# Appendix B:
# 2016 Biological Update Report

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December 7, 2016

Craig Lawson
CAL Custom Building Services, Inc.
P.O. Box 3597
Santa Rosa, CA 95402

Re: Updated biotic surveys and findings for 7842 Hembree Lane, Windsor

Dear Craig:

As requested, I have completed a recent re-visit to the subject property (approximately 5.19 acres) at 7842 Hembree Lane in Windsor, and have made an updated evaluation of its wetland and other biological resources. I had conducted numerous site visits (including rare plant surveys and wetland mapping) over past years, initially in 2005, with a formal "Jurisdictional Determination" (JD) confirmed by the U. S. Army Corps of Engineers (Corps) by letter dated May 18, 2007. This letter summarizes my past investigations, updated by my recent site visit.

**Baseline Conditions**

Specific field dates have included the following:

| | | |
|---|---|---|
| 2005: | | |
| | October 7 | general reconnaissance and vegetation survey |
| 2006: | | |
| | January 26 | hydrology check and preliminary wetland mapping |
| | March 31 | plant survey |
| | April 26 | plant survey |
| | May 18 | plant survey |
| | June 16 | plant and wetland surveys; data collection for JD |
| 2007: | | |
| | April 11 | plant survey and JD confirmation visit with Corps |
| | August 1 | general site check, vegetation surveys |
| 2008: | | |
| | March 3 | rare plant survey |
| | April 3 and 23 | plant surveys, hydrology check |
| | May 8 | plant survey |
| 2016: | | |
| | September 22 | general conditions check |

Based on these detailed surveys, the site can be described as being dominated by regionally typical non-native annual grassland with numerous young oak saplings, several small man-made, seasonally wet depressions and a ditch. The bulk of the site is common annual grassland composed largely of introduced grasses (*Avena, Bromus, Lolium, Hordeum, Cynodon, Phalaris*) and weeds (*Brassica, Hypocheris, Vicia,*

*Carduus, Sonchus, Lactuca,* etc.), plus scattered individuals of a few native grasses (*Danthonia, Stipa*) and a few common native herbs (*Lupinus, Hemizonia, Eschscholzia, Danthonia*). There are a significant number of native oak trees (*Quercus lobata, Q. agrifolia*), most of which are relatively young (10 to 20 years old); these have been cataloged and identified in a separate report.

There is a straightened ditch that runs roughly east-west across the middle of the site, entering from the northeast and exiting to the south into a buried storm drain beneath the adjoining residential neighborhood. This feature is generally ephemeral, but typically carries some intermittent summer flow related to nearby urban watering and miscellaneous yard and street runoff. This ditch is dominated by the non-native Himalaya blackberry (*Rubus discolor*), cattails (*Typha latifolia*), and numerous other common seasonal wetland species (*Rumex, Epilobium, Cyperus, Paspalum, Polygonum, Cynodon, Polypogon, Xanthium*), most of which are not native. The extreme western end also supports a small clump of native (but very common, and even aggressive) arroyo willow (*Salix lasiolepis*).

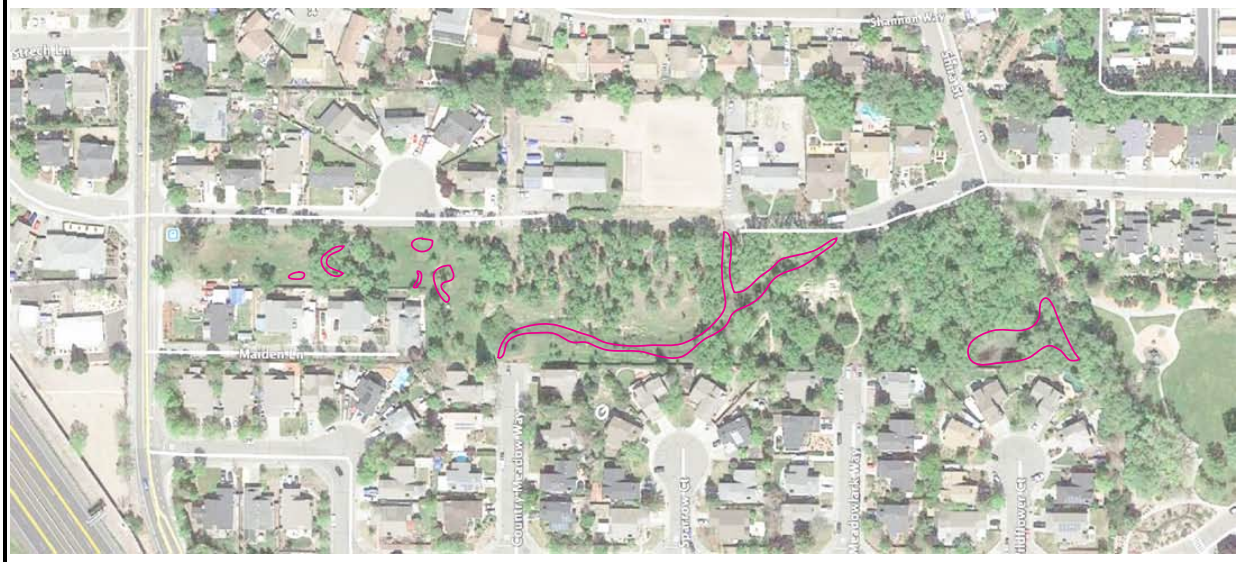
This ditch represents seasonal "wetland" subject to the jurisdiction of and regulation by the Corps, as well as by the California Regional Water Quality Control Board (RWQCB). Fill or alteration of this feature would require permits from these agencies, including a requirement for compensatory mitigation, and would probably also require a Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW).

There is also a highly degraded (man-made) shallow pool in the extreme southeastern corner of the site. This seasonal pool is apparently the unintended result of constructing a nearby elevated walking path in the adjacent park, which has become a 'dam' to the previous flow of runoff southeastward from the eastern part of the Hembree Lane site. This pool feature is highly tannic because of dense oak canopy and leaf litter, but does foster some regionally common wetland vegetation (*Eryngium, Rumex, Mentha, Pleuropogon, Eleocharis, Ranunculus*), in addition to dense Himalaya blackberry and coyote brush (*Baccharis*) around the edges.

There are also five very small isolated seasonally wet depressions toward the western end of the site. These are shallow depressions (less than one foot deep) that occur in the nearly level grassland, some of which appear to be man-made, including tire ruts and small 'borrow' areas. These pockets total approximately 0.05 acre (2040 square feet), and support common seasonal wetland species of plants (i.e., *Pleuropogon, Plagiobothrys, Downingia, Juncus bufonius, Veronica, Lythrum*). Because of their very small size, these features tend to be highly ephemeral with regard to hydrology (sometimes drying completely on the surface between storms). These five small features (as well as the larger seasonal pool in the site's southeastern corner) have all been deemed "Isolated" by the Corps, and are hence not regulated by the Corps. Figure 1 shows the approximate locations of the site's wetlands.

**Sensitive Species**

Based on my surveys and records from the California Natural Diversity Data Base, the site does not support any rare, endangered, or otherwise sensitive species of plants or animals, nor does it contain particularly suitable habitat for same. Several years of spring plant surveys have resulted in no rare, endangered, or otherwise unusual plants being found, and based on the site's disturbed condition and largely man-made wetlands, is not likely to support any such species. There are no historic records of rare plants here or immediately nearby, and most of the surrounding landscape has already been fully developed for urban neighborhoods. The onsite wetlands include small man-made depressions with common weeds and a few common native seasonal wetland species, but these small features are apparently man-made and are shallow and ephemeral enough to support only non-native grasses and upland weeds in drier years.



= Corps confirmed wetlands (0.38 acre total)
(locations approximate)

## Figure 1. Site Setting and Wetland Conditions

**7842 Hembree Lane, Windsor, Calif.**

| | | | |
|---|---|---|---|
| **NORTH** ↑ | **Source/Prepared by:** C. Patterson; December, 2016 | **Applicant:** CAL Custom Building Services, Inc., Santa Rosa, CA | **Sonoma County A. P. Number 163-080-047** |
| | **Basemap:** 2015 Google Earth satellite image **No Scale** | | Approx. 5.19 ac |

**Biological Baseline Update report**

The larger pool in the SE corner appears to be wholly man-made and supports common weeds and seasonal wetland herbs. It does not represent particularly suitable potential habitat for sensitive species because of its thick bed of oak litter, highly tannic water quality, invasion by exotics (*Rubus, Mentha, Rumex*), and dense overhead shading. The linear ditch contains occasional summer runoff and does not represent good or even suitable habitat for the region's sensitive plants. This feature is dominated by common seasonal wetland and semi-riparian vegetation such as dock, cattails, mint, and willows, plus numerous weedy seasonal wetland species (*Rumex, Polypogon, Polygonum, Agrostis, Paspalum*). No listed or otherwise highly sensitive plant species have been encountered or reported from this site, and based on the marginal conditions, none are expected. One plant of minor interest that is present is Lobb's aquatic buttercup (*Ranunculus lobbii*), which occurs as a small colony in the man-made pool in the southeastern corner of the site. This regionally common aquatic plant is listed by the California Native Plant Society on their List 4 ("A Watch List"), but it has no state or federal protection. This pool is to be avoided by the development plan.

With regard to sensitive wildlife, the site occurs near the outermost northeastern corner of the historic known or suspected range of the state and federally listed California tiger salamander (CTS), and based on this, plus the marginal suitability of the habitats present (mostly man-made, mostly very ephemeral, extremely isolated and fragmented), no CTS are likely here. The Santa Rosa Plain Conservation Strategy shows the Hembree Lane site white on the Strategy's Figure 2, designated as "Out of Potential Range for CTS", and the site is shown as pale yellow ("Presence of CTS is not likely...") on the Strategy's Figure 3, with the surrounding area generally being mapped as "Already Developed (no potential for CTS)". Based on this and the fact that there are no known suitable natural breeding pools in this general area, plus all the surrounding development and other barriers (freeway, residential neighborhoods, buried storm drains, other major roads), the conclusion here is that CTS do not occur here and should not be an issue.

The general lack of any suitable natural habitats or resources that could support or attract any of the region's known sensitive wildlife species, plus the surrounding areas' near full existing urban development, renders this site's resource potential for such species as extremely low. The older trees may provide some minor roosting or resting opportunities, but they do not represent (nor does the site overall) the type of habitat and setting that the region's sensitive wildlife species prefer.

**Agency Involvement and Permitting**

With regard to wetlands, the site contains a total of approximately 0.38 acre of "wetland", although the small divots in the western part and the SE pool were all deemed "Isolated" by the Corps (Bryan Matsumoto, project manager) and are hence, not regulated by the Corps. The main ditch contains a total of 0.13 acre of ("Adjacent") "jurisdictional wetland", which is regulated by the Corps. All of the site's wetlands, both "Adjacent" and "Isolated" will be regulated at the state level by the RWQCB. The Corps JD was valid until May 18, 2010, at which time it expired. Under recent drought conditions, the Corps has had a policy of simply re-confirming old JDs rather than accepting new wetland mapping for sites that did have prior JDs. It can be assumed that this site's JD would be re-confirmed by the Corps if requested.

While there would be some standard mitigation requirements for any significant impacts to any of the onsite wetlands (if not by the Corps, then certainly by the RWQCB), it should be relatively straightforward to obtain fill authorization for any amount of onsite wetland fill. Agencies always tend to prefer avoidance as the first means of reducing impacts to wetlands, but any wetland(s) that cannot easily be avoided here should be eligible for the Corps' "Nationwide" (fill) permit program (NWP) for minor impacts less than 0.5 acre. Authorization could be obtained using a strong argument against avoidance of certain specific features, plus some onsite avoidance and adequate compensatory mitigation. No portion or feature on the site is highly significant for its direct resource values. All features here represent very minor (degraded, remnant, man-

made) wetland resources, and virtually any onsite layout that cannot avoid any/all/some of the wetlands would most likely be able to easily obtain the necessary permits and clearances to fill any/all onsite wetlands. In fact, it would be to the applicant's advantage to include at least a small area of fill in the ditch, as this feature was not deemed "Isolated" and would be regulated by the Corps. Without Corps regulation (as would be the case for the smaller 'isolated' wetland features), the applicant would need to complete "Section 10 Consultation" with the US Fish and Wildlife Service, a process that is much more cumbersome and expensive than the more typical "Section 7 Consultation" process that occurs if the Corps is involved.

While the Corps has deemed the six independent features "Isolated", the RWQCB would still regulate all onsite "wetlands", requiring adequate mitigation for all onsite acreage to be filled or otherwise adversely affected.

Mitigation for wetland impacts can be provided in any of several forms, ranging from onsite or offsite (in-kind) habitat replacement, mitigation bank credits, and/or various wetland habitat restoration and enhancement measures. Regional wetland credits are selling currently for roughly $200,000 per acre of wetland fill, but pricing can vary dramatically week to week. Onsite habitat replacement is feasible here, requiring at least equal (likely 1.5:1) acreage of similar seasonal wetland habitat to be created (in currently non-wetland ground).

Details (plant list, habitat mapping, field notes) of the botanical surveys are available upon request. Also, detailed potential impacts and alternative mitigations have been discussed briefly for this site, but expanded discussions of these issues are not included here. Additional baseline information and/or expanded discussions of the regulatory processes are available on request. I hope this report helps in planning for this site/project.

Sincerely,

Charles A. Patterson