



PRUNUSKE CHATHAM, INC.

July 29, 2008

Michael Fennel
Fennell Development
P.O. Box 3274
Napa, CA 94558

Re: Suscol Ferry Road Development Project
Preconstruction Breeding Bird Survey

Dear Micheal,

This letter is a report of a preconstruction breeding bird survey conducted for the Suscol Ferry Road Development Project. The purpose of the survey was to determine whether or not breeding birds were present within the project site prior to the proposed removal of invasive, non-native Himalayan blackberry (*Rubus discolor*) along Suscol Creek. As required by the project permits, I am providing the following written report.

The subject property is located along Suscol Ferry Road adjacent to Suscol Creek, a tributary to the Napa River, south of the town of Napa. The site is located in the northeastern corner of the Cuttings Wharf USGS quadrangle (38°14'19"N and 122°16'33"W) at approximately 30 feet elevation. The overall project consists of building a winery and associated buildings on the property. The survey was conducted prior to removal of Himalayan blackberry that is overtaking the riparian corridor along Suscol Creek as part of proposed mitigation for the above-mentioned development. Following removal, the creek banks will be revegetated with native riparian trees (e.g., willow, oak, buckeye) and an understory of native grasses and forbs.

As part of the background studies completed for project, a biological resources evaluation was prepared by Prunuske Chatham, Inc. (PCI 2006). In this report, PCI identified suitable breeding habitat for birds protected under the Migratory Bird Treaty Act (MBTA) and recommended a preconstruction breeding bird survey prior to construction. In addition, PCI discussed the potential for the occurrence of Swainson's hawk, a state-listed as threatened species, based on information you obtained from the California Department of Fish and Game (CDFG). CDFG noted that in May 2005 two pairs of breeding Swainson's hawks were observed courting and nest building in the southern airport area, south of the property. During the breeding bird survey, particular attention was paid to identifying Swainson's hawk as well as inactive and active raptor nests.

The survey was conducted on June 26, 2008, from 10:00 am to 1:30 pm. Conditions during the survey were warm, hazy with wildfire smoke, and no detectable wind. The air temperature was 71° F at 10:00 am and became increasingly warmer as the survey progressed (80° F at 1:30 am). During the survey, an inventory of animal species observed was compiled (Table 1). The survey was conducted with the aid of binoculars and followed the guidelines described in Martin and Geupel (1993). Breeding bird activity was determined by observing parental behavior and systematically searching the vegetation and other appropriate nest sites (e.g., bare ground, snags, etc.). The survey focused on identifying nests along the length of Suscol Creek adjacent to the project site. The eucalyptus grove parallel to the dirt road along the western property line was also evaluated. Jennifer Michaud, M.A., of Prunuske Chatham, Inc., conducted the survey.

No active bird nests were found during the survey as indicated by systematic searches of the vegetation and lack of observations of behavior indicative of breeding birds (e.g., adults carrying food or nesting materials, nest dances, nervous displacement behaviors, etc.). Several old nest structures were observed within the project area. These included inactive nest cavities in old snags on the right bank of Suscol Creek and a single large nest structure (e.g., kite or raptor) in the eucalyptus grove along the western property line. The large nest structure appeared to lack fresh greenery and whitewash indicating it may not have been active this breeding season. A number of observations of recently fledged birds were made. These included a juvenile white-tailed kite being tended by two adults, a young California towhee begging for food, and three great horned owls roosting in a large oak tree, one of which was clearly a juvenile. Neither Swainson's hawk or active raptor nest structures were observed. A number of foraging and/or roosting birds were observed in native riparian vegetation along the creek. At this time, the project site does not appear to support active bird nests as indicated by a lack of breeding bird behavior and observations of active nests.

Table 1. Wildlife species observed during the June 28, 2008 survey.

COMMON NAME	SCIENTIFIC NAME
REPTILES	
western fence lizard	<i>Sceloporus occidentalis</i>
MAMMALS	
black-tailed jackrabbit	<i>Lepus californicus</i>

COMMON NAME	SCIENTIFIC NAME
BIRDS	
Anna's hummingbird	<i>Calypte anna</i>
barn owl	<i>Tyto alba</i>
Bewick's wren	<i>Thryomanes bewickii</i>
California towhee	<i>Pipilo crissalis</i>
great horned owl	<i>Bubo virginianus</i>
house finch	<i>Carpodacus mexicanus</i>
northern mockingbird	<i>Mimus polyglottos</i>
oak titmouse	<i>Baeolophus inornatus</i>
song sparrow	<i>Melospiza melodia</i>
violet-green swallow	<i>Tachycineta thalassina</i>
western kingbird	<i>Tyrannus verticalis</i>
western scrub-jay	<i>Aphelocoma californica</i>
white-tailed kite	<i>Elanus leucurus</i>

If you require additional information, please feel free to contact me at (707) 824-4601 ext 108, or via e-mail at jennifer@pcz.com.

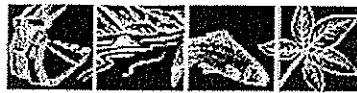
Sincerely yours,
PRUNUSKE CHATHAM INC.

Transmitted electronically

Jennifer Michaud
Senior Wildlife Biologist

References

- Martin, T.E. and G.R. Geupel. 1993. Nest-monitoring plots: methods for locating nests and monitoring success. *Journal of Field Ornithology* 64:507-519.
- Prunuske Chatham, Inc, (PCI). 2006. Biological Assessment Evaluation Suscol Ferry Road Development Project, March 2006.



PRUNUSKE CHATHAM, INC.

MEMO

Date: March 2, 2006

To: Mike Fennell

From: Jennifer Michaud
Wildlife Biologist

Re: Suscol Ferry Road Winery
Swainson's Hawk Summary

PROJECT DESCRIPTION

The subject property is located along Suscol Ferry Road adjacent to Suscol Creek, a tributary to the Napa River, south of the town of Napa. The project consists of building a winery and associated buildings on the property. Fennell Development has retained Prunuske Chatham, Inc. (PCI) to perform a biological evaluation of the project site to assess potential impacts to biological resources.

BACKGROUND

During our on-site meeting on February 16, 2006, you expressed concern over information you obtained regarding the potential presence of two breeding pairs of Swainson's hawks (*Buteo swainsoni*) within the property boundaries. According to information you obtained from California Department of Fish and Game (CDFG), two pairs of breeding Swainson's hawks were observed courting and nest building within the project area in May 2005. As a result of this sighting, concerns over potential impacts to this species need to be addressed before project approval.

SPECIES DESCRIPTION

The Swainson's hawk is currently state-listed as threatened. It is a slender prairie hawk that feeds on small mammals, reptiles, and insects. This species occurs in the Great Plains of North America and is also found in the Central Valley in California. Swainson's hawks migrate to South America during the winter months. Habitat includes plains, open rangeland and hillsides, and country with scattered trees. Nesting occurs from late March to late August. Nesting sites

include open and sparsely vegetated habitats with scattered trees. Nests are built from 4 to 100 feet above ground.

LITERATURE REVIEW

A background literature search was conducted to determine recently reported sightings and potential for occurrence of Swainson's hawk within the project area. The most recent data available from the CDFG Natural Diversity Data Base (CNDDDB) were obtained for the Cuttings Wharf and Napa USGS quadrangles and reviewed to determine if recent sightings of Swainson's hawk have been reported (CDFG 2006). The project site is located at the northern edge of the Cuttings Wharf quadrangle. According to the CNDDDB database, there are no sightings for Swainson's hawk within the overlays or in the outlying areas. I also spoke with Darlene McGriff of the Wildlife and Habitat Data Analysis Branch of CNDDDB, she reported there are no unprocessed sightings for Swainson's hawk on either overlay (McGriff 2006).

The Napa-Solano Audubon Society's, Breeding Birds of Napa County, California (Atlas) was also reviewed for documented occurrences for the hawk (Berner et al. 2003). The Atlas is a result of a 5-year extensive study of breeding birds in the county and includes sightings for common, rare, irregular, and unclear breeding birds over the length of the study. According to the Atlas, there are no known historic or recent sightings of breeding Swainson's hawk in Napa County. An on-line literature search was also conducted and no recent sightings for Swainson's hawk in Napa County were found.

FIELD OBSERVATIONS

A field reconnaissance of the project area was conducted on February 16, 2006. The purpose of the survey was to characterize biological communities within the project area and to determine whether or not suitable habitat for special-status species is present on site. The field survey consisted of evaluating all areas of potential disturbance plus a buffer around the impact areas. During the assessment, no Swainson's hawks were observed. Observations of large predatory birds were limited to a pair of red-tailed hawks and a single white-tailed kite. Both of these species were seen soaring over the project site and the kite was observed perched on a large bay tree across the creek on the adjacent parcel.

Habitat within the project area consists primarily of open grassland and riparian habitat along Suscol Creek. The grassland is dominated by miscellaneous annual grasses and a few scattered coyote brush. The property line runs to the centerline

of Suscol Creek. On either side of the channel is a mature riparian forest consisting of valley oaks, live oaks, buckeye, grape, native and non-native blackberry and introduced species of hybrid poplar and locust. Huge patches of Himalaya blackberry dominate the understory of the riparian community and in most places it is impenetrable. Along the upstream reach of the property, the understory of Himalaya blackberry is replaced by native California blackberry. No historic nest structures suitable for breeding hawks were observed within the open grassland and along Suscol Creek in the riparian community. On the adjacent parcel, one nest structure was identified in a large fir tree, however, it was inactive.

INTERPRETATION

Historic and recent sightings of Swainson's hawk in Napa County appear to be absent from the literature. Habitat elements suitable for this species occur on site, however, the potential for occurrence is extremely low. During the winter months, it would not be unusual for a vagrant Swainson's hawk to be observed in Napa County, since this species is highly migratory during the winter months. However, as noted, breeding occurrences are absent for this region.

Swainson's hawk is easily confused with one of the more common raptors residing in Napa County, the red-tailed hawk. Additional species such as the red-shouldered hawk and northern harrier may also be confused with the Swainson's hawk for novice bird watchers. Without additional documented evidence on the sighting, the observation of courting and nesting-building Swainson's hawks is uncertain.

RECOMMENDATIONS

Construction activities at the project site will involve working within close proximity to Suscol Creek and surrounding habitats. To ensure impacts to all bird species are minimized the following recommendation should be implemented:

Under the Migratory Bird Treaty Act (MBTA), it is unlawful to take, kill, and/or possess migratory birds at any time or in any manner, unless the appropriate permits are obtained. Protections extend to active nests, eggs, and young birds still in the nest. Most bird species, with a few specific exceptions, are protected under this act. Construction during the breeding period, typically April through July, could result in losses to these and other native wildlife species.

To avoid potential losses to nesting migratory birds, construction activities should occur outside of the critical breeding period. If activities must occur during the normal breeding season, work areas should be surveyed by a qualified biologist prior to commencing. If active nests are encountered, those areas plus a buffer area designated by the biologist should be avoided until the nests have been vacated. The buffer area should be 50-feet for small songbirds and 75-feet for larger birds (i.e., raptors, owls)

REFERENCES

Berner, M., B. Grummer, R. Leong, and M. Rippey. 2003. Breeding Birds of Napa County, California. Napa-Solano Audubon Society, Vallejo, CA.

California Department of Fish and Game. 2006. California Natural Diversity Database. California Department of Fish and Game, Sacramento, CA.

McGriff, D. 2006. Personal communication with Ms. McGriff, Wildlife and Habitat Data Analysis Branch of the California Natural Diversity Database. California Department of Fish and Game, Sacramento, CA.

Zeiner, D.C., W.F. Laudenslayer, K.E. Mayer, and M. White. 1990. California's Wildlife: Volume II - Birds. California Department of Fish and Game. Sacramento, CA.



PRUNUSKE CHATHAM, INC.

November 16, 2005

Mike Fennell
Fenken Realty Inc.
P.O. Box 3299
Napa, CA 94558

Re: Parcel #2, Suscol Ferry Road APN 057-170-018
Riparian Setback

Mike:

Your initial request was for Prunuske Chatham, Inc. (PCI) to examine the drainage swale that traverses the property. At our site visit, we discussed other biological features within the property that should be considered in the planning phase of the development. The following report focuses on the Riparian area.

Riparian Area

The southern property line is the centerline of Suscol Creek. On either side of the channel is a mature riparian forest consisting of valley oaks, live oaks, buckeye, grape, native and non-native blackberry and introduced species of hybrid poplar and locust. Examination of historic stereo aerial photos dated October 2, 1958 indicates that the canopy of the riparian vegetation covered less area than it does today – about an average width of 25 feet on each side of the creek. Ground-truthing of recent aerials has shown us that the expansion of the riparian corridor out to 40 feet on the north side is largely due to the spread of the non-native invasive Himalaya blackberry (*Rubus discolor*).

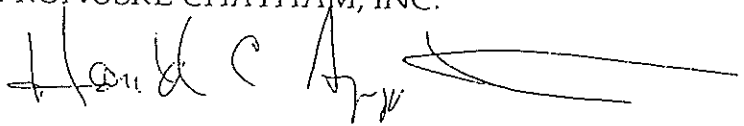
As you know, the riparian vegetation provides valuable wildlife habitat. Maintaining and improving the riparian corridor would be beneficial for water quality, wildlife habitat, and aesthetic enjoyment. Because of the historical perspective (a narrow riparian corridor for 50 years or more) and the relatively flat topography outside of the creek channel, a setback from the top of bank of 75 feet would seem reasonable and adequate. Within this area are dense patches of Himalaya blackberry which should be cleared and replanted with additional native riparian woody species.

It should be noted that approximately 150 feet east of the western parcel line, the understory vegetation along the creek changes from Himalaya blackberry to the native blackberry (*Rubus ursinus* var. *ursinus*) with willows growing through

them. The native plants should be left undisturbed. At the eastern-most section of creek within the parcel is a patch of native creeping wildrye (*Leymus triticoides*) which should also remain within the riparian buffer area.

If you have any questions, please feel free to call me at 874-0102 extension 16 or email Harold@pcz.com.

Sincerely,
PRUNUSKE CHATHAM, INC.

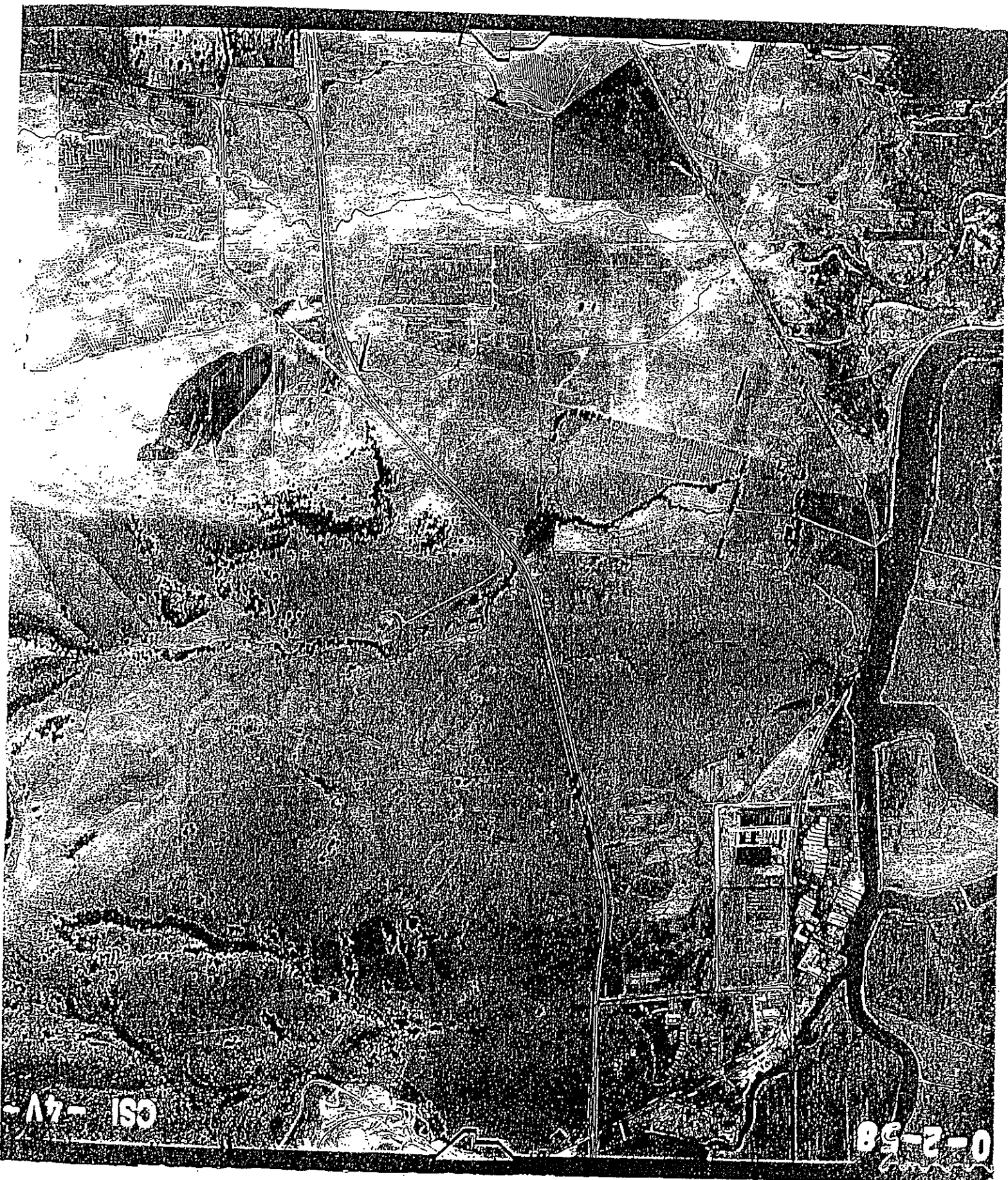
A handwritten signature in dark ink, appearing to read "Harold C. Appleton", followed by a long, horizontal, slightly wavy line that extends to the right.

Harold C. Appleton
Registered Professional Forester
Certified Arborist
Certified Professional in Sediment and Erosion Control

Attachments:

- 1958 aerial photo
- Recent aerial photo

958 Photo



CSL-4V-

0-2-58

1" = 2000'





PRUNUSKE CHATHAM, INC.

November 16, 2005

Mike Fennell
Fenken Realty Inc.
P.O. Box 3299
Napa, CA 94558

Re: Parcel #2, Suscol Ferry Road APN 057-170-018
Preliminary Assessment: Potential Wetlands or Waters

Mike:

The following is our preliminary determination for the presence of wetlands or waters of the US on the property. See also the attached Figure 1: Location Map and Figure 2: Site map.

Drainage Swale

The watershed contributing to the swale on the property appears to have been roughly 55 acres prior to State road construction. Seasonal water flow passes through the subject property downstream into a vegetated swale. The USGS topographic map shows the swale draining to Suscol Creek or the Napa River near their confluence. The location of the natural drainage into the subject property was modified in the past when road builders placed a 36-inch diameter culvert under Suscol Ferry Road. This may have contributed to cutting the channel within what was once a vegetated swale.

Historic stereo aerial photographs dated October 2, 1958 were examined. The subject area appears to have been a grassy swale with no obvious channel. The 1978 Soil Survey of Napa County was consulted. No listed hydric soils were mapped on the property.

PCI performed a routine wetland determination along the swale on August 29, 2005 with additional plots surveyed on October 13, 2005. Data sheets are attached at the end of this report. A jurisdictional wetland is one in which all three of the following features are present: wetland vegetation, wetland hydrology, and hydric soils. Vegetation analysis is not entirely reliable this late in the year. The key hydrologic indicator in August at this site is the local topography (drainage pattern). Several soil pits were dug to examine secondary hydrology and soil indicators using the 1987 Corps of Engineers wetlands delineation protocol.

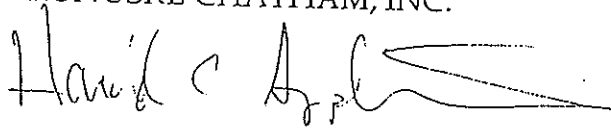
There is a channel that meanders for a distance of about 330 feet from the culvert outlet through the swale to the western parcel boundary. The channel varies in dimension from roughly 2.5 feet wide by 0.3 feet deep to 3.6 feet wide by 0.1 feet deep. It is our opinion that this channel would not be considered waters of the U.S. as the channel disappears downstream into a non-wetland vegetated swale. Furthermore, the channel was probably a result of road and culvert work that concentrated water run-off immediately downstream of the culvert.

There is a possibility that wetlands are present immediately adjacent to the channel within a bench feature about six feet wide (this varies from bank to bank - sometimes 2 feet on one side and 4 feet on the other). Although the 1978 Soil Survey of Napa County shows the soil to be in the Hambright complex, which is not on the hydric soils list, soil pits produced hydric indicators in some cases. Vegetation indicators are inconclusive at this time of year. Only one small isolated area definitely met all three wetland criteria, plot #1, due to the presence of wetland plants. Presumably, this area would be too isolated to be jurisdictional, but the Army Corps will have to make the final determination.

This report is preliminary only and does not constitute a final biological or wetland assessment. The time of year has limited the accuracy of the vegetation survey. The next step for wetland determination is to send these data and maps to the Corps of Engineers regulatory branch and request a site visit and certification.

If you have any questions, please feel free to call me at 874-0102 extension 16 or email Harold@pcz.com.

Sincerely,
PRUNUSKE CHATHAM, INC.



Harold C. Appleton, RPF, CPESC

Attachments:

- Fig. 1. Location map
- Fig. 2. Site map
- Data Forms
- Photos

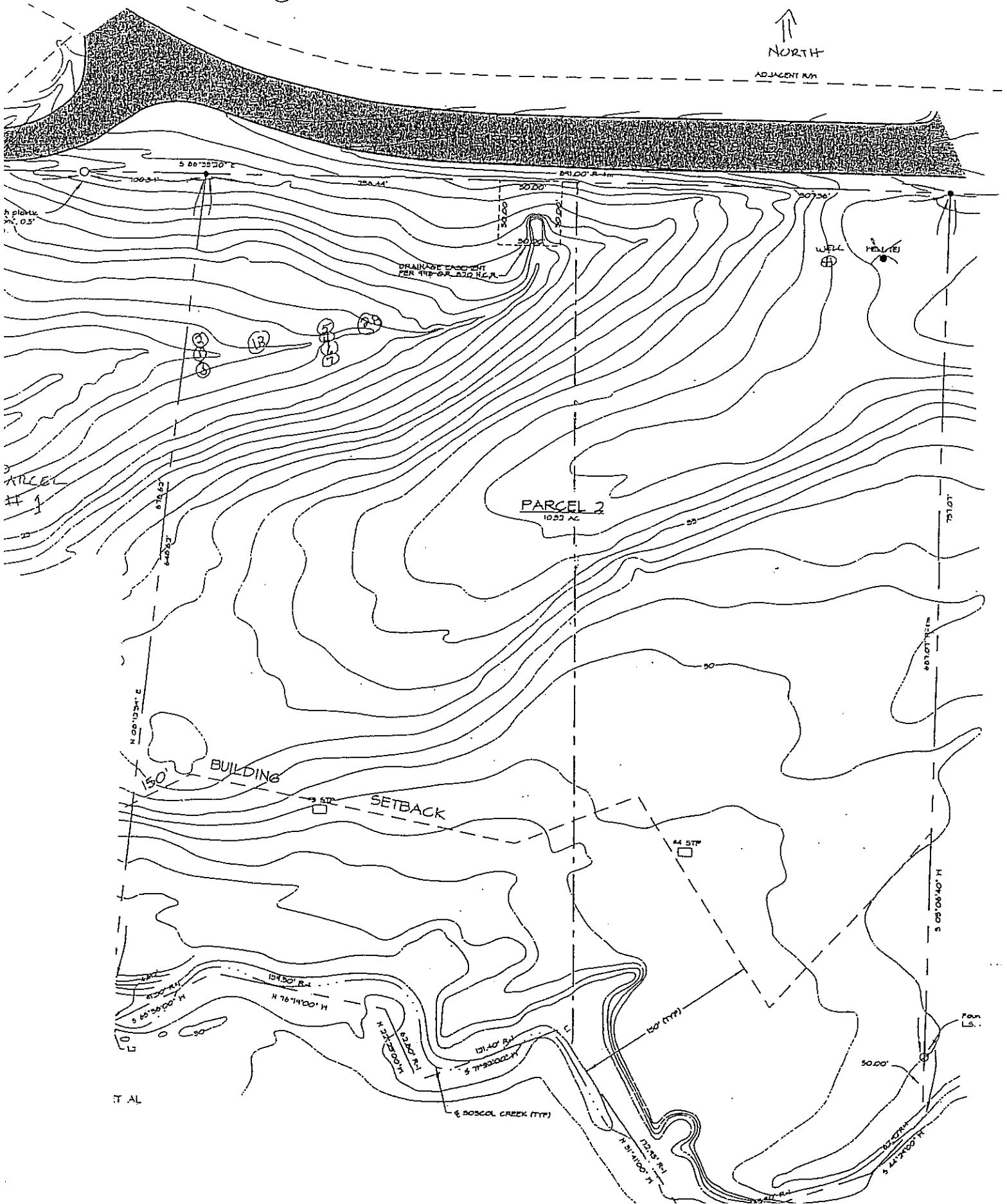
FIGURE 2 . SITE MAP

① = SAMPLE PLOT LOCATIONS

1" = 100'

↑
NORTH

ADJACENT RUN





Plot 1A, Downhill Parcel # 1



Plots 4 + 5 Parcel # 2

2 May 2006

Mike Fennell
Fennell Development
PO Box 3399
Napa, CA 94558

RECEIVED

MAY 02 2006

NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.


RE: Vegetative Enhancement Plan
Suscol Creek Winery (AP # 057-170-018)

Dear Mike,

After removing the blackberries and other non-native species, the riparian re-planting program along the Suscol Creek will include a mix of native trees, shrubs and grasses. The primary tree planting will be *Quercus agrifolia*, (live oak), *Quercus lobata*, (valley oak), and *Aeschylus californica*, (California buckeye). *Salix laevigata* (red willow) will be used in areas that need bank stabilization. Shrubs will include *Rosa californica*, *Sambucus mexicana*, and *Symphoricarpus albus*. *Leymus triticoides*, (creeping wild rye), to match that on site, and other native streamside grasses will be planted as well.

If you have any questions, don't hesitate to call.

Sincerely,



Jennifer Chandler