and 8 and the kitchen exhaust fan. For the eastern property boundary, contributions were modelled for compressor units 4, 6, 7 and 8. However, in order to demonstrate that combined noise from all mechanical equipment sources with direct exposure at the two property lines would be within allowable parameters, the sum of the noise levels from all mechanical equipment is also provided at each of the two property boundaries.

Table 3           Mechanical Equipment Operation Noise Summary of Results					
Equipment	Noise Level at Property Boundary				
	West Property Line Average Noise Level (dBA Leq)	East Property Line Average Noise Level (dBA Leq)			
Comp #1	13	N/A			
Comp #2	13	N/A			
Comp #3	12	N/A			
Comp #4	N/A	19			
Comp #5	13	N/A			
Comp #6	11	22			
Comp #7	N/A	23			
Comp #8	12	22			
Kitchen Exhaust	29	N/A			
Combined Noise Level	30	28			

The noise levels (Leq) from the individual equipment, and the combined noise levels of all of the equipment, are indicated in *Table 3*. Refer to *Appendix E* for the calculation worksheet.

The results of the mechanical equipment operations noise analysis indicate that operation of the exterior mechanical equipment would easily comply with the Ventura County Noise Element Policy Criteria and Noise Ordinance restrictions. Mechanical equipment operations noise levels would not exceed 30 dBA  $L_{eq}$  at the adjacent western property line closest to the equipment locations, or 28 dBA  $L_{eq}$  at the adjacent eastern property line closest to the equipment locations, which is well below the most restrictive level of  $L_{eq}$ 1H 45dB(A) during any hour from 10:00 p.m. to 6:00 a.m. It would therefore not be necessary to restrict the hours for mechanical equipment operation associated with the proposed new Machon complex.

The distance from these noise sources to the remaining adjacent property boundaries in each case are more than double the distance used in these calculations, and therefore noise levels from mechanical equipment operation at the adjacent property boundaries to the north and south are not expected to be audible.

### 4.1.1.2 Outdoor Speaker System

Camp Ramah proposes to install and operate an outdoor sound amplification system as part of the minor modification to their existing CUP. Operational hours for exterior amplified sound use are proposed to be from 9AM - 10PM, but a limited number of exceptions to this schedule are proposed in order to accommodate specific traditional activities (described in more detail below). *Appendix C* provides a schematic indicating the proposed location of speakers to be included in the system; the numbering below corresponds to the locations identified in the schematic exhibit in *Appendix C*. A brief description of the locations is provided below.

- 1. Main dining room lawn (facing northeast) one speaker apiece on the northern, eastern, and southern corners of the dining building
- 2. Fire pit at the boys tent area (portable or temporary speaker), oriented southwest
- 3. Tennis courts (portable or temporary speaker), oriented north
- 4. Amphitheater (anticipated to include a pair of speakers at the stage corners, and a pair of speakers at the half-way point on either side of the seating area, facing northeast and northwest)
- 5. Girls gazebo (inside, oriented downward from the ceiling)
- 6. An emergency alarm, with individual speakers facing north, west, south, and east, located immediately south of the central dining facility

Camp Ramah proposes to allow the use of amplified sound in outdoor areas which extends later than the general 10:00 PM limit, and/or which includes a substantial portion of the Camp population, for the following traditional activities or events.

Café Ezra	One night per week during summer camp season, in the patio and lawn area on the northwest side of the dining hall (amplified sound location #1), low level amplified music, $9:00 - 11:00$ PM
Israeli Dance	One night per week during summer camp season, in the tennis courts area (amplified sound location #3), moderate level amplified music, $9:00 - 10:00$ PM
Performance Night	Once per camp session, in the amphitheater (amplified sound location #4), amplified speech and low level music, $7:30 - 9:30$ PM

#### Normal Speaker System Operations (Announcements)

An average sound level for exterior speakers used in an institutional setting (i.e., standard speech announcements) is approximately 65 dBA L<sub>eq</sub> measured at 21 feet from the speaker (Sound System Design Reference Manual, JBL, 1999). This level would be applicable to each of the proposed speaker locations for normal operation, which would involve routine announcements (i.e., speech).

The concept of directionality is very important in regard to sound levels produced by loudspeakers. The direction the speaker is pointed, specifically the center of the speaker cone, receives the greatest sound levels from speaker operation. At an angle 60 degrees from the center of the speaker cone, sound levels from speaker operation are 9 dBA less than those in-line with the center of the speaker. At an angle of 90 degrees from the center of the speaker (perpendicular to the speaker direction) sound levels from speaker operation are negligible (Sound System Design Reference Manual, JBL, 1999).

In order to evaluate sound levels at Camp Ramah property boundaries shared with adjacent noisesensitive land uses, speakers oriented toward each property line were identified. If a property line has an exposure less than 60 degrees from the speaker center line of a given speaker, the speaker was assessed using the measured full sound level of the speaker, with appropriate formula for distance attenuation. If a property line has an exposure between 60 degrees and 89 degrees, the speaker source sound level was decreased by 9 dBA, again with appropriate formula for distance attenuation. For a property line at 90 degrees or greater exposure from a given speaker, the speaker was not included in the quantification of noise levels (since the contribution would be negligible). For the amphitheater installation, it is assumed that a speaker would be provided at each of the two the corners of the "stage" and a speaker would also be provided on either side of the seating area, at the midpoint of the seating area.

For the northern Camp Ramah property boundary, there are a number of existing structures located between proposed speaker locations and the property boundary that would provide shielding and attenuation of speaker noise at the property boundary; the analysis does not take into account this structural shielding, and is therefore a conservative evaluation. There are no structures between the amphitheater location and the northern property boundary, and the speakers for the amphitheater would be oriented generally toward the north (northeast and northwest).

The results of the analysis of average noise levels during speaker operation for the closest adjacent property boundary to the north, west, south, and east are presented in *Table 4*. The analysis assumes all of the proposed speakers are operating simultaneously. Refer to *Appendix F* for a spreadsheet of the calculations for the speaker analysis.

Table 4           Average Noise Level During Normal Announcements Speaker Operation				
Location	L <sub>eq</sub> dBA	Ambient <sup>1</sup> Leq HOUR		
Eastern Property Boundary	41			
Eastern Property Boundary	29	38		
(West Facing Amphitheater Speakers Only)				
Southerly Property Boundary	27	NA		
Western Property Boundary	31	40		
Northern Property Boundary	34	39		

Table Note: <sup>1</sup> Average hourly sound level from 9-10 PM from four day measurement data.

#### Noise Element Policy Analysis – Normal Speaker System Operations

Referring to *Table 4* above and Noise Element Policy 2.16.2 (4), the calculated noise level at each property boundary for normal operation of the proposed outdoor speaker system (i.e., announcements) would comply with the most restrictive noise limit (45 dBA  $L_{eq}$  applicable in the period from 10 PM to 6 AM). Consequently, normal operation of the sound amplification system as proposed would comply with the Noise Element.

#### Noise Ordinance Policy Analysis – Normal Speaker System Operations

The noise ordinance (Ventura County Municipal Code Sec. 6299-1 - Loud or Raucous Noise Prohibition) prohibits the generation of noise from amplified sound systems which is audible to the human ear during the hours of 9 PM to 7 AM of the following day, at a distance of 50 feet from the property line of the noise source. The amplified sound system, for normal announcements operation, is proposed to be limited to the period from 9 AM to 10 PM. In the period from 9 PM to 10 PM, the amplification system cannot produce sound which is audible at 50 feet from the Camp property lines.

Data from the four day sound level measurements was used to compile the hourly average noise level during the hour of concern, from 9 PM to 10 PM. Measurements were performed at the western, northern, northeastern, and eastern property boundaries. The measurement data for the period from 9-10 PM on four consecutive days was averaged for each of the property boundary locations; this average is presented Table 4 as the "Ambient  $L_{EQ HOUR}$ " for reference in this policy analysis. Note that the sound levels for normal speaker system operation at the north and west property lines would fall below the recorded average ambient levels. For the south property line, measurements were not taken, but the predicted speaker noise levels would fall below the lowest ambient levels recorded at any of the property boundaries.

For the eastern property boundary, the sound level from all speakers in announcement mode would equal 41 dBA  $L_{EQ}$  compared to the recorded average of 38 dBA  $L_{EQ HOUR}$  from 9-10 PM at this property line. Since this represents up to a 3 dBA increase over ambient, the sound would be considered audible 50 feet from the eastern property boundary, which would constitute a potential conflict with the noise ordinance. However, placing the speakers for the amphitheater along the east side of the stage and seating areas, and orienting these speakers to the northwest (pointing into the audience, and away from the eastern property boundary), would reduce the normal speaker operational levels to 29 dBA  $L_{EQ}$  along the eastern property boundary. This level would fall below ambient, and would therefore comply with the noise ordinance. Refer to the mitigation discussion below regarding the amphitheater speaker placement and orientation.

#### Traditional Events /Activities Speaker Noise Levels

For Café Ezra, it is assumed that sound levels could reach up to 70 dBA  $L_{eq}$  at 21 feet from the speakers (reasonable as a background music level to accompany conversation). It is assumed that speakers at the northeast, east, and southeast of the dining hall would be employed, facing generally eastward. Structures exist between the dining hall and the closest off-site residence to

the east, north, northeast, and east; the analysis does not take into account this structural shielding, and is therefore a conservative evaluation.

For the Israeli Dance event, it is assumed that sound levels could reach up to 85 dBA  $L_{eq}$  at 21 feet from the speakers (which would address reasonable amplification for a general dance function, excluding those which would be associated with a live rock concert type of event). It is assumed that three portable speakers would be employed, facing northward along the southern tennis court boundary. Structures exist between the tennis court and the closest off-site residence to the northeast and to the west; the analysis does not take into account this structural shielding, and is therefore a conservative evaluation. There are no structures between the amphitheater location and the northern property boundary.

For musical performances in the amphitheater, it is assumed that sound levels could again reach up to 85 dBA  $L_{eq}$  at 21 feet from the speakers (which is considered reasonable for vocal ensemble performances, small musical combos, orchestral performances, and light "rock" music performances, excluding heavy metal or hard rock bands). Structures exist directly to the north and west of the amphitheater, but the analysis does not take into account any structural shielding. There are no structures between the amphitheater and the closest residences east or northeast.

The results of the analysis of average noise levels during the described traditional activities/events for the closest adjacent property boundary to the north, west, and east are presented in *Table 5*. Refer to *Appendix F* for a spreadsheet of the calculations for the speaker analysis.

Table 5           Average Noise Level During Traditional Events/Activities							
Event         West Property Line dBA CNEL         North Property Line dBA CNEL         East Property dBA CNEL							
Café Ezra	27	17	35				
Israeli Dance	46	43	39				
Performance Night	32	43	61				
Ambient <sup>1</sup> (LEQ HOUR)	37	35	35				

Table Note: <sup>1</sup> Average hourly sound level from 10-11 PM from four day measurement data.

## Noise Element Policy Analysis – Traditional Events/Activities

Referring to *Table 5* data, and in accordance with Noise Element Policy 2.16.2 (4), the calculated noise level for the Café' Ezra event at each property boundary would comply with the most

## Noise Assessment Technical Report for the Camp Rama CUP Amendment Project

restrictive noise limit of 45 dBA  $L_{eq}$ , which is applicable in the period from 10 PM to 6 AM. The Café Ezra event would therefore comply with noise element policies, as proposed. Refer to *Appendix F* for the calculation results.

Again with reference to *Table 5*, the calculated noise levels for the Israeli Dance event at each property boundary would comply with the noise restrictions for the periods 6 AM to 7 PM, and from 7 PM to 10 PM; however, it would exceed the 45 dBA  $L_{eq}$  applicable in the period from 10 PM to 6 AM. Consequently, sound mitigation would be required in order for the dance event to extend beyond 10 PM; sound mitigation would also be required in order for the Israeli Dance event to comply with the noise ordinance, which is discussed in greater detail below.

Finally, referring to *Table 5*, the calculated noise levels for the Performance Night event would exceed even the most lenient noise restrictions for the periods 6 AM to 7 PM (55 dBA  $L_{eq}$ ) at the east property boundary, with more substantial exceedance of the evening (55 dBA  $L_{eq}$ ) and night-time (45 dBA  $L_{eq}$ ) restrictions. Consequently, sound mitigation would be required in order for the Performance Night event to take place at any time; sound mitigation would also be required in order for the Performance Night event to comply with the noise ordinance, which is discussed in greater detail below.

## Noise Ordinance Policy Analysis - Traditional Events/Activities

The noise ordinance (Ventura County Municipal Code Sec. 6299-1 - Loud or Raucous Noise Prohibition) prohibits the generation of noise from amplified sound systems which is audible to the human ear during the hours of 9 PM to 7 AM of the following day, at a distance of 50 feet from the property line of the noise source. We have defined "audible" sound level as being at least 2 dBA greater than the ambient noise level. Data from the four day sound level measurements was used to compile the hourly average noise level during the hour of concern, from 10 PM to 11 PM. The noise ordinance restriction has a start time of 9 PM, however, noise levels were found to be somewhat greater from 9 PM to 10 PM as compared to those in the period 10 PM to 11 PM, so to capture the lowest ambient levels across the proposed event durations, we used the slightly lower ambient noise levels for the 10 PM to 11 PM hour as ambient. The measurement data for the period from 10-11 PM on four consecutive days was averaged for each of the property boundary locations; this average is presented Table 5 as the "Ambient L<sub>EQ HOUR</sub>" for reference in this policy analysis.

Referring to *Table 5* data, and in accordance with VCMC Sec. 6299-1, the calculated noise level for the Café' Ezra event at each property boundary would be less than or equal to the existing average ambient noise level, and therefore would be inaudible compared to ambient noise.

Consequently, the Café Ezra event would comply with noise ordinance, as proposed. Refer to *Appendix F* for the calculation results.

Again with reference to *Table 5*, the calculated noise levels for the Israeli Dance event at each property boundary would exceed the existing average ambient noise level by 4 dBA or more; this sound level would be considered audible 50 feet from the eastern property boundary, <u>which would</u> <u>constitute a potential conflict with the noise ordinance</u>. Consequently, sound mitigation would be required in order for the Israeli Dance event to comply with the noise ordinance; refer to the mitigation section below for additional detail.

Finally, referring to *Table 5*, the calculated noise levels for the Performance Night event at the east and north property boundary would exceed the existing average ambient noise level by 8 dBA or more; this sound level would be considered audible 50 feet from the eastern property boundary, which would constitute a potential conflict with the noise ordinance. Consequently, sound mitigation would be required in order for the Performance Night event to comply with the noise ordinance; refer to the mitigation section below for additional detail.

## 4.1.2 Mitigation Measures

In order to avoid a significant nuisance noise impact associated with potentially violating the Noise Ordinance, the following mitigation measures are required.

## **MM-1** Routine Speaker Operations / Performance Night Event – Amphitheater Speakers

The speakers for the amphitheater shall be installed at the eastern end of the stage area, and along the eastern side of the seating area, and shall be oriented northwest. No amphitheater speakers shall be oriented toward the eastern property boundary.

## **MM-2** Israeli Dance Event

Acoustic blankets shall be installed on the fencing along the west, north, and east side of the tennis courts before Israeli Dance events are held there with a planned schedule which goes any later than 9 PM. The blankets must be installed with no gaps, and should extend from the ground to a height of 8 feet above the ground. The sound blankets ahsll have an STC rating of a minimum of 25.

### **Significance After Mitigation**

Potentially significant nuisance noise impacts would be reduced to <u>less than significant</u> with incorporation of the above mitigation measure. *Table 6* illustrates noise levels with incorporation

of the required mitigation measures. Noise levels at property lines would fall below ambient levels, and as such would comply with the noise ordinance.

Table 6							
Average Noise Level During Traditional Events/Activities							
With Mitigation							
Event         West Property Line dBA CNEL         North Property Line dBA CNEL         East Property Line dBA CNEL							
Israeli Dance	36	33	29				
Performance Night	35	34	29				
Ambient <sup>1</sup> (LEQ HOUR)	37	35	35				

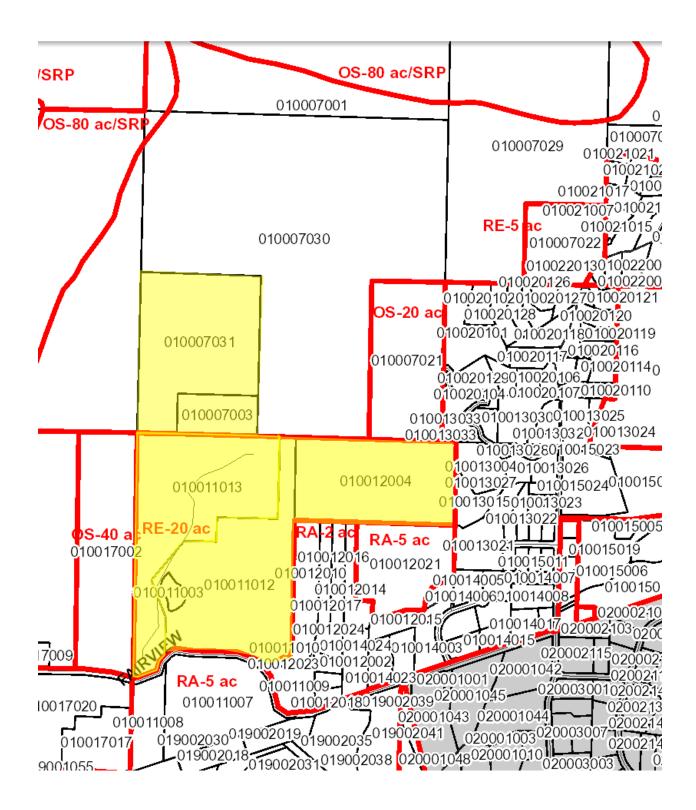
## 5.0 **REFERENCES**

Caltrans (California Department of Transportation). 1980. Fundamentals and Abatement of Highway Traffic Noise. September 1980.

Ventura County General Plan, Noise Element, 2015

Ventura County, Noise Ordinance, 1996

# APPENDIX A *Zoning Map*



ZONING DESIGNATIONS

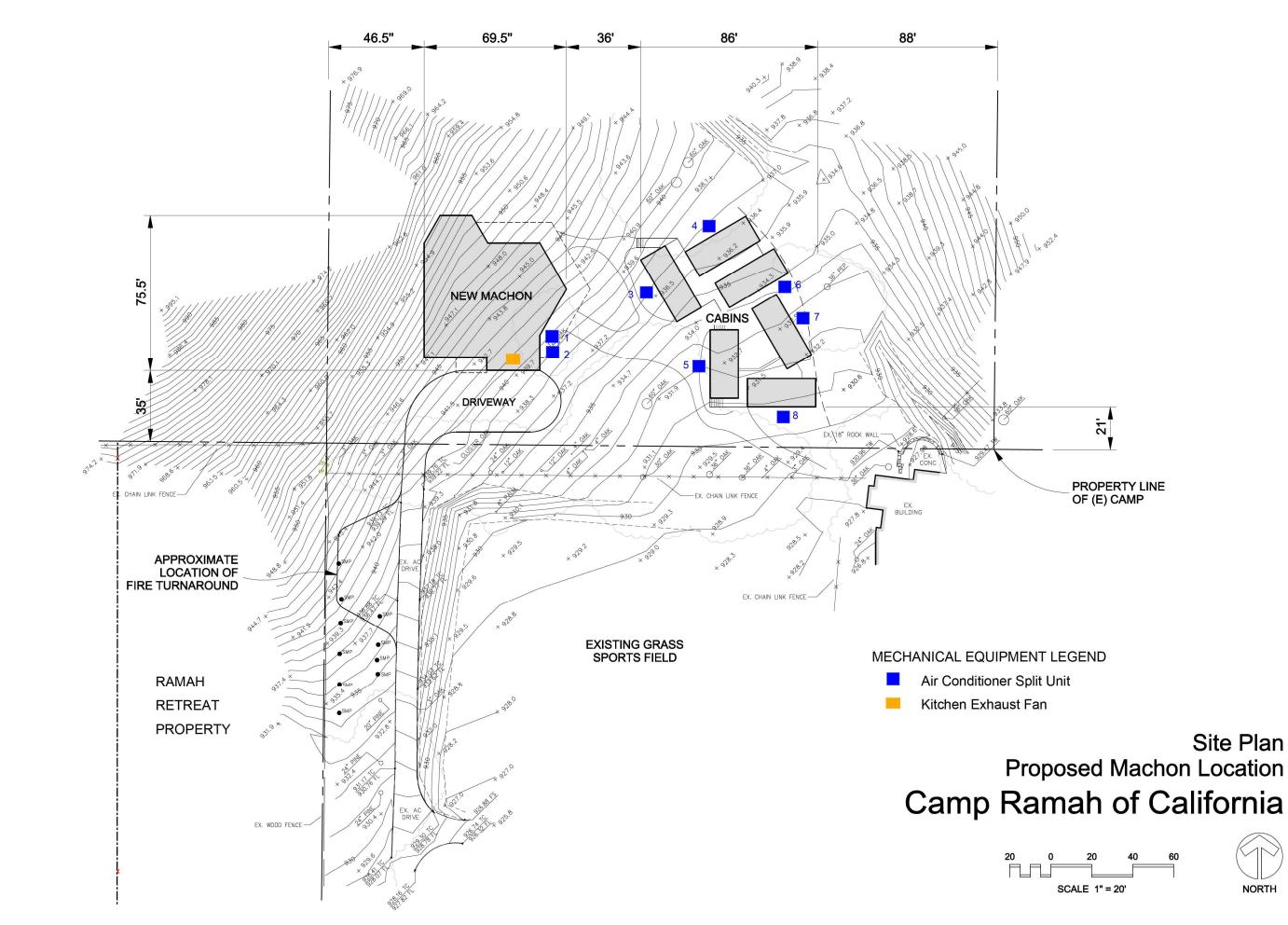
Camp Ramah & Surrounding Properties

# **APPENDIX B**

# Schematic Plans for Proposed Macron Complex







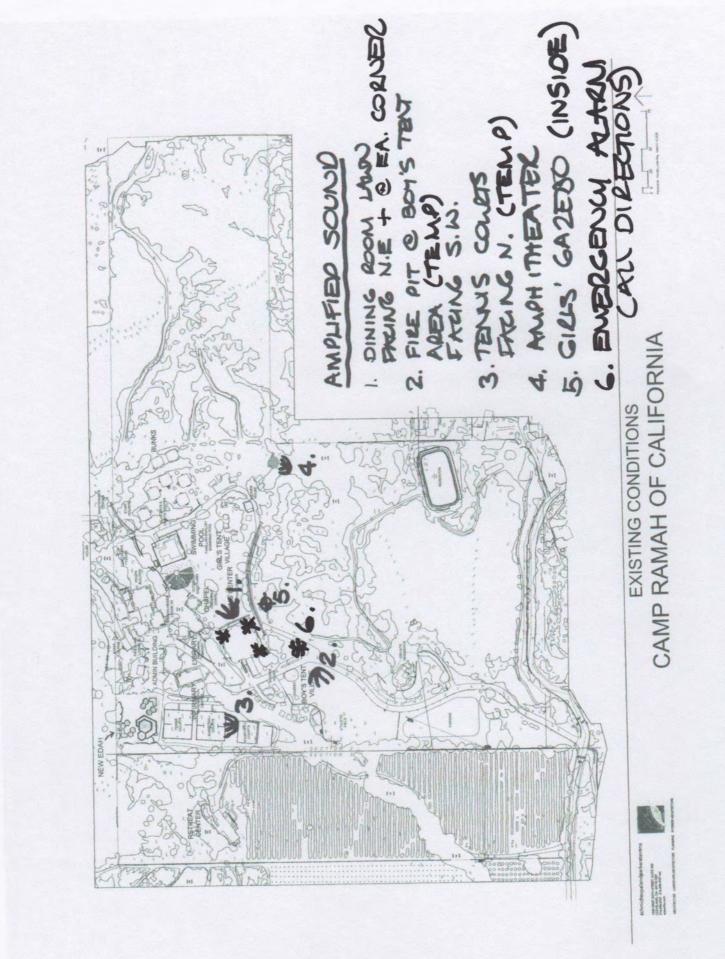


# Site Plan **Proposed Machon Location**

NORTH

# APPENDIX C

# **Proposed Speaker Layout Diagram**



# APPENDIX D Ambient Noise

Measurement Data

Rec 2 to 97				
Date hh:mm	Manager PL	EDAH PL	Reservoir PL	Bench PL
5/27/2016 11:00 1.0 hour	50.4	49.5	45.6	46.6
5/27/2016 12:00 1.0 hour	50.5	46.1	43.3	44.5
5/27/2016 13:00 1.0 hour	44.3	50	43.6	47.1
5/27/2016 14:00 1.0 hour	43.7	47.6	43.7	47.4
5/27/2016 15:00 1.0 hour	47.5	46.2	45.3	46.3
5/27/2016 16:00 1.0 hour	46.7	42.5	41	42.2
5/27/2016 17:00 1.0 hour	45.7	43.3	39.2	42.7
5/27/2016 18:00 1.0 hour	48.2	44.6	39	43.5
5/27/2016 19:00 1.0 hour	44.4	43.4	39.6	40.6
5/27/2016 20:00 1.0 hour	45.3	44.6	38.1	39.3
5/27/2016 21:00 1.0 hour	44.3	49.5	43.6	47.1
5/27/2016 22:00 1.0 hour 5/27/2016 23:00 1.0 hour	36.4 34.4	43.1 42.2	36.4 32.2	40.9 33.2
5/28/2016 0:00 1.0 hour	33.2	42.2	32.2	33.3
5/28/2016 1:00 1.0 hour	33.2	43.6	32	35.5
5/28/2016 2:00 1.0 hour	37	44.2	32	36.5
5/28/2016 3:00 1.0 hour	32.9	44.2	32	33
5/28/2016 4:00 1.0 hour	36.2	45.1	32	33.2
5/28/2016 5:00 1.0 hour	45.9	48.7	45.2	47
5/28/2016 6:00 1.0 hour	43.9	52.2	46.5	51
5/28/2016 7:00 1.0 hour	46.6	51.2	44.4	45.4
5/28/2016 8:00 1.0 hour	42.6	54.6	41.5	42.7
5/28/2016 9:00 1.0 hour	47.7	48.3	46.5	48.1
5/28/2016 10:00 1.0 hour	50.7	46	45.7	49.1
5/28/2016 11:00 1.0 hour	47.1	41.1	46.2	47.2
5/28/2016 12:00 1.0 hour	44.8	54.7	42	43.2
5/28/2016 13:00 1.0 hour	46	61.1	45.3	46.9
5/28/2016 14:00 1.0 hour	47.4	50.1	42.6	46
5/28/2016 15:00 1.0 hour	43.4	50.9	36.2	37.2
5/28/2016 16:00 1.0 hour	42.4	49.4	41.7	42.9
5/28/2016 17:00 1.0 hour	45.5	48	46.6	48.2
5/28/2016 18:00 1.0 hour 5/28/2016 19:00 1.0 hour	42.3 42.3	56 49.6	40.1 38.9	42 40.8
5/28/2016 20:00 1.0 hour	42.5	49.8	36.8	40.8
5/28/2016 21:00 1.0 hour	40.3	35.1	30.8	38.7
5/28/2016 22:00 1.0 hour	37.7	33.1	36.6	37.5
5/28/2016 23:00 1.0 hour	34.2	32	32	33.9
5/29/2016 0:00 1.0 hour	33	32	32.3	33.5
5/29/2016 1:00 1.0 hour	33.8	32	33.8	35.4
5/29/2016 2:00 1.0 hour	33.2	32	32	32.9
5/29/2016 3:00 1.0 hour	32.8	32	32	33.9
5/29/2016 4:00 1.0 hour	35	32	33.8	34
5/29/2016 5:00 1.0 hour	44.2	41.4	39.2	40
5/29/2016 6:00 1.0 hour	41.3	33	40.4	41.3
5/29/2016 7:00 1.0 hour	45.7	41.1	41.5	43.4

	5/29/2016 8:00 1.0 hour	42	30	41.3	41.5
	5/29/2016 9:00 1.0 hour	44	43.4	42.6	43.4
5	5/29/2016 10:00 1.0 hour	44	48.7	46.5	47.4
5	5/29/2016 11:00 1.0 hour	49.6	55.6	48.5	50.4
5	5/29/2016 12:00 1.0 hour	44.2	41.7	43	43.2
	5/29/2016 13:00 1.0 hour	45.6	47	42.5	43.3
	5/29/2016 14:00 1.0 hour	45.8	43.1	44.9	45.8
	5/29/2016 15:00 1.0 hour	45.6	48.1	42.8	44.7
	5/29/2016 16:00 1.0 hour	50.6	43.6	49.9	50.1
	5/29/2016 17:00 1.0 hour	45	42.5	41.1	41.9
	5/29/2016 18:00 1.0 hour	45.9	41.9	39.9	40.8
	5/29/2016 19:00 1.0 hour	39.4	41.6	38.7	40.6
	5/29/2016 20:00 1.0 hour	40.4	39.7	41.5	41.7
	5/29/2016 21:00 1.0 hour	39.7	44.9	37.5	38.3
	5/29/2016 22:00 1.0 hour	34.4	40.1	33.6	34.5
	5/29/2016 23:00 1.0 hour	34.4	36.6	32	33.9
	5/30/2016 0:00 1.0 hour	33.5	34.5	32	32.2
	5/30/2016 1:00 1.0 hour	33.5	34.3	32	32.8
	5/30/2016 2:00 1.0 hour	32.7	33.9	32	32.9
	5/30/2016 3:00 1.0 hour	32.7	33.3	32	33.9
	5/30/2016 4:00 1.0 hour		33.3		34.9
	5/30/2016 5:00 1.0 hour	35.2 45.7	48.5	34.7	45.3
		45.7		44.5	45.3
	5/30/2016 6:00 1.0 hour		50.7	45.3	
	5/30/2016 7:00 1.0 hour	46.8	51.4	45.6	47.5
	5/30/2016 8:00 1.0 hour	46.2	58.2	44.6	44.8
-	5/30/2016 9:00 1.0 hour	44.9	45.5	44	44.8
	5/30/2016 10:00 1.0 hour	44.8	40.1	40.6	41.5
	5/30/2016 11:00 1.0 hour	45.7	39.7	45	46.9
	5/30/2016 12:00 1.0 hour	43.4	45.9	44.1	44.3
	5/30/2016 13:00 1.0 hour	44.1	42.7	43	43.8
	5/30/2016 14:00 1.0 hour	47.3	50	46.2	47.1
	5/30/2016 15:00 1.0 hour	52.7	50.2	51.5	53.4
	5/30/2016 16:00 1.0 hour	44	51	40.9	41.1
	5/30/2016 17:00 1.0 hour	41	43.5	40.1	40.9
	5/30/2016 18:00 1.0 hour	39.1	43.1	36.3	37.2
	5/30/2016 19:00 1.0 hour	39.1	36.9	38.4	40.3
	5/30/2016 20:00 1.0 hour	35.7	36.4	32	32.2
	5/30/2016 21:00 1.0 hour	34.6	32	32	32.8
	5/30/2016 22:00 1.0 hour	32.9	32	32	32.9
5	/30/2016 23:00 1.0 hour	32.7	32	33.8	35.7
	5/31/2016 0:00 1.0 hour	33.1	32.1	32	32.2
	5/31/2016 1:00 1.0 hour	33	32	32.2	33
	5/31/2016 2:00 1.0 hour	32.7	32	32	32.9
	5/31/2016 3:00 1.0 hour	32.5	32	32	33.9
	5/31/2016 4:00 1.0 hour	36.8	33.8	35.8	36
	5/31/2016 5:00 1.0 hour	43.5	40.7	42.8	43.6
	5/31/2016 6:00 1.0 hour	42.6	38	42.1	43

5/31/2016 7:00 1.0 hour	43	38.4	42.5	44.4
5/31/2016 8:00 1.0 hour	46	34	44.8	45
5/31/2016 9:00 1.0 hour	43.5	42.9	42.7	43.5
5/31/2016 10:00 1.0 hour	47.8	52.5	46.6	47.5

	Leq				
Date hh:mm	Fri	Sat	t Sun	Ν	/lon
5/27/2016 11:00		50.4	47.1	49.6	45.7
5/27/2016 12:00		50.5	44.8	44.2	43.4
5/27/2016 13:00		44.3	46	45.6	44.1
5/27/2016 14:00		43.7	47.4	45.8	47.3
5/27/2016 15:00		47.5	43.4	45.6	52.7
5/27/2016 16:00		46.7	42.4	50.6	44
5/27/2016 17:00		45.7	45.5	45	41
5/27/2016 18:00		48.2	42.3	45.9	39.1
5/27/2016 19:00		44.4	42.3	39.4	39.1
5/27/2016 20:00		45.3	41.7	40.4	35.7
5/27/2016 21:00		44.3	40.3	39.7	34.6
5/27/2016 22:00		36.4	37.7	34.4	32.9
5/27/2016 23:00		34.4	34.2	34.4	32.7
5/28/2016 0:00		33.2	33	33.5	33.1
5/28/2016 1:00		33.2	33.8	33	33
5/28/2016 2:00		37	33.2	32.7	32.7
5/28/2016 3:00		32.9	32.8	32.5	32.5
5/28/2016 4:00		36.2	35	35.2	36.8
5/28/2016 5:00		45.9	44.2	45.7	43.5
5/28/2016 6:00		43.9	41.3	46.1	42.6
5/28/2016 7:00		46.6	45.7	46.8	43
5/28/2016 8:00		42.6	42	46.2	46
5/28/2016 9:00		47.7	44	44.9	43.5
5/28/2016 10:00		50.7	44	44.8	47.8
C	NEL	48.9	46.6	48.2	46.7
L	DN	48.4	46.3	48.1	46.6

Manager House Property Line

	Leo	9			
Date hh:mm	Fri		Sat	Sun	Mon
5/27/2016 11:00		49.5	41.1	55.6	39.7
5/27/2016 12:00		46.1	54.7	41.7	45.9
5/27/2016 13:00		50	61.1	47	42.7
5/27/2016 14:00		47.6	50.1	43.1	50
5/27/2016 15:00		46.2	50.9	48.1	50.2
5/27/2016 16:00		42.5	49.4	43.6	51
5/27/2016 17:00		43.3	48	42.5	43.5
5/27/2016 18:00		44.6	56	41.9	43.1
5/27/2016 19:00		43.4	49.6	41.6	36.9
5/27/2016 20:00		44.6	42.4	39.7	36.4
5/27/2016 21:00		49.5	35.1	44.9	32
5/27/2016 22:00		43.1	32	40.1	32
5/27/2016 23:00		42.2	32	36.6	32
5/28/2016 0:00		42.6	32	34.5	32.1
5/28/2016 1:00		43.6	32	34.8	32
5/28/2016 2:00		44.2	32	33.9	32
5/28/2016 3:00		44.2	32	33.3	32
5/28/2016 4:00		45.1	32	38.2	33.8
5/28/2016 5:00		48.7	41.4	48.5	40.7
5/28/2016 6:00		52.2	33	50.7	38
5/28/2016 7:00		51.2	41.1	51.4	38.4
5/28/2016 8:00		54.6	30	58.2	34
5/28/2016 9:00		48.3	43.4	45.5	42.9
5/28/2016 10:00		46	48.7	40.1	52.5
C	CNEL	53.5	51.1	52	46.1
L	DN	53.3	50.8	51.8	46

EDAH PL

	Leq				
Date hh:mm	Fri	Sat	Su	un Mo	n
5/27/2016 11:00		45.6	46.2	48.5	45
5/27/2016 12:00		43.3	42	43	44.1
5/27/2016 13:00		43.6	45.3	42.5	43
5/27/2016 14:00		43.7	42.6	44.9	46.2
5/27/2016 15:00		45.3	36.2	42.8	51.5
5/27/2016 16:00		41	41.7	49.9	40.9
5/27/2016 17:00		39.2	46.6	41.1	40.1
5/27/2016 18:00		39	40.1	39.9	36.3
5/27/2016 19:00		39.6	38.9	38.7	38.4
5/27/2016 20:00		38.1	36.8	41.5	32
5/27/2016 21:00		43.6	37.1	37.5	32
5/27/2016 22:00		36.4	36.6	33.6	32
5/27/2016 23:00		32.2	32	32	33.8
5/28/2016 0:00		32.1	32.3	32	32
5/28/2016 1:00		32	33.8	32	32.2
5/28/2016 2:00		32	32	32	32
5/28/2016 3:00		32	32	32	32
5/28/2016 4:00		32	33.8	34.7	35.8
5/28/2016 5:00		45.2	39.2	44.5	42.8
5/28/2016 6:00		46.5	40.4	45.3	42.1
5/28/2016 7:00		44.4	41.5	45.6	42.5
5/28/2016 8:00		41.5	41.3	44.6	44.8
5/28/2016 9:00		46.5	42.6	44	42.7
5/28/2016 10:00		45.7	46.5	40.6	46.6
CNEL		47.4	44.5	47.1	45.9
LDN		47.2	44.3	46.8	45.8

Reservoir PL

	Leq				
Date hh:mm	Fri	Sa	t Su	in Mo	n
5/27/2016 11:00		46.6	47.2	50.4	46.9
5/27/2016 12:00		44.5	43.2	43.2	44.3
5/27/2016 13:00		47.1	46.9	43.3	43.8
5/27/2016 14:00		47.4	46	45.8	47.1
5/27/2016 15:00		46.3	37.2	44.7	53.4
5/27/2016 16:00		42.2	42.9	50.1	41.1
5/27/2016 17:00		42.7	48.2	41.9	40.9
5/27/2016 18:00		43.5	42	40.8	37.2
5/27/2016 19:00		40.6	40.8	40.6	40.3
5/27/2016 20:00		39.3	38	41.7	32.2
5/27/2016 21:00		47.1	38.7	38.3	32.8
5/27/2016 22:00		40.9	37.5	34.5	32.9
5/27/2016 23:00		33.2	33.9	33.9	35.7
5/28/2016 0:00		33.3	33.5	32.2	32.2
5/28/2016 1:00		35.5	35.4	32.8	33
5/28/2016 2:00		36.5	32.9	32.9	32.9
5/28/2016 3:00		33	33.9	33.9	33.9
5/28/2016 4:00		33.2	34	34.9	36
5/28/2016 5:00		47	40	45.3	43.6
5/28/2016 6:00		51	41.3	46.2	43
5/28/2016 7:00		45.4	43.4	47.5	44.4
5/28/2016 8:00		42.7	41.5	44.8	45
5/28/2016 9:00		48.1	43.4	44.8	43.5
5/28/2016 10:00		49.1	47.4	41.5	47.5
CNEL		50.6	45.8	48	46.9
LDN		50.3	45.5	47.8	46.8

Bench PL

# APPENDIX E

# Noise Calculation Worksheets for Proposed Mechanical Equipment

Exterior HVAC Equipment

Western Adjacent PL in L	
Scenario:	

Line (west side of retreat)

	Source	Source				
	Noise	Reference	Number of	Distance to	Distance	Noise Level
Source	Level	Distance	Units	Nearest Receiver / PL	Attenuation	at Receiver
Compressor 1 (ARUN036GS2)	52	3.3	-	300	39.2	12.8
Compressor 2 (ARUN036GS2)	52	3.3	-	300	39.2	12.8
Compressor 3 (ARUN036GS2)	52	3.3	<del>.                                    </del>	325	39.9	12.1
Compressor 5 (ARUN036GS2)	52	3.3	<del>.                                    </del>	285	38.7	13.3
Compressor 6 (ARUN036GS2)	52	3.3	-	365	40.9	11.1
Compressor 8 (ARUN036GS2)	52	3.3	<del>.                                    </del>	325	39.9	12.1
Kitchen Exhaust	56	10	<del>.    </del>	220	26.8	29.2
					Cumulative	29.7
			Scenario:	Easter Adjacent PL		
	Source	Source				
	Noise	Reference	Number of	Distance to		Noise Level
Source	Level	Distance	Units	Nearest Receiver / PL		at Receiver
Compressor 4 (ARUN036GS2)	52	3.3	-	140	32.6	19.4
Compressor 6 (ARUN036GS2)	52	3.3	<del>.                                    </del>	100		22.4
Compressor 7 (ARUN036GS2)	52	3.3	<del>.                                    </del>	92		23.1
Compressor 8 (ARUN036GS2)	52	3.3	<del>.    </del>	100		22.4

28.0

Cumulative

# APPENDIX F

# **Outdoor Amplified Sound System** Noise Level Calculation Worksheets

#### Scenario: Eastern Property Line

	Source Noise	Source Reference	Number of	Distance to Nearest	Distance	Noise Level at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
Emergency East	65	21	1	865	40.4	24.6
Dining East	65	21	1	755	38.9	26.1
Dining NE	54	13	1	755	44.1	9.9
Dining South	54	13	1	755	44.1	9.9
Amphiteater W1	56	21	1	115	18.5	37.5
Amphiteater W2	56	21	1	115	18.5	37.5

Cumulative LEQ	
Cumulative LEQ Without Amphitheater East-Facing Speakers:	

### Scenario: Southern Property Line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
Emergency South	65	21	1	1045	42.4	22.6
Boys Tent Village	65	21	1	1035	42.3	22.7
Dining South	65	21	1	1250	44.4	20.6

```
Cumulative LEQ 26.8
```

Scenario: Western Property Line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
Emergency West 65	65	21	1	670	37.6	27.4
Dining South	65	21	1	650	37.3	27.7
Boys Tent Village	54	13	1	660	42.6	11.4

Cumulative LEQ

30.6

40.8 28.6

Scenario:

rio: Northern Property Line All Speaker Sources

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
Emergency North	65	21	1	1020	42.2	22.8
Dining North	65	21	1	735	38.6	26.4
Dining NE	56	21	1	735	38.6	17.4
Tennis	56	21	1	925	41.1	14.9
Amphiteater W.	65	21	1	745	38.7	26.3
Amphiteater E.	65	21	1	745	38.7	26.3
Amphiteater W.	65	21	1	730	38.5	26.5
Amphiteater E.	65	21	1	730	38.5	26.5

Cumulative LEQ

33.9

		Coonano.				
	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
TC Speaker 1	85	21	1	1760	48.1	36.9
TC Speaker 2	85	21	1	1760	48.1	36.9
TC Speaker 3	85	21	1	1760	48.1	36.9
TC Speaker 4	85	21	1	1760	48.1	36.9
				Cumulative LEC	2	42.9

### Scenario: Israeli Dance - North Property line

#### Scenario: Israeli Dance - East Property line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
TC Speaker 1	76	21	1	1140	43.4	32.6
TC Speaker 2	76	21	1	1120	43.2	32.8
TC Speaker 3	76	21	1	1080	42.8	33.2
TC Speaker 4	76	21	1	1060	42.6	33.4
-						

Cumulative LEQ

39.1

Scenario: Israeli Dance - West Property line

	Source Noise	Source Reference	Number of	Distance to Nearest	Distance	Noise Level at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
TC Speaker 1	76	21	1	520	34.8	41.2
TC Speaker 2	76	21	1	540	35.3	40.7
TC Speaker 3	76	21	1	580	36.0	40.0
TC Speaker 4	76	21	1	600	36.4	39.6

Cumulative LEQ

46.4

		ocenano.		i toperty line		
	Source Noise	Source Reference	Number of	Distance to Nearest	Distance	Noise Level at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
DH Speaker 1	61	21	1	1750	48.0	13.0
DH Speaker 2	61	21	1	1810	48.4	12.6
DH Speaker 3	61	21	1	1870	48.7	12.3

### Scenario: Café Ezra - North Property line

Cumulative LEQ 17.4

#### Scenario: Café Ezra - East Property line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
DH Speaker 1	70	21	1	780	39.2	30.8
DH Speaker 2	70	21	1	860	40.3	29.7
DH Speaker 3	70	21	1	940	41.3	28.7

Cumulative LEQ

34.6

Scenario: Café Ezra - West Property line

	Source	Source		Distance to		Noise Level
	Noise	Reference	Number of	Nearest	Distance	at Property Line
Source	Level	Distance	Loudspeakers	Property Line	Attenuation	(LEQ dBA)
DH Speaker 1	61	21	1	810	39.7	21.3
DH Speaker 2	61	21	1	785	39.3	21.7
DH Speaker 3	61	21	1	760	39.0	22.0

Cumulative LEQ

26.5

#### Loudspeaker Noise Evaluation

#### Scenario: Amphitheater Performance - North Property line

		Scenario:	Amphitheater Per	formance - North	n Property line	
Source West Speaker 1 West Speaker 2 East Speaker 1 East Speaker 2	Source Noise Level 76 76 76 76	Source Reference Distance 21 21 21 21	Number of Loudspeakers 1 1 1 1	Distance to Nearest Property Line 745 770 745 770	Distance Attenuation 38.7 39.1 38.7 39.1	Noise Level at Property Line (LEQ dBA) 37.3 36.9 37.3 36.9
				Cumulative LEC	Ç	43.1
		Scenario:	Amphitheater Per	formance - East	Property line	
Source West Speaker 1 West Speaker 2	Source Noise Level 76 76	Source Reference Distance 21 21	Number of Loudspeakers 1 1	Distance to Nearest Property Line 115 115	Distance Attenuation 18.5 18.5	Noise Level at Property Line (LEQ dBA) 57.5 57.5
			Westerly Facing S	Cumulative LEC Speakers Only:		60.5 Ambient
		Scenario:	Amphitheater Per	formance - Wes	t Property line	
Source West Speaker 1 West Speaker 2	Source Noise Level 76 76	Source Reference Distance 21 21	Number of Loudspeakers 1 1	Distance to Nearest Property Line 1625 1625	Distance Attenuation 47.2 47.2	Noise Level at Property Line (LEQ dBA) 28.8 28.8
				Cumulative LEC	ב	31.8
		Scenario:	Amphitheater Per	formance - Wes	t PL, West Fa	cing Speakers (4)
Source West Speaker 1 West Speaker 2 West Speaker 3 West Speaker 4	Source Noise Level 76 76 76 76	Source Reference Distance 21 21 21 21 21	Number of Loudspeakers 1 1 1 1	Distance to Nearest Property Line 1625 1625 1625 1625	Distance Attenuation 47.2 47.2 47.2 47.2 47.2	Noise Level at Property Line (LEQ dBA) 28.8 28.8 28.8 28.8 28.8
				Cumulative LEC	ב	34.8
		Scenario:	Amphitheater Per	formance - North	nwest Property	/ Line Closest Point
Source West Speaker 1	Source Noise Level 76	Source Reference Distance 21	Number of Loudspeakers 1	Distance to Nearest Property Line 1825	Distance Attenuation 48.5	Noise Level at Property Line (LEQ dBA) 27.5

						(== ~ ~ ~ ~ ,
West Speaker 1	76	21	1	1825	48.5	27.5
West Speaker 2	76	21	1	1825	48.5	27.5
West Speaker 3	76	21	1	1825	48.5	27.5
West Speaker 4	76	21	1	1825	48.5	27.5

Cumulative LEQ

# APPENDIX G

# Acoustic Blanket Manufacturer Data



NOISE CONTROL HELP LINE: 1-800-854-2948 M - F 7A.M. - 6P.M. (CENTRAL TIME)

## ACOUSTICAL SURFACES, INC.

CELEBRATING 35 YEARS - SINCE 1980 | SOUND PROOFING | ACOUSTICS | NOISE & VIBRATIO...

What's Your Noise Problem? (http://soundproofing.aco your-problem)

#### (http://www.acousticalsurfaces.com)

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> CFAB™ Cellulose Panels (http://www.acousticalsurfaces.co panel/cellulose-panels.html)

> The Curve System (http://www.acousticalsurfaces.co

> Echo Barrier™ (http://www.acousticalsurfaces.co barrier/echo-barrier.html)

> Echo Eliminator™ (http://www.acousticalsurfaces.co

> Micro-perforated Ceiling & Wall Panels

> (http://www.acousticalsurfaces.co micro-perforated-acousticalpanels/)

> NOISE S.T.O.P. FABRISORB™ (http://www.acousticalsurfaces.co wrapped-wall-panels.html)

> Poly Max™ Polyester Acoustical Panels (http://www.acousticalsurfaces.co wall-panels/wall-panels.html)

> Silk Metal™ (http://www.acousticalsurfaces.co metal/silk-metal-ceiling-wallpanels.html)

Sound Silencer™ (http://www.acousticalsurfaces.co

## Product Line

Acoustical Ceiling Tiles

Acousti-Board

Acousti-Gasket™ Tape (http://www.acousticalsurfaces.co

Acoustical Fabric Selection (http://www.acousticalsurfaces.co

# NOISE S.T.O.P.™ Sound Blankets – Reinforced



Testimonial:

### BBC-EXT-R-2 Noise Barrier/Sound Absorber Sound Blankets

BBC-EXT-R-2 offers the benefits of both a noise barrier and a sound absorber composite in one product. This BBC product consists of an exterior grade, UV resistant

bonded to a one-pound per sq. ft. reinforced loaded vinyl barrier. The heavy-duty facing is a 10 oz per sq yd vinyl-coated-polyester (VCP) quilted to the sound absorber rather than the standard 4.5 oz facing. Curtain panels are constructed with grommets across the top and bottom and exterior grade Velcro seals along the vertical edges.

**STC** = 33

NRC = .75

Facing Colors on Quilt: Gray, Tan, Black or White

Barrier Colors: Gray, Tan, Olive or Blue Product Testing & Information

> Product Specs (http://www.acoustical

Acoustimetal<sup>™</sup> Perforated Metal Panels (http://www.acousticalsurfaces.co Acoustic Enclosures Acoustic Quilted Curtain Absorptive Quilted Curtains (http://www.acousticalsurfaces.co Curtain Hardware (http://www.acousticalsurfaces.co Echo Barrier (http://www.acousticalsurfaces.co barrier/echo-barrier.html) Enclosures (http://www.acousticalsurfaces.co Exterior Sound Blanket -Reinforced (http://www.acousticalsurfaces.c Insul-Quilt Blankets (http://www.acousticalsurfaces.co quilt.html) Portable Acoustical Enclosures & Screens (http://www.acousticalsurfaces.co QFA Absorptive Exterior Grade Curtain (http://www.acousticalsurfaces.co absorbtive-curtain.html) OFA – Absorptive Ouilted Curtain (http://www.acousticalsurfaces.co Silicone Curtains Acoustic/Soundproof Doors (http://www.acousticalsurfaces.co Acoustic Windows - Inserts Adjustable Cutters - Sprinkler Cutter (http://www.acousticalsurfaces.co cutters/index.htm) Adjustable Door Seals CFAB<sup>™</sup> Cellulose Panels (http://www.acousticalsurfaces.co panel/cellulose-panels.html) dBA Panels (http://www.acousticalsurfaces.co Decorative Fabric Wrapped Panels **Designer Acoustical Curtains** (http://www.acousticalsurfaces.co Echo Eliminator™ Electronics - Sound Level Meters Flooring Underlays Hanging Acoustical Baffles Hvac Products / Silencers Micro-perforated Ceiling & Wall Panels (http://www.acousticalsurfaces.co micro-perforated-acousticalpanels/) Noise Barrier-Noise Blockers **RSIC Sound Isolation Clips** School Noise Management Sealants - Adhesives - Paints & Compounds Softwall - Wallmate Sonex<sup>™</sup> Foam Products Sound Absorbing Foam

1. Exterior Chiller Enclosure Helps Homeowner Maintain Sanity! (http://www.acousticalsurfaces.com/curtan\_stop/pdf/Enclosure.pdf)

2. Acoustical Blanket Saves the Day by Reducing High Pitch Whiny Sound (http://www.acousticalsurfaces.com/curtan\_stop/pdf/testa/Sound-Blanket-High-Pitch-Reduction-Testimonial.pdf)

## **Product Specs**

MATERIAL	Vinyl coated polyester facing on 2" quilted fiberglass & 1 lb/sf reinforced mass loaded vinyl barrier
FEATURES	Effective and durable absorber with mass loaded vinyl barrier option.
APPLICATIONS	Typically used as modular curtain panels in outdoor applications where high abuse resistance or excellent durability as well as maximum longevity and noise reduction is required. Also used as sliding acoustical doors, durable acoustical jacket on fans or valves, as well as a temporary noise barrier on outdoor construction projects.
WEIGHT	1.45 lb/sf
THICKNESS	Nominal 2"
SIZES	Standard Width: 54"; Roll Length 25'
COLORS	Facing Colors on Quilt – Gray, Tan, Black or White Barrier Colors – Gray, Tan, Olive, or Blue

**TEMPERATURE RANGE** 

-20°F to +180°F

#### Click on Images to Enlarge



Front.jpg)

Back.jpg)

Sound Blanket – Sound Transmission Loss – ASTM E90 & E 413							
Frequency	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	STC
BBC-EXT-R-2	14	20	32	41	42	41	33

#### Sound Blanket – Sound Absorption Performance – ASTM C423

Frequency	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	NRC
BBC-EXT-R-2	.45	.96	.87	.66		.20	.75

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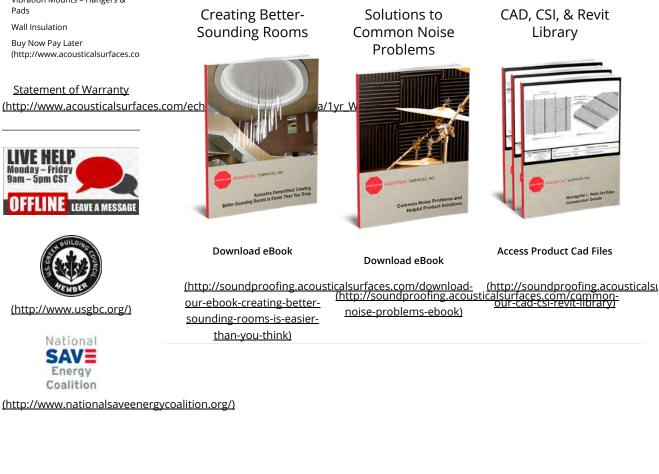
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### MEMORANDUM

То:	Josh Hillinger, Camp Ramah
	Rabbi Joe Menashe, Camp Ramah
	Randy Michaels, Camp Ramah
From:	Jonathan V. Leech, Dudek
Subject:	President's Day Weekend Noise Survey
Date:	March 6, 2020
cc:	Steve Welton, SEPPS

## 1 Background

## 1.1 Approach and Participating Property Addresses

President's Day Weekend is traditionally the schedule for hosting one of the larger events at Camp Ramah, the Israeli Scouts gathering. Camp Ramah approached several residential neighbors of the Camp Ramah property with an offer to voluntarily measure sound levels at such properties, for the duration of the President's Day Weekend 2020 functions at Camp Ramah. The participating properties included:

- 1447 Foothill Road (Measure Point 1 or "MP1")
- 406 Fairview Road (Measure point 2 or "MP2")
- 312 Fairview Road (Measure Point 3 or "MP3")

Exhibit 1 illustrates the locations of the above measurement points, relative to the Camp Ramah property.

## 1.2 Methodology

Measurements were performed using three SoftdB brand Piccolo 2 integrating sound level meters, which are classified as an ANSI Class II instrument (which has suitable accuracy for environmental noise measurements). The sound level meters were configured to measure and record sound level data on an hourly basis, for a duration of approximately 96 hours.

Measurements began at approximately 2 PM on Friday, February 14 (before arrival of participants) and extended until approximately 2 PM on Tuesday, February 18 (a full day after the departure of camp attendees). This sound level measurement duration and recorded results allows comparison of noise levels during the Camp Ramah session against ambient noise levels without the camp in operation.

DUDEK

County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 14 - Dudek President's Day Weekend Noise Survey, dated March 6, 2020

9615 March 2020

## 2 Results

Tables on the following pages provide the recorded average sound level ( $L_{eq}$ ) for each hour, with one table per each of the three measurement points.

## 2.1 Interpretation

The County Ordinance allows an hourly average noise level of up to 55 dBA during the day (7 AM to 7 PM), up to 50 dBA in the evening (7 PM to 10 PM), and up to 45 dBA overnight (10 PM to 7 AM). When an existing recorded ambient noise level exceeds these levels, the higher recorded noise level becomes the allowable level. In the following tables, the column labeled "Allowed" reflects the limit from the noise ordinance, corrected in some instances if the ambient noise level already exceeds the limit.

Hourly average sound levels during the Israeli Scout event that exceed the allowable limit are indicated in red font in the following tables. Note that there is only one time period in common across all three properties when a marginal exceedance of the allowed sound level was recorded. This exceedance occurred at all tree properties during the sports tournament. Since amplified sound was used at the sports tournament, the mitigations proposed to govern amplified sound systems at Camp Ramah would be expected to avoid this exceedance from occurring in the future.

There were several isolated sound level exceedances recorded at MP2. One exceedance occurred between 5 AM and 6 AM, when no activity was occurring at Camp Ramah. Because there was no exceedance at the other two properties, it is assumed an isolated event occurred very close to (or on) this property. While above ambient levels, the recorded 50 dBA L<sub>eq</sub> was probably not loud enough to cause sleep disturbance.

Another set of isolated exceedances also occurred at MP2 between 9 and 11 PM on Sunday Night, which coincides with the time of the Final Ceremony. Because an exceedance was not recorded at the other two properties, it is uncertain if Camp Ramah was the source of the noise. The recorded noise exceeded the limits by 2 to 5 dBA, which could have been noticeable against ambient noise levels in the hours before and after the exceedance. The overall sound level did not exceed 52 dBA  $L_{eq}$  which was unlikely to be disruptive in the indoor areas of the residence at this address. If the Final Ceremony was the source of the sound levels recorded at MP2 between 9PM and 11 PM, sound amplification systems used at this event would be governed by the newly proposed mitigations.

Overall, across 96 hours of continuous measurements at the three properties, there were only 7 instances where a recorded sound level exceeded an allowance; one instance at MP3, two instances at MP1, and four instances at MP2. These occurrences were therefore infrequent, and the sound levels that can potentially be correlated to Camp Ramah activities would be addressed by the proposed mitigation programs.

## 2.2 Results Tables

Are presented on the following pages, followed by Exhibit 1.

## DUDEK

	14-Feb	15-Feb	16-Feb	17-Feb	18-Feb		Max		
	Friday	Saturday	Sunday	Monday	Tuesday	Allowed	Recorded		
Recorded Hourly Noise Levels (Leq)									
12		31.5	31.8	35	31.1	45	35		
1		32.1	31.4	32.3	35.7	45	32.3		
2		34.4	31	31.1	33.3	45	34.4		
3		31.6	31.1	32.9	30	45	32.9		
4		31.8	31.3	31.1	31	45	31.8		
5		33.5	33.3	33.5	32.2	45	33.5		
6		37.4	37.8	38.1	45	55	38.1		
7		38	40	40.9	40.8	55	40.9		
8		41.9	41	41.6	42	55	41.9		
9		39.3	52.3	41.2	47.2	55	52.3		
10		39.3	46.5	47.6	47.2	55	47.6		
11		38.6	42.7	52.6	41.3	55	52.6		
12		40	41.2	38.2	54.2	55	41.2		
13		41.3	41.5	43.8	47.3	55	43.8		
14	42	44.3	57.4	41.5	54.6	55	57.4		
15	42.7	43	48.8	39.9		55	48.8		
16	39.4	59	43	41.7		55	59		
17	38.1	40.1	43.5	37.6		55	43.5		
18	41.5	41.1	39.6	38.4		55	41.5		
19	36	36.5	38.3	38		50	38.3		
20	39.9	36.2	37.2	37.6		50	39.9		
21	35.5	35.2	38.7	35.5		50	38.7		
22	35.6	35.2	40.4	35.4		45	40.4		
23	33.2	33.7	36.3	31.9		45	36.3		

#### LEGEND

Holiday Weekend Camp In-Session

Outdoor Song Contest (Amphitheater)

Sport Tournament

Final Ceremony (Baseball Field)

"Allowed" noise level from County Noise Ordinance

"Max Recorded" is maximum noise level for a given hour, any day of the event.

Red text - indicates a noise level above the ordinance allowance

#### Measurement Point MP1 (1447 Foothill Road)

## DUDEK

	14-Feb	15-Feb	16-Feb	17-Feb	18-Feb		Max		
	Friday	Saturday	Sunday	Monday	Tuesday	Allowed	Recorded		
Recorded Hourly Noise Levels (Leq)									
12		38	39.1	35.2	37.5	45	39.1		
1		36.5	33.9	37.9	33.3	45	37.9		
2		37.5	37.4	38.7	32.4	45	38.7		
3		36.6	33.3	39.7	32.3	45	39.7		
4		35.1	41.7	38.8	32.9	45	41.7		
5		37.4	35.2	49.9	34.5	45	49.9		
6		43.8	42.5	44.2	42.6	55	44.2		
7		46.6	45.6	53.7	50.2	55	53.7		
8		46.9	45.7	54	47.3	55	54		
9		47.8	46.8	59.2	61.1	64	59.2		
10		48.3	49.2	49	49.2	55	49.2		
11		48.7	47.3	50.6	48.3	55	50.6		
12		49.8	49.1	48.9	72.3	55	49.8		
13		48.4	46.7	46.2	51.5	55	48.4		
14	56.5	49.2	58.9	47.4	56.9	60	58.9		
15	50.7	46.8	58.9	47.3		55	58.9		
16	51.5	49.4	54	47.5		55	54		
17	48.2	46.6	51.4	45.1		55	51.4		
18	48	51.2	45.1	44.2		55	51.2		
19	44.9	43	45.8	43.3		50	45.8		
20	45.1	46.5	46.7	45.3		50	46.7		
21	44.8	41.8	51.7	42.9		50	51.7		
22	42.3	39.8	50.2	39.1		45	50.2		
23	38.2	42.6	42.6	40		45	42.6		

#### LEGEND

Holiday Weekend Camp In-Session

Outdoor Song Contest (Amphitheater)

Sport Tournament

Final Ceremony (Baseball Field)

"Allowed" noise level from County Noise Ordinance

"Max Recorded" is maximum noise level for a given hour, any day of the event.

Red text - indicates a noise level above the ordinance allowance

#### Measurement Point MP2 (406 Fairview Avenue)

## DUDEK

	14-Feb	15-Feb	16-Feb	17-Feb	18-Feb		Max
Time	Friday	Saturday	Sunday	Monday	Tuesday	Allowed	Recorded
		Recorded Ho	ourly Noise L	evels (Leq)			
12		32.7	33.3	32.2	31.1	45	33.3
1		31.9	32	32.1	30.7	45	32.1
2		35	31.4	32.8	29.7	45	35.0
3		32.6	30.8	31.7	30	45	32.6
4		31.8	34.6	31.5	31.6	45	34.6
5		33.4	32.7	35.1	33.3	45	35.1
6		38.7	40	38.3	41.6	55	40.0
7		43	40.1	45.4	42.7	55	45.4
8		43.6	43.7	43.6	43.9	55	43.7
9		42.7	42.8	41.9	48.4	55	42.8
10		40	38.3	47.1	42.2	55	47.1
11		42.6	42.4	41.7	41.7	55	42.6
12		40	41.2	39.9	64.7	55	41.2
13		39.7	41.9	39.7	40.2	55	41.9
14	59.4	47.6	55.5	42.9	47.2	55	55.5
15	47.2	39.3	49	42.7		55	49.0
16	43.6	50.6	44	40.4		55	50.6
17	39.2	47	46.2	38.7		55	47.0
18	39.8	38.1	43.4	36.3		55	43.4
19	36.2	37.1	42.5	34.5		50	42.5
20	36.1	34.9	42.6	35.3		50	42.6
21	35.8	35.5	43	33.6		50	43.0
22	34.5	34.9	37.5	31.4		45	37.5
23	33.8	34.4	33.9	32.3		45	34.4

#### LEGEND

Holiday Weekend Camp In-Session

Outdoor Song Contest (Amphitheater)

Sport Tournament

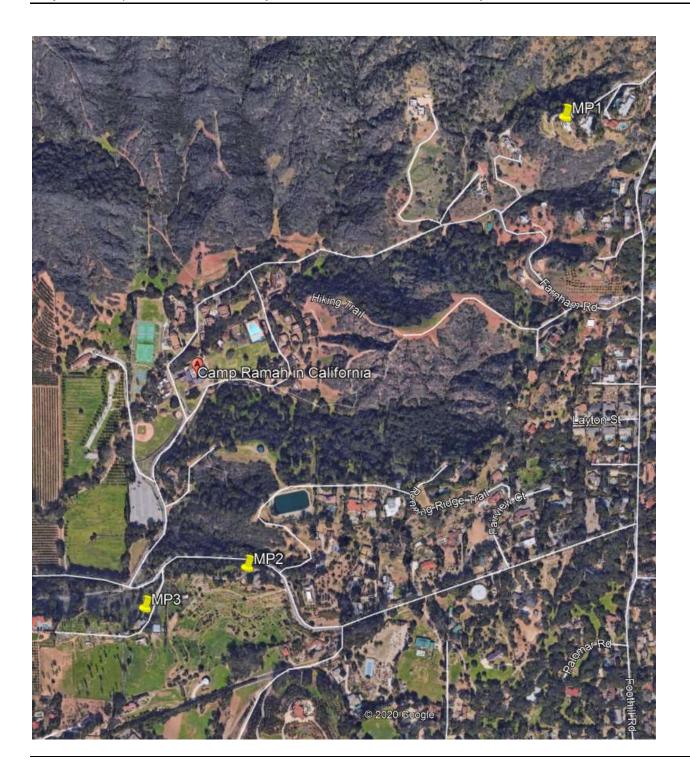
Final Ceremony (Baseball Field)

"Allowed" noise level from County Noise Ordinance

"Max Recorded" is maximum noise level for a given hour, any day of the event.

Red text - indicates a noise level above the ordinance allowance

#### Measurement Point MP3 (312 Fairview Avenue)



#### LEGEND

MP# = Measurement Point

#### **Exhibit 1 - Noise Measurements Locations**

621 CHAPALA STREET SANTA BARBARA, CALIFORNIA 93101 T 805.963.0651 F 805.963.2074

September 30, 2020

Kristina Roodsari Boero, MPPA Senior Planner Ventura County Resource Management Agency Planning Division 800 S. Victoria Avenue Ventura, CA 93009-1740

#### Subject: Requested Clarifications Dudek Noise Assessment Technical Report for the Camp Ramah Project, February 2020 Ventura County, California

#### Dear Ms. Boero:

It is my understanding that you requested various clarifications in regard to the content of the Dudek noise report for the Camp Ramah Project, dated February 2020. Provided below are the points of clarification identified as necessary by the Planning Division, and additional information to respond to the requests for clarification.

#### CLARIFICATION REQUESTS AND RESPONSES

#### 1. How are the portable speakers oriented at the softball fields?

Answer: A speaker is only rarely employed in connection with the use of the softball fields. On such rare occasions, a single portable speaker is placed on the southern edge of the fields, directed north.

#### 2. What activities go on at Café Ezra during the camp session? Just a social meeting place with music?

Answer: As described on Page 4 of the February 2020 report, Café Ezra is operated one night per week during the summer camp season, by placing tables and chairs in the patio area and adjacent lawn area on the northwest side of the dining hall. The café serves as a social meeting place, and music is provided for ambience. As described on Page 18 of the report, low level amplified music is proposed to be provided from 9 PM to 11 PM for Café Ezra,

### 3. How many portable speakers are available along the southern basketball court fence line facing north for the Israeli dance event?

Answer: As described on Page 21 of the February 2020 report, the analysis assumes that three portable speakers would be used for the Israeli Dance event. The above statement is accurate regarding the placement of these three speakers along the southern basketball court fence line facing north, for the Israeli dance event.



County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 15 - Dudek Noise Clarification Memorandum, dated September 30, 2020

September 2020

#### 4. How many portable speakers would be located in the amphitheater for the Performance night event?

Answer: As described on Page 18 of the February 2020 report, the amphitheater is proposed to be equipped with permanent speakers (as compared to temporary or portable speakers), including a pair of speakers at the stage corners, and a pair of speakers at the half-way point on either side of the seating area, facing northeast and northwest. No additional portable speakers are proposed to be employed in the amphitheater, on Performance Night or at any other times. As described on Page 19 of the report, Performance Night would occur once per camp session, would involve amplified speech and low level music, and would occur in the period from 7:30 to 9:30 PM.

## 5. The Noise study states that there would be impacts at western PL from Israeli Dance between 10 PM and 6AM. The noise study states it is 45 dBA. The threshold in the GP Policy 2.16.2-1 is 45 dBA between 10 PM and 6AM, so why is there an impact?

Answer: The threshold in GP Policy 2.16.2-1.4(c) is" *Leq1H of 45dB(A)* or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.(emphasis added). As stated on Page 23 of the February 2020 report, the calculated noise levels for the Israeli Dance event (which terminates at 11PM) at each property boundary would exceed the existing average ambient noise level by 4 dBA or more, resulting in a noise impact. This impact would be mitigated to less than significant levels with imposition of MM-2, found on Page 26 of the report.

6. There is 1 reference to "sport court" in the February 2020 Noise Study, but then there are references to basketball, softball and tennis courts. Please reconcile, especially for the location of the speakers and impacts. The site plan identifies these courts separately as basketball, softball and tennis courts – not sport courts. An Addendum to the noise study would be needed to be provided to reconcile the discrepancies.

Answer: The one reference to "sports courts" occurs on Page 24 of the February 2020 report, in conjunction with the request to increase the number of allowed outdoor events, and is used in a generic manner to define the nature of the additional outdoor events, including the facilities to which outside groups renting the camp could be granted access. "Outdoor events as described above are envisioned to include groups hosting daytime retreats featuring access to the sports courts, pool, and hiking trails, possibly with meals served in the dining hall." The term "sports courts" in this generic reference indicates that groups could be given access to all of the sporting facilities on site, including tennis and basketball courts. However, further down on Page 24, clarification is provided regarding the use of individual courts by such groups. "Because the basketball courts and tennis courts are not configured on a full-time basis with speaker systems, these court areas are not likely to be used for outdoor events similar to the Israeli Dance function hosted as part of the Camp Ramah program (and described under 4.1.1.2 above). Therefore, use of the courts to host dances or activities with amplified music is not anticipated, and is not evaluated as part of outdoor events noise levels." Consequently, the generic "sports court" used in this one instance is gualified on the same page. For clarification, to dismiss any apparent discrepancy regarding the use of courts and speakers by outside groups, outside groups would not be permitted the use of portable speaker systems. Hence, the report already addresses the only event at the basketball courts where portable speakers would be used (i.e., the Israeli Dance event).

### DUDEK

Should you have any questions regarding the above information, please do not hesitate to contact me at (805) 308-8527 or jleech@dudek.com.

Respectfully submitted,

**DUDEK** onat

JONATHAN V. LEECH, INCE Senior Environmental Specialist / Acoustician

Cc: Katy Vanderwyk, Hospitality Manager & Special Projects Coordinator, Camp Ramah in California Steve Welton, Principal Planner, SEPPS



### **ASSOCIATED TRANSPORTATION ENGINEERS**

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Richard L. Pool, P.E. Scott A. Schell

December 16, 2021

21023L01

Randy Michaels Camp Ramah 385 Fairview Road Ojai, CA 93023

#### TRIP GENERATION ANALYSIS FOR THE CAMP RAMAH CONDITIONAL USE PERMIT MODIFICATION APPLICATION - VENTURA COUNTY

Associated Transportation Engineers (ATE) has prepared the following trip generation analysis for the Camp Ramah Conditional Use Permit Modification Application (the "Project"), located at 385 Fairview Road north of Ojai in unincorporated Ventura County.

#### **PROJECT DESCRIPTION**

The proposed Camp Ramah CUP Modification will not add any new events, campers or employees. Camp Ramah operates year-round. For nine weeks during the months of June through August, Camp Ramah summer camp for youth is held. The first week of summer camp is for counselor orientation. During the remainder of the year, adult and youth group events are held on site. In 2019, Camp Ramah hosted 90 events. Camp Ramah is proposing to improve its on-site facilities. The camp will construct a new 10,609 square-foot Machon "village" space to serve the leadership training program for campers entering the 11<sup>th</sup> grade. The village would consist of six new cabins for campers and a gathering area which would include counselor sleeping quarters, prep kitchen, meeting spaces, storage, and restrooms. The camp will certify the existing structures with minor interior and exterior improvements and add a 1,151 square-foot reception and storage area to the existing Dining Hall. The drop-off areas for campers will be reconfigured. The camp will add adjacent camp-owned parcels to its CUP.

County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 16 - Associated Transportation Engineers Trip Generation Analysis, dated December 16, 2021

Engineering • Planning • Parking • Signal Systems • Impact Reports • Bikeways • Transit

#### **PROJECT TRIP GENERATION ESTIMATE**

The following trip generation was established to determine the "Baseline" trip generation for Camp Ramah. Trip generation estimates were developed for Camp Ramah based on operational data provided by the applicant (see attachments for 2019 operational data). The camp operation is not comparable with any land uses contained in the Institute of Transportation Engineers (ITE), <u>Trip Generation</u>, 11<sup>th</sup> Edition or the San Diego Association of Governments (SANDAG), <u>San Diego Traffic Generators</u>. ATE relied on the 2019 operational data provided by the camp because it was impractical to collect traffic counts given the current conditions due to the pandemic. Camp Ramah primarily generates three types of trips, daily employee trips and camper arrival/ departure trips. As a means to validate the trip generation estimates ATE would suggest that the camp collect traffic counts during the weeks that the summer camp activities are occurring during the months of June to August. The 2019 operational data provided for the Camp Ramah operations is discussed below.

#### Summer Camp

<u>Summer Camp Staff and Summer Counselors:</u> During the summer months (June to August) Camp Ramah is staffed by 348 daytime and overnight (93 and 255 respectively) employees and counselors. Camp counselors (255 overnight and 20 daytime) work Sunday through Saturday for nine weeks. Kitchen and housekeeping staff (49) work Sunday through Saturday. Camp administrative staff (13) work Monday through Friday with 6 living on-site. Maintenance staff (5) work Monday through Friday. Security staff (6) work Sunday through Saturday. Based on the workdays and hours of the daytime employees, the employee commute trips occur during the critical weekday 6:30 AM to 9:00 AM period and the critical 3:30 PM to 6:30 PM period on State Route 33.

<u>Campers</u>: Camp Ramah hosts 1,200 campers (600 per session) over 2 four-week sessions. Note that the camp counselors arrive one week prior to the campers. The majority of campers arrive and depart by bus (55-passenger capacity), a few arrive and depart via private vehicle. Forty-four charter bus loads are required to accommodate the arrival and departure of 1,200 youth campers. Three times per week campers are taken on day trips. During the week, there are 3 daily supply runs during the summer camp.

Table 1 presents the trip generation estimates developed for Camp Ramah during the weeks of summer camp based on operational data discussed and attached.

				Summer Tri	p Generation	า	
		A	DT	AM Pe	ak Hour	PM Pe	ak Hour
Camp Ramah	Number	Rate	Trips	Rate	Trips	Rate	Trips
Daytime Camp Staff	73 <sup>(a)</sup>	-	-	-	-	-	-
- Administrative Staff	13 <sup>(b)</sup>	1.07	14	0.53	7	0.53	7
- Kitchen/Housekeeping Staff	49	2.0	98	0.5	24	0.5	24
- Maintenance Staff	5	2.0	10	0.66	4	0.66	4
- Security	6	2.0	12	0.33	2	0.33	2
Miscellaneous Deliveries/Vendors	13 <sup>(c)</sup>	2.0	26	0.4	1	0.4	1
Camp Counselors	275	-	-	-	-	-	-
- Overnight	255	0.05	13	0.0	0	0.0	0
- Daytime	20 <sup>(a)</sup>	2.0	40	1.0	20	1.0	20
Net Trip G	eneration:	-	213	-	58	-	58

Table 1 Summer Camp Trip Generation Estimates

(a) 73 + 20 = 93 Daytime camp employees.

(b) Seven administrative staff commute daily while six staff live on-site.

(c) Supply runs and vendor trips.

The data presented in Table 1 indicate that Camp Ramah generates 213 average daily trips, 58 AM peak hour trips and 58 PM peak hour trips during the summer camp months June to August. The camp provides youth campers 3 excursions per week. The excursion trips are via 5 vehicles and that equate to a total of 120 trips during the length of the summer camp period. These trips occur during the AM and PM peak hours. The forty-four bus loads required to accommodate the arrival and departure of 1,200 youth campers equates to 88 bus trips with campers arriving every two weeks. Campers must arrive before Shabbat which commences on sundown Friday.

#### **Non-Summer Cam Operations**

<u>Camp Staff:</u> During the non-summer camp period, Camp Ramah is staffed by 37 daytime employees. Kitchen and housekeeping staff (22) work Sunday through Saturday. Camp administrative staff (6) work Monday through Friday with 2 living on-site. Maintenance staff (3) work Monday through Friday. Security staff (6) work Sunday through Saturday 24 hours a day in overlapping shifts. Based on the workdays and hours of the daytime employees, the employee commute trips occur during the critical weekday 6:30 AM to 9:00 AM period and the critical 3:30 PM to 6:30 PM period on State Route 33.

<u>Campers</u>: Camp Ramah hosts approximately 90 events per year for adult and youth campers. Weekday campers arrive on Monday and depart on Thursday. Check in occurs between 8:00 AM and 12:00 PM on Monday. Check out occurs between 8:00 AM and 12:00 PM on Thursday. Weekend campers arrive on Friday and depart on Sunday. Check in occurs between 12:00 PM and 5:00 PM on Friday. Check out occurs between 9:00 AM and 12:00 PM on Sunday or between 4:00 PM and 8:00 PM for day groups. Weekend campers must arrive before Shabbat which commences on sundown Friday.

Youth groups with counselors arrive and depart by bus. Based on the historical operational data, the 90 events in 2019 generated an estimated 5,614 passenger car and bus trips per year which

averages to 62 trips per event (5,614 trips/90 events = 62 trips per event). Event trips are not daily trips like the camp employee trips. Weekend campers must arrive before Shabbat which commences on sundown Friday.

Table 2 presents the trip generation estimates developed for Camp Ramah during the nonsummer camp weeks based on operational data discussed above and attached.

			Non-	Summer Car	np Trip Gene	ration	
- <sup>4</sup>		A	DT	AM Pe	ak Hour	PM Pe	ak Hour
Camp Ramah	Number	Rate	Trips	Rate	Trips	Rate	Trips
Daytime Camp Staff	37	-	-	-	-	-	-
- Administrative Staf	6 <sup>(a)</sup>	1.3	8	0.67	4	0.67	4
- Kitchen/Housekeeping Staff	22	2.0	44	0.41	9	0.45	10
- Maintenance Staff	3	2.0	6	1.0	3	1.0	3
- Security	6	2.0	12	0.33	2	0.33	2
Miscellaneous Deliveries/Vendors	5	2.0	10	0.2	1	0.2	1
Net Trip G	eneration:	-	80	-	19	-	20

Table 2Non-Summer Camp Trip Generation Estimates

(a) Four administrative staff commute daily, while two staff live on-site.

The data presented in Table 2 indicate that during the non-summer camp period, Camp Ramah generates 80 average daily trips, 19 AM peak hour trips and 20 PM peak hour trips during the non-summer camp operation. Based on the attached historical data, the 90 events generate an estimated 62 trips per event (5,614 trips/90 events) which do not occur on a <u>daily basis</u>.

Associated Transportation Engineers

By: Richard L. Pool, P.E. Principal Engineer



attachments: Camp Ramah Traffic Operational Data Camp Ramah Employee Shift Information (Typical 2019) Camp Ramah 2019 Events Table Camp Ramah Estimated 2019 Event Passenger Vehicles and Buses

#### CAMP RAMAH Traffic Operational Description Based on 2019 Events

#### **Summer Camp Operations**

<u>Campers and Counselors</u> - During Summer Camp, Camp Ramah hosts roughly 900 persons each week, including roughly 600 campers and 250 overnight programming staff. Below is a typical breakdown of persons on-site during the summer (not including deliveries or vendors):

	Day Only	All Day
Campers	None	600-650
Counselors and Programming Staff	20	200-275
Staff Family	0	~20
Camp Ramah Dining, Housekeeping,		
Operations, Maintenance, Security,	70	1-2
etc.		
Totals	90	~900

Summer camp at Camp Ramah lasts a total of nine (9) weeks. It is broken down as follows:

The first week is for camp counselor training, only. About 90 counselors arrive by automobile and the remainder arrive via buses. All counselors stay for the entire summer. Between the two main sessions (or a total of 1 time), all counselors will leave and come back, via car, prior to the start of the next session. In addition, counselors are permitted to leave camp for weekly days off (six times per summer) and may leave property for periodic trips into Ojai throughout the week. Estimated 1 1/2 trip per car per week.

Following the training week, there are two (2) 4-week regular camp sessions. Campers predominately arrive by bus (16 buses). Over the course of the entire summer camp, a handful of campers arrive by car (drop off), totaling ~20 campers for the entire 8-weeks of summer camp. Buses generally stay on site during camp sessions.

During the sessions, there are excursions about three (3) times per week for some campers. These excursions include 2-3 buses with a van support vehicle and a luggage/supply truck. Additionally, three (3) times per day for six (6) days a week there are supply-related trips of about 4 vehicles each trip, totaling ~144 trips (in and out) per week. Within the 4-week sessions, there are two (2) 2-week sessions available for campers that need or desire a shorter stay. These campers arrive by bus (~3 buses).

At the conclusion of each session, all-campers depart in the same way that they arrived. At the end of Summer Camp, all counselors depart the way that they arrived.

<u>Daytime programming staff</u> - On average, about 20 day-counselors and specialists arrive and depart the camp each day, during summer camp.

<u>Kitchen/Housekeeping support staff</u> – During summer camp, approximately 49 kitchen and housekeeping employees support camp operations. These employees arrive in the morning and depart in the evening, each day during camp. Please see the accompany shift data.

Administration and Operations Personnel – Seven (7) regular camp employees (admin) work M-F shifts arriving in the morning and departing in the evening. Additionally, 5-6 Camp personnel and their families live on the Camp premises during summer camp, in dedicated housing. There are five (5) on-site residential dwelling units in addition to Camp cabins and tents for adults and children, as shown on the site plan.

<u>Maintenance Staff</u>: 4-6 maintenance staff work M-F, arriving in the morning and departing the afternoon. 2-3 maintenance staff work on the weekends.

<u>Security</u> – Two (2) 24-hour security staff persons (in 3 overlapping shifts) operate a kiosk at the front gate, and inside camp, during summer camp.

<u>Carpooling and Public Transit</u>- Approximately 10% of daily staff are observed to use public transit, non-motorized transportation (e.g., bicycle) or carpool.

#### Non-Summer Camp Operations (sizes varies by event)

Aside from summer camp, Camp Ramah hosts youth camps, religious-oriented camps and events for Jewish and non-Jewish community non-profit partners. These events, including the size and the associated vehicles, are described in the 2019 Traffic Information table.

#### <u>Weekdays</u>

Weekday events typically commence on Monday, and attendees generally depart Thursday. Groups and any counselors come and stay for the duration of the event. Check-in times can vary significantly, but is commonly between **8AM** and **12:00PM on Monday with** check out generally occurring between **8:00AM** and **12:00PM** on **Thursday**. Day use groups typically check out between 4:00PM and 8:00PM

#### <u>Weekends</u>

Weekend events typically commence on **Friday** with attendees departing **Sunday**. As with weekdays, check-in times may vary but are generally between **12:00pm** and **5:00PM**, on **Friday**. Group attendees <u>must arrive before Shabbat</u>, which commences on sundown on Friday. Check out is generally between **9:00AM and 12:00PM** on Sunday or between **4:00PM and 8:00PM** for day groups.

#### <u>Guests</u>

Guests arrive and depart by bus or car in the numbers indicated in the Camp Event Traffic spreadsheet. Standard coach buses used by the camp have a 55-seat capacity. Except for emergencies, guests generally stay on-site for the duration of the event, which is typically 2-4 days.

#### Camp Personnel and Support Staff

During off peak (Non-Summer Camp) parts of the year, Camp personnel and support staff is roughly similar to the summer camp, with these exceptions:

- The numbers reported in the 2019 event log for off-peak events <u>include</u> the counselors and programming staff specific to that event.
- There are 3-5 regular camp administration and operations staff that come and go each day (Sunday to Saturday). Additionally, 2 Camp personnel and their families live on site during this time.
- Housekeeping and kitchen staff are <u>reduced</u> to reflect the corresponding reduction in event size, as shown in the accompanying shift data and project description summary table.

#### **Proposed Project**

The primary goal for the Modification is to construct a new 10,609 SF Machon "village" space to serve the leadership training program for summer campers entering the 11<sup>th</sup> grade. The "village" would consist of six new cabins for campers and a central gathering area which would include counselor sleeping quarters, prep kitchen, meeting spaces, storage and restrooms. Four (4) of the cabins are proposed to have a second story.

The proposed development does not affect the number or size of events held at Camp Ramah. Rather, these modifications are proposed to accommodate existing campers and programming.

Secondary goals for Camp Ramah include certifying all existing on-site development and:

- Adding a ~1,151 SF reception and storage area to the Dining Hall.
- Reconfiguring the drop off area for campers to reduce bus traffic and traffic noise, and
- Adding adjacent Camp-owned parcels into the CUP.

#### CAMP RAMAH EMPLOYEE SHIFT INFO (Typical – 2019)

#### **Dining Hall Staff**

Summer Camp Daily 6AM – 2:30pm (4 persons) 7AM – 3:30pm (6) 2:30PM – 9/10 (2) 3PM-9/10pm (7)

#### Non-Summer (Average 7/day) Monday 8AM-2:30 or 3pm (2-4)

<u>Tuesday-Friday</u>

7AM-3:30 (3) 2PM-9:30pm (3)

<u>Sat. – Sunday</u> 6AM-2:30pm (5) 2:30PM-9:30 (4) 3PM- 11pm (1) (for larger groups over 300 add 1 staff to each shift per 50 people)

#### Kitchen

Summer Daily 6AM-2:30 (2) 7AM- 3:30pm (8) 11AM – 8pm (1) 2:30PM-10:30/11pm (9)

#### Non-Summer (Average 11/day)

<u>Monday</u> 10AM -6:30 (2-3) <u>Tuesday- Friday</u> 6/6:30AM – 2:30/3pm (7) 11AM-8pm (2) 2:30PM- 9/9:30 (5)

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<u>Saturday:</u>
6:30am -3pm (2)
7am - 3:30p (4)
11-7:30pm (1)
2:30pm - 10:30 - 11pm (5)
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<u>Sunday:</u>
6:30-2pm (3)
7am-2pm (5)
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#### **Maintenance Staff**

#### Summer Camp

<u>M-F</u> 8AM-4:30pm (5) <u>Sat – Sunday</u> 9AM-5:30/6pm (2-3)

#### Non-Summer Camp (average 3/day)

<u>Monday – Wednesday</u> 8AM – 4:30pm (5) <u>Thursday</u> 8AM – 4:30 (4) <u>Saturday</u> 9AM-5:30pm (1)

#### **Housekeeping Staff**

Summer 7AM-4:30 (2) 8AM-6 (4) 10AM-7:30 (4)

#### Non-Summer Camp (average 3/day)

<u>Monday – Friday</u> 8AM– 4:30PM (5) <u>Saturday</u> 9AM-5:30PM (2) 3 | Page

#### Security Staff (2/day)

Year Round - 3 overlapping shifts w/two persons per shift: 7:00AM-3:30PM 3:00PM-11:30PM 11PM -7:30PM

#### **Administration and Operations**

Summer Camp <u>M-F</u> 8:00 AM-5:00PM (7) Additionally, 5-6 staff live on-site

#### Non-Summer Camp (average 6/day)

<u>Daily</u> 8:00 AM-5:00PM (3-5, averaging 4) Additionally, 2 camp personnel and their families live on-site

## Camp Ramah 2019 Events Table

DATE	airoao		
	GAOOF	Est. Attendees	Event Summary
Dec 27 2018 - Inc. 2 2010			
2 1 40 2 1 40	rath of Bliss	71	Buddhist meditation study retreat. Primarily held indoors.
61-aa-c	Path of Bliss	90	Buddhist meditation study retreat. Primarily held indoors.
Jan 3-5, 2019	Weinstein Institute	135	National Ramah Convention Ramah staff in attendance as wall as in chasses of more association
Jan 11-13, 2019	Congregation B'nai B'rith of SB School retreat	59	Children's Jewish Program, all children. Study and sports
Jan 25-27, 2019	USY Kadima Kinnus	400	Study, services, sports, and programming for youth in the Jewish community. Includes Ramah Summer Staff.
Jan 19-20, 2019	NFTY	249	Study, services, sports, and programming for youth in the Jewish community. Includes Ramah Summer Staff.
Jan 19-20, 2019	Adat Ari El	190	Family Camp for Adat Ari El Temple. Roughly 60% of attendees are age 16 and under. Stabbat services. study, and snorts.
Jan 27-28, 2019	Wilshire Executive Staff	23	Retteat for senior staff of I os Angeles Temple Drimorily held indoces
Jan 31-Feb 3, 2019	Hazon	36	Rabbinical students study retreat
Feb 1-3, 2019	JCA Shalom- Sinai Teen	94	Jewish study for teenagers as well as sports
Feb 1-3, 2019	ECFC	75	Family camp for toddlers.
Feb 8-10, 2019	Stephen Wise Family Camp	76	Family camp retreat for synagogue, study, sports
Feb 9-10, 2019	Fulcrum	25	All children, sports and nature study
Feb 11 - April 11, 2019	Concjo Valley	~100-180 Weekly	Conejo Valley School District, students from middle and elementary schools come to camp ~100-180 Weekly for outdoor and science education.
Feb 13-18, 2019	Friends of Israeli Scouts	~750-850	Program for kids to study Israeli culture and history, along with sports and entertainment programmine.
Feb 20-22, 2019	Adelson School	74	Jewish study and sports for teenagers
Feb 22-23, 2019	Shalhevet	275	lewish High School. Students come for shalibat services snorts and snidu
Feb 23-24, 2019	UCLA Hillel	50	College Jewish study group
March 1-3, 2019	Sinai Religious School Camp	195	Family Camp for Sinai Religious School. Roughly 50% of attendees are age 16 and under. Ramah Summer Staff included.
March 8-10, 2019	PJ Library	175	Family Camp for synagogue. Roughly 60% of attendees are age 16 and under. Shabbat services. study. and sports.
March 8-10, 2019	LA Hebrew High (LAHH)	73	Jewish study for teenagers as well as sports
March 8-10, 2019	Roxanne Retreat (McNally)	29	Adult Women's AA group, study and therapy. Primarily held indoors.
March 15-17, 2019	Congregation Ner Tamid	136	Family camp for synagogue. Roughly 60% of attendees are age 16 and under. Shabbat services, study, and sports. Ramah Summer staff included
March 15-17, 2019	ECFC / Shomrei Torah	100	Family Camp for toddlers. Run by Ramah staff
March 15-17, 2019	Shomrei Torah Family Camp	75	Family camp retreat for synagogue, roughtly 60% under 16, study, sports

Page 1

# Camp Ramah 2019 Events Table

		2	
DATE	GROUP	Est. Attendees	Event Summary
March 18-20, 2019	Santa Barbara Adventure	47	
March 18-22 2019	Barrier V. C	t/	Aut condren, sports and nature study
March 22 24 2010	Dapuste I oga Group	226	Retteat for adults to study Yoga practice.
MALCH 22-24, 2017	I emple Beth Am	291	Family Camp, roughly 50% of attendees are age 16 and under. Jewish study component.
March 28-29, 2019	Fulcrum	43	
March 28-April 5, 2019	Dacific Gestalt Institute		
Match 20.31 2010	A AMALE OCSIAIL ALISULUIE	00	Conterence for therapists, study. Primarily held indoors.
107 CT C CT TTO THE	Kuach INashim	70	Ramah community women's retreat for Jewish study.
Арні 5-7, 2019	Sinai Family Camp	229	Family Camp for Sinai Day School. Roughly 60% of attendees are age 16 and under. Jewish study componanat.
April 8-11, 2019	Baptiste Yoga Group	156	Retreat for adults to study Yrom morize
April 10-14, 2019	RYLA	340	Study and momentum for Vould I advant.
April 18-27, 2019	Passover	300	Promemine for lawich Chudia 2000 1 2000 Leadership program.
April 29- May 3, 2019	Animal Equality	33	Adult tetreot for minut sicher annu Dummit 1-11:1
April 29- May 3, 2019	Bodhi Path Meditation	27	Adult meditation study group. Primarily held indoors.
May 3-5, 2019	Ross Goldberg Bar Mitzvah	208	Ramah Summer Staff hired to run programming. family are Ramah alumnae. Torah study
May 10-12, 2019	IKAR	215	Jewish Community for youth in Los Angeles, shabbat services, sports, and study. Includes
May 14-15, 2019	Mariposa Middle School	75	All children encure and control at 1-
May 17, 2019	Fulcrum	75	All children shours and mature sound
May 17-19, 2019	ECFC - Adat Ari El	130	Am cumucus, sports and nature study Family Camb for roddlers
May 17-19, 2019	VBS Day School	108	Family Camp for VBS Day School Day School. Roughly 60% of attendees are age 16 and under. Shibbat services study and snorts
May 23-27, 2019	Frtiends of Temeli Scours		Program for kids to study Israeli culture and history, along with sports and entertainment
May 29-May 31, 2019	Wolf Adventure	000-001-2	programming. All children and an and a statements of the statement of the statement of the statement of the statement of the
May 31-June 2, 2019	Robbins Wedding	JA 165	An cumurcu, sports and nature study
June 3-12, 2019	A-Camp		raumy are rautan atumm. Raman Summer start and alumni included
June 18-August 14, 2019	Summer		Camp Ior adult LGD I Q women. Sports & entertainment.
June 23-27, 2019	Legacy Heritage (Kol Haot)		Adult Tewish Shidy more an during summer come Drimouily hold in door.
July 8, 2019	Jomsky Bat Mitzvah		Bar Mitzvah celebration during summer camp, no overnicht
August 16-19, 2019	Ohr Lanu	120	Family Camp for Ramah Special Needs campers.
August 19-25, 2019	Camp in Harmony	660	Campers ages 6-15 from underprivledged backgrounds (many homeless), counselors include Rambh summer staff Shorts entertioners of a contract of the state of the state of the state of the state of the
Sept 4-6, 2019	Fulcrum - Curtis		All children, sports and nature study
Sept 4-6, 2019	Fulcrum - Calvary		All children sports and nature study
Sept 6-8, 2019	Sinai Teen Center		Retreat for children from Sinai Temple
Sept 11-13, 2019	Fulcrum - Buckley		All children, sports and nature study
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## Camp Ramah 2019 Events Table

DATE	GROUP	Est. Attendees	Event Summary
Sept 13-15, 2019	Jewish Federation of Greater LA	75	Jewish study and prooramming for adults Primarily held indones
Sept 13-15, 2019	Fulcrum - Claremont McKenna	60	Journey and programming for aution random and advise and
Sept 19, 2019	Celebrate Life	38	Day opening for children change and actual and a
Sept 20-22, 2019	Los Cerritos Middle School	72	Jay group for cumurch, sports and nature study
Sept 20-22, 2019	Tome Rot Mitmuch	C) 101	Au condren, sports and nature study
Sent 23-25 2019	Bulance Parl MULEVAIL	1/1	Naman Summer Statt hired to run programming, family are Ramah alumni. Torah study.
Sant 25 27 2010		80	All children, sports and nature study
Sept 25-21, 2019	Fulcrum - Brentwood	60	All children, sports and nature study
Sept 2/-29, 2019	Women's Spirituality Retreat	50	Women's AA retreat, study. Primarily held indoors.
Sept 27-29, 2019	Men's Recovery Retreat	19	Adult Men's AA group, study and therapy. Primarily held indoors.
Sept 30- Oct 7, 2019	Baptiste Yoga Group	68	Retreat for adults to study yoga practice. Primarily held indoors.
Oct 25-27, 2019	NFTY	182	Study, services, sports, and programming for youth in the Jewish community. Includes Ramah Summer Staff
Oct 11-13, 2019	Boren Bat Mitzvah	108	Ramah Summer Staff hired to run neomenmine family are Demok alumni Taurk and
Oct 18-20, 2019	Camp Yoga	103	Refrest for adults to study Vom washine
October 23, 2019	Celebrate Life	38	Day promin for children shorts and nature study
Oct 25-27, 2019	ECFC	100	Family Came for toddlare
Oct 25-27, 2019	Adat Ari-El ILC	50	Children's Terrish Promam all children Study and anothe
Nov 1-4, 2019	CamPowerment	190	Adult programming for women Includes condr commences
Nov 6-7, 2019	Stephen Wise 6th Graders	40	All children shorts and nature shide
Nov 7-9, 2019	Fulcrum - Manhattan Beach USD	55	All children shorts and nature study
November 8-9, 2019	Greenfield Elementary	55	All children. sports and nature study
Nov 8-10, 2019	Congregation B'nai B'rith of SB Families	00	Family Camp for summer Shahhat Somisson 21.1.
Nov 8-10, 2019	ISN		A atury Catty for synagogu Onaboat OctVICES, study, sports Study services shorts and promamning for most in the Lanich community.
Nov 12, 2019	OUHSD		Day prolitic for children drings and alcohol memorican an accountient.
Nov 15-17, 2019	YULA	239	Tevish High School. Shidents come for chalible contrices cannot and cander
Nov 22-24, 2019	Mizel Bat Mitzvah	140	Ramah Summer Staff hired to run programming, family are Ramah alumni. Torah study.
December 6-7, 2019	Milken	688	Jewish Day School. Students and teachers come for sports as well as Shabbat services and study.
9-Dec-19	OUHSD	30	Day group for children drugs and alcohol prevention. no overnight
11-Dec-19	QSHUO		Day group for children drugs and alcohol brevention no overnicht
12-Dec-19	OUHSD	30	Day group for children drugs and alcohol brevention. no overnicht
December 13-15, 2019	Shomrei Torah Children	24	Children's Jewish Program, all children. Study and sports
December 13-15, 2019	Adat Ari El	118	Family Camp for Adat Ari El Day School. Roughly 60% of attendees are age 16 and under. Stabbat services study and snorre
December 13-15, 2019	Temple Aliyah Children		Family camp retreat for synapopue, roughtly 60% under 16 shidy shorts
17-Dec-19	OUHSD	30	Day group for children drugs and alcohol brevention. no overnicht
December 20-23, 2019	Machon Reunion	100	Camper reunion run by Ramah staff.
December 20-22, 2019	Ezra Reunion	30	Ramah summer camp staff and campers

Page 3

DATE	GROUP	Est. Cars	Est. Bus	Note
Dec 27, 2018 - Jan 2, 2019	Path of Bliss	Est. Cars 50	O Est. Bus	ivote
Jan 3-5, 2019	Weinstein Institute	70	0	
Jan 11-13, 2019	Congregation B'nai B'rith of SB School retreat	0	1	
Jan 19-20, 2019	NFTY	5	4	
Jan 19-20, 2019	Adat Ari El	70	0	
Jan 25-27, 2019	USY Kadima Kinnus	10	6	
Jan 27-28, 2019	Wilshire Executive Staff	20	0	
Jan 31-Feb 3, 2019 Feb 1-3, 2019	Hazon JCA Shalom- Sinai Teen	30 40	0	
Feb 1-3, 2019	ECFC	30	0	
Feb 8-10, 2019	Stephen Wise Family Camp	40	0	
Feb 9-10, 2019	Fulcrum	0	1	
Feb 13-18, 2019	Friends of Israeli Scouts	50	20	
Feb 11 - April 11, 2019	Conejo Valley	5	3	8 sessions
Feb 20-22, 2019	Adelson School	5	1	
Feb 22-23, 2019	Shalhevet	5	5	
Feb 23-24, 2019	UCLA Hillel	0	1	
March 1-3, 2019 March 8-10, 2019	Sinai Religious School Camp	70 25	0	
March 8-10, 2019	Roxanne Retreat (McNally) LA Hebrew High (LAHH)	25	2	
March 8-10, 2019	PJ Library	70	0	
March 15-17, 2019	Congregation Ner Tamid	60	0	
March 15-17, 2019	ECFC Shomrei Torah	35	0	
March 15-17, 2019	Shomrei Torah Family Camp	25	0	
March 18-20, 2019	Santa Barbara Adventure	2	1	
March 18-22, 2019	Baptiste Yoga Group	100	0	
March 22-24, 2019	Temple Beth Am	100	0	
March 28-April 5, 2019	Pacific Gestalt Institute	30	0	
March 28-29, 2019 March 29-31, 2019	Fulcrum Ruach Nashim	2 50	0	
April 5-7, 2019	Sinai Family Camp	140	0	
April 8-11, 2019	Baptiste Yoga Group	100	0	
April 10-14, 2019	RYLA	5	7	
April 18-27, 2019	Passover	140	0	12 shuttle bus trips during the week
April 29- May 3, 2019	Animal Equality	25	0	
April 29- May 3, 2019	Bodhi Path Meditation	20	0	
May 3-5, 2019	Ross Goldberg Bar Mitzvah	100	0	
May 10-12, 2019	IKAR Maine Mille School	5	4	
May 14-15, 2019 May 17-19, 2019	Mariposa Middle School ECFC - Adat Ari El	0 40	2	
May 17-19, 2019 May 17-19, 2019	VBS Day School	30	0	
17-May-19	Fulcrum	2	1	
May 23-27, 2019	Friends of Israeli Scouts	50	20	
May 29-May 31, 2019	Wolf Adventure	2	1	
May 31-June 2, 2019	Robbins Wedding	50	0	
June 3-12, 2019	A-Camp	150	4	
June 23-27, 2019	. Legacy Heritage (Kol Haot)	0	2	
June 18-August 14, 2019 8-Jul-19	Summer	SPECIAL	SPECIAL	Special See below
August 16-19, 2019	Jomsky Bat Mitzvah Ohr Lanu	0 20	0	
August 19-25, 2019	Camp in Harmony	30	7	
Sept 4-6, 2019	Fulcrum - Calvary	0	1	
Sept 4-6, 2019	Fulcrum - Curtis	4	1	
Sept 6-8, 2019	Sinai Teen Center	0	1	
Sept 11-13, 2019	Fulcrum - Buckley	2	2	
			2	
Sept 13-15, 2019	Fulcrum - Claremont McKenna	5	1	
Sept 13-15, 2019	Jewish Federation of Greater LA	60	1 0	
Sept 13-15, 2019 19-Sep-19	Jewish Federation of Greater LA Celebrate Life	60 0	1 0 1	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah	60 0 50	1 0 1 1	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019 Sept 20-22, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School	60 0 50 2	1 0 1 1 2	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019 Sept 20-22, 2019 Sept 23-25, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School Fulcrum - TVT	60 0 50	1 0 1 1 2 2	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019 Sept 20-22, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School	60 0 50 2 2 2	1 0 1 1 2	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019 Sept 20-22, 2019 Sept 23-25, 2019 Sept 23-27, 2019 Sept 27-29, 2019 Sept 27-29, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School Fulcrum - TVT Fulcrum - Brentwood	60 0 50 2 2 2 2 2	1 0 1 2 2 1	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019 Sept 20-22, 2019 Sept 23-25, 2019 Sept 25-27, 2019 Sept 27-29, 2019 Sept 27-29, 2019 Sept 27-29, 2019 Sept 30- Oct 7, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School Fulcrum - TVT Fulcrum - Brentwood Men's Recovery Retreat Women's Spirituality Retreat Baptiste Yoga Group	60 0 50 2 2 2 2 19 30 40	1 0 1 2 2 1 0 0 0 0	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019 Sept 20-22, 2019 Sept 23-25, 2019 Sept 23-27, 2019 Sept 27-29, 2019 Sept 27-29, 2019 Sept 30- Oct 7, 2019 Oct 11-13, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School Fulcrum - TVT Fulcrum - Brentwood Men's Recovery Retreat Women's Spirituality Retreat Baptiste Yoga Group Boren Bat Mitzvah	60 0 2 2 2 19 30 40 40	1 0 1 2 2 1 0 0 0 0 1	
Sept 13-15, 2019 19-Sept 20-22, 2019 Sept 20-22, 2019 Sept 23-25, 2019 Sept 23-27, 2019 Sept 25-27, 2019 Sept 27-29, 2019 Sept 30- Oct 7, 2019 Oct 11-13, 2019 Oct 11-13, 2019 Oct 18-20, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School Fulcrum - TVT Fulcrum - Jrentwood Men's Recovery Retreat Women's Spirituality Retreat Baptiste Yoga Group Boren Bat Mitzvah Camp Yoga	60 0 50 2 2 2 19 30 40 40 50	1 0 1 2 2 1 0 0 0 0 1 0	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019 Sept 20-22, 2019 Sept 23-25, 2019 Sept 25-27, 2019 Sept 27-29, 2019 Sept 27-29, 2019 Sept 27-29, 2019 Oct 11-13, 2019 Oct 11-20, 2019 2-3-Oct 19	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School Fulcrum - TVT Fulcrum - Jerntwood Men's Recovery Retreat Women's Spirituality Retreat Baptiste Yoga Group Boren Bat Mitzvah Camp Yoga Celebrate Life	60 0 50 2 2 19 30 40 40 50 0	1 0 1 2 2 1 0 0 0 0 1 1	
Sept 13-15, 2019 19-Sept 20-22, 2019 Sept 20-22, 2019 Sept 20-22, 2019 Sept 23-25, 2019 Sept 23-27, 2019 Sept 27-29, 2019 Sept 30- Oct 7, 2019 Oct 11-33, 2019 Oct 18-20, 2019 23-Oct 79 Oct 25-27, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School Fulcrum - TVT Fulcrum - Brentwood Men's Recovery Retreat Women's Spirituality Retreat Baptiste Yoga Group Boren Bat Mitzvah Camp Yoga Celebrate Life Adat Ari-El JLC	60 0 50 2 2 19 30 40 40 50 0 30	1 0 1 2 1 0 0 0 1 0 1 0 1 0	
Sept 13-15, 2019 19-Sep-19 Sept 20-22, 2019 Sept 20-22, 2019 Sept 23-25, 2019 Sept 23-27, 2019 Sept 27-29, 2019 Sept 27-29, 2019 Sept 30- Oct 7, 2019 Oct 18-20, 2019 23-Oct 19 Oct 25-27, 2019 Oct 25-27, 2019 Oct 25-27, 2019	Jewish Federation of Greater LA Celebrate Life Lowe Bar Mitzvah Los Cerritos Middle School Fulcrum - TVT Fulcrum - Brentwood Men's Recovery Retreat Women's Spirituality Retreat Baptiste Yoga Group Boren Bat Mitzvah Camp Yoga Celebrate Life Adat Ari-El JLC ECFC	60 0 50 2 2 19 30 40 50 0 30 20	1 0 1 2 2 1 0 0 0 0 1 0 0 1 0 0 0	
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Summer Camp

4-week Camp (2 sessions) 2-week camp (4 sessions)

100\* 0

1

16 3

\*Between sessions, some staff leave and return. Others stay. Here, assuming all come and go twice

Notes: 1 These numbers are estimates provided by Camp Ramah staff based on their experience with these camps 2 At these events, guests arrive and stay for the duration of the event except as noted. 3 This chart does not include kitchen, admin, security staff that may come and during the work week. This has been provided separately.

\* 0.01

#### Attachment 17 - Works Cited

#### Modified Conditional Use Permit Case No. PL18-0052 Camp Ramah

Ventura County Public Works Agency, Transportation Department, Darren Arrieta, November 6, 2019, June 14, 2021, October 29, 2021 and February 3, 2022

Resource Management Agency Planning Division Cultural Heritage Planner, Ashley Cook, December 5, 2018, and February 8, 2019

Resource Management Agency Planning Biologist, Manju Venkat, March 4, 2019

Watershed Protection District, Advanced Planning Floodplain, Yunsheng Su July 5, 2018

Watershed Protection District, Planning and Regulatory Division, Sergio Vargas, July 6, 2018

Ventura County Public Works Agency, Development and Inspection Services Division, Jim O'Tousa, June 6, 2018

Ventura County Public Works Agency, Development and Inspection Services Division, Jim O'Tousa, December 28, 2018

Ventura County Watershed Protection District, Groundwater Section, Kim Loeb, February 6, 2019 and August 30, 2019 and James Maxwell, January 12, 2021

Ventura County Environmental Health Division, Rebecca Lustig, June 4, 2018

Ventura County Public Works Agency, Surface Water Quality Section, Ewelina Mutkowska, May 3, 2018

Ventura County Air Pollution Control District, Nicole Collazo, May 17, 2018

Ventura County Agricultural Commissioner's Office, Monica Sanoja, May 11, 2018

Integrated Waste Management Division, Tobie Mitchell, May 4, 2018

Ventura County Fire Protection District, John Dodd, May 10, 2018

County of Ventura Mitigated Negative Declaration PL18-0052 Attachment 17 – Works Cited Ventura County Planning GIS data layers, March 2022

Ventura County Initial Study Assessment Guidelines, April 26, 2011

Site Plans, Jane Carrol Design, dated March 13, 2018 and April 2, 2018

Ventura County General Plan, September 15, 2020

Ojai Valley Area Plan, September 15, 2020

Ventura County Non-coastal Zoning Ordinance, May 13, 2021

Arborist Report, prepared by Kenneth A. Knight Consulting, LLC., February 7, 2019 and Tree Protection Plan

Camp Ramah Programs and Activities (2019)

Map of Pending and Recently Approved Projects within a 5 Mile Radius of the project Site (March 2022)

Dudek Water Allocation Report, dated October 15, 2018

Dudek Water Allocation Report Addendum, dated November 12, 2020 and SEPPS Water Quality Assessment Addendum, dated January 19, 2021

Initial Study Biological Assessment, prepared by Hunt and Associates Biological Consulting Services February 20, 2019

Feffer Geotechnical Report, dated July 7, 2014, Addendum, dated October 17, 2017 and Responses to Application Incompleteness determination, dated October 29, 2018

Historical Resources Report, prepared by San Buenaventura Research Associates, October 5, 2018

Lewis Engineering Drainage Report, dated November 9, 2018

Dudek Noise Assessment Technical Reports, dated February 2020 and October 2019

Dudek President's Day Weekend Noise Survey, dated March 6, 2020

Dudek Noise Clarification Memorandum, dated September 30, 2020

Associated Transportation Engineers Trip Generation Analysis, dated December 16, 2021

Attachment 4	Arborist Report and Tree Protection Plan, prepared by Kenneth A. Knight Consulting, LLC., February 7, 2019
Attachment 5	Camp Ramah Programs and Activities (2019)
Attachment 6	Map of Pending and Recently Approved Projects within a 5 Mile Radius of the project Site
Attachment 7	Dudek Water Allocation Report, dated October 15, 2018
Attachment 8	Dudek Water Allocation Report Addendum, dated November 12, 2020 and SEPPS Water Quality Assessment Addendum, dated January 19, 2021
Attachment 9	Initial Study Biological Assessment, prepared by Hunt and Associates Biological Consulting Services February 20, 2019
Attachment 10	Feffer Geotechnical Report, dated July 7, 2014, Addendum, dated October 17, 2017 and Responses to Application Incompleteness determination, dated October 29, 2018
Attachment 11	Historical Resources Report, prepared by San Buenaventura Research Associates, October 5, 2018
Attachment 12	Lewis Engineering Drainage Report, dated November 9, 2018
Attachment 13	Dudek Noise Assessment Technical Reports, dated February 2020 and October 2019
Attachment 14	Dudek President's Day Weekend Noise Survey, dated March 6, 2020
Attachment 15	Dudek Noise Clarification Memorandum, dated September 30, 2020
Attachment 16	Associated Transportation Engineers Trip Generation Analysis, dated December 16, 2021
Attachment 17	Works Cited