CAL STATE ENGINEERING, INC.

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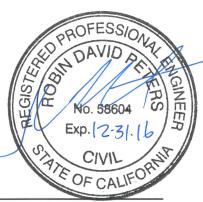
Reverie Retreat

On-site Transportation Review November, 2016

Project:

Reverie Retreat Project

Conditional Use Permit S15-0016



11.22.16

1. Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal.

Access to the project is via a private driveway encroachment to Spanish Flat Road. Spanish Flat Road is approximately 1.3 miles long, intersecting SR 193 to the west and Traverse Creek Road to the east. Both terminal intersections are standard, unsignalized intersections with little or no skew, adequate sight distance and high apparent service levels. County long-range planning staff confirm that the most recent annual accident location study shows that there are no high accident locations near the project.

2. Proximity of proposed site driveway(s) to other driveways or intersections.

Access to the project site is via an existing driveway that encroaches onto Spanish Flat Road approximately 4,250 feet (0.8 mi.) east of the Spanish Flat-SR 193 intersection. The nearest adjacent driveways are 450 feet to the east and 3,000 feet to the west.

3. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements.

Retreat uses are not specifically listed in the County's schedule of off-street vehicle parking requirements (Municipal Code Chapter 17.18.060). When parking requirements for a use are not specifically listed in the Municipal Code (i.e. because the specific use is not listed in the code), parking requirements are determined by applying demand factors for the most similar use or activity listed in the code. The Reverie Retreat project's uses include one-day events, multi-day retreats & workshops during which guests stay at the site, and short-duration special events. In all cases attendance is limited to 75 guests (40 guests for Phase 1), and in all cases guests are expected to stay at the site for the duration of the event (i.e. one inbound trip and one outbound trip). The owners'

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experience with similar events suggests that very few guests arrive alone, most arrive either two or three to a vehicle, and some arrive four to a vehicle.

Parking demand factors published in the Municipal Code for uses similar in nature to the project's uses – i.e. uses that expect a pre-determined number of (frequently pre-registered) guests to arrive within a narrow window of time and then stay at the site for the duration of an event - include the following:

<u>Use</u>	Parking demand factor
Campground	1 space per every 3 day users
Ski facility	1 space per every 2.7 users
Theaters, movies	1 space per 3 seats
Churches, places of public assembly,	1 space per 4 seats
convention facilities	

While the description "church, places of public assembly and convention centers" is most similar to the project's proposed uses, the owner believes that a parking demand factor of 1 space per 4 guests would result in fewer parking spaces than is needed to comfortably accommodate all guests. Based upon past experience with the use, the owner predicts that a parking demand factor of 1 space per 3 guests will conservatively accommodate guests for all planned uses and activities.

With the foregoing in mind, parking demand for the project has been calculated as follows:

Phase 1 Parking Demand				
Use	Demand Factor	Project Quantity	On-site Parking Required	
Residential single-family	2 spaces per unit	1	2	
Campground, theatre, restaurant, etc.	1 space per 3 persons	40	14	
Staff (including owners)	1 space per person	4	<u>4</u>	
Total on-site parking spaces required – Phase 1:			20	

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Phase 2 Parking Demand				
Use	Demand Factor	Project Quantity	On-site Parking Required	
Residential single-family	2 spaces per unit	1	2	
Campground, theatre, restaurant, etc.	1 space per 3 persons	75	25	
Staff (including owners)	1 space per person	6	<u>6</u>	
Total on-site parking spaces required – Phase 2:			33	

New parking areas are proposed to accommodate passenger vehicles for guests and staff. Accessible parking areas and accessible pathways will be provided as required by law. In keeping with the agriculture-based theme of the project, parking areas will be graded to drain and surfaced with rolled aggregate base.

 Adequacy of the project site design to fully satisfy truck circulation and loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day.

The estimated number of deliveries and service calls for the project (converted to a daily rate) is approximately 1.4 per day. A truck circulation and loading demand analysis is not warranted for this project.

5. Adequacy of the project site design to provide at least a 25 foot minimum required throat depth (MRTD) at project driveways; include calculation of the MRTD.

The required storage length for the project's access driveway has been calculated based on guidance provided in the California Department of Transportation Highway Design Manual, Section 405.2. For unsignalized intersections, the required storage length is calculated as the number of turning vehicles likely to arrive in an average 2-minute period during the peak hour. The Highway Design Manual recommends that space for a minimum of two vehicles should be provided, at 25 feet per vehicle.

The minimum required storage length for turning movements at the intersection of the project access driveway and Spanish Flat Road is as follows:

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(25 turning movements/60 minutes per hour)(2)(25 feet/vehicle) = 20.8 feet

The calculated minimum storage length is 20.8 feet, however the Highway Design Manual recommends a minimum storage length of 50 feet. The design throat depth for the project access driveway (the distance between the Spanish Flat traveled way and the near edge of the first on-site parking space) is approximately 85 feet, which conservatively exceeds the recommended minimum storage length.

6. Adequacy of the project site design to convey all vehicle types.

The site has been designed to accommodate all vehicle types by incorporating relevant minimum design standards from both State and County fire & life safety codes. Improvement plans for the site will incorporate relevant geometric design standards for County review and approval.

7. Adequacy of sight distance on-site.

The required sight distance at the project's access driveway encroachment to Spanish Flat Road has been calculated based on guidance provided in the California Department of Transportation Highway Design Manual, Section 201.1. For at-grade intersections including private road connections, required sight distance is the stopping site distance based on a given design speed. Design speed is determined by either: a) the posted speed limit in the direction of travel; or b) a prime facie speed of 55 mph for unposted roadway sections.

Westbound Spanish Flat Road is posted for a maximum speed of 25 mph. Stopping sight distance for westbound traffic (i.e. sight distance in the easterly direction) is given by the Highway Design Manual as 150 feet. Preliminary measurements of sight distance in the easterly direction exceed 150 feet, although minor vegetation removal may be necessary to maintain adequate long-term sight distance in this direction.

Eastbound Spanish Flat Road is not posted for maximum speed, therefore a prime facie speed of 55 mph is used for required sight distance calculations. Stopping sight distance for eastbound traffic (i.e. in the westerly direction) is given by the Highway Design Manual as 500 feet. Preliminary measurements of sight distance in the westerly direction exceed 500 feet with minor vegetation removal.

The extent and location of vegetation removal will be identified and specified at the time of encroachment design and permitting.

8. Queuing analysis of "drive-through" facilities.

Not applicable.

KEL\$EY **VICINITY MAP** NOT TO SCALE

REVERIE RETREAT

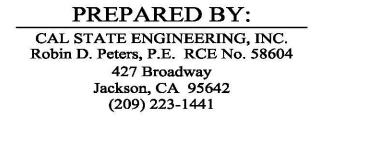
5760 SPANISH FLAT ROAD APN: 088-020-04-100 EL DORADO COUNTY, CALIFORNIA

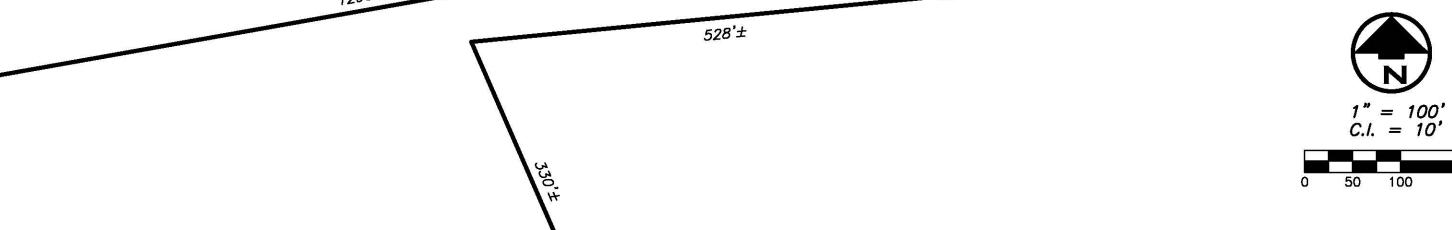
Revised March 2016

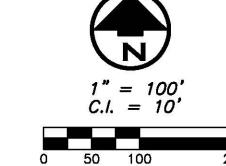


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EXISTING FEATURES

- 1 EXISTING SINGLE FAMILY DWELLING
- **EXISTING PAVED ENCROACHMENT**
- 3 GPUD DITCH LINE
- **EXISTING CABIN**
- 5 EXISTING GUEST HOUSE
- **EXISTING SHED**
- **EXISTING POND**
- EXISTING ON-SITE ROADWAY, TYP.
- AREA OF PROPERTY NOT ASSOCIATED WITH RETREAT ACTIVITIES
- 20' ROAD & PUE PER 1995-47852
- 25' WATER PIPELINE EASEMENT PER 1991-24658 (UNABLE TO PLOT LOCATION)

TOPOGRAPHY BASED ON AN ON-SITE SURVEY CONDUCTED JULY, 2013 BY TERRA FIRMA LAND SURVEYING. ARTIFICIAL DATUM ASSUMED.

PROPERTY INFORMATION

EL DORADO COUNTY APN 088-020-01-100

LOT 10, NW 1/4 SECTION 12, T.11 N., R.10 E., M.D.M.

5760 SPANISH FLAT ROAD, GARDEN VALLEY

DEED REFERENCE: 2012-68631

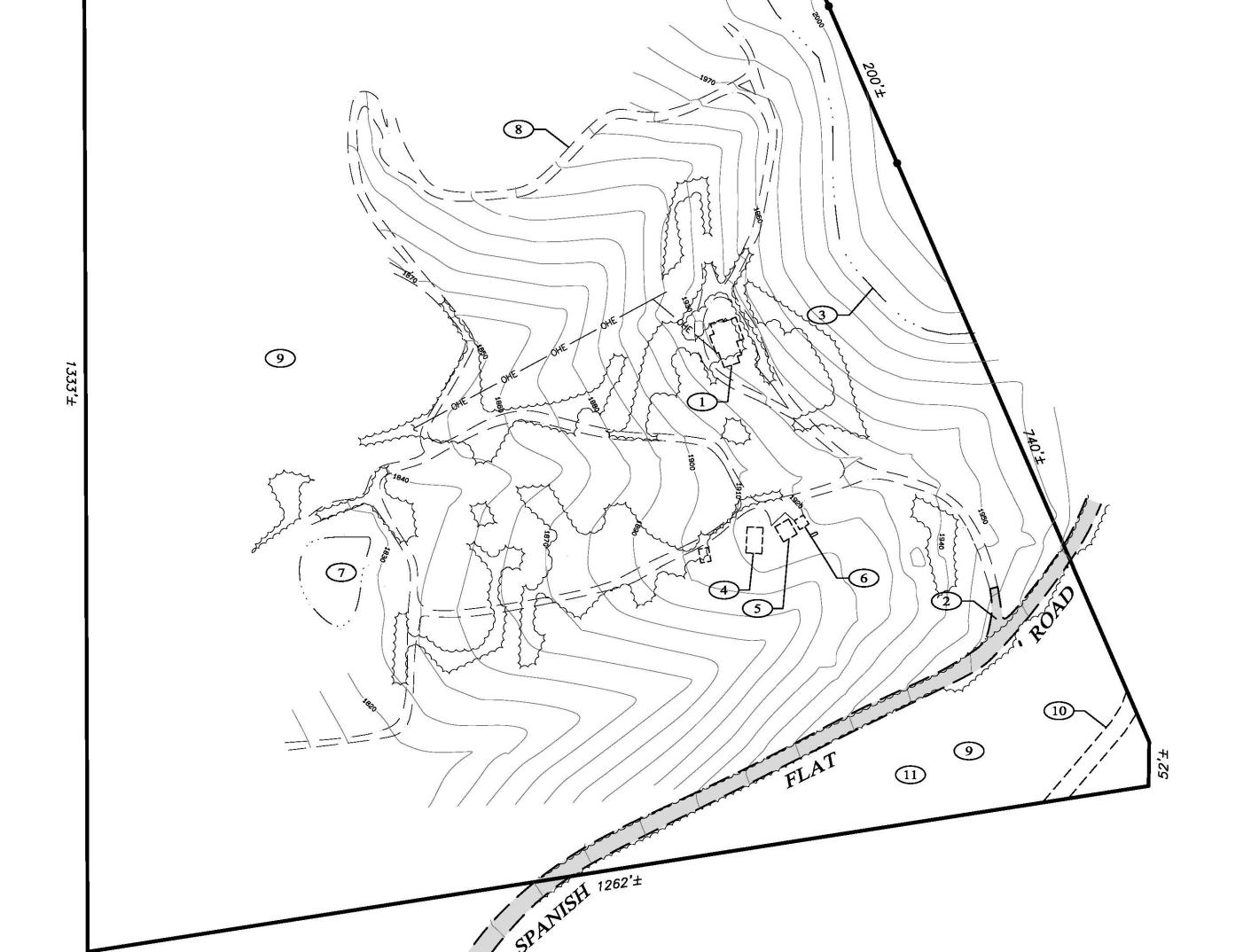
MAP REFERENCE: NONE

ACREAGE: 32± Ac.

EXISTING GENERAL PLAN: RR (RURAL RESIDENTIAL)

EXISTING ZONING: RL-10 (RURAL LANDS, 10 ACRES)

CAL STATE **ENGINEERING** INCORPORATED



OVERALL PLAN - EXISTING CONDITIONS 1" = 100'

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