

Exhibit E

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Monterey County Resource Management Agency
Planning Department
168 West Alisal Street, 2nd Floor
Salinas, California 93901

***RE: Biological survey for the Martinez Property, 477 Paradise Road, Salinas, California
93907. APN
129-091-071-000.***

Dear Planners of Monterey County,

I surveyed the Martinez Property on March 27, 2017. Owner, David Martinez, met me on the property, provided an information sheet and showed me the boundaries of the property and all areas associated with the proposed development.

METHOD OF SURVEY

I surveyed the property on foot on the afternoon of March 27, 2017. The entire property was surveyed and I concentrated on areas where development is proposed. I identified plant species for the species list and assessed possible use of the property by wildlife and possible impacts to biological values from the proposed project. Inaccessible relevant nearby areas of natural habitat, were surveyed with binoculars and binoculars were also used in the identification of birds.

All of the plants listed on the plant list were observed on the property on my survey.

THE PROPERTY AND PROJECT

The Martinez Property is approximately 0.73 acres in size. The shape of the Parcel is rectangular in shape with its long axis trending roughly northwest to southeast. The topography of the property is a southeasterly facing slope with its highest point at the northwestern end of the property. The home site is proposed for a level bench near the southeastern end of the property. The home is proposed to be oriented roughly northwest to southeast. Elevations on the property range from around 355 feet above sea level at the southeastern end of the property to around 431 feet above sea level at the northwestern end of the property.

The footprint of the land disturbance including the one story home and attached garage is 2748 square feet in size. This is 7.4 percent of the total property area. The driveway will not be paved but will have gravel added to its surface. Three coast live oak trees *Quercus agrifolia* greater than five inch trunk diameter will require removal for this project.

ENVIRONMENTAL OVERVIEW

The dominant plant communities on the Martinez Property (using the terminology in California Department of Fish and Wildlife's Preliminary Descriptions of the Terrestrial Natural Communities of California by Robert F. Holland, 1986 and A Manual of California Vegetation, Second Edition by Sawyer, Keeler-Wolf and Evans, 2009), are central maritime chaparral, which covers approximately 60 percent of the property, coast live oak forest, which covers approximately 15 percent, non-native grassland which covers approximately 20 percent central and central coastal scrub which covers approximately 5 percent. The developments are proposed for areas in the non-native grassland and central coastal scrub plant communities, but some coast live oaks are also present in these areas and some Pajaro manzanitas are present around these areas. In the current site plan, three coast live oaks (*Quercus agrifolia*) will require removal.

The dominant plant community on ridge tops in the Prunedale Hills is central maritime chaparral, which is classified as a sensitive habitat by the Monterey County Resource Management Agency as well as state and federal agencies concerned with environmental considerations. The more northerly facing slopes in the Prunedale Hills generally contain dense, closed canopy coast live oak forest and the more southerly facing slopes generally contain more open coast live oak forest and may also contain coast live oak woodland, central coastal scrub and some central maritime chaparral. Some grassland may also be present on the more southerly facing slopes and grassland becomes most abundant on more level areas and on the valley floors in the Prunedale Hills. Riparian wetland habitats are often present along the larger canyon bottoms such as in parts of the floor of Paradise Canyon.

The vegetative cover on the Martinez Property is primarily central maritime chaparral on the slope, which ascends to a ridge top area and remnants of coast live oak forest primarily on the level bench around the southeastern end of the property. Considerable vegetation clearing took place over much of the property prior to ownership by David Martinez, and some planted Eucalyptus (*Eucalyptus globulus*) and Monterey pines (*Pinus radiata*) are present on the level bench at the southeastern end of the property. Some non-native grassland and central coastal scrub are present in the more recently disturbed areas and on the more level areas. Clearing that occurred prior to present ownership of the property has expanded the area occupied by non-native grassland.

The non-native grassland plant community is present on the more recently cleared areas. This plant community is dominated by naturalized, non-native annual grasses and naturalized, non-native annual broad-leaved herbaceous plants (weeds), most of which originated in the Old World. Some native grasses and broad-leaved herbaceous plants are also present. Some coast live oaks and some native shrubs remain in these cleared areas.

SENSITIVE HABITAT

Central maritime chaparral is a sensitive habitat that includes the Martinez Property from California Department of Fish and Wildlife Natural Diversity Data Base records for the Prunedale Quadrangle and surrounding area. Central maritime chaparral was observed to be present on the Martinez Property on my survey.

The most abundant habitats in the local area classified as sensitive habitats by the Monterey County Resource Management Agency and state and federal agencies concerned with environmental issues, are the central maritime chaparral plant community and wetland plant communities. As mentioned previously, the central maritime chaparral plant community is present on the crest and slopes of the Martinez Property. Most of the sensitive plant species in the Prunedale Quadrangle are found in this community (see Table 1).

The desired minimum setback of developments from sensitive habitat is 100 feet. Some of the proposed developments on the Martinez Property are closer than 100 feet away from the central maritime chaparral plant community, since its closest presence is on the slope near the southeastern end of the property where the home site is located. Some of the proposed developments are also closer than 100 feet to isolated central maritime chaparral plants like Pajaro manzanitas that are located in other plant communities.

Various wetland plant communities, such as central coast live oak riparian forest, arroyo willow riparian forest and vernal marsh, are found in seasonally and perennially wet areas along the floors of the larger local drainages. No wetland plant communities were observed within 100 feet of developments on the Martinez Property and the nearest wetland vegetation to the Martinez Property appears to be in the floor of Paradise Canyon, approximately 0.2 mile to the south.

SENSITIVE PLANT SPECIES

Two sensitive plant species were observed on the Martinez Property on my surveys. They are:

1. Pajaro manzanita (*Arctostaphylos pajaroensis*), which is on List 1B of the California Native Plant Society and classified as 1B.1 which is for species that are very endangered. This plant is a major component of the central maritime chaparral plant community and is most often found in this community. It only grows naturally in the Prunedale Hills and surrounding areas.
2. Hooker's manzanita (*Arctostaphylos hookeri* ssp. *hookeri*), which is also on List 1B of the California Native Plant Society and is classified as 1B.2 by the California Native Plant Society, which is for species that are moderately endangered. It only grows naturally in the Monterey Bay area.

See Table 1 for important information about all the sensitive plant species found on the Prunedale Quadrangle and surrounding area.

The closest sensitive plants to the areas of disturbance are:

- A cluster of 12 brittleleaf manzanita (*Arctostaphylos tomentosa* ssp. *crustacea*) x Pajaro manzanita (*Arctostaphylos pajaroensis*) hybrid plants approximately 15 feet from the edge of the proposed garage.
- A Pajaro manzanita approximately 25.5 feet from the proposed home.
- A Pajaro manzanita approximately 65 feet upslope from the proposed driveway.

No sensitive plant species are indicated as having locations for occurrences on the Martinez Property from current California Department of Fish and Wildlife Natural Diversity Data Base records for the Prunedale Quadrangle and surrounding area. Three sensitive plant species are indicated as having locations for occurrences close to the Martinez Property from the Natural Diversity Data Base records. They are Pajaro Manzanita, Hooker's manzanita and Yadon's rein orchid (*Piperia yadonii*). Yadon's rein orchid is federally listed endangered and is also on California Native Plant Society's list 1B.1, which includes plants that are very endangered. It is endemic to Monterey County. This small orchid grows annually from an underground root. Its leaves are most observable in February and it blooms in May or June. Not all plants bloom every year.

As mentioned previously, the central maritime chaparral plant community is present on the higher ridges and slopes of the Prunedale Hills, but isolated plants from the central maritime chaparral plant community can be found growing in other plant communities.

I thoroughly searched all of the areas where development is proposed by walking transects and no remains of Yadon's rein orchid plants were observed. At this time of the year, spring, the presence of rein orchids can sometimes be detected by its leaves and also dried flower stalks from the previous year. I also searched the most likely areas of central maritime chaparral where this plant is most likely to grow and none were observed there either.

I have found most of the sensitive plant species of the Prunedale Quadrangle on other parcels within a one mile radius of the property. There are records for these species within a one mile radius of the Martinez Property on California Department of Fish and Wildlife Natural Diversity Data Base records for the Prunedale Quadrangle and surrounding area. These species include Pajaro manzanita, Hooker's manzanita, Yadon's rein orchid, Eastwood's goldenbush (*Ericameria fasciculata*), which is classified as 1B.1 by the California Native Plant Society, Monterey spineflower (*Chorizanthe pungens* var. *pungens*), which is federally threatened and 1B.2 and small-leaved lomatium (*Lomatium parviflorum*), which is on List 4 of the California Native Plant Society which is for plants of limited distribution, a watch list. If there are any other sensitive plant species present on the Martinez Property that could not be located on my survey, they would be most likely to be present in the central maritime chaparral habitat located on portions of the property where no development is planned.

SENSITIVE ANIMAL SPECIES

No sensitive animal species were observed on the Martinez Property on my surveys.

There are no records of sensitive animal species having been found on the Martinez Property from current California Department of Fish and Wildlife Natural Diversity Data Base records for the Prunedale Quadrangle and surrounding area.

Monterey dusky-footed woodrats (*Neotoma fuscipes luciana*) are the most common sensitive animal species observed in the Prunedale Hills. Evidence for the presence of these animals is their characteristic nests of conical piles of sticks. The Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*), is not a state or federally listed species; it is classified as a state species of special concern and a federal species of special concern. It is restricted to Monterey, San Benito and San Luis Obispo Counties.

Monterey dusky-footed woodrats are common in coast live oak forest and woodland habitat in north Monterey County. All portions of the property were searched for the characteristic nests of these animals. None were found.

There are three listed species of amphibians that have been found in and near wetland habitats in Monterey County. The Martinez Property does not contain suitable aquatic habitat for these species since no wetland habitat is present. These species are the California red-legged frog (*Rana draytonii*), which is federally listed as threatened and is a state species of special concern, the California tiger salamander (*Ambystoma californiense*), which is federally listed as threatened and state listed as threatened, and the Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*), which is listed as endangered by both the state and federal governments. California red-legged frogs and California tiger salamanders are more likely to be present in suitable habitats in this area than the Santa Cruz long-toed salamander.

Temporary as well as permanent water sources can serve as breeding areas for these amphibians. They can migrate up to approximately 1.5 miles away from wetlands into nearby upland habitats during the dry season. In their upland habitats, they may spend much of their lives under objects or underground. California tiger salamanders spend most of their lives underground in burrows of California ground squirrels (*Spermophilus beecheyi*) and sometimes valley pocket gophers (*Thomomys bottae*) and the others can also sometimes be found in underground burrows.

No evidence for the presence of these amphibians was observed on my visual search of potential upland habitat for adults. They are unlikely to be present since no California ground squirrel burrows and very few burrows of valley pocket gophers or other small rodents were observed on the property. No potential bodies of water for breeding were observed closer than approximately one mile from the property.

The closest location to the Martinez Property for California red-legged frogs on California Department of Fish and Wildlife Natural Diversity Data Base records is approximately 2 miles to the west. The closest location to the Martinez Property for California tiger salamanders is approximately 2.15 miles to the west-northwest. The closest location to the property for Santa Cruz long-toed salamanders is approximately 2.12 miles to the west.

There are several animal species with ranges that include the local area that are classified by various agencies as species of special concern, protected or sensitive species. Some of these are candidates for listing and many are simply uncommon and/or restricted in distribution. These species include the western pond turtle (*Actinemys marmorata*), California legless lizard (*Anniella pulchra pulchra*), California horned lizard (*Phrynosoma coronatum frontale*), two-striped garter snake (*Thamnophis hammondi*), white-tailed kite (*Elanus leucurus*), burrowing owl (*Athene cunicularia*), ornate shrew (*Sorex ornatus*), pallid bat (*Antrozous pallidus*), and badger (*Taxidea taxus*).

Burrowing owls are not a state or federally listed species. They are, however, classified as a Species of Special Concern by the California Department of Fish and Wildlife, a Bird of Conservation Concern by the United States Fish and Wildlife Service, a Sensitive Species by the Bureau of Land Management and a Threatened Species by the International Union for Conservation of Nature and Natural Resources.

Burrowing owls are ground nesting birds that are usually found in open grassland areas and use burrows of larger burrowing animals such as the California ground squirrel for nest sites and shelter. This species is declining in numbers in Monterey County due to such impacts as development of their nesting and foraging areas and predation by cats and dogs, the introduced red fox and other predators. They are now quite rare in northern Monterey County, but are still locally abundant in some areas of south Monterey County.

There are no California Natural Diversity Data Base records for these birds on the Prunedale Quadrangle and surrounding area. No evidence for their presence on the Martinez Property was observed on my survey. The generally poor habitat quality on the property for these birds and the lack of California ground squirrel burrows for nest sites makes it unlikely that they would be on the property.

California legless lizards and more rarely, California horned lizards, are occasionally found in Monterey County. California legless lizards burrow in loose, sandy soils. They are highly secretive and difficult to find but appear to be widespread in sandy soils throughout the County. Neither of these reptiles was found on my survey. Logs and other objects were overturned in the search for these and other reptiles.

No evidence for the presence of badgers was observed on the property but they are occasionally reported in the more rural areas of Monterey County.

AREAS OF CONCERN - IMPACTS

Some impacts to natural values on the Martinez Property have already occurred through clearing of the home site area, clearing of some of the slope and highest portions of the property and clearing and grading of the access road to the homesite that was done by previous owners of the property.

The following impacts will occur to the Martinez Property from this development:

1. Some Pajaro manzanitas will be closer than 100 feet from the areas of development. The closest Pajaro manzanitas to the areas of disturbance are:
 A Pajaro manzanita approximately 25.5 feet from the proposed home.
 A Pajaro manzanita approximately 65 feet upslope from the proposed driveway.
 A cluster of 12 Pajaro manzanita (*Arctostaphylos pajaroensis*) x brittleleaf manzanita (*Arctostaphylos tomentosa* ssp. *crustacea*) hybrid plants approximately 15 feet from the edge of the proposed garage.
2. Three mature coast live oaks currently present in the homesite area will be removed.
3. Some native vegetation will be removed in the clearing and grading of the driveway and home site.

CONDITIONS FOR APPROVAL - MITIGATIONS

1. A preconstruction survey for the presence of sensitive wildlife that could potentially be impacted by construction activities will be conducted within ten days prior to the start of the work. If construction or tree trimming begins between April 1 and August 31, the survey will also include breeding birds.
2. All healthy native trees and shrubs on the property will be protected from all impacts that may occur before, during and after construction. This includes protection from direct damage to the branches and roots of the plants, deposition or removal of soil around the plants and compaction of soil around the plants through vehicle use. Care will be taken to make sure that the soil levels within driplines, and especially around the trunks of native trees and shrubs, are not altered and to make sure that drainage slopes away from trunks. These plants should be marked by orange construction fencing, if necessary, during the installation of the new developments to make their locations obvious.
3. Less than one third of branches will be removed from any native tree or shrub that may need to be trimmed. Less than one third of area under the dripline of any native tree or shrub should be paved. Coast live oaks should not be trimmed from February through May. There should be no pavement closer than four feet from the trunks of trees unless permeable pavement is used in these areas and surface roots are deep enough to allow paving without their extensive removal.
4. Storage and staging areas for construction will be on already cleared land and will not be on or close to areas of natural habitat.
5. Most of the property other than the areas impacted by development will remain in its current natural state.
6. Conservation easements will be dedicated to preserve the best central maritime chaparral sensitive habitat areas on the property, which are in the uncleared portions of the high point area and uncleared slope areas.
7. Three Pajaro manzanitas will be planted on the property as mitigation for the area of development being closer than 100 feet from the Pajaro manzanitas growing on the property.
8. Six coast live oaks will be planted to replace the three mature coast live oaks to be removed from around the homesite area (2:1 mitigation).
9. Measures will be taken to maximally protect and preserve all Pajaro manzanitas on or near the areas to be developed. All Pajaro manzanitas in areas that could be impacted by development will be marked by orange construction fencing prior to the start of construction. If it is determined that any Pajaro manzanitas will have to be removed they will be replaced with two of local origin (2:1 mitigation). I recommend transplanting of the

ones present, if possible. Any transplanted Pajaro manzanitas will also be supplemented with one additional one.

10. It is recommended that all landscaping and restoration plantings on the property other than immediately around the home be composed primarily of native plants of local origin. Other native plants and drought tolerant, fire resistant plants with similar requirements to our native vegetation may also be planted immediately around the home. All other restoration plantings will be plants native to the area, preferably of local origin. A native plant seed mix from stock of local origin will be used to restore impacted native understory and ground cover as well as for erosion control. Many suitable plants for drought-tolerant landscaping in our local area are listed on pamphlets and websites available from the Monterey County Resource Management Agency, the Monterey Peninsula Water Management District and other agencies as well as native plant nurseries.
11. Invasive exotic plants will, as much as possible, be removed from the property. The invasive exotics observed to be on the Martinez Property on my survey are: Hottentot Fig (*Carpobrotus edulis*), French Broom (*Genista monspessulana*), Pampas Grass (*Cortaderia jubata*), Monterey pine (*Pinus radiata*) and Blue Gum Eucalyptus (*Eucalyptus globulus*).
12. Perimeter fencing, if present, will be of a type to allow wildlife to cross. Wire fencing should have a clearance of eighteen inches between the ground and the first wire and can be any height. Board fencing can be of any height and should have at least two panels on a side, or every ten feet, with at least fifteen inches between boards.
13. Curbs, if present at the edges of roads, parking areas, or driveways, will be rolled. They should be at a low angle, 40° to 50° or less and have S-shaped rounded contours, to allow amphibians, reptiles, invertebrates and other small animals to cross them easily.
14. Where feasible, permeable pavement will be used.

I recommend Elkhorn Native Plant Nursery in Moss Landing (831-763-1207, elkhornnursery.com), Central Coast Wilds of Santa Cruz (831-459-0656, centralcoastwilds.com), and Rana Creek Nursery in Carmel Valley (831-659-3820, ranacreekdesigns.com) as sources for native plants of local origin including erosion control seed mixes and plantings and for recommendations on planting and maintaining plants. Native grass mulches and hay bales are recommended and can also be obtained from these sources.

MONITORING AND ADDITIONAL WORK

The following monitoring inspections will be performed on the Martinez Property:

1. Once 10 days prior to the start of construction (preconstruction survey). All sensitive species of wildlife that could potentially occur on the Martinez Property will be searched for on this survey. If this survey is for construction beginning between April 1 and August 31, the survey will also include breeding birds. The marking of all Pajaro manzanitas that could potentially be impacted by the developments with orange construction fencing will be

verified at this time and if any Pajaro manzanitas will need to be removed, they will be marked as such.

2. Once within the three months following completion of the development.
3. Once per year, in the spring season, for the following two years.

These monitoring inspections will be done by a qualified biologist and will monitor the quality of implementation of the conditions for approval. A report on each inspection will be submitted to the Monterey County Resource Management Agency.

A separate spring survey for winter growing annual plant species will not be required since this biological survey was performed in April. Much of the flora and many of the rare, endangered and threatened plant species occurring in Monterey County are winter growing annual species that often can only be conclusively identified during the late winter through spring and early summer.

A February survey for Yadon's rein orchid will not be required since Yadon's rein orchid is very unlikely to be present in the areas where development is proposed. Some leaves are often observable in March-April. This plant usually blooms in May or June. Not all plants bloom every year. Its leaves are most observable in February. The leaves are hard to spot under thick growths of low growing manzanitas, where this plant is most often observed in the Prunedale Hills.

Monterey spineflower, which is a sensitive species in the local area, is at its most identifiable in late spring through early summer and the timing of this survey is suitable for its identification. None were observed.

RECOMMENDATIONS ON THE PROJECT

With the successful implementation of the conditions for approval listed above, impacts to biological values on the Martinez Property should be at a level of insignificance and in compliance with the regulations and standards of the Monterey County Resource Management Agency and state and federal agencies concerned with the maintenance of habitat quality and protection of biological resources.

Please contact me if you have any questions.

Best regards,

Ed Mercurio,
Biological Consultant

Table 1

STATE, FEDERAL AND CALIFORNIA NATIVE PLANT SOCIETY STATUS FOR MAJOR SENSITIVE PLANT SPECIES PRESENT IN THE PRUNEDALE QUADRANGLE AREA

SCIENTIFIC NAME	COMMON NAME	STATUS Fed. State CNPS			PREFERRED HABITAT	FOUND ON SURVEY?
<i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i>	Monterey Manzanita			1B.2	Central Maritime Chaparral	YES
<i>Arctostaphylos pajaroensis</i>	Pajaro Manzanita			1B.1	Central Maritime Chaparral	YES
<i>Ceanothus cuneatus</i> var. <i>rigidus</i>	Monterey Ceanothus			4	Central Maritime Chaparral	NO
<i>Ericameria fasciculata</i>	Eastwood's Goldenbush			1B.1	Central Maritime Chaparral	NO
<i>Holocarpha macradenia</i>	Santa Cruz Tarplant	PT	E	1B.1	Grasslands	NO
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's Tarplant			1B.1	Grasslands	NO
<i>Chorizanthe pungens</i> var. <i>pungens</i>	Monterey Spineflower	T		1B.2	Dunes and sandy soils	NO
<i>Chorizanthe robusta</i> var. <i>robusta</i>	Robust Spineflower	E		1B.1	Dunes and sandy soils	NO
<i>Fritillaria liliacea</i>	Fragrant Fritillary			1B.2	Grasslands	NO
<i>Horkelia cuneata</i> ssp. <i>sericea</i>	Kellogg's Horkelia			1B.1	Sandy soils and rocky areas	NO
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's Yampah			4	Grasslands	NO
<i>Lomatium parvifolium</i>	Small-leaved Lomatium			4	Central Maritime Chaparral	NO
<i>Piperia yadonii</i>	Yadon's rein orchid	E		1B.1	Central Maritime Chaparral	NO

Species Code Designations:

E = endangered

PE = Proposed Endangered

T = Threatened

PT = Proposed Threatened

SC = Species of Special Concern

CNPS List 1B = Plants rare, threatened or endangered in California and elsewhere.

1B.1 = very endangered

1B.2 = fairly endangered

1B.3 = not very endangered

CNPS List 4 = Plants of limited distribution, a watch list.

**PLANTS AND WILDLIFE OF THE MARTINEZ PROPERTY, 477 PARADISE
ROAD, SALINAS, CALIFORNIA. APN 129-091-071-000**

**NATIVE AND NATURALIZED VASCULAR PLANTS OBSERVED ON THE MARTINEZ
PROPERTY ON MY SURVEY****

By Ed Mercurio, Biological Consultant
March 2017

Scientific Name

Common Name

DIVISION PTEROPHYTA

FERNS AND FERN ALLIES

DENNSTAEDTIACEAE

Pteridium aquilinum var. *pubescens*

BRACKEN FERN FAMILY

Western Bracken Fern

PTERIDACEAE

Pentagramma triangularis

BRAKE FAMILY

Goldback Fern

DIVISION CONIFEROPHYTA

CONIFERS

PINACEAE

*Pinus radiata**

PINE FAMILY

Monterey Pine

DIVISION ANTHOPHYTA

FLOWERING PLANTS

CLASS DICOTYLEDONEAE

DICOTS (Two seed-leaved flowering plants)

AIZOACEAE

*Carpobrotus edulis**

ICEPLANT FAMILY

Hottentot Fig

ANACARDIACEAE

Toxicodendron diversiloba

SUMAC FAMILY

Poison Oak

APIACEAE

*Anthriscus caucalis**

*Conium maculatum**

Sanicula crassicaulis

CARROT FAMILY

Bur Chervil

Poison Hemlock

Gambleweed

APOCYNACEAE

*Vinca major**

DOGBANE FAMILY

Greater Periwinkle

ASTERACEAE

Artemisia californica

Artemisia douglasiana

Baccharis pilularis

*Carduus pycnocephalus**

*Chamomilla suaveolens**

SUNFLOWER FAMILY

California Sagebrush

California Mugwort

Coyote Brush

Italian Thistle

Pineapple Weed

*Cirsium vulgare**
*Erechtites glomerata**
Ericameria ericoides
Eriophyllum confertiflorum
Gnaphalium californicum
*Gnaphalium luteo-album**
Heterotheca grandiflora
*Hypochaeris radicata**
*Lactuca serriola**
*Picris echioides**
Senecio vulgaris
*Silybum marianum**
*Sonchus asper**
*Sonchus oleraceus**
*Taraxacum officinale**

Bull Thistle
 Cut-leaved Fireweed
 Mock Heather
 Lizard Tail
 California Everlasting
 Weedy Cudweed
 Telegraph Weed
 Rough Cat's Ear
 Prickly Lettuce
 Ox Tongue
 Common Groundsel
 Milk Thistle
 Prickly Sow Thistle
 Common Sow Thistle
 Common Dandelion

BRASSICACEAE

*Brassica nigra**
*Capsella bursa-pastoris**
Cardamine californica
Cardamine oligosperma
*Raphanus sativus**

MUSTARD FAMILY

Black Mustard
 Shepherd's Purse
 Milkmaids
 Bitter Cress
 Wild Radish

CAPRIFOLIACEAE

Lonicera hispidula ssp. *vacillans*

HONEYSUCKLE FAMILY

Hairy Honeysuckle

CARYOPHYLLACEAE

*Cerastium arvense**
*Spergula arvensis**

PINK FAMILY

Field Chickweed
 Corn Spurrey

CISTACEAE

Helianthemum scoparium

ROCK-ROSE FAMILY

Rush Rose

CRASSULACEAE

Crassula connata

STONECROP FAMILY

Sandy Pygmy

CUCURBITACEAE

Marah fabaceus

GOURD FAMILY

Man-Root

ERICACEAE

Arctostaphylos hookeri
Arctostaphylos pajaroensis
Arctostaphylos tomentosa ssp. *crustacea*
Vaccinium ovatum

HEATH FAMILY

Hooker's Manzanita
 Pajaro Manzanita
 Brittleleaf Manzanita
 California Huckleberry

EUPHORBIACEAE

*Euphorbia peplus**

FABACEAE

*Genista monspessulana***Lotus scoparius**Medicago polymorpha***Trifolium angustifolium***Trifolium repens***Vicia sativa**

FAGACEAE

Quercus agrifolia

GARRYACEAE

Garrya eliptica

GERANIACEAE

*Erodium botrys***Geranium molle**

LAMIACEAE

*Marrubium vulgare***Salvia mellifera**Satureja douglasii**Stachys bullata*

MALVACEAE

*Malva parviflora***Malva pseudolavatera**

MYRTACEAE

*Eucalyptus globulus**

OXALIDACEAE

*Oxalis albicans ssp. pilosa**Oxalis pes-caprae**

PAPAVERACEAE

Eschscholzia californica

PLANTAGINACEAE

*Plantago coronopus**

SPURGE FAMILY

Petty Spurge

PEA FAMILY

French Broom

Deerweed

Bur-Clover

Narrow-Leaved Clover

White Clover

Spring Vetch

BEECH FAMILY

Coast Live Oak

SILK TASSEL FAMILY

Coast Silk Tassel

GERANIUM FAMILY

Long-Beaked Filaree

Dove's Foot Geranium

MINT FAMILY

Horehound

Black Sage

Yerba Buena

Hedge Nettle

MALLOW FAMILY

Cheeseweed

Cretan Mallow

MYRTLE FAMILY

Blue Gum Eucalyptus

OXALIS FAMILY

Hairy Wood Sorrel

Bermuda Buttercup

POPPY FAMILY

California Poppy

PLANTAIN FAMILY

Cut-leaved Plantain

<i>Plantago lanceolata</i> *	Ribwort
POLEMONEACEAE <i>Navarretia Hamata</i>	PHLOX FAMILY Hooked Navarretia
POLYGONACEAE <i>Polygonum argyrocoleon</i> * <i>Rumex acetosella</i> * <i>Rumex crispus</i> *	BUCKWHEAT FAMILY Silversheath Knotweed Sheep Sorrel Curly Dock
PORTULACEAE <i>Claytonia perfoliata</i>	PURSLANE FAMILY Miner's Lettuce
PRIMULACEAE <i>Anagallis arvensis</i> *	PRIMROSE FAMILY Scarlet Pimpernel
RHAMNACEAE <i>Rhamnus californica</i>	BUCKTHORN FAMILY California Coffeeberry
ROSACEAE <i>Adenostoma fasciculatum</i> <i>Cotoneaster sp.*</i> <i>Heteromeles arbutifolia</i> <i>Rosa gymnocarpa</i> <i>Rubus ursinus</i>	ROSE FAMILY Chamise Cotoneaster Toyon Wood Rose California Blackberry
RUBIACEAE <i>Galium aparine</i> * <i>Galium californicum</i>	MADDER FAMILY Goose Grass California Bedstraw
SCROPHULARIACEAE <i>Mimulus aurantiacus</i>	FIGWORT FAMILY Sticky Monkey Flower
SOLANACEAE <i>Solanum americanum</i>	NIGHTSHADE FAMILY Small-Flowered Nightshade
URTICACEAE <i>Urtica urens</i> *	NETTLE FAMILY Dwarf Nettle
VERBENACEAE <i>Verbena lasiostachys</i> var. <i>scabrida</i>	VERVAIN FAMILY Western Vervain
CLASS MONOCOTYLEDONEAE	MONOCOTS (one seed-leaved flowering plants)
CYPERACEAE <i>Cyperus tumulicula</i>	SEDGE FAMILY Foothill Sedge

IRIDACEAE

Sisyrinchium bellum

IRIS FAMILY

Blue-eyed Grass

JUNICACEAE

Luzula comosa

RUSH FAMILY

Common Wood Rush

LILACEAE

Chloragalum pomeridianum

LILY FAMILY

Soap Root

MELANTHIACEAE

Toxicoscordion fremontii

FALSE-HELLEBORE FAMILY

Fremont's Star Lily

POACEAE

*Agrostis pallens**Aira caryophyllaea***Avena fatua***Bromus carinatus**Bromus hordaceus***Bromus diandrus***Cortaderia jubata***Cynodon dactylon***Cynosurus echinatus***Elymus glaucus**Festuca myuros***Hordeum murinum* ssp. *leporinum***Lolium multiflorum***Nasella pulchra*

GRASS FAMILY

Leafy Bent-Grass

Silvery Hair-Grass

Wild Oat

California Brome

Soft Chess Grass

Ripgut Grass

Pampas Grass

Bermuda Grass

Spiny Dogtail Grass

Western Rye Grass

Rattail Sixweeks Grass

Barnyard Foxtail

Italian Rye Grass

Purple Needlegrass

* naturalized species not native to the Martinez Property.

**Based on field studies done by Ed Mercurio in March 2017.

WILDLIFE LIST FOR THE MARTINEZ PROPERTY**More common Birds Observed or Likely to Occur on the Property****

HAWKS, FALCONS, VULTURES (ORDER FALCONIFORMES)

Turkey Vulture

Black-shouldered Kite

Sharp-shinned Hawk^wCooper's Hawk^w

Red-tailed Hawk

Red-shouldered Hawk

Golden Eagle

Northern Harrier (Marsh Hawk)^w

American Kestrel (Sparrow Hawk)

QUAILS, PHEASANTS, GROUSE (ORDER GALLIFORMES)

California Quail

SHOREBIRDS (ORDER CHARADRIIFORMES)

Killdeer

PIGEONS, DOVES (ORDER COLUMBIFORMES)

Band-tailed Pigeon

Rock Dove

Mourning Dove

OWLS (ORDER STRIGIFORMES)

Barn Owl

Western Screech Owl

Great Horned Owl

NIGHTJARS (ORDER CAPRIMULGIFORMES)

Common Poorwill

SWIFTS, HUMMINGBIRDS (ORDER APODIFORMES)

Anna's Humminbird

Rufous Humminbird

Allen's Hummingbird^s

KINGFISHERS (ORDER CORACIIFORMES)

Belted Kingfisher

WOODPECKERS (ORDER PICIFORMES)

Common Flicker (Red Shafted)

Acorn Woodpecker

Red-breasted Sapsucker^w

Hairy Woodpecker

Downy Woodpecker

Nuttall's Woodpecker

PERCHING BIRDS (ORDER PASSERIFORMES)

TYRANT FLYCATCHERS (FAMILY TYRANNIDAE)

Olive-sided Flycatcher^s

Western Wood Pewee^s

Black Phoebe

Western Flycatcher^s

SWALLOWS (FAMILY HIRUNDINIDAE)

Violet-green Swallow

Barn Swallow^s

Cliff Swallow^s

JAYS, CROWS, MAGPIES (FAMILY CORVIDAE)

Scrub Jay

American Crow

CHICKADEES, BUSHTITS (FAMILY PARIDAE)

Chestnut-backed Chickadee

Plain Titmouse

Bushtit

WRENS (FAMILY TROGLODYTIDAE)

House Wren^s

Bewick's Wren

KINGLETS, ETC. (SUBFAMILY SYLVIINAE)

Ruby-crowned Kinglet^w

THRUSHES (SUBFAMILY TURDIDAE)

American Robin

Varied Thrush ^w

Hermit Thrush ^w

BABBLERS (SUBFAMILY TIMALIINAE)

Wrentit

MOCKINGBIRDS, THRASHERS (FAMILY MIMIDAE)

Northern Mockingbird

California Thrasher

WAXWINGS (FAMILY BOMBYCILLIDAE)

Cedar Waxwing^w

SHRIKES (FAMILY LANIIDAE)

Loggerhead Shrike^w

STARLINGS (FAMILY STURNIDAE)

European Starling^{*}

VIREOS (FAMILY VIRIONIDAE)

Hutton's Vireo

Warbling Vireo^s

WOOD WARBLERS (SUBFAMILY PARULINAE)

Orange-crowned Warbler

Yellow Warbler^s

Yellow-rumped Warbler (Myrtle & Audubon's Warblers)^w

Townsend's Warbler^w
 Common Yellowthroat
 Wilson's Warbler^s

SPARROWS (SUBFAMILY EINBERIZINAE)

Rufous-sided Towhee
 Brown Towhee
 Savannah Sparrow
 Junco (Oregon)
 Dark-eyed Sparrow
 White-crowned Sparrow^w
 Golden-crowned Sparrow^w
 Fox Sparrow^w
 Song Sparrow
 Lincoln's Sparrow^w

GROSBEAKS, BUNTINGS (SUBFAMILY CARDINALINAE)

Black-headed Grosbeak^s
 Lazuli Bunting^s

BLACKBIRDS, ORIOLES (FAMILY ICTERINAE)

Red-winged Blackbird
 Northern Oriole^s
 Brewer's Blackbird
 Brown-headed Cowbird

FINCHES (FAMILY FRINGILLIDAE)

Purple Finch
 House Finch
 Pine Siskin^w
 Lesser Goldfinch
 Lawrence's Goldfinch^s

WEAVERS (FAMILY PASSERIDAE)

House Sparrow^{*}

* = naturalized species not native to the Martinez Property.

** = Based on National Audubon Society data base printout for the greater local area and field studies done by Ed Mercurio in March 2017.

w = likely to be present only in winter.

s = likely to be present only in summer.

**More common Amphibians, Reptiles and Mammals
Observed or Likely to Occur on the Martinez Property****

<u>Common Name</u>	<u>Scientific Name</u>
AMPHIBIANS	CLASS AMPHIBIA
SALAMANDERS	ORDER CAUDATA
NEWT FAMILY Coast range newt	SALAMANDRIDAE <i>Taricha torosa torosa</i>
LUNGLESS SALAMANDER FAMILY Monterey salamander Arboreal salamander Pacific slender salamander	PLETHODONTIDAE <i>Ensatina eschscholtzii eschscholtzii</i> <i>Aneides lugubris</i> <i>Batrachoseps pacificus</i>
FROGS AND TOADS	ORDER SALIENTIA
TRUE TOAD FAMILY California toad	BUFONIDAE <i>Bufo boreas halophilus</i>
TREEFROG FAMILY Pacific treefrog	HYLIDAE <i>Hyla regilla</i>
REPTILES	CLASS REPTILIA
LIZARDS AND SNAKES	ORDER SQUAMATA
IGUANID FAMILY Northwestern fence lizard	IGUANIDAE <i>Sceloporus occidentalis occidentalis</i>
SKINK FAMILY Skilton skink	SCINCIDAE <i>Eumeces skiltonianus skiltonianus</i>
ALLIGATOR LIZARD FAMILY California alligator lizard San Francisco alligator lizard	ANGUIDAE <i>Gerrhonotus multicarinatus multicarinatus</i> <i>Gerrhonotus coeruleus coeruleus</i>
CALIFORNIA LEGLESS LIZARD FAMILY Silvery legless lizard	ANNIELLIDAE <i>Anniella pulchra pulchra</i>
BOA FAMILY Pacific rubber boa	BOIDAE <i>Charina bottae bottae</i>
COLUBRID FAMILY Monterey ringneck snake	COLUBRIDAE <i>Diadophis punctatus vandeburghi</i>

Sharp-tailed snake
 Western yellow-bellied racer
 Pacific gopher snake
 California kingsnake
 Western terrestrial garter snake
 California red-sided garter snake

VIPER FAMILY
 Northern Pacific rattlesnake

MAMMALS

POUCHED MAMMALS

OPOSSUM FAMILY
 Opposum*

INSECT EATERS

SHREW FAMILY
 Trowbridge shrew
 Ornate shrew

MOLE FAMILY
 Shrew-mole
 Broad-handed mole (California mole)

BATS

EVENING BAT & PLAINNOSE BAT FAMILY
 Little brown myotis
 Yuma myotis
 Long-eared myotis (hairy-winged myotis)
 California myotis
 Small-footed myotis
 Western pipistrel
 Big brown bat
 Red bat
 Hoary bat
 Western big-eared bat (Lump-nosed bat)
 Pallid bat

FREETAIL BAT FAMILY
 Brazilian freetail bat (Mexican freetail bat)

Contia tenuis
Coluber constrictor mormon
Pituotphis melanoleucus catenifer
Lampropeltis getulus californiae
Thamnophis elegans terrestris
Thamnophis sirtalis infernalis

VIPERIDAE
Crotalus viridis oreganus

CLASS MAMMALIA

ORDER MARSUPIALIA

DIDELPHIDAE
Didelphis virginiana

ORDER INSECTIVORA

SORICIDAE
Sorex trowbridgei
Sorex ornatus

TALPIDAE
Neurotrichus gibbsi
Scapanus latimanus

ORDER CHIROPTERA

VESPERTILIONIDAE
Myotis lucifugus
Myotis yumanensis
Myotis volans
Myotis californicus
Myotis leibii
Pipistrellus hesperus
Eptesicus fuscus
Lasiurus borealis
Lasiurus cinereus
Plecotus townsendi
Antrozous pallidus

MOLOSSIDAE
Tadarida brasiliensis

FLESHEATERS

RACCOON FAMILY

Raccoon

RINGTAIL FAMILY

Ringtail

WEASEL AND SKUNK FAMILY

Longtail weasel

Badger

Spotted skunk

Striped skunk

DOG, WOLF AND FOX FAMILY

Coyote

Red fox*

Gray fox

CAT FAMILY

Mountain lion

Bobcat

GNAWING ANIMALS

SQUIRREL FAMILY

California ground squirrel

Western gray squirrel

Eastern gray squirrel*

Fox squirrel*

POCKET GOPHER FAMILY

Valley pocket gopher

POCKET MOUSE AND KANGAROO RAT FAMILY

California pocket mouse

Heermann kangaroo rat

RAT AND MOUSE FAMILY

Western harvest mouse

California mouse

Deer mouse

Piñon mouse

Dusky-footed woodrat

California meadow mouse (California vole)

ORDER CARNIVORA

PROCYONIDAE

Procyon lotor

BASSARISCIDAE

Bassariscus astutus

MUSTELIDAE

*Mustela frenata**Taxidea taxus**Spilogale putorius**Mephitis mephitis*

CANIDAE

*Canis latrans**Vulpes fulva**Urocyon cinereoargenteus*

FELIDAE

*Felis concolor**Lynx rufus*

ORDER RODENTIA

SCIURIDAE

*Spermophilus beecheyi**Sciurus griseus**Sciurus carolinensis**Sciurus niger*

GEOMYIDAE

Thomomys bottae

HETEROMYIDAE

*Perognathus californicus**Dipodomys heermanni*

CRICETIDAE

*Reithrodontomys megalotis**Peromyscus californicus**Peromyscus maniculatus**Peromyscus truei**Neotoma fuscipes**Microtus californicus*

OLD WORLD RAT AND MOUSE FAMILY

House mouse*

Norway rat*

Black rat*

MURIDAE

*Mus musculus**Rattus norvegicus**Rattus rattus*

HARES AND RABBITS

ORDER LAGOMORPHA

HARE AND RABBIT FAMILY

LEPORIDAE

Blacktail jackrabbit

Lepus californicus

Audubon cottontail (Desert Cottontail)

Sylvilagus audubonii

Brush rabbit

Sylvilagus bachmani

EVEN-TOED UNGULATES

ORDER ARTIODACTYLA

DEER FAMILY

CERVIDAE

Mule deer (Blacktail deer)

Odocoileus hemionus

*Naturalized species not native to the Martinez Property.

**Based on field studies done by Ed Mercurio in March 2017.