

**BIOLOGICAL RESOURCES ANALYSIS
HIGHWAY 116/WEST COTATI ALIGNMENT PLAN
CITY OF COTATI, CALIFORNIA**

October 26, 2023

Prepared for

The City of Cotati
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TABLE OF CONTENTS

1. INTRODUCTION	1
2. PROPERTY LOCATION	1
3. PROPOSED PROJECT	1
4. ANALYSIS METHODS	2
5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES	3
5.1 Topography and Hydrology	3
5.2 Soils.....	3
5.3 Plant Communities and Associated Wildlife Habitats	3
5.3.1 RUDERAL HERBACEOUS	4
5.3.2 SEASONAL WETLANDS	4
5.4 Wildlife Corridors.....	5
6. SPECIAL-STATUS SPECIES	6
6.1 Definitions.....	6
6.2 Potential Special-Status Plants on the Project Site	8
6.2.1 SONOMA SUNSHINE (<i>BLENNOSPERMA BAKERI</i>).....	8
6.2.2 BURKE’S GOLDFIELDS (<i>LASTHENIA BURKEI</i>)	9
6.2.3 SEBASTOPOL MEADOWFOAM (<i>LIMNANTHES VINCULANS</i>).....	10
6.3 Potential Special-Status Animals on the Project Site	11
6.3.1 CALIFORNIA TIGER SALAMANDER (<i>AMBYSTOMA CALIFORNIENSE</i>)	11
7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS.....	15
7.1 Federal Endangered Species Act.....	15
7.1.1 RESPONSIBLE AGENCY	17
7.1.2 APPLICABILITY TO THE PROPOSED PROJECT	17
7.2 Federal Migratory Bird Treaty Act	18
7.2.1 APPLICABILITY TO THE PROPOSED PROJECT	18
7.3 California Endangered Species Act	19
7.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT	19
7.3.2 APPLICABILITY TO THE PROPOSED PROJECT	20
7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513	21
7.4.1 APPLICABILITY TO THE PROPOSED PROJECT	21
7.5 Santa Rosa Plain Conservation Strategy	21
7.5.1 APPLICABILITY TO THE PROPOSED PROJECT	23
7.6 USFWS Recovery Plan for the Santa Rosa Plain (USFWS 2016)	23
7.6.1 APPLICABILITY TO PROPOSED PROJECT.....	24
7.7 Santa Rosa Plain 2020 Programmatic Biological Opinion	24
7.7.1 IMPACTS TO LISTED PLANT SPECIES	25
7.7.2 IMPACTS TO CALIFORNIA TIGER SALAMANDER	26
7.7.3 APPLICABILITY TO THE PROPOSED PROJECT	27
7.8 City of Cotati General Plan – Conservation Element.....	28
7.8.1 CONSERVATION GOAL CON 1 PROTECT AND ENHANCE COTATI’S ECOSYSTEM AND NATURAL HABITATS.....	28
7.8.2 APPLICABILITY TO THE PROPOSED PROJECT	30
7.8.3 OBJECTIVE CON 1B PROTECT AND ENHANCE LOCAL RIPARIAN, WETLAND AND AQUATIC HABITAT.....	31
7.8.4 APPLICABILITY TO THE PROPOSED PROJECT	31

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

- 7.8.5 OBJECTIVE CON 1C PROTECT AREAS WITH HIGH WATER RECHARGE CAPABILITY AND SURFACE WATER QUALITY IN THE CITY’S CREEKS, STREAMS, AND WATERWAYS 31
- 7.8.6 APPLICABILITY TO THE PROPOSED PROJECT 32
- 7.8.7 APPLICABILITY TO THE PROPOSED PROJECT 33
- 7.9 City of Cotati Tree Ordinance - Chapter 17.54 Tree Preservation and Protection..... 33
 - 7.9.1 APPLICABILITY (17.54.020)..... 33
 - 7.9.2 TREE PERMIT APPLICATION REQUIREMENTS (17.54.030)..... 34
 - 7.9.3 TREE PLANTING AND REPLACEMENT (17.54.050)..... 38
 - 7.9.4 TREE PERMIT APPROVAL FINDINGS AND CONDITIONS (17.54.060) 39
 - 7.9.5 APPLICABILITY TO THE PROPOSED PROJECT 40
- 8. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE..... 40
 - 8.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting 40
 - 8.2 Permitting Corps Jurisdictional Areas 43
 - 8.2.1 APPLICABILITY TO THE PROPOSED PROJECT 44
 - 8.3 California Regional Water Quality Control Board (RWQCB) 44
 - 8.3.1 SECTION 401 OF THE CLEAN WATER ACT 44
 - 8.3.2 APPLICABILITY TO THE PROPOSED PROJECT 45
 - 8.3.3 PORTER-COLOGNE WATER QUALITY CONTROL ACT 46
 - 8.3.4 APPLICABILITY TO THE PROPOSED PROJECT 46
- 9. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORMWATER MANAGEMENT 47
 - 9.1 Construction General Permit 47
 - 9.1.1 APPLICABILITY TO THE PROPOSED PROJECT 49
- 10. STORM WATER LOW IMPACT DEVELOPMENT (SWLID)..... 49
 - 10.1 Projects That Trigger Requirements 50
 - 10.1.1 APPLICABILITY TO THE PROPOSED PROJECT 51
- 11. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE PROTECTIONS 51
 - 11.1.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE..... 51
 - 11.1.2 APPLICABILITY TO THE PROPOSED PROJECT 52
- 12. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS..... 52
 - 12.1.1 APPLICABILITY TO THE PROPOSED PROJECT 53
- 13. IMPACTS ANALYSIS 53
 - 13.1 Significance Criteria 53
 - 13.1.1 THRESHOLDS OF SIGNIFICANCE 53
- 14. IMPACT ASSESSMENT AND PROPOSED MITIGATION 54
 - 14.1 Impact BIO-1: Development of the Proposed Project May Have a Potentially Significant Impact on Suitable Habitat for State and Federally listed Vernal Pool Plants (Potentially Significant)..... 56
 - 14.2 Mitigation Measure BIO-1. For Impacts to Federally Listed Vernal Pool Plant Suitable Habitat..... 56
 - 14.3 Impact BIO-2. Development of the Proposed Project Would Have a Potentially Significant Adverse Impact on Habitat for the California Tiger Salamander 57
 - 14.4 Mitigation BIO-2. California Tiger Salamander Critical Habitat 57
 - 14.5 Impact BIO-3. Development of the Proposed Project Would Have a Potentially Significant Impact on Nesting Raptors and Passerine Birds. 58
 - 14.6 Mitigation Measure BIO-3. Nesting Birds 58

14.7 Impact BIO-4. Development of the Proposed Project Would Have a Significant Impact on Waters of the United States and/or State. 59

14.8 Mitigation Measure BIO-4. Waters of the United States and/or State..... 59

14.9 Impact BIO-5. Development of the Proposed Project Would Have a Significant Impact on Protected Trees 60

14.10 Mitigation BIO-5. Protected Trees..... 60

15. LITERATURE CITED 61

FIGURES
 (At Back of Report)

- Figure 1. Regional Map of the Highway 116/West Cotati Alignment Plan Project Site.
- Figure 2. Highway 116/West Cotati Alignment Plan Project Site Location.
- Figure 3. Aerial photograph of the Highway 116/West Cotati Alignment Plan Project Site.
- Figure 4. Closest Known Records for Special-Status Species Within 3 Miles of the Highway 116/West Cotati Alignment Plan Project Site.
- Figure 5. *Blennosperma bakeri* Core and Management Areas (USFWS 2016) in the Vicinity of the Highway 116/West Cotati Alignment Plan Project Site.
- Figure 6. *Lasthenia burkei* Core and Management Areas (USFWS 2016) in the Vicinity of the Highway 116/West Cotati Alignment Plan Project Site.
- Figure 7. *Limnanthes vinculans* Core and Management Areas (USFWS 2016) in the Vicinity of Highway 116/West Cotati Alignment Plan Project Site.
- Figure 8. USFWS Critical Habitat in the Vicinity of the Highway 116/West Cotati Alignment Plan Project Site.
- Figure 9. California Tiger Salamander Core and Management Areas (USFWS 2016) in the Vicinity of the Highway 116/West Cotati Alignment Plan Project Site.
- Figure 10. Santa Rosa Plain Conservation Strategy Map.

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

TABLES
(At Back of Report)

Table 1. Plant Species Observed on the Highway 116/West Cotati Alignment Plan Project Site.

Table 2. Wildlife Species Observed on the Highway 116/West Cotati Alignment Plan Project Site.

Table 3. Special-Status Plant Species Known to Occur in the Vicinity of the Highway 116/West Cotati Alignment Plan Project Site.

Table 4. Special-Status Animal Species Known to Occur in the Vicinity of the Highway 116/West Cotati Alignment Plan Project Site.

EXHIBITS
(At Back of Report)

Exhibit A. Assessor Parcel Numbers for the Hwy 116/West Cotati Avenue Alignment Plan Project Site.

Exhibit B. CTS Records Within 1.3 Miles of the Highway 116/West Cotati Alignment Plan Project Site.

Exhibit C. Hardpack Analysis of the Highway 116/West Cotati Alignment Plan Project Site.

ATTACHMENTS
(At Back of Report)

Attachment A. Sheet 1. Draft Aquatic Resources Delineation Map

Attachment B. Site Plan (Preliminary)

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this Biological Resources Analysis for the proposed Highway 116/West Cotati Alignment Plan project site located in the City of Cotati, California (referred to as the “project site”) (Figures 1 through 3). The purpose of our analysis is to provide a description of existing biological resources on the project site and to identify potentially significant impacts that could occur to sensitive biological resources from the Hwy 116/West Cotati Alignment Plan.

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations including the California Native Plant Society. Biological resources also include waters of the United States (U.S.) and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW. It is important to note that our analysis includes an assessment of the potential for impacts to regulated waters and a request for an Approved Jurisdictional Determination will be sent to the U.S. Army Corps of Engineers (Corps) concurrently with the submittal of this Biological Resources Analysis, but there is not yet a Corps confirmed map as M&A’s map has not yet been reviewed by this agency.

This Biological Resources Analysis also provides mitigation measures for “potentially significant” and “significant” impacts that could occur to biological resources. Whenever possible, upon implementation, the prescribed mitigation measures would reduce impacts to levels considered less than significant pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs §§ 15000 et seq). Accordingly, this report is suitable for review and inclusion in any review being conducted by the City of Cotati for the proposed project pursuant to the CEQA.

2. PROPERTY LOCATION

The approximately 7.51-acre project site is a linear project area located along a portion of State Route 116 between Redwood Drive to the east and Alder Avenue to the west in the City of Cotati.

3. PROPOSED PROJECT

The project will remove the existing approach on West Cotati and realign at a 90° angle to State Route 116/Gravenstein Highway (SR 116). A sidewalk and striped bicycle lane would be installed extending from the new intersection to connect with the existing sidewalk and bike lane at Gillman Ranch Road. Exclusive protected turn lanes would be added on W. Cotati Avenue. The project will modify SR 116 from the intersection of Redwood Drive to approximately 500 feet west of Alder Avenue and will realign West Cotati Avenue to a 90-degree intersection and include signalization and the addition of dedicated turning lanes, as well as pedestrian and bicycle facilities. West of the proposed intersection of SR 116 and W. Cotati Avenue, the project would create three eastbound lanes, all twelve feet wide to include a center through-traffic lane, a left-hand turn lane and a right-hand turn lane. The westbound traffic would

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

continue in one twelve-foot-wide lane with an eight-foot-wide shoulder. A Class 1 shared use pathway separated by a vegetated buffer would run the length of the project. An eight-foot-wide shoulder would be striped to accommodate a Class II bike lane.

The westbound and eastbound traffic would be separated by a six-foot-wide raised median. East of the proposed intersection of SR 116 and W. Cotati Avenue, the project would create three twelve-foot-wide westbound lanes, including a center through-traffic lane, a left-hand turn lane and a right-hand turn lane. The eastbound traffic on SR 116 would continue in one twelve-foot-wide through-traffic lane. An eight-foot-wide paved/striped shoulder would run the length of the westbound lanes with the option for an additional Class II bike lane. Traffic at the intersection of SR 116 and West Cotati Ave. would be controlled by a four-way signal. Sidewalks and curb cuts would be installed at all four corners of the intersection. The existing W. Cotati roadway would be realigned to create a 90-degree intersection with SR 116, approximately 250 feet east of the existing intersection alignment. On the southern side of the intersection there would be a single southbound lane, a northbound left-hand turn lane, and a northbound through traffic/right-hand turn lane. Improvements would include striped bicycle lanes, ADA accessible sidewalks and curb cuts, landscaping, and associated striping for safety. The project includes the addition of new streetlights as required for safety and compliance with the City's municipal code and Caltrans regulations

4. ANALYSIS METHODS

Prior to preparing this biological resources analysis report, M&A researched the most recent version of CDFW's Natural Diversity Database (CNDDDB) (RareFind 6 application) (CNDDDB 2023). The CNDDDB is a database maintained by the CDFW that provides historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare species) known from the state of California. All special-status species records were compiled in tables. M&A examined all known record locations for special-status species to determine if special-status species could occur on the project site or within an area of affect.

On May 3, 2023, M&A biologists conducted a general survey of the project site to record biological resources and to assess the likelihood of resource agency regulated areas. The survey involved searching all habitats on the site and recording all plant and wildlife species observed. M&A cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species.

M&A's site evaluation also included an Aquatic Resources Delineation (aka a wetland delineation) to determine if there could be areas within the project site that would be regulated as waters of the U.S. and/or State pursuant to Sections 404 and 401 of the Clean Water Act.

M&A also completed the first year of a two-year protocol survey for special-status plants in accordance with the Santa Rosa Plain survey guidelines (USFWS 2005, CDFW 2018). Surveys were conducted on the project site on May 3, May 25, and June 7, 2023. The 2023 surveys were conducted at appropriate times when the targeted listed plants were identified in flower at an agency-approved reference site (the Alton Lane Conservation Bank).

The results of our literature research and field studies are provided in the sections below.

5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES

5.1 Topography and Hydrology

The project site is flat and relatively uniform across the site at approximately 107 ft above sea level in elevation (Google Earth). There are a few ditches and topographic low areas within the project site; one topographic low area, wetland W2 as shown on Sheet 1, drops one meter below the surrounding area (Attachment A, Sheet 1). There is a reinforced concrete pipe (16" diameter) located near this wetland that runs under the highway. Additionally, there is another topographic low area along West Cotati Avenue (a roadside ditch wetland) where there is a decrease in elevation of one meter compared to the rest of the site (see wetland LW2 on Sheet 1). Similarly, the roadside ditches along SR 116 are lower than the rest of the project site; these roadside ditches were constructed from uplands when SR 116 was constructed. Other than these low areas, the project site topography is generally consistent and somewhat level. Water that is captured in the wetlands and other low areas that are connected flow into the city storm drain system off of the project site. Some low areas are isolated and do not have connectivity to the city storm drain system (isolated wetlands shown on Sheet 1).

The seasonal wetlands and roadside ditches within the project site boundaries flow during storm events to the city storm drain system, which then flows out to the Laguna de Santa Rosa before reaching Mark West Creek. From Mark West Creek water then travels to the Russian River before flowing into the Pacific Ocean. Outside of the mapped roadside ditches and other small wetland features onsite (Sheet 1), there are no creeks or rivers located on the project site.

5.2 Soils

The Natural Resources Conservation Service (NRCS) mapped one soil series type, HaB – Haire Fine Sandy Loam, Hummocky, 0 to 5 percent slopes on the project site. Haire clay loam with 0 to 5 percent slopes consists of moderately well-drained soils, with alluvium parent material derived from sedimentary rock. This series occurs on slopes and terraces at elevations ranging from 20 to 2,402 feet above sea level. *Haire clay loam is classified as a non-hydric soil by the Natural Resources Conservation Service.*

5.3 Plant Communities and Associated Wildlife Habitats

A complete list of plant species observed on the project site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual Second Edition* (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (<http://ucjeps.berkeley.edu/interchange/index.html>). Table 2 is a list of wildlife species observed on the project site. Nomenclature for wildlife follows the CDFW's *Complete List of Amphibian, Reptile, Bird, and Mammal Species in California* (2016) and any changes made to species nomenclature as published in scientific journals since the publication of the CDFW's list.

The project site is located on the southwestern boundary of the Santa Rosa Plain. Historically this area was characterized by a mosaic of oak and riparian woodlands and seasonal wetlands

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

including vernal pools. The distribution of these natural communities and habitats has been significantly reduced, and much of the remaining area has been reduced in quality as a result of agriculture, rural residential development and business development. Currently, plant cover in the project area is dominated by non-native grasses and forbs (i.e., broad-leaved plants) and is predominantly ruderal; discussion below.

5.3.1 RUDERAL HERBACEOUS

Most of the project site is dominated by a ruderal herbaceous plant community. Ruderal (weedy) communities are assemblages of plants that thrive in waste areas, roadsides and other sites that have been disturbed by human activity. Typically, hardpacked soils of roadsides, parking lots, industrial areas and construction sites support communities of ruderal species. Ruderal vegetation is adapted to high levels of disturbance and persists almost indefinitely in areas with continuous disturbance. The various parcels within the project site boundaries have all been disturbed over the years to some extent, either due to minor vegetation modifications such as weed whacking and mowing, or more extreme measures such as disking, grading, and dirt importation.

Dominant grass and forb species observed on site within this habitat are non-native species such as wild oat (*Avena barbata*), ripgut grass (*Bromus diandrus*), and Italian thistle (*Carduus pycnocephalus pycnocephalus*). Subdominants observed within this community included soft chess (*Bromus hordeaceus*), and Harding grass (*Phalaris aquatica*), among others. A few native oaks, valley oak (*Quercus lobata*) and black oak (*Quercus kelloggii*) are scattered along the project site, and a mature stand of blue gum trees (*Eucalyptus globulus*) is present on the southeastern side of the site. A few landscape trees are also present along the road right of way; these trees are listed in Table 1.

Animals observed or expected to occur in ruderal habitats are those species adapted to human disturbance and that can tolerate the noise of heavy traffic such as the following species observed on the project site: northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and black phoebe (*Sayornis nigricans*). Urban-adapted mammals such as Botta's pocket gopher (*Thomomys bottae*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*) and Virginia opossum (*Didelphis virginiana*) are also expected to forage onsite. Finally, lizards such as western fence lizard (*Sceloporus occidentalis*) and alligator lizard (*Elgaria* spp.) and snakes such as the Pacific gopher snake (*Pituophis catenifer catenifer*) are expected to forage and reside in this community onsite.

5.3.2 SEASONAL WETLANDS

Seasonal wetlands are habitats that may appear dry in the summer and fall months but following the first winter rains, become saturated or hold water for a period of several weeks to months at a time. Seasonal wetlands may remain inundated for a prolonged period typically due to the presence of impervious soils and/or confining topography such as topographic low areas. Typically, these wetlands are dominated by a mix of native and non-native, hydrophytic plant species.

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

All areas mapped as seasonal wetlands were characterized by a dominance of hydrophytic vegetation, hydric soils, and hydrophytic vegetation. Hydrophytic (wetland) plant species identified in the mapped wetlands includes various species of rushes (*Juncus xiphioides*, *J. phaeocephalus*, and *J. patens*), curly dock (*Rumex crispus*), perennial ryegrass (*Festuca perennis*), and western yellow cress (*Rorippa curvisiliqua*) among others. The largest wetland mapped on the project site is labeled W5 on Sheet 1. This seasonal wetland is roughly 2,253 square feet (0.052 acre) in size and is dominated by the native wetland grass: annual semaphore grass (*Pleuropogon californicus californicus*).

A few linear wetlands and roadside ditches were identified on the project site. These linear features follow along the roads; they are long and narrow. One of these roadside wetlands is dominated by western yellow cress (*Rorippa curvisiliqua*) and annual semaphore grass (*Pleuropogon californicus californicus*). Another is dominated by the native Douglas' meadowfoam (*Limnanthes douglasii douglasii*) and non-native annual bluegrass (*Poa annua*).

Seasonal wetlands typically provide wildlife with a seasonal water source that allows animals to drink and forage during the winter and spring months, and for some amphibians and invertebrates with short aquatic life cycles an opportunity to lay eggs and complete the aquatic phase of their life. For example, the Sierran chorus frog (*Pseudacris sierra*) is typically found in shallow aquatic habitats. However, the shallow, human-altered topographic low areas and ditches on the project site are highly ephemeral, receive urban runoff laced with petroleum particulates and oils which makes them nearly unsuitable for any type of wildlife use.

5.4 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

The project site is a linear corridor along a heavily traveled highway and city street (West Cotati Avenue); it does not provide a corridor suitable for even the most urban-adapted wildlife as it is highly dangerous given that the likelihood for animal-car collisions is high. Thus, the project site does not serve as a local corridor for wildlife to forage for food or mates, or as a regional corridor for animals searching wider and farther for mates and/or food. It is dangerous for any animals to move along this corridor.

6. SPECIAL-STATUS SPECIES

6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq.*; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- plants and animals that meet the definition of endangered, rare, or threatened under the CEQA (14 CCR §15380) that may include species not found on either CESA or FESA lists;
- plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of the CNPS' electronic *Inventory* (CNPS 2001). The CDFW recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and the CDFW requests their inclusion in EIRs. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);
- migratory nongame birds of management concern listed by the USFWS (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);
- animals that are designated as "species of special concern" by the CDFW (2023);
- animal species that are "fully protected" in California (Fish and Game Codes 3511, 4700, 5050, and 5515).
- bat species that are designated on the Western Bat Working Group's (WBWG) Regional Bat Species Priority Matrix as: "RED OR HIGH." This priority is justified by the WBWG as follows: "Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.”

In the paragraphs below we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as endangered or threatened under the FESA is protected from unauthorized “take” (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a federally-listed endangered or threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as threatened under the CESA (§2050 of California Fish and Game Code) is protected from unauthorized “take” (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to “take” a State-listed threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the CDFW prior to initiating the “take.”

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered “rare.” Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a “significant effect on the environment” (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an “Inventory” of special-status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also State or federally-listed species), the CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other State and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (CESA) of the Fish and Game Code and are eligible for State listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern and are reviewed by the CDFW and maintained on “watch lists.”

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Additionally, in 2006, the CNPS updated their lists to include “threat code extensions” for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered “seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)”;
- .2 is “fairly endangered in California (20-80% of occurrences threatened)”;
- .3 is “not very endangered in California (less than 20% of occurrences threatened or no current threats known).”

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA’s definition of “rare” or “endangered.” Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the White-tailed Kite (*Elanus leucurus*) and Golden Eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). Fully protected birds may not be “taken” or possessed (i.e., kept in captivity) at any time.

6.2 Potential Special-Status Plants on the Project Site

Figure 4 provides a graphical illustration of the closest known records for special-status species within three miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. According to the CDFW’s CNDDDB, a total of seven special-status plant species are known to occur in the region of the project site (Table 3). Most of these plants occur in specialized habitats such as valley and foothill grasslands (mesic), vernal pools, clay soils, meadows and seeps, closed-cone coniferous forests, cismontane woodlands, marshes and swamps, and coastal scrub. However, none of these special-status plants have been mapped on or adjacent to the project site, with the exception of Sebastopol meadowfoam greater than 20 years ago; that population is now extirpated (see write up below). Owing to the excessively disturbed conditions found at the project site, special-status plants would not likely occur. In order to substantiate this premise, M&A conducted the first year of two years of required rare plant surveys per the USFWS for the Santa Rosa Plain on the project site in 2023. These surveys followed all CDFW (2018) and USFWS (2005) survey guidelines and requirements, including the requirement for visits to a local reference site (USFWS 2005).

According to the *Recovery Plan for the Santa Rosa Plain* (USFWS 2016), the project site is located at the southern edge of the Santa Rosa Plain and on the southern boundary of the “Core Area” for the federally and State-listed Sebastopol meadowfoam (*Limnanthes vincularis*). The project site is well outside the Core and Management Areas for Sonoma sunshine (*Blennosperma bakeri*) and Burke’s goldfields (*Lasthenia burkei*). Regardless, due to the project site’s location within the Santa Rosa Plain Conservation Strategy’s designated listed plant area, below we discuss these three federally and state-listed plants known from the Santa Rosa Plain, for which the project site provides marginally suitable habitat.

6.2.1 SONOMA SUNSHINE (*BLENNOSPERMA BAKERI*)

Sonoma sunshine is a federal and state-listed endangered plant species protected pursuant to the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA)

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

respectively. It is also a CNPS Rank 1B.1 species. This annual member of the sunflower family is found in vernal pools and grassland habitats in the Santa Rosa Plain and from the Sonoma area. Sonoma sunshine flowers from March through May and is threatened by urbanization, grazing, and agriculture.

The closest CNDDDB record for Sonoma sunshine is located approximately 2.1 miles northwest of the project site (Occurrence No. 20). Pursuant to the FESA, the USFWS regulates impacts to “suitable habitats” of listed vernal pool plants in the Santa Rosa Plain. In the Santa Rosa Plain, most seasonal wetlands are regarded by the USFWS as “suitable habitat” for listed vernal pool plants. However, the seasonal wetlands on the project site are primarily roadside ditches and heavily degraded seasonal wetlands which do not provide suitable habitat conditions for vernal pool species. Nonetheless, in an abundance of caution, and in accordance with plant surveys for the Santa Rosa Plain (USFWS 2005), two years of appropriately-timed special-status plant surveys will be conducted to ensure that no impacts occur to special-status plant species.

M&A completed the first year of a two-year protocol survey for special-status plants in accordance with the Santa Rosa Plain survey guidelines (USFWS 2005) and CDFW’s 2018 survey protocol. Surveys were conducted by Ms. Sarah Lynch on May 3, May 25, and June 7, 2023. The 2023 surveys were conducted at appropriate times when the targeted listed plants were identified in flower at an agency-approved reference site (the Alton Lane Conservation Bank). No special-status plants were found on the project site during these appropriately timed surveys.

If two years of surveys yields negative results, no mitigation for Sonoma sunshine is warranted because the project site is located outside of (south of) the Core and Management Areas (Figure 5) for this federal and state listed plant species.

6.2.2 BURKE’S GOLDFIELDS (*LASTHENIA BURKEI*)

Burke’s goldfields is a federally and state-listed endangered species protected pursuant to the FESA and the CESA, respectively. It is also a CNPS Rank 1B.1 species. This small, slender annual member of the sunflower family is found in meadows, seeps, and vernal pools. The yellow flowers of the Burke’s goldfields bloom from April through June. Burke’s goldfields is endemic to the central California Coastal Range region and has been reported historically to be located within Mendocino, Lake, and Sonoma counties (USFWS 2016). Historically, approximately 18 to 20 occurrences were known from the Santa Rosa Plain in Sonoma County. Two occurrences were recorded from Lake County, at Manning Flat and at a winery on Highway 29. Both of these occurrences and three additional occurrences in Lake County are presumed extant. A single occurrence of Burke’s goldfields, located near the town of Ukiah, is the only known occurrence in Mendocino County. This occurrence was thought to be extirpated but was rediscovered in 2010 (CNDDDB 2013). Within Sonoma County, one occurrence is known from north of Healdsburg (USFWS 2016). One occurrence is located outside of the Santa Rosa Plain east of the City of Sonoma. The core of the current range of Burke’s goldfields is in the Plain north of the Town of Windsor to east of the City of Sebastopol, with three occurrences south of Highway 12. Burke’s goldfield occurrences continue to become increasingly fragmented in the area of the Town of Windsor and are now nearly extirpated from that area (USFWS 2016). It is threatened by agriculture, urbanization, development, grazing, road widening, road maintenance, and non-native plants.

The closest known occurrence for this species is approximately two miles northwest of the project site (Occurrence No. 29). Pursuant to the FESA, the USFWS regulates impacts to “suitable habitats” of listed vernal pool plants. In the Santa Rosa Plain, most seasonal wetlands are regarded by the USFWS as “suitable habitat.” However, the seasonal wetlands on the project site are disturbed and would likely not provide suitable habitat for vernal pool species. Nonetheless, in an abundance of caution, and in accordance with plant surveys for the Santa Rosa Plain (USFWS 2005), two years of appropriately-timed rare plant surveys will be conducted to ensure that no impacts occur to special-status plant species.

M&A completed the first year of a two-year protocol survey for special-status plants in accordance with the Santa Rosa Plain survey guidelines (USFWS 2005) and CDFW’s 2018 survey protocol. Surveys were conducted by Ms. Sarah Lynch on May 3, May 25, and June 7, 2023. The 2023 surveys were conducted at appropriate times when the targeted listed plants were identified in flower at an agency-approved reference site (the Alton Lane Conservation Bank). No special-status plants were found on the project site during these appropriately timed surveys.

If two years of surveys yields negative results, no mitigation for Burke’s goldfields is warranted because the project site is located outside of (south of) the Core and Management Areas (Figure 6) for this federal and state listed plant species.

6.2.3 SEBASTOPOL MEADOWFOAM (*LIMNANTHES VINCULANS*)

Sebastopol meadowfoam is a federally and state-listed endangered species. It is also a CNPS Rank 1B.1 species. This annual member of the meadowfoam family blooms April through May, and is found in meadows and seeps, seasonally wet grasslands, and vernal pools. Although the first leaves are narrow and undivided, leaves on the mature plant have three to five undivided leaflets along each side of a long stalk (petiole). The shape of the leaves distinguishes Sebastopol meadowfoam from other members of the *Limnanthes* genus. It is threatened by urbanization, agriculture, grazing, non-native plants, and vehicles.

Historically, Sebastopol meadowfoam was documented at 40 occurrences in Sonoma County and one in Napa County at the Napa River Ecological Reserve (USFWS 2016). In Sonoma County, all occurrences were found in the central and southern portions of the Plain with the exception of two occurrences: one located at Atascadero Creek Marsh west of Sebastopol and another in the vicinity of Knights Valley northeast of Windsor. Many of these historic occurrences are now extirpated. The current known range of the species includes Knights Valley to the north, the Napa River Ecological Reserve near Yountville to the east, an occurrence near Sonoma to the south, and an occurrence near Sebastopol to the west. Of the three occurrences located outside of the Plain, the Atascadero Marsh occurrence has been presumed to be extirpated since 1969; the Knights Valley occurrence has not been visited since 1994 but is presumed to be extant; and the Napa River Ecological Reserve occurrence is presumed extant (USFWS 2016).

The closest known occurrence for this species is approximately 0.15-mile north of the project site, now extirpated by development (Occurrence No. 35). Pursuant to the FESA, the USFWS regulates impacts to “suitable habitats” of listed vernal pool plants. In the Santa Rosa Plain, most seasonal wetlands are regarded by the USFWS as “suitable habitat.” However, the seasonal

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

wetlands on the project site are highly disturbed and would likely not provide suitable habitat for vernal pool species. Nonetheless, in an abundance of caution, and in accordance with plant survey guidelines for the Santa Rosa Plain (USFWS 2005), two years of appropriately-timed rare plant surveys will be conducted to ensure that no impacts occur to special-status plant species. The first year of surveys was conducted in the spring of 2023 following the USFWS (2005) and the CDFW's (2018) survey guidelines and no special-status plant species were identified onsite. The second year of surveys will be conducted in the spring of 2024.

The project site is located within the Core Area for Sebastopol meadow foam (Figure 7); thus, even with two years of negative survey results, mitigation for impacts to this plant's "suitable habitat" is required per the requirements of the USFWS' Recovery Plan (2016) and the USFWS' PBO (2020).

6.3 Potential Special-Status Animals on the Project Site

Figure 4 provides a graphical illustration of the closest known records for special-status species within three miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status animal records have ever been mapped on or adjacent to the project site. However, a total of 10 special-status animal species are known to occur in the region of the project site (Table 4). Due to the sensitivity and historical record of two of the listed special-status animal species known to occur in the area, we further discuss these species below. This includes the California tiger salamander (*Ambystoma californiense*) which, according to the Santa Rosa Plain Conservation Strategy (USFWS 2007), occurs in an area within this project site with "potential for presence of CTS and listed plants."

6.3.1 CALIFORNIA TIGER SALAMANDER (*AMBYSTOMA CALIFORNIENSE*)

6.3.1.1 Legal status

The project site is located within the known range of the Sonoma County "Distinct Population Segment" (DPS) of the California tiger salamander (CTS). Under the Federal Endangered Species Act (FESA), the USFWS emergency-listed the Sonoma County DPS as endangered on July 22, 2002. On March 4, 2010, the CDFW state-listed CTS as a threatened species under the California Endangered Species Act (CESA).

The USFWS determined that the Sonoma County DPS is significantly and immediately imperiled by a variety of threats including habitat destruction, degradation, and fragmentation due to urban development, road construction, pesticide drift, collection, and inadequate regulatory mechanisms. In addition, it was determined that this population could face extinction as a result of naturally occurring events (e.g., fires, droughts) due to the small and isolated nature of the remaining breeding sites combined with the small number of individuals in the population.

Finally, in 2011, the USFWS designated revised critical habitat for the Sonoma County DPS. In total, approximately 47,383 acres (19,175 hectares) of land were designated as Critical Habitat for the Sonoma County DPS of the CTS under the revised Final Rule (USFWS 2011). *The project site is within this mapped critical habitat (Figure 8). The project site is also within the CTS' "West Cotati Core Area" (Figure 9) as discussed in the USFWS' Recovery Plan (2016).*

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Finally, the West Cotati Avenue Parcel (APN 144-050-005) on the project site (i.e., the triangular shaped parcel) is also within the USFWS' Conservation Strategy map (2007) as an area proposed for "Future Development" (Figure 10).

6.3.1.1 Life History

California tiger salamanders occur in grasslands and open oak woodlands that provide suitable overwintering and/or breeding habitats. M&A has worked with populations that are almost at sea level (Catellus Site in the City of Fremont) to almost 2,900 feet above sea level (Rancho Canada De Pala aka the Blue Oak Ranch Preserve, East Santa Clara County). California tiger salamanders spend the majority of their lives underground. They typically only emerge from their subterranean refugia for a few nights each year during rainfall events typically in late October through December to migrate to breeding ponds where they lay eggs. After spending up to a few weeks and sometimes longer in breeding ponds the adult salamanders then return to their subterranean over-wintering refugia not to resurface until the following breeding season. Young hatch typically in February and March and metamorphose leaving natal ponds in search of subterranean refugia typically in late-May.

6.3.1.1 Breeding/Larval Development Requirements

Deep, seasonal and sometimes perennial wetlands typically provide most of the breeding habitat used by CTS. CTS attach their eggs to rooted, emergent vegetation, and other stable filamentous objects in the water column. Eggs are gelatinous and are laid singly or occasionally in small clusters. Eggs range in size from about three-quarters ($\frac{3}{4}$) the diameter of a dime to the full diameter of a dime. Typically, seasonal breeding pools must hold water into the month of May to allow enough time for larvae to fully metamorphose. Pools that are 16 inches or deeper in the peak winter months usually will remain inundated long enough to provide good breeding conditions for California tiger salamanders. Optimal pools are typically deeper than 16 inches consistently in most winters. One reason deeper pools are generally better for larval development is because the water remains cooler. Shallow pools are warmed faster by the sun, evaporate more quickly becoming smaller and more prone to successful predation, and most importantly, warmer water carries less free oxygen which is necessary for California tiger salamander larvae to mature and metamorphose. With ample free oxygen in the water, California tiger salamander larvae are able to reach full metamorphosis even with partially to fully absorbed gills.

Shallow pools are not optimal California tiger salamander breeding sites. Pools that are as shallow as 10 to 12 inches may still attract breeding salamanders, but young do not often successfully metamorphose from such pools except in years exhibiting wet springs. In dry years, seasonal wetlands, especially shallower pools, may dry too early to allow enough time for California tiger salamander larvae to successfully metamorphose. As pools dry down to very small areas of inundation, California tiger salamander larvae become concentrated and are particularly susceptible to predation. In Cotati, Ms. Lynch and Mr. Monk observed drying pool predation of larvae by red-sided garter snakes (*Thamnophis sirtalis infernalis*). Similarly, ducks (various spp.) are often observed preying breeding pools. In duck-ravaged pools, larvae may be concentrated in deeper water or are found in areas along the pool margins where pools remain relatively deep and there is dense emergent vegetation. When pools dry too soon, desiccated

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

California tiger salamander larvae can be found, but owing to scavengers usually disappear within a day or two.

With frequent rainfall events in March and April, or with infrequent but large late spring rainfall events, shallower pools can remain hydrated long enough to allow California tiger salamander larvae ample time to successfully metamorphose from shallower pools. Pools that dry and rehydrate multiple times over the winter do not provide the continuous hydration period required for successful metamorphosis of young.

6.3.1.2 Migration

Adult California tiger salamanders have been observed up to 2,092 meters (1.3 miles) from breeding ponds (USFWS 2004). As such, unobstructed migration corridors are an important component of California tiger salamander habitat. In Sonoma County, Ms. S. Lynch has been conducting California tiger salamander surveys since 1992. It is M&A's direct experience that California tiger salamanders move to their breeding pools at night during the first heavy, typically warmer, rainfall events of the year, usually in late-October into early December. In most instances, early movements from over-summering refugia to breeding sites do not occur until it has been raining continuously for several days, but occasionally errant salamanders may move to breeding pools during light rainfall events too. Typically, movements of California tiger salamander occur when temperatures are above 48° F.

A primary factor encouraging larger movements of California tiger salamanders is continuous or nearly continuous rainfall over many days. Resultant widespread ground saturation that otherwise floods over-summering refugia can result in relatively large numbers of California tiger salamanders leaving their refugia in search of breeding sites over a one- or two-night period (as observed by G. Monk and S. Lynch during numerous studies). In addition to pitfall trapping results that demonstrate such movements, often these focused movement periods are evident in breeding pools where up to several size classes of larvae can be identified later in the spring, each size class likely being representative of a focused movement period for adult breeding salamanders.

During the spring, summer, and fall months, most known populations of the California tiger salamander throughout this species range in California predominately use California ground squirrel (*Spermophilus beechyi*) burrows as over summering habitat (G. Monk personal observation). However, in Sonoma County where California ground squirrel populations are scarce to non-existent, subterranean refugia likely include Botta's pocket gopher (*Thomomys bottae*) burrows, deep fissures in desiccated clay soils, and debris piles (e.g., downed wood, rock piles).

6.3.1.3 Closest Known California Tiger Salamander Breeding Population

Please note that there are no CTS breeding pools within 500 feet of the project site. In fact, there are no extant potential breeding pools within 1 mile of the project site. The closest known historic breeding occurrence for CTS, now extirpated, is approximately 0.17-mile directly northeast of the project site (CNDDDB Occurrence No. 12) on the portion of the South Sonoma Business Park project site where Lowes now occurs (M&A personal observation/occurrence

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

record; G. Monk reporting biologist). The entire South Sonoma Business Park project site was mass graded and prepped for development in the early 2000s and CTS adults and larvae were salvaged from the site. The applicant for the South Sonoma Business Park entered into an 1802 Agreement with the CDFW and received a Biological Opinion from the USFWS for this impact and mitigated for the loss of habitat to the satisfaction of both agencies; the 13.4-acre Walker Avenue and the 8.8-acre Arshi mitigation land was purchased, preserved and deeded over to the CDFW (the then CDFG). Lowes' was built where the former breeding pools were located. The remainder of this project site has remained undeveloped since. The mass grading and importation of soil to the undeveloped portion of the South Sonoma Business Park site removed any other potential breeding habitat. There has been no breeding habitat in the vicinity of the SR 116 project site since the only two confirmed breeding habitats were filled over 20 years ago: (1) the South Sonoma Business Park seasonal wetlands and (2) another known breeding pool to the west along the south side of SR 116 in the vicinity of Larsen's Feed Store.

Below is a discussion of the CTS CNDDDB records within 1.3 miles of the project site, which is the known migration distance of an adult CTS. These records are all shown on Exhibit B, attached.

Occurrence No. 82. Believed to be extirpated. This sighting is immediately adjacent to (north of) the project site. This is a pitfall trapping salvage effort fully authorized and coordinated with CDFW and USFWS and conducted by M&A back in 2003-2004 for the then proposed development of that property. Approximately 82 adult and juvenile CTS were live-trapped and transferred by Mr. Bill Cox of CDFW to the Gobbi and Alton Lane Mitigation Sites. There is no breeding habitat onsite; over-summering habitat only.

Occurrence No. 58. This is an M&A sighting (M. Scheele and G. Thomas, M&A observers) south of SR 116 approximately 0.09-mile to the west. One CTS juvenile was observed in a shallow pool on this property. This pool was deemed unsuitable for breeding due to its shallow depth, small size, and duration of ponding. This property remains in its current state.

Occurrence No. 55. This is a sighting by Mr. Dave Cook from December 2001 of CTS eggs in the Alder Avenue roadside ditch (this is approximately 0.17-mile north of the project site on Alder Avenue). At the time Mr. Cook found the CTS eggs this ditch did not have a functioning drain inlet and retained pooled water. This ditch has since been improved and now no longer holds water for duration but rather water drains into the city storm drain system.

Occurrence No. 68. This sighting is along Stony Point Road south of the project site and slightly greater than 1.3 miles away. This record is for adult CTS found along the road (dead and alive).

6.3.1.4 Project Site Conditions

The roadside ditches along the project site (along SR 116 and West Cotati Avenue) are not deep enough (i.e., less than 12 inches) and do not hold water for long enough duration to support a

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

CTS breeding attempt. These shallow features dry between a few days to a few weeks following a rain event. The “triangle parcel” within the project site boundaries (south side of SR 116, APNs 144-050-004 and part of -005)) supports a few seasonal wetlands that inundate only several inches deep (see W1, W4, and W5 on Sheet 1, the Aquatic Resources Delineation, attached). M&A mapped these wetland features in the winter of 2022-2023 which was a year with episodic storm events, flooding, and greater than normal rainfall. While these seasonal wetlands hold water, they are not deep enough nor hold water for long enough duration to support any California tiger salamander breeding attempt to successful metamorphosis. M&A noted that the two largest wetlands on this triangle parcel were dry by early May of 2023.

Due to an absence of suitable breeding habitats on the project site and within 1.3 miles of the project site, it is very unlikely that CTS remain in the immediate area today, especially given the fact that their known over-summering habitat was mass graded and the elevation on that property changed by the addition of clean fill. Thus, due to an absence of breeding habitat onsite and within 1.3 miles as well as the extensive disturbance that occurred to the upland habitat adjacent to the site (and onsite) decades ago, the possibility of CTS migrating into the project area today is very low since habitats are no longer suitable for this species. However, given that the project site is within federally designated Critical Habitat, and falls within the USFWS’ Recovery Plan’s West Cotati Core CTS area, this species would need to be addressed in any application for a federal permit (e.g., a Corps permit). Accordingly, the applicant may be required to acquire a permit from the USFWS or append the project to the *Programmatic Biological Opinion*. Please review the FESA regulatory considerations. Also, please review the Impacts and Mitigation Section of this report for a full discussion on mitigation requirements.

7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS

This section provides a discussion of those laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law, its relevance to the proposed project is discussed.

7.1 Federal Endangered Species Act

The FESA forms the basis for the federal protection of threatened or endangered plants, insects, fish, and wildlife. FESA contains four main elements:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit (ITP) through approval of a Habitat Conservation Plan (HCP).

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

In the case of saltwater fish and other marine organisms, the requirements of FESA are enforced by the NMFS. The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (*Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity*) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. According to this ruling, the USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is "reasonably certain to occur."

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species (other than a plant species) is necessary to complete an otherwise lawful activity, this triggers the need to obtain an ITP either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency such as the Corps), or through Section 10 of FESA which requires preparation of an HCP (for State and local agencies, or individuals, and projects without a federal "nexus"; for example, projects that do not need a Corps permit).

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the federal "action agency," for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the "action agency" – that is, the federal

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

agency that is carrying out, funding, or approving a project - that the project “may affect” a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in “jeopardy” to a listed species or if it could adversely modify designated critical habitat. If the USFWS/NMFS prepares a Biological Opinion it will contain either a “jeopardy” or “non-jeopardy” decision. If the USFWS/NMFS concludes that a proposed project would result in adverse modification of critical habitat or would jeopardize the continued existence of a federally-listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be most unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a “non-jeopardy” Biological Opinion, the nexus federal agency may authorize the discretionary permit making all conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an “incidental take” permit that allows applicants to “take” federally-listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, and counties that are proposing a project that might result in incidental take, Section 10 provides the mechanism for obtaining that take authorization. Under Section 10 of FESA, for the applicant to obtain an ITP, the applicant is required to submit a "conservation plan" to the USFWS or NMFS that specifies the impacts that are likely to result to federally-listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an ITP can be issued.

7.1.1 RESPONSIBLE AGENCY

FESA gives regulatory authority to the USFWS for federally-listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally-listed marine mammals and anadromous fish.

7.1.2 APPLICABILITY TO THE PROPOSED PROJECT

Three federally-listed plants (*Blennosperma bakeri*, *Lasthenia burkei*, and *Limnanthes vinculans*) and the California tiger salamander are known from the project site region. One year of appropriately timed surveys for the federally-listed plants have been conducted on the project site following the CDFW’s 2018 survey protocol as well as the USFWS’ 2005 survey guidelines for the Santa Rosa Plain. These guidelines require visits to a known reference site during the three plants’ blooming periods to check the phenology of the species and ensure project site surveys are conducted at the correct time. Reference site visits were made prior to each site survey; no special-status plants, including the three federally listed plants, were found on the project site during the first year of surveys, which was conducted in a normal to above normal rainfall year (2023). A second year of surveys will be conducted in the spring of 2024 as required by the Santa Rosa Plain survey requirements (USFWS 2005). If the results of a second year of special-status plant surveys are also negative, no further regard for two of the federally-listed

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

plant species, *Blennosperma bakeri* and *Lasthenia burkei*, is necessary since the project site is not within these plants' Core or Management Areas and no mitigation for these two species should be warranted. *Limnanthes vinculans*, however, is known from the region and the project site falls within its Core Area; thus, mitigation at a minimum ratio of 1.5:1 would be necessary for this plant species.

This linear project site provides only marginal habitat for one federally-listed animal species: the California tiger salamander. This species was known from the immediate area 20 plus years ago, but permitted grading activities and wetland fill activities removed the habitat. Regardless, since the project site lies within federally-designated Critical Habitat and within the West Cotati Core Area for CTS, any federal permit application prepared for this project would have to address the possible presence of this species. There are no other federally-listed wildlife species of concern on this project site.

7.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to “take” (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

Executive Order 13186 for conservation of migratory birds (January 11, 2001) requires that any project with federal involvement address impacts of federal actions on migratory birds. The order is designed to assist federal agencies in their efforts to comply with the Migratory Bird Treaty Act and does not constitute any legal authorization to take migratory birds. The order also requires federal agencies to work with the USFWS to develop a memorandum of understanding (MOU). Protocols developed under the MOU must promote the conservation of migratory bird populations through the following means:

- avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

7.2.1 APPLICABILITY TO THE PROPOSED PROJECT

Birds of prey such as White-tailed Kite, Cooper's Hawk, Red-shouldered Hawk, Red-tailed Hawk, American Kestrel, Barn Owl, Western Screech-owl, and Great-horned Owl are all known to nest in the region of the project site (Burrige 1995). The project site provides a few trees of adequate nesting habitat for some of these species, for example the eucalyptus trees along the eastern edge of the triangle parcel south of SR 116. There are other trees and bushes onsite and adjacent to the site that could provide habitat for nesting birds as well. These birds would be protected by the Migratory Bird Treaty Act. As long as there is no direct mortality of species protected pursuant to this Act caused by development of the site, there should be no constraints to development. To comply with the Migratory Bird Treaty Act, all active nest sites would have

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

to be avoided while such birds were nesting. While adult birds can typically fly out of harm's way, nesting birds, their eggs, and young are much more prone to being impacted by construction projects. Upon completion of nesting, the proposed project could commence as otherwise planned. Please review specific requirements for avoidance of nest sites for potentially occurring species in the Impacts and Mitigations section below.

7.3 California Endangered Species Act

7.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT

In 1984, the State legislated the CESA (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above), CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If the CDFW determines that a proposed project could impact a State-listed threatened or endangered species, the CDFW will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from the CDFW and/or USFWS (if it is a federally-listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a State-listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a federal ITP for federally listed species). The CDFW will issue an ITP only if:

- 1) The authorized take is incidental to an otherwise lawful activity;
- 2) the impacts of the authorized take are minimized and fully mitigated;
- 3) measures required to minimize and fully mitigate the impacts of the authorized take:
 - a) are roughly proportional in extent to the impact of the taking on the species;
 - b) maintain the project applicant's objectives to the greatest extent possible; and,
 - c) capable of successful implementation; and,
- 4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing an HCP as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve CDFW staff in development of the HCP. If a final Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the FESA, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of “take.” These species are listed in several statutes that identify “fully protected” species and “specified birds.” See Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a “fully protected” species or a “specified bird” occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a “non-jeopardy” federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal ITP) pursuant to the FESA, to submit the federal opinion or permit to the CDFW for a determination as to whether the federal document is “consistent” with CESA. If after 30 days the CDFW determines that the federal ITP is consistent with state law, and that all State-listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if the CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are State-listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a CESA permit under Section 2081(b). Section 2080.1 is of no use if an affected species is State-listed, but not federally-listed.

State and federal ITPs are issued on a discretionary basis, and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the ITP(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

7.3.2 APPLICABILITY TO THE PROPOSED PROJECT

Three state listed plants (*Blennosperma bakeri*, *Lasthenia burkei*, and *Limnanthes vinculans*) and the state listed California tiger salamander are known from the project site region. One year of appropriately timed surveys for the state listed plants has been conducted on the project site following the CDFW’s 2018 survey protocol as well as the USFWS’ 2005 survey guidelines for the Santa Rosa Plain. These guidelines require visits to a known reference site during the three plants’ blooming periods to check the phenology of the species and ensure project site surveys are conducted at the correct time. Reference site visits were made each day prior to each site survey. No special-status plants were found on the project site during the one year of surveys conducted in a normal rainfall year (2023). A second year of surveys will be conducted in the spring of 2024 as required by the Santa Rosa Plain survey requirements (USFWS 2005). If the results of a second year of special-status plant surveys are also negative, *it can safely be concluded that the proposed project site will not impact state-listed plant species*. Thus, an Incidental Take Permit would be not required for the project for state-listed plants.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

This linear project site provides only marginal habitat for one state listed animal species: the California tiger salamander. This species was known from the immediate area 20 plus years ago, but permitted grading activities and wetland fill activities removed the habitat, both on the project site and in the immediate area. There is no longer any breeding habitat within 1.3 miles and no undisturbed suitable upland refugia for this salamander species within the project site footprint due to historic grading and fill associated with the fully permitted Sonoma Business Park project, routine disking on this site, and unsuitable (disturbed) upland conditions on the “triangle parcel.” In consideration that all known and potential breeding habitat is outside the maximum dispersal distance for this species (1.3 miles), there is no expectation that this species would be found on the project site. There are no other state listed wildlife species of concern on this project site.

7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503 makes it unlawful to take, possess or “needlessly” destroy the nest or eggs of any bird, although it does not protect the fledged birds themselves. Section 3503.5 (birds of prey), 3511 (fully protected birds), and 3513 (Migratory Bird Treaty Act-listed birds) prohibit the take, possession, and/or destruction of different categories birds, their nests or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered “take.”

7.4.1 APPLICABILITY TO THE PROPOSED PROJECT

Preconstruction surveys would have to be conducted for nesting birds prior to any site disturbance to ensure that there is no direct take of these birds including their eggs, or young. Any active nests that were found during preconstruction surveys would have to be avoided by the project. Suitable non-disturbance buffers would have to be established around nest sites until the nesting cycle is complete. More specifics on the size of buffers are provided below in the Impacts and Mitigations section.

7.5 Santa Rosa Plain Conservation Strategy

The Federal listing of California tiger salamander resulted in uncertainty for many local jurisdictions, landowners, and developers about its effects on their current and proposed activities. Because of this uncertainty, local private and public interest groups met with the USFWS to discuss a cooperative approach to protecting California tiger salamander, while allowing currently planned and future land uses to occur within its range. The result of these discussions was the creation of the *Final Santa Rosa Plain Conservation Strategy* (“*Conservation Strategy*”) (USFWS 2005).

The purpose of the *Conservation Strategy* is threefold: (1) to establish a long-term conservation program sufficient to mitigate potential adverse effects of future development on the Santa Rosa Plain, and to conserve and contribute to the recovery of the listed species and the conservation of their sensitive habitat; (2) to accomplish the preceding in a fashion that protects stakeholders’ (both public and private) land use interests, and (3) to support issuance of an authorization for incidental take of Sonoma County California tiger salamander and listed plants that may occur in the course of carrying out a broad range of activities on the Santa Rosa Plain. The *Conservation Strategy* establishes interim and long-term mitigation requirements and designates conservation

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

areas where mitigation will occur. It describes how habitat preserves will be established and managed. It also includes guidelines for translocation, management plans, adaptive management, and funding.

The *Conservation Strategy* identifies areas within the Santa Rosa Plain that should be conserved to benefit the listed plants and Sonoma County California tiger salamander. Their designation was based upon the following factors: 1) known distribution of the California tiger salamander; 2) the presence of suitable habitat; 3) presence of large blocks of natural or restorable land; 4) proximity to existing Preserves; and 5) known location of the listed plants. The designation of conservation areas also generally attempted to avoid future development areas established by urban growth boundaries and city general plans. The objective of these conservation areas is to ensure that preservation occurs throughout the distribution of the species.

The goal of the *Conservation Strategy* is to preserve a large enough area of suitable habitat to ensure the conservation of California tiger salamander and listed plants and contribute to their recovery. In order to do this, areas are identified within the Santa Rosa Plain that currently or potentially support California tiger salamander and listed plants, as well as the areas that currently or likely will support development. This information was used to develop appropriate “conservation areas” and requirements as well as mitigation guidelines and requirements, in order to “provide consistency, timeliness and certainty for permitted activities.”

Proposed projects within the potential California tiger salamander range will fall into one of three categories:

- a.) Projects within 1.3 miles of a known California tiger salamander breeding site, and likely to impact California tiger salamander breeding and/or upland habitat; or
- b.) Projects beyond 1.3 miles from a known California tiger salamander breeding site, but within the “Potential for Presence of California tiger salamander” or “Potential for Presence of California tiger salamander and Plants”; or
- c.) Projects where “Presence of California tiger salamander is Not Likely.”

Different mitigation ratios are recommended for each of these categories.

The *Conservation Strategy* recommends that projects filling potential listed plant habitat should mitigate these impacts via the preservation of existing occupied habitat at a 1:1 ratio, and projects filling *known* listed plant habitat should mitigate these impacts via the preservation of existing occupied habitat at a 2:1 ratio, as per a Programmatic Biological Opinion (USFWS 1998) in effect at the time of the *Conservation Strategy* was prepared in 2005. The USFWS’ 2020 Programmatic Biological Opinion (USFWS 2020) has since superseded the 2007 and 1998 Programmatic Biological Opinions and the mitigation ratios have changed as discussed below and in the 2020 Programmatic Biological Opinion.

The *Conservation Strategy* recommends that projects filling wetlands should mitigate these impacts via the preservation of wetlands at a minimum of a 1:1 replacement ratio, depending on the quality of the filled wetlands, as per a Programmatic Biological Opinion (USFWS 1998) in effect at the time of the *Conservation Strategy* was prepared in 2005. The 1998 Programmatic

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Biological Opinion was superseded by a Programmatic Biological Opinion prepared by the USFWS for the Corps in 2007 (USFWS 2007) and again in 2020 (USFWS 2020).

7.5.1 APPLICABILITY TO THE PROPOSED PROJECT

The USFWS released a revised *Programmatic Biological Opinion* (USFWS 2020) which replaced the USFWS' earlier Biological Opinion (USFWS 1998 and 2007). Mitigation ratios established in the earlier Programmatic Biological Opinion were revised. Thus, while the objectives for the Conservation Strategy remain unchanged today, mitigation ratios for impacts to listed plants should be derived from the USFWS's 2020 *Programmatic Biological Opinion*.

The SR 116 right of way (i.e., project area) is in an area of the Santa Rosa Plain that is designated in Figure 3 of the USFWS' Conservation Strategy (USFWS 2005b) as "Already Developed (no potential for future impact)." The triangle parcel on the south side of the SR 116 right of way (i.e., project area) is designated as "Future Development."

7.6 USFWS Recovery Plan for the Santa Rosa Plain (USFWS 2016)

In December 2016, the USFWS adopted a formal Recovery Plan for the Santa Rosa Plain addressing recovery efforts necessary to protect and otherwise eventually recover the federally listed Sonoma County Distinct Population Segment of the California tiger salamander (*Ambystoma californiense*) and three vernal pool plants: Sonoma sunshine (*Blennosperma bakeri*); Burke's goldfields (*Lasthenia burkei*); and Sebastopol meadowfoam (*Limnanthes vinculans*) (USFWS 2016). All four species are confined almost entirely to the Santa Rosa Plain. The Recovery Plan and its objectives are implemented through cooperative CEQA lead agencies, and through federal nexus agency consultations (e.g., Corps consultations) with the USFWS via Section 7 of the FESA. Any federal nexus agency that consults with the USFWS pursuant to Section 7 will obtain a letter of no effect or a Biological Opinion that provides or denies "incidental take authority." Pursuant to the FESA, Incidental take would include loss of a listed species habitat or harm that could occur to a federally listed species. An Incidental Take Permit allows an otherwise legally sanctioned activity to proceed even if there is a collateral impact to a federally listed species. Similarly, any Section 10 FESA consultation with the USFWS, which is allowed for in the FESA for all non-federal entities, which results in Incidental Take authority granted by the USFWS to the non-federal entities, would otherwise include provisions for compliance with the objectives of the Recovery Plan.

The USFWS has determined that the primary threats to the three listed vernal pool plants and the California tiger salamander on the Santa Rosa Plain is the reduction and fragmentation of habitat due to urban development, agricultural land conversion, and habitat degradation that modifies vernal pool hydrology, and colonization of seasonal wetlands by competitive invasive plants. Consequently, the Recovery Plan focuses on these threats. To downlist or delist the four species that are imperiled in the Santa Rosa Plain, the threats to the species' habitat must be reduced or eliminated. The USFWS criteria for downlisting are based upon preservation of extant vernal pools systems and attending uplands that support wetland complexes. The USFWS has segmented the Santa Rosa Plain into "Core" and "Management Areas" (Figures 5 through 7 for plants and Figure 9 for CTS) where species preservation, and habitat enhancement and management must occur to recover these four listed species.

[The following information has been obtained from various personal communications in 2016 and 2017 between Mr. G. Monk and Mr. Vincent Griego and/or Mr. Ryan Olah of the Sacramento Endangered Species Office of the USFWS]: The USFWS is now requiring that projects that impact federally listed plant species in Core habitats, and/or California tiger salamander Core habitat (Figure 9), mitigate through preservation and enhancement of extant listed species habitats in the same Core Area where the impacts will occur. Mitigation for Core area species always takes precedence over Management area species. The USFWS is also now requiring that impacts to specific federally listed species' Management Areas, be mitigated in the affected species Core Areas or its Management Areas as designated in the USFWS' 2016 Santa Rosa Plain Recovery Plan (USFWS 2016). Impacts to California tiger salamander outside of Core and Management Areas may be mitigated in any Core or Management Area designated in the Santa Rosa Plain (Ryan Olah pers. Comm. With G. Monk, January 18, 2017).

7.6.1 APPLICABILITY TO PROPOSED PROJECT

The project site is on the very southern boundary of the Sebastopol meadowfoam (*Limnanthes vinculans*) Core Area (Figure 7)¹. Accordingly, vernal pool plant mitigation that is implemented to offset impacts to "suitable vernal pool plant species habitat" must be obtained within this Core Area to meet the objectives of the Recovery Plan (USFWS 2016). Regarding impacts that would occur to the California tiger salamander from the implementation of the proposed project, these impacts would occur within the West Cotati Core California tiger salamander area (Figure 9). The project site has roadside ditches and other disturbed seasonal wetland areas and upland areas that do not provide suitable breeding or over-summering habitat for the California tiger salamander; thus, roadway improvements would not be impacting high quality salamander habitat. Regardless, it is the goal of the Recovery Plan to mitigate project impacts within the same Core area. However, there are currently no available mitigation banks within the West Cotati Core Area and therefore, this may not be possible. Regardless, if necessary, mitigation will be provided in an alternate area as approved by the USFWS.

7.7 Santa Rosa Plain 2020 Programmatic Biological Opinion

The *Programmatic Biological Opinion* (USFWS 2020) (Programmatic BO) is based on the biological framework presented in the *Conservation Strategy*. This *Programmatic Biological Opinion* replaces (supersedes) the July 17, 1998 *Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects that May Affect Four Endangered Plant Species on the Santa Rosa Plain* (USFWS 1998), as well as the revisions made in 2007 (USFWS 2007), which were prepared for listed plant species on the Santa Rosa Plain.

Projects that require a Corps permit, that remain consistent with objectives stated in the *Conservation Strategy*, can be appended to the *Programmatic Biological Opinion* at the discretion of the USFWS. Projects that are appended to the *Programmatic Biological Opinion* will be provided incidental take authorization for impacts to federally-listed species.

¹ The project site is outside the Core and Management Areas for Burke's goldfields and Sonoma sunshine (Figures 5 and 6).

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

7.7.1 IMPACTS TO LISTED PLANT SPECIES

In the Programmatic BO, “suitable habitat” for listed plants is defined as 1) wetlands containing surface water (standing or flowing) during the rainy season in a normal rainfall year for seven or more consecutive days, 2) wetlands that have an outlet barrier (i.e., are pools) or occur in depressional terrain (i.e., are a swale or drainage feature), and 3) seasonal wetlands located within a Core or Management Area (USFWS 2020). Seasonal wetlands are considered “occupied habitat” if surveys have been conducted following USFWS protocols and listed species are recorded on the site, or if listed species have been recorded on the site in the past. Projects anticipated to adversely affect occurrences of Burke’s goldfields, Sebastopol meadowfoam, or Sonoma sunshine recorded in the CNDDDB do not qualify for coverage under the 2020 programmatic biological opinion and will need to have a specific biological analysis and a separate Biological Opinion issued by the USFWS because appropriate conservation for loss or degradation of the site(s) is case specific. However, projects anticipated to adversely affect *suitable habitat* of Burke’s goldfields, Sebastopol meadowfoam, or Sonoma sunshine are covered in the 2020 *Programmatic Biological Opinion*. Even if two years of protocol rare plant surveys have been conducted proving absence of these federally-listed plants, wetland habitats where a seedbank may be present are still regarded by the USFWS as “suitable” listed plant species habitat. The following mitigation to impacts ratios, expressed as acres to be conserved to acres of impact, are required to adhere to the *Programmatic Biological Opinion* (USFWS 2020):

Burke’s Goldfields

- Impacts to Suitable Habitat: 1.5:1 suitable habitat within the same Core Area as impacts; 3:1 suitable habitat in different a Core Area than impacts.

Sonoma Sunshine

- Impacts to Suitable Habitat: 1.5:1 suitable habitat within the same Core Area as impacts; 3:1 suitable habitat in a different Core Area than impacts.

Sebastopol Meadowfoam

- Impacts to Suitable Habitat: 1.5:1 suitable habitat; 3:1 suitable habitat in a different Core Area than impacts.

In addition:

- The *Programmatic Biological Opinion* (USFWS 2020) allows for the purchase of mitigation credits to be used for listed plant species from a USFWS-approved mitigation bank.
- When impacted areas contain suitable habitat for listed plant species, species-specific mitigation will be implemented for the species that occurs nearest the project site based on CNDDDB occurrences.
- When impacts occur to suitable habitat on sites that are within the Core Area for more than one listed plant species, mitigation land area must be distributed equally among all

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

affected species (e.g., impacts to 1 total acre of suitable habitat on a site that is within a Core Area for both Burke's goldfields and Sonoma sunshine must then allocate 0.5-acre of restored habitat to each species).

- For impacts to suitable habitat located within a Core Area, mitigation will be prioritized to occur in that same Core Area. Exceptions may be considered on a case-by-case basis, and will require approval from the Corps and the USFWS. For impacts to suitable habitat located within a Management Area, mitigation may take place either in that same Management Area or in the nearest Core Area.

7.7.2 IMPACTS TO CALIFORNIA TIGER SALAMANDER

For projects that may affect California tiger salamander, mitigation requirements will apply to the entire project area, including areas of both direct and indirect impact. The following mitigation to impacts ratios, expressed as acres to be conserved to acres of impact, are required by the *Programmatic Biological Opinion* (USFWS 2020) for project sites that affect Corps regulated waters of the U.S.:

Mitigation of 3:1

For projects that are within 500 feet of a known breeding site.

Mitigation of 2:1

For projects that are greater than 500 feet and within 2,200 feet of a known breeding site, and for projects beyond 2,200 feet from a known breeding site, but within 500 feet of a non-breeding occurrence.

Mitigation of 1:1

For projects that are greater than 2,200 feet and within 1.3 miles (6,864 feet) of a known breeding site.

Mitigation of 0.2:1

For projects that are greater than 1.3 miles (6,864 feet) from a known breeding site and greater than 500 feet from a non-breeding occurrence.

In addition:

- The *Programmatic Biological Opinion* (USFWS 2020) allows for the purchase of mitigation credits to be used for the Sonoma County California tiger salamander from a USFWS-approved mitigation bank.
- For impacts to Sonoma County California tiger salamander located within a Core Area, mitigation will be prioritized to occur in that same Core Area. Exceptions may be considered on a case-by-case basis, and will require approval from the Corps and the USFWS.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

- For impacts to Sonoma County California tiger salamander located within a Management Area, mitigation may take place either in that same Management Area or in the nearest Core Area.

7.7.3 APPLICABILITY TO THE PROPOSED PROJECT

7.7.3.1 Federally Listed Plants

As the proposed project *will* require a permit from the Corps, is within the Santa Rosa Plain, and there are no known occurrences of the three federally listed plants onsite (just suitable habitat), the *Programmatic Biological Opinion* by and between the Corps and the USFWS (USFWS 2020) is available for the proposed project. Although federally and state-listed plants were not observed on the project site during one year of formal rare plant surveys conducted in 2023 and likely will not be found in 2024 due to the low-quality habitat onsite, per the *Programmatic Biological Opinion* (USFWS 2020), seasonal wetlands on the site are still regarded by USFWS to be “suitable habitat.” Consequently, impacted seasonal wetlands on the project site would still be required to be mitigated as “suitable” listed plant habitats. [Please note that if federally listed plants are found onsite during the 2024 surveys, use of the Programmatic BO would not be allowed].

Per the USFWS’ 2020 *Programmatic Biological Opinion*, if a federal permit is acquired for this project (e.g., a Corps permit), the applicant shall be required to purchase vernal pool conservation credits for Sebastopol meadowfoam at 1:1 occupied or established habitat ratio (any combination) with success criteria met prior to groundbreaking at the project site and 0.5:1 established habitat ratio with success criteria met prior to groundbreaking at the project site. Thus, even with the two years of negative special-status plant surveys, to obtain a Corps permit, a 1.5:1 replacement to impacts of vernal pool listed plant mitigation credits must be obtained by the project. Provided 1) the *Programmatic Biological Opinion* (USFWS 2020) remains valid when the project is constructed; 2) a Corps permit is required for the project; and 3) the Corps/USFWS allow use of the 2020 *Programmatic Biological Opinion*, then the applicant shall be required to provide proof to the resource agencies and to the City of Cotati that conservation credits for Sebastopol meadowfoam (or other listed vernal pool species as otherwise allowed by the Corps/USFWS) were obtained.

Thus, prior to any earthmoving activities the applicant shall be required to purchase preservation or establishment credits for Sebastopol meadowfoam at a 1.5:1 ratio from a USFWS-approved mitigation bank(s) located in the same Core Area as the project site as defined in the 2016 Recovery Plan (unless otherwise approved by the USFWS). ***Since the proposed project will directly impact approximately 0.10-acre of suitable Sebastopol meadowfoam habitat (that is, wetlands W1-W5, IW1, IW2, and LW1 on Sheet 1, Attachment A), the loss of 0.10-acre of suitable listed plant habitat will need to be mitigated for by purchasing 0.15-acre (0.10-acre x 1.5) of Sebastopol meadowfoam preservation or establishment credits.***

7.7.3.2 California Tiger Salamander

Similarly, the project must mitigate for the project’s impact on CTS habitat. According to the *Programmatic Biological Opinion*, for projects that are greater than 500 feet and within 2,200

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

feet of a known breeding site, and for projects beyond 2,200 feet from a known breeding site, but within 500 feet of a non-breeding occurrence, 2:1 mitigation ratio is required (that is, for every square foot of impact to upland habitat that will be impacted, two square feet of mitigation is required). ***Thus, the project will need to provide 3.22 acres of CTS mitigation for the proposed impacts².***

7.8 City of Cotati General Plan – Conservation Element

The City of Cotati's General Plan was adopted on March 24, 2015. Under State law, many actions, such as development projects, specific plans, master plans, community plans, zoning, subdivisions, public agency projects and other decisions must be consistent with the General Plan. State law requires that the City's ordinances regulating land use be consistent with the General Plan. The Land Use Code, individual project proposals, and other related plans and ordinances must be consistent with the goals and policies in this General Plan. Below is a discussion of the General Plan's Conservation Element which is the element that pertains to natural communities and biological resources such as plants and wildlife.

7.8.1 CONSERVATION GOAL CON 1 PROTECT AND ENHANCE COTATI'S ECOSYSTEM AND NATURAL HABITATS

Policy CON 1.1: Sensitive habitats afforded protection and special consideration in this General Plan include wetlands, vernal pools, riparian areas, wildlife and fish migration corridors, native plant nursery sites, waters of the U.S., sensitive natural communities, and other habitats designated by state and federal agencies and laws.

Policy CON 1.2: Preserve and enhance those biological communities that contribute to the City's and the region's rich biodiversity including, but not limited to, annual grasslands, freshwater marshes, wetlands, vernal pools, riparian areas, aquatic habitat, oak woodlands, and agricultural lands.

Policy CON 1.3: Attempt to resolve conflicts between sensitive habitat areas and adjoining urbanized lands in a manner which recognizes the public interests in both resource protection and the need to provide for residential and job---generating land uses.

Policy CON 1.4: Focus conservation efforts on high priority conservation areas that contain suitable habitat for endangered, threatened, migratory, or special---status species and that can be managed with minimal interference with nearby urban land uses.

Policy CON 1.5: Conserve existing native vegetation where possible and integrate plant species native to the region into development and infrastructure projects where appropriate.

Policy CON 1.6: Avoid removal of large, mature trees that provide wildlife habitat or contribute to the visual quality of the environment to the greatest extent feasible through

² 1.61 acres of impact is derived from the total project site acreage of 7.51 minus 3.61 acres of hard-packed surfaces = 3.9, minus 2.29 acres of already mitigated land = 1.61 acres.

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

appropriate project design and building siting. If full avoidance is not possible, prioritize planting of replacement trees on-site over off-site locations.

Action CON 1a: Require development project proposals, infrastructure projects, long-range planning projects, and other projects that may potentially impact special-status species and sensitive resources to submit a biological resources evaluation which determines whether significant adverse impacts will occur. Evaluations shall be carried out under the direction of the Community Development Department and consistent with applicable state and federal guidelines. Projects shall be designed to avoid or reduce impacts to the maximum extent feasible. Where adverse impacts cannot be feasibly reduced or avoided through project design, projects shall include the implementation of site-specific or project-specific effective mitigation strategies developed by a qualified professional in consultation with state or federal resource agencies with jurisdiction (if applicable) that may include, but are not limited to, the following strategies:

- a. Preservation of habitat and connectivity of adequate size, quality, and configuration to support the special-status species. Connectivity shall be determined based on the specifics of the species' needs.
- b. Project design measures, such as clustering of structures or locating project features to avoid known locations of special-status species and/or sensitive habitats.
- c. Provision of supplemental planting and maintenance of grasses, shrubs, and trees of similar quality and quantity to provide adequate vegetation cover to enhance water quality, minimize sedimentation and soil transport, and provide adequate shelter and food for wildlife.
- d. Protection for habitat and the known locations of special-status species through adequate buffering or other means.
- e. Provision of replacement habitat of like quantity and quality on or off site for special-status species. Preference shall be given to the preservation of habitat as close to the area of impact as feasible, so long as that habitat is of comparable quality.
- f. Enhancement of existing special-status species habitat values through restoration and replanting of native plant species.
- g. Provision of temporary or permanent buffers of adequate size (based on the specifics of the special-status species) to avoid nest abandonment by nesting migratory birds and raptors associated with construction and site development activities.
- h. Incorporation of the provisions or demonstration of compliance with applicable recovery plans for federally listed species.
- i. Monitoring of construction activities by a qualified biologist to avoid impacts to onsite special status species.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Action CON 1b: Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- a. Preconstruction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;
- b. Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection; and
- c. Employees working on the project site shall be trained by a qualified biologist to identify and avoid protected species and habitat.

Action CON 1c: Develop CEQA Thresholds of Significance to assist staff, project applicants, and decision-makers in determining whether a project may have a significant effect on the environment under Section 21082.2 of the California Environmental Quality Act (CEQA).

Action CON 1d: Through coordination with the U.S. Fish and Wildlife Service, California Department of Fish and Game, and Sonoma County develop and maintain a map of sensitive biological communities and habitat within the Cotati Urban Growth Boundary. Ensure that this map and associated information is readily available to potential developers and the public.

Action CON 1e: Revise the Zoning Map to add the coordinated planning overlay zone to the Commercial/Industrial and General Commercial areas south of Helman Lane that are located within the critical habitat designation for the California tiger salamander.

7.8.2 APPLICABILITY TO THE PROPOSED PROJECT

While the project site supports wetlands and “suitable” habitat for rare plants, the wetlands and habitats onsite are not high-quality habitats worthy of conservation. The wetlands and upland habitats are located along a well-traveled highway; these roadside habitats are highly disturbed and do not provide ideal conditions for native or special-status plants or wildlife species. Mitigation offsite would be most appropriate for impacts to this setting. Regarding tree impacts, the project site does not support many mature native trees and impacts would be minimal and easily mitigatable offsite.

This Biological Resources Analysis identifies project site biological resources including sensitive and significant resources and incorporates mitigation measures to offset impacts to those resources. Mitigation measures include consultation with the Corps and USFWS as necessary to satisfy mitigation of the impacts.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

7.8.3 OBJECTIVE CON 1B PROTECT AND ENHANCE LOCAL RIPARIAN, WETLAND AND AQUATIC HABITAT

Policy CON 1.7: Consult with all the resource agencies during the CEQA review process for proposed developments to help identify wetland and vernal pool habitat that has candidacy for restoration, conservation, and/or mitigation. Focus restoration and/or conservation efforts on areas that would maximize multiple beneficial uses for such habitat and provides opportunities for mitigation banking.

Policy CON 1.8: Conserve riparian habitat along local creeks, including but not limited to the Laguna de Santa Rosa and Cotati Creek, in order to maintain suitable habitat for native fish and plant species.

Action CON 1f: Utilize existing regulations and procedures, including but not limited to the Land Use Code, Design Review, and the environmental review process (CEQA) to conserve wetlands and riparian habitat within the City and the Urban Growth Boundary. Comply with the federal and state requirements, including no net loss of wetlands using mitigation strategies such as:

- a. Avoidance of wetlands and riparian habitat through site design;
- b. Clustered development;
- c. Transfer of development rights; and/or
- d. Compensatory mitigation, such as habitat restoration or habitat creation.

Action CON 1g: Coordinate with the California Department of Fish and Game and Sonoma County to identify potentially impacted aquatic habitat within the City and the Urban Growth Boundary and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams and other waterways.

Action CON 1h: Periodically review, and update if necessary, Chapter 17.56 of the Cotati Municipal Code to ensure that the most appropriate requirements and best management practices are implemented to protect and restore wetland resources in the Planning Area.

Action CON 1i: Provide a Conservation Page (or similar page) on the City's website provides links to resource agencies (CDFG, USFWS, USACE, etc.) and provides information regarding local and regional conservation and environmental programs, to the extent the City has readily available information.

7.8.4 APPLICABILITY TO THE PROPOSED PROJECT

The project site does not have any natural stream channels or drainages with associated riparian vegetation. There is a roadside ditch along SR 116 and a few seasonal wetlands of low habitat value. Regardless, the Corps and the RWQCB will be contacted to obtain the appropriate permits/authorizations for drainage/wetland impacts related to this project and any impacts will be mitigated in accordance with those permits/authorizations.

7.8.5 OBJECTIVE CON 1C PROTECT AREAS WITH HIGH WATER RECHARGE CAPABILITY AND SURFACE WATER QUALITY IN THE CITY'S CREEKS, STREAMS, AND WATERWAYS

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Policy CON 1.9: Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat, and vernal pools through sound land use planning, community design, and site planning.

Policy CON 1.10: Support rehabilitation of open existing channelized waterways, as feasible, to remove concrete linings and allow for a connection with the stream channel and the natural water table. Avoid creating additional open channelized waterways, unless no other alternative is available to protect human health, safety, and welfare.

Policy CON 1.11: Where feasible, support restoration of existing channelized waterways to a more natural condition. Restoration efforts should provide for naturalized hydraulic functioning. Restoration should also promote the growth of riparian vegetation to effectively stabilize banks, screen pollutants from runoff entering the channel, enhance fisheries, and provide other opportunities for natural habitat restoration.

Policy CON 1.12: Require discretionary projects, as well as new flood control and stormwater conveyance projects, to integrate best management practices (BMPs) and natural features to the greatest extent feasible, while ensuring that these features adequately convey and control stormwater to protect human health, safety, and welfare.

Policy CON 1.13: Prioritize the use of natural features such as bioswales, vegetation, retention ponds, and other measures to remove surface water pollutants prior to discharge into surface waters.

Policy CON 1.14: New development adjacent to creeks and streams should include opportunities for beneficial uses, such as flood control, ecological restoration activities, public access trails, and walkways.

Action CON 1j: Coordinate with interested public and private entities to create new and expanded public access trails along creeks and streams that connect to parks and open space areas within the Urban Growth Boundary.

Action CON 1k: Continue to identify which stormwater and drainage facilities are in need of repair and address these needs through the CIP process.

7.8.6 APPLICABILITY TO THE PROPOSED PROJECT

The project site does not have any natural stream channels or drainages. There is a roadside ditch along SR 116 that was excavated from uplands and a few seasonal wetlands of low habitat value. Regardless, the Corps and the RWQCB will be contacted to obtain the appropriate permits/authorizations for other waters/wetland impacts related to this project and any impacts will be mitigated in accordance with those permits/authorizations.

Action CON 3k: Continue implementing the City Tree Preservation and Protection Ordinance (Chapter 17.54 of the Municipal Code).

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Action CON 3l: Periodically undertake a citywide notification program to notify the citizens and arborists doing business within the City limits of the tree preservation requirements.

Action CON 3o: During the development review process, discourage the loss of native trees in accordance with the Tree Preservation and Protection Ordinance (Chapter 17.54 of the Municipal Code).

Action CON 3p: The City shall continue to implement the landscape and tree ordinance to give preference to native and drought tolerant species. The Planning Division shall review and revise as necessary.

Action CON 3q: Design Review criteria shall be prepared to require that creeks, trees, views and features unique to the site be preserved and incorporated into design proposals. The Design Review Committee shall insure that new development meets the criteria.

Action CON 3r: Through the use of public funds, where available, provide educational plant and tree labeling in City parks and City--- maintained plant demonstration areas to educate and inform residents of native plant and tree species planted and maintained in Cotati.

7.8.7 APPLICABILITY TO THE PROPOSED PROJECT

The elements of the City's Tree Ordinance will be followed in regards to tree removal and other impacts associated with protected trees. If landscaping along SR 116 is implemented after improvements to the roadway are made, use of native and drought tolerant plantings will be encouraged.

7.9 City of Cotati Tree Ordinance - Chapter 17.54 Tree Preservation and Protection

Below are key provisions of the City of Cotati's Tree Ordinance. Since the project will impact both native and non-native (i.e. landscape) trees, this ordinance will apply.

7.9.1 APPLICABILITY (17.54.020)

A. Applicability of Requirements. The provisions of this chapter shall apply in all zoning districts to the removal or relocation of any tree with a circumference of twelve inches or more, measured at fifty-four inches above natural grade.

B. Tree Permit Required.

1. Activities Requiring a Permit. A tree permit shall be required prior to:

- a. The relocation, removal, cutting-down, or other act that causes the destruction of a tree;
- b. Prior to any grading, paving, or other ground-disturbing activity within the protected zone of a tree; and
- c. The approval of a use permit, minor use permit, variance, minor variance, or subdivision, hereafter referred to as "discretionary projects."

2. Permit Issuance. The procedure and review authority for a tree permit is as follows:
 - a. Developed Parcel. A tree permit for the removal of other than a native oak from a developed parcel shall be issued as follows:
 - i. A permit for a parcel developed with one single-family dwelling may be issued by the director after a site inspection. In this case, the director may waive the prior submittal of a site plan.
 - ii. A permit for a parcel developed with multiple dwellings or a nonresidential structure may be issued by the director after the review of a complete tree permit application in compliance with Section 17.54.030 (Tree permit application requirements) of this chapter.
 - b. Vacant Parcel. A tree permit for the removal of other than a native oak from a vacant parcel shall require commission approval, and shall not be granted except in conjunction with:
 - i. The approval of a discretionary project for the same site;
 - ii. The approval of a building permit for the same site; or
 - iii. The approval of improvement plans for a subdivision of the same property.

C. Native Oak Removal. The removal of a native oak with a trunk circumference of twelve inches measured at fifty-four inches above natural grade shall be prohibited, except where approved by the council after a public hearing in compliance with Chapter 17.88 (Public Hearings) of this title, in conjunction with the approval of a subdivision or other specific development project.

D. Timing of Removal of Large-Stature Trees. The removal of a tree with a height of fifty feet or more shall not occur between April 15 and June 15 of any year, to provide for the nesting and stopover patterns of raptors, migratory birds, and other bird species.

E. Exceptions. The removal or relocation of a tree that would otherwise require a tree permit is exempt from the provisions of this chapter only in case of emergency, where the director, city engineer, a member of a law enforcement agency, or the fire district determines that a tree poses an imminent threat to the public safety, or general welfare. (Ord. 766 § 2 Exh. A (part), 2004).

7.9.2 TREE PERMIT APPLICATION REQUIREMENTS (17.54.030)

A. Application Contents. Each tree permit application shall include the information and materials required by the department, and:

1. Shall be accompanied by the application fee required by the city fee schedule;
2. The application may be required to include an arborist's report, at the discretion of the director; and
3. If the site is subject to conditions, covenants, and restrictions (CC&Rs) that address tree removal and are administered by an active homeowners' association, the application shall include a letter from the homeowners' association authorizing the tree removal.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

B. Application Filing. An application for a tree permit involving a discretionary project shall be included as part of the application for the discretionary project. An application for a tree permit not associated with a discretionary project shall be filed with the department separately. (Ord. 766 § 2 Exh. A (part), 2004).

7.9.2.1 Protection of Trees to Be Retained

A. Purpose. The purpose of this section is to define procedures necessary to protect the health of affected protected trees. Great care must be exercised when work is conducted upon or around trees that are not authorized for removal.

B. Applicability. The requirements of this section shall apply to all encroachments into the protected zone of a tree that is not authorized for removal from a site when approved grading or other construction is to occur. All tree permits shall be deemed to incorporate the requirements of this section except as a tree permit may otherwise specifically provide.

C. Trenching Procedure. Trenching within the protected zone of a protected tree, when permitted, may only be conducted with hand tools or as otherwise directed by the city, to avoid root injury.

D. Cutting Roots.

1. Minor roots less than one inch in diameter may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area.

2. Major roots over one inch in diameter may not be cut without the director's approval. Depending upon the type of improvement being proposed, bridging techniques or a new site design may need to be employed to protect the root and the tree.

E. Irrigation Systems. An independent low-flow drip irrigation system may be used for establishing drought-tolerant plants within the protected zone of a tree to be protected.

F. Plant Materials Under Oaks. Planting live material under native oak trees is generally discouraged, and it will not be permitted within six feet of the trunk of a native oak tree with a circumference of less than twelve inches measured at fifty-four inches above natural grade, or within ten feet of the trunk of a native oak tree with a circumference of twelve inches or more measured at fifty-four inches above natural grade. Only drought-tolerant plants will be permitted within the protected zone of native oak trees.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

G. Protective Fencing.

1. **Type of Fencing.** A minimum five-foot high chain link or substitute fence approved by the director shall be installed at the outermost edge of the protected zone of each protected tree or groups of protected trees. Exceptions to this policy may occur in cases where protected trees are located on slopes that will not be graded. However, approval must be obtained from the department to omit fences in any area of the project.
2. **Fence Installation.** The fences shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review authority. The developer shall call the city engineer for an inspection of the fencing prior to grading operations.
3. **Signing.** Signs shall be installed on the fence in four equidistant locations around each individual protected tree. The size of each sign must be a minimum of two feet by two feet and must contain the following language: “WARNING, THIS FENCE SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE COTATI PLANNING AND BUILDING DEPARTMENT.” Signs placed on fencing around a grove of protected trees, shall be placed at approximately fifty-foot intervals.
4. **Fence Removal.** Once approval has been obtained, the fences shall remain in place throughout the entire construction period and shall not be removed without obtaining written authorization from the department.

H. **Retaining Walls and Root Protection.** Where a tree permit has been approved for construction of a retaining wall within the protected zone of a protected tree, the developer shall provide for the immediate protection of exposed roots from moisture loss during the time prior to completion of the wall. The retaining wall shall be constructed within seventy-two hours after completion of grading.

I. **Preservation Devices.** If required, preservation devices such as aeration systems, oak tree wells, drains, special foundation systems, special paving and cabling systems must be installed per approved plans.

J. Grading.

1. Every effort shall be made to avoid cut and/or fill slopes within or in the vicinity of the protected zone of any protected tree.
2. No grade change shall cause water to drain into an area around a protected tree equal to twice the longest radius of the protected zone.
3. No grade changes are permitted that will lower or raise the ground on any side of the tree.

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

K. Chimney Locations. A chimney for a wood burning fireplace or stove shall not be located within the canopy of a tree or in any location that sparks emitted from the chimney may damage a tree.

L. On-site Information. The following information shall be on-site while any construction activity is ongoing for a project requiring a tree permit:

1. Any applicable arborist's report and any subsequent modifications to the arborist's report;
2. Tree location map with a copy of the tree fencing plan;
3. Tree permit and approved construction plans;
4. Approved planting and irrigation drawings.

M. Information on Standards. The developer shall be responsible for informing all subcontractors and individuals who will be performing work around protected trees of the requirements of this section for working around trees and conditions of approval for the project. This information shall be provided in writing to the subcontractors and employees by the general contractor or applicant.

N. Utility Trenching Pathway Plan. In the event trenching is proposed, the tree permit application shall include a utility trenching pathway plan for approval following approval of the project improvement or civil plans.

1. Contents. The trenching-pathway plan shall depict all of the following systems: storm drains, sewers, easements, water mains, area drains, and underground utilities. Except in lot sale subdivisions, the trenching-pathway plan must show all lateral lines serving buildings. To be completely effective, the trenching-pathway plan must include the surveyed locations of all protected trees on the project as well as an accurate plotting of the protected zone of each protected tree.
2. Standards for Plan. The trenching-pathway plan shall be developed considering the following general guidelines:
 - a. The trenching-pathway plan shall be developed to avoid trenching in the protected zone of any protected tree on its path from the street to the building.
 - b. Where it is impossible to avoid the protected zone, the design shall minimize the extent of trenching within the protected zone. The required arborist's report shall include mitigation measures for any trenching within the protected zone.

O. Final Certification of Tree Work. All of the tree preservation measures required by the conditions of the discretionary project approval, and/or the tree permit, as applicable, shall be

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

completed, and certified by an arborist selected by the director prior to city issuance of a final building inspection or certificate of occupancy. (Ord. 766 § 2 Exh. A (part), 2004).

7.9.3 TREE PLANTING AND REPLACEMENT (17.54.050)

The City’s principal objective for the tree permit process is the preservation of native oaks and other significant trees, particularly in groves. Where the review authority determines that preservation is infeasible, replacement plantings may be allowed in compliance with this section.

- A. Extent of Replacement Required. The review authority may condition any tree permit for the removal of a tree to require tree replacement, as shown in Table 5-2 (taken from the ordinance). The review authority may approve a replacement program using one of the methods identified in subsection B or C of this section, or any combination of the methods.

**Table 5-2
 Minimum Required Replacement Trees**

Species of Tree to be Removed	Circumference of Tree to be Removed⁽¹⁾	Mitigation Value (required number of replacement trees)	Required Size and Species of Replacement Trees for Mitigation Value
Oaks (Black, Valley, Live)	12 to 49 inches	5	15-gallon, oak of the same species removed
	50 to 79 inches	10	
	80 or more inches	20	
Other	12 to 49 inches	2	15-gallon, of species determined by city
	50 to 79 inches	4	
	80 or more inches	6	

Notes:

- (1) Circumference shall be measured at a point fifty-four inches above the natural grade at the base of the tree.

B. Location and Specifications for Replacement Trees. The replacement trees required by Table 5-2 shall be planted on-site (the City’s preferred method of mitigation), except that the review authority may authorize other areas where maintenance to ensure survival of the trees will be guaranteed.

- 1. All replacement trees shall be of the same species as the trees being replaced, propagated from locally gathered seeds, except in the case where a replacement tree is approved in a location characterized by nonnative species (for example, within a narrow roadway

median where existing trees are ornamental non-natives), or where the review authority otherwise determines that native species are inappropriate.

2. The review authority may allow up to fifty percent of the required replacement trees to have a five-gallon container size, where it determines that long-term tree health and survival will be improved by starting with a smaller container size, and that each tree with a container size less than fifteen gallons will not be planted where it will be subject to damage while becoming established.
3. The review authority may require fewer and/or larger replacement trees than required by Table 5-2 where it determines that fewer but significantly larger trees are appropriate because of the size of the site, or on-site environmental resources or terrain constraints.
4. Replacement trees shall be in addition to any trees required by provisions of this land use code other than this chapter (e.g., required parking lot landscaping or street trees).

C. In-lieu Mitigation Fee. The review authority may determine that the remedies described above are not feasible or desirable and may instead require the payment of an in-lieu fee for the cost of purchasing, planting, irrigating, and maintaining each tree for a period of ten years. The in-lieu fee shall be as required by the city fee schedule. The in-lieu fee shall be deposited into the city's tree fund. (Ord. 766 § 2 Exh. A (part), 2004).

7.9.4 TREE PERMIT APPROVAL FINDINGS AND CONDITIONS (17.54.060)

A. Required Findings. The approval of a tree permit shall require that the review authority first make all the following findings:

1. The approval of the tree permit will not be detrimental to the public health, safety or welfare, and approval of the tree permit is consistent with the provisions of this chapter;
2. Measures have been incorporated into the project or permit to mitigate impacts to remaining trees or to replace the trees removed in compliance with this chapter;
3. The removal of a healthy tree cannot be avoided by:
 - a. Reasonable redesign of the site plan prior to construction, or
 - b. Trimming, thinning, tree surgery, or other reasonable treatment, as determined by the director;
4. Adequate provisions for drainage, erosion control, land stability, windscreen, buffers along the road and between neighbors have been made where these problems are anticipated as a result of the removal; and,
5. The tree to be removed does not contain an active nest that has been identified through the environmental process or is otherwise known to the review authority as the nest of a migratory bird, except where a qualified professional has determined that the nest can be relocated without damage to the nestlings.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

B. Conditions of Approval. The approval of a tree permit shall include conditions of approval as necessary to ensure compliance with Section 17.54.050 (Tree planting and replacement) of this chapter. (Ord. 766 § 2 Exh. A (part), 2004).

7.9.5 APPLICABILITY TO THE PROPOSED PROJECT

The project will impact both native oaks and non-native trees subject to the City of Cotati's Tree Protection Ordinance. *The applicant shall submit an arborist's report and an application for a tree permit as part of the application for the development project. In compliance with the Tree Protection Ordinance, tree replacement species and numbers are presented in Table 5-2, above, or as otherwise required by the City of Cotati.*

8. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE

This section presents an overview of the criteria used by the Corps, the RWQCB, the State Water Resources Control Board (SWRCB), and the CDFW to determine those areas within a project area that would be subject to their regulation.

8.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting

Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344), the Corps regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill materials into any water of the United States.

On November 18, 2021, the U.S. EPA and the Corps (the "agencies") announced the signing of a proposed rule to revise the definition of "waters of the United States." On December 7, 2021, the proposed rule was published in the Federal Register. The intent of the proposed rule was to put back into place the pre-2015 definition of "waters of the United States," (40 CFR 230.3(s)). The final Revised Definition of "Waters of the United States" was published in the Federal Register on January 18, 2023 (33 C.F.R. § 328.3) (the final "Rule"). The 2023 Rule conforms to the limits expressed in the 2006 Rapanos decision, in the plurality opinion and Justice Kennedy's concurring opinion. Additionally, the agencies are in receipt of the U.S. Supreme Court's May 25, 2023 decision in the case of *Sackett v. Environmental Protection Agency*. In light of this decision, the agencies will interpret the phrase "waters of the United States" consistent with the Supreme Court's decision in the *Sackett* case. In *Sackett*, the Supreme Court adopted the Rapanos plurality's test for adjacent wetlands: only those wetlands with a continuous surface connection to other regulated waters, such that the two are indistinguishable.

In the published 2023 rule from the Federal Register, the term "waters of the United States" is defined as:

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

1. Waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide
2. Interstate waters including interstate wetlands;
3. Intrastate lakes and ponds, wetlands, streams:
 - i. That are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3)(i) of this section; or
 - ii. That either alone or in combination with similarly situated waters in the region, **significantly affect** the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section.
4. Impoundments of waters otherwise defined as waters of the United States under the definition, other than impoundments of waters identified under paragraph (a)(5) of this section
5. Tributaries of waters identified in (a)(1) or (2), (4), or (6) of this section:
 - i. That are relatively permanent, standing or continuously flowing bodies of water; or
 - ii. That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section.
6. The territorial seas;
7. Wetlands adjacent to the following waters:
 - i. Waters identified in paragraph (a)(1) of this section; or
 - ii. Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) of this section and with a continuous surface connection to such waters; or
 - iii. Waters identified in paragraph (a)(2) or (3) of this section when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section.

Waters of the United States do not include:

8. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.
9. Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.
10. Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water.
11. Artificially irrigated areas that would revert to dry land if the irrigation ceased;

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

12. Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
13. Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
14. Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
15. Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Limits of Corps' jurisdiction:

- a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)
- b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:
 - (1) Extends to the high tide line, or
 - (2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.
- c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:
 - (1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark ("OHWM"), or
 - (2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
 - (3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

The OHWM on a non-tidal water is:

the "line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

Wetlands are defined as: "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

(i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

The Agencies jointly prepared an Instructional Guidebook to aid Corps field staff in completing the “Approved Jurisdictional Determination Form,” taking into account judicial decisions (i.e., *Rapanos v. United States*, *Carabell v. U.S. Army Corps of Engineers* and *U.S. v. Riverside Bayview Homes*, *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC)) interpreting the extent of Corps jurisdiction, and is intended to be used as the U.S. Army Corps of Engineers Regulatory National Standard Operating Procedures for conducting an approved jurisdictional determination. This Approved Jurisdictional Determination Form will be updated to reflect the 2023 Rule.

8.2 Permitting Corps Jurisdictional Areas

To remain in compliance with Section 404 of the CWA, project proponents and property owners (applicants) are required to be permitted by the Corps prior to discharging or otherwise impacting waters of the United States. In many cases, the Corps must visit a proposed project area (to conduct a “jurisdictional determination”) to confirm the extent of area falling under their jurisdiction prior to authorizing any permit for that project area. Typically, at the time the jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to “waters of the United States.”

Pursuant to Section 404, the Corps normally provides two alternatives for permitting impacts to the type of waters of the United States found in the project area. The first alternative would be to use Nationwide Permit(s) (NWP). The second alternative is to apply to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes public interest review procedures (i.e., public notice and receipt of public comments) and must contain an “alternatives analysis” that is prepared pursuant to Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). The alternatives analysis is also typically reviewed by the federal EPA and thus brings another resource agency into the permitting framework. Both the Corps and EPA take the initial viewpoint that there are practical alternatives to the proposed project if there would be impacts to waters of the U.S., and the proposed permitted action is not a water dependent project (e.g., a pier or a dredging project). Alternative analyses therefore must provide convincing reasons that the proposed permitted impacts are unavoidable. Individual Permits may be available for use in the event that discharges into regulated waters fail to meet conditions of NWP(s).

NWPs are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under NWP, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). In order to use NWP(s), a project must meet 27 general nationwide permit conditions, and all specific conditions pertaining to the NWP being used (as presented at 33 CFR Section 330, Appendices A and C). It is also important to note that pursuant to 33 CFR Section 330.4(e), there may be special regional conditions or modifications to NWPs that could have relevance to individual proposed projects. Finally,

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

pursuant to 33 CFR Section 330.6(a), Nationwide permittees may, and in some cases must, request from the Corps confirmation that an activity complies with the terms and conditions of the NWP intended for use (*i.e.*, must receive “verification” from the Corps).

Prior to finalizing design plans, the applicant needs to be aware that the Corps maintains a policy of “no net loss” of wetlands (waters of the United States) from project area development. Therefore, it is incumbent upon applicants that propose to impact Corps regulated areas to submit a mitigation plan that demonstrates that impacted regulated areas would be recreated (*i.e.*, impacts would be mitigated). Typically, the Corps requires mitigation to be “in-kind” (*i.e.*, seasonal wetlands would be filled, mitigation would include seasonal wetland mitigation), and at a minimum of a 1:1 replacement ratio (*i.e.*, one acre or fraction thereof of recreated for each acre or fraction thereof lost). Often a 2:1 replacement ratio is required if the Permittee is responsible for the mitigation. In some cases, the Corps allows “out-of-kind” mitigation if the compensation site has greater value than the impacted site. Finally, there are many Corps approved wetland mitigation banks where wetland mitigation credits can be purchased by applicants to meet mitigation compensation requirements. Mitigation banks have defined service areas and the Corps may only allow their use when a project would have minimal impacts to wetlands.

8.2.1 APPLICABILITY TO THE PROPOSED PROJECT

In May of 2023, M&A completed wetland delineation field work and prepared an Aquatic Resources Delineation of potential waters of the U.S. and/or State within the project site boundaries. This Aquatic Resources Delineation Report was submitted to the Corps on August 28, 2023.

On the project site, M&A mapped a total of 0.162-acre (7,076 square feet) of potential waters of the U.S. and an additional 0.070-acre (3,051 square feet) of potential non-federal waters (*i.e.*, not Corps jurisdictional but RWQCB jurisdictional). This map still needs to be confirmed by the Corps but provides a formal assessment of what portions of the project site would be regulated by this federal agency [and by the RWQCB as well for any non-federal waters]. According to the preliminary site plan (Attachment B), the proposed project will result in the fill of up to approximately 0.06-acre of potential waters of the U.S. pursuant to the Clean Water Act (CWA.) Once the Corps has confirmed their jurisdiction on the project site, it will be necessary to apply for a Nationwide Permit (NWP) prior to filling any water of the U.S. As impacts to waters of the U.S. will be less than 0.5-acre, the threshold for the Corps to authorize use of a Nationwide Permit (NWP), a NWP is the applicable permit for this project. Since the Corps has a “no net loss” policy, mitigation would be required for any impacts to Corps regulated areas at a minimum 1:1 ratio (that is, for each square foot of waters impacted, one square foot of mitigation would be required). See the Impacts and Mitigation Measures section for additional details.

8.3 California Regional Water Quality Control Board (RWQCB)

8.3.1 SECTION 401 OF THE CLEAN WATER ACT

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the U.S., including wetlands and other waters, any Corps

Biological Resources Analysis
Highway 116/West Cotati Alignment Plan
City of Cotati, California

permit authorized for a proposed project would be inoperative unless it is a NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific certification of water quality. Certification of NWPs requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the permit (the term is typically for five years). Certification must be consistent with the requirements of the federal Clean Water Act, the CEQA, the CESA, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification of water quality. Where a project will result in dredge or fill of non-federal waters of the State, the RWQCB will authorize those fills through waste discharge requirements issued under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State-level definition of "wetlands," which definition is broader than the federal definition in that unvegetated areas may be considered a wetland water of the State. As a part of the same policy, the SWRCB adopted permit procedures and standards governing the discharge of dredged or fill material into wetlands and other waters of the State. The policy includes, among other things, requirements for analyses to identify the least environmentally damaging practicable alternative (LEDPA) and compensatory mitigation standards including a minimum 1:1 ratio for wetlands and streams, and full functional replacement of all waters on top of this minimum where applicable. The policy, which will govern both Section 401 certifications and Waste Discharge Requirements (WDRs), is scheduled to become effective nine months following the completion of review by the California Office of Administrative Law.

8.3.2 APPLICABILITY TO THE PROPOSED PROJECT

The Corps' draft Aquatic Resources Delineation map (Sheet 1) is provided as Attachment A. Since the RWQCB does not have a formal method for technically defining what constitutes waters of the State, M&A expects that the RWQCB should remain consistent with the Corps' determination of wetland and non-wetland waters in terms of methodology. As such, any potential wetland or other waters areas were delineated using the Corps methods for consideration by the RWQCB and the SWRCB and are shown on the Aquatic Resources Map regardless of whether a feature is Corps jurisdictional or not.

On the project site, M&A mapped a total of 0.162-acre (7,076 square feet) of potential waters of the U.S./State and an additional 0.070-acre (3,051 square feet) of potential non-federal waters/waters of the State.

Any impacts to waters of the State would have to be mitigated to the satisfaction of the RWQCB prior to the time this resource agency would issue a permit for impacts to such features. The RWQCB requirements for issuance of a "401 Permit" typically parallel the Corps requirements for permitting impacts to Corps-regulated areas pursuant to Section 404 of the Clean Water Act. Please refer to the Corps Applicability Section above for likely mitigation requirements for impacts to RWQCB-regulated wetlands. Also, please refer to the applicability section of the Porter-Cologne Water Quality Control Act below for other applicable actions that may be imposed on the project by the RWQCB prior to the time any certification of water quality is authorized for the project. Please note that any isolated wetlands or other waters that are determined to be on the project site (M&A mapped a total of 0.070-acre (3,051 square feet) of

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

potential isolated wetlands/other waters) that are not regulated by the Corps pursuant to the SWANCC and Sackett decisions, would still be regulated by the RWQCB pursuant to the Porter-Cologne Water Quality Control Act (see below).

8.3.3 PORTER-COLOGNE WATER QUALITY CONTROL ACT

The uncontrolled discharge of pollutants into impaired water bodies is considered particularly detrimental. According to the EPA, **sediment is one of the most widespread pollutants contaminating U.S. rivers and streams**. Sediment runoff from construction sites is 10 to 20 times greater than from agricultural lands and 1,000 to 2,000 times greater than from forest lands (EPA 2005). Consequently, the discharge of stormwater from large construction sites is regulated by the RWQCB under the Clean Water Act and California's Porter-Cologne Water Quality Control Act.

The Porter-Cologne Water Quality Control Act, Water Code § 13260, requires that "any person discharging waste, or proposing to discharge waste, that could affect the waters of the State to file a report of discharge" with the RWQCB through an application for waste discharge (Water Code Section 13260(a)(1)). The term "waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (Water Code § 13050(e)). It should be noted that pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB also regulates "isolated wetlands," or those wetlands considered to be outside of the Corps' jurisdiction (see Corps Section above).

The RWQCB generally considers filling in waters of the State to constitute "pollution." Pollution is defined as an alteration of the quality of the waters of the State by waste that unreasonably affects its beneficial uses (Water Code §13050(1)). The RWQCB litmus test for determining if a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act is if the action could result in any "threat" to water quality.

The RWQCB requires complete pre- and post-development Best Management Practices (BMPs) for any portion of the project site that is developed. This means that a water quality treatment plan for the pre- and post-developed project site must be prepared and implemented. Preconstruction requirements must be consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES). That is, a *Stormwater Pollution Prevention Plan* (SWPPP) must be developed prior to the time that a site is graded (see NPDES section below). In addition, a post construction BMPs plan, or a Stormwater Management Plan (SWMP) must be developed and incorporated into any site development plan.

8.3.4 APPLICABILITY TO THE PROPOSED PROJECT

If the Corps determines there are waters of the U.S. and/or isolated waters of the State, the RWQCB would have jurisdiction over these areas pursuant to the Porter-Cologne Water Quality Control Act. Since any "threat" to water quality could conceivably be regulated pursuant to the Porter-Cologne Water Quality Control Act, care will be required when constructing the proposed project to be sure that adequate pre-and post-construction BMPs are incorporated into the project implementation plans. Please note that any isolated wetlands defined by the Corps on the project site, that are not regulated by the Corps pursuant to the SWANCC decision, would still be regulated by the RWQCB pursuant to the Porter-Cologne Water Quality Control Act.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

It should also be noted that prior to issuance of any permit from the RWQCB this agency will require submittal of a Notice of Determination from the City of Cotati indicating that the proposed project has completed a review conducted pursuant to CEQA. The pertinent sections of the CEQA document (typically the biology section) are often submitted to the RWQCB for review prior to the time this agency will issue a permit for a proposed project.

Most stormwater runoff currently flows into the City's existing storm drain system. It is expected that project development will utilize the existing storm drain system; however, pre-treatment of stormwater in accordance with Provision C.3 (discussed in the section below) prior to release into the City stormdrain system will be necessary. Additionally, during project construction it is important for the project proponent to have the components of a SWPPP and a SWMP in place; these documents are typically prepared by the project civil engineer. Please see the sections below for further discussion on site disturbance (grading) and stormwater management.

9. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORMWATER MANAGEMENT

9.1 Construction General Permit

While federal Clean Water Act NPDES regulations allow two permitting options for construction related stormwater discharges (individual permits and General Permits), the SWRCB has elected to adopt only one statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (CalTrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than one acre of land or those sites less than one acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a SWPPP which specifies BMPs that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters.
2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively-defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.
3. Perform inspections of all BMPs.

This Construction General Permit is implemented and enforced by the nine RWQCBs. It is also enforceable through citizens' suits and represents a dramatic shift in the SWRCB's approach to regulating new and redevelopment sites, imposing new affirmative duties and fixed standards on builders and developers.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Types of Construction Activity Covered by the Construction General Permit

- clearing,
- grading,
- disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre or more of total land area.

Construction activity that results in soil disturbances to a smaller area would still be subject to this General Permit if the construction activity is part of a larger common plan of development that encompasses greater than one acre of soil disturbance, or if there is significant water quality impairment resulting from the activity.

Construction activity does not include:

- routine maintenance to maintain original line and grade,
- hydraulic capacity, or original purpose of the facility,
- nor does it include emergency construction activities required to protect public health and safety.

The Construction General Permit includes several “post-construction” requirements. These requirements entail that site designs provide no net increase in overall site runoff and match pre-project hydrology by maintaining runoff volume and drainage concentrations. To achieve the required results where impervious surfaces such as roofs and paved surfaces are being increased, developers must implement non-structural off-setting BMPs, such as landform grading, site design BMPs, and distributed structural BMPs (bioretention cells, rain gardens, and rain cisterns). This “runoff reduction” approach is essentially a SWRCB-imposed regulatory requirement to implement Low Impact Development (“LID”) design features. Volume that cannot be addressed using non-structural BMPs must be captured in structural BMPs that are approved by the RWQCB.

Improving the quality of site runoff is necessary to improve water quality in impaired and threatened streams, rivers, and lakes (that is, water bodies on the EPA’s 303(d) list). The RWQCB prioritizes the water bodies on the 303(d) list according to potential impacts to beneficial uses. Beneficial uses can include a wide range of uses, such as nautical navigation; wildlife habitat; fish spawning and migration; commercial fishing, including shellfish harvesting; recreation, including swimming, surfing, fishing, boating, beachcombing, and more; water supply for domestic consumption or industrial processes; and groundwater recharge, among other uses. The State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these impaired water bodies. The TMDL is the quantity of a pollutant that can be safely assimilated by a water body without violating the applicable water quality standards.

Pursuant to the Clean Water Act, the RWQCB regulates construction discharges under the NPDES. The project sponsor of construction or other activities that disturb more than one acre of

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB³.

9.1.1 APPLICABILITY TO THE PROPOSED PROJECT

To obtain coverage under the SWRCB administered Construction General Permit, the applicant (typically through its civil engineer) must electronically file a number of permit-related compliance documents (Permit Registration Documents (PRDs), including a Notice of Intent (NOI), a risk assessment, site map, signed certification, SWPPP, Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). (QSDs are typically civil engineers, professional hydrologists, engineering geologists, or landscape architects.) Once filed, these documents become immediately available to the public for review and comment. At a minimum, the SWPPP shall identify BMPs for implementation during project construction that are in accordance with the applicable guidance and procedures contained in the California Stormwater Quality Association's *California Stormwater Best Management Practices Handbook* (2015).

10. STORM WATER LOW IMPACT DEVELOPMENT (SWLID)

The SWRCB and RWQCB adopted new design requirements and an updated LID Manual effective May 3rd, 2017. The 2017 Storm Water Low Impact Development (SWLID) guidelines are provided to better facilitate the processing of Clean Water Act permits. California's North Coast RWQCB routinely uses the SWLID Design Manual as an example program on how post-construction BMPs should be implemented.

The 2017 SWLID provides technical guidance for project designs that require the implementation of permanent storm water BMPs. This 2017 SWLID supersedes both the 2005 SUSMP guidelines and the 2011 version of the SWLID manual. To reduce storm water pollution, protect water quality of local waterways, and promote groundwater recharge, SWLID integrates specialized landscape features into an urban environment and directs runoff into these features where it can soak into the ground. This design approach mimics the storm water benefits of the natural environment. Specialized swales, planters, and raingardens provide beauty while also slowing runoff and removing pollutants. Plants and microbes that live in healthy soil use pollutants as nutrients, removing them from runoff.

The SWLID is formally defined as:

A development site design strategy with a goal of maintaining or reproducing the predevelopment hydrologic system through the use of design techniques to create a functionally equivalent hydrologic setting. Hydrologic functions of storage, infiltration, and groundwater recharge, as well as the volume and frequency of discharges are maintained through the use of

³ CGP Order 2009-0009-DWQ remains in effect, but has been amended by CGP Order 2009-0014-DWQ, effective February 14, 2011, and CGP Order 2009-0016-DWQ, effective July 17, 2012. The first amendment merely provided additional clarification to Order 2009-0009-DWQ, while Order 2009-0016-DWQ eliminated numeric effluent limits on pH and turbidity (except in the case of active treatment systems), in response to a legal challenge to the original order.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

integrated and distributed small-scale storm water retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths, and runoff time.

The SWLID Design Manual is intended to satisfy the specific requirements of “Order No. R1-2015-0030, NPDES No. CA-0025054 NPDES permit and waste discharge requirements for discharges from the municipal separate storm sewer systems.” Additional design requirements imposed by governing agencies, such as local grading ordinances, CAL Green, CEQA, 401 permitting, and hydraulic design for flood control still apply as appropriate.

The intention of the Design Manual is to promote the following SWLID goals:

- Minimize the adverse impacts from storm water runoff on water quality, the biological integrity of receiving waters, and the beneficial uses of water bodies.
- Minimize the percentage of impervious surfaces on land development projects and implement mitigation measures to mimic the pre-development water balance through infiltration, evapotranspiration, and capture and reuse of storm water.
- Minimize pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs, including source control BMPs or good housekeeping practices, SWLID planning and design strategies, and treatment control BMPs.
- Proper selection, design and maintenance of treatment control BMPs, and hydromodification control BMPs to address pollutants generated by land development, minimizing post-development surface flows and velocities, assuring long-term functionality of BMPs, and avoiding the breeding of vectors.

10.1 Projects That Trigger Requirements

Geographic Areas

The requirements set forth in this SWLID Design Manual apply to projects within the jurisdiction of City of Santa Rosa, City of Healdsburg, Town of Windsor, City of Cotati, City of Sebastopol, City of Cloverdale, City of Ukiah, and City of Rohnert Park as well as the portions of the County of Sonoma as shown in Attachment C of the NPDES MS4 Permit Order No. R1-2015-0030.

This SWLID manual does not apply to the areas south of the Russian River/Laguna De Santa Rosa watershed boundary, including portions of Petaluma, Sonoma, and the southern portion of the County of Sonoma as they are outside the jurisdiction of the North Coast RWQCB and have distinct design requirements.

Project Triggers and Exemptions

Since SWLID features are designed to mitigate for the permanent impacts caused by impervious surfaces, the total amount of impervious surface must be considered when determining whether or not a project triggers SWLID requirements. This evaluation must include the built-out project condition (including homes or structures that will be completed under separate building permits) as well as all phases of a phased project. Note that tributary areas where no impervious surface will be added or replaced are not required to install BMPs.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Impervious Surface

Impervious surfaces are defined as an area that has been modified such that storm water percolation into underlying soils is reduced or prevented. Examples of surfaces include concrete, asphalt, and roof tops. Existing gravel on a project site prior to the proposed project is considered to be pervious unless documentation is provided that demonstrates that it is impervious. Gravel placed as part of the proposed project is considered to be impervious unless documentation is provided to verify that it is pervious.

Site Determination

For the purposes of this Manual, the impacts that must be accounted for in the SWLID design includes everything within the project site of all improved parcels as well as all offsite or associated public improvements, such as trenching and repaving for utility connections.

10.1.1 APPLICABILITY TO THE PROPOSED PROJECT

The City of Cotati will require that an engineer prepare and submit SWLID Plan that integrates the 2017 SWLID Design Manual guidelines. The proposed project will create more than one acre of impervious surface and will therefore be conditioned to meet treatment and hydromodification control requirements. The hydromodification control design goal requires the project to capture and/or infiltrate and/or reuse one hundred percent of the post project volume.

The proposed project will be designed to implement permanent water quality treatment and hydro-modification control BMPs set forth in the 2017 SWLID; such as treatment of all runoff generated by a one-inch rainfall event in a 24-hour time period falling on all impermeable surfaces, and the exit off the project site of all such storm water at flow rates similar to predevelopment conditions.

11. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE PROTECTIONS

11.1.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE

Pursuant to Section 1602 of the California Fish and Game Code: “An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

- (1) CDFW receives written notification regarding the activity in the manner prescribed by CDFW. The notification shall include, but is not limited to, all of the following:
 - (A) A detailed description of the project’s location and a map.
 - (B) The name, if any, of the river, stream, or lake affected.
 - (C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
 - (D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
 - (E) A copy of any other applicable local, State, or federal permit or agreement already issued.
 - (F) Any other information required by CDFW” (Fish & Game Code 2023).

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Please see Section 1602 of the current California Fish and Game Code for further details as to the next steps once a written notification is submitted.

Please also note that while not stated in the regulations above, the CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, would require entering into a Streambed Alteration Agreement (SBAA) with the CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, the CDFW typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

11.1.2 APPLICABILITY TO THE PROPOSED PROJECT

There are no blue line streams or tributaries on the project site nor is there any riparian vegetation. Roadside ditches, excavated from uplands, occur along SR 116 and West Cotati Avenue. Only two of these ditches, LW1 and LW2 (Sheet 1) flow to the City storm drain system. All the other ditches onsite end onsite and have no connectivity to offsite waterways. The two ditches that flow to the City storm drain system flow through a series of underground pipes, eventually flowing out through another pipe to the Laguna de Santa Rosa. Thus, there are no streams or drainages on the project site that provide wildlife or fisheries habitat and that would meet the definition of a Section 1600 regulated stream.

12. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g. an occupancy permit must be issued), the lead agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an “Initial Study.” If there could be significant environmental impacts, the lead agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are “Categorical Exemptions” that apply to the proposed activity; thus the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. If the project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a “Negative Declaration.” If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a “Mitigated Negative Declaration” (MND) is typically prepared by the lead agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can’t be mitigated to a level considered less than significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines “endangered” species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. “Rare” species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will “substantially affect a rare or endangered species of animal or plant or the habitat of the species.” The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

12.1.1 APPLICABILITY TO THE PROPOSED PROJECT

This report has been prepared as a Biology section that is suitable for incorporation by the CEQA lead agency (in this case, City of Cotati) into a CEQA review document such as a MND or an Environmental Impact Report. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA.

13. IMPACTS ANALYSIS

Below the criteria used in assessing impacts to Biological Resources is presented.

13.1 Significance Criteria

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other federal, State, and local agencies’ considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as “significant,” “potentially significant,” or “less than significant.” Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated “waters of the United States” and/or stream channels.

13.1.1 THRESHOLDS OF SIGNIFICANCE

13.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.
- Have a substantial adverse effect on state or federally protected “wetlands” (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or State HCP.

13.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the Corps regulates the discharge of dredged or fill material into waters of the U.S., which includes wetlands, as discussed in the bulleted item above, and also includes “other waters” (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the State. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

13.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which the CDFW typically considers to include riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

14. IMPACT ASSESSMENT AND PROPOSED MITIGATION

In this section we discuss potential impacts to sensitive biological resources including special-status plant species, California tiger salamander, and waters of the U.S. and/or State. We follow each impact with a mitigation prescription that when implemented would reduce impacts to the greatest extent possible. This impact analysis is based on a preliminary site plan prepared in 2023.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

Appendix G – Checklist Items are listed below. Where there would be significant impacts to checklist categories, these impacts and required mitigation measures are fully discussed in the sections below.

Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Yes. Sebastopol meadowfoam suitable habitat, California tiger salamander upland habitat, and nesting birds, could all be impacted by the proposed project. See the impacts and mitigations detailed below.

Would the Proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

No. There is no riparian habitat or sensitive natural community on the project site that has been identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Therefore, the Proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community.

Would the Proposed Project have a substantial adverse effect on state or federally protected “wetlands” (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Yes. The proposed project would impact approximately 0.06-acre of potential waters of the U.S. and approximately 0.05-acre of potential non-federal waters of the State.

Would the Proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No. The Proposed Project would not adversely impact or interfere with wildlife movement corridors. The project site is an anthropogenic habitat that is surrounded by developed properties on all sides.

Would the Proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Yes, there is a City tree ordinance and tree removal must be addressed. There are no other local policies or ordinances with which this project would conflict.

Would the Proposed Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

No, there are no Habitat Conservation Plans or Natural Community Conservation Plans in force in the City of Cotati or Sonoma County.

14.1 Impact BIO-1: Development of the Proposed Project May Have a Potentially Significant Impact on Suitable Habitat for State and Federally listed Vernal Pool Plants (Potentially Significant)

Formal special-status plant surveys were conducted on the project site in 2023 by M&A on May 3, May 25, and June 7, 2023. No special-status plants were found during the first year of a two year rare plant survey protocol. The 2023 surveys were conducted at appropriate times when the targeted listed plants were identified in flower at a reference site (the Alton Lane Conservation Bank). Thus, provided the second year of surveys also has negative results and the target plants are observed at the reference site locations at the same time project site surveys are conducted, development of the project site is not expected to impact any special-status plant species.

Regardless, the seasonal wetlands onsite are still regarded as “suitable vernal pool plant habitat” (even with two years of negative survey findings) per the Programmatic BO for the Santa Rosa Plain and also because the project site lies within Sebastopol meadowfoam’s Core Area. Impacts to “suitable” listed plant habitat for Sebastopol meadowfoam must be mitigated by purchase of Sebastopol meadowfoam preservation or establishment credits. As a federal permit will be obtained for this project from the Corps, a federal nexus agency to the USFWS, pursuant to the USFWS’ formal Recovery Plan for the Santa Rosa Plain (USFWS 2016), and current mitigation policy implemented by the USFWS, mitigation that will compensate for impacts to “suitable vernal pool plant habitat” must be obtained for Sebastopol meadowfoam (*Limnanthes vinculans*) from a conservation bank located in the Sebastopol meadowfoam Core Area (Figure 7). ***Thus, pursuant to the CEQA, the proposed project may result in significant impacts to suitable vernal pool plant species habitat.*** Such impacts could be mitigated to a level considered less than significant pursuant to the CEQA.

14.2 Mitigation Measure BIO-1. For Impacts to Federally Listed Vernal Pool Plant Suitable Habitat

Appropriately timed surveys conducted in 2023 were negative for all special-status plants. If surveys in 2024 are also negative, it will demonstrate that the project site does not support federally listed or state listed vernal pool plants. Regardless, since the project site lies within the core area for Sebastopol meadowfoam, in accordance with agency regulations and per the 2020 Programmatic BO for the Santa Rosa Plain, the applicant shall be required to purchase vernal pool conservation credits for impacts to suitable Sebastopol meadowfoam habitat at 1.5:1 ratio⁴.

Accordingly, the project as proposed will impact 0.10-acre of “suitable vernal pool rare plant habitat” (i.e., seasonal wetlands). Thus, in consideration of the 1.5:1 required mitigation ratio, the applicant shall secure 0.15-acre of credits for Sebastopol meadowfoam (or as otherwise allowed by the Corps/USFWS) from a mitigation bank in the Sebastopol meadowfoam Core Area. Any rare plant conservation credits purchased for the project shall be approved by the USFWS prior

⁴ Please note that if Sebastopol meadowfoam was identified onsite the mitigation ratio would be twice as much or 3:1.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

to the purchase of the credits. The applicant shall be required to provide proof to the City of Cotati that these conservation credits have been purchased prior to commencement of grading on the project site.

When implemented, the above mitigation measure would reduce project impacts to federally listed vernal pool plant suitable habitat to a level considered less than significant pursuant to CEQA.

14.3 Impact BIO-2. Development of the Proposed Project Would Have a Potentially Significant Adverse Impact on Habitat for the California Tiger Salamander

The project site does not support any California tiger salamander breeding habitat. The seasonal wetlands onsite do not pond deep enough or for a long enough duration to support a breeding attempt to successful metamorphosis. Regardless, the project site occurs immediately south the South Sonoma Business Park project site where CTS larvae and adults were removed (salvaged) prior to placement of wetland fill and grading 20 plus years ago. There is no known breeding habitat (anymore) within 1.3 miles of the project site, and hasn't been for over two decades; thus, the possibility of California tiger salamanders residing in the immediate area and migrating to or across the project site today is very low. Regardless, the presence of this salamander cannot be dismissed entirely as the project site is within the California tiger salamander's West Cotati Core Area and designated Critical Habitat and must mitigate for the project's impact on California tiger salamander habitat. Thus, there will be an assumption that the proposed project will impact *habitat* suitable for California tiger salamander. ***Pursuant to the CEQA, the proposed project could result in significant impacts to California tiger salamander habitat.*** Such impacts could be mitigated to a level considered less than significant.

14.4 Mitigation BIO-2. California Tiger Salamander Critical Habitat

The closest known extant (existing) breeding record location for California tiger salamander is located greater than 1.3 miles away (Occurrence No. 396). Since adult California tiger salamanders have been salvaged (within the last 20 years) from upland areas within 500 feet of the project site, the mitigation ratio derived from the Programmatic BO (USFWS 2020) is a 2:1 ratio (for "project sites beyond 2,200 feet from a breeding site, but within 500 of a non-breeding occurrence"). That is, for each acre of habitat impacted, two acres must be set aside as mitigation.

Per the Programmatic BO, the portions of the 7.51-acre project site that constitute California tiger salamander over-summering or migration habitat are natural areas that are not paved or hard-packed surfaces. Approximately 3.61 acres of the 7.51-acre project site is currently developed with asphalt roadways or hard-packed, gravel-impregnated surfaces and parking areas (see Exhibit C). These developed surfaces do not constitute California tiger salamander habitat that warrants mitigation. Additionally, approximately 2.29 acres of undeveloped area north of SR 116 have already been mitigated as part of the South Sonoma Business Park (Exhibit C). The applicant for the South Sonoma Business Park entered into an 1802 Agreement with the CDFW and received a Biological Opinion from the USFWS for this impact and mitigated for the loss of habitat to the satisfaction of both agencies; the Walker Avenue Mitigation land was purchased, preserved and deeded over to the CDFW (the then CDFG).

In consideration of the 2:1 mitigation ratio for the project site, the applicant will need to provide 3.22 acres of mitigation credit. This mitigation acreage takes into account the already developed surfaces that do not constitute California tiger salamander habitat on the project site (3.61 acres), and the already mitigated impact acreage (2.29 acres) associated with the South Sonoma Business Park, thus, leaving impacts to 1.61⁵ acres of California tiger salamander habitat that would occur from development of the project site. ***The applicant would need to purchase 3.22 acres of California tiger salamander mitigation credit from a USFWS approved Conservation Bank.*** The applicant shall be required to provide proof to the City of Cotati that these California tiger salamander conservation credits have been purchased prior to commencement of grading on the project site. In lieu of conservation bank credits, the applicant may preserve extant occupied California tiger salamander habitat in the West Cotati Core California tiger salamander area or other geographic area as approved by the agencies via recordation of a perpetual conservation easement. Any preservation plan would have to be approved by the USFWS.

By appending the project to the Programmatic Biological Opinion and mitigating at a 2:1 ratio as detailed above, these measures would reduce significant impacts to the California tiger salamander to a level regarded as less than significant pursuant to CEQA.

14.5 Impact BIO-3. Development of the Proposed Project Would Have a Potentially Significant Impact on Nesting Raptors and Passerine Birds.

Nesting raptors (birds of prey) and passerine (perching) birds are protected pursuant to California Fish and Game Code (Sections 3503, 3503.5, 3513), and the Federal Migratory Bird Treaty Act. The oaks and eucalyptus trees present on the project site provide suitable nesting habitat for raptors and passerine birds. In addition, the grassland on the project site provides suitable nesting habitat for ground-nesting birds. Since, typically, most birds can fly out of harm's way, development of the project site would not be expected to harm adult birds. However, nesting birds are susceptible to take through disturbance that harms eggs or young. The project proponent can avoid impacts to nesting birds by conducting preconstruction nesting bird surveys and implementing avoidance measures. ***As such, pursuant to the CEQA, development of the proposed project could result in potentially significant impacts to nesting birds.*** Such impacts could be mitigated to a level considered less than significant.

14.6 Mitigation Measure BIO-3. Nesting Birds

To avoid impacts to nesting raptors and passerines, a nesting bird survey shall be conducted within 15 days prior to commencing with construction work if this work would begin between February 1 and August 31. The nesting bird survey shall be conducted on the project site and within a zone of influence around the project site. The zone of influence includes those areas off the project site where raptors could be disturbed by earth-moving vibrations or noise. The nesting bird survey should include examination of all suitable nesting habitats within 300 feet of the entire project site. A nesting bird survey report shall be prepared upon completion of the

⁵ 1.61 acres of impact is derived from the total project site acreage of 7.51 minus 3.61 acres of hard-packed surfaces which equals 3.90 acres, minus 2.29 acres of already mitigated land = 1.61 acres of impact.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

survey and provided to the City of Cotati with any recommendations required for establishment of protective buffers as necessary to protect nesting birds.

If birds are identified nesting on or within the zone of influence of the construction project, a qualified biologist shall establish a temporary protective buffer around the nest(s). The buffer must be of sufficient size to protect the nesting site from construction-related disturbance and shall be established by a qualified ornithologist or biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 75 feet from the nest site or nest tree dripline for small birds and up to 300 feet for sensitive nesting birds that include several raptor species known from the region of the project site. The nest buffer should be staked with orange construction fencing or orange lath staking.

No construction or earth-moving activity shall occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified ornithologist/biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise completed. In the region of the project site, most species complete nesting by mid-July. This date can be significantly earlier or later and would have to be determined by the qualified biologist. At the end of the nesting cycle, and abandonment of the nest by its occupants, as determined by a qualified biologist, temporary nest buffers may be removed, and construction may commence in established nesting buffer areas without further regard for the nest site.

When implemented, these mitigation measures would reduce project impacts to nesting raptors and passerine birds to a level considered less than significant pursuant to CEQA.

14.7 Impact BIO-4. Development of the Proposed Project Would Have a Significant Impact on Waters of the United States and/or State.

A draft wetland delineation has been submitted to the Corps for this agency's confirmation. This draft map shows that there is approximately 0.162-acre of federal jurisdictional seasonal wetland within the project site boundaries subject to the Corps' jurisdiction and 0.070-acre of non-federal (isolated) other waters/wetlands subject to regulation by the RWQCB. The proposed project would likely impact some of the delineated (federal and non-federal) jurisdictional areas. ***As such, pursuant to the CEQA, development of the proposed project would result in significant impacts to waters of the U.S. and State.*** Such impacts could be mitigated to a level considered less than significant.

14.8 Mitigation Measure BIO-4. Waters of the United States and/or State

Impacts to waters of the United States and/or State can be reduced to less-than-significant levels with incorporation of mitigation that includes avoidance, minimization of impacts, and/or mitigation compensation.

Under the proposed project design (Attachment B), the project will impact 0.06-acre of waters of the U.S. and 0.05-acre of non-federal waters of the State. The applicant shall compensate for the loss of waters of the U.S. and State via the purchase of wetland credits from a Corps- and RWQCB-approved wetland mitigation bank at no less than a 1:1 impacts to mitigation ratio. This

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

is the minimum mitigation acreage. Wetland credits will be purchased at the Corps' and RWQCB required mitigation ratios in compliance with the terms and conditions of the "permit" authorized for the project. Proof of the purchase of wetland mitigation credits shall be provided to the City of Cotati, the Corps, and the RWQCB in advance of grading activities on the project site. This credit acreage may be modified by the Corps and/or RWQCB and will appear as a condition of issued permits from these agencies. Should the mitigation requirements differ in the conditions of issued Corps and RWQCB permits, these conditions must be implemented by the project.

When implemented, these mitigation measures would reduce project impacts to waters of the U.S./State to a level considered less than significant pursuant to CEQA.

14.9 Impact BIO-5. Development of the Proposed Project Would Have a Significant Impact on Protected Trees

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would: conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Trees present on the project site are comprised of a mix of non-native, native and protected trees, such as valley oak, black oak, and several non-native (ornamental) tree species including mature blue gum trees. Pursuant to the City of Cotati Tree Ordinance, mitigation is required for impacts to protected trees. ***As such, pursuant to the CEQA, development of the proposed project could result in significant impacts to protected trees.*** Such impacts could be mitigated to a level considered less than significant.

14.10 Mitigation BIO-5. Protected Trees

The project will impact both native and non-native trees subject to the City of Cotati's Tree Protection Ordinance. Tree replacement mitigation measures are derived from the City of Cotati's *Tree Impact and Mitigation Policy Derived from City of Cotati Tree Mitigation and Protection Ordinance, Article 5, Chapter 17.54 of the City of Cotati Municipal Code Title 17 Land Use Code. Tree mitigation replacement numbers derived from Section 17.54.050 (Tree Required Replacement Trees. Planting and Replacement) Table 5-2.* The applicant shall submit an arborist report with a tree permit application as part of the application for the development project. The applicant shall mitigate impacts to trees as required by the City of Cotati.

Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

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Biological Resources Analysis
 Highway 116/West Cotati Alignment Plan
 City of Cotati, California

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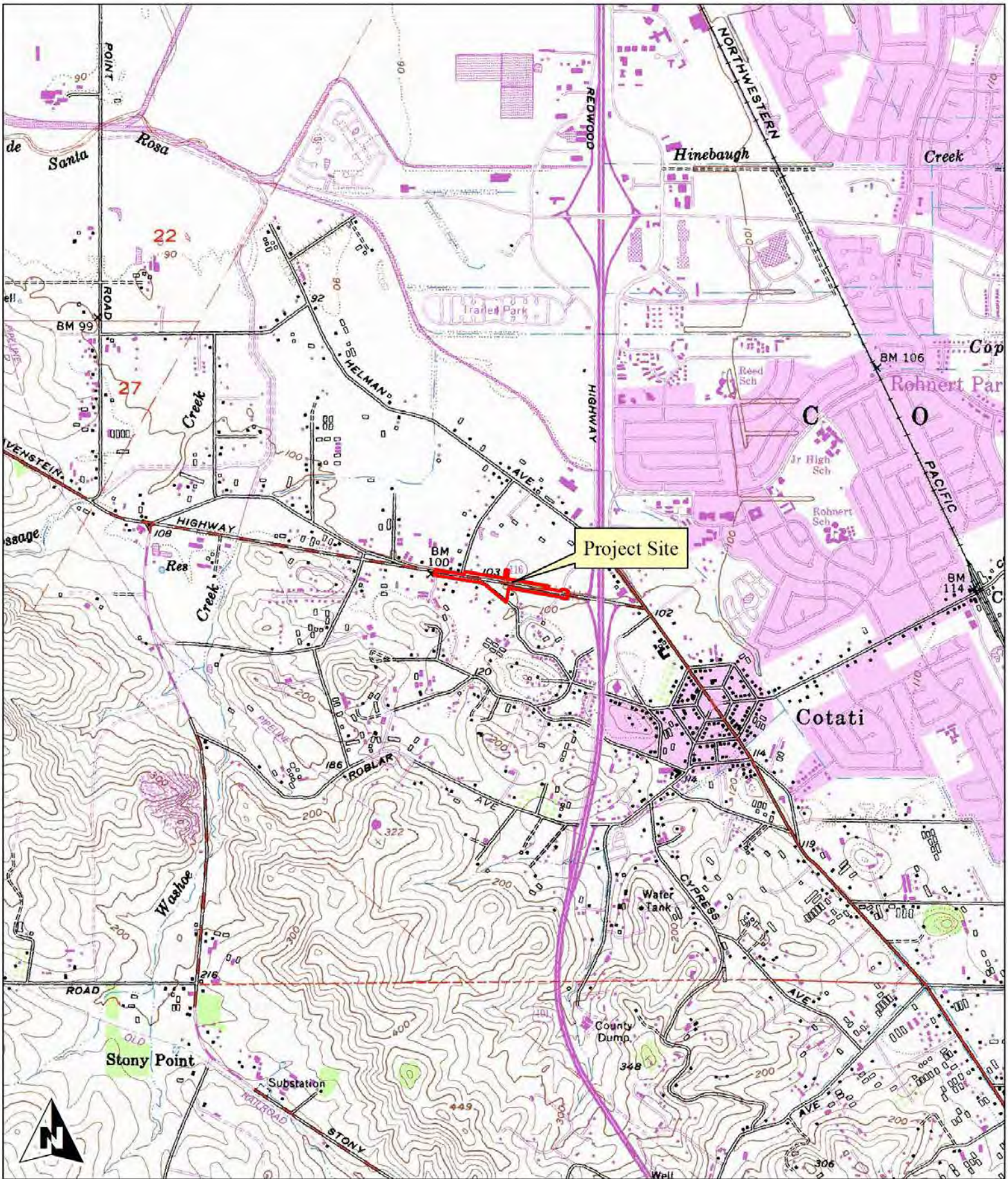
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Figure 2. Hwy 116 and W Cotati Ave Project Site
 Location Map
 Cotati, California



38.331743 -122.718643
 Section: 26; T6 N R8 W
 7.5-Minute Cotati quadrangle
 HUC08 Watershed CA: Russian
 Topography Source: USGS
 Map Preparation Date: June 19, 2023



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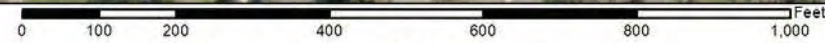
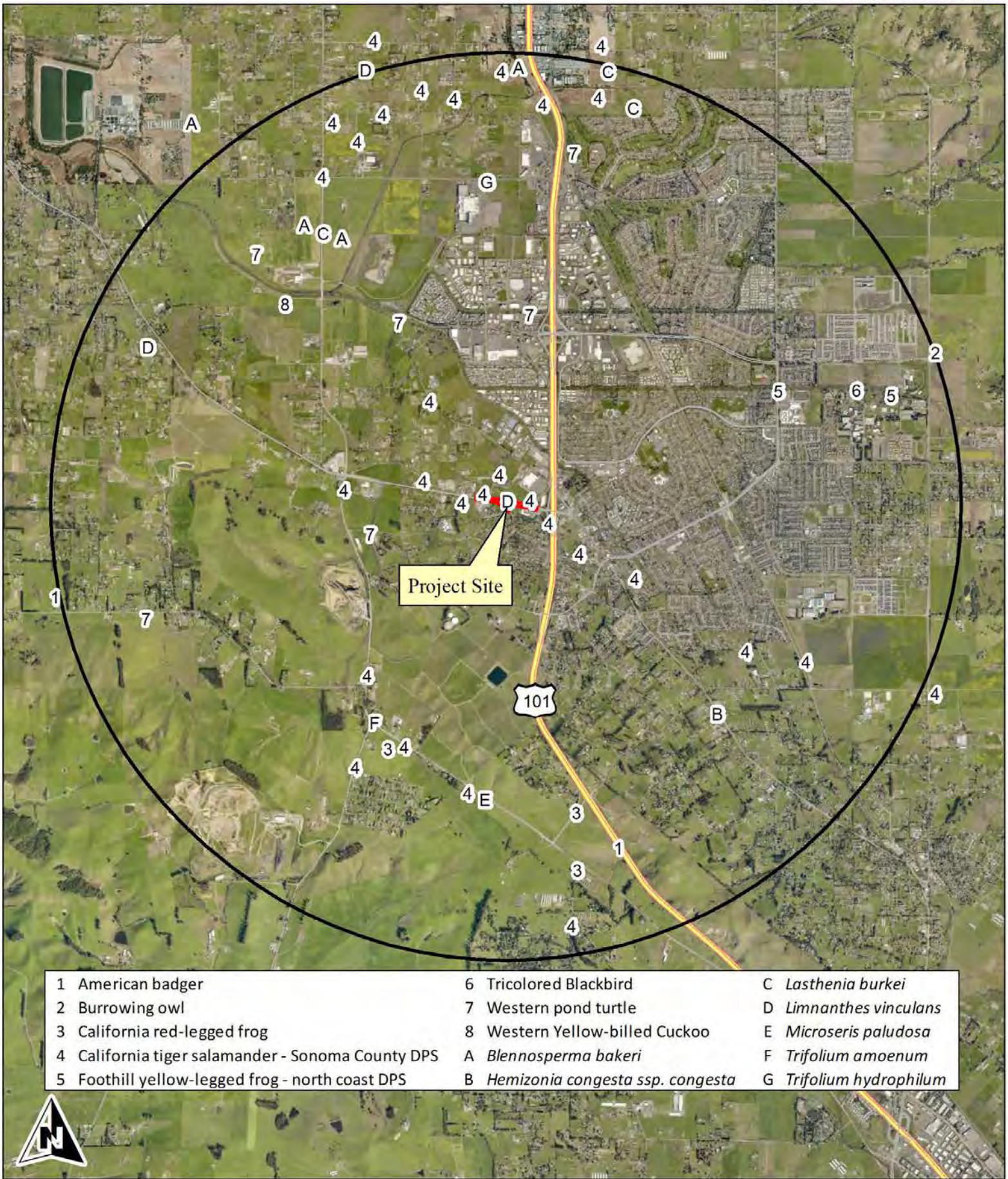


Figure 3. Aerial Photograph of the
Hwy 116 and W Cotati Ave Project Site
Cotati, California

Aerial Photograph Source: ESRI
Map Preparation Date: June 19, 2023



1 American badger	6 Tricolored Blackbird	C <i>Lasthenia burkei</i>
2 Burrowing owl	7 Western pond turtle	D <i>Limnanthes vinculans</i>
3 California red-legged frog	8 Western Yellow-billed Cuckoo	E <i>Microseris paludosa</i>
4 California tiger salamander - Sonoma County DPS	A <i>Blennosperma bakeri</i>	F <i>Trifolium amoenum</i>
5 Foothill yellow-legged frog - north coast DPS	B <i>Hemizonia congesta ssp. congesta</i>	G <i>Trifolium hydrophilum</i>

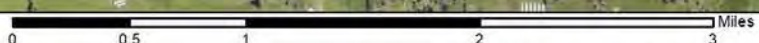


Figure 4. Known Special-Status CNDDDB Plant Species Within 3 Miles of the Highway 116/West Cotati Avenue Project Site

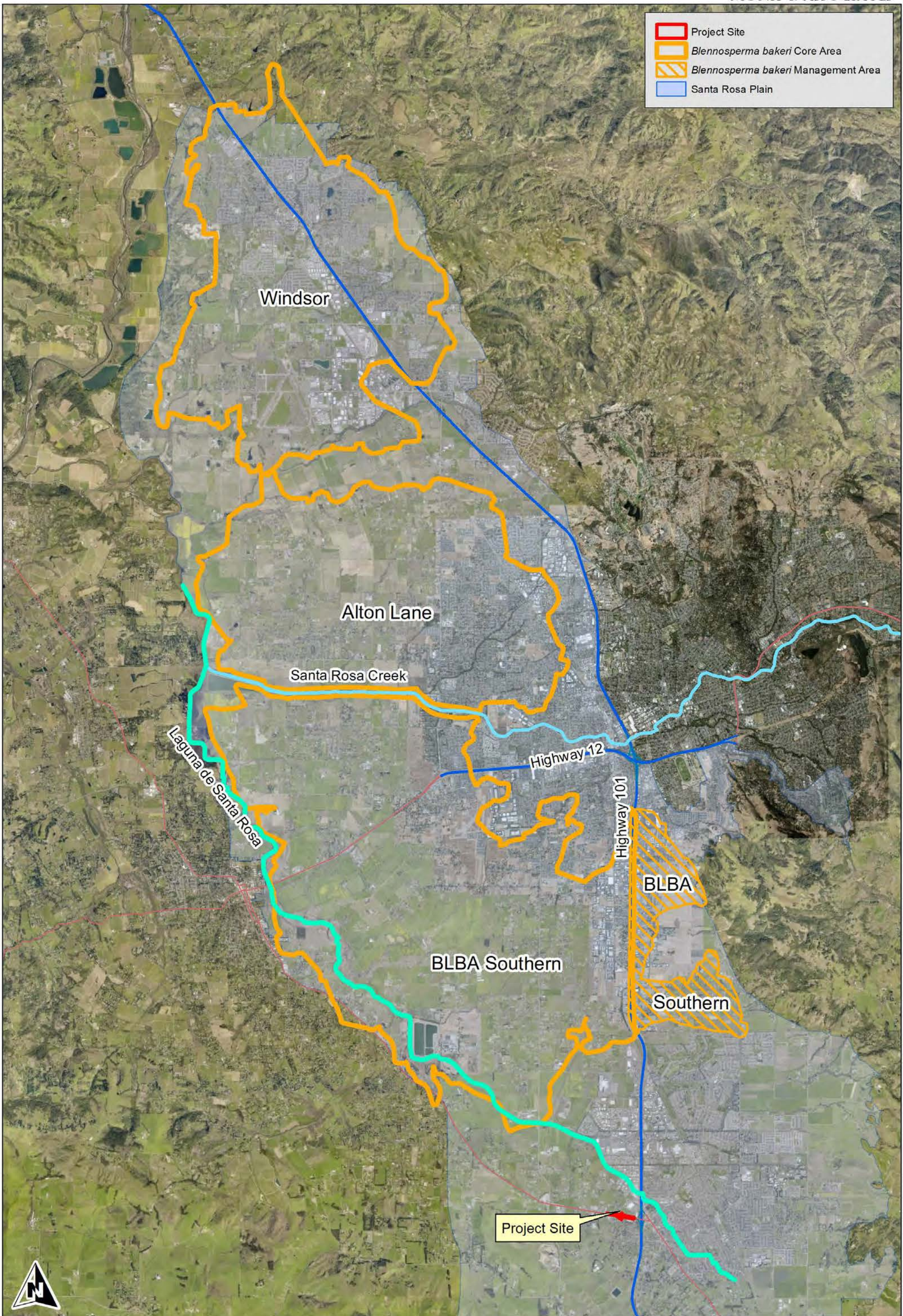


Figure 5. *Blennosperma bakeri* Core and Management Areas (from USFWS 2016) in the Vicinity of the Highway 116/West Cotati Avenue Project Site

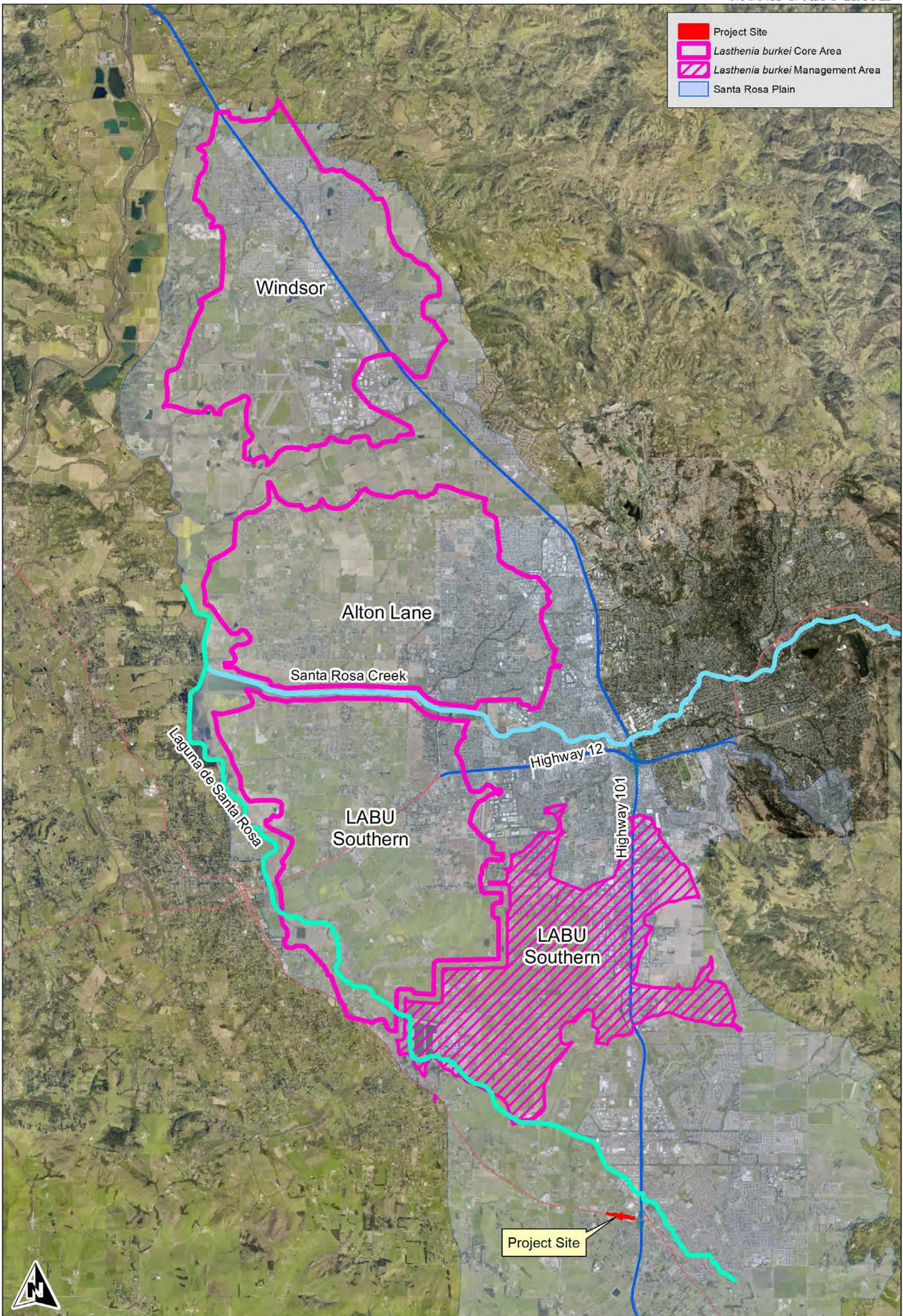


Figure 6. *Lasthenia burkei* Core and Management Areas (from USFWS 2016) in the Vicinity of the Highway 116/West Cotati Avenue Project Site

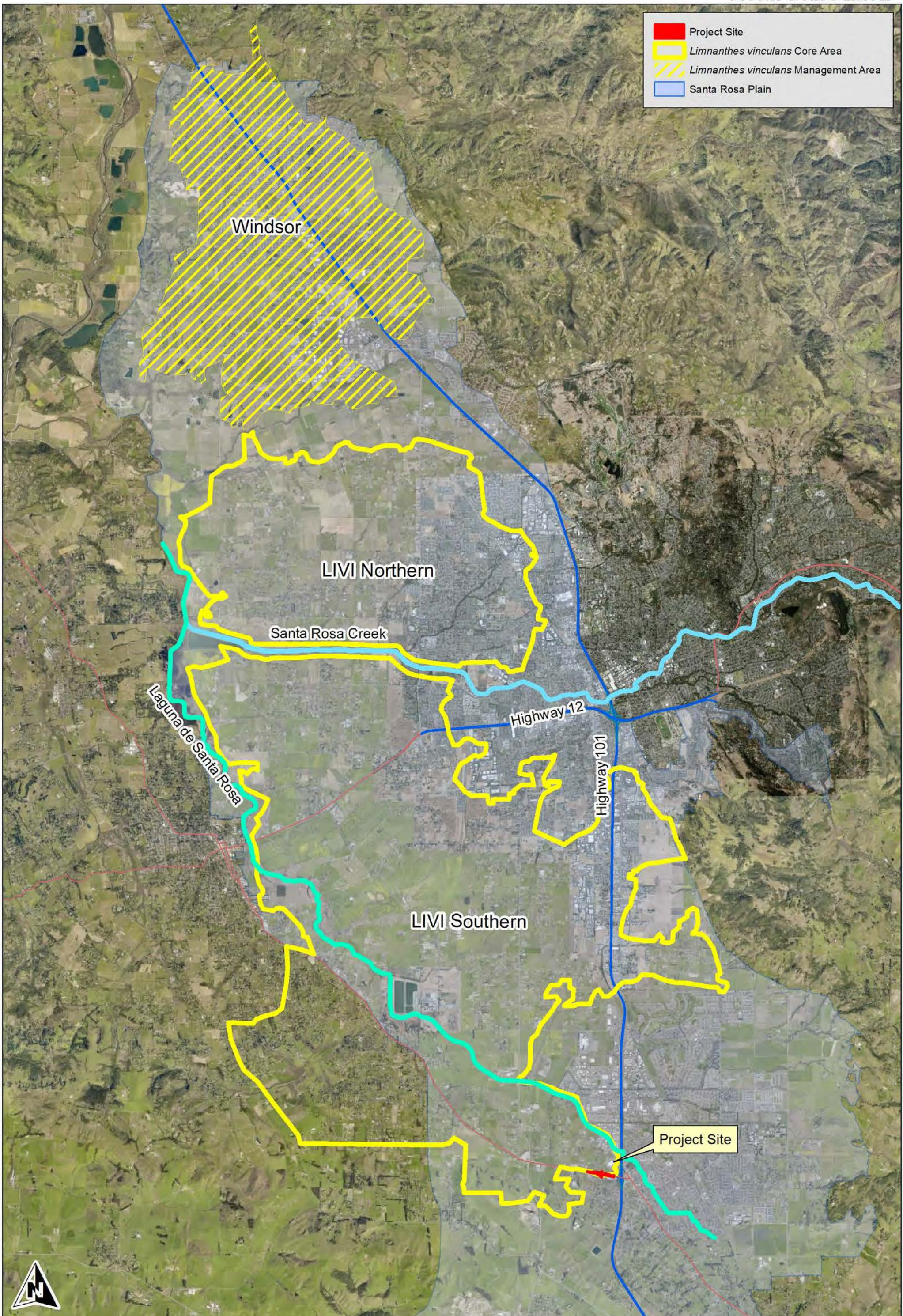


Figure 7. *Limnanthes vinculans* Core and Management Areas (from USFWS 2016) in the Vicinity of the Highway 116/West Cotati Avenue Project Site

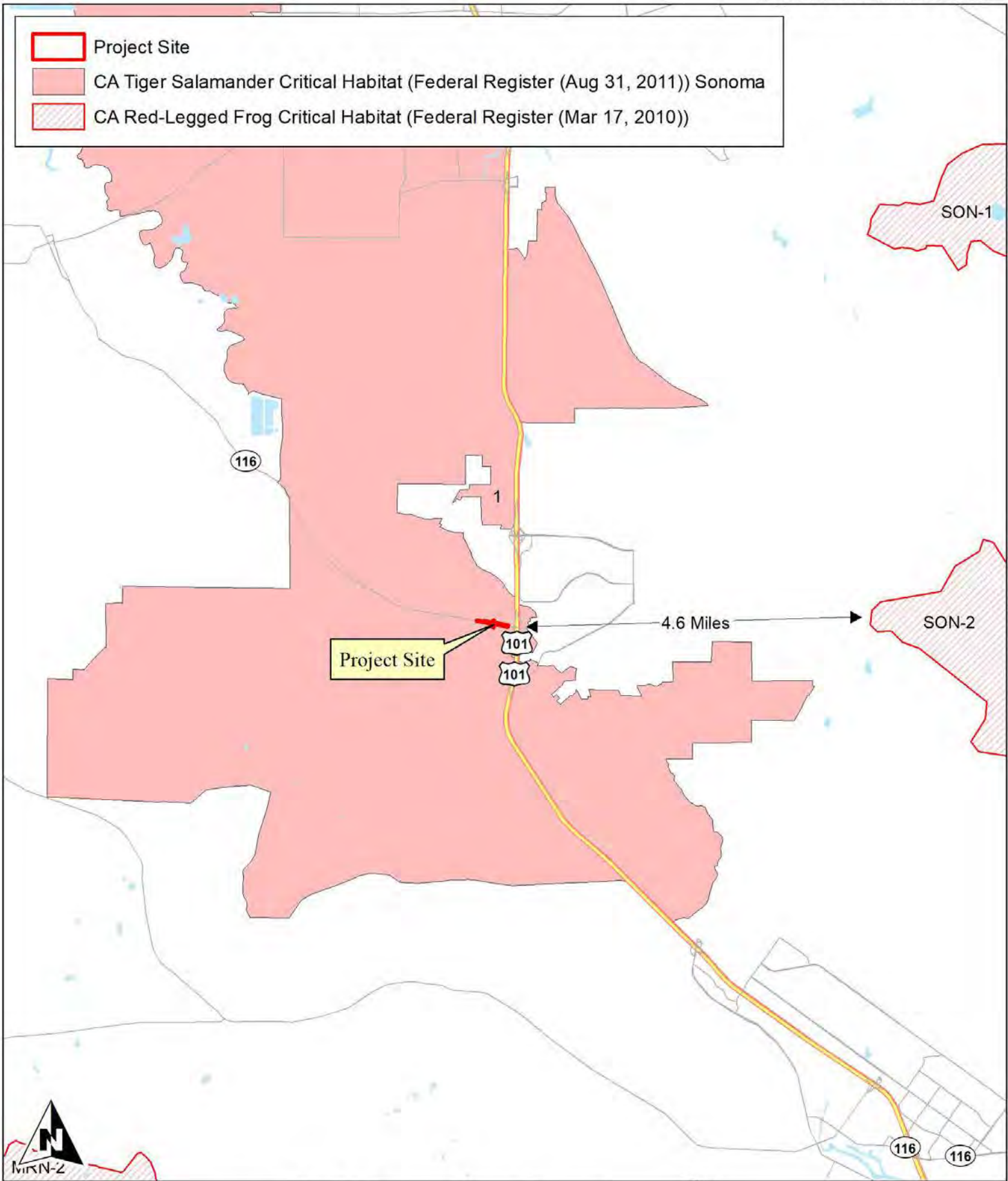


Figure 8. USFWS Critical Habitat
in the Vicinity of the
Highway 116/West Cotati Avenue Project Site

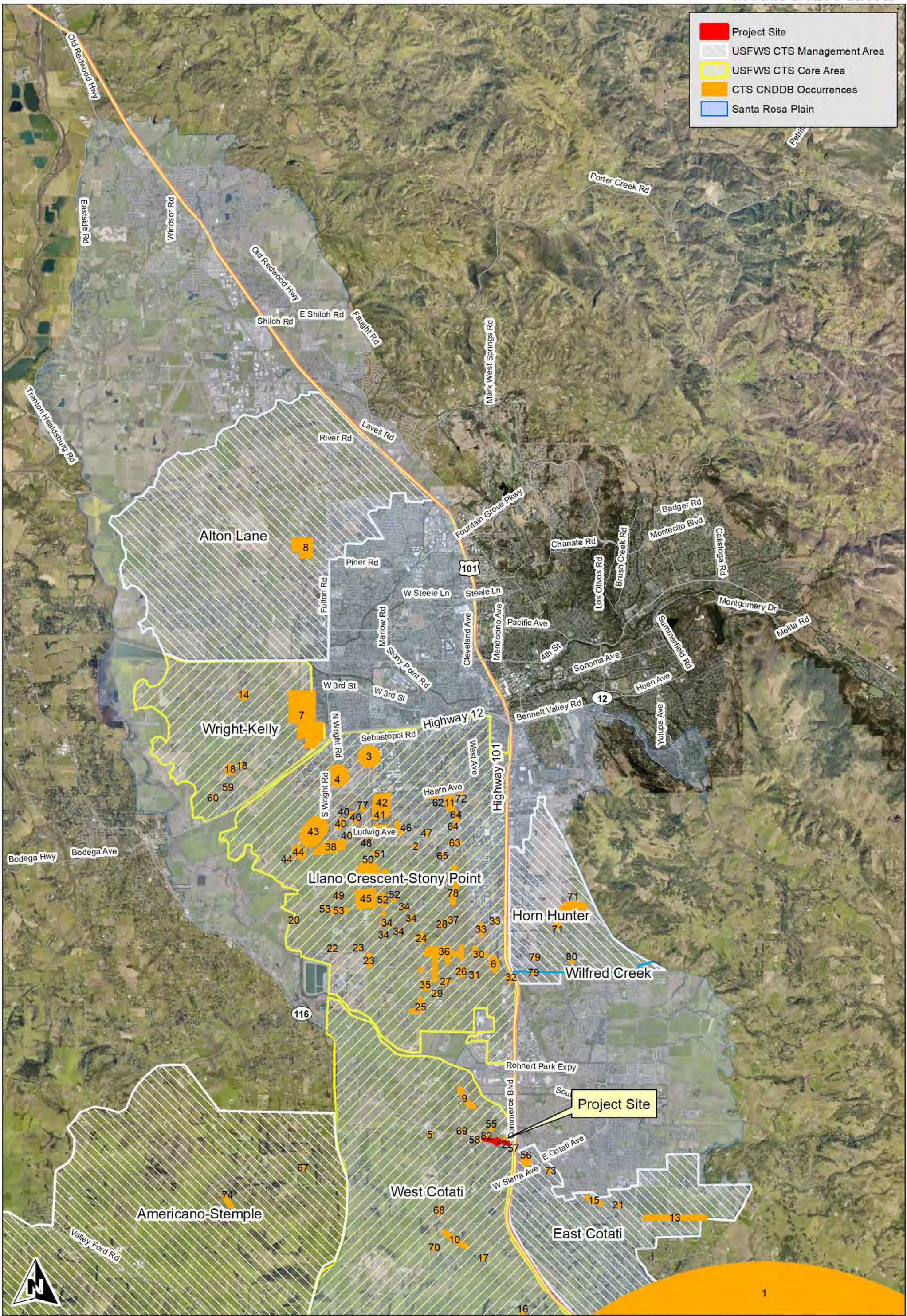


Figure 9. Santa Rosa Plain California Tiger Salamander Core and Management Areas (USFWS 2016) in the Vicinity of the Highway 116/West Cotati Avenue Project Site

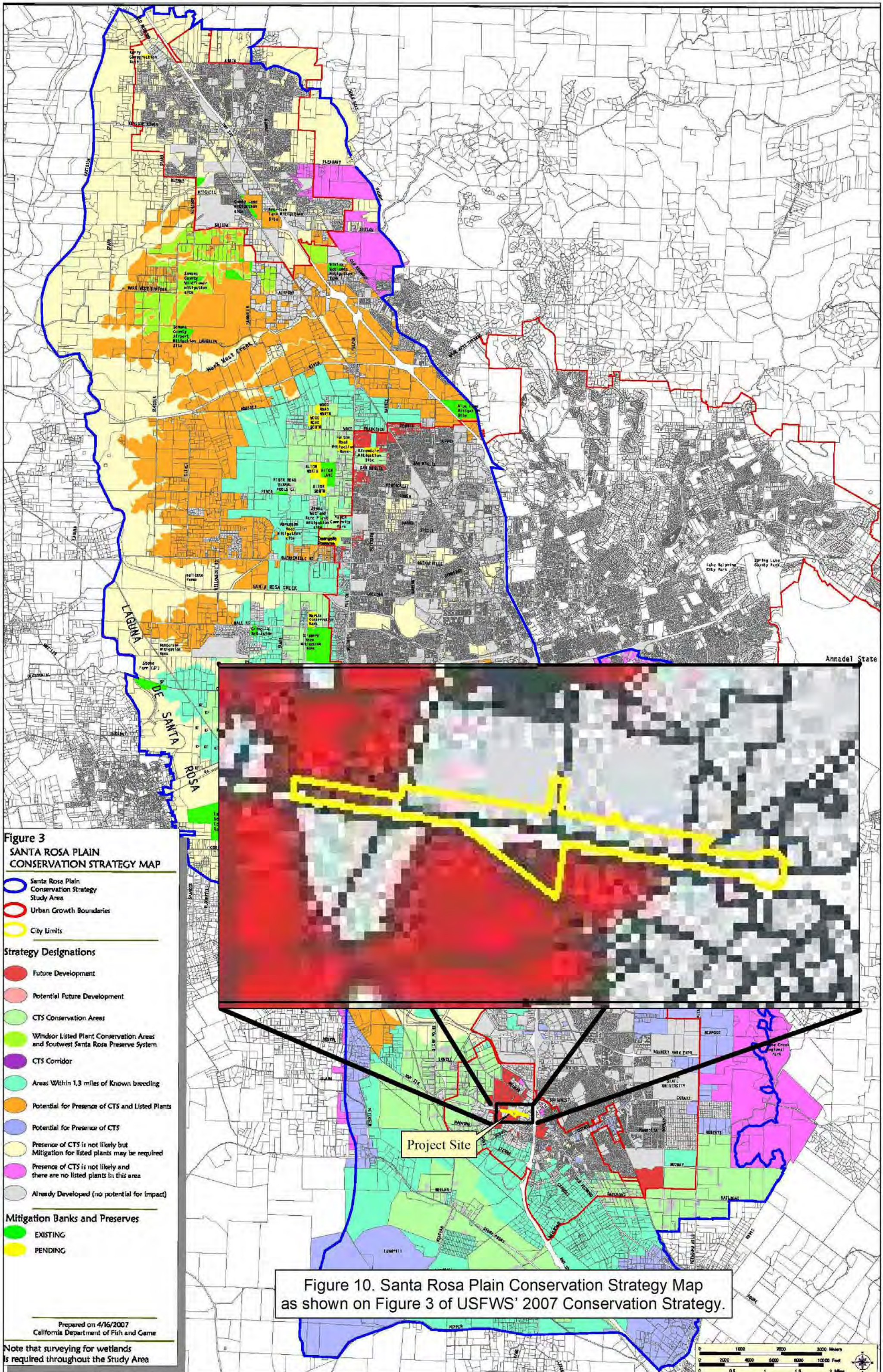


Figure 10. Santa Rosa Plain Conservation Strategy Map as shown on Figure 3 of USFWS' 2007 Conservation Strategy.

Table 1
Plant Species Observed on the Highway 116 Widening Project

Gymnosperms

Pinaceae

Abies sp. Fir

Angiosperms - Dicots

Adoxaceae

Sambucus nigra subsp. caerulea blue elderberry

Anacardiaceae

Toxicodendron diversilobum Poison-oak

Apiaceae

**Ammi majus* Greater ammi
 **Conium maculatum* Poison hemlock
 **Daucus carota* Queen Anne's lace
 **Foeniculum vulgare* Sweet fennel
 **Scandix pecten-veneris* Venus' needle

Apocynaceae

**Vinca major* Periwinkle

Asteraceae

Baccharis pilularis subsp. pilularis Baccharis
 **Calendula arvensis* Field-marigold
 **Carduus pycnocephalus subsp. pycnocephalus* Italian thistle
 **Helminthotheca echioides* Bristly ox-tongue
 **Hypochaeris radicata* Rough cat's-ear
 **Lactuca serriola* Prickly lettuce
 **Sonchus asper subsp. asper* Prickly sow-thistle
 **Sonchus oleraceus* Common sow-thistle
 **Tragopogon porrifolius* Common salsify

Brassicaceae

**Brassica nigra* Black mustard
 **Raphanus sativus* Wild radish
Rorippa curvisiliqua Western yellow cress
 **Sinapis arvensis* Wild mustard

Caryophyllaceae

**Spergula arvensis* Stickwort

Convolvulaceae

**Convolvulus arvensis* Bindweed

Fabaceae

**Acacia mearnsii* Black wattle
Lathyrus sp. Wild pea
Lupinus bicolor Bicolored lupine
Lupinus nanus Sky lupine
 **Medicago polymorpha* California burclover

Table 1
Plant Species Observed on the Highway 116 Widening Project

<i>*Melilotus indicus</i>	Annual yellow sweetclover
<i>*Trifolium dubium</i>	Little hop clover
<i>*Trifolium hirtum</i>	Rose clover
<i>*Vicia sativa</i>	Common vetch
Fagaceae	
<i>Quercus kelloggii</i>	California black oak
<i>Quercus lobata</i>	Valley oak
Geraniaceae	
<i>*Erodium botrys</i>	Broad-leaf filaree
<i>*Geranium dissectum</i>	Cut-leaf geranium
Limnanthaceae	
<i>Limnanthes douglasii subsp. douglasii</i>	Douglas meadowfoam
Lythraceae	
<i>*Lythrum hyssopifolia</i>	Hyssop loosestrife
Malvaceae	
<i>*Malva parviflora</i>	Cheeseweed
Montiaceae	
<i>Claytonia perfoliata</i>	Miner's lettuce
Myrsinaceae	
<i>*Lysimachia arvensis</i>	Scarlet pimpernel
Myrtaceae	
<i>*Eucalyptus sp.</i>	Eucalyptus
Onagraceae	
<i>Epilobium brachycarpum</i>	Summer cottonweed
Orobanchaceae	
<i>Triphysaria versicolor subsp. faucibarbata</i>	Yellow owl's-clover
Papaveraceae	
<i>Eschscholzia californica</i>	California poppy
Plantaginaceae	
<i>*Plantago lanceolata</i>	English plantain
Polygonaceae	
<i>*Rumex acetosella</i>	Sheep sorrel
<i>*Rumex crispus</i>	Curly dock
Ranunculaceae	
<i>*Ranunculus muricatus</i>	Spiny-fruit buttercup
Rosaceae	
<i>*Rubus armeniacus</i>	Himalayan blackberry
Rubiaceae	
<i>Galium aparine</i>	Goose grass

Table 2
Wildlife Observed on the Highway 116/West Cotati Alignment Plan Project Site.

Amphibians	
Sierran treefrog	<i>Pseudacris sierra</i>
Reptiles	
Western fence lizard	<i>Sceloporus occidentalis</i>
California red-sided garter snake	<i>Thamnophis sirtalis infernalis</i>
Birds	
Turkey Vulture	<i>Streptopelia decaocto</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Eurasian Collared-Dove	<i>Streptopelia decaocto</i>
Anna's Hummingbird	<i>Calypte anna</i>
California Scrub Jay	<i>Aphelocoma californica</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Western Bluebird	<i>Sialia mexicana</i>
European Starling	<i>Sturnus vulgaris</i>
Yellow-rumped Warbler	<i>Setophaga coronata</i>
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>

Table 3

Special-Status Plant Species Known to Occur in the Vicinity of the Highway 116/West Cotati Alignment Plan Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Asteraceae					
<i>Blennosperma bakeri</i> Sonoma sunshine	Fed: FE State: CE CNPS: Rank 1B.1	February-April	Valley and foothill grassland (mesic); vernal pools.	The closest record for this species is located approximately 2.1 miles northwest of the project site (Occurrence No. 20).	Low to none. Not observed during approp. timed surveys spring of 2023. A 2nd year of surveys will be conducted in 2024 per USFWS guidelines. No impact expected.
<i>Hemizonia congesta congesta</i> Congested-headed hayfield tarplant	Fed: - State: - CNPS: Rank 1B.2	April-November	Valley and foothill grassland. 20 to 560 meters. Clay soils	The closest record for this species is located approximately 1.9 miles southeast of the project site (Occurrence No. 12).	Low to none. Was not observed during appropriately timed surveys conducted in the spring and summer of 2023. No impact expected.
<i>Lasthenia burkei</i> Burke's goldfields	Fed: FE State: CE CNPS: Rank 1B.1	April-June	Meadows and seeps (mesic); vernal pools.	The closest record for this species is located approximately 2 miles northwest of the project site (Occurrence No. 29).	Low to none. Not observed during approp. timed surveys spring of 2023. A second year of surveys will be conducted in 2024 per USFWS guidelines. No impact expected.
<i>Microseris paludosa</i> Marsh microseris	Fed: - State: - CNPS: Rank 1B.2	April-July	Closed-cone coniferous forest; cismontane woodland; coastal scrub; valley and foothill grassland. 5-300 m.	The closest record for this species is located approximately 1.9 miles south of the project site (Occurrence No. 18).	None. Was not observed during appropriately timed surveys conducted in the spring of 2023. No impact expected.
Fabaceae					
<i>Trifolium amoenum</i> Showy Indian clover	Fed: FE State: - CNPS: Rank 1B.1	April-June	Valley and foothill grassland (sometimes serpentinite)	The closest record for this species is located approximately 1.6 miles southwest of the project site (Occurrence No. 18).	None. Was not observed during appropriately timed surveys conducted in the spring of 2023. No impact expected.
<i>Trifolium hydrophilum</i> Saline clover	Fed: - State: - CNPS: Rank 1B.2	April-June	Marshes and swamps; valley and foothill grassland (mesic, alkaline); vernal pools. 0-300 m.	The closest record for this species is located approximately 2.1 miles north of the project site (Occurrence No. 49).	None. Was not observed during appropriately timed surveys conducted in the spring of 2023. No impact expected.

Table 3

Special-Status Plant Species Known to Occur in the Vicinity of the Highway 116/West Cotati Alignment Plan Project Site

Family	Taxon	Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Limnanthaceae	<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	Fed: FE State: CE CNPS: Rank 1B.1	April-May	Meadows (mesic); vernal pools.	The closest record for this species is located approximately 0.15 mile north of the project site (Occurrence No. 35).	Low to none. Not observed during surveys spring of 2023. A 2nd year of surveys will be conducted in 2024. Project will need to mitigate for impacts to "suitable habitat," see text.

***Status**

- Federal:
 FE - Federal Endangered
 FT - Federal Threatened
 FPE - Federal Proposed Endangered
 FPT - Federal Proposed Threatened
 FC - Federal Candidate
- State:
 CE - California Endangered
 CT - California Threatened
 CR - California Rare
 CC - California Candidate
 CSC - California Species of Special Concern
- CNPS:
 Rank 1A - Presumed extinct in California
 Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
 Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/ high degree and immediacy of threat)
 Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)
 Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

- CNPS Continued:
 Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere
 Rank 2A - Extirpated in California, common elsewhere
 Rank 2B.1 - Seriously endangered in California, but more common elsewhere
 Rank 2B.2 - Fairly endangered in California, but more common elsewhere
 Rank 2B.3 - Not very endangered in California, but more common elsewhere
 Rank 3 - Plants about which we need more information (Review List)
 Rank 3.1 - Plants about which we need more information (Review List)
 Rank 3.2 - Plants about which we need more information (Review List)
 Rank 3.3 - Fairly endangered in California
 Rank 4 - Plants of limited distribution - a watch list



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Exhibit A. Assessor Parcel Numbers for the
Hwy 116 and W Cotati Ave Project
Cotati, California

APN Source: Sonoma County Assessors GIS
Aerial Photograph Source: ESRI
Map Preparation Date: June 29, 2023



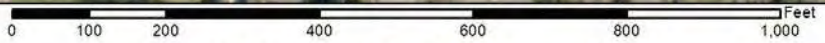
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Exhibit B. Known CNDDDB Records of California Tiger Salamander
Within 1.3 Miles of the
Highway 116/West Cotati Avenue Project Site

Source: CDFW, California
Natural Diversity Data Base, 2023
Aerial Photograph Source: ESRI
Map Preparation Date: August 23, 2023

-  Project Site (7.51 Acres)
-  Hardpack Area (3.61 Acres)
-  Previously Mitigated Area (2.29 Acres)*

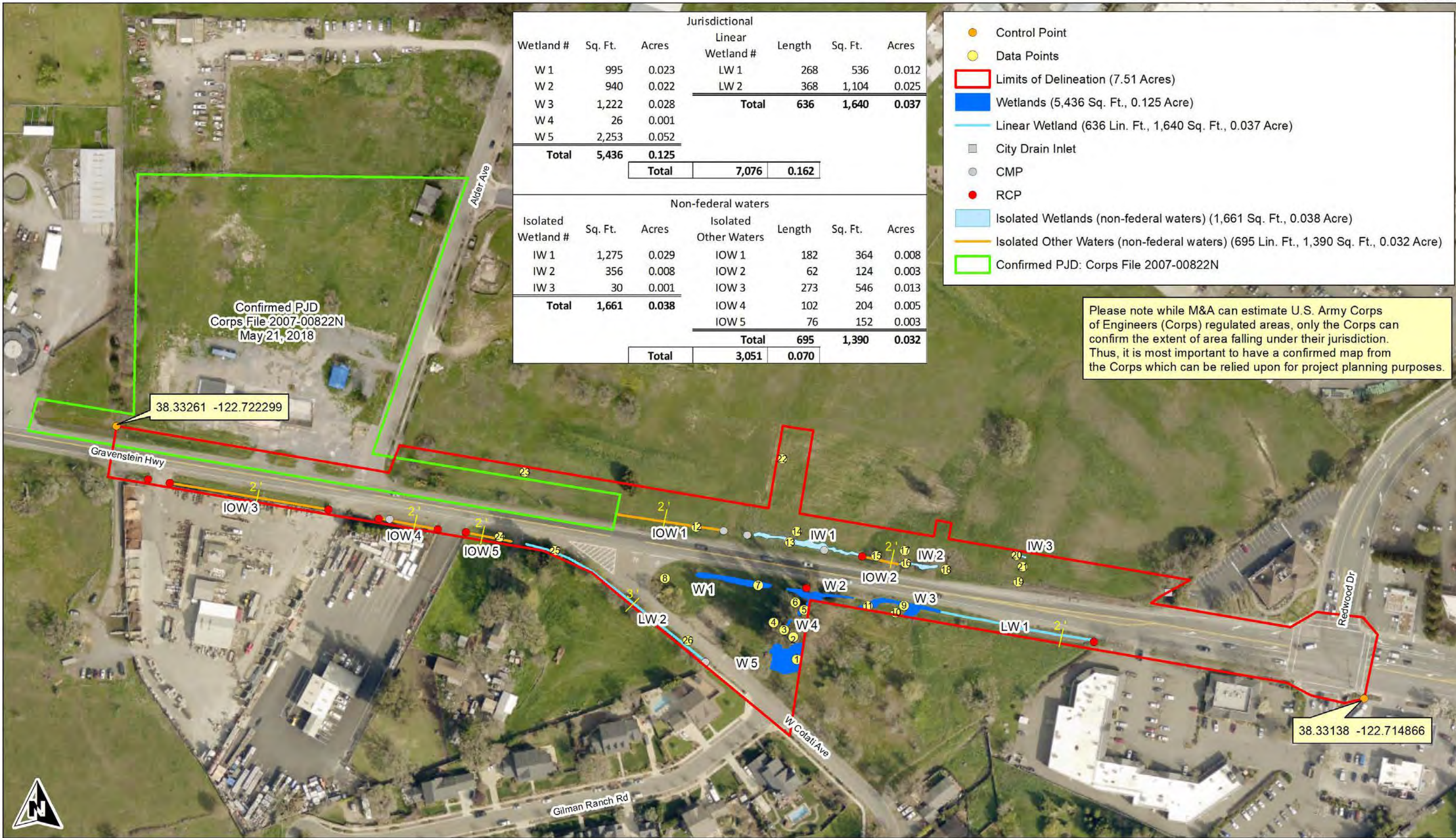
* Area Already Mitigated For Sebastopol Meadowfoam and CTS
As Part Of The South Sonoma Business Park
(USFWS BO 1-1-03-F-0002; Corps File No. 23 540N; CDFW 1802-2001-017-03)



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Exhibit C. Hardpack Analysis of the
Hwy 116 and W Cotati Ave Project Site
Cotati, California

Aerial Photograph Source: ESRI
Map Preparation Date: August 25, 2023

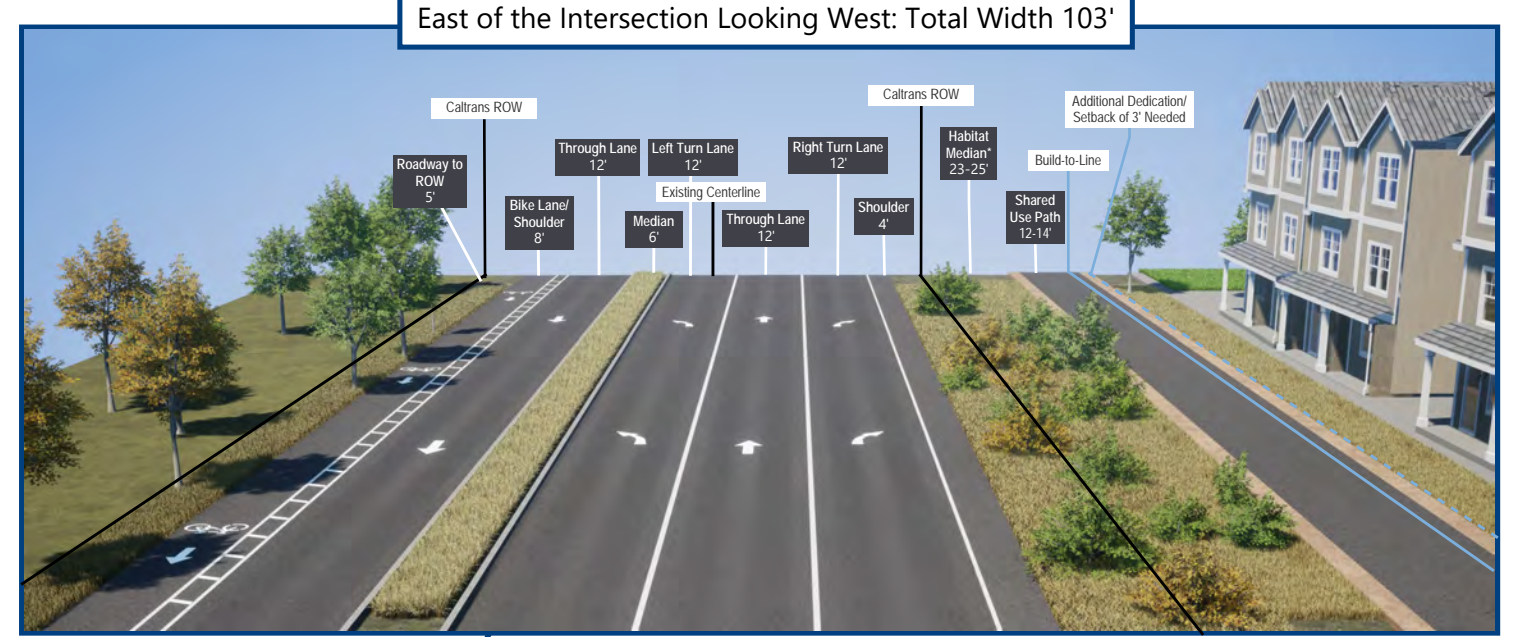
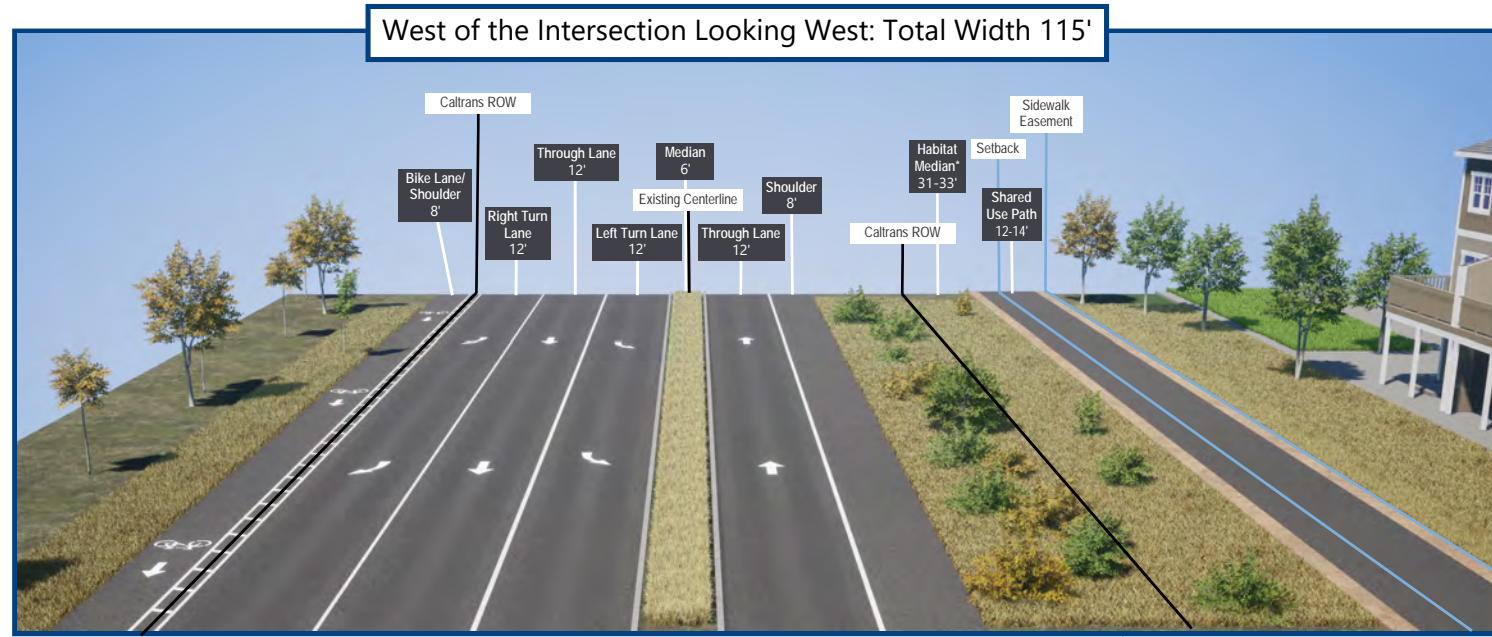


Jurisdictional						
Wetland #	Sq. Ft.	Acres	Linear Wetland #	Length	Sq. Ft.	Acres
W 1	995	0.023	LW 1	268	536	0.012
W 2	940	0.022	LW 2	368	1,104	0.025
W 3	1,222	0.028	Total	636	1,640	0.037
W 4	26	0.001				
W 5	2,253	0.052				
Total	5,436	0.125	Total	7,076		0.162

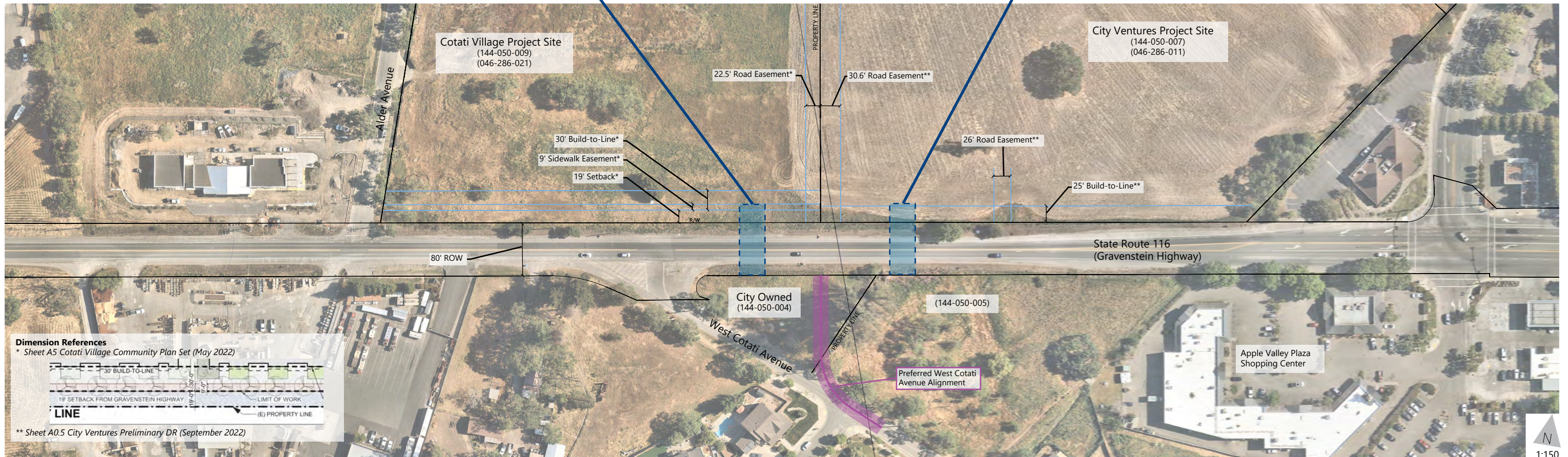
Non-federal waters						
Isolated Wetland #	Sq. Ft.	Acres	Isolated Other Waters	Length	Sq. Ft.	Acres
IW 1	1,275	0.029	IOW 1	182	364	0.008
IW 2	356	0.008	IOW 2	62	124	0.003
IW 3	30	0.001	IOW 3	273	546	0.013
			IOW 4	102	204	0.005
			IOW 5	76	152	0.003
Total	1,661	0.038	Total	695	1,390	0.032
			Total	3,051		0.070

- Control Point
- Data Points
- ▭ Limits of Delineation (7.51 Acres)
- Wetlands (5,436 Sq. Ft., 0.125 Acre)
- Linear Wetland (636 Lin. Ft., 1,640 Sq. Ft., 0.037 Acre)
- City Drain Inlet
- CMP
- RCP
- Isolated Wetlands (non-federal waters) (1,661 Sq. Ft., 0.038 Acre)
- Isolated Other Waters (non-federal waters) (695 Lin. Ft., 1,390 Sq. Ft., 0.032 Acre)
- ▭ Confirmed PJD: Corps File 2007-00822N

Please note while M&A can estimate U.S. Army Corps of Engineers (Corps) regulated areas, only the Corps can confirm the extent of area falling under their jurisdiction. Thus, it is most important to have a confirmed map from the Corps which can be relied upon for project planning purposes.



*Access Easement and Irrevocable Off-Road Dedication



Dimension References
 * Sheet A5 Cotati Village Community Plan Set (May 2022)
 ** Sheet A0.5 City Ventures Preliminary DR (September 2022)



State Route 116 and West Cotati Avenue Project Map

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Notes

Vehicle Lane Configurations:

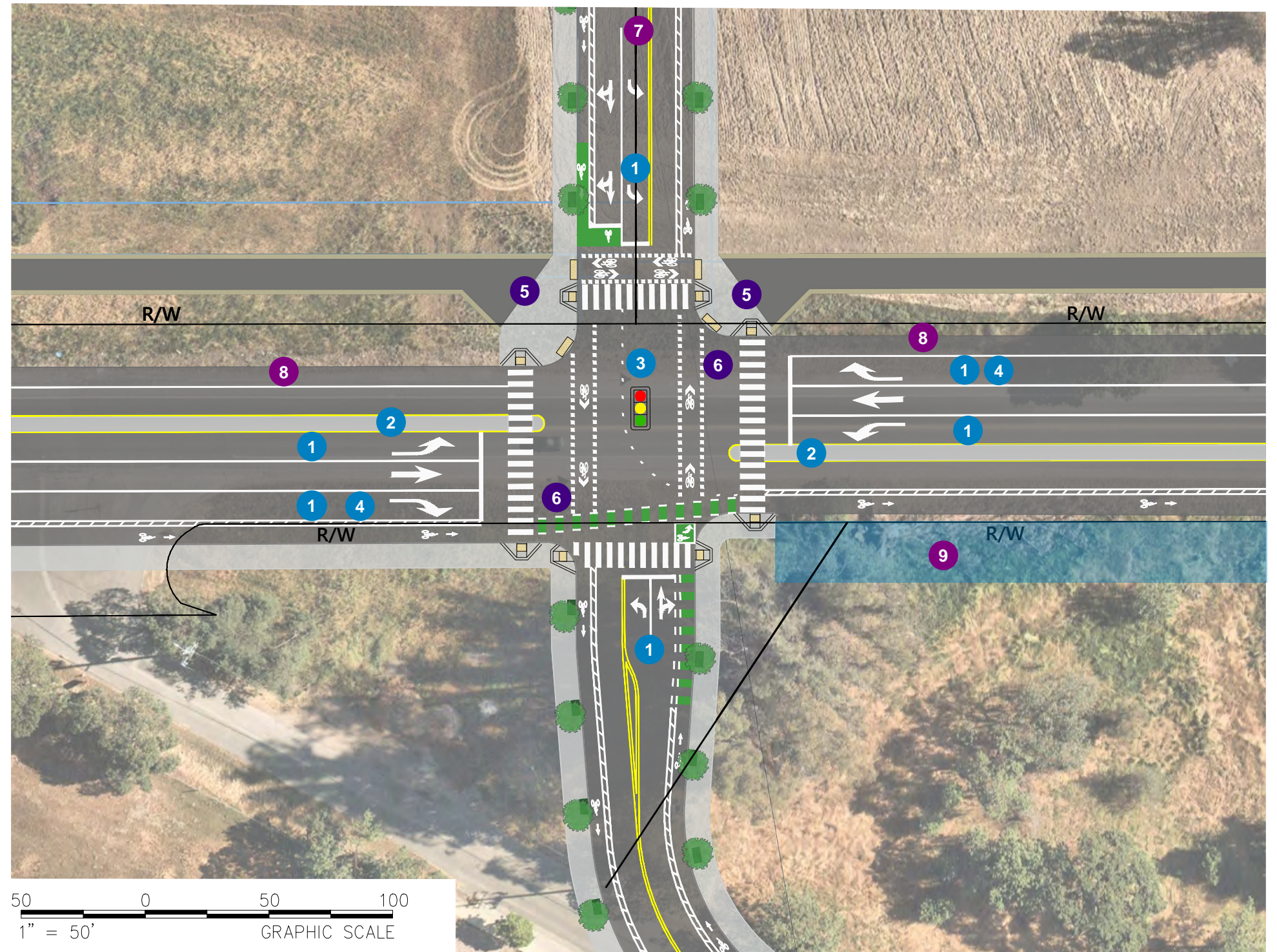
- 1 Length and geometry of turn pockets to be developed based on future analysis and engineering.
- 2 Size and materials of median to be determined based on future study.
- 3 Intersection striping to guide motorists and establish path for left turning bicycles
- 4 Implement a protected right turn phase and no right turn on red to reduce conflicts with bicycles.

Bicycle and Pedestrian Facilities:

- 5 Bikeway and pedestrian mixing zone to be refined during final design, including ramp configuration.
- 6 Bicycle conflict striping through the intersection varies in style to maintain efficacy of calling attention to bike path-of-travel. Striping style may be changed in future design.

General Notes:

- 7 Roadway, sidewalk, and bikeway to be integrated into proposed development projects. Additional coordination, analysis, and engineering will be required.
- 8 Future study may consider westbound Class II bikeway along SR 116
- 9 Consider allocating 20 ft outside of R/W to accommodate raised median, Class IV cycle track, sidewalk, and landscaping buffers as part of future development



State Route 116 and West Cotati Avenue
Conceptual Plan



CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL
DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

May 23, 2023
 CADD FILE: W:\Projects\2022_Projects\SR116 - West Cotati - Concept - 2023-05-15.dwg