

LSA ASSOCIATES, INC. 157 PARK PLACE PT. RICHMOND, CALIFORNIA 94801 510.236.6810 TEL 510.236.3480 FAX

BERKELEY FRESNO RIVERSIDE CARLSBAD IRVINE ROCKIIN FORT COLLINS PILL FORT COLLINS PALM SPRINGS SAN LUIS OBISPO

September 5, 2013

Hardy Gill The Shaw Group, LP P.O. Box 2622 Sumas, WA 98295

Subject: Results of the Biological Survey of the D Street Property Hayward, Alameda County, California

Dear Hardy:

This letter reports on the results of the biological survey of your property located on D Street, in Hayward, Alameda County, California. This survey addresses the concerns of the County of Alameda regarding effects of the proposed residences on biological resources. This letter addresses the potential occurrence of special-status plant and animal species and the occurrence of wetlands.

The proposed project would entail constructing a residential addition between the existing residence and the studio. A bio-retention basin would reduce peak runoff and a spreader would reduce erosion from the runoff.

The approximately 3.66-acre project site is located on the north side of D Street at addresses 2492 and 2512, approximately 1.5 miles east of its intersection with Foothill Boulevard in Hayward (Alameda County Assessor's Parcel Number 416-200-22-6 and 416-200-19-9). The site is situated within an unsectioned portion of Township 3 South, Range 2 West on the Hayward, California 7.5-minute USGS quadrangle, and is centered at 37.6808° North Latitude and 122.0567° West Longitude. Figures 1 and 2 (attached) depict the regional location and project site location.

The project site slopes generally to the west and has elevations ranging from approximately 280 to 350 feet above sea level. The project site contains two homes, one occupied and one abandoned. Most of the site is surrounded by a perimeter fence. Much of the site has been graded for road access and to span two drainages which cross the site.

## METHODS

I surveyed the property on June 18, 2013. The survey entailed searching the entire property for special-status plant species, habitat of special-status animals, and sensitive habitats, such as wetlands. Observed species were tallied in field notes. Prior to the survey, I queried the California Natural Diversity Data Base (CNDDB) for records of the occurrence of special-status species in the Diablo, Dublin, Hayward, Las Trampas Ridge, Newark, Niles, Oakland East, Redwood Point, and San Leandro quadrangles. The query included only those portions of the quadrangles within Alameda, Contra Costa, and Santa Clara quadrangles.

## RESULTS

#### Vegetation

The project site is surrounded by residences and has been disturbed by heavy equipment in the past. The vegetation consists of a mixture of non-native grassland and ruderal (weedy) species and patches of blackberry, herbaceous wetland, and eucalyptus. The wetland vegetation occurs along two watercourses that flow across the site. Figure 3 shows the vegetation of the project site.

**Non-native Grassland.** Grassland dominated by non-native species covers the majority of the project site. The non-native grassland is dominated by wild oats (*Avena* sp.). Other species of non-native grass that occur in the grassland include hare barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Chilean brome (*Bromus catharticus* var. *elatus*), and annual fescue (*Festuca bromoides*). Non-native species of grass that occur in moist areas include Italian ryegrass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), velvet grass (*Holcus lanatus*), and tall fescue (*Festuca arundinacea*).

Non-native forbs that occur sparsely in the grassland include clover (*Trifolium glomeratum*), fiddle dock (*Rumex pulcher*), salsify (*Tragopogon* sp.), narrow-leaved plantain (*Plantago lanceolata*), field bindweed (*Convolvulus arvense*), short-pod mustard (*Hirschfeldia incana*), and scarlet pimpernel (*Anagallis arvensis*). Ruderal species that occur in the grassland include wild radish (*Raphanus sativa*) and fennel (*Foeniculum vulgare*). The wild radish grows in patches throughout the grassland. Native species of plants that occur in the grassland include a few California poppies (*Eschscholzia californica*) and individual coyote brush (*Baccharis pilularis*) shrubs.

**Himalayan Blackberry.** Himalayan blackberry (*Rubus armeniacus*) occurs in patches on the project site. These patches are 10 to 20 feet in diameter and can grow to 6 feet in height. Some of the patches are dense and others are sparse with non-native grass growing within the patches.

**Seasonal Wetland.** The watercourses support patches of cattails (*Typha latifolia*), spreading rush (*Juncus patens*), and nut sedge (*Cyperus eragrostis*). Italian ryegrass and velvet grass grow beside these species in areas that were dryer. Beardless rabbitsfoot grass (*Polypogon viridis*) grew along the edges of the watercourses.

**Watercourses.** Two watercourses flow across the site from the east to the west. Water, presumably runoff from the adjacent homes, flowed within the watercourses during the site visit. The watercourses consist of swales 6 - 12 feet wide. Portions of the banks were incised 1 - 2 feet deep on one of the watercourses. Head-cuts occurred on the northern watercourse. Most of the substrate of the watercourses consists of silt and clay soil although the downstream portion of the southern watercourse is cobble. Culverts connect the upstream end with the downstream end on both watercourses.

**Eucalyptus.** Blue gum eucalyptus (*Eucalyptus globulus*) occurs along the downstream portion of the southern watercourse. These trees are mature; 2 - 4 feet in diameter and up to 40 feet tall. Sapling and small diameter coast live oak (*Quercus agrifolia*) and Oregon ash (*Fraxinus velutina*) trees also occur in the understory of the Eucalyptus. A few larger coast live oak, up to 6-8 inches in diameter occur at the edge of the project site.

#### Wildlife

The wildlife that would occur on the project site would be those species adapted to live in urban environments. The small size of the site (3.66 acres) and the surrounding homes, restricts animal movement to and from the site.

Amphibians expected on the project site include tree frog (*Pseudacris sierra*), western toad (*Anaxyrus boreas*), California slender salamander (*Batrachoseps attenuatus*), and arboreal salamander (*Aneides lugubris*). Although the tree frog and western toad could breed in the watercourses on site, tadpoles were not observed. Breeding, if it occurs, may be earlier in the season. These species would occur in and beside the watercourses during the breeding season and then seek refuge in protected moist places during the dry season. They would forage in the grasslands during the wet season. The salamanders would be active during the wet season and seek protected moist locations during the dry season.

Western fence lizards (*Scelopoorus occidentalis*) and northern (*Elgaria coerulea*) and/or southern alligator (*Elgaria multicarinata*) lizards are likely to occur on the site in open areas. Garter snakes (*Thamnophis* spp.) would forage in the watercourses for amphibians and may also feed on lizards and small mammals. Pacific gopher snakes (*Pituophis catenifer catenifer*) are also expected to occur on site and feed upon reptiles, birds, and small mammals.

Birds that are common in urban areas are expected to occur on site. American robin (*Turdus migratorius*) and northern mockingbird (*Mimus polyglottos*) were observed on the project site. House finch (*Carpodacus mexicanus*) is also expected to occur on site.

Mammals that occur on site are a few rodent species and mule deer (*Odocoileus hemionus*). Mule deer forage on the project site and seek cover beneath the eucalyptus trees. Rodents including California vole (*Microtus californicus*) and pocket gopher (*Thomomys bottae*) are likely to occur on the site in the grasslands.

#### **Special-status Species**

Special-status species are unlikely to occur on the project site because of the prior disturbance and because of the dense growth of non-native grass and ruderal species. Very few native plant species were observed on the project site. This preponderance of non-native species indicates that rare species would be unlikely to occur on site. The attachment to this letter addresses the plant and animal species that were identified by the query of the CNDDB and particular reasons for their likely absence from the project site.

Cooper's hawk (*Accipter cooperii*) and sharp-shinned hawk (*Accipter striatus*) could potentially nest in the eucalyptus trees on the project site. Pallid bat (*Antrozoas pallida*) and Yuma myotis (*Myotis yumanensis*) could potentially roost within the abandoned house on the project site.

The California red-legged frog is federally listed as threatened and is a state species of special concern. They breed in seasonal ponds or streams that contain water into May or June. They also occur in wet areas that do not provide breeding habitat and can disperse more than a mile from one area to another.

The closest known occurrence of California red-legged frogs is at Hollis Canyon, east of Castro Valley approximately 2.25 miles from the project site and north of Highway 580. Hollis Canyon drains into San Lorenzo Creek. Another tributary to San Lorenzo Creek flows approximately 0.8 miles from the project site, but is separated from the site by homes.

Habitat on the project site consists of non-breeding habitat. The watercourses are not deep enough to support breeding by the California red-legged frog. Homes occur between the project site and the closest available habitat in the tributary to San Lorenzo Creek. Because these homes would likely provide a barrier to dispersal to the project site, because California red-legged frogs were not observed on the project site, and because of the absence of breeding habitat on the project site, California red-legged frogs are not likely to occur on the project site.

Burrowing (*Athene cunicularia*) owls were not observed on the project site. In addition, habitat consisting of holes dug by ground squirrels or other mammals was not observed during the survey. Burrowing owls are therefore not likely to occur on the project site.

#### **Project Effects**

**Special-status Plant Species.** The potentially-occurring special-status plant species are unlikely to occur on the project site because they were not observed during surveys and on-site habitat was unsuitable for their occurrence (see attachment). Special-status species of plants are unlikely to occur on the project site.

**Special-status Animal Species.** Potentially-occurring special-status species of animals are unlikely to occur on the project site because of its urban setting and the prior disturbance to the site (see Attachment). Nevertheless, Cooper's hawk, sharp-shinned hawk, pallid bat, and Yuma myotis could potentially occur on site or could colonize the site prior to construction.

**Migratory Birds.** The federal Migratory Bird Treaty Act and Sections 3503 and 3505 of the California Fish and Game Code protect most species of native birds, their nests, and eggs from harm. Birds could be harmed if bird nests and eggs are present in areas proposed for construction during the breeding season. Birds usually nest between the middle of February and middle of August.

#### Recommendations

The proposed project is not likely to have a significant effect on the biological resources of the D Street Property.

**Pre-construction Surveys for Birds.** Preconstruction surveys should be initiated within 14 days prior to earth-disturbing activities during the breeding season. The breeding season begins February 15 and ends August 15. Breeding bird surveys should be conducted for species that could nest in the grassland, blackberry, and eucalyptus trees. If a nesting bird is encountered, a buffer approximately 250 feet from the nest should be established for raptors and 25 feet for other bird species. People, construction equipment, and any human activity should be prohibited within the buffer area. Nevertheless, if the biologist determines that the nesting birds are acclimated to human activity, the buffer may be reduced. If the buffer is reduced, the birds should be periodically observed to ensure

that human activity is not causing stress or otherwise disrupting their normal behavior. The buffer can be removed from the nest once the young birds have fledged.

**Pre-construction Surveys for Bats.** The structure on the project site should be surveyed for bats prior to demolition. If a maternity colony of bats occurs in the structure, then demolition should occur after the young bats are able to leave their parents (demolition can typically occur between September 1 and October 15 that is before a wintering colony of bats may begin hibernation). If a wintering colony of bats occurs in the structure, then demolition should occur after the weather warms in the spring but before young are born (demolition can typically occur between March 1 and April 15). Female bats begin to have their pups after April 15 and any maternity roost should not be destroyed if pups are present.

#### Conclusion

The proposed D Street project would not:

- 1) substantially reduce the number or restrict the range of a rare, endangered or threatened plant or animal;
- 2) cause a fish or wildlife population to drop below self-sustaining levels; or
- 3) adversely affect significant riparian lands, wetlands, marshes, and other significant wildlife habitats.

The proposed project will not result in any significant adverse biological impacts.

Please contact me if you have any questions.

Sincerely,

#### LSA ASSOCIATES, INC.

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Clinton Kellner, Ph.D.

Attachment: Figures 1 - 3 Possible Occurrence of Special-status Species – D Street Property Species List – D Street Property

## **FIGURES**



SOURCE: Esri StreetMap North America (2012).

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D Street Project Alameda County, California Site Location

SOURCE: USGS 7.5-minute Topo Quad - Hayward, Calif. (1980). I:\SHG1301\GIS\Maps\Figure2\_Site Location.mxd (8/12/2013)

2000



SOURCE: USGS OrthoImagery (04/2011).

I:\SHG1301\GIS\Maps\LandCover\Figure3\_Vegetation&LandCover.mxd (9/5/2013)

## ATTACHMENTS

# POSSIBLE OCCURRENCE OF SPECIAL-STATUS SPECIES D STREET PROPERTY

The special-status species addressed below were identified in the query of the California Natural Diversity Data Base as occurring in the general area of the project site. The query accessed information from the following USGS quadrangles: Diablo, Dublin, Hayward, Las Trampas Ridge, Newark, Niles, Oakland East, Redwood Point, and San Leandro quadrangles. The query included only those portions of the quadrangles within Alameda, Contra Costa, and Santa Clara quadrangles. The query indicates which species could potentially occur on a particular project site based on geographic proximity.

## PLANTS

#### Grasslands

The following species of plants occur in grasslands. They are unlikely to occur on the project site because the high density of the non-native grass and the prior disturbance that occurred over the entire site in the past.

Bent-flowered fiddleneck (Amsinckia lunaris) Big-scale balsamroot (Balsamorhiza macrolepis) Round-leaved filaree (California macrophylla) Mt. Diablo fairy-lantern (*Calochortus pulchellus*) Hospital Canyon larkspur (*Delpinium californicum* ssp. *interiuis*) Mt. Diablo buckwheat (Eriogonum truncatum) Fragrant fritillary (*Fritillaria liliacea*) Diablo helianthella (Helianthella castanea) Brewer's dwarf flax (Hesperolinon breweri) Kellogg's horkelia (Horkelia cuneata var. sericea) Oregon meconella (Meconella oregona) Shining navarretia (*Navarretia nigelliformis* ssp. *radians*) San Francisco popcorn flower (*Plagiobothrys diffuses*) Oregon polemonium (*Polemonium carneum*) Adobe sanicle (Sanicula maritime) Santa Cruz tarplant (*Holocarpha macradenia*)

#### Serpentine

The following species occur in serpentine areas. Since serpentine soil is absent, the following species would not occur on the project site:

Presidio clarkia (*Clarkia franciscana*) Tiburon buckwheat (*Eriogonum luteolum* var. *caninum*) Loma Prieta hoita (*Hoita strobilina*) Woodland woolythreads (*Monolopia graceliens*) Most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoneus*) Mt. Diablo jewel-flower (*Streptanthus hispidus*)

#### **Moist Alkaline Grasslands**

The following species occur in wet alkaline grassland areas. These type of areas do not occur on the project site and the following species would not occur on the project site:

Alkali milk-vetch (*Astragalus tener* var. *tener*) San Joaquin spearscale (*Atriplex joaquinana*) Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) Hairless popcorn flower (*Plagiobothrys glaber*) Saline clover (*Trifolium hydrophyllum*)

### **Vernal Pools and Wet Grasslands**

The following species occur in vernal pools or wet grasslands. Although wet grassy areas occur onsite the likelihood of occurrence for wetland species is low because of the density of non-native grass and the prior disturbance that has occurred on site. The following species are unlikely to occur in the project site's wet areas:

Contra Costa goldfields (*Lasthenia conjugens*) Slender-leaved pondweed (*Stuckenia filiformis*)

#### **Chaparral and Rocky Soils**

Chaparral and rocky soils do not occur on the project site. The following species would therefore not be expected to occur on site:

Chaparral harebell (*Campanula exigua*) Mt. Diablo phacelia (*Phacelia phacelioides*) Chaparral ragwort (*Senecio aphanactis*)

#### Salt Marsh

Salt marsh does not occur on site and the following species are therefore precluded from the site:

Pt. Reyes bird's beak (*Chloropyron maritimum* ssp. *palustre*) Marin knotweed (*Polygonium marinense*) California seablite (*Suadea californica*)

#### Sand Dunes and Sandy Soils

Sand dunes and sandy soils are absent from the project/ site. Robust spineflower (*Chroizanthe robusta* var. *robusta*) would therefore not occur on the site.

#### Shrubs

Special-status species of shrubs were not observed during the site visit. The following species of special-status shrubs would therefore not occur on the project site:

Mt Diablo manzanita (*Arctostaphylos auriculata*) Contra Costa manzanita (*Arctostaphylos manzanita* ssp. *laevigata*) Pallid manzanita (*Arctostaphylos pallida*) Western leatherwood (*Dirca occidentalis*) Northern California black walnut (*Juglans hindsii*) [groves are the sensitive resource] Hall's bush mallow (*Malacothamnus hallii*) Oval-leaved viburnum (*Viburnum ellipticum*)

## ANIMALS

The following species of animals are not likely to occur on the project site because they either were not observed or their habitat is absent. The Alameda island mole (*Scapanus latimanus parvus*), is restricted to Alameda and would not be expected to occur on the project site.

#### Grasslands

The following species occur in grasslands and would not be expected to occur on the site because they were not observed during surveys, the site is surrounded by development and is therefore cutoff from habitat areas, and/or the prior disturbance to the site would have eliminated remaining individuals.

Bridge's coast range shoulderband snail (Helminthoglypta nickliniana bridgesi)

Lee's microblind harvestman (Microcina leei)

Alameda whipsnake (*Masticophis lateralis euryxanthus*) California horned lark (*Eremophila alpestris actia*) Burrowing owl (*Athene cunicularia*) Northern harrier (*Circus cyaneus*) Berkeley kangaroo rat (*Dipodomys heermanni berkeleyensis*) Santa Cruz kangaroo rat (*Dipodomys venustus venustus*) American badger (*Taxidea taxus*) San Joaquin kit fox (*Vulpes macrotus mutica*)

#### Serpentine

Lum's micro-blind harvestman (*Microcina lumi*) is restricted to the interface of serpentine rocks with serpentine soil. It would not be expected on the project site where serpentine is absent.

### Larval Food Plants

The food plant for the caterpillars of the San Bruno elfin butterfly (*Callophrys mossii bayensis*) is broad-leaved stonecrop (*Sedum spathelifolium*) and the food plant for the caterpillars of the Bay checkerspot butterfly (*Euphydryas editha bayensis*) is dwarf plantain (*Plantago erecta*). Both of the species of food plants were not observed on site and these two species of butterflies would therefore not be expected to occur on site.

#### Songbird Nesting Habitat

The following songbirds would not occur on site because their nesting habitat is absent. Tricolored blackbird (*Ageliaus tricolor*) nest in large stands of blackberry, mustard, tules or cattails. The stands on the project site are too small for habitat. Yellow warbler (*Dendroica petechia brewsteri*) nests in stands of willow, which are absent from the project site. Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) nests in dense vegetation near water bodies. This habitat is absent from the project site. Bank swallow (*Riparia riparia*) nests in steep eroding banks above rivers or beaches. They would not nest on the project site.

#### **Eucalyptus Trees**

The following species are unlikely to nest or roost in the stand of eucalyptus trees on site because to the adjacent homes and high amount of human activity. The adjacent homes would reduce habitat for these species. The human activity would disturb the two raptor species. Feathers and whitewash were absent from areas beneath the eucalyptus indicating that a heron or cormorant rookery is absent. Monarch butterfly (*Danaus plexippus*) do not usually aggregate in trees this far inland and would not be expected to occur on the project site. San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) builds characteristic large conical stick nests in tree canopies or the understory of woodland, chaparral, or scrub. Woodrat nests were not observed with in the eucalyptus canopy or in the understory and are therefore not likely to occur on site.

Golden eagle (*Aquila chrysaetos*) Prairie falcon (*Falco mexicanus*) white-tailed kite (*Elanus leucurus*) Great blue heron (*Ardea herodias*) Black-crowned night heron (*Nycticorax nycticorax*) Double-crested cormorant (*Phalacrocorax auritus*) Silver-haired bat (*Lasionycteris noctivagans*) Hoary bat (*Lasiurus cinereus*) Western mastiff bat (*Eumops perotis californicus*)

#### **Pools or Stock Ponds**

The following species occur in pools, stock ponds, and/or watercourses. The watercourses are too small to support habitat for the California red-legged frog (*Rana draytonii*) and western pond turtle (*Emys marmorata*). Cobble banks are absent, therefore foothill yellow-legged frog (*Rana boylii*) would not be expected to occur. California tiger salamander (*Ambystoma californica*) and California linderiella (*Linderiella occidentalis*) generally do not occur in watercourses and would not occur in such small watercourses as those on site.

#### **Permanent Watercourses**

Tidewater goby (*Eucyclogobiius newberryi*) and Steelhead (*Oncorhynchus mykiss irideus*) occur in permanent watercourses that are larger than the watercourse on the project site. Cobble spawning habitat is absent for steelhead. Tidewater gobies occur more toward the confluence of the watercourse with a salt or brackish waterbody.

#### Salt Flats, Sand Dunes and Beaches

The absence of salt flats, sand dunes, and beaches from the project site indicates that the following species would not occur on the site.

Black skimmer (*Rynchops nigra*)

Western snowy plover (Charadrius alexandriuns nivosus)

California Least tern (Sternula antillarum browni)

Antioch efferian roberfly (*Efferia antiochi*)

#### Salt Marsh or Brackish Marsh

The following species occur in salt or brackish marshes. They would not be expected to occur on the project site because those habitats are absent.

California black rail (*laterallus jamaicensis coturniculus*) Alameda song sparrow (*Melospiza melodia pusillula*) California clapper rail (*Rallus longirostris obsoletus*) Salt marsh harvest mouse (*Reithrodontomys raviventris*) Salt marsh wandering shrew (*Sorex vagranshalicoetes*) Mimic tryonia [or California brackish-water snail] (*Tryonia imitator*)

# PLANT SPECIES LIST D STREET PROPERTY

Century plant

Poison hemlock Sweet fennel

Agavaceae Agave americana Apiaceae *Conium maculatum* Foeniculum vulgare Asteraceae Baccharis pilularis\* Carduus pycnocephalus *Cirsium vulgare* Delaria odorata Dittrichia graveolens Helminthotheca echioides *Hypochaeris radicata* Silybum marianum Sonchus sp. *Tragopogon* sp. Brassicaceae Hirschfeldia incana Raphanus sativus Caprifoliaceae Symphoricarpos albus\* Caryophyllaceae Spergularia rubra Convolvulaceae Convolvulus arvensis Cyperaceae Cyperus eragrostis\* Euphorbiaceae Euphorbia peplus Fabaceae Medicago polymorpha Trifolium sp. Vicia sativa Fagaceae Quercus agrifolia\* Juncaceae Juncus effusus\* Juncus patens\* Laminaceae Marrubium vulgare Myrtaceae Eucalyptus globulus

Coyote brush Italian thistle Bull thistle German ivy Stinkwort Bristly ox-tongue Hairy cat's ear Milk thistle Sow thistle Salsify Short-pod mustard Wild radish Snowberry Red sand spurry Field bindweed Nut sedge Petty spurge

Bur-clover Clover Vetch

Coast live oak

Pacific rush Spreading rush

Horehound

Blue gum

Oleaceae Fraxinus latifolia\* Papaveraceae Eschscholzia californica\* Pinaceae Pinus radiata Plantaganaceae *Linaria* sp. Plantago coronopus Plantago lanceolata Poaceae Avena sp. Bromus catharticus var. elatus Bromus diandrus Bromus hordeaceous *Cortaderia* sp. Cynodon dactylon Ehrharta erecta Festuca arundinaceae *Festuca bromoides* Festuca perenne Holcus lanata *Hordeum marinum* ssp. *gussoneanum* Hordeum murinum ssp. leporinum Paspalum dilatatum Pennisetum clandestinum Polypogon viridis Stipa milacea Polygonaceae Rumex crispus Rosaceae Prunus cerasifera Rubus armeniacus Salicaceae Salix lasiolepis\* Taxodiaceae Sequoia sempervirens Typhaceae Typha sp.\*

Oregon ash California poppy Monterey pine Toad flax Buckhorn plantain Narrow-leaved plantain Wild oats Chilean brome Rip-gut brome Soft chess Pampas grass Bermuda grass Panic veldtgrass Tall fescue Annual fescue Italian ryegrass Velvet grass Mediterranean barley Hare barley Dallis grass Kikuyu grass Beardless rabbit's foot grass Smilo grass Curly dock Plum Himalayan blackberry Arroyo willow Coast redwood Cattail

\*species native to Alameda County