PROJECT REFERENCE NO.: LU06-0158; Killen Property, Pacific View Drive	PROJECT PLANNER: Dan Klemann
DATE: 19 July 2007 (Site Visits 3 January 2007 and 31 May 2007)	PROJECT BIOLOGIST: Cher Batchelor, David Magney Environmental Consulting (DMEC)

PROJECT LOCATION: The Killen property is a 1.08-acre parcel located on Pacific View Drive (Deals Flat) in the Santa Monica Mountains region of the unincorporated area of Ventura County, California (APN 700-0-010-275). The project site is located at NE½ NW¼ NE⅓ S16 T1S R20W, Triunfo Pass, California Quadrangle (USGS 7.5-minute Series Topographic Map), and at the approximate coordinates of 34.08821°N latitude and 118.97675°W longitude. In the region, Serrano Canyon (a tributary to Sycamore Canyon) is to the northwest, Little Sycamore Canyon is to the east, Boney Mountain is to the north, and the Pacific Ocean is to the south. Deals Flat is immediately east of the project site. (Note: The southeastern most corner of the Killen property is kiddy-corner to the northwestern-most corner of the Beltrami property, for which DMEC conducted the CEQA Initial Study and prepared the *Biological Resources Assessment for Deals Flat Property on Pacific View Drive* report [DMEC 2005]).

PROJECT ADDRESS: The project site is located at an unassigned address on Pacific View Drive in the Santa Monica Mountains. (APN 700-0-010-275.)

PROJECT DESCRIPTION: The applicant (Mr. Killen) is proposing to construct a new, single-story, 2,212-square-foot single family dwelling, with a detached, 410-square-foot garage with a 1,281-square-foot horse stable (with four stalls), and a swimming pool. The subject parcel is 1.08 acres. Water will be provided through a private well, and sewage disposal will be provided through a private septic system. No trees are proposed for removal. Approximately 150 cubic yards (4,000 square feet) of grading is proposed for the project, and excavated material is proposed for relocation onsite. Access would be provided via a new driveway from Pacific View Drive.

David Magney Environmental Consulting (DMEC) was contracted by the County of Ventura to conduct seasonal biological field surveys, vegetation mapping, and impact assessment for this proposed development project. DMEC conducted the winter and spring surveys in order to detect, observe, and map existing conditions and any special-status resources existing and potentially occurring onsite.

ENVIRONMENTAL SETTING: Currently, the property is undeveloped; however, the entire property has been disced. Evaluation of aerial photographs show the property was inhabited by Coastal Sage Scrub prior to discing activities. Very little native vegetation was observed during the winter survey, in part due to the extreme drought of 2006-2007. Only ruderal species have established onsite as of the spring survey. Coastal Sage Scrub exists to the north, *Quercus agrifolia* Alliance exists in the adjacent property to the west, a residence exists to the east, and a drainage swale exists immediately to the north, off the property. The elevation onsite is approximately 1,410 feet above mean sea level.

Serrano Canyon Ventura Los Angeles **Deals Flat** Orange Pacific Coast Hwy Pacific Coast Hwy Killen Project Location **County Line** Kilometers Map Created: 18 June 2007 David Magney Environmental Consulting (DMEC) Data sources: DMEC, ESRI Projection: NAD 1983, CA State Plane, Zone V (feet) Aerial photograph: AirPhotoUSA, February 2006, 1 ft. 0.25

Figure 1. Location of the Killen Property

Only fourteen (14) plant species were directly observed onsite by DMEC during the winter field survey conducted on 3 January 2006, as significant bare ground existed as result of discing activities. As of the spring survey, a total of 70 plant species were observed onsite. Of the 70 vascular plant taxa, 42 (60%) are native species and 28 (40%) are introduced naturalized species. The current species richness is significantly low due to recent and likely recurring vegetation discing onsite, and the severe drought. What was once sensitive Coastal Sage Scrub habitat has been reduced to a disturbed ruderal field. The property currently consists primarily of introduced annual grasses and ruderal forbs. No nonvascular plants (lichens or bryophytes) were observed onsite. For a list of plant species observed, refer to Table 5, Plants Observed at the Killen Property, in the *Biological Resources and Impact Assessment of the Killen Property, Pacific View Drive, Deals Flat, Ventura County, California* report (Killen Biological Resources Report) (DMEC 2007).

The predominant habitat inhabiting the Killen property prior to discing/disturbance was Coastal Sage Scrub (*Salvia leucophylla-Artemisia californica* Alliance). Currently under post-disturbance conditions, the Killen property is inhabited by Ruderal Grassland Alliance. Additional habitats observed in adjacent parcels include *Quercus agrifolia* Alliance (to the west) and Perennial Grassland Alliance (to the south). All habitats and plant alliances are mapped in Figure 4, Killen Property Pre-Disturbance Habitats, in the Killen Biological Resources Report (DMEC 2007).

Numerous species of wildlife are known to occur within the Santa Monica Mountains vicinity, and DMEC expects that many wildlife species frequented the property on a regular basis prior to vegetation clearing. During the biological surveys, DMEC observed or detected 15 wildlife species onsite, including 1 reptile, 9 birds, and 5 mammals. Table 6, Killen Property Wildlife Species, in the Killen Biological Resources Report (DMEC 2007), contains a list of animal species that were directly observed or detected by sign adjacent to or on the Killen property. No local wildlife travel routes were observed onsite during the timing of the surveys; however, evidence of wildlife travel routes may have been lost due to recurring discing disturbances to the project site soil.

Literature Review: DMEC conducted a search of the California Department of Fish and Game's (CDFG's) California Natural Diversity Database (CNDDB) RareFind3 (CDFG 2007) for the Triunfo Pass, California Quadrangle (USGS 7.5-minute Series Topographic Map) (in which the Killen property exists), and all surrounding quads (Point Mugu, Camarillo, Newbury Park, Thousand Oaks, and Point Dume). DMEC conducted this database search to account for special-status species tracked by CDFG in the area and with potential to occur at the project site.

DMEC also conducted a literature search of California Native Plant Society's *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2006) and the *Checklist of Ventura County Rare Plants* (Magney 2007) to account for other special-status plant species not tracked by CNDDB with potential to occur in the vicinity of the proposed project site. Projects reviewed under California Environmental Quality Act (CEQA) should consider impacts to Locally Important Species as significant. Generally, impacts to an entire population of one or more of the species listed herein would be considered significant. The CNDDB Special Animals List (CDFG 2006) was also referenced to determine if any wildlife species observed onsite are considered special-status. DMEC also searched in-house files on occurrences of plants and wildlife.

IV. BIOLOGICAL RESOURCES:		PROJECT IMPACT DEGREE OF EFFECT ¹				CUMULATIVE IMPACT DEGREE OF EFFECT			
What level of impact will the proposal have on:	N	LS	PS-M	PS	N	LS	PS-M	PS	
A. Endangered, Threatened, or Rare Species			X				X		
B. Wetland Habitat	X				X				
C. Coastal Habitat			X					X	
D. Migration Corridors	X				X				
E. Locally Important Species/Communities			X					X	
Will the proposal:									
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?									
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?									
c) Have a substantial adverse effect on federally protected wetland as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?									
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?									
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?									
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?									

¹ N = No Impact; LS = Less Than Significant; PS-M = Potentially Significant Impact Unless Mitigation Incorporated; PS = Potentially Significant Impact.

BIOLOGICAL RESOURCES (COMMENTS, IMPACTS, & MITIGATION):

Impacts to sensitive biological resources resulting from proposed development and fuel modification are shown below in Figure 2, Killen Project Impacts to Sensitive Biological Resources. Figure 3, Minimum Mitigation for Killen Project Impacts, illustrates the currently proposed project and the area of mitigation proposed for the project. Figure 4, Recommended Development Relocation and Mitigation for Killen Project Impacts, is a schematic showing how the Killen development could be modified to minimize impacts. The project illustrated in Figure 10 relocates the horse arena, and relocates the residence further south to minimize impacts to sensitive biological resources and increase the mitigation area to the maximum extent possible onsite. DMEC recommends the project be similarly redesigned to the schematic in Figure 4, over the proposed project in Figure 3, since (1) the Fritillaria biflora var. biflora (Chocolate Lily) population (the special-status plant species observed onsite) will have an increased chance of survival/viability, (2) the mitigation area will be increased for mitigating impacts from past discing and future permanent development, and (3) Fritillaria biflora will be on the outer limits of the fuel modification zone further reducing the chance of impacting the population. Specifically, the mitigation area proposed in Figure 3 compared to the mitigation area recommended in Figure 4 is summarized below:

- **Proposed Mitigation** (mitigation area available with current development plans) (Figure 3):
 - o Coastal Sage Scrub Mitigation Site (red hatching) = 4,207 sq. ft. (0.10 acre);
 - Recommended Mitigation Transition Area Preserving *Fritillaria* Population (yellow hatching and solid red) = 5,976 sq. ft. (0.14 acre);
 - o Total Mitigation Area Proposed in Figure 3 = 10,183 sq. ft. (0.24 acre).
- **Recommended Mitigation** (minimizes impacts to the maximum extent) (Figure 4):
 - Coastal Sage Scrub Mitigation Site (red hatching) = 10,314 sq. ft. (0.24 acre);
 - Recommended Mitigation Transition Area Preserving *Fritillaria* Population (yellow hatching and solid red) = 1,890 sq. ft. (0.04 acre);
 - o Total Mitigation Area Proposed in Figure 4 = 12,204 sq. ft. (0.28 acre).

Pacific View Drive Known Special Status Species (Fritillaria biflora var. biflora) Vegetation Types Comprising Special-Status Habitats Coastal Sage Scrub (Recently Disked) Killen Parcel Coastal Sage Scrub (Regenerating) **Neighboring Ventura County Parcels** Needlegrass-Brome Grassland Proposed Structures (as of 14 June 2007, Studio 9 one 2) **Bigpod Ceanothus Chaparral** Proposed Landscape Features (as of 14 June 2007, Studio 9 one 2) 100' Buffer of Structures (drawn by DMEC per VCFD) Coast Live Oak Woodland Map Created: 16 July 2007 David Magney Environmental Consulting (DMEC) Data sources: DMEC, County of Ventura, Studio 9 one 2 Projection: NAD 1983, CA State Plane, Zone V (feet) Aerial photograph: AirPhotoUSA, February 2006, 1 ft.

Figure 2. Killen Project Impacts to Sensitive Biological Resources

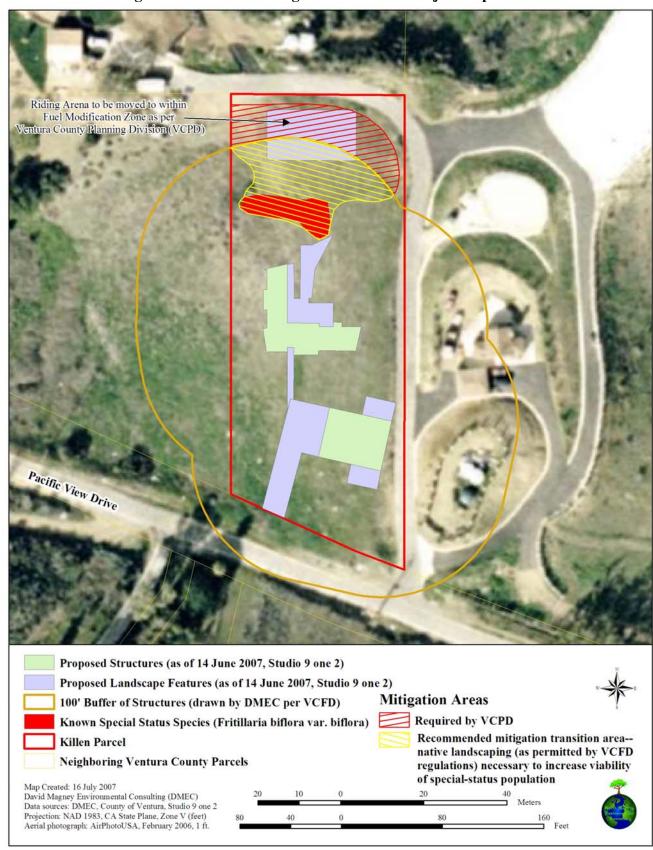
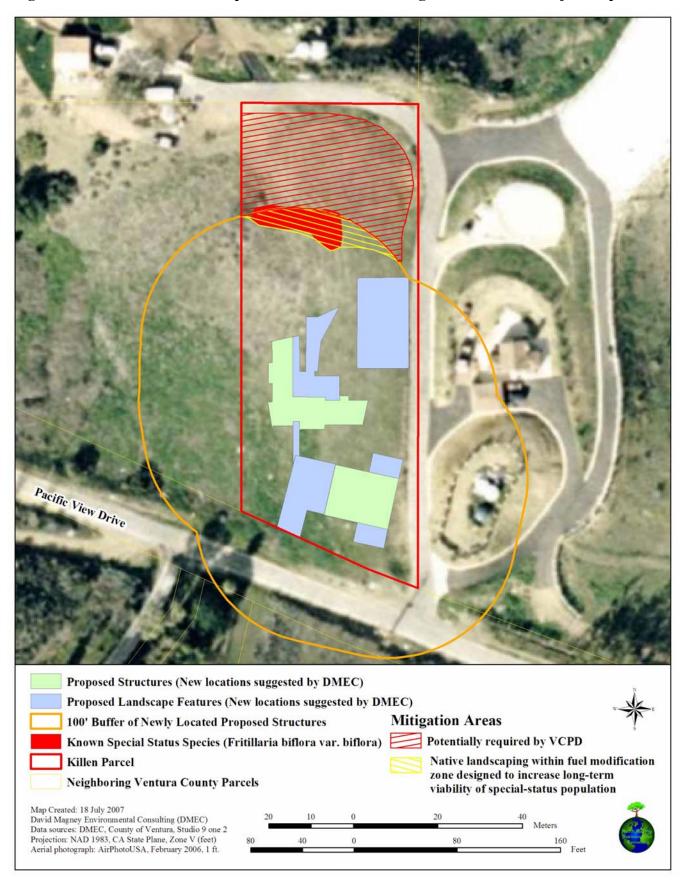


Figure 3. Minimum Mitigation for Killen Project Impacts*

^{*}The northern bounds of the mitigation area in Figure 9 does not extend all the way to the access road immediately north of the mitigation site, as a 10-foot fuel modification zone will likely be required along that access road.

Figure 4. Recommended Development Relocation and Mitigation for Killen Project Impacts



A. Endangered, Threatened, or Rare Species

No Federally or State listed endangered, threatened, or rare plant or wildlife species were observed onsite; however, four (4) special-status plant species and six (6) special-status wildlife species, considered rare at least at a statewide level, are likely to occur onsite, based on the presence of the pre-disturbance habitat (Coastal Sage Scrub) and their known presence at the beltrami property across the street (DMEC 2005). Special-status species *likely to occur onsite* include:

		Species Status			tus	CNIDG	
Scientific Name	Common Name	G-Rank	S- Rank	Federal Listing	State Listing	CNPS List/ CDFG	Habitat Requirements
				Plan	ts		
Calochortus catalinae	Catalina Mariposa Lily	G3	S3.2	-	-	4.2	Valley and foothill grassland, chaparral, coastal scrub, cismontane woodland. In heavy soils, open slopes, openings in brush. 30-700m. Observed by DMEC across the street at Beltrami property.
Calochortus plummerae	Plummer Mariposa Lily	G3	S3.2	-	-	1B.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Rocky and sandy sites, usually of granitic or alluvial material. Common after fire. 90-1610m.
Chorizanthe parryi var. parryi	Parry's Spineflower	G2T2	S2.1	-	-	3.2	Coastal scrub, chaparral. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral & woodland; dry, sandy soils. 40-1705m.
Navarretia jaredii	Paso Robles Navarretia	G3	S3.3	-	-	4.3	Cismontane woodland, chaparral, valley and foothill grassland. Open, grassy areas on serpentine clay. 200-500m. Observed by DMEC across the street at Beltrami property.
				Wildl	ife		
Aimophila ruficeps canescens	Southern California Rufous-crowned Sparrow	G5T2T4	S2S3	-	-	SC	Resident in southern California Coastal Sage Scrub and sparse mixed chaparral. Frequents relatively steep, rocky hillsides w/grasses & forbs.
Neotoma lepida intermedia	San Diego Desert Woodrat	G5T3?	S3?	-	-	SC	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops and rocky cliffs & slopes.
Phrynosoma coronatum (blainvillii population)	Coast (San Diego) Horned Lizard	G4G5	S3S4	-	-	SC	Inhabits Coastal Sage Scrub and chaparral in arid and semi-arid climate conditions. Prefers friable, rocky, or shallow sandy soils.
Phrynosoma coronatum (frontale population)	Coast (California) Horned Lizard	G4G5	S3S4	-	-	SC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, & abundant supply of ants & other insects.
Toxostoma redivivum	California Thrasher	G5	S?	-	-	LC	An endemic of the California Biotic Province (mostly in the western part of the state). Breeds from sea level to the higher parts of the montane chaparral. Breeds in adjacent oak woodlands and pine-juniper scrub as well as in parks and gardens, but only if dense cover is available. Its dispersal is very limited.
Trimerotropis occidentaloides	Santa Monica Grasshopper	G1G2	S1S2	-	-	-	Known only from Santa Monica Mountains. Bare hillsides and along dirt trails in chaparral.

The proposed project may result in impacts to the *likely* **special-status plant species**, considered rare at least at a statewide level, if they become reestablished back onsite, which is a potentially significant impact.

M-1: Although winter and spring surveys have been conducted, additional botanical surveys including a summer survey for late-flowering species and a pre-construction survey should be conducted prior to any development activities to determine if any special-status biological resources have become established or have reestablished onsite. The extent of any additional special-status species should be delineated to determine if an entire population exists onsite and to determine the extent of the impacts to each potential species resulting from the proposed project. In the event that mitigation measures are necessary - due to loss of any individuals of special-status plant species considered rare statewide, loss of an entire locally rare plant population, or loss of population viability - a detailed mitigation plan should be developed to minimize impacts and to ensure successful mitigation for impacts to special-status plant species. The severe drought of 2006-2007 almost certainly limited the number of annual and perennial plant species that germinated this year, leaving high potential for one or more special-status species that may occur onsite to go undetected. Ideally, field surveys should be conducted during seasons and years when climatic conditions have not limited detection.

If mitigation is required for impacts to special-status plant species, a detailed mitigation plan should be developed that is designed to minimize impacts and to ensure successful mitigation for impacts to special-status plant species. Mitigation ratios for any significant impacts to special-status plant species is recommended generally at a 10:1 ratio, but this ratio may vary depending upon the status of the species impacted and how well the species is expected to be reestablished.

The mitigation plan should include but not be limited to the following measures:

- Conducting floristic surveys prior to any construction to delineate the extent of the impacts to the population and individual plants resulting from the proposed project;
- Flagging off plants to be avoided outside of the development envelope;
- Preserving the topsoil within the development envelope as a seed bank to promote specialstatus species revegetation;
- Collecting seeds of special-status plant species in the immediate vicinity of the project site, to ensure that the genetic integrity of the local landscape remains intact;
- Relocating individuals to be impacted to a designated mitigation site;
- Sowing the seed back onsite (and outside of any potential fuel modification zones) after construction activities have been completed. (A qualified botanist should be present during implementation of mitigation measures to aid in successful mitigation.); and
- Maintaining and monitoring restoration/planting sites for a minimum of five (5) years to determine mitigation success/failure, and implementing remedial measures to satisfy mitigation objectives.

No **special-status wildlife species** were observed onsite or within the proposed impact areas. In addition, no bird nests or migratory nesting bird species were observed onsite. However, habitat for special-status wildlife species once existed onsite, and studies conducted by DMEC across the street found special-status species on the Beltrami property.

Since the potential exists for impacts to occur to these wildlife species resulting from the proposed project, the impact is considered a potentially significant impact. Indirect and cumulative impacts due to wildlife habitat loss will also result. The indirect loss of wildlife habitat is a significant but partially mitigable impact since it can only be partially mitigated for by implementing a portion of habitat restoration onsite. The cumulative impact is also considered significant but partially mitigable since the loss of habitat is permanent and contributes to the overall cumulative loss of wildlife habitat for special-status wildlife species in the Santa Monica Mountains and the region.

M-2: Measures should be taken to ensure no harm or impacts to any wildlife species (special-status or otherwise) during construction activities. Prior to grading or activities, a qualified biologist should survey the construction areas to determine if wildlife species are foraging, frequenting, or nesting on or adjacent to the construction site(s). If any special-status wildlife species are expected to be impacted during construction of the proposed development, a mitigation plan will be developed and implemented by a County approved Biologist to minimize impacts and to ensure successful mitigation for impacts to special-status wildlife species. This mitigation plan shall include, but not be limited to the measures discussed in the following paragraphs.

A County approved Biologist shall develop a mitigation plan to safely relocate the sensitive wildlife species (may include trapping) and install appropriate temporary fencing prior to development to prevent re-entry. If any state or federal endangered or threatened listed species are detected during the pre-development surveys, then the County, and the respective regulatory agencies, will be immediately notified, and development will not be permitted until such time as a letter of no-effect or the appropriate take permit(s) is issued. A County approved Biologist shall also be present during development to ensure that sensitive wildlife species will not be directly disturbed or lost.

If a special-status wildlife species is observed onsite, the biological monitor shall be notified to implement all measures necessary to protect the sensitive species. Regardless, if *any* wildlife species, including special-status wildlife species, are observed during construction activities, the contractor shall allow the animal to escape or a qualified biologist shall relocate the animal to a preserved/undeveloped area with similar required habitat. The equipment operators shall be informed of the species' presence and/or be provided with pictures in order to help avoid impacts.

B. Wetland Habitat

No impacts to riparian vegetation, County defined wetlands, federal jurisdictional waters (including wetlands), or state jurisdictional wetlands are expected to result from the proposed project; however, runoff may be increased and water quality of the northern drainage (offsite) may be negatively influenced by development. The impacts to water quality onsite are likely a less-than-significant impact. However, it should be noted that although the property is only one acre, and although the proposed development is relatively small, the project contributes to the cumulative development in the area, which increases the total amount of runoff in the vicinity and affects the general water quality of nearby streams.

Since no impacts to riparian vegetation, County defined wetlands, federal jurisdictional waters (including wetlands), or state jurisdictional wetlands are expected to result from the proposed project, no mitigation measures are required.

C. Coastal Habitat

The Killen property exists within the ESHA of the Santa Monica Mountains. The 1.3 acres of Coastal Sage Scrub that have collectively been removed onsite as a result of discing activities and that will result from development and associated fuel modification is considered sensitive habitat, within the Coastal Zone, and qualifies as ESHA. Direct impacts and indirect impacts to this coastal habitat are considered significant, since the impact is only partially mitigable onsite. Adequate space does not exist onsite to mitigate for the 1.3 acre of ESHA Coastal Sage Scrub lost, and offsite mitigation is infeasible. The cumulative impact is also considered significant since the loss of this habitat is permanent and contributes to the overall cumulative loss of sensitive coastal habitat in the Santa Monica Mountains.

M-3: DMEC recommends the mitigation schematic represented in Figure 4 (above) to increase the area of mitigation onsite and minimize impacts to the coastal habitat, and to restore the impacted coastal habitat to the maximum extent possible. In addition, to mitigate for impacts to sensitive habitat, a detailed mitigation plan should be developed to minimize impacts and to ensure successful mitigation for impacts to sensitive habitats. The mitigation plan should include, but not be limited to, the following:

- Collect seeds of plant species from the sensitive habitat in the immediate vicinity of the project site, to ensure that the genetic integrity of the local landscape remains intact;
- Revegetate and enhance the preserved sensitive habitat within the property boundaries by handsowing seeds and planting container plants of native indigenous plant species;
- Control and remove invasive exotic plant species from the restoration site(s) to enhance species richness and create a less competitive environment for native successional and planted species;
- Implement erosion control measures, as necessary, to protect the integrity of the restoration site and to allow plantings and natural natives to germinate;
- Facilitate natural habitat regeneration and habitat succession to aid in the restoration effort;
- Increase native plant species richness, structural diversity, native vegetative cover, and increase
 forage, cover, and nesting habitat for terrestrial wildlife frequenting and inhabiting the vicinity of the
 property;
- Monitor work of the planting contractors to keep impacts to biological resources during mitigation implementation to the minimum extent possible; and
- Monitor the restoration plantings and restoration site for a minimum of five (5) years to ensure that success is achieved.

D. Migration Corridors

The Killen property is not mapped as any particular wildlife movement category and exists within an "island" of non-wildlife-habitat and unprotected land; however, the project site is surrounded by what is mapped as wildlife habitat (non-core and privately held). No local wildlife travel routes were observed onsite during the timing of the survey; however, wildlife travel routes may have been lost due to recurring discing disturbances to the project site soil.

Future development of the Killen property may directly temporarily impact wildlife movement or migration at or near the project site due to noise, lighting, dust, poison, and human presence. The temporary direct impacts are considered less than significant when the measures outlined below for M-4 are implemented to minimize these temporary impacts. Permanent and cumulative impacts to wildlife movement resulting from loss of native natural vegetation and species-specific wildlife habitat are considered less than significant since the project site is not mapped as any particular wildlife movement category.

M-4: Although the impact to wildlife movement is considered less than significant, the following mitigation measures will be required to reduce impacts to the minimum extent possible:

- Avoid removing natural vegetation to the maximum extent possible within the project area;
- Avoid contact with, or aggravating, any wildlife that may be encountered;
- Reduce noise levels during the night hours between 10:00 P.M. and 5:00 A.M.;
- Reduce night lighting; and
- Restrict the use of chemicals or poisons around construction areas and completed project.

E. Locally Important Species/Communities

One **species of local concern**, *Fritillaria biflora* var. *biflora* (Chocolate Lily), was observed onsite (a population of approximately 120 individuals). In addition, approximately 5 individuals of *Fritillaria biflora* and approximately 14 individuals of *Grindelia camporum* var. *bracteosum* (Bracted Gumplant), another species of local concern, were observed in the adjacent parcel to the west (not on the Killen parcel). Both of these observed species are considered Locally Uncommon by CNPS (Magney 2007) with only 8 known extant populations in Ventura County, including the populations observed onsite (Magney manuscript). No lichen or bryophyte species, special-status or otherwise, were observed onsite.

The proposed project likely will not impact individuals of the locally uncommon *Grindelia camporum* var. *bracteosum*; however, the proposed project will impact several individuals of the locally uncommon *Fritillaria biflora* (actual number to be impacted is unknown at this time). Since the whole population is not being lost, this is considered a less-than-significant impact. However, Mr. Killen shall protect the rest of the remaining individuals of the population on his property to the maximum extent possible (refer to Section 6 for mitigation measures) to ensure long-term viability of population onsite.

If the population becomes unviable due to direct or indirect impacts of the proposed development (such as soil disturbance and/or regular disturbance from annual fuel modification), the impact would be considered a significant adverse impact. Therefore, impacts to *Fritillaria biflora* onsite is considered a potentially significant (and potentially mitigable) impact. Significance is ultimately determined by the success of the *Fritillaria biflora* preservation effort over the long run.

DMEC expects several additional locally rare or uncommon plant species to inhabit or frequent the property, especially prior to vegetation removal. The proposed development poses a potentially significant impact to locally important plant species since several locally rare species were directly observed by DMEC across the street at the Betrami property (DMEC 2005), and since special-status plant species may become established, or may re-establish, onsite prior to any construction activities. The presence of Ventura County Locally Important plant species nearby represents a potentially significant impact, especially if an entire plant population is destroyed or is reduced in size such that it is no longer viable.

M-5: Mr. Killen shall protect the rest of the remaining individuals of the entire population of *Fritillaria biflora* on his property to the maximum extent possible to ensure the long-term viability of the population onsite. The remaining individuals of the population will be fenced off, and/or will be included within a larger mitigation site (if implementing the recommended mitigation in Figure 4). The population will be preserved onsite and incorporated into the Killen property landscape.

DMEC recommends the *Fritillaria biflora* population be protected within the mitigation area depicted in Figure 4 (above) to (1) minimize impacts to the population to the maximum extent possible, (2) to maintain or increase the population's viability over time since the population will be located immediately adjacent to the required mitigated Coastal Sage Scrub habitat, and (3) to locate the population as far out of the fuel modification zone as possible. Redesigning the development plans (moving the development south) will concurrently move the associated fuel modification zone southward. This will allow the *Fritillaria biflora* population to be on the outer boundary of the fuel modification zone. Fire hazard thinning on the outer zone boundary can typically be negotiated with the Fire Department to be conducted at a lesser degree, especially if special-status species mitigation exists within the outer zone, to ultimately result in fewer impacts to the population over time. The *Fritillaria biflora* population preserved onsite shall be monitored for a minimum of five (5) years to document the health of the individuals, and the population as a whole over time, and to determine if additional/extended mitigation and monitoring is required.

Although winter and spring surveys have been conducted, additional botanical surveys including a summer survey for late-flowering species and a pre-construction survey should be conducted prior to any development activities to determine if any special-status biological resources have become established or have reestablished back onsite. The extent of any additional special-status species should be delineated to determine if an entire population exists onsite and to determine the extent of the impacts to each potential species resulting from the proposed project. In the event that mitigation measures are necessary - due to loss of an entire locally rare plant population, or loss of population viability - a detailed mitigation plan should be developed to minimize impacts and to ensure successful mitigation for impacts to special-status plant species.

If mitigation is required for impacts to special-status plant species, a detailed mitigation plan should be developed to minimize impacts and to ensure successful mitigation for impacts to special-status plant species. Mitigation ratios for any significant impacts to special-status plant species is recommended generally at a 10:1 ratio, but this ratio may vary depending upon the status of the species impacted and how well the species is expected to be reestablished. The mitigation plan should include but not be limited to the measures outlined above for M-1.

One **sensitive habitat** exists within the Killen property (Coastal Sage Chaparral Scrub [Salvia leucophylla-Artemisia californica Alliance]). Impacts to Salvia leucophylla-Artemisia californica Alliance have resulted from repeated discing and vegetation clearing onsite. In addition, the proposed development and associated fuel modification will impact a total of approximately 1.3 acres of this Coastal Sage Scrub Alliance (including 0.88 acre of direct and indirect impacts onsite, and 0.42 acre of indirect impact offsite). Direct impacts (discing and development) and indirect impacts (fuel modification) to this sensitive habitat are considered significant, since the impact is only partially mitigable onsite. Adequate space does not exist onsite to mitigate for the 1.3 acre of Coastal Sage Scrub lost, and offsite mitigation is likely infeasible. The cumulative impact is also considered significant since the loss of habitat is permanent and contributes to the overall cumulative loss of sensitive habitat in the Santa Monica Mountains and the region.

M-6: DMEC recommends the mitigation schematic represented in Figure 4 (above) to increase the area of mitigation onsite in order to minimize impacts to the sensitive habitat and to restore the sensitive habitat to the maximum extent. To mitigate for impacts to sensitive habitat, a detailed mitigation plan should be developed to minimize impacts and to ensure successful mitigation for impacts to sensitive habitats. The mitigation plan should include, but not be limited to, the measures outlined above for M-3.

BIBLIOGRAPHY/REFERENCES CITED:



D	MANDATORY FINDINGS OF SIGNIFICANCE	Yes/Maybe	No
	Based on the information contained with Section B6:		
1.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California's history or prehistory?	X	
2.	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)		X
3.	Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effect of other current projects, and the effect of probable future projects. (Several projects may have relatively small individual impacts on two or more resources, but that total of those impacts on the environment is significant.)	X	
4.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X

E. <u>DETERMINATION OF ENVIRONMENTAL DOCUMENT</u> :							
On tl	On the basis of this initial evaluation:						
[]	I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION should be prepared.						
[]	I find that although the proposed project could have a significant effect on the environmental, there would not be a significant effect in this case because the mitigation measure(s) described in section C of the Initial Study will be applied to the project, A MITIGATED NEGATIVE DECLARATION should be prepared.						
[]	I find the proposed project, individually and/or cumulatively, MAY have a significant effect on the environmental, and an ENVIRONMENTAL IMPACT REPORT is required.						
[]	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environmental, but at least one effect 1) has been adequately analyzed in and earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.						
[]	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.						

Biological Resources Initial Study Preparer(s)

19 July 2007_

Date