County of San Diego

MARK WARDLAW
DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
www.sdcounty.ca.gov/pds

DARREN GRETLER
ASSISTANT DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

STIPULATED ADMINISTRATIVE ENFORCEMENT ORDER

DATE OF ORDER:	October 27, 2015
LOCATION OF VIOLATION:	19150 High Glen Road Alpine, CA 91901
APNs:	521-130-08-00, 521-130-05-00, 521-130-07-00, 522-070-03-00
ZONE	A72
PROPERTY OWNER:	Covert Canyon, LLC 5590 Ruffin Road San Diego, CA 92123

The San Diego County Department of Planning & Development Services ("COUNTY") and Covert Canyon, LLC.("Covert Canyon"), appearing by and through their officer and representative Marc Halcon[1] and his attorney, Robert Wright, agree to the issuance of the following Stipulated Administrative Enforcement Order (Stipulation) to resolve alleged violations occurring at 19150 High Glen Road in Alpine, California, Assessor Parcel Number ("APN") 521-130-08-00 and bind it and its contiguous parcels: 521-130-05-00, 521-130-07-00, and 522-070-03-00. All four parcels hereinafter referred to as the "Property" are owned by Covert Canyon.

This Stipulation is entered into without trial or adjudication of any issue of fact or law, and parties identified above agree that the Stipulation governs the enforcement of the San Diego County Zoning Ordinance ("SDCZO") and the San Diego County Code of Regulatory Ordinances ("SDCCRO") at the Property while Covert Canyon actively seeks a discretionary Site Plan permit, building permits, and a grading permit for the Property in accordance with the compliance measures outlined in this Stipulation. The parties further agree that the Stipulation

[1] Mr. Halcon is listed as an officer on Covert Canyon's Corporate Filing with the California Secretary of State.

resolves the alleged violations, and replaces and supersedes the previous Stipulated Enforcement Order dated August 10, 2011.

This Stipulation is intended to resolve disputed claims without the time and expense of legal proceedings and to avoid future disputes regarding the permissible uses on the Property until a discretionary Site Plan permit or Major Use Permit (MUP) is approved. This Stipulation is not intended to be an admission by any party on the merits of any alleged violations. The terms of this Stipulation are applicable to Covert Canyon, its successors and assigns, any of their agents, officers, employees, representatives, and tenants, and all persons, corporations or other entities acting by, through, under or on behalf of Covert Canyon, and all persons acting in concert with or participating with Covert Canyon. This Stipulation and terms and conditions herein are Property specific, and are not standards for future sites owned by Covert Canyon and/or other applicants; each Site Plan permit is evaluated on a case by case basis.

I. ALLOWED USES

A. GENERAL

1. The provisions of SDCZO Sections 2720-2725 outline the allowed uses at the Property.
2. Covert Canyon shall comply with the requirements of the SDCCRO, Title 3, Division 6, Chapter 4 (County Noise Ordinance) including Section 36.404(a) at the Property.
3. All firearm activity at the Property shall comply with SDCCRO and the SDCZO.
4. This Stipulation shall not prevent Covert Canyon or anyone with written permission from Covert Canyon from engaging in free, non-commercial activities involving firearms discharge at any location on the Property, provided such activities:
    a. Comply with SDCCRO section 33101 with respect to discharging a firearm at a reasonably safe distance from any occupied dwelling, house, residence, or other building;
    b. Comply with SDCZO; and
    c. Do not take place at the same time as any training activities.
5. There shall be no more than 45 people total on the Property at one time.
6. Covert Canyon shall comply with the Fire Protection Plan prepared by Firewise 2000 Inc. as redacted on October 27, 2015 ("Fire Protection Plan") and included herein (see exhibit C).

B. FIRST RESPONDER MEDIC TRAINING

1. Covert Canyon has a non-conforming use to conduct this training.
2. Covert Canyon may conduct this training in accordance with the authorization letter from COUNTY dated September 11, 2009 (see exhibit B):
    a. Conduct training activities in a two day course to prepare first responders to evaluate and treat serious trauma, proper use of bandages, tourniquets and hemostatic agents;
    b. Refrain from firearm use during training;
    c. Limit participants to a maximum of 12 per class;

d. Transport participants with Covert Canyon staff using 2-3 Sport Utility Vehicles; and
e. Comply with SDCCRO and SDCZO.

C. GOVERNMENTAL MILITARY AND LAW ENFORCEMENT TRAINING

1. Firearms and associated training activities for government military and governmental law enforcement are allowed uses as Law Enforcement Services pursuant to SDCZO sections 2722, 6905, 1300, and1346, and SDCCRO section 33.101 *et seq.* See exhibit A for a non-exhaustive list of offered trainings.
2. While a Site Plan permit for the Property is being processed and compliance measures are met on schedule as outlined in Section II below, Covert Canyon may conduct training on the Property in accordance with the following conditions. Covert Canyon shall:
    a. Conduct all firearms training activities at least 150 yards from any occupied dwelling house, residence, or other building or any barn or other outbuilding used in connection therein pursuant to SDCCRO section 33.101 utilizing only existing shooting ranges and structures;
    b. Delineate and maintain visibly marked property lines in accordance with the land survey described below;
    c. Charge fees in advance and collect all fees for training activities through written contracts with recognized governmental military and recognized governmental law enforcement agencies; no walk-up participants will be accepted;
    d. Notify all attendees in writing of transportation requirements at the time training classes are scheduled;
    e. Notify all attendees prior to arrival that there will be a mandatory orientation including a safety review before every class;
    f. Notify all attendees at the time of arrival of the risks associated with large vegetation fires which may occur in the immediate area and the emergency operations plan should a wildfire occur. Notifications and emergency operations shall be in accordance with the Fire Protection Plan (see exhibit C);
    g. Limit ordnance: firearms shall not exceed 50 caliber and no tracers or other type of incendiary devices or explosives are allowed;
    h. Limit the use of distraction and breaching devices in areas void of flammable or combustible material and to a maximum of 6 times per calendar year; and
    i. In accordance with the compliance measures outlined in Section II below:
        i. Submit a complete application that complies with SDCZO section 7150, and cooperate in the processing and issuance of a discretionary Site Plan permit for the uses described herein;
        ii. Apply for and obtain building permits for the Guest Services/Classroom building, the 40 foot by 58 foot garage and all sea cargo containers at the Property;
        iii. Apply for and obtain a building permit for the metal woodshed or reduce the size to less than 120 square feet or remove;
        iv. Apply for and obtain a grading permit for the berms at the two

square shooting ranges;
v. Complete the on-going maintenance and monitoring for Revegetation Plan PDS2010-3968-09-001; and
vi. Provide a land survey by a California licensed Land Surveyor and submit a plot plan to COUNTY that shows the location of the boundary lines for APN 521-130-08-00 and establishes the property lines between the Property and land owned by the USFS, specifically as it pertains to the berms surrounding the shooting range.

3. Allowable training schedule and limitations
   a. All training shall begin no earlier than 7:00 a.m. and shall cease by 7:00 p.m., Monday through Friday.
   b. Training is prohibited on weekends and holidays; holidays are January 1st, the last Monday in May, July 4th, the first Monday in September, the fourth Thursday in November and December 25th.
   c. Instructors, support staff and participants shall not stay overnight at the Property.
   d. Participants shall leave the property at 7:00 p.m. or earlier.
4. Training participants
   a. Training shall be limited to eligible participants from the following agencies:
      i. Border Patrol;
      ii. Homeland Security;
      iii. Immigration and Customs Enforcement;
      iv. U.S. Marines;
      v. U.S. Navy;
      vi. U.S. Army;
      vii. U.S. Coast Guard;
      viii. County Sheriff and police agencies; and
      ix. Any other military or law enforcement agency which is part of the local, state, or federal government.
   b. Eligible participants are limited to members of the listed organizations, in addition to those members formally selected for service but not yet officially employed.
   c. There shall be no more than 30 eligible participants excluding instructors and support staff at any training.
5. Records
   a. Covert Canyon shall keep and maintain records of all trainings held, including the contracts, the name and direct phone number of the coordinating governmental military or law enforcement representative, date and time of training, and number of participants; the names of participants and details of training may be redacted to maintain confidentiality.
   b. All records shall be retained for at least five years.
   c. Covert Canyon shall provide records to COUNTY within 72 hours upon request or at a COUNTY site inspection as outlined in section II below.

6. Weather watches and warnings
    a. Covert Canyon shall monitor weather via the National Weather Service in advance of training activities and while hosting training activities.
    b. Training activities shall not take place during the duration of any weather warnings posted by the National Weather Service applicable to the Alpine area or San Diego County Inland areas. These include but are not limited to:
        i. Fire weather watch;
        ii. Red Flag Warning;
        iii. Winter storm watch;
        iv. Winter storm warning;
        v. Winter weather advisory;
        vi. Thunderstorm warning;
        vii. Lightening warning;
        viii. Flood warning; and
        ix. Flash flood warning.
    c. If any wildfires occur within 5 miles of the Property all training activities shall cease immediately and Covert Canyon shall follow the procedures outlined in Appendix F of the Fire Protection Plan (see exhibit C).
    d. Covert Canyon shall not construct, use, or maintain any open fire pits or ground fires at the Property; barbeques are allowed.
7. Transportation requirements include but are not limited to:
    a. No more than a total of 45 cars shall be at the Property at one time;
    b. Covert Canyon shall construct road improvements, turnouts and turnarounds on the entry/egress road to the Property in accordance with the Fire Protection Plan (see exhibit C);
    c. Covert Canyon shall maintain High Glen Road in good condition free of ruts and obstructions;
    d. Covert Canyon shall maintain road drainage structures on High Glen Road in good working order to prevent erosion;
    e. In accordance with the Fire Protection Plan (see exhibit C) Covert Canyon shall conduct fuel modification along High Glen Road in coordination with COUNTY, County Fire Authority/ San Diego Rural Fire Protection District, and the United States Forestry Service ("USFS") which is to determine how much and whether or not USFS permits will be required.
8. Emergency services
    a. Covert Canyon shall allow access to the Property for law enforcement services, fire, and/or emergency personnel to utilize any water resource available on the property at no cost, and/or store any equipment required to assist in fire prevention or suppression.
    b. Covert Canyon shall allow the Property to be used as a base of operations during a fire emergency.

II. COMPLIANCE MEASURES

Covert Canyon shall complete the following to comply with the terms of this Stipulation:

A. Within 10 calendar days from the execution of the Stipulation, create a 300-foot Fuel Modification Zone acceptable to County Fire Authority/San Diego Rural Fire Protection District around all structures and maintain it thereafter;
B. By October 31, 2015, schedule a site visit with COUNTY Landscape Architect and complete the items described in the May 6, 2014 letter from COUNTY related to Revegetation Plan PDS2010-3968-09-001;
C. Cooperate in the processing and issuance of a discretionary Site Plan permit and associated CEQA documents and technical studies for the Governmental Military and Law Enforcement Training use described in this Stipulation, and provide any additional information required at COUNTY'S request within the specified timeframe.
D. Within 60 calendar days from the execution of the Stipulation:
    1. Submit an application for building permits for the Guest Services/Classroom building, the 40 foot by 58 foot garage and all sea cargo containers at the Property;
    2. Submit a complete and adequate application suitable for evaluation and action for a discretionary Site Plan permit for the uses described herein;
    3. Submit a Noise Assessment Report prepared by COUNTY approved consultant addressing noise impacts from all training activities, including shooting ranges. The Noise Assessment Report must include calculations showing the worst-case noise levels generated by individual noise sources and cumulative noise sources. The Noise Assessment Report shall make recommendations for mitigation measures in reducing noise levels and showing compliance with the County Noise Ordinance; and
    4. Conduct and submit to COUNTY a survey and plot plan prepared by a California licensed Land Surveyor establishing the property lines between the Property and land owned by the USFS, specifically as it pertains to the berms surrounding the shooting ranges.
E. Within 60 calendar days from the COUNTY's acceptance of the Noise Assessment Report, install wooden ricochet barriers and maintain earthen backstop berms in accordance with the Fire Protection Plan (see exhibit C) and Noise Assessment Report;
F. Within 90 calendar days from the execution of the Stipulation:
    1. Submit an application and grading plans prepared by a California licensed civil engineer for a grading permit for all existing and proposed grading on the Property;
    2. Retro-fit the classroom building with ignition-resistant construction in accordance with the County Building Code and have an NFPA 13-D sprinkler system installed with backup power; and have the improvements inspected and approved by COUNTY and County Fire Authority/San Diego Rural Fire Protection District;
    3. Complete the fuel modification as outlined in the Fire Protection Plan (see exhibit C) with permission from the USFS; and
    4. Complete turn-outs, and road improvements along High Glen Road as outlined in the Fire Protection Plan (see exhibit C) and with permission and permitting from

the USFS.

G. Within 120 calendar days from the execution of the Stipulation, implement the recommendations and mitigation measures in the approved Noise Assessment Report to COUNTY's satisfaction;
H. Within 180 calendar days from the execution of the Stipulation, obtain building permits for all existing structures at the Property;
I. Within 18 months from the execution of the Stipulation, obtain a grading permit for the grading done to create the berms at the two square shooting ranges on the Property;
J. Within 24 months from the execution of the Stipulation, submit as-built grading plans and pass all required grading inspections and obtain final inspection on the grading permit;
K. Within 365 calendar days from the execution of the Stipulation, complete all work authorized by the building permits, complete all required building inspections, and obtain a final inspection for all structures at the Property;
L. By January 31, 2018 obtain final approval of the Site Plan permit for the Property; and
M. Allow personnel from COUNTY or their designee to inspect the Property for compliance with Stipulation or Site Plan application at any time during operating hours.
N. If Covert Canyon has already completed any of the requirements contained in this stipulation to the County's satisfaction, they will not be required to duplicate those efforts.

III. MONETARY RELIEF

A. Within 30 calendar days from execution of the Stipulation, Covert Canyon shall submit $1,975.80 of processing fees previously incurred on the Property and owed COUNTY. Payment shall be in the form of a cashier's check or money order made out to the County of San Diego and mailed or personally delivered to:

The County of San Diego
Department of Planning & Development Services
5510 Overland Ave, Ste 310
San Diego, CA 92123

B. The remainder of the balance owed COUNTY, $7,000.00, is immediately suspended, and shall only be imposed if Covert Canyon fails to comply with any term of this Stipulation. COUNTY agrees to notify Covert Canyon in writing if imposition of the fees will be sought and on what basis.
C. Covert Canyon agrees to accounting of fees paid prior to this Stipulation pertaining to the MUP and related applications 12-D-07-0086991, PDS2007-3300-07-011, PDS2007-3910-0715002, PDS2009-3967-09-001, PDS2007-3921-07-002 in the amount of $122,614.14; Covert Canyon shall not request a refund of prior fees.
D. The parties shall pay their own attorneys' fees and any other costs associated with the creation of the Stipulation.
E. Within 60 calendar days from execution of the Stipulation Covert Canyon shall submit any and all fees associated with the required discretionary Site Plan permit application, and shall remain current on their account thereafter.

IV. ENFORCEMENT

A. This Stipulation will be deemed executed on the date the final signature is obtained on the document.
B. In the event of default by Covert Canyon as to any term, payment, compliance measure, or condition under this Stipulation, the uses allowed by the Stipulation shall cease immediately and the following fees will be immediately due and payable to COUNTY:
    a. The complete $8,975.80 previously incurred on the Property, or balance thereof if partial payment has been made; and
    b. Any additional fees incurred after the execution of the Stipulation relating to the processing the Site Plan permit and related permits.
C. COUNTY shall be entitled to inspect the Property for compliance with Stipulation or Site Plan application during operating hours.
D. COUNTY shall be entitled to pursue any and all remedies provided by law for the enforcement of this Stipulation.
E. Any amount in default shall bear interest at 10% per year from the date of default until paid in full.
F. Nothing in this Stipulation shall prevent COUNTY from pursuing any remedies as provided by law to subsequently enforce this Stipulation or the provisions of the SDCCRO or SDCZO, including criminal prosecution and/or civil penalties.
G. When more than one person is responsible for a violation each responsible person may be separately assessed. A person may be found responsible for different violations, or repeat violations, which are subject to separate cumulative maximums.
H. Covert Canyon agrees that any act, intentional or negligent, or any omission or failure by their contractors, successors, assigns, partners, members, agents, employees or representatives to comply with the requirements set forth in the Stipulation will be deemed to be the act, omission, or failure of Covert Canyon.
I. In the event of default by Covert Canyon as to any term, payment, compliance measure or condition under this Stipulation COUNTY has a right to rescind this Stipulation.
J. In the event a Site Plan permit is abandoned or not issued for any reason, Covert Canyon assumes the risk for and is liable for any costs incurred as a result of performing any action outlined in this Stipulation.

V. DEFENSE AND INDEMNIFICATION

A. Covert Canyon shall Defend and indemnify COUNTY, its agents, officers and employees from any claim, action, liability or proceeding against COUNTY to attack, set aside, void or annul the Stipulation or Site Plan permit or any of the proceedings, acts or determinations taken, done or made as a result of COUNTYS' processing and/or approval of the Stipulation or Site Plan permit. Covert Canyon's obligation to defend and indemnify under this Stipulation shall apply to any lawsuit or challenge against COUNTY alleging failure to comply with the California Environmental Quality Act or with the requirements of any other federal, state, or local laws, including but not limited to general plan and zoning requirements. Covert Canyon's obligations under this

Stipulation to defend and indemnify COUNTY shall include, but not be limited to, payment of all court costs and attorneys' fees, all litigation-related costs, all costs of any judgments or awards against COUNTY, and/or all settlement costs, which arise out of COUNTY's processing and/or approval of the Stipulation or Site Plan permit.

B. The COUNTY shall notify Covert Canyon or its representative promptly of any claim, action or proceeding and cooperate fully in the defense. Upon receipt of such notification, Covert Canyon shall assume the defense of the claim, action, or proceeding, including the employment of counsel reasonably satisfactory to COUNTY and Covert Canyon, and the prompt payment of the attorneys' fees and costs of such counsel. In the event of a disagreement between COUNTY and Covert Canyon over litigation issues, COUNTY shall have the authority to control the litigation and make litigation decisions, including but not limited to, settlement or other disposition of the matter. If COUNTY reasonably determines that having common counsel would present such counsel with a conflict of interest, or if Covert Canyon fails to promptly assume the defense of the claim, action, or proceeding or to promptly employ counsel reasonably satisfactory to COUNTY, then COUNTY may employ separate counsel to represent or defend the COUNTY, and Covert Canyon shall pay the reasonable attorneys' fees and costs of such counsel within 30 days of receiving an itemized billing therefor. At its sole discretion, COUNTY may participate at its own expense in the defense of any claim, action or proceeding, but such participation shall not relieve Covert Canyon of any obligation imposed by this Stipulation.

C. Covert Canyon's obligations to defend and indemnify under this Stipulation shall apply whether or not there is concurrent, active, or passive negligence on the part of COUNTY, except that Covert Canyon's obligation to indemnify shall not apply where the court finds there is gross negligence or willful misconduct by COUNTY. Covert Canyon's obligations under this Stipulation shall be effective regardless of whether any or all Site Plan permit approvals and/or actions by COUNTY regarding the Site Plan permit remain valid or are invalidated by any court.

D. Failure to promptly defend or indemnify COUNTY is a material breach which shall entitle COUNTY to all remedies available under law, including but not limited to specific performance and damages. Moreover, failure to defend or indemnify shall constitute grounds upon which COUNTY may rescind this Stipulation and its approval(s) associated with the Stipulation and/or Site Plan permit, and shall constitute a waiver by Covert Canyon of any right to proceed with the Site Plan permit or any portion thereof.

E. In the event of any claim, action or proceeding against COUNTY arising out of or relating to this stipulation or Site Plan Permit application, while continuing to fulfill its defense and indemnification obligations, Covert Canyon shall have the sole and exclusive right to withdraw the Site Plan Permit application.

F. Covert Canyon shall be and remain personally obligated to all of the terms of this Stipulation, notwithstanding any attempt to assign, delegate or otherwise transfer all or any of the rights or obligations of this Stipulation, and notwithstanding a change in or transfer of ownership of the Property (or any interest therein). However, Covert Canyon

may be released from such obligations if Covert Canyon obtains the COUNTY's prior written consent to such transfer, which consent shall not be unreasonably withheld.

Date: 10·27·15

Mark Wardlaw, Director
Department of Planning & Development Services

Date: 10/27/15

Marc Halcon, Officer
Covert Canyon, LLC

Date: 10/27/15

Approved as to form by Robert Wright, Esq.
Attorney for Covert Canyon, LLC

Enclosures:
Exhibit A: offered training classes for governmental military and law enforcement
Exhibit B: letter from COUNTY regarding first responder medic training
Exhibit C: redacted Fire Protection Plan dated October 27, 2015 pages 1-41 and appendices A-G

Offered Training
Governmental Military and Governmental Law Enforcement

Covert Canyon, LLC
19150 High Glen Road
Alpine, CA 91901

1. Basic Firearm/Handgun
2. Advanced Firearm/Handgun
3. Basic Firearm/Patrol Rifle
4. Advanced Firearm/Patrol Rifle
5. Transition Firearm training
6. Precision Rifle
7. Basic Shotgun
8. Advanced Shotgun

EXHIBIT A

ERIC GIBSON
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017
www.sdcounty.ca.gov/dplu

September 11, 2009

Marc Halcon, Manager
Covert Canyon, LLC
5590 Ruffin Rd.
San Diego, CA 92123

RE: Request for Authorization to Conduct Training
APN#521-130-08; 521-130-07; 521-130-05; 522-070-03

Dear Mr. Halcon,

I am writing in response to your letter dated August 18, 2009 in which you request that the Department allow you to conduct various activities on your property without the requirement of a discretionary permit.

Based on your descriptions, the following uses listed in your August 18, 2009 letter would not be allowed in an A72 zone without a discretionary permit. Some may not be allowed under any circumstances:

- "Security Guard classes"
- "Executive Protection classes"
- "Firearms Safety classes – basic"
- "Executive Personal Safety classes"
- "Self Defense Training"
- "Fitness Training"
- "Search and Rescue training"
- "Land Navigation"
- "Boy Scout Merit Badge"

The "First Responder Medic Classes" would not require a discretionary permit. However the activity would be required to comply with all other County codes and ordinances. Your description of the proposed training is as follows:

- *Course summary: 2 day course – prepares first responders to evaluate and treat serious trauma. Proper use of bandages, tourniquets, and homeostatic agents are topics.*

EXHIBIT B

- *Firearms use: NONE*
- *Average # of students: 12 max*
- *Traffic impact: Students transported by our staff in 2-3 SUV's*

If you have any questions regarding this letter, you may contact me at 858-495-5020.

Sincerely,

Pam Elias, Chief
Code Enforcement Division
Department of Planning and Land Use

cc: Brian Bacca, Chief, Project Planning, Department of Planning and Land Use
Case file

10/27/2015

Fire Protection Plan
Covert Canyon Training Center

(APN's 522-070-03, 521-130-05,07,08)
(Environmental Log No. 07-15-002
Project No. P07-011)

January 15, 2009 (revised April 14, 2011)
Revised to Comments May 17, 2012

Applicant: Marc Halcon
Covert Canyon LLC
19150 High Glen Road
Alpine, CA 91950

Prepared & Certified By:

David C. Bacon, President
*FIRE*WISE 2000, Inc.
26337 Sky Drive
Escondido, CA 92026
Telephone: 760-745-3947
firewise2000@sbcglobal.net

EXHIBIT C

COVERT CANYON TRAINING CENTER
FIRE PROTECTION PLAN

Table of Contents

EXHIBITS

APPENDICES

FIRE PROTECTION PLAN MAP

Covert Canyon Training Center
Environmental Log No. 07-15-002
Project No. P07-011
FIRE PROTECTION PLAN

January 15, 2009 (revised April 14, 2011)
(revised to comments May 17, 2012)

Executive Summary

The Stipulated Administrative Enforcement Order (SAEO) provides for certain interim uses, proposed site design measures and structures, review and approval processes, and compliance measures. In the event of any discrepancies between this Fire Protection Plan and the SAEO, the SAEO shall take precedence.

This project has significant interest from and inestimable value at local, state and national levels. It is intended to provide critical training opportunities for a wide spectrum of law enforcement agencies (including but not limited to Police, Sheriff, Border Patrol, U.S. Forest Service Law Enforcement, Homeland Security, etc.) and military units throughout San Diego County and the region. The density and complexity of usage at the site will be limited as follows:

1. Non-residential
2. Day use 8 to 5 o'clock with occasional night training not to exceed 10pm.
3. Limited number of students at one time, maximum ~~24~~ Trainees and 6 Instructors
4. Restricted use and not open to the general public; On-Duty Military, Local, State, and Federal Law Enforcement Officers.
5. Limited number of vehicles (not to exceed ~~8~~) in any one group.

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This Fire Protection Plan (FPP) evaluates the Covert Canyon Training Center to ensure it does not unnecessarily expose people or structures to fire risks and hazards. The FPP identifies and prioritizes the measures necessary to adequately mitigate those impacts. The FPP has considered the property location, topography, geology, combustible vegetation (fuel types), climatic conditions and fire history. It considers water supply, access, structure ignitability and fire resistive building materials, fire protection systems and equipment, impacts to existing emergency services, defensible space and vegetation management.

The project was analyzed to identify potential adverse impacts and to identify adequate measures for impacts resulting from wildland fire hazards. The evaluation determined that the San Diego Rural Fire Protection District, California Department of Forestry and Fire Protection (CAL FIRE) and the U. S. Forest Service along with nearby fire departments will be able to provide adequate emergency services. CAL FIRE (under the State Responsibility Area Agreement) as well as other fire departments and fire protection districts, can be requested under a Mutual Aid agreement to respond in the event of wildfire event in the area. No new habitable or combustible structures are planned for this project. The existing Administrative Building will be retrofitted with a code compliant residential sprinkler system.

The project will meet all applicable fire code requirements except dead-end road length and alternative access, which is infeasible. SEC. 96.1.104.8. Modifications in the San Diego County Consolidated Fire Code provides a means for a Fire Officials to grant modification to the code. This report proposes modifications which complies with the intent and purpose of the County Consolidated Fire Code of Oct 2011, and does not lessen life and fire safety requirements. The project will provide fire safety features designed to Code Standards, including:

(1) Improvements to High Glen Road for safe, organized ingress and egress by users of the Training Center and emergency responders;
(2) Two (2) 10,000 gallon water tank for fire suppression, and 3000 recently installed near Building A-1 Administrative Services;
(3) Creation and maintenance of fuel modification zones to suppress the spread of fire (the current condition provides a minimum of ~~200~~ 300 feet of fuel removal); and,
(4) Limited activities on site, improved range berms and barriers, PA and Mass Notification System (MNS), and closed circuit TV with infrared capabilities; also, a trigger system to preclude training during extreme fire danger periods.

In addition, this FPP lists fuel modification requirements to mitigate the exposure of people or structures from a significant risk of loss, injury or death from wildland fires.

Finally, this plan and its requirements will be incorporated by reference into the final project Conditions of Approval to ensure compliance with codes/regulations and significance standards.

Covert Canyon
Environmental Log No. 07-15-002
Fire Protection Plan

1.0 - INTRODUCTION

This Fire Protection Plan (FPP) has been prepared for the Covert Canyon Training Center. The purpose of the FPP is to assess the potential impacts resulting from wildland fire hazards and identify the measures necessary to adequately mitigate those impacts. As part of the assessment, the plan has considered the property location, topography, geology, combustible vegetation (fuel types), climatic conditions, fire history and the planned use of the property. The plan addresses water supply, access (including secondary/emergency access where applicable), structural ignitability and ignition resistive building features, fire protection systems and equipment, impacts to existing emergency services, defensible space and vegetation management. The plan identifies and prioritizes areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more-at-risk communities and essential infrastructures. The plan recommends measures that property owners will take to reduce the probability of ignition of structures throughout the area addressed by the plan.

2.0 PROJECT LOCATION, DESCRIPTION AND ENVIRONMENTAL SETTING

2.1 Project Location

The Covert Canyon Training Center (APN's 522-070-03, 521-130-05,07,08) is located at 19150 High Glen Road south of Japatul Road, in a rural area of San Diego County on 144 acres of private land within the Cleveland National Forest (see Photo # 1). The primary access is from Alpine, California via Tavern Road to Japatul Road to High Glen Road.

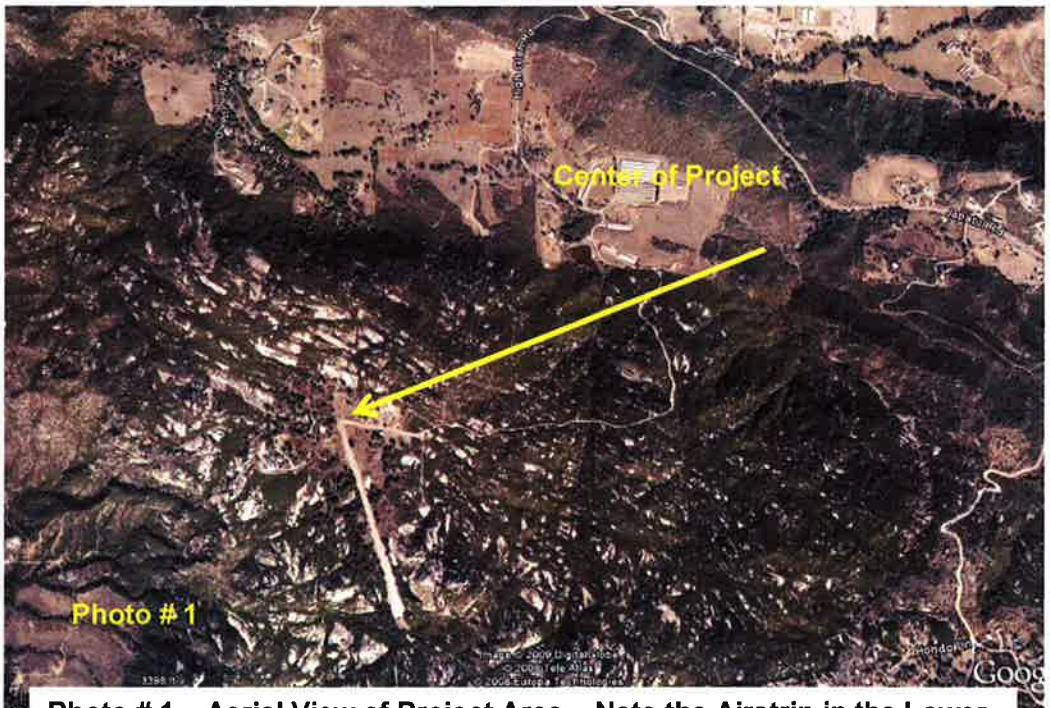

Photo # 1 – Aerial View of Project Area – Note the Airstrip in the Lower Left Portion of the Photo

2.2 Project Description

A. Purpose of Application

The purpose of the application is for a Major Use Permit to operate a training facility for on-duty personnel of local, state and federal law enforcement, branches of the United States Military and Homeland Security, and to request the cancellation of Agricultural Contract (Williamson Act Agreement, Japatul Agricultural Preserve No. 36) Please see Project Site Plan Exhibit 6.

B. Location/Property Characteristics

Covert Canyon Training Center constitutes approximately 144 acres situated along High Glen Road 1.5 miles south of Japatul Road in the Alpine Community Plan area. The property is surrounded on all sides by rural, undeveloped public lands of the Cleveland National Forest, except for one 40-acre parcel adjacent to the northwest boundary.

C. General Plan Land Use and Zoning

- General Plan Regional Categories 1.4 RDA (Rural Development Area) and 1.6 ECA (Environmental Constrained Areas);
- Land Use Designations 20 (General Agriculture) and 23 (National Forest/State Parks).
- The entire site is zoned A72 (General Agriculture) which permits the proposed ~~project as a Major Impact Service and Utility through the approval of a Major Use Permit pursuant to Section 2725.b of the San Diego County Zoning Ordinance.~~ use.

2.2.1 Existing Conditions

A. Existing Uses and Structures

The following list provides a summary of the existing uses and structures currently located on the property. All uses and structures will continue concurrently with the MUP.

- Single family home currently occupied by the owner/applicant for the proposed major use permit.
- Additional structures on the property include an accessory building, a detached garage, several small storage sheds, and steel cargo storage containers.
- Three small arms ranges, together with associated graded berms have been constructed; two near the center of the property and one offsite just south of the southern boundary
- Caretaker/Security Quarters.
- An existing FAA approved dirt landing strip, approximately 2,200 feet long is located on the property. The FAA approved this strip for operation on 04/01/1990.

B. Access

- The property is accessible from Interstate 8 via the Tavern Road exit, then approximately 2.5 miles south to Japatul Road, and approximately 4 miles east to High Glen Road. The property is located approximately 1.5 miles south of Japatul Road at 10150/19191 High Glen Road, an existing private road that provides access to the site which dead-ends at the Training Facility.
- A special use permit has been granted by the U.S Department of Agriculture (Cleveland National Forest, Use Code: 753) to access over federal lands.

- A 25-foot private road access easement; Document Number 29790 recorded February 20,1968, provides access over the project site to the adjacent 40 acres to the northwest. Although the recorded easement does not specifically define the location of the of the ingress and egress easement, historically the road easement has been located over the existing dirt road that crosses the subject property from the east to west.

C. Groundwater Use

- Water is supplied by two onsite wells: one for landscape irrigation and the other supplying a 10,000-gallon water tank providing domestic water supply and fire suppression.
- Groundwater will only be withdrawn for the following uses:
  Other uses including the existing single-family dwelling, caretaker/security Quarters and periodic occupancy of the accessory structure.
- Localized irrigation around existing structures.
- Irrigation of the areas to be restored/vegetated.
- Two abandoned wells exist on site.
- Two existing private septic systems are utilized for sewerage disposal; one serving the primary residence and one serving the accessory structure.

2.2.2 Proposed Use Areas

Refer to the SAEO for Interim Uses.

The property has been divided into four areas though only one will be used for the training activities allowed in the MUP. The four areas are as follows:

Use

~~MUP~~ Use Area (18.55 ac.): The ~~MUP use~~ area includes all activities ~~subject to the major use permit~~ including small arms Ranges A, B, and C; instruction and practice facilities ~~including the rappelling tower; ship in a box and urban training house;~~ and, parking areas.

Activities

Owner's Residential Use Area (8.62 ac.): ~~MUP activities~~ are not conducted in this area and allowed uses and structures in the area are permitted and controlled in accordance with zoning regulations. See Section 2.2.1. above for a description of existing uses and structures. Future residential uses and improvements are authorized in accordance with the zoning regulations and do not require a modification or minor deviation to the major use permit.

~~**Dedicated Archaeological and Biological Open Space (48.86 ac.):** These areas include archaeological open space easements and biological open space easements to protect and preserve sensitive onsite environmental resources as identified in the technical reports prepared for the project, including the archaeological resources technical report dated Dec. 16, 2008 and the biological resources technical report dated Jan. 2009. Open space easements may be located in any of the four use areas and would be subject to restrictions specified in the respective open space easement documents. The easement areas mitigate for biological and archaeological impacts caused by the major use permit.~~

~~**Designated Open Space (67.60 ac.):** This area is designated as open space under the approved major use permit. Designated open space is to remain in its natural state. No uses authorized under the existing major use permit and no grading or other improvements shall be permitted in this area. Future use of any portion of this area may be permitted upon modification of the major use permit and appropriate environmental review.~~

~~Refer to Sheet 1 Exhibit 6 of the Major Use Permit Plot Plan for definitions and boundaries of the activity areas listed above.~~

A. ~~Proposed MUP~~ Uses and Structures

The following uses and structures represent both existing and proposed structures that are to remain on site. Existing uses and structures shall continue being utilized in their current capacity and the proposed uses and structures are to be constructed as part of the Major Use Permit activities.

1. Existing Uses and Structures to Remain

- Single Family Dwelling (Existing owner/applicant residence)
- Detached Garage
- Accessory Structure
- Various storage sheds
- 8'X29' Sea Cargo containers (3)
- Caretaker/Security Quarters

2. Proposed Structures

- ~~40'L X 20'W X 45'H Rappel/Climbing Tower, a four-sided steel and wood clad tower used to simulate buildings or cliffs to train for multi-story building entry or cliff rescue. Tower also contains modular climbing holds for rock climbing instruction. See MUP Plot Plan for location.~~

- ~~40'L X 40'W Urban Training House, is a single-story, ballistically safe shoot house constructed of modular steel panels and rubber coated interior walls. Due to the modular construction, the shoot house may be periodically reconfigured to create varying interior scenarios. See MUP Plot Plan for location.~~

- ~~40'L X 24'W X 24'H Ship in a Box, modular steel structure used to train personnel in non-compliant maritime boarding and close quarter encounters. See MUP Plot Plan for location.~~
- ~~8'X20' Sea Cargo containers (7)~~

- Three existing small arms ranges for pistol, rifle, and shotgun. These ranges were previously approved by the Department of Defense in June 2006~~, will be reconstructed as shown on the MUP Plot Plan.~~

3. Proposed Activities

- Target practice/shooting range activities, typical small arms and shotgun target practice will occur on the ranges. ~~An average of eight (8) shooters per range will practice at a time.~~ The maximum numbers of trainees shall be ~~12~~ 30. Allowable weapons will be from 22 caliber to 50 caliber.

- ~~GPS, night vision, map navigation and thermal imaging training, used to train personnel with electronic tracking and mapping devices in both day and nighttime settings. No firearms are used for this type of training.~~

- ~~Unarmed defensive tactics~~

- ~~Escape and evade and survival training, teaches lifesaving tactics necessary to survive hostile circumstances.~~

- ~~Emergency medical evacuation/First Aid training focuses on coordination and facilitation of emergency medical evacuation during catastrophic events.~~

- ~~Urban tactics and training limited to within one 40'L X 40'W urban training house where personnel are instructed on breach entries, defense tactics and maneuverability in confined structures and close quarter skills such as room clearing.~~

- ~~Maritime breach and rescue, close quarter encounter tactical training using a 40'L X 24'W X 24'H Ship in a Box modular structure.~~

- ~~Climbing rappelling tower, training personnel in climbing and rappelling techniques used to gain entry through windows of multi-story structures, rescue and recovery from high angle positions.~~

- No night lighting is proposed with the exception of emergency lighting.

4. Training Size, Frequency and Hours of Operation

Refer to the SAEO for interim training size, frequency and hours of operation. Retain the requirement for a minimum of 1 EMT to be present during instruction/training.

The size and frequency of training classes vary by the specific needs of each agency, although all will be required to adhere to the standards outlined below.

- ~~The Maximum class size is 24 students, plus 6 instructors (Historically, class sizes have averaged 8 students)~~
- ~~A maximum of 2 classes (48 students and 8 instructors) shall be onsite at one time.~~
- A minimum of 1 EMT will be present during instruction/training.
- ~~Training activities will be permitted a maximum of 20 days per month. Training is to occur only on weekdays. Special requests for weekend training will be on a case by case basis and must be of an urgent nature attached to an upcoming operation. Hours of small arms range operations shall be between 8:00a.m. to sunset with the exception of "low light" small arms training which is anticipated not to exceed four (4) training days per month and shall not go beyond 10:00 p.m.~~
- ~~Night training classes and activities are proposed, with the specific exclusion of live fire except as noted above.~~

5. Student and Instructor Method of Arrival/Departure

Vehicular traffic to and from the Covert Canyon Training Facility is limited. Groups of trainees arrive at the facility in car/vanpools or small buses. Estimated trip generation is calculated using the following information:

- Students and instructors car/vanpool to the site, arriving in official vans and small buses, limiting trip traffic.
- For each class, a maximum of six (6) vehicles will arrive at, and depart from the property.

- Total average daily trips are estimated at 25 vehicles/day (max. class/instructor size), plus an additional 15 ADT for the existing residential use totaling 40 ADT for the entire site.

6. Existing Airstrip and Emergency Helicopter Landing Area

The existing FAA approved dirt airstrip, approximately 2,200 feet long is located on the property. The airstrip has approval from the Federal Aviation Administration (FAA) to operate, but is currently closed to fixed wing aircraft.

- The airstrip is restricted to emergency helicopter landings.
- Additional landings by emergency services personnel may be necessary for emergency extraction, fire related duties and evacuation purposes.
- The limited helicopter activity does not meet any of the three use definitions in the Zoning Ordinance relating to helicopters; heliport, helipad, or helispot.

2.3 Environmental Setting

2.3.1 Dates of Site Inspections/Visits Conducted - Two site visits were conducted between the period of September 2008, December 2008 and November 2010, as well as several telephone calls to determine pertinent information.

Site Visit & Purpose	Date
#1 Initial field visit Evaluate project and access road locations	Sept. 19, 2008
#2 Field visit Evaluate vegetation, road conditions, and fire access	Dec 3, 2008
#3 Field review w/CAL FIRE, SD County Fire Authority and applicant	Nov 17, 2010
#4 Site Visit Re-Evaluate Project Site to Comments	Oct 27, 2011

2.3.2 Topography - The project site is located in a small valley surrounded by hilly terrain in a very high fire hazard severity zone approximately thirty (30) miles inland from the ocean. Slopes on the site range from 5% - 20% and slopes adjacent to the site range between 10% and 90%. On-site elevations range from 2650 feet to 2800 feet.

2.3.3 Climate - The climate within the project area is characterized as a Mediterranean type climate with generally mild, wet (16 - 20 inches per year) winters. The bulk of the annual precipitation falls between January and March. Long, hot and very dry summer seasons frequently occur with occasional multi-year droughts.

The most critical wind pattern to the project area is an off-shore wind coming out of the north/northeast, typically referred to as a Santa Ana wind. Such wind conditions are usually associated with strong (> 60-MPH), hot, dry winds with very

low (< 15%) relative humidity. Santa Ana winds originate over the dry desert land and can occur anytime of the year; however, they generally occur in the late fall (September through November) when non-irrigated vegetation is at its lowest moisture content.

The typical prevailing summer time wind pattern is out of the south or southwest. These winds are normally of a much lower velocity (5-15 MPH with occasional gusts to 30-MPH) and associated with higher relative humidity readings (> 30% and frequently more than 60%) due to a moist air on-shore flow from the ocean.

All other (northwest, south, west) wind directions may be occasionally strong and gusty. However, they are generally associated with cooler moist air and have higher relative humidity (> 40%). They are considered a serious wildland fire weather condition when wind speeds reach > 20-MPH.

2.3.4 On and Off Site Vegetation – The project area consists of several native plant communities of which southern mixed chaparral and oak grassland are the predominant vegetation types. Species found in the area include lemonade berry,

Photo #2 – Heavier Chaparral Vegetation on the North and East Sides of the Project.

Photo #3 – Looking Southwest Across the Interior of the Project.

Ceanothus, chamise, manzanita, black sage, laurel sumac, California buckwheat, interior scrub oak live oak, toyon, and native and non-native grasses (see Photo #3). If left undisturbed the natural vegetation in the project area on the north and east facing slopes can be characterized as a Fuel Model 4 (Chaparral with 1 hour fuels of 5 tons/acre and 10 hours fuels of 4 tons/acre).

The interior of the project area, where the Training Center activities are planned, is mostly grass with widely scattered oak trees and shrub species (see Photo # 4). It can be characterized as a Fuel Model gs 2 (Moderate Load Dry Climate Grass/Shrub with 1 hour fuels of .5 tons/acre and 10 hour fuels of .5 tons/acre).

The most notable wildland fire threat to this project is from firebrands and burning embers from highly flammable native and non-native vegetation off-site and along the northern and eastern boundary areas. Direct flame impingement would be possible in areas traversed by the access road.

2.3.5 Fire History - The available data suggests that in the second half of the 20th Century the frequency of small fires increased in southern California while their average size

decreased. In San Diego County this has resulted in an increased rate of burning in low elevation coastal scrubland, especially the coastal sage scrub formation near the urban development areas. It also indicates over 600 fires in the foothills and mountains from 1910-1999. Recently, however, several years of drought have contributed to major fires (in excess of 50,000 acres) that have swept through San Diego County resulting in large losses of property and damaged watershed.

Several large fires burned through the project area prior to 1970. No large fires have burned through the project area since that time but several fires have occurred north of the project since 1992. These were the Loveland Fire in 1992 (shown as green cross-hatched on Figure 1) and the Horse Fire in 2006 (shown as pink cross-hatched on Figure 1). The Loveland Fire burned 2081 acres and the Horse Fire burned 16,677 acres.

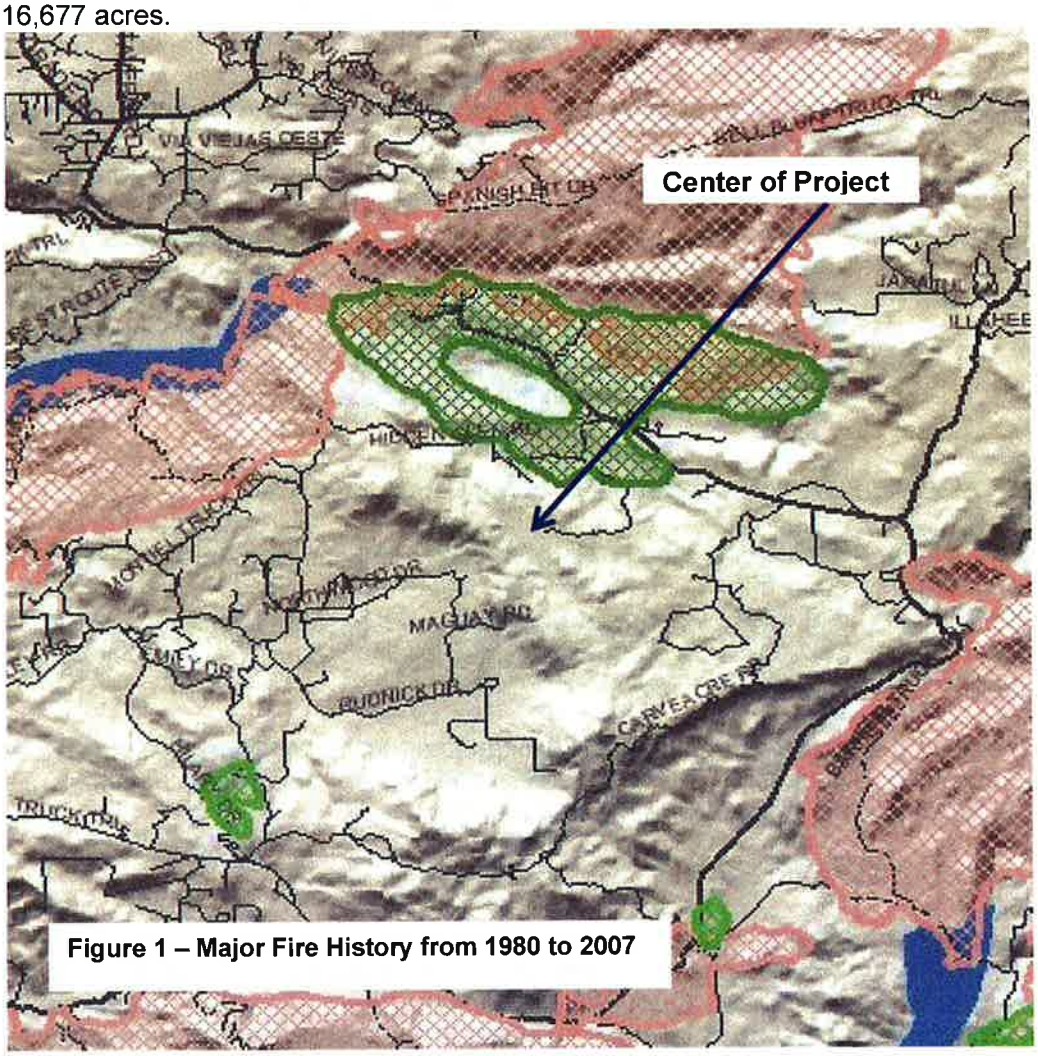

Figure 1 – Major Fire History from 1980 to 2007

2.3.6 On-site and Off-site Land Uses - The existing site is already developed with a single family home, accessory building, several storage buildings. Past usage consisted of training military, local, state and federal law enforcement in the use of weapons. The estimated daily usage will consist of 45 adts. There is no evidence of previous agricultural activity except for possible grazing and the surrounding land is either national forest land or undeveloped except for a 40 acre private parcel that

abuts the northwest boundary and contains another residence that is not a part of this project. The proposed project is strictly private, and is not open to the general public.

There is an existing 2,200 feet long dirt landing strip. The airstrip has approval from the Federal Aviation Administration (FAA) to operate, but is currently closed to fixed-wing aircraft. It is restricted to emergency helicopter landings. The airstrip is maintained and could be used as an emergency landing area for aircraft or for helicopter staging areas during wildfires.

2.3.7 Public and Private Ownership of Land in the Vicinity - The applicant owns all property within the project site. There are existing developed private parcels with residences along the first mile of High Glen Road between Japutal Road and the Cleveland National Forest boundary. These properties are not within the limits of the site. All other properties surrounding the facility are National Forest with the exception of a 40 acre private parcel adjacent to the northwest boundary. A 25-foot private road access easement; Document Number 29790 recorded February 20, 1968, provides access over the project site to this adjacent 40 acres. Although the recorded easement does not specifically define the location of the of the ingress and egress easement, historically the road easement has been located over the existing dirt road that crosses the Covert Canyon property from the east to west. A recent request to improve the special use permit private road access on the National Forest has been submitted to the Cleveland National Forest by the applicant. Should this request be approved, additional road improvements within the permitted special use area could be possible within the scope of the agreement.

3.0 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

A Fire Protection Plan evaluates the potential adverse environmental effects that the Covert Canyon development may have from wildland fire and proposes appropriate mitigations for any adverse impacts to ensure that this development does not unnecessarily expose people or structures to a significant risk of loss, injury or death in regard wildland fire. The following guidelines for the determination of significance are used:

1. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

2. Would the project result in inadequate emergency access?

3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance service ratios, response times or other performance objectives for fire protection?

4. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

4.0 ANALYSIS OF PROJECT EFFECTS

The project demonstrates compliance, or offers the 'Alternative Materials, Design and Methods', with applicable fire regulations, including but not limited to the California Fire Code, California Code of Regulations, County Fire Code, or the County Consolidated Fire Code.

The comprehensive Fire Protection Plan and the project design are consistent with the San Diego County DPLU recommendations including fuel modification.

The project meets the emergency response objectives identified in the Public Facilities Element of the County General Plan or provides for a request of the code through modification.

4.1 Adequate Emergency Services

The project site is located within the California Department of Forestry and Fire Protection (CAL FIRE) State Responsibility Area (SRA) lands for wildland fire protection. The U. S. Forest Service is responsible for wildland fire suppression on the National Forest lands surrounding the project. Structural fire protection and emergency services for the project site is provided by the San Diego Rural Fire Protection District (SDRFPD).

The closest fire station is SDRFPD Station #45, located at 9718 River Road in Descanso, approximately eleven and eight tenths (11.8) miles from the project site. Using NFPA Standard 1142 (2007 ed.) Table C1.11 (b) the expected emergency travel time to the project site from this station is estimated at nineteen (19) minutes. The next closest fire station is the CAL FIRE Lyons Valley Fire Station #32 located at 17759 Skyline Truck Trail in Jamul, approximately twelve and one-half (12.5) miles from the project. Estimated response time from this station to the site is approximately twenty (20) minutes according to NFPA Standard 1142 (2007 ed.) Table C1.11 (b). Under either Automatic Aid or the State Mutual Aid Agreement other nearby Fire Departments, the U.S. Forest Service and CAL FIRE will respond to structure fires depending on staffing patterns in the area. The project would not directly result in the expansion of area fire protection services. CAL FIRE (under the SRA Agreement) and the U.S. Forest Service can request other fire departments under Mutual Aid agreement to respond to wildfire events. They are approximately 20 - 30 minutes away from the project site.

4.2 Access Roads and Gates

Major portions of the road are non-code compliant the following descriptive narrative provides detailed constraints that exist along the roadway. The narrative includes discussion of the Zoning which directly effects project dead-end road length.

4.2.1 Existing Access Conditions:

The project site is located on and at the terminus of High Glen Road, a private road. High Glen Road is accessed by public roads from Interstate 8 via the Tavern Road exit, continuing approximately 2.5 miles south to Japatul Road, and then 4 miles further southwest on Japatul Road to High Glen Road.

From its intersection with Japatul Road, High Glen Road southerly to the project site is a graded, dirt road, 1.90 miles in length and traverses both privately-owned land and public lands. The graded width of the travel way varies from 11.0 feet to as wide as 27.0 feet, with additional graded swales of varying width for drainage. Access

rights for the Project over the segment of private ownership, which separates two segments of public land within the Cleveland National Forest, is by a 20-foot wide road easement for a length of approximately 0.66 mile. Access rights to the owner/applicant of the Project over the public lands segments is by a Special Use Permit issued by the Cleveland National Forest that provides for a 14-foot wide road over 1.22 miles. **Exhibit 1 Roadway Aerial View** shows the alignment and location of High Glen Road over the two public lands segments, separated by the one private ownership segment. Refer to the **Road Data Table, Section 4.2.2**, for widths, constraints and proposed mitigation.

High Glen Road traverses lands characterized by open space on the two Cleveland National Forest segments and very low residential density, agricultural uses, and large parcel sizes ranging from 20 acres to 80 acres in the private ownership segment. In the private ownership segment, eight parcels take access from the road including the two legal parcels that compose the project site. Nine residences are located on the eight private parcels, including the applicant's residence on the project site. Five of the eight privately owned parcels are shown on assessor's records to be under agricultural preserve contract, including one parcel of the project site. **Exhibit 2, Zoning and Exhibit 3, Land Use Designation** delineate the existing zoning and general plan land use designation of all parcels along the alignment of High Glen Road.

The combination of the land use designation and zoning precludes further subdivision of any of the parcels to create additional parcels and additional residential units. In addition, the effective result of the combination of land use designation, zoning, and agricultural preserve contract limits potential residential development at a density well below one dwelling unit per 40 acres.

The following table summarizes by Assessor Parcel Number the existing parcel size, ownership, general plan land use designation, zoning, and whether an agricultural preserve contract is in place for the parcels that access High Glen Road.

APN	Ownership	Existing Parcel Size	Land Use Designation	Zoning	Ag. Preserve Contract
522-070-03	Project	40.0 ac	RL -40	A72 (8)	No
521-130-05	Project	38.5 ac	RL -40	A72 (40)	No
521-130-07	Project	40.0 ac	RL -40	A72 (40)	No
521-130-08	Project	40.0 ac	RL -40	A72(40)	Yes
521-130-06	Private	40.0 ac	RL-40	A72(40)	Yes
521-130-04	Private	20.0 ac	RL-40	A72(8)	Yes
523-130-09	Public	312.6 ac	National Forest and State Parks	A72(40)	No
523-130-08	Private	81.0 ac	RL-40	A72(40)	Yes
524-010-01	Private	40.4 ac	RL-40	A72(8)	No
524-010-02	Private	80.0 ac	RL-40	A72(8)	No
524-010-08	Public	490.7 ac	National Forest and State Parks	A72-(8)	No
524-061-03	Private	41.5 ac	RL-40	A72(40)	Yes

Note: Project Assessors Parcels 522-070-03, 521-130-05 and 07 constitute one of two legal parcels that comprise the project site.

Each of the two segments of High Glen Road over Cleveland National Forest land and the privately-owned segment are described in further detail below. Refer to **Exhibit 4 High Glen Road** which shows the alignment and features along High Glen Road by road station from Japatul Valley Road to the Project site.

Segment 1 - High Glen Road from Japatul Road Southerly 1,150 Feet (to Station 11 + 50)

The first segment of High Glen road traverses approximately1150 feet through the Cleveland National Forest (CNF) and is authorized by the Special Use Permit from the CNF that provides for a 14-foot roadway width. As indicated on Sheet 1 of Exhibit 4 the existing graded travel way varies from 17.5 feet to 27 .0 feet wide, plus additional graded width on the sides for drainage swales. The road grade varies from 10% to 14%. The road surface is in good condition and the road has been recently re-graded and re-surfaced with disintegrated granite by SDG&E. The road edges are lined with brush on both the up-hill side and down-hill side of the road. Most of the road is lined by either a steep cut bank on the up- hill side and a falling slope of 2:1 on the down-hill side, except for flat areas on both sides near Japatul Road. There are no trees or brush that restrict overhead clearance.

Segment 2 –From Segment 1, southerly 3,500 Feet to Station 46 + 50

The second segment of High Glen Road traverses approximately 3,500 across privately owned land, providing access to six existing parcels, containing seven residences. As indicated on Sheets 1 and 2 of Exhibit 4 the dirt road has a graded width that varies from 11 feet wide to 20 feet wide within a road easement of 20 feet wide, with a majority of the roadway between 13 to 16 feet wide. Road grades along this segment are generally flat to slightly sloping (under 10%), except for one area at the northerly portion near the end of Segment 1 where grades range from 13% to 17.5% for approximately 300 feet. The road surface is good and well maintained over most of this road segment.

Road edges are generally flat, except for a berm along one edge for 200 feet between stations 33 + 00 to 35 + 00 and where the road crosses a culvert over a small drainage at Station 27 +00. Concrete headwalls line the edge of the roadway at this location. Except as noted, the road edge conditions generally pose no constraint to additional widening to the allowed easement width of 20 feet.

Trees along the roadway are limited to the culvert crossing. These have been trimmed and do not limit overhead clearance.

Segment 3 –From Segment 2, southerly 5,320 Feet to Project Boundary (Station 99 + 70)

The third segment of High Glen road traverses 5,320 feet through the Cleveland National Forest (CNF) and is authorized by the Special Use Permit from the CNF that provides for a 14-foot wide road access. This segment starts at a gate (lower gate) installed and owned by the Project Applicant and traverses the CNF property to the boundary of the project site, where another gate is located. In addition to the Project with its existing residence, this segment provides access to one additional parcel with a residence to the northwest of the Project, for a total of two of the nine residences that utilize High Glen Road for access.

As indicated on Sheet 3 of Exhibit 4 the dirt road has a graded width that varies from 13 feet to 28 feet wide, with additional graded width provided along the sides of the roadway for drainage swales. The predominate graded road width is approximately 16 feet. There are several areas along the road where graded width widens to 19 feet and greater. Road grades vary from virtually flat to 23%. The predominate grade is approximately 15% over large portions of this segment. Two sections, each

approximately 200 feet long, are 21% to 23%, located at Station 60 + 50 to 62 + 50 and Station 97 + 50 to 99 + 50.
As shown on Sheet 3 of Exhibit 4 much of the road edges are lined with brush on both the up-hill side and down-hill side of the road. The road is lined by steep cut banks on the up- hill side with down-slopes, as steep as 1:1 on the downhill side. Boulders line several locations along the roadway. There are no trees or brush that restrict overhead clearance.
The steep up-hill and down-hill slopes and boulders preclude additional widening along much of the road.

4.2.2 Proposed Road Access Improvements

Both topographic and right-of-way constraints restrict the Applicant's ability to widen and improve much of the High Glen Road access to meet emergency and fire access standards customarily applied to development projects. However, given the low intensity and transitory nature of the training activities proposed by the project, and the number and nature of the participants that will participate in the training activities, the following ~~four~~ three areas of roadway improvements are proposed to improve emergency access commensurate to the level of increased use of the road and threat to participants resulting from the proposed use. The ~~four~~ three areas are: ~~1) Graded improvement width and surfacing;~~ 2) Turnarounds and Turnouts; 3) Signage; and 4) Brush Management. These improvements, while providing safer conditions for the Project's training participants, will also greatly enhance emergency access conditions for all of the residents along High Glen Road, particularly to residences at the end of High Glen Road. These road improvements vary between the three road segments as previously identified. Refer to **Exhibit 4, High Glen Road by Segment**, that details existing road conditions by road section and **Exhibit 5, High Glen Road-Turnaround, Turnout & Signage Locations** that provide all of the turnaround, turnout and signage locations.

The SAEO does not require right of way, graded width and surfacing requirements on the three segments of roadway.

~~**Right-of-Way, Graded Improvement Width and Surfacing**~~

~~The following improvements are proposed that widen the graded width and improve the surfacing of the travel way along High Glen Road. The level of improvements differ by road segment as previously identified in the existing conditions discussion, depending upon available right-of-way, topography, and other conditions. Turnarounds, turnouts and signage are provided in part as mitigation, together with other project features, for sections along the road where road width and grade can not be improved to meet fire access standards due to constraining topographic or right-of-way conditions.~~

~~The Road Data Table provided for each segment below identifies where widening and surfacing will occur and where specific turnaround or turnout locations are to be located, that when coupled with signage and enhanced surfacing, provide for mitigation for the roadway condition, commensurate with the characteristics and intensity of the use proposed by the project. NC indicates that no change is proposed in graded road width, S & R indicates sheer and rocky, N/A indicates not applicable, and N indicates no mitigation required.~~

Segment 1

~~No additional widening beyond current conditions for the graded width is proposed in Segment 1. However, it is proposed that the existing Special Use Permit be modified to increase the right-of-way width from 14 feet as currently specified in the Special Use Permit to match the existing graded width. This would entail an increase from~~

~~14 feet to the existing widths ranging from 17.5 feet to 27 feet as delineated in Exhibit 4, Sheet 1.~~
~~The road surface would be improved by application of a non-toxic, biodegradable binding agent, such as Poly Pavement or equivalent, to the existing DG road surface to all portions of the road over 15% grade.~~

One turnout location with signage as indicated in the Road Data Table is proposed and is further discussed in the appropriate section below.

ROAD DATA TABLE – SEGMENT 1

STA.	EXIST. ROAD WIDTH	PROP. GRADED ROAD WIDTH	Bank Obstruction LEFT	Bank Obstruction RIGHT	Mitigation Required	Mitigation
0+00	+80'	NC	N/A - FLAT	N/A - FLAT	N	
1+00	19.0'	NC	N/A - FLAT	3:1 RISING SLOPE	N	
2+00	22.0'	NC	N/A - FLAT	3:1 RISING SLOPE	N	
3+00	24.0'	NC	N/A - FLAT	3:1 RISING SLOPE	N	
4+00	27.0'	NC	N/A - FLAT	N/A - FLAT	N	
4+50			--			TURNOUT #1
5+00	26.0'	NC	S&R CUT SLOPE	3:1 FALLING SLOPE	N	
6+00	21.0'	NC	S&R CUT SLOPE	2:1 FALLING SLOPE	N	
7+00	22.0'	NC	S&R CUT SLOPE	2:1 FALLING SLOPE	N	
8+00	20.0'	NC	S&R CUT SLOPE	2:1 FALLING SLOPE	N	
9+00	21.5'	NC	S&R CUT SLOPE	2:1 FALLING SLOPE	N	
10+00	20.0'	NC	S&R CUT SLOPE	2:1 FALLING SLOPE	N	
11+00	20.5'	NC	S&R CUT SLOPE	3:1 FALLING SLOPE	N	

Segment 2

~~The graded width in Segment 2 would be widened to 20 feet, less necessary side slopes to keep all grading within the 20-foot wide private road easement. Travel way width at the culvert in the drainage crossing would be maintained as is however.~~
~~The road surface would be improved by application of a non-toxic, biodegradable binding agent, such as Poly Pavement or equivalent, to the existing DG road surface at all portions of the road over 15% grade.~~

~~Three~~ Two turnarounds ~~and one turnout with signage~~ are ~~also~~ proposed as mitigation and locations are identified in the Road Data Table. These are discussed further in the appropriate section below.

ROAD DATA TABLE – SEGMENT 2

STA.	EXIST. ROAD WIDTH	PROP. GRADED ROAD WIDTH	Bank Obstruction LEFT	Bank Obstruction RIGHT	Condition Requiring Mitigation	Mitigation
12+00	24.5'	NC	S&R CUT SLOPE	FLAT - ROCKS	N	
13+00	19.5'	NC	1:1 CUT SLOPE	3:1 CUT SLOPE	N	
14+00	17.5'	NC	1:1 CUT SLOPE	2:1 CUT SLOPE	N	
15+00	23.0'	NC	N/A- FLAT	N/A - FLAT	N	
16+00	36.0'	NC	N/A- FLAT	N/A - FLAT	N	
16+50	--	--	--	--		~~TURNAROUND #1~~
17+00	13.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
18+00	11.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
19+00	11.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
20+00	11.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
21+00	13.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
22+00	13.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
23+00	15.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
24+00	13.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
25+00	14.0'	~~20.0'~~ NC	N/A- FLAT	BOULDERS - FLAT	N	
26+00	20.0'	**	N/A- FLAT	N/A - FLAT	N	
26+50	--	--	--	--		TURNAROUND #2
27+00	11.0'	NC	CULVERT CROSSING*	CULVERT CROSSING*	Road width	
28+00	17.5'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
28+50	--	--	--	--		~~TURNOUT #2~~
29+00	12.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
30+00	14.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
31+00	15.0'	~~20.0'~~ NC	N/A- FLAT	3' BERM	N	
32+00	16.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
33+00	12.0'	~~20.0'~~ NC	N/A- FLAT	8' BERM	N	
34+00	14.0'	~~20.0'~~ NC	N/A- FLAT	8' BERM	N	
35+00	13.0'	~~20.0'~~ NC	N/A- FLAT	8' BERM	N	
36+00	13.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
37+00	18.0'	~~20.0'~~ NC	N/A- FLAT	N/A - FLAT	N	
38+00	13.0'	~~20.0'~~ NC	N/A - FLAT	N/A - FLAT	N	
39+00	14.0'	~~20.0'~~ NC	N/A - FLAT	N/A - FLAT	N	
40+00	15.0'	~~20.0'~~ NC	N/A - FLAT	N/A - FLAT	N	
41+00	15.5'	~~18.0'~~ NC	SLOPE	N/A - FLAT	Road width	
42+00	12.0'	~~20.0'~~ NC	N/A - FLAT	N/A - FLAT	N	
43+00	12.0'	~~20.0'~~ NC	N/A - FLAT	N/A - FLAT	N	

STA.	EXIST. ROAD WIDTH	PROP. GRADED ROAD WIDTH	Bank Obstruction LEFT	Bank Obstruction RIGHT	Condition Requiring Mitigation	Mitigation
43+50	--	--	--	--		TURNAROUND #3
44+00	11.0'	~~12.0'~~ NC	N/A - FLAT	POND	Road width	
45+00	14.0'	NC	12' BERM	POND	Road width	
46+00	15.5'	NC	N/A - FLAT	POND	Road width	

Segment 3

~~In Segment 3, the graded width of the road will remain as it exists except as necessary to provide a travel way width of 16 feet. The existing Special Use Permit will be modified to increase the right of way width from 14 feet as currently specified to a minimum of 16 feet or larger to match the existing graded width, up to 28 feet wide as delineated in Exhibit 4, Sheet 3. Additional width to accommodate proposed turnarounds and turnouts will also be provided.~~

~~Surfacing on road grades in excess of 20% shall be improved with compacted road base material composed of three quarter inch crushed aggregate and disintegrated granite coupled with an application of a non toxic, biodegradable binding agent, such as Poly Pavement or equivalent, and contained by a redwood header or equivalent border. Grades over 15% shall be also be improved with the application of the binding agent.~~

Four turnarounds and three turnouts with signage are proposed. These are discussed in the appropriate section below.

ROAD DATA TABLE – SEGMENT 3

STA.	EXIST. ROAD WIDTH	PROP. GRADED ROAD WIDTH	Bank Obstruction LEFT	Bank Obstruction RIGHT	Condition Requiring Mitigation	Mitigation
47+00	18.0'	NC	N/A - FLAT	N/A - FLAT	Road width	
47+00	--	--	--	--		TURNOUT #3
48+00	15.0'	~~16.0'~~ NC	N/A - FLAT	N/A - FLAT	Road width	
49+00	13.0'	~~16.0'~~ NC	N/A - FLAT	N/A - FLAT	Road width	
50+00	12.0'	~~16.0'~~ NC	N/A - FLAT	N/A - FLAT	Road width	
51+00	13.0'	~~16.0'~~ NC	N/A - FLAT	N/A - FLAT	Road width	
52+00	16.0'	NC	N/A - FLAT	N/A - FLAT	Road width	
53+00	25.0'	NC	N/A - FLAT	N/A - FLAT	N	
53+00	--	--	--	--		TURNAROUND #4
54+00	20.0'	NC	3:1 RISING SLOPE	4:1 FALLING SLOPE	N	
55+00	16.5'	NC	S&R CUT SLOPE	4:1 FALLING SLOPE	Road width	
56+00	19.0'	20 NC	3:1 RISING SLOPE	S&R CUT SLOPE	N	

STA.	EXIST. ROAD WIDTH	PROP. GRADED ROAD WIDTH	Bank Obstruction LEFT	Bank Obstruction RIGHT	Condition Requiring Mitigation	Mitigation
57+00	28.0'	NC	4:1 RISING SLOPE	1:1 FALLING SLOPE	N	
57+00	--	--	--	--		TURNAROUND #5
58+00	24.0'	NC	3:1 RISING SLOPE	1:1 RISING SLOPE	N	
59+00	21.0'	NC	1:1 FALLING SLOPE	S&R CUT SLOPE	N	
60+00	15.0'	~~16.0'~~ NC	1:1 FALLING SLOPE	S&R CUT SLOPE	21% to 23% grade & Road width	Enhanced surfacing
61+00	16.0'	NC	1:1 FALLING SLOPE	S&R CUT SLOPE	21% to 23% grade & Road width	Enhanced surfacing
62+00	19.5'	NC	1:1 FALLING SLOPE	S&R CUT SLOPE	21% to 23% grade	Enhanced surfacing
63+00	17.0'	NC	1:1 FALLING SLOPE	S&R CUT SLOPE	Road width	
64+00	16.5'	NC	1:1 FALLING SLOPE	S&R CUT SLOPE	Road width	
65+00	17.5'	NC	1:1 FALLING SLOPE	1:1 RISING SLOPE	Road width	
66+00	19.0'	NC	1:1 FALLING SLOPE	S&R CUT SLOPE	Road width	
67+00	16.0'	NC	1:1 FALLING SLOPE	4:1 RISING SLOPE	Road width	
68+00	19.5'	NC	N/A- FLAT	S&R CUT SLOPE	Road width	
69+00	18.5'	NC	5:1 RISING SLOPE	N/A - FLAT	Road width	
70+00	27.5'	NC	2:1 FALLING SLOPE	S&R CUT SLOPE	N	
70+00	--	--	--	--		TURNOUT #4
71+00	16.5'	NC	2:1 RISING SLOPE	3:1 RISING SLOPE	Road width	
72+00	19.0'	NC	S&R CUT SLOPE	N/A - FLAT	Road width	
73+00	15.5'	~~16'~~ NC	BOULDERS - FLAT	2:1 FALLING SLOPE	Road width	
74+00	17.0'	NC	1:1 RISING SLOPE	5:1 FALLING SLOPE	Road width	
75+00	15.5'	~~16'~~ NC	1:1 RISING SLOPE	2:1 FALLING SLOPE	Road width	
76+00	16.5'	NC	S&R CUT SLOPE	3:1 FALLING SLOPE	Road width	
77+00	18.0'	NC	2:1 RISING SLOPE	2:1 FALLING SLOPE	Road width	

STA.	EXIST. ROAD WIDTH	PROP. GRADED ROAD WIDTH	Bank Obstruction LEFT	Bank Obstruction RIGHT	Condition Requiring Mitigation	Mitigation
78+00	13.0'	~~16~~ NC	3:1 RISING SLOPE	5:1 FALLING SLOPE	Road width	
79+00	16.0'	NC	BOULDERS - FLAT	N/A - FLAT	Road width	
80+00	15.5'	~~16.0'~~ NC	1:1 FALLING SLOPE	3:1 FALLING SLOPE	Road width	
81+00	16.0'	NC	1:1 FALLING SLOPE	1:1 FALLING SLOPE	Road width	
82+00	19.5'	NC	3:1 RISING SLOPE	3:1 FALLING SLOPE	Road width	
82+50	--	--	--	--	--	TURNAROUND #6
83+00	21.0'	NC	1:1 RISING SLOPE	1:1 FALLING SLOPE	N	
84+00	15.0'	~~16.0'~~ NC	1:1 RISING SLOPE	1:1 FALLING SLOPE	Road width	
85+00	15.0'	~~16.0'~~ NC	1:1 RISING SLOPE	1:1 FALLING SLOPE	Road width	
86+00	15.0'	~~16.0'~~ NC	1:1 RISING SLOPE	1:1 FALLING SLOPE	Road width	
87+00	13.5'	~~16.0'~~ NC	1:1 RISING SLOPE	1:1 FALLING SLOPE	Road width	
88+00	14.5'	~~16.0'~~ NC	1:1 RISING SLOPE	1:1 FALLING SLOPE	Road width	
89+00	20.0'	NC	1:1 RISING SLOPE	N/A - FLAT	N	
89+50	--	--	--	--		TURNOUT #5
90+00	14.5'	~~16.0'~~ NC	1:1 RISING SLOPE	3:1 FALLING SLOPE	Road width	
91+00	14.0'	~~16.0'~~ NC	N/A - FLAT	1:1 FALLING SLOPE	Road width	
92+00	16.0'	NC	4:1 RISING SLOPE	ROCKS - FLAT	Road width	
93+00	18.0'	NC	S&R CUT SLOPE	5:1 FALLING SLOPE	Road width	
94+00	16.0'	NC	S&R CUT SLOPE	N/A - FLAT	Road width	
95+00	17.0'	NC	3:1 RISING SLOPE	1:1 FALLING SLOPE	Road width	

STA.	EXIST. ROAD WIDTH	PROP. GRADED ROAD WIDTH	Bank Obstruction LEFT	Bank Obstruction RIGHT	Condition Requiring Mitigation	Mitigation
96+00	18.5'	NC	2:1 FALLING SLOPE	1:1 RISING SLOPE	Road width	
96+00	--	--	--	--	Road width	TURNAROUND #7
97+00	16.5'	NC	1:1 FALLING SLOPE	S&R CUT SLOPE	21% to 23% grade & Road width	Enhanced surfacing
98+00	15.5'	~~16.0'~~ NC	1:1 RISING SLOPE	1:1 RISING SLOPE	21% to 23% grade & Road width	Enhanced surfacing
99+00	19.0'	NC	N/A - FLAT	3:1 FALLING SLOPE	21% to 23% grade & Road width	Enhanced surfacing
99+90	+30'	NC	GATE	GATE		

Turnarounds and Turnouts

To reduce the potential for vehicular traffic blocking or otherwise delaying a response by emergency equipment and personnel and to improve the capacity of High Glen Road during potential evacuations, road turnouts and turnarounds are proposed six along the length of the road. These are provided, in-part with other project measures, as mitigation for non-compliant sections of the road. A total of ~~seven~~ turnarounds four and ~~five~~ turnouts are proposed. The locations of the turnarounds and turnouts are shown on the Data Table above for each road segment and described below. The locations were selected close to constrained sections along the road where topographic conditions allowed. Exhibit 5 is an aerial photo that shows all of the locations of the turnarounds and turnouts along High Glen Road.

Travelers along the road would be advised of the locations of the turnouts and turnarounds by signage placed at appropriate intervals along the road. Signage content and locations are discussed further under Signage that follows.

Segment 1

One turnout would be provided on Segment 1 at the wide point in the turn in the road at Station 4 + 50, 450 feet southerly of Japatul Road.

Two

Segment 2

~~Three~~ turnarounds ~~and one turnout~~ are proposed along Segment 2. These are proposed at wider locations along the road where driveways or road easements intersect High Glen Road. The locations of these are: ~~Station 16 + 50~~; Station 26 + 50; ~~28 + 50,~~ and Station 43 + 50.

Segment 3

Four turnarounds and three turnouts are proposed along Segment 3, spaced at roughly equal distances of approximately 1,400 feet apart. These are located at: Station 53 + 00 (lower gate); Station 57 + 00; Station 70 + 00; Station 82 + 50; 89 +50, and Station 96 + 00.

Signage

Signs that inform drivers of turnouts or turnarounds ahead will be installed along the High Glen Road, approximately 300 feet in each direction from a turnout or turnaround. In addition, a sign will be located on High Glen Road, just south of its intersection with Japatul Road that will advise drivers about High Glen Road and its

length, width, grade, and the presence of turnarounds along the road. Refer to Exhibit 5 for these locations. Signage will conform to San Diego Design Standards in size and lettering.

Suggested wording, which will be finalized with the fire official and the Cleveland National Forest, is: "Caution – Be advised High Glen Road is a private road with intermittent steep grades and a narrow travel way. Maintain a safe speed at all times. Designated turnarounds and turnouts are located at regular intervals. Use designated turnarounds and turnouts to yield to emergency vehicles or on-coming traffic where necessary."

Roadway Brush Management/Maintenance

Brush shall be thinned along each side of High Glen Road in accordance with County Fire Regulations or as specified by the Fire Official Having Jurisdiction.

15

Road ways will be maintained with ~~20~~ foot of maintenance ~~in these areas that are not federal lands. Federal lands shall be maintained with 15 ft of roadside maintenance~~.

Gating Requirements

Covert Canyon gate (station 99+90 Exhibit 4) will be replaced with a solar powered automatic gate 25 feet in width. The Gate at station 53+50 Exhibit 4 is on U.S. Forest Service lands and will remain as constructed. The existing gates plus any future gates that may be installed must be equipped with an approved padlock or "Knox" key box ("Knox" padlock, or "Knox" weather resistant lock box, for use with a "Knox" sub-master key) or "Knox" box electronic access system. If an electronic access system is installed it must be equipped with approved emergency key-operated switches overriding all command functions and opening the gate(s). Upon activation of the key switch, the gate (egress and ingress) shall open and remain open until returned to normal operation by means of the key switch. The key switch shall be readily visible and unobstructed. The "Knox" box must be placed in a conspicuous location and clearly labeled with a permanent red sign with not less than ½" contrasting letters reading "FIRE DEPT" or with a "Knox" decal. Installed electronic access system devices must be approved by the San Diego County Fire Marshal, which will activate the gate on the approach of emergency apparatus with a battery back-up or manual mechanical disconnect in case of power failure. Automatic gates shall allow egress without the use of codes or remote devices (e.g., the use of pressure pads, metal detection or infrared sensors).

4.3 Water Supply

The project obtains its water supply from two onsite wells: one for landscape irrigation and the other supplying a 10,000-gallon water tank providing domestic water supply and fire suppression. The owners shall be required to store 10,000 gallons of water dedicated for fire protection as per Table No.903.3.2 from the San Diego County Consolidated Fire Code. ~~An additional 10,000 gallons of water will be stored in the vicinity of the small arms range.~~ When exposure distance is one hundred feet (100') or less from adjacent property, an increase in water storage may be required by the County Fire Marshal.

During the interim use allowed by the SAEO Covert Canyon will provide a mobile, 500 gallon water tank in the vicinity of the small arms range.

TABLE NO. 903.3.2.			
Building Square Feet	Gallons Per Minute Water Flow	Capacity Gallons	Duration Minutes
Up to 1,500 Over 1,500	250 250	5,000 10,000	20 40

1. Tank elevation shall be equal to or higher than the fire department connection on the premises. Regardless of domestic use, all tanks shall be equipped with a device that will ensure that the tank contains the designated amount of water for fire flow duration as determined by the fire department. Tank size may be increased to serve multiple structures on a single parcel.

2. Supply outlet shall be at least 4 inches in diameter from the base of the tank to the point of outlet at the fire department connection. The fire department connection shall be at least one 4-inch National Standard thread (male). Additional outlets may be required.

3. Location of fire department outlet to be determined on the plot plan when submitted to the fire department. Consideration will be given to topography, elevations, and distance from structures, driveway access, prevailing winds, etc.

4. The outlet/fire department connection shall be located along an access roadway and shall not be closer than 50 feet or further than 150 feet from residential structures.

5. All exposed tank supply pipes shall be of an alloy or other material listed for above ground use. Adequate support shall be provided.

6. Water storage tanks shall be constructed from materials approved by the Fire Marshal and installed per manufacturer recommendations.

7. The Fire Marshal may require any necessary information to be submitted on a plot plan for approval.

8. Vessels previously used for products other than water shall not be permitted.

4.4 Ignition Resistant Construction and Fire Protection Systems

There are no new habitable structures proposed.

***FIREWISE* 2000, Inc.**, conducted an on-site exterior analysis of shooting ranges, storage and occupied structure to determine any deficiencies on or around the existing structures that are vulnerable to embers from nearby wildfires. The owner's residence, Building A-1 Command Post/Administrative Services, and hanger do not meet the current Consolidated County Fire Code and would be vulnerable to embers. It should also be noted that the owner's residence included interior fire sprinklers. However, a storage building located 90 feet from Building A-1 Administrative Services/Command Post has numerous fire code deficiencies and shall be retrofitted or removed to meet current ignition resistant fire code (California Building Code-Chapter 7A) requirements. Building A-1 will be upgraded to meet current code requirements as well.

4.5 Defensible Space and Vegetation Management

4.5.1 Off-site Fire Hazard and Risk Assessment - Covert Canyon is located in a very high fire hazard severity zone approximately thirty (30) miles inland from the ocean. The project is surrounded by national forest and one private 40 acre developed parcel. A notable wildland fire threat will come from a wildland fire burning in the off-site highly flammable native and non-native vegetation north and east of this proposed project. This is undeveloped national forest land and the greatest threat to this project will be firebrands carried a long distance (one mile or more) by fire drafts or strong winds.

4.5.2 On-site Fire Hazard and Risk Assessment - At the date of this plan most of the vegetation north the project area burned in the 1992 Loveland Fire and 2002 Horse Fire. The area has re-vegetated and, if left undisturbed by natural events or without any fire hazard abatement practices, the project area's vegetation would again become a mature chaparral/Coastal Sage Scrub community.

The mixed chaparral, characterized as a Fuel Model FM 4 – Chaparral, will be of the most concern for the project area during a worst case scenario northeastern wind pattern (Santa Ana) with hot dry wind speeds that could reach 60 MPH. These conditions would be similar to what was experienced for the more recent Harris Fire. In this vegetation type, a high percentage of the vegetation would have an abundance of dead material. This is especially true of the black sage and sumac plants. This is due to the effects of the local Mediterranean climate where warm wet winters promote new growth, and long, hot and very dry summer seasons sometimes occur. Occasionally, multi-year droughts cause significant parts of these plants to die back. All of these plants are adapted to the intense wildfires that they need for species regeneration.

In summary, any wind or topography driven wildfire burning under a northeast (*Santa Ana*) wind pattern creates a very high wildland fire hazard, especially for wildland fires starting northeast of the development. However, the proposed fuel modification treatments will mitigate the potential loss of structures to less than significant levels due to direct fire impingement or radiant heat around the perimeter of the structures.

The on-site wildland fire threat from this native vegetation can be mitigated within the development with the required fuel modification and utilization of "*firewise*" landscaping criteria.

4.6 Vegetative Fuel Assessment

The minute-by-minute movement of a wildland fire will probably never be totally predictable–certainly not from weather conditions forecast many hours before the fire. Nevertheless, practice and experienced judgment in assessing the fire environment coupled with a systematic method of calculating fire behavior yields surprisingly good results (Rothermel 1983).

The BehavePlus Fire Modeling System has been used to predict the wildland fire behavior (rate-of-spread, fireline intensity and flame length) for the northeastern and southwestern boundary vegetative fuels. The BEHAVE: Fire Behavior Prediction and Fuel Modeling System–Burn Subsystem, Part 1 by Patricia L. Andrews, is one of the

best systematic methods for predicting wildland fire behavior. The BEHAVE fire behavior computer modeling system was developed by USDA–Forest Service research scientists at the Intermountain Forest Fire Laboratory, Missoula, Montana, and is utilized by wildland fire experts nationwide. Since the model was designed to predict the spread of a fire, the fire model describes the fire behavior only within the flaming front. The primary driving force in the fire behavior calculations is the dead fuel less than one-fourth inch in diameter; these are the fine fuels that carry the fire. Fuels larger than three (3") inches in diameter are not included in the calculations at all (Andrews 1986)".

BehavePlus, Version 3.0.2, is an updated and enhanced form of the BEHAVE System. The BEHAVE fire model describes a wildfire spreading through surface fuels, which are the burnable materials within six (6') feet of the ground and contiguous to the ground. Regardless of the limitations expressed, experienced wildland fire managers can use the BEHAVE modeling system to project the expected fire intensity, rate-of-spread and flame lengths with a reasonable degree of certainty for use in fire protection planning purposes.

The ***FIREWISE* 2000, Inc.** evaluation team used the computer based BEHAVE Plus 3.0.2 Fire Behavior Prediction Model to make the fire behavior assessments and projections for the hazardous vegetative fuels on the areas in proximity to the existing structures in Covert Canyon (see APPENDIX 'C' for actual calculations). The projections are based on scenarios that are "worst case" San Diego County fire assumptions.

Two (2) fire scenarios are presented based on "worst case" fire weather assumptions for the project area, and one (1) fire scenarios based on "typical" fire weather projections for comparison. Each fire scenario displays the expected Rate of Fire Spread (expressed in feet per minute), Fireline Intensity (expressed in British Thermal Units per foot per second) and Flame Length (expressed in feet) for two (2) separate BEHAVE Plus predications: one for the untreated fuels, and one for the treated fuels for the two worst case scenarios following the completion of the required fuel modification work. The tables also include the calculation inputs used in the BEHAVE Plus program which were obtained from project site observations and fuel levels typically observed during the local fire season.

Table 4.6.1
Fire Scenario # 1 – Fire Approaching from the North and East
(Late Fire Season With 60 MPH North, Northeast And East Wind Conditions)

Fire Behavior Calculation Input Data	Anticipated Fuel Moistures
• 20 percent slope • 60 mph 20-foot wind speed • 65° aspect from north • 45° wind direction from north	* 1-Hour Fine Fuel Moisture of.....2% * 10-Hour Fuel Moisture of.....3% * 100-Hour Fuel Moisture of.....5% * Live Herbaceous Fuel Moisture of.....30% * Live Woody Fuel Moisture of.....50%

Expected Fire Behavior Fuel Model 4 – Chaparral	
Rate of Spread	- 2,028 feet/minute
Fireline Intensity	- 116,611 BTU's/foot/second
Flame Length	- 96.4 feet in length

Expected Fire Behavior in Treated Fuels Combined Fuel Model - [tl6 – Very High Load Broadleaf Litter 50% and gs1 - Short, Sparse Dry Climate Grass 50%]	
Rate of Spread	- 209 feet/minute
Fireline Intensity	- 1,535 BTU's/foot/second
Flame Length	- 13.1 feet in length

Table 4.6.2
Fire Scenario # 2 – Fire Approaching from the South and West
(Late Fire Season With Above Average 30 MPH South, West and Southwest Wind Conditions)

Fire Behavior Calculation Input Data	Anticipated Fuel Moistures
• 15 percent slope • 30 mph 20-foot wind speed • 180° aspect from north • 225° wind direction from north	* 1-Hour Fine Fuel Moisture of .....2% * 10-Hour Fuel Moisture of.....3% * 100-Hour Fuel Moisture of .....5% * Live Herbaceous Fuel Moisture of.....30% * Live Woody Fuel Moisture of.....60%

Expected Fire Behavior Combined Fuel Model gs2 -	
Rate of Spread	- 107 feet/minute
Fireline Intensity	- 1,074 BTU's/foot/second
Flame Length	- 11.2 feet in length

Expected Fire Behavior in Treated Fuels Combined Fuel Model - [tl6 – Very High Load Broadleaf Litter 50% and gr1 - Short, Sparse Dry Climate Grass 50%]	
Rate of Spread	- 36 feet/minute
Fireline Intensity	- 225 BTU's/foot/second
Flame Length	- 5.4 feet in length

Table 4.6.3 ***Fire Scenario # 3 - Fire Approaching from the South and West*** ***(Typical 10 MPH South, West and Southwest Wind Conditions)***	
Fire Behavior Calculation Input Data • 40 percent slope • 10 mph 20-foot wind speed • 180° aspect from north • 225° wind direction from north	**Anticipated Fuel Moistures** * 1-Hour Fine Fuel Moisture of .....4% * 10-Hour Fuel Moisture of.....6% * 100-Hour Fuel Moisture of .....8% * Live Herbaceous Fuel Moisture of.....50% * Live Woody Fuel Moisture of.....60%
Expected Fire Behavior **Fuel Model gs2 – Moderate Load Dry Climate Grass Shrub**	
Rate of Spread - 19 feet/minute	
Fireline Intensity - 164 BTU's/foot/second	
Flame Length - 4.7 feet in length	

4.7 Required Fuel Modification Zones for Buildings, Structures and Access Roads

Projects located in Hazardous Fire Areas shall include Fuel Modification Zones (FMZ) surrounding all structures that are greater than 250 square feet in size. San Diego County Code stipulates that the FMZ is a minimum of 100-foot area surrounding and extending in all directions from all structures, in which flammable vegetation or other combustible growth is cleared away or modified, **except for:**

- Single specimens of trees or other vegetation that are well-pruned and maintained.
- Grass and other vegetation located more than 50 feet from the structure and less than 18 inches in height above the ground.
- All ornamental landscaping that is consistent with County Wildland Interface plant list (see APPENDIX 'A').

Although San Diego County Code requires a minimum of 100 feet of vegetation management, this is not sufficient especially to the north and east of the ranch house due to the projected flame lengths of nearly 100 feet and type of fuel. Therefore, a larger fuel treatment zone is required.

Below are the detailed defintions and required treatments for the Fuel Modification Zones. There are three fuel modifcation zones required for the Covert Canyon: an irrigated zone 50 feet in width: a 50% thinning zone 50 – 100 feet in width and a 30% thinning zone ~~100~~ 200 feet in width for a total of ~~200~~ 300 feet of fuel treatment. In addtion, the edge of roadways and driveways must be treated to prevent ignition starts and to provide safe ingress and egrees should a wildfire occur. Each of these zones is described below in greater detail.

All distances in this report are measured horizontally. These distances are depicted on the Fire Protection Plan Map included herein as 'Exhibit 1'. Prior to approval of the Major Use Permit, the access road shall be accepted by the SDRFPD Fire Marshal.

The responsibility for the fuel modification maintainence defined below shall remain with the current owner(s) and any subsequent owners, and as such shall run with the

land. In the event the project is repossessed or sold, the unit/agency holding title to the Covert Canyon property will be responsible for such maintenance. Fuel Modification Zones will be the responsibility of the owner(s) of Covert Canyon.

Fuel Modification Zone 1 (Owner Maintained) - *(Shown as Green on the Fire Protection Plan Map)*

Defined

Zone 1 comprises the first 50 feet around a structure (front, back and side yards) and is commonly called the defensible space zone. It is an irrigated zone and shall be free of all combustible construction and materials. Much of this area is currently cleared to native decomposed granite or no vegetation is growing because of soil type.

Required Landscaping

Zone 1 will be cleared of all existing native vegetation and replanted with drought tolerant and irrigated fire resistant lawns, ground covers and shrubs. Landscaping shall be irrigated and primarily consist of fire resistant, maintained native or ornamental plantings usually less than 18 inches in height. However, this zone may contain occasional fire resistant trees and single well spaced ornamental shrubs up to 48 inches in height, intermixed with ground covers and lawn. Shrubs and ground covers may be located no closer than 5 feet from the structure provided these plants will not carry fire to the structure. Non-flammable concrete patios, driveways, swimming pools, walkways, boulders, rock, and gravel can be used to break up fuel continuity within Zone 1.

Plants in this zone need to be fire resistant and should not include any pyrophytes that are high in oils and resins such as pines, eucalyptus, cedar, cypress or juniper species. Thick, succulent or leathery leaf species with high moisture content are the most "fire resistant". Refer to APPENDIX 'A' County of San Diego's desirable plant list and APPENDIX 'B' for Prohibited Plants for plant selection.

Trees must be planted so that when they reach maturity the tips of their branches are at least 10 feet away from any structure and must have a minimum of 6 feet of vertical separation from low growing irrigated vegetation beneath the canopy of the tree.

Required Maintenance

The area surrounding the structures shall be maintained year round by the property owner(s) as required by this FPP or the SDRFPD Fire Marshal. Shrubs and trees are to be annually maintained free of dead material. Trees will be maintained so that their crown cover will be more than ten (10) feet from any structure. All tree crowns will be separated by twenty (20) feet and maintained to keep a separation of 6 feet between the ground fuels (shrubs and ground covers) and the lower limbs. All trees must be maintained to the current ANSI A300 standards [*Tree, Shrub, and Other Woody Plant Maintenance —Standard Practices (Pruning)]*
(See www.treecareindustry.org/public/gov_standards_a300.htm).

Fuel Modification Zone 2 (Owner Maintained) - *(Shown as Yellow on the Fire Protection Plan Map)*

Defined

Zone 2 is a non-irrigated thinning zone 50 feet in width beginning at the outer edge of Zone 1 and is between 50 and 100 feet from each structure as shown on the Fire Protection Plan Map.

Required Landscaping

All flammable native plants (see San Diego County prohibited plant list in APPENDIX 'B') shall be removed with the resulting 50 - 100 feet of treated area containing low growing (maximum 18 inches in height) and low fuel volume "ground cover" vegetation or native grasses and occasional well spaced (separated by a minimum of twenty (20) feet), low growing (maximum height 15 feet) fire resistant trees (see APPENDIX 'A').

Required Maintenance

The intent is to achieve and maintain an overall 50 percent reduction of the canopy cover spacing, a 50 percent reduction of the original fuel loading, and the 100 percent removal of all dead and dying plant material. Low growing plants and ground covers are to be maintained to a height of 18 inches or less. Each tree will be limbed to maintain a separation of 6 feet between the ground fuels (shrubs and ground covers) and the lower limbs. Maintenance shall be on-going throughout the year as needed. Native annual and perennial grasses will be allowed to grow and produce seed during the winter and spring. As grasses begin to cure (dry out), they will be cut to 4 inches or less in height.

Fuel Modification Zone 3 (Owner Maintained) - *(Shown as Tan on the Fire Protection Plan Map)*

Defined

200

Zone 3 is a non-irrigated thinning zone ~~100~~ feet in width, beginning at the outer edge of Zone 2, 100 – ~~200~~ feet from each structure.

300

Required Landscaping

The intent is to achieve and maintain an overall 30 percent reduction of the canopy cover spacing, a 30 percent reduction of the original fuel loading, and the 100 percent removal of all dead and dying plant material. Only structures, construction and materials (i.e. decks, gazebos, trellises, patio covers etc.) constructed from Class A rated materials or alternatives reviewed and approved by the SDRFPD Fire Marshal are allowed in this zone.

Required Maintenance

Low growing plants and ground covers are to be maintained to a height of 18 inches or less. Each tree will be limbed to maintain a separation of 6 feet between the ground fuels (shrubs and ground covers) and the lower limbs. Maintenance shall be on-going throughout the year as needed. Native annual and perennial grasses will be allowed to grow and produce seed during the winter and spring. As grasses begin to cure (dry out), they will be cut to 4 inches or less in height.

Roadways – Owner Maintained *(Shown as [redacted] on the Fire Protection Plan Map)*

Required Maintenance

Fifteen (15)

Clearance of brush or vegetative growth along existing on and off-site roadways will comply with the Consolidated Fire Code for the 17 Fire Protection Districts in San Diego County. ~~Twenty (20)~~ feet on each side of the existing access roads shall be cleared of highly flammable vegetation and maintained to Zone 2 requirements.

The applicant has received tentative approval for: ~~1) increased right-of-way width up to 24 feet where practical;~~ 2) construction of additional vehicle turnouts and turnarounds for emergency access vehicles; and, 3) creation of additional fuel modification thinning zone along each side of the ~~national forest~~ access road out to 15 feet. (see APPENDIX 'E').

4.8 Cumulative Impact Analysis

The combination of San Diego County's weather, fuel, and terrain has often contributed to intense, uncontrolled wildland fires. This was clearly evident in the devastating Cedar, Paradise and Otay Fires of October 2003, and the more recent Witch Fire of November 2007.

Typically, the areas of greatest concern are adjacent to urbanized areas or where residences are intermixed with wildland. Since no new structures are planned in this project, this concern is slight. As the population of San Diego County increases and the Wildland Urban Interface (WUI) expands, fire hazards and risks will continue to be encountered. Increased vehicular access for this project by way of approval of the major use permit and improving an existing road will increase human activities in the immediate area and therefore increase the risk of property loss, injury or death within the wildland interface to a limited extent.

The approval of this proposal, the existing structures in the surrounding area, and dedicated open space/national forest activities will increase the concern for wildfire as activity in the area increases. At present, the density of development in this portion of San Diego County, is relatively low and includes properties both compliant and non-compliant with the fuel modification and weed abatement requirements of the County of San Diego. It is doubtful the area density will change much, due to current Zoning Requirements.

Range design criteria will limit ricochet events from occurring. Additionally, the students are all highly trained, disciplined shooters. Range berm heights will be 12 to 14 feet with 8 to 10 foot wooden ricochet barriers placed on top of them. It is estimated to overshoot the range berm, a shooter would have to raise the muzzle of their weapon to 30 degrees or greater.

5.0 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

5.1 Enhancements for Modification under Section 104.8 of the County Consolidated Fire Code.

Providing a full code compliant access is not feasible. Refer to Section 4.2 for constraints, and overall improvements. Fire enhancements and fire modifications made in conjunction with the Covert Canyon project is in compliance with the intent and purpose of the fire code and such modifications do not lessen health, life and fire safety requirements on the following grounds:

1. Any proposed new habitable structures will be built to San Diego County Consolidated Fire and Building Code standards, which includes the installation of automatic fire sprinkler systems (National Fire Protection Association – NFPA Standard 13D), and would require a new permit.

2. (Accessory Building) Building A-1 Command Post/Administrative Services/Temporary Safe Refuge (TSR) will be up-graded to meet all current code requirements. The

structure is currently metal framed and metal clad, a code compliant sprinkler system will be installed, all windows will be replaced with current CBC Chapter 7a requirements. A 3000 gallon water tank has been installed next to the structure for emergency water. Additionally, the building has air conditioning and back up power. As the Command Post it will be equipped with communications equipment, closed circuit TV with thermal imaging, and PA and Mass Notification System, as well as direct communications between the Command Post and Range Safety Officer.

300

3. A minimum of ~~200~~ feet of fuel treatment shall be placed around all structures that abut flammable native vegetation. The first 50 feet from the structure if landscaped will require irrigation (most areas are native DG with no vegetation), plus an additional 150 feet of fuel treatment (thinning zone) beginning at the edge of the irrigated zone (see Fire Protection Plan Map, Section 5.4). In actual fact the facility is currently maintained to mineral earth, either by disking or other means, all remaining oak trees have been limbed and leaf litter removed.

4. The primary access road will be partially improved with additional measures such as: ~~1) road surfacing;~~ 2) road widening; 3) turnouts & turnarounds; and, 4) brush thinning.

5. Range re-design and improvements to provide better ricochet/skip safety. Design elements to include wooden ricochet barriers atop earthen backstop berms.

6. ~~Additional water storage~~ ~~2nd 10,000 gal tank near small arms range.~~

7. Provided for a mechanism whereby the Training Facility will be in a closed through the use of Triggers during an emergency event (see APPENDIX 'F').

8. Appendix F is meant to be a stand-alone part of the plan which:
   - Establishes roles, responsibilities, and staffing levels
   - Provides for training, requires specific training of staff.
   - Requires safety brief on conditions prior to operation
   - Outlines Evacuation procedures both fire and serious injury

9. Safe Refuge for adjacent home owner.

During the interim use allowed by the SAEO Covert Canyon will provide a mobile, 500 gallon water tank in the vicinity of the small arms range.

10. Ready Set Go

1. Ready – Preparing for the Fire Threat: Covert Canyon will insure Defensible Space is maintained in the manner designed. No modifications to Building A-1 that would nullify the hardened standards of the structure. Provide clear concise instruction to students on all aspects of the Evacuation Plan and the use of the Safe Refuge Building during the initial safety brief. Keep a watchful eye out for smoke in the area or on the horizon. Report any smoke. Ensure all supplies are ready for use, daily checks of emergency generators and communications.

2. Set – Situational Awareness When a Fire Starts: Reported smoke anywhere in the vicinity of the facility will initiate an immediate check fire. Staff will immediately attempt to ascertain exact location and distance. Student and Staff will report to the Safe Refuge Area. A situation brief will take place to advise all students of current conditions and resources available at the Safe Refuge Building. A decision will be made by the Fire Coordinator to evacuate or stay in the Safe Refuge Building.

3. Go – Leave early! Remember Evacuate early, follow the pre-defined plan. Life Safety of the Students and Staff will be the main concern of the Fire Coordinator.

5.2 Range Mitigation Measures.

1. Range ordinance will be limited to crew served weapons, consisting of small arms, shot guns, and rifles. Caliber will range from 22 to 50, and meet the current standard requirements as defined by Department of the Navy, Homeland Security and other user Agencies.

2. Range design will include berm heights from 12 to 14 feet, a wooden ricochet barrier will be built on top of the berm it will range from 8 to 10 feet in height. Berms will be constructed with clean fill dirt or DG. Dirt fill will be rock free to ensure no ricochet is possible.

3. Ordinance will be limited to metal clad bullets, no tracers or other type of incendiary devices will be allowed. Larger caliber rounds would have non-effective range of 2 miles. However to overshoot the berm would require the shooter to elevate the muzzle above 30 degrees. Considering the type of students projected to use the range, highly skilled professionals this is highly unlikely.

4. Berms and adjacent areas to 100ft will be disked, mowed or weed whipped to mineral earth.

5. Smoking is restricted on the entire site with the exception of the designated smoking area Building A-1 Administrative Services.

6. This report and its recommendations shall be incorporated by reference into the final project Conditions of Approval to ensure compliance with codes/regulations and significance

5.3 Management Controls and Evacuation Planning

Refer to APPENDIX 'F'.

5.4 Fire Protection Plan Map

A pocket folder containing - FIRE PROTECTION PLAN MAP can be found following this FPP depicting the location of all proposed fuel modification treatment locations and other mitigation measures for Covert Canyon Training Facility.

6.0 - CONCLUSIONS

This FPP evaluated the adverse environmental effects that the proposed training facility may have from wildland fire and to properly mitigate those impacts to ensure that this facility does not unnecessarily expose people or structures to a significant risk of loss, injury or death involving wildland fires.

- The requirements of this FPP provide the fuel modification standards to mitigate the exposure of people or structures to a significant risk of loss, injury or death. Zone 1 is 50 feet in width and includes the level building pad and provides the defensible space zone for fire suppression forces and will protect structures from radiant and convective heat. This zone will also be a landscaped zone that is permanently irrigated and consists of fire resistant and maintained plantings. Zone 2 is the next 50 feet and provides removal of 50 percent of the native vegetation, including all prohibited highly combustible native vegetation, but permits plantings with very specific criteria. Zone 3 is the next ~~100~~ 200 feet and

provides for the removal of 30 percent of the native vegetation including all prohibited highly combustible native vegetation.

- The requirements of this FPP provide the project area with adequate emergency access in terms of access and construction standards for the existing roadways. The San Diego Rural Fire Protection District, CAL FIRE, the U.S. Forest Service, and nearby fire departments will provide fire protection through automatic aid as needed. The inclusion of a Safe Refuge area and extensive training will minimize risk to student and staff in a catastrophic fire situation.

- Water supplies via storage tanks and related requirements will provide adequate water for fire protection.

- With the implementation of the requirements of this FPP, the Covert Canyon Training Facility can be considered a safe zone for the staging of students/staff and other residents in the area during a fire event.

7.0 - LIST OF PREPARERS, PERSONS AND ORGANIZATIONS CONTACTED

7.1 List of Preparers

The principal author and preparer of this Fire Protection Plan is David C. Bacon, President of ***FIREWISE* 2000, Inc.**, a San Diego County DPLU certified wildland fire consultant. Other ***FIREWISE* 2000, Inc.**, members contributed to this plan with comments and peer review. These members include Mel Johnson, Wildland Fire Associate; Herb Spitzer, Senior Wildland Fire Associate; and, Monty Kalin, Senior Wildland Fire Associate.

7.2 List of Persons Contacted During the Course of this Project

1. Jeff Barfield - RBF Consulting
2. Dan Hortert - RBF Consulting
3. Marc Halcon - Owner, Covert Canyon Training Center
4. Charlie Robinson - Ranch Hand, Covert Canyon Training Center
5. Chief Dave Nissen - Fire Chief, San Diego Rural Fire Protection District
6. Martin Owen-District Ranger, Cleveland National Forest
7. Chief Howard Windsor-Ranger Unit Chief, CAL FIRE-San Diego Ranger Unit
8. Chief Ralph Steinhoff - SD County Fire Authority
9. Michel Anderson - Michel Anderson Associates

8.0 - REFERENCES

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2. *BEHAVE: Fire Behavior Prediction and Fuel Modeling System - BURN Subsystem, Part 2.* General Technical Report INT-260. May 1989. Patricia L. Andrews and Carolyn H. Chase, United States Department of Agriculture - Forest Service, Intermountain Station, Ogden, Utah 84401.

3. *BehavePlus Fire Modeling System, Version 3.0.2* General Technical Report RMRS-GRT-106WWW. June 2003. Patricia L. Andrews, Collin D. Bevins. United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.

4. County of San Diego Ordinance No. 9915 – *An Ordinance Amending Appendix II-A of the County Fire Code Relating to Wildland/Urban Interface Standards.*

5. *How to Predict the Spread and Intensity of Forest and Range Fires.* General Technical Report INT-143. June 1983. Richard C. Rothermel. United States Department of Agriculture - Forest Service, Intermountain Station, Ogden, Utah 84401.

6. National Fire Protection Association - NFPA 1144 *Standard for Protection of Life and Property from Wildfire* (2002).

7. National Fire Protection Association - *NFPA 13 Standard for the Installation of Sprinkler Systems in One – and Two-Family Dwellings and Manufactured Homes, 13-R & 13-D, 2002 Editions*

8. *Wildland/Urban Interface Development Standards.* San Diego County Fire Chief's Association, originally Developed by Orange County Wildland/Urban Interface Task Force Subcommittee on Open Space Management, July, 1994, Modified by the San Diego County Wildland/Urban Interface Task Force, November, 1995, Revised August, 1997.

9. California Code of Regulations, Title 14, section 1280; California Public Resources Codes sections 4201 through 4204 & International Urban – Wildland Interface Code, 2006 edition,

10. California Government Code, sections 51175 through 51189; the 2007 Fire Code portion of the CBSC, including appendices to Chapters 1 & 4 and Appendices B, F & H, the 2006 International Fire Code (IFC)

11. *County of San Diego. Consolidated Fire Code, October 2011.*

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15. *County of San Diego. Plant List and Acceptable Plants for a Defensible Space in Fire Prone Areas. Department of Planning and Land Use, December, 1998.*

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17. *County of San Diego. Guidelines for Determining Significance and Report Format and Content Requirements Wildland Fire and Fire Protection Land Use and Environment Group Department of Planning and Land Use, Department of Public Works, March 19, 2007*

18. *Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model,* General Technical Report. RMRS-GTR 153, June 2005 United States Department of Agriculture - Forest Service

19. *The California State and Local Responsibility Area Fire Hazard Severity Zone Map – Fire and Resource Assessment Program of CALFIRE*

EXHIBITS

Roadway Aerial	**Exhibit 1**
Zoning	**Exhibit 2**
Land Use Designation	**Exhibit 3**
High Glen Road by Segment	**Exhibit 4**
High Glen Road Turnaround, Turnouts and Signage	**Exhibit 5**
Project Site Plan	**Exhibit 6**

APPENDICES

Recommended Plant List	**APPENDIX 'A'**
Prohibited/Invasive Plant List	**APPENDIX 'B'**
Behave Plus Version 3.0.2 Fire Behavior Calculations	**APPENDIX 'C'**
Non-Combustible & Fire Resistant Building Materials	**APPENDIX 'D'**
Correspondence with Forest Service Access Road	**APPENDIX 'E'**
Emergency Relocation and Evacuation	**APPENDIX 'F'**
Fire Availability Form	**APPENDIX 'G'**

FIRE PROTECTION PLAN MAP

EXHIBIT 1

Roadway Aerial

EXHIBIT 2

Zoning

EXHIBIT 3

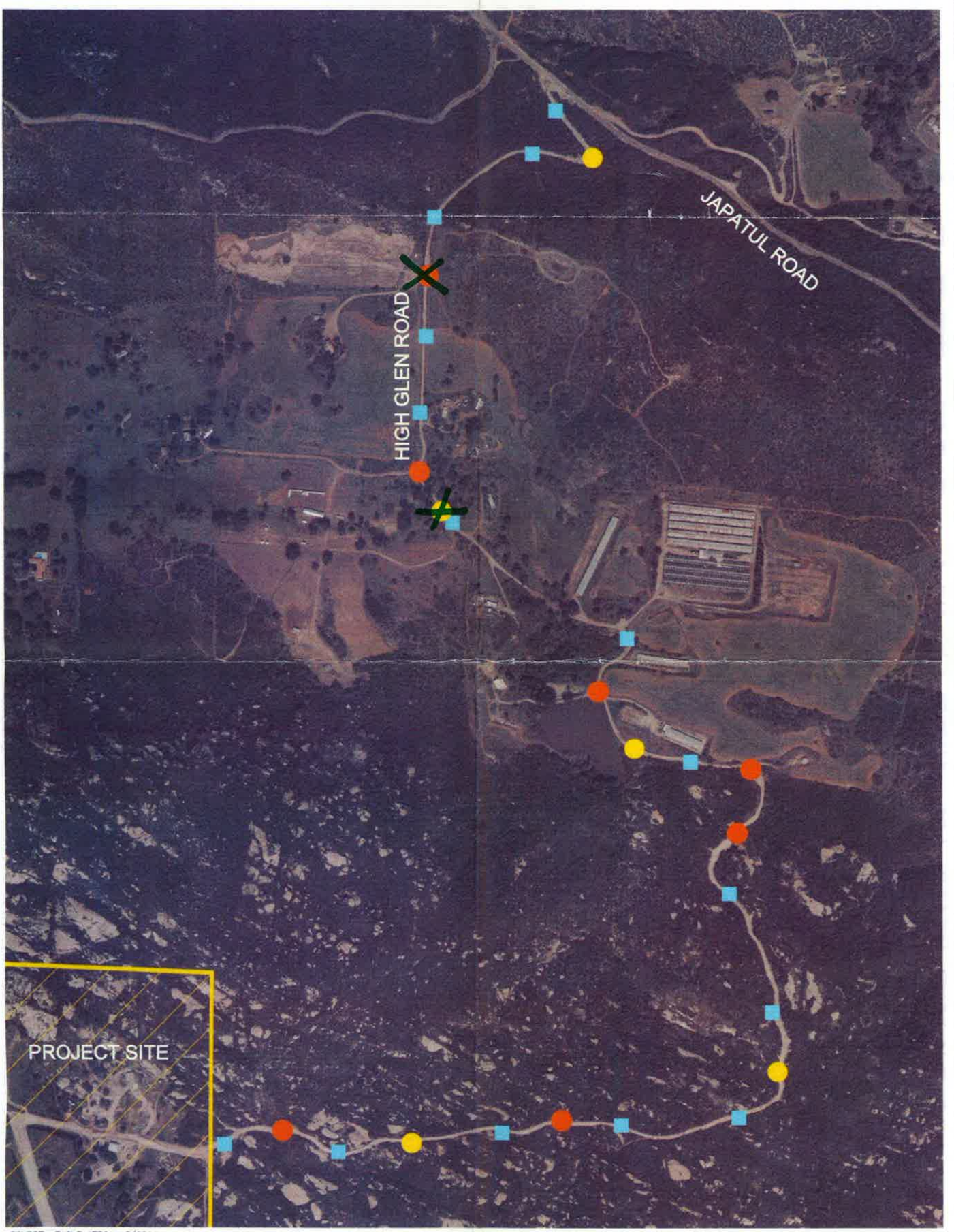
Land Use Designation

EXHIBIT 4

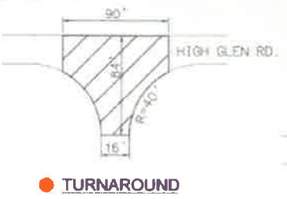
High Glen Road by Segment 1, 2 and 3

EXHIBIT 5
High Glen Road Turnround, Turnout and Signage Locations

HIGH GLEN ROAD - TURNROUND, TURNOUT & SIGNAGE LOCATONS



SOURCE: EAGLE AERIAL 3/2011



TURNAROUND

SIGNAGE

TURNOUT

Covert Canyon Training Center
EXHIBIT 5

RBF CONSULTING
PLANNING ■ DESIGN ■ CONSTRUCTION
9755 CLAREMONT MESA BOULEVARD SUITE 100
SAN DIEGO, CALIFORNIA 92124-1324

EXHIBIT 6

Project Site Plan

APPENDIX 'A'

COUNTY OF SAN DIEGO

ACCEPTABLE PLANTS FOR DEFENSIBLE SPACE IN FIRE PRONE AREAS

ALL NATIVE PLANTS ON THE FOLLOWING LIST are considered to be drought-tolerant in the particular climate zone they are found. Those that grow best in riparian areas, as indicated by the "R", are generally the least drought-tolerant plants on the list.

SPECIAL NOTE: When planting, it is necessary to water deeply to encourage the plant roots to seek natural moisture in the soil. This watering should continue for at least three years to allow the plants to naturalize. More water should be provided in summer and less (if any) in the winter. These plants should be weaned off the supplemental irrigation and become less dependent on it over the establishment period.

No plant is totally fire resistant. The plants listed were chosen due to their high water content, minimum amount of flammable resins and/or low fuel volume.

Definitions:

Defensible Space: The area around a structure, where material capable of causing fire has been cleared, reduced or changed, to act as a barrier between an advancing fire and the structure.

Drought-Tolerant Plant Materials: Trees, shrubs, groundcovers, and other vegetation capable of sustained growth and reproduction with only natural moisture. Occasional supplemental irrigation is necessary only in extreme drought situations.

Establishment Period: The time it takes for a plant to become drought-resistant. This is usually a period of three years and is the time when supplemental irrigation is necessary.

Native or Naturalizing Plant Species: Plant species native to the region or introduced which, once established, are capable of sustaining growth and reproduction under local climatic conditions without supplemental irrigation.

***FIREWISE* 2000, Inc. Note:** The plant list which follows was developed using the plants found on the San Diego County approved plant list. This list was then compared to those plants which are suitable for the climatic zone in which the project is located. Only those plants suitable for the project area listed below. The list is therefore shorter than that provided by the County. By providing this custom list, plants that are likely to be killed or seriously damaged by frost or will not perform in hot dry conditions have been eliminated. ***FIREWISE* 2000, Inc.** believes that the planting of species suited to the site is essential to fire management goals and is a environmentally sound practice.

San Diego County
Customized Acceptable Plant List
For The Covert Canyon Training Center

No.	Type	Genus	Species	Common Name
1	Annual	Lupinus spp.	nanus	Lupine
2	Groundcover	Achillea	millefolium	Yarrow
3	Groundcover	Arctostaphylos spp.		Manzanita
4	Groundcover	Cerastium	tomentosum	Snow-in-Summer
5	Groundcover	Coprosma	kirkii	Creeping Coprosma
6	Groundcover	Cotoneaster spp.		Redberry
7	Groundcover	Drosanthemum	hispidum	Rosea Ice Plant
8	Groundcover	Dudleya	virens	Island Live-Forever
9	Groundcover	Eschscholzia	californica	California Poppy
10	Groundcover	Ferocactus	viridescens	Coast Barrel Cactus
11	Groundcover	Gaillardia	grandiflora	Blanket Flower
12	Groundcover	Gazania spp.		Gazania
13	Groundcover	Helianthemum spp.		Sunrose
14	Groundcover	Lantana spp.		Lantana
15	Groundcover	Lasthenia	californica	Common Goldfields
16	Groundcover	Lasthenia	glabrata	Coastal Goldfields
17	Groundcover	Lupinus spp.		Lupine
18	Groundcover	Pyracantha spp.		Firethorn
19	Groundcover	Rosmarinus	officinalis	Rosemary
20	Groundcover	Santolina	chamaecyparissus	Lavender Cotton
21	Groundcover	Trifolium	frageriferum	O'Connor's Legume
22	Groundcover	Verbena	rigida	Verbena
23	Groundcover	Viguiera	laciniata	San Diego Sunflower
24	Groundcover	Vinca	major	Periwinkle
25	Groundcover	Vinca	minor	Dwarf Periwinkle
26	Perennial	Coreopsis	grandiflora	Coreopsis
27	Perennial	Coreopsis	maritima	Sea Dahlia
28	Perennial	Coreopsis	verticillata	Coreopsis
29	Perennial	Heuchera	maxima	Island Coral Bells
30	Perennial	Iris	douglasiana	Douglas Iris
31	Perennial	Kniphofia	uvaria	Red-Hot Poker
32	Perennial	Lavandula spp.		Lavender
33	Perennial	Penstemon spp.		Penstemon
34	Perennial	Satureja	douglasii	Yerba Buena
35	Perennial	Sisyrinchium	bellum	Blue-Eyed Grass

36	Perennial	Sisyrinchium	californicum	Golden-Eyed Grass
37	Perennial	Solanum	xantii	Purple Nightshade
38	Perennial	Zauschneria	'Catalina' ?	Catalina Fuschia
39	Perennial	Zauschneria	californica	California Fuschia
40	Perennial	Zauschneria	cana	Hoary California Fuschia
41	Shrub	Agave	americana	Desert Century Plant
42	Shrub	Agave	Amorpha fruticosa	False Indigobush
43	Shrub	Agave	deserti	Shaw's Century Plant
44	Shrub	Agave	shawii	NCN
45	Shrub	Agave		Century Plant
46	Shrub	Arbutus	menziesii	Madrone
47	Shrub	Arctostaphylos spp.		Manzanita
48	Shrub	Atriplex	canescens	Hoary Saltbush
49	Shrub	Atriplex	lentiformis	Quail Saltbush
50	Shrub	Baccharis	pilularis	Coyote Bush
51	Shrub	Baccharis	salicifolia	Mule Fat "R"
52	Shrub	Carissa	macrocarpa	Natal Plum
53	Shrub	Ceanothus spp.		California Lilac
54	Shrub	Cistus spp.		Rockrose
55	Shrub	Cneoridium	dumosum	Bush rue
56	Shrub	Comarostaphylis	diversifolia	Summer Holly
57	Shrub	Convolvulus	cneorum	Bush Morning Glory
58	Shrub	Elaeagnus	pungens	Silverberry
59	Shrub	Encelia	californica	Coast Sunflower
60	Shrub	Encelia	farinosa	White Brittlebush
61	Shrub	Eriobotrya	deflexa	Bronze Loquat
62	Shrub	Eriophyllum	confertiflorum	Golden Yarrow
63	Shrub	Escallonia spp.		Escallonia
64	Shrub	Feijoa	sellowiana	Pineapple Guava
65	Shrub	Fouqueria	splendens	Ocotillo
66	Shrub	Fremontodendron	californicum	Flannelbush
67	Shrub	Fremontodendron	mexicanum	Southern Flannelbush
68	Shrub	Galvezia	juncea	Baja Bush-Snapdragon
69	Shrub	Galvezia	speciosa	Island Bush-Snapdragon
70	Shrub	Garrya	elliptica	Coast Silktassel
71	Shrub	Garrya	flavescens	Ashy Silktassel
72	Shrub	Heteromeles	arbutifolia	Toyon
73	Shrub	Lantana spp.		Lantana
74	Shrub	Lotus	scoparius	Deerweed
75	Shrub	Mahonia spp.		Barberry
76	Shrub	Malacothamnus	clementinus	San Clemente Island Bush Mallow
77	Shrub	Malacothamnus	fasciculatus	Mesa Bushmallow
78	Shrub	Melaleuca spp.		Melaleuca
79	Shrub	Mimulus spp.		Monkeyflower
80	Shrub	Nolina	parryi	Parry's Nolina
81	Shrub	Photinia spp.		Photinia
82	Shrub	Pittosporum	rhombifolium	Queensland Pittosporum
83	Shrub	Pittosporum	tobira 'Wheeleri'	Wheeler's Dwarf
84	Shrub	Plumbago	auriculata	Cape Plumbago
85	Shrub	Prunus	caroliniana	Carolina Laurel Cherry
86	Shrub	Prunus	ilicifolia	Hollyleaf Cherry
87	Shrub	Prunus	lyonii	Catalina Cherry

88	Shrub	Puncia	granatum	Pomegranate
89	Shrub	Pyracantha spp.		Firethorn
90	Shrub	Rhamus	alaternus	Italian Buckthorn
91	Shrub	Rhamus	californica	Coffeeberry
92	Shrub	Rhaphiolepis spp.		Rhaphiolepis
93	Shrub	Rhus	continus	Smoke Tree
94	Shrub	Rhus	ovata	Sugarbush
95	Shrub	Rhus	trilobata	Squawbush
96	Shrub	Romneya	coulteri	Matilija Poppy
97	Shrub	Rosa	californica	California Wild Rose
98	Shrub	Rosa	minutifolia	Baja California Wild Rose
99	Shrub	Salvia spp.		Sage
100	Shrub	Sambucus spp.		Elderberry
101	Shrub	Symphoricarpos	mollis	Creeping Snowberry
102	Shrub	Syringa	vulgaris	Lilac
103	Shrub	Teucrium	fruticans	Bush Germander
104	Shrub	Verbena	lilacina	Lilac Verbena
105	Shrub	Xylosma	congestum	Shiny Xylosma
106	Shrub	Yucca	schidigera	Mojave Yucca
107	Shrub	Yucca	whipplei	Foothill Yucca
108	Tree	Acer	macrophyllum	Big Leaf Maple
109	Tree	Acer	saccarum	Sugar Maple
110	Tree	Acer	saccharinum	Silver Maple
111	Tree	Alnus	rhombifolia	White Alder "R"
112	Tree	Arbutus	unedo	Strawberry Tree
113	Tree	Brahea	edulis	Guadalupe Palm
114	Tree	Ceratonia	siliqua	Carob
115	Tree	Cercis	occidentalis	Western Redbud
116	Tree	Cerdidium	floridum	Blue Palo Verde
117	Tree	Cornus	nuttallii	Mountain Dogwood
118	Tree	Cornus	stolonifera	Redtwig Dogwood
119	Tree	Elaeagnus	angustifolia	Russian Olive
120	Tree	Eriobotrya	japonica	Loquat
121	Tree	Gingko	biloba "Fairmount"	Fairmount Maidenhair Tree
122	Tree	Gleditisia	triacanthos	Honey Locust
123	Tree	Juglans	californica	California Walnut
124	Tree	Juglans	hindsii	California Black Walnut
125	Tree	Lagerstroemia	indica	Crape Myrtle
126	Tree	Ligustrum	lucidum	Glossy Privet
127	Tree	Liquidambar	styraciflua	Sweet Gum
128	Tree	Liriodendron	tulipifera	Tulip Tree
129	Tree	Melaleuca spp.		Melaleuca
130	Tree	Nerium	oleander	Oleander
131	Tree	Parkinsonia	aculeata	Mexican Palo Verde
132	Tree	Pistacia	chinensis	Chinese Pistache
133	Tree	Pistacia	vera	Pistachio Nut
134	Tree	Pittosporum	phillyreoides	Willow Pittosporum
135	Tree	Platanus	acerifolia	London Plane Tree
136	Tree	Platanus	racemosa	California Sycamore "R"
137	Tree	Populus	alba	White Poplar
138	Tree	Populus	fremontii	Western Cottonwood "R"
139	Tree	Populus	trichocarpa	Black Cottonwood "R"
140	Tree	Prunus	caroliniana	Carolina Laurel Cherry

141	Tree	Prunus	cersifera 'Newport'	Newport Purple-Leaf Plum
142	Tree	Prunus	ilicifolia	Hollyleaf Cherry
143	Tree	Prunus	lyonii	Catalina Cherry
144	Tree	Prunus	serrulata 'Kwanzan'	Flowering Cherry
145	Tree	Prunus	xblireiana	Flowering Plum
146	Tree	Prunus	yedoensis 'Akebono'	Akebono Flowering Cherry
147	Tree	Quercus	agrifolia	Coast Live Oak
148	Tree	Quercus	engelmannii	Engelmann Oak
149	Tree	Quercus	suber	Cork Oak
150	Tree	Rhus	lancea	African Sumac
151	Tree	Salix spp.		Willow "R"
152	Tree	Ulmus	parvifolia	Chinese Elm
153	Tree	Ulmus	pumila	Siberian Elm
154	Tree	Umbellularia	californica	California Bay Laurel "R"
155	Vine	Antigonon	leptopus	San Miguel Coral Vine
156	Vine	Distictis	buccinatoria	Blood-Red Trumpet Vine
157	Vine	Keckiella	cordifolia	Heart-Leaved Penstemon
158	Vine	Lonicera	japonica 'Halliana'	Hall's Honeysuckle
159	Vine	Lonicera	subspicata	Chaparral Honeysuckle
160	Vine	Solanum	jasminoides	Potato Vine

APPENDIX 'B'

UNDESIRABLE PLANT LIST

The following species are highly flammable and should be avoided when planting within the first 50 feet adjacent to a structure. The plants listed below are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plantings with a high dead to live fuel ratio. Many of these species, if existing on the property and adequately maintained (pruning, thinning, irrigation, litter removal, and weeding), may remain as long as the potential for spreading a fire has been reduced or eliminated.

BOTANICAL NAME	COMMON NAME
Abies species	Fir Trees
Acacia species	Acacia (trees, shrubs, groundcovers)
Adenostoma sparsifolium**	Red Shanks
Adenostoma fasciculatum**	Chamise
Agonis juniperina	Juniper Myrtle
Araucaria species	Monkey Puzzle, Norfolk Island Pine
Artemesia californica**	California Sagebrush
Bambusa species	Bamboo
Cedrus species	Cedar
Chamaecyparis species	False Cypress
Coprosma pumila	Prostrate Coprosma
Cryptomeria japonica	Japanese Cryptomeria
Cupressocyparis leylandii	Leylandii Cypress
Cupressus forbesii**	Tecate Cypress
Cupressus glabra	Arizona Cypress
Cupressus sempervirens	Italian Cypress
Dodonea viscosa	Hopseed Bush
Eriogonum fasciculatum**	Common Buckwheat
Eucalyptus species	Eucalyptus
Heterotheca grandiflora**	Telegraph Plant
Juniperus species	Junipers
Larix species	Larch
Lonicera japonica	Japanese Honeysuckle
Miscanthus species	Eulalia Grass
Muehlenbergia species**	Deer Grass
Palmae species	Palms
Picea species	Spruce Trees
Pickeringia Montana**	Chaparral Pea
Pinus species	Pines
Podocarpus species	Fern Pine
Pseudotsuga menziesii	Douglas Fir
Rosmarinus species	Rosemary
Salvia mellifera**	Black Sage
Taxodium species	Cypress
Taxus species	Yew
Thuja species	Arborvitae
Tsuga species	Hemlock
Urtica urens**	Burning Nettle

** San Diego County native species

APPENDIX 'B' References:

Gordon, H. White, T.C. 1994. Ecological Guide to Southern California Chaparral Plant Series. Cleveland National Forest.

Willis, E. 1997. San Diego County Fire Chief's Association. Wildland/Urban Interface Development Standards

City of Oceanside, California. 1995. Vegetation Management. Landscape Development Manual. Community Services Department, Engineering Division.

City of Vista, California 1997. Undesirable Plants. Section 18.56.999. Landscaping Design, Development and Maintenance Standards.

www.bewaterwise.com. 2004. Fire-resistant California Friendly Plants.

www.ucfpl.ucop.edu. 2004. University of California, Berkeley, Forest Products Laboratory, College of Natural Resources. Defensible Space Landscaping in the Urban/Wildland Interface. A Compilation of Fire Performance Ratings of Residential Landscape Plants.

County of Los Angeles Fire Department. 1998. Fuel Modification Plan Guidelines. Appendix I, Undesirable Plant List, and Appendix II, Undesirable Plant List.

APPENDIX 'C'
Behave Models

BehavePlus 3.0.2 (Build 265)

Covert Cyn. - Eastern Boundary 60 MPH
Sun, Jan 04, 2009 at 12:30:49

1. Input Worksheet

Modules: SURFACE

Input Variables	Input Value(s)	Units
Fire Name	Covert Cyn. Project	
Fire Date & Projection Period	Sunday, Jan 4, 2009	
Fire Analyst	H. Spitzer, Firewise 2000, Inc.	
Fuel/Vegetation, Surface/Understory		
Fuel Model	4	
Fuel Moisture		
1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	50	percent
Weather		
20-ft Wind Speed	60	mi/h
Wind Adjustment Factor	0.5	
Wind Direction (from north)	45	deg
Terrain		
Slope Steepness	20	percent
Aspect (from north)	65	deg

Notes

Numerous large rock outcroppings throughout the fuelbed.

2. Run Option Notes

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always

for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from north [SURFACE].

Wind direction is the direction from which the wind is blowing [SURFACE].

3. Results

Output Variable	Value	Units

Surface Rate of Spread (maximum)	2028	ft/min
Fireline Intensity	116611	Btu/ft/s
Flame Length	96.4	ft

4. End

BehavePlus 3.0.2 (Build 265)

Covert Cyn. - Northern Boundary 60 MPH
Sun, Jan 04, 2009 at 12:32:58

1. Input Worksheet

Modules: SURFACE

Input Variables	Input Value(s)	Units
Fire Name	Covert Cyn. Project	
Fire Date & Projection Period	Sunday, Jan 4, 2009	
Fire Analyst	H. Spitzer, Firewise 2000, Inc.	
Fuel/Vegetation, Surface/Understory		
Fuel Model	4	
Fuel Moisture		
1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	50	percent
Weather		
20-ft Wind Speed	60	mi/h
Wind Adjustment Factor	0.5	
Wind Direction (from north)	45	deg
Terrain		
Slope Steepness	10	percent
Aspect (from north)	45	deg

Notes

Numerous large rock outcroppings throughout the fuelbed.

2. Run Option Notes

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always

for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from north [SURFACE].

Wind direction is the direction from which the wind is blowing [SURFACE].

3. Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	2021	ft/min
Fireline Intensity	116206	Btu/ft/s
Flame Length	96.2	ft

4. End

BehavePlus 3.0.2 (Build 265)

Covert Cyn. - Southern Boundary 30 MPH Rare Event Wind

Sun, Jan 04, 2009 at 12:38:18

Input Worksheet

Modules: SURFACE

Input Variables	Input Value(s)	Units
Fire Name	Colvert Cyn. Project	
Fire Date & Projection Period	January 4, 2008	
Fire Analyst	H. Spitzer, Firewise 2000, Inc.	
Fuel/Vegetation, Surface/Understory		
Fuel Model	gs2	
Fuel Moisture		
1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	60	percent
Weather		
20-ft Wind Speed	30	mi/h
Wind Adjustment Factor	0.3	
Wind Direction (from north)	225	deg
Terrain		
Slope Steepness	15	percent
Aspect (from north)	180	deg

Notes

Southern Boundary fuels contain several large oak trees with little or no understory due to fuel treatment. FM GS2 utilized to represent an untreated fuelbed.

Run Option Notes

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always

for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from north [SURFACE].

Wind direction is the direction from which the wind is blowing [SURFACE].

Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	107	ft/min
Fireline Intensity	1074	Btu/ft/s
Flame Length	11.2	ft

End

BehavePlus 3.0.2 (Build 265)

Covert Cyn - Western Boundary 30 MPH Rare Event Wind

Sun, Jan 04, 2009 at 12:18:17

5. Input Worksheet

Modules: SURFACE

Input Variables	Input Value(s)	Units
Fire Name	Covert Project	
Fire Date & Projection Period	January 4, 2009	
Fire Analyst	H. Spitzer, Firewise 2000, Inc.	
Fuel/Vegetation, Surface/Understory		
Fuel Model	gs2	
Fuel Moisture		
1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	60	percent
Weather		
20-ft Wind Speed	30	mi/h
Wind Adjustment Factor	0.3	
Wind Direction (from north)	225	deg
Terrain		
Slope Steepness	10	percent
Aspect (from north)	225	deg

Notes: Scattered Oak trees currently exist west of the existing structures. Little or no vegetation currently exists beneath the trees due to fuel treatment.

6. Run Option Notes

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always

for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from north [SURFACE].

Wind direction is the direction from which the wind is blowing [SURFACE].

7. Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	107	ft/min
Fireline Intensity	1070	Btu/ft/s
Flame Length	11.1	ft

8. End

BehavePlus 3.0.2 (Build 265)

Covert Cyn. - Eastern Boundary 60 MPH Treated

Sun, Jan 04, 2009 at 12:47:14

Input Worksheet

Modules: SURFACE

Input Variables	Input Value(s)	Units
Fire Name	Covert Cyn. Project	
Fire Date & Projection Period	Sunday, Jan 4, 2009	
Fire Analyst	H. Spitzer, Firewise 2000, Inc.	
Fuel/Vegetation, Surface/Understory		
First Fuel Model	tl6	
Second Fuel Model	gs1	
First Fuel Model Coverage	50	percent
Fuel Moisture		
1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	50	percent
Weather		
20-ft Wind Speed	60	mi/h
Wind Adjustment Factor	0.5	
Wind Direction (from north)	45	deg
Terrain		
Slope Steepness	20	percent
Aspect (from north)	65	deg

Notes

Numerous large rock outcroppings throughout the fuelbed.

Run Option Notes

Two fuel model weighting method: two-dimensional spread [SURFACE].

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from north [SURFACE].

Wind direction is the direction from which the wind is blowing [SURFACE].

Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	209	ft/min
Fireline Intensity	1535	Btu/ft/s
Flame Length	13.1	ft

End

BehavePlus 3.0.2 (Build 265)

Covert Cyn. - Southern Boundary Treated
Sun, Jan 04, 2009 at 12:44:19

3.9.111. Input Worksheet

Modules: SURFACE

Input Variables	Input Value(s)	Units
Fire Name	Covert Cyn. Project	
Fire Date & Projection Period	January 4, 2008	
Fire Analyst	H. Spitzer, Firewise 2000, Inc.	
Fuel/Vegetation, Surface/Understory		
First Fuel Model	tl6	
Second Fuel Model	gr1	
First Fuel Model Coverage	50	percent
Fuel Moisture		
1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	60	percent
Weather		
20-ft Wind Speed	30	mi/h
Wind Adjustment Factor	0.3	
Wind Direction (from north)	225	deg
Terrain		
Slope Steepness	15	percent
Aspect (from north)	180	deg

Notes

Southern Boundary fuels contain several large oak trees with little or no understory due to fuel treatment. FM GS2 utilized to represent an untreated fuelbed.

3.9.1III. Run Option Notes

Two fuel model weighting method: two-dimensional spread [SURFACE].

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from north [SURFACE].

Wind direction is the direction from which the wind is blowing [SURFACE].

3.9.1IV. Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	36	ft/min
Fireline Intensity	225	Btu/ft/s
Flame Length	5.4	ft

3.9.1V. End

APPENDIX 'D'

Non-Combustible & Ignition Resistant Building Materials For Balconies, Carports, Decks, Patio Covers and Floors

Examples of non-combustible & fire resistant building materials for balconies, carports decks, patio covers and floors are as follow:

I. **NON-COMBUSTIBLE HEAVY GAGE ALUMINUM MATERIALS** - *Metals USA Building Products Group - Ultra-Lattice*

Ultra-Lattice Stand Alone Patio Cover

Ultra-Lattice Attached Patio Cover

Ultra-Lattice Solid Patio Cover

Ultra-Lattice Vs. Wood

II. FRX Exterior Fire-Retardant Treated Wood

Exterior Fire Retardant Treated (FRT) Wood

FRX® fire retardant treated wood may be used in exterior applications permitted by the codes where: public safety is critical, other materials would transfer heat or allow fires to spread, sprinkler systems cannot easily be installed, corrosive atmospheres necessitate excessive maintenance of other materials, or fire protection is inadequate or not readily available. The International Building, Residential and Urban-Wildland Interface Codes and regulations permit the use of fire retardant treated wood in specific instances. See below for typical exterior uses and typical residential uses.

Typical Exterior Uses

- Balconies
- Decks

Homeowners and Residential Architects: See this 2-minute video and the diagram below.

For information on fire retardant treated wood for exterior uses, visit www.frxwood.com.

Decking (SFM Standard 12-7A-4)

III. **TREX COMPANY, INC –**"Trex Accents ®: Fire Defense ™ " wood and polyethylene composite deck board, nominal 5/4" thick x 5-1/2" width, nominal density of 0.036 lb/in^3.

Trex Accents®: Fire Defense™

The perfect blend of beauty and brawn.

Trex's #1 selling platform, Trex Accents®, exceeds the strict fire regulations set by the State of California and San Diego County.

- Offers superior safety performance:
  - Exceeds ASTM E84 Class B Flame Spread.
  - Exceeds 12-7A-4 Part A (underflame) and Part B (Burning Brand).
- Self-extinguishing even under extreme fire exposure.
- Approved for use by the California State Fire Marshal's Office and San Diego County. Read the California Department of Forestry and Fire Protection, Office of the State Fire Marshal WILDLAND URBAN INTERFACE (WUI)PRODUCTS Report. (PDF)

IV. SOLID "WOOD" DECKING

◊Company Name: Various Manufacturers
Product Description: Solid "Wood" decking: "Redwood", "Western Red Cedar", "Incense Cedar", "Port Orford Cedar", and "Alaska Yellow Cedar".
Sizes: Minimum nominal 2" thickness (American Softwood Lumber Standard PS 20).
Lumber grades: Construction Common and better grades for Redwood, 3 Common and better grades for Cedars, and commercial decking or better grades for both Redwood and Cedars.

Special instructions: Solid wood decking shall be 3x decking and installed over solid wood joists spacing 24" or less on center with 6x6 columns, 4x10 or 6x8 beams and 4x8 joists.

APPENDIX 'E'
Correspondence with Forest Service Access Road

United States Department of Agriculture
Forest Service
Cleveland National Forest
Descanso Ranger District
3348 Alpine Blvd.
Alpine, CA 91901-3923
(619) 445-6235
(619) 445-1753 FAX
CRS 1-800-735-2922

File Code: 2710
Date: February 28, 2011

Marc Halcon
5590 Ruffin Road
San Diego, CA 92123

Dear Mr. Halcon,

This letter is to follow up on Owen Martin's letter of October 10, 2010 responding to your proposal to amend your Special Use Permit (DRD018401) to allow for improvements to the access road located on National Forest System lands which serves your private real property in the vicinity of Japatul Valley.

Your proposal meets Forest Service screening criteria regulations located at Title 36 CFR 251.54(e) (enclosed) for consideration as an application for the use and occupancy of National Forest System lands. We anticipate accepting your proposal as an application sometime in 2012 when workload allows. At that time your application will be subject to environmental analysis according to the provisions of the National Environmental Policy Act (NEPA). I will consider approving your application based on the findings of the NEPA analysis when it has been completed.

If you have any questions concerning this matter, please contact Tim Cardoza, District Lands Specialist. He can be reached at (619) 445-6235 ext. 3434.

Sincerely,

Sharon Wallace

SHARON I. WALLACE
Acting District Ranger

APPENDIX 'F'
Part 1
Emergency Relocation/Temporary Safe Refuge Plan

1. Management Controls and Responsibilities

The applicant has agreed to cancel all events at Covert Canyon Training Facility (CCTF) when the following weather and/or fire conditions exist, This will be the responsibility of the project's Fire Coordinator.

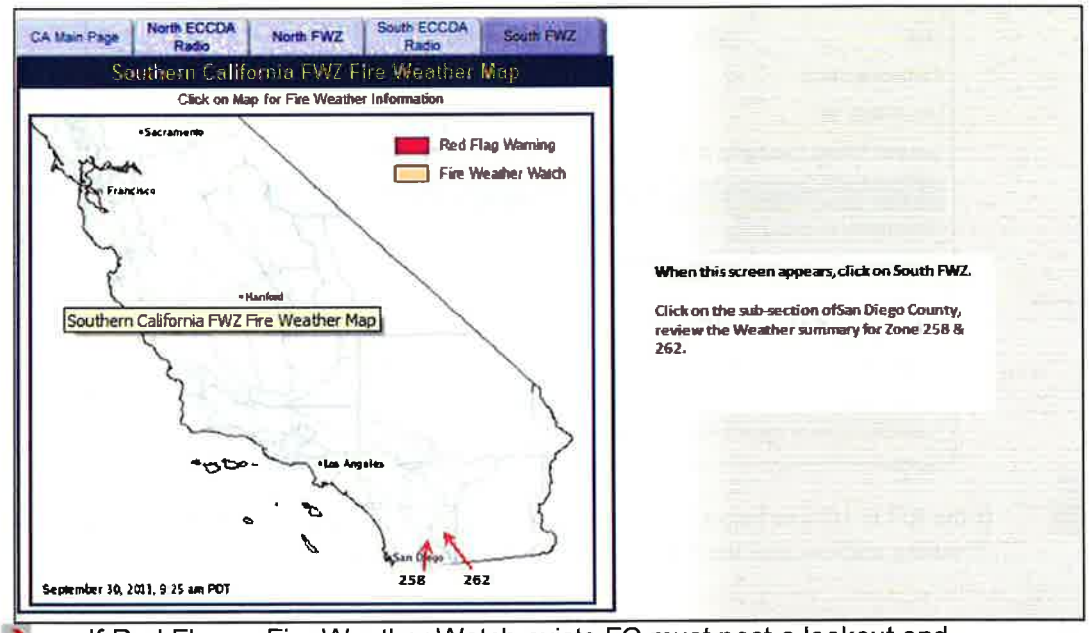
Management will designate a Fire Coordinator (FC), the individual named will be a specific, top level employee, designation to be by title.

The Fire Coordinator will be responsible for insuring full fire compliance with this Fire Protection Plan, including monitoring for.

TRIGGERS

- FC must monitor National Weather Service to be aware of "Red Flag" weather. http://www.wrh.noaa.gov/sto/cafw/index.php

  1. When the NOAA web page appears, click on South FWZ. Review local fire weather forecast by clicking on sub-sections of San Diego County.

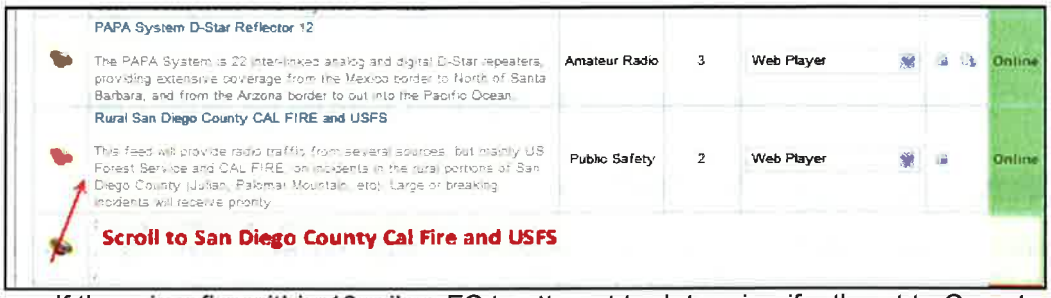


- If Red Flag or Fire Weather Watch exists FC must post a lookout and

- Check CAL FIRE website http://www.fire.ca.gov/fire_protection/firemaps.php for any fires in San Diego County.

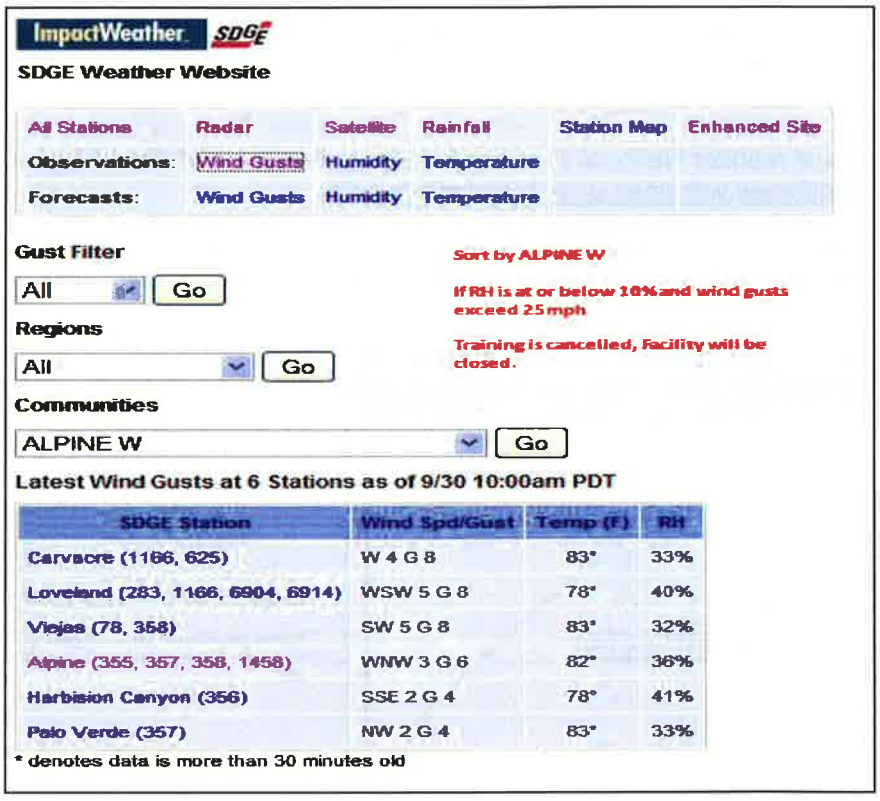
  1. **Any fires within 30 miles of the Facility could indicate diminished local resources.**

FC must attempt to find out if local Fire Protection has been assigned to an incident, by monitoring radio traffic at http://www.radioreference.com/apps/audio/?ctid=219



- If there is a fire within ~~10 miles,~~ FC to attempt to determine if a threat to Covert Canyon Training Facility by checking local weather at http://www.sdgeweather.com/index.php?com=ALPINE+W&submit=Go

5 miles



- If the RH is 10% or below and there are wind gusts exceeding 25mph, the FC will cancel Training and/or close the Facility, and vacate the premises.

- If a fire exists and should there be insufficient time to cancel or relocate all trainees and staff will relocate to the TEMPORARY SAFE REFUGE building.

- ~~Any interruption of power by SDG&E will cause immediate closure.~~

2. Range Control Responsibilities

When the range is in use it shall be under the control of the Range Safety Officer (RSO) from the client group

2.1 RSO Responsibilities

- Stay in radio contact with the Covert Canyon Command Post located at the Classroom
- Put the Range in check fire when any abnormal occurrence takes place that could jeopardize the safety of personnel being trained.
- Observe firing conditions and ensure all weapons are being fired in an appropriate manner.
- Investigate any occurrence of multiple ricochets which could be caused by a shooter.
- Initiate cease fire direct all personnel to the designated Staging Area. This process may be initiated by sounding the Training Facility's Mass Notification System (MNS) audible alarm. The process may be initiated by the RSO or by the FC from the Command Post. Once the Alarm is sounded all training will cease, weapons will be cleared and personnel will report to the designated staging area for instructions. The FC may give instruction over the Facilities PA system.
- Ensure the no smoking condition is adhered to when on the range.

3. Client Briefing Information for Fire Event

Students will be provided with information prior to arrival and/or at the time of arrival which will apprise them of risks associated with large vegetation fires which may occur in the immediate area during their stay. Visitors will be informed that Staff, may escort them to the Temporary Safe Refuge (TSR) building should a fire occur, that is blocking the evacuation route.

This initial information will not be detailed. Rather, it will be a brief notice of the potential for such a wildfire event and act as a confidence building device. Should the unlikely event occur, the students will be directed to the Temporary Safe Refuge (TSR) building and there receive a detailed explanation of the circumstances and an opportunity to participate in an analysis of relevant information, in real time, and the resulting iterative decision-making process. Staff will describe active and passive features of the TSR facility; the building, the features designed into the area immediately surrounding the building including vegetation management, and the level of staff training.

Key Factors describing the Safe Refuge Facility

1) Ignition resistive construction utilizing the most current California Building Code,
2) Automatic fire sprinklers in compliance with standards for public assembly areas
3) Building size of 847sq.ft. will not exceed the required 7 sq. ft. per person x maximum capacity. No more than 30 students and staff will be on site per session.
4) More than 200 ft. of defensible space will surround the Refuge building. This means proper maintenance of existing trees, currently the space is disked.
5) Optimum Communication systems including radio, television, telephone, fax and internet capability with back-up power for those devices.
6) Refuge building will have adequate water supply via stored water.
7) Adequate access for emergency vehicles.
8) Back up power for building lights in case of power outage.
9) Safe and efficient relocation from the Range area to the TSR

Emergency Supplies to be housed in the Temporary Safe Refuge:

1. Batteries for all battery powered appliances
2. Tool kit, duct tape, misc fasteners, cord, wire, etc.
3. Battery operated am/fm radio
4. Flashlights 5.
5. Bottled water for drinking
6. First Aid Kit
7. Scanner to monitor emergency frequencies.

Fire Drills/Training Documentation

Covert Canyon will provide at least two Temporary Safe Refuge drills annually. These drills will focus on the specific duties of staff members to ensure that safety procedures are carried out as outlined in the FPP. Document training and drills by the use of a Log Book.
The Log Book will identify the FC for the training session, which organization is being trained and who is assigned as the RSO

Additional Staff Training

Other training in addition to Safe Refuge procedures will be required for staff to determine an adequate risk assessment. Areas of training will cover:

1. Determination of fire and the characteristics of an incipient stage fire or fires that can be extinguished with portable fire extinguishers/available 300 gal water support trailer, and those that are above staff level of training.
2. Size of the Fire – If a fire is contained within the defensible space and not wind driven extinguishment should be a priority.
3. Immediate Environment – If room temperature is slightly increased with visible signs of smoke or is heat easily felt within 10-15' of fire and smoke is quickly filling room with decreasing visibility.
4. Evacuation Path – If there is a clear path way behind you as you fight the fire or is the fire, heat and/or smoke blocking the route to the TSR.

Training will help staff better identify when evacuation is necessary from such fires. All Covert Canyon staff are trained on the use of portable extinguishers and such extinguishers are inspected, tested and maintained. Additionally the staff will be required to operate the emergency water trailer and pump.

PART 2
FIRE DISCOVERY

Discovery of wildland fire within a ten mile radius of Covert Canyon, will be considered a life safety threat to staff and students within the Covert Canyon property. The designated Fire Coordinator will monitor the situation as outlined in this Appendix and determine the appropriate action to ensure the safety of both staff and client/student. The Mass Notification System (MNS) will be activated and all personnel will rally at the pre-determined Staging Area. At that location staff of Covert Canyon will ensure that all students are accounted for and pass on available information.

Evacuation

If there is sufficient time to evacuate Covet Canyon, staff will deploy under the direction of the Fire Coordinator to the following monitoring locations:

- Intersection of Japatul Road and High Glenn Road
- Lower Gate, this is located approximately half way between Japatul Valley Road and the Covert Canyon facility.

Staff will be deployed by car and will have radio communication with the Fire Coordinator located at Covert Canyon. Once the above locations are determined to be clear and passable, the Fire Coordinator will initiate evacuation from Covert Canyon Training Facility. The staff person located at the intersection of Japatul Valley Road and high Glenn Road will maintain a written roster of persons that have safely evacuated. The Fire Coordinator will then confirm that all persons have evacuated Covert Canyon Training Facility. Once confirmation is made, remaining staff will evacuate in the same manner including the two monitoring locations. In the event of an observed wildfire, should visibility be obscured by smoke at the arrival of the first gate the monitors will immediately return to the Safe Refuge Building no attempt will be made to leave the facility for pre-established monitoring positions.

Temporary Safe Refuge (TSR)

If fire conditions are such that the Fire Coordinator determines evacuation to not be a safe option all personnel will be notified and escorted to a safe location. Building 1A (Administrative Office) has been designated the Temporary Safe Refuge (TSR) location. The Fire Coordinator will ensure that all staff and students are accounted for and notify duty personnel at the San Diego County Rural Fire Protection District - Station 45 of the situation. The Fire Coordinator will monitor the situation and determine if an evacuation can take place as conditions change.

In addition, the FC will listen for fire updates on television or radio. Ensure backup generator is functioning correctly in case electricity goes out.

Medical Evacuation

In the event of a medical emergency at Covert Canyon, the highest medical trained person available shall determine: Client Groups will often have a Paramedic accompanying the training event. Covert Canyon Staff will have at least one Certified EMT

- If the patient requires more than first aid
- If the patient requires evacuation
- If the patient requires emergency evacuation

Evacuation:
If the patient can be safely evacuated by car, the patient will be driven to the intersection of Japatul Valley Road and High Glen Road. The Fire Coordinator will contact Emergency Medical Services (EMS) and arrange for EMS to meet the patient at that location.

Emergency Evacuation:
If the patient cannot safely be evacuated by car the Fire Coordinator or designee shall contact EMS providing the appropriate information for an emergency aerial evacuation. This is possible due to the uniqueness of the CCTF having an FAA approved air strip. The Fire Coordinator or designee shall initiate the establishment of a designated helicopter landing zone.

APPENDIX 'G'

Fire Availability Form

COUNTY OF SAN DIEGO
DEPT. OF PLANNING & LAND USE
5201 RUFFIN ROAD, SUITE B
SAN DIEGO, CA 92123-1666
(858) 565-5981 • (888) 267-8770

PROJECT FACILITY AVAILABILITY FORM — FIRE

Please type or use pen

Cover Canyon LLC, Marc Halcon (858) 279-7233
Owner's Name Phone

5590 Ruffin Road
Owner's Mailing Address Street

San Diego CA 92123
City State Zip

ORG_____ **F**
ACCT_____
ACT_____
TASK_____
DATE_____ AMT $_____
DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION — TO BE COMPLETED BY APPLICANT

A. ☐ Major Subdivision (TM) ☐ Specific Plan or Specific Plan Amendment
☐ Minor Subdivision (TPM) ☒ Certificate of Compliance:_____
☐ Boundary Adjustment
☐ Rezone (Reclassification) from_____ to_____ zone.
☒ Major Use Permit (MUP), purpose: For a Security Training Facility
☐ Time Extension ...Case No._____
☐ Expired Map ...Case No._____
☒ Other Williamson Act Agricultural Preserve Contract Cancellation

B. ☐ Residential ..... Total number of dwelling units_____
☐ Commercial ..... Gross floor area_____
☐ Industrial ..... Gross floor area_____
☐ Other ..... Gross floor area_____

C. Total Project acreage 153 Total lots_____ Smallest proposed lot_____

Assessor's Parcel Number(s) (Add extra if necessary)

5	2	2	0	7	0	0	3
5	2	1	1	3	0	0	5
5	2	1	1	3	0	0	7
5	2	1	1	3	0	0	8

Thomas Bros. Page 1274 Grid G2, G3
High Glen Road
Project address Street
Alpine Community 91901
Community Planning Area/Subregion Zip

OWNER/APPLICANT AGREES TO COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.
Applicant's Signature: Danielle Wegenstein Date: 9/14/07
Address: 9755 Clairemont Mesa Blvd., 100 San Diego, CA Phone: (858) 614-5015
(On completion of above, present to the district that provides fire protection to complete Section 2 and 3 below.)

SECTION 2: FACILITY AVAILABILITY — TO BE COMPLETED BY DISTRICT

District name San Diego Rural F.P.D.
Indicate the location and distance of the primary fire station that will serve the proposed project. Station 75 Descanso

A. ☒ Project is in the District and eligible for service.
☐ Project is not in the District but is within its Sphere of Influence boundary, owner must apply for annexation.
☐ Project is not in the District and not within its Sphere of Influence boundary.
☐ Project is not located entirely within the District and a potential boundary issue exists with the _____ District.
B. ☒ Based on the capacity and capability of the District's existing and planned facilities, fire protection facilities are currently adequate or will be adequate to serve the proposed project. The expected emergency travel time to the proposed project is 10 minutes.
☐ Fire protection facilities are not expected to be adequate to serve the proposed development within the next five years.
C. ☐ District conditions are attached. Number of sheets attached:_____
☒ District will submit conditions at a later date.

SECTION 3. FUELBREAK REQUIREMENTS

Note: The fuelbreak requirements prescribed by the fire district for the proposed project do not authorize any clearing prior to project approval by the Department of Planning and Land Use.

☒ Within the proposed project 100 feet of clearing will be required around all structures.
☒ The proposed project is located in a hazardous wildland fire area, and additional fuelbreak requirements may apply. Environmental mitigation requirements should be coordinated with the fire district to ensure that these requirements will not pose fire hazards.

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

David Nissen B.C. 619-669-1085 10/8/07
Authorized signature Print name and title Phone Date