



**WALSH ENGINEERING  
& SURVEYING, INC.**

607 Aldwych Road El Cajon, Ca 92020  
619-588-6747 619-792-1232 fax

*February 28, 2013*

County of San Diego  
Department of Planning and Land Use  
5510 Overland Ave  
San Diego, Ca 92123

Attn: James Pine

Subject: Fire Protection Plan-Letter Report  
San Diego Freedom Ranch  
Major Use Permit 3992-10-018 Freedom Ranch  
APN's – 607-110-10, 11, 36, 53 & 54 and 607-120-69

This Fire Protection Plan (FPP) – Letter Report is being submitted as an evaluation, pursuant to Chapter 47 of the County Fire Code, of the adverse environmental effects that a proposed project may have from wildland fire and as mitigation of those impacts to ensure that the above referenced project does not unnecessarily expose people or structures to a significant risk of loss, injury or death involving wildland fires.

### **Project Description**

This project is a Modification to the existing Major Use Permit on the property. The project is 112.6 acres and proposes the construction of 5 new dormitory buildings and a multi purpose building. There is also a driveway proposed for access to the new buildings.

### **Environmental Setting**

#### **Location**

The project is located at 1777 Buckman Springs Road in Campo, Ca. It is surrounded by rural residential development and vacant land.

#### **Topography**

The site has a natural swale that runs from the north to the south. The majority of the site slopes to the west to the natural swale. Elevations across the site range from 2,780 to 3,025. The high point being in the northeast portion of the site and the low point being on the most southerly property line.

#### **Geology**

There are a few rock outcroppings that have been preserved in the project design. There are no other geological features that will affect wildfire potential on the site.

#### **Flammable Vegetation**

A Biology Report for this project has been prepared. Please see project file.

## **Climate**

The climate in the project area is characterized as a Mediterranean type climate with generally mild, wet winters with the majority of the rainfall falling between January and March. Precipitation totals range between 14 and 16 inches per year. Long, hot, and very dry summer seasons occur frequently with occasional multi-year droughts. The most critical wind pattern in the area is a Santa Ana wind, which is off-shore wind coming out of the north/northeast. Such wind conditions may produce strong (> 60mph), hot, dry winds with very low (<15%) relative humidity. Santa Ana winds generally occur in the late fall (September through November).

The typical prevailing summer time wind pattern is out of the south or southwest and is normally of a much lower velocity (5-19 mph with occasional gusts up to 30 mph) and has a higher relative humidity(>30% and frequently more than 60%) due to a moist air on-shore flow from the ocean.

All other (northwest, south, and west) wind directions may be occasionally strong and gusty. However, they are generally associated with cooler moist air and often have higher relative humidity (>40%). Serious wildland fire conditions are reached when wind speeds are >20mph.

### **1. Water Supply.**

All proposed structures shall have a water tank, with size, location and fire department connection (FDC) consistent with the County Fire Code. This project is proposing to install a 30,000 gallon water tank.

### **2. Fire Access Roads.**

#### **Location:**

Access to the project will be from an existing driveway off Buckman Springs road. There is a driveway proposed for access to all the new buildings.

#### **Access to Multiple Evacuation Routes:**

The project is accessed by Buckman Springs Road, a publically maintained road which allows egress in two separate directions. Therefore, dead end road length should not be an issue for this project. Evacuation of the site in an emergency will consist of utilizing all vehicles onsite. If the site is at full capacity of 125 patients and 10 staff, the available vehicles break down as follows:

10 staff cars (4 persons/car) = 40 people

Up to 11% of patients have cars = 14 cars (4 persons/car) = 56 people

4 vans onsite (10 persons/van) = 40 people

136 total people can be evacuated

Evacuation of the site will begin as soon as a fire event is reported in the area.

#### **Turnarounds:**

Dead end driveways/roadways cannot exceed 150 feet in length without approved emergency vehicle turnarounds at the terminal end.

**Width:**

Fire access roads must meet County Fire Code requirements and be a minimum of 24 feet wide all-weather surface suitable for travel by 50,000 lb fire apparatus.

**Vertical Clearance:**

Minimum vertical clearance of 13 feet 6 inches must be maintained for the entire required width of fire access roads.

**Grade:**

In the current design, the grade of the proposed driveway will be 13% max. Grades will not exceed 15%.

**Surface:**

The proposed access driveway will be constructed with AC pavement.

**3. Setback from Property Lines:**

Structures, including projections, shall be located not less than 30 feet away from property lines, measured perpendicular to the subject property line, to reduce the potential for wildfire ignition.

**4. Building Construction:**

All Structures shall comply with the ignition-resistive construction requirements: Wildland-Urban Interface areas of Chapter 7A of the County Building Code.

**5. Fire Protection Systems:**

All habitable structures and attached garages shall have residential fire sprinklers per County Code requirements. The automatic fire sprinkler systems in the dormitories are to be designed per NFPA 13R and the dining hall per NFPA 13.

**6. Defensible Space:**

A minimum 100 foot Fuel Management Zone will be established and maintained around all structures over 250 square feet in size. No off-site clearing is required or authorized.

**7. Vegetation Management:**

Prescribed Defensible Space (fuel management zones) will be maintained by the property owners at least annually or more often as needed. Boundaries of fuel management zones will be cleared, permanently marked. Plants used in the Defensible Space will be from an approved fire resistant planting materials list that is maintained by County of San Diego, Department of Planning and Land Use.

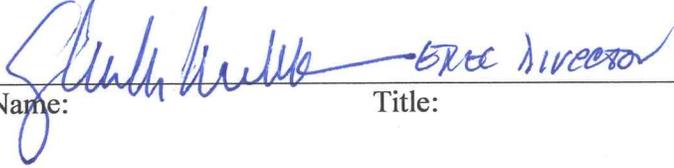
**8. Fire Behavior Computer Modeling:**

Based on preliminary evaluation by the County Fire Marshal, Computer Fire Behavior Modeling is not required for this FPP-Letter Report.

Name of Person Preparing this Report

PREPARED BY  Date 2/28/13  
Printed Name: Ernest M. Bartley III Title: Project Engineer

Name of Property Owner

Owner  Date 8/2/14  
Printed Name: Title: EXEC DIRECTOR