

November 21, 2005

DRAFT

Hans Giruad & Associates
2340 Park Sorrento, Suite 211 A
Calabasas, CA 91302

Subject: Deerlake Ranch- Minor Grading within MRCA Holding

Attn: Hans Giruad

Dear Hans:

Envicom Corporation conducted a vegetation survey in a small off-site grading and restoration area within MRCA property. This memorandum summarizes our findings and provides recommendations for species to include when revegetating. As described in your email dated November 3, 2005, minor grading is required in order "to remove loose material identified by the soils engineer." The area investigated is located in the northeast portion, roughly 40 feet beyond (north) the subject property, and within a small area of MRCA land, as shown on **Figure 1**. Carl Wishner, Principal Biologist and Adam Gale, Staff Biologist of Envicom Corporation, thoroughly examined the location and compiled an inventory of vascular plants that were observed on November 18, 2005. Photographs were taken during the site visit to document the existing conditions as well as to identify habitats that would potentially be impacted as a result of the grading (see **Appendix 1**, Photo Plates).

The topography of the surveyed location was within a bowl-shaped segment facing southwest to southeast with the dominant habitat type being post-burn, chamise (*Adenotoma fasciculatum*) chaparral. Old flower stocks of mariposa lilies (either *Calochortus plummerae* or *C. clavatus gracilis*) were observed and restricted to the coarse, gravelly soils located on the southeast facing slopes on the western portion of the area investigated, as shown on **Figure 1**. Approximately a dozen flower stocks were observed and flagged with green ribbon. However, because the lilies do not necessarily flower every year, it is probable that a larger population exists within the site. The complete list of vascular plants that were observed during the field visit is located in **Table 1** at the conclusion of the memo.

Plummer's mariposa and the slender mariposa lilies are both a California Native Plant Society (CNPS) 1B species. The legal status of the species is derived from the CNPS List, which categorizes the relative degree of concern or threat to individual plant species, and the California Natural Diversity Database (NDDDB). The NDDDB, a California Department of Fish and Game (CDFG) program, is an inventory of the locations of the State's rarest species and natural communities. The NDDDB assigned the lilies an S3.2 status. An S3.2 status indicates that the species is only reported in 21-100 locations or that there are only 3,000 to 10,000 known individuals of the species remaining, regardless of the number of locations. Plummer's and slender mariposa lilies are rare throughout their range and have been determined to be vulnerable in its present circumstances, or to have a high potential to be vulnerable due to limited or vulnerable habitat, its low numbers of individuals per population, and its limited number of populations.

Because such a small number of lilies were observed, it is our recommendation to salvage the bulbs during their dormant periods (Fall), and transplant them to the offsite mitigation parcel, in Brown's Canyon. Numerous sites have already been identified in Brown's Canyon during Fall 2004 when the initial lily salvage and transplantation occurred.

The table below indicates the plant species that were observed during the field investigation. The asterisk preceding certain species indicates our recommendation for inclusion into the seed mix. In addition to the recommended species, the following species, which were not observed should also be included in the seed mix; California native brome (*Bromus carinatus*), coastal lotus (*Lotus salsuginosus*), and either dove lupine or Coulter's lupine (*Lupinus bicolor* or *L. sparsiflorus*).

Table 1
Vascular Plants Observed

GROUP Family Scientific Name	Common Name
FLOWERING PLANTS --DICOTS	
Anacardiaceae	
Malosma laurina	laurel sumac
Rhus ovata	sugar bush
Asteraceae	
*Artemisia californica	California sagebrush
Centaurea melitensis	tochalote
Chaenactis artemisiifolia	white pincushion
Deinandra fasciculata	fascicled tarweed
*Eriophyllum confertiflorum	golden yarrow
Hazardia squarrosa	sawtooth goldenbush
Micropus californicus	slender cottonweed
Stephanomeria virgata	wand chicory
Boraginaceae	
Cryptantha intermedia	popcorn flower
Brassicaceae	
Hirschfeldia incana	Mediterranean mustard
Caprifoliaceae	
Sambucus mexicana	elderberry
Convolvulaceae	
Calystegia macrostegia cyclostegia	morning glory
Cucurbitaceae	
Marah macrocarpus	wild cucumber
Cuscutaceae	
Cuscuta sp.	dodder
Fabaceae	
*Lotus scoparius	deer weed
Geraniaceae	
Erodium cicutarium	red-stem filaree
Hydrophyllaceae	

November 21, 2005
 Letter to Hans Grund
 Subject: Deerlake Ranch- Minor Grading within MRCA Holding

GROUP	
Family	
Scientific Name	Common Name
Phacelia cicutaria	caterpillar phacelia
Lamiaceae	
Salvia columbariae	chia
*Salvia mellifera	black sage
Nyctaginaceae	
Mirabilis laevis var. crassifolia	wahbone bush
Onagraceae	
Camissonia californica	mustard evening primrose
Camissonia intermedia/micrantha	small evening primrose
Polemoniaceae	
Leptodactylon californicum	prickly-phlox
Polygonaceae	
*Eriogonum fasciculatum	California wild buckwheat
Rhamnaceae	
Ceanothus crassifolius	hoary-leaved ceanothus
Rosaceae	
*Adenostoma fasciculatum	chamise
FLOWERING PLANTS --MONOCOTS	
Agavaceae	
Yucca whipplei	our lord's candle
Liliaceae	
Calochortus sp.	mariposa lily
Poaceae	
Achnatherum coronatum	giant needlegrass
Avena barbata	slender wild oats
Bromus madritensis rubens	red brome
*Nassella lepida	foothill needlegrass
*To be included in seed mix.	

Please feel free to contact me if you have any questions regarding this memorandum.

Sincerely,

Primo Tapia
 Special Projects