

REVISION 2
BIOLOGICAL RESOURCES ANALYSIS
38 DEGREES NORTH PHASE 2 PROJECT
CITY OF SANTA ROSA, CALIFORNIA
APN: 044-051-055

June 9, 2020

Prepared for

Kennedy Wilson
151 S. El Camino Drive
Beverly Hills, California 90212
Attention: Mr. Dave Eadie

Prepared by

Monk & Associates, Inc.
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595

TABLE OF CONTENTS

1. INTRODUCTION 1

2. PROPERTY LOCATION AND SETTING 1

3. PROPOSED PROJECT 1

 3.1 Offsite Improvements 2

4. ANALYSIS METHODS 2

 4.1 Background Research 2

 4.2 Site Investigation 2

 4.2.1 RARE PLANT SURVEYS 2

 4.2.2 WETLAND DELINEATION 3

 4.2.3 TREE SURVEY 3

5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES 4

 5.1 Topography and Hydrology 4

 5.2 Plant Communities and Associated Wildlife Habitats 4

 5.2.1 NON-NATIVE ANNUAL GRASSLAND 4

 5.2.2 SEASONAL WETLANDS 5

 5.2.3 WETLAND DRAINAGE FEATURES 5

 5.3 Wildlife Corridors 5

6. SPECIAL-STATUS SPECIES DEFINITION 6

 6.1 Definitions 6

 6.2 Potential Special-Status Plant Species on the Project Site 8

 6.2.1 SONOMA SUNSHINE 9

 6.2.2 BURKE’S GOLDFIELDS 9

 6.2.3 SEBASTOPOL MEADOWFOAM 9

 6.3 Analysis of the Effects of the Project on FESA/CESA Listed Plants 10

 6.4 Potential Special-Status Wildlife Species on the Project Site 10

 6.4.1 CALIFORNIA TIGER SALAMANDER 11

 6.4.2 WHITE-TAILED KITE 14

7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS 14

 7.1 Federal Endangered Species Act 14

 7.1.1 RESPONSIBLE AGENCY 16

 7.1.2 APPLICABILITY TO THE PROPOSED PROJECT 16

 7.2 Federal Migratory Bird Treaty Act 17

 7.2.1 APPLICABILITY TO THE PROPOSED PROJECT 18

 7.3 California Endangered Species Act 18

 7.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT 18

 7.3.2 APPLICABILITY TO THE PROPOSED PROJECT 20

 7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513 20

 7.4.1 APPLICABILITY TO THE PROPOSED PROJECT 20

 7.5 Santa Rosa Plain Conservation Strategy 21

 7.5.1 APPLICABILITY TO THE PROPOSED PROJECT 21

 7.6 USFWS Recovery Plan for the Santa Rosa Plain (USFWS 2016) 22

 7.6.1 APPLICABILITY TO THE PROPOSED PROJECT 22

 7.7 CITY OF SANTA ROSA TREE ORDINANCE 23

 7.7.2 APPLICABILITY TO THE PROPOSED PROJECT 26

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

8. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE..... 27

8.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting 27

8.1.1 SECTION 404 OF THE CLEAN WATER ACT 27

8.1.2 APPLICABILITY TO THE PROPOSED PROJECT 29

8.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)..... 32

8.2.1 SECTION 401 OF THE CLEAN WATER ACT 32

8.2.2 APPLICABILITY TO THE PROPOSED PROJECT 32

8.2.3 PORTER-COLOGNE WATER QUALITY CONTROL ACT 33

8.2.4 APPLICABILITY TO THE PROPOSED PROJECT 33

8.2.5 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) 34

8.2.6 APPLICABILITY TO THE PROPOSED PROJECT 36

9. STORM WATER LOW IMPACT DEVELOPMENT (SWLID)..... 37

9.1 Projects That Trigger Requirements 38

9.1.1 APPLICABILITY TO THE PROPOSED PROJECT 38

9.2 California Department of Fish and Wildlife Protections..... 39

9.2.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE..... 39

9.2.2 APPLICABILITY TO THE PROPOSED PROJECT 39

10. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS..... 40

10.1.1 APPLICABILITY TO THE PROPOSED PROJECT 40

11. IMPACTS ANALYSIS 41

11.1 Significance Criteria 41

11.1.1 THRESHOLDS OF SIGNIFICANCE 41

12. IMPACT ASSESSMENT AND PROPOSED MITIGATION 42

12.1 Impact BIO-1. Nesting Birds (Passerines and Raptors) 42

12.2 Mitigation Measure BIO-1 (Passerines and Raptors)..... 42

12.3 Impact BIO-2. Development of the Project would have a significant adverse impact on trees (Significant)..... 43

12.4 Mitigation Measure BIO-2. Impacts to Trees..... 44

12.5 Impact BIO-3. Development of the proposed project would have a significant impact on Waters of the U.S. and/or State (Significant)..... 44

12.6 Mitigation Measure BIO-3. Impacts to Waters of the U.S. and/or State 45

12.7 Impact BIO-4. Development of the proposed project would have a significant impact on CDFW Section 1602 jurisdictional areas (Significant) 46

12.8 Mitigation Measure BIO-4. Impacts to CDFW Section 1602 jurisdictional areas..... 46

13. LITERATURE CITED 48

FIGURES
(At Back of Report)

Figure 1. Regional Map of the 38° North Phase 2 Project Site.

Figure 2. 38° North Phase 2 Project Site Location Map.

Figure 3. Aerial Photograph of the 38° North Phase 2 Project Site.

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

Figure 4. Known CNDDDB Records for Special-Status Species Within 3 Miles of the 38° North Phase 2 Project Site.

Figure 5. Sonoma Sunshine Core and Management Areas (USFWS 2016) 38° North Phase 2 Project Site.

Figure 6. Burke's Goldfields Core and Management Areas (USFWS 2016) 38° North Phase 2 Project Site.

Figure 7. Sebastopol Meadowfoam Core and Management Areas (USFWS 2016) 38° North Phase 2 Project Site.

Figure 8. USFWS Critical Habitat in the Vicinity of the 38° North Phase 2 Project Site.

Figure 9. Santa Rosa Plain California Tiger Salamander Core and Management Areas (USFWS 2016) 38° North Phase 2 Project Site.

TABLES (At Back of Report)

Table 1. Plant Species Observed on the 38° North Phase 2 Project Site.

Table 2. Wildlife Species Observed on the 38° North Phase 2 Project Site.

Table 3. Special-Status Plant Species Known to Occur Within 3 Miles of the 38° North Phase 2 Project Site.

Table 4. Special-Status Wildlife Species Known to Occur Within 3 Miles of the 38° North Phase 2 Project Site.

TABLES (in text)

Table A. Tree Survey: 38° North Phase 2 Project Site.

Table B. Impacts to Waters U.S./State

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

ATTACHMENTS
(At Back of Report)

Attachment A. Preliminary CEQA Site Plan: 38° North Phase 2, prepared by TSD Engineering, Inc. January 22, 2020.

Attachment B. Sheet 1. Corps-Confirmed Aquatic Resources Kawana Apartments Phase 2 Project Site.

Attachment C. Sheet 2. Proposed Impacts and Avoidance: 38 Degrees North Phase 2 Project Site.

Exhibit A. Tree Survey: 38° North Phase 2 Project Site.

1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this *Biological Resources Analysis* for the proposed 38 Degrees North Phase 2 project site (herein referred to as the project site) located in the City of Santa Rosa, California (Figures 1 and 2). The purpose of the 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 construction of the proposed apartment homes and the potential future construction of the remainder area with commercial use.

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 (CNPS). Biological resources also include waters of the U.S. and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW.

This *Biological Resources Analysis* also provides mitigation measures for “potentially significant” and “significant” impacts that could occur to biological resources. 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 of Regulations §§ 15000 et seq). Accordingly, this report is suitable for review and inclusion in any review being conducted by the City of Santa Rosa for the proposed project pursuant to the CEQA.

2. PROPERTY LOCATION AND SETTING

The approximately 11-acre project site is located east of Petaluma Hill Road in the City of Santa Rosa, Sonoma County, California (Figures 1 and 2). The project site is immediately east of Petaluma Hill Road and north of Yolanda Road, both roads that provide access to the surrounding residential and commercial areas. The project site is bordered to the south and east by grazed/mowed, non-native annual grassland that is currently being developed as part of the Kawana Meadows Subdivision. The extension of Farmers Lane, along the southern boundary of the project site, was rough graded in 2018 by the Kawana Meadows Subdivision. Private residences occur to the west of Petaluma Hill Road. The 38 Degrees North Phase 1, also known as Kawana Springs, is currently under construction immediately north of the project site. Figure 3 provides an aerial photograph of the project site, showing the land use of the site and the surrounding area.

3. PROPOSED PROJECT

The proposed Project, 38 Degrees North Phase 2 (“Project”), is located on a 10.9-acre parcel at 2660 Petaluma Hill Road in the City of Santa Rosa (APN 044-051-055). The Project includes the development of 172 multi-family residential units contained within eight three-story buildings, a 2.54-acre Open Space Preserve, and a 1.04-acre site for the future development of a 21,000 square foot community shopping center. Amenities to be provided as part of the Project include an outdoor community area, a pool, deck and spa area, and a club house containing a fitness

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

center. The Preliminary CEQA Site Plan: 38 Degrees North Phase 2, prepared by TSD Engineering, Inc., dated January 22, 2020, is provided as Attachment A. The Site Plan shows the proposed site layout, the commercial site, location of the Open Space Preserve with its perimeter 3:1 transitional fill slopes to allow for development of the elevated building pads, as well as access points, drive aisles, carports and parking. A bus pullout stop with bench will be provided at the southwest corner of the project site along Petaluma Hill Road for immediate use by Sonoma County Transit and future use by Santa Rosa City Bus.

3.1 Offsite Improvements

The proposed Project would also construct the required offsite roadway improvements at the project site frontages along Petaluma Hill Road, Franz Kafka Avenue and Farmers Lane, including sidewalks, curbs, gutters, and pavement. In addition, the Project is required to construct a left turn lane on eastbound Yolanda Avenue at Petaluma Hill Road. This improvement will consist of a three-lane section within the existing 40-foot wide right-of-way. The section will include a 11-foot wide through lane in each direction and a 12-foot wide eastbound turn lane in the middle of the road at the approach to Petaluma Hill Road. The proposed work along Yolanda Avenue may also include a 10- foot wide construction easement along the northern edge of Yolanda Avenue.

4. ANALYSIS METHODS

4.1 Background Research

Prior to preparing this *Biological Resources Analysis* report, M&A researched the most recent version of CDFW's Natural Diversity Database (CNDDDB 2019) for historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare) known to occur in the region of the project site. 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 have ever been recorded on or within a zone of influence of the project site.

4.2 Site Investigation

M&A has completed multiple years of project site investigations for several different owners on this project site and in the immediate vicinity.

4.2.1 RARE PLANT SURVEYS

Rare plant surveys have been completed in multiple years. M&A originally completed full investigations on this project site in 2006 for Pulte Homes Group. In 2006 special-status plant surveys were conducted by M&A qualified botanist Ms. Stephanie Scolari on March 20, April 17, May 18, and June 22, 2006. The surveys followed published survey guidelines provided then by California Department of Fish and Game (CDFG 2000), USFWS (2005a, b), and the California Native Plant Society (CNPS 2001). In May 2007, and again in April 2009, Mr. Geoff Monk conducted follow-up site investigations looking for rare plants and examining wetland conditions for two different prospective owners. In April 2014, Mr. Monk again examined the project site to verify wetland conditions for another prospective owner and, at that time, examined the project site for potentially occurring rare plants. On May 3 and July 19, 2018 M&A biologists Ms. Hope Kingma and Ms. Christy Owens again conducted rare plant surveys

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

of the project site incorporating revised CDFW published guidelines for conducting rare plant surveys (CDFW 2018). Finally, another year of rare plant surveys was conducted on the project site by M&A qualified biologists Ms. Owens and Ms. Sarah Lynch in March, April and May of 2020 following current survey guidelines (CDFW 2018, CNPS 2001, and USFWS 2005a, b).

Reference site visits were made at the Alton Lane Mitigation Site by M&A prior to conducting each project site rare plant survey. Reference site visits were made to be certain that rare plant surveys were conducted on the project site when targeted rare plants were visible and in flower on the days of survey. The Alton Lane Mitigation Site supports extant colonies of Burke's goldfields (*Lasthenia burkei*), Sebastopol meadowfoam (*Limnanthes vinculans*) and Sonoma sunshine (*Blennosperma bakeri*), the three primary listed vernal pool species of focus in the Santa Rosa Plain. Although no reference site was visited for many-flowered navarretia (*Navarretia leucocephala* ssp. *plieantha*), as such reference sites are not accessible, the rare plant survey dates nonetheless encompassed periods when this rare plant would be visible, either vegetatively or while in flower.

A list of the plants observed on the project site in 2020 is provided as Table 1. ***No state or federally listed plants, or plants with lessor protective status have ever been identified on the project site. Accordingly, the proposed project will not impact rare plants.***

4.2.2 WETLAND DELINEATION

On May 3, 2018, M&A biologists, Ms. Kingma and Ms. Owens also conducted a detailed wetland delineation of the project site. The wetland delineation was conducted according to the Corps' 1987 *Wetlands Delineation Manual* (Corps 1987) in conjunction with the regional supplement for the Arid West Region (Corps 2008).

Vegetation, hydrology, and soils information were taken at 25 data points throughout the project site. The locations of these data points are indicated on the confirmed Aquatic Resources Delineation Map (Sheet 1, Attachment B). Data points were mapped using a Trimble Geo-7X Global Positioning System (GPS) having sub-meter accuracy. The delineation map was created from the GPS files using ArcMap 10.6. All spatial data were projected into the California State Plane, NAD 83 coordinate system, Zone 2. Using GPS technology, the boundaries (within 30 inches) of the delineated wetland areas were transferred to an aerial photograph of the project site. On July 19, 2018, the Corps confirmed the extent of its jurisdiction pursuant to the Clean Water Act (CWA) on the 38 Degrees North Phase 2 project site. This Corps-confirmed Aquatic Resources Delineation Map is provided as Sheet 1, Attachment B.

4.2.3 TREE SURVEY

On November 15, 2018, M&A staff conducted a survey to document and map all of the trees on the project site, and to measure the diameter at breast height (DBH) of each tree (tree diameter measured at 4.5 feet above the ground). The Tree Survey information is provided in Exhibit A.

5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES

5.1 Topography and Hydrology

The project site is characterized by gently to moderately sloping topography that drains towards the southwest corner of the project site. The northern portion of the project site supports several shallow topographic lows that collect stormwater and remain inundated or saturated in the wet months of the year. Evidence of prolonged inundation within these topographic low areas include vegetation suppression and matted vegetation.

A tributary with headwaters in Taylor Mountain Regional Park east of the project site flows through several private properties prior to flowing onto the project site. This drainage bisects the project site and flows seasonally east to west. On the west side of the project site it flows into a roadside ditch along the eastern edge of Petaluma Hill Road. The roadside ditch appears to have been filled at the intersection of Yolanda Avenue at some point in the last few years (Sheet 1). Owing to the blockage in this roadside ditch at the southwest corner of the project site, a new erosional channel now flows from the roadside ditch to a culvert under the Farmers Lane Extension. This culvert connects to the reconstructed ditch alongside Petaluma Hill Road south of the Farmers Lane Extension that was constructed by the Kawana Meadows Subdivision. At the southwest corner of the Kawana Meadows Subdivision, this roadside ditch flows under Petaluma Hill Road via a 48-inch diameter reinforced concrete culvert that discharges immediately west of Petaluma Hill Road. Flows from here drain through a scoured drainage to the southwest.

The shallow 1-foot wide roadside ditch along the northern edge of Yolanda Avenue was constructed in uplands to convey stormwater run-off from adjacent uplands and impervious surfaces. This ditch flows east to west only following significant storm events before discharging into the City stormdrain.

5.2 Plant Communities and Associated Wildlife Habitats

M&A biologists examined the habitats and characterized the vegetation present on the project site. A complete list of plant species observed within the project site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual, 2nd edition* (Baldwin et.al. 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 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 CDFW's list. Three communities occur on the project site including: non-native annual grassland, seasonal wetland, and wetland drainage features.

5.2.1 NON-NATIVE ANNUAL GRASSLAND

Annual grassland comprises the majority of the project site and is characterized by a sparse to dense cover of non-native annual grasses and ruderal forbs. Some of these non-native grass dominants found in the uplands, in order of dominance, includes soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), slender oats (*Avena barbata*), Mediterranean

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

barley (*Hordeum marinum* ssp. *gussoneanum*), and hare barley (*Hordeum murinum* ssp. *leporinum*). Common non-native forbs found in the uplands of the project site, in order of dominance, include, cut-leaf geranium (*Geranium dissectum*), common vetch (*Vicia sativa*), black mustard (*Brassica nigra*), and summer mustard (*Hirschfeldia incana*).

5.2.2 SEASONAL WETLANDS

Seasonal wetlands occur in the topographic lows of the project site that are dominated by a combination of non-native and native upland and hydrophytic herbaceous plant species including meadow barley (*Hordeum brachyantherum*), curly dock (*Rumex crispus*), fiddle dock (*Rumex pulcher*), Italian ryegrass (*Festuca perennis*), annual semaphore grass (*Pleuropogon californicus*), and Mediterranean barley.

5.2.3 WETLAND DRAINAGE FEATURES

The drainage channel that bisects the project site is dominated by manna grass (*Glyceria declinata*), curly dock, and Mediterranean barley. The linear wetland roadside ditch along the eastern edge of Petaluma Hill Road is dominated by tall flatsedge (*Cyperus eragrostis*), fat-hen (*Atriplex prostrata*), spreading rush (*Juncus patens*), and curly dock.

Pursuant to the Clean Water Act, any proposed impacts to seasonal wetlands and linear wetlands/other waters drainage ditch would be regulated as a “water of the U.S.” by the Corps, and “waters of the State” by the RWQCB.

5.3 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 proposed project will not interfere with the movement of native wildlife. The project site is immediately east of Petaluma Hill Road, a heavily used commuter road that provides access to/from the surrounding high density residential and commercial areas southward through Santa Rosa, Rohnert Park, Petaluma and beyond. The proposed apartment project is an urban infill project that will not impact any known local or regional wildlife corridor.

The project site is not located between other local or regional other open spaces and there virtually is nowhere that wildlife could be moving to/from except between developed areas. While the project site may provide movement habitat for local mammals, most of these mammals are associated with development such as house cats, Virginia opossums (*Didelphis*

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

virginiana), and striped skunks (*Mephitis mephitis*). The development of the project site will not adversely impact any significant or regional wildlife movement corridor.

6. SPECIAL-STATUS SPECIES DEFINITION

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 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 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 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 CDFW (2016);
- 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

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

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

In the paragraphs below further definitions of legal status are provided 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 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), 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

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by CDFW and maintained on “watch lists.”

Additionally, in 2006 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 and golden eagle, 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 Plant Species on the Project Site

The project site falls within the geographic region designated as the Santa Rosa Plain by the USFWS and the Corps. The Santa Rosa Plain supports a number of state and federally-listed species, and there are regulatory agency rules that govern how projects must evaluate impacts to wetlands and listed species. Figure 4 provides a graphical illustration of the known records for special-status plant species that occur on the Santa Rosa Plain within three miles of the project site. According to the CDFW’s CNDDDB, a total of 12 special-status plant species are known to occur within three miles of the project site (Table 3). That said, no special-status plants have ever been mapped on or adjacent the project site. Most special-status plant species can be ruled out as potentially occurring owing to an absence of suitable habitat that could support these species as indicated in Table 3.

Due to the sensitivity of Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) listed plant species known from seasonal wetlands in the Santa Rosa Plain, the potential presence of three rare plants cannot be dismissed from a proposed project site without conducting two years of formal rare plant surveys that follow CDFW (2018), CNPS (2001), and USFWS (2000, 2005a,b) published survey guidelines. M&A conducted two full years of rare plant surveys plus additional spring surveys in additional years as follows; M&A conducted rare plant surveys on the project site on March 20, April 17, May 18, and June 22, 2006, in May 2007, April 2009, April 2014, and on May 3 and July 19, 2018. Another complete year of rare plant surveys was conducted on the project site in 2020. 2020 rare plant surveys were conducted on March 19, April 15, and May 12, 2020.

Plant phenology (flowering periods) reference site surveys conducted by M&A confirmed that targeted rare plants were visible and in flower on the dates of project site surveys. No rare plants

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

have ever been observed on the project site. Below, the presence of CESA/FESA listed plants known to occur in seasonal wetlands on the Santa Rosa Plain are further discussed.

6.2.1 SONOMA SUNSHINE

Sonoma sunshine is a federally and state-listed endangered plant species. It is also a CNPS Rank 1B.1 species. The USFWS' Recovery Plan for the Santa Rosa Plain (USFWS 2016) designates the project site outside the *Blennosperma bakeri* Southern Core Area (Figure 5). 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. It is threatened by urbanization, grazing, and agriculture.

The closest CNDDDB record for Sonoma sunshine is located 1.9 miles south of the project site (Occurrence No. 39). ***Sonoma sunshine plants were not detected during appropriately timed rare plant surveys conducted in March through June 2006, May 2007, April 2009, April 2014, May of 2018, and March through May 2020. Thus, no impacts to Sonoma sunshine are expected from the proposed project.***

6.2.2 BURKE'S GOLDFIELDS

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. The USFWS' Recovery Plan for the Santa Rosa Plain (USFWS 2016) designates the project site outside the *Lasthenia burkei* Management Area (Figure 6).

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. This species is known only from southern portions of Lake and Mendocino counties, the western portion of Napa County, and from northeastern Sonoma County (the Santa Rosa Plain). Historically, 39 colonies were known from the Santa Rosa Plain, two colonies were known from Lake County, and one colony was known in Mendocino County. The occurrence in Mendocino County is most likely extirpated. From north to south in the Santa Rosa Plain, the species occurs from north of the community of Windsor to east of the city of Sebastopol. It is threatened by agriculture, urbanization, development, grazing, road widening, road maintenance, and non-native plants.

The closest CNDDDB record for Burke's goldfields is located 1.9 miles south of the project site (Occurrence No. 43). ***Burke's goldfields were not detected during appropriately timed rare plant surveys conducted in March through June 2006, May 2007, April 2009, April 2014, May 2018, and March through May 2020. Thus, no impacts to Burke's goldfields are expected from the proposed project.***

6.2.3 SEBASTOPOL MEADOWFOAM

Sebastopol meadowfoam is a federally and state-listed endangered species. It is also a CNPS Rank 1B.1 species. The USFWS' Recovery Plan for the Santa Rosa Plain (USFWS 2016) designates the project site outside the *Limnanthes vinculans* Southern Core Area (Figure 7).

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

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. The only known natural occurrences of this species have been recorded in Sonoma County.

Sebastopol meadowfoam is a federally and state-listed endangered species. It is also a CNPS Rank 1B.1 species. The USFWS' Recovery Plan for the Santa Rosa Plain (USFWS 2016) designates the project site within the *Limnanthes vinculans* Southern Core Area (Figure 7).

The closest CNDDDB record for Sebastopol meadowfoam is located 1.9 miles south of the project site (Occurrence No. 57). ***Sebastopol meadowfoam was not detected during appropriately timed rare plant surveys conducted in March through June 2006, May 2007, April 2009, April 2014, May 2018, and March through May 2020. Thus, no impacts to Sebastopol meadowfoam are expected from the proposed project.***

6.3 Analysis of the Effects of the Project on FESA/CESA Listed Plants

The project site is located in an area of the Santa Rosa Plain that is designated in the USFWS' *Conservation Strategy* (USFWS 2005c) as within "Urban Growth Boundaries." Accordingly, the USFWS anticipated that the project site would be developed when it prepared the *Conservation Strategy*. Figure 3 in the *Conservation Strategy* (op. cit.) shows the location of the project site as occurring in an area mapped as "*presence of California tiger salamander is not likely and there are no listed plants in this area.*"

The project site is also located outside of the Santa Rosa Plain Rare Plant Core and Management Areas identified in the USFWS' 2016 Recovery Plan for the Santa Rosa Plain (USFWS 2016) (Figures 5-7). ***As such, implementation of the proposed project is not expected to result in significant impacts to state and federally listed plants known to occur on the Santa Rosa Plain.*** M&A did not find any rare plants on the project site during rare plant surveys conducted in March through June 2006, May 2007, April 2009, April 2014, May and July 2018, and March through May 2020, confirming this premise.

6.4 Potential Special-Status Wildlife Species on the Project Site

Figure 4 provides a graphical illustration of the known records for special-status wildlife 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 wildlife records have ever been mapped on or adjacent to the project site. However, a total of four (4) special-status animal species are known to occur in the region of the project site (Figure 4 and Table 4). There is no potential habitat on or adjacent to the project site for western pond turtle (*Emys marmorata*). In addition, western burrowing owl (*Athene cunicularia hypugaea*) is not expected to occur due to the absence of suitable burrows on the project site. As such, these species are not expected to be impacted by the project. Below, the expected effects of the project on the

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

California tiger salamander (*Ambystoma californiense*) (CTS) and white-tailed kite (*Elanus leucurus*) are analyzed.

6.4.1 CALIFORNIA TIGER SALAMANDER

The project site is located within the known range of the Sonoma County “Distinct Population Segment” (DPS) of the CTS. The closest known record for CTS to the project site is located 1.4 miles to the west (CNDDDB Occurrence No. 1105). Gravid females were found along Hearn Avenue in 2003 at that CNDDDB record location.

The USFWS emergency listed the Sonoma County DPS as Endangered under the FESA on July 22, 2002. The USFWS formalized the listing of the Sonoma County DPS of the CTS as endangered on March 19, 2003 (USFWS 2003). The USFWS determined that this population 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 CTS 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.

In 2011, the USFWS designated critical habitat for the Sonoma County DPS of the CTS. 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 not located within this mapped critical habitat*** (Figure 8). Critical habitat is mapped over a regional area and includes developed areas, roads, etc. and wildlands. The mapped extent of critical habitat overlays habitats that are known to support the CTS and also unsuitable habitats that would never be occupied by the CTS. Thus, a designation of critical habitat is not an indication that a project would/could result in “take” of the CTS. Rather, it is a legal mandate to other federal nexus agencies to consult with the USFWS (or NMFS) prior to authorizing any “discretionary permit” within the designated critical habitat. Finally, on March 4, 2010, the CTS was also state-listed as a Threatened species under the CESA.

Proposed projects may not impact CTS without “incidental take” authority from both the USFWS and the CDFW. Prior to implementing a project that would result in “take” (i.e., to harm or kill) of CTS, an Incidental Take Permit must be obtained from the CDFW that is issued pursuant to the CESA. Similarly, projects that impact the CTS or its occupied habitat must obtain an incidental take permit from the USFWS issued pursuant to either Section 7 or Section 10 of the FESA.

CTS occur in grasslands and open oak woodlands that provide suitable aestivation 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 (Kammerer Ranch, East Santa Clara County). CTS spend the majority of their lives underground. They typically only emerge from their subterranean refugia for a few nights each year during the rainy season to migrate to breeding ponds. While 1.3 miles is typically considered the maximum migration distance of CTS to/from their breeding pools to upland over-summering habitat, there is literature suggesting that the CTS could migrate up to 1.5 miles from their breeding pools. This migration distance is

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

reported by the USFWS' Recovery Plan for the Santa Rosa Plain (USFWS 2016) where it states: Based on distances travelled per night, Searcy and Shaffer (2011) estimated that Central CTS are physiologically capable of moving up to 2.4 km (1.5 mi) each breeding season, with an average dispersal distance estimated to be 0.56 km (1,840 ft). Orloff (2007) found that the majority of CTS dispersed at least 0.5-mile (0.8 km) from the breeding site, with a smaller number of salamanders appearing to move even farther—from 1.2 to 2.2 km (0.75 to 1.3 mi) between breeding ponds and upland habitat. M&A biologists Mr. Geoff Monk and Ms. Sarah Lynch have observed CTS migrating up to 0.6-mile and further from their underground refugia to breeding ponds (personal data from Livermore, California collected in 1997). As such, unobstructed migration corridors are important component of CTS habitat.

In Sonoma County, CTS emerge during the first heavy, warm rains of the year, typically in late November and early December. In most instances, larger movements of CTS do not occur unless it has been raining hard and continuously for several hours. Typically, for larger movements of CTS to occur, nighttime temperatures also must be above 48° F (G. Monk and S. Lynch pers. observations). Other factors that encourage larger movements of CTS to their breeding ponds include flooding of refugia (observed by G. Monk in Springtown, east Alameda County in 1997) as occurs after significant rainfall events.

During the spring, summer, and fall months, most known populations of the CTS throughout this species range in California predominately use California ground squirrel (*Otospermophilus 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).

Stock ponds, seasonal wetlands, and deep vernal pools typically provide most of the breeding habitat used by CTS. In such locations, 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 $\frac{3}{4}$ the diameter of a dime to the full diameter of a dime. Occasionally CTS are found breeding in slow moving streams or ditches. In 1997, Mr. G. Monk observed CTS breeding in large, still ditches in Fremont, California. Similarly, in 2001/2002, Mr. D. Wooten observed CTS eggs in a roadside ditch in Cotati, California (D. Wooten, formerly of USFWS, pers. comm. w/ Mr. G. Monk). Ditches and/or streams that are subject to rapid flows, even if only on occasion, typically will not support or sustain CTS egg attachment through hatching, and thus, are not usually used successfully by CTS for breeding (G. Monk and S. Lynch, pers. observations). Similarly, streams and/or ditches that support predators of CTS or their eggs and larvae such as fish, American bullfrog (*Rana catesbeiana*), red swamp crayfish (*Procambarus clarkii*), or signal crayfish (*Pacifastacus leniusculus*), almost never constitute suitable breeding habitat.

In most of the range of the CTS, seasonal wetlands that are used for breeding typically must hold water into the month of May to allow enough time for larvae to fully metamorphose. Typically, in Sonoma County pools that are 16 inches or deeper in the peak winter months will remain inundated long enough to provide good breeding conditions for CTS. In dry years, seasonal wetlands, especially shallower pools, may dry too early to allow enough time for CTS larvae to

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

successfully metamorphose. Under such circumstances, desiccated CTS larvae are often found in dried pools. In addition, as pools dry down to very small areas of inundation, CTS larvae can become concentrated and are susceptible to predation.

M&A's principal biologist Mr. Geoff Monk has maintained a Federal Permit (No. TE776608-10) for him and other Monk & Associates biologists that allows specified named biologists at M&A to work directly with the CTS. Similarly, Mr. Monk has a Memorandum of Understanding (MOU) (SC-001886) with the CDFW that allows named M&A biologists to work with the CTS. Ms. Kingma is designated in both permits as an independent researcher allowed to work with the CTS. Mr. Monk and M&A biologists have completed many CTS studies in the Santa Rosa Plain for over 28 years and are a significant contributor of CTS locational records to the CNDDDB. M&A is highly qualified to assess the suitability of a project site for use by the CTS.

M&A biologists Ms. Kingma and Mr. Monk have worked on the project site dating to 2006 and have evaluated the likelihood that CTS could use the project site. M&A concludes that the project site does not currently support CTS and that it is unlikely to support the CTS in the future. There is no suitable breeding habitats on or adjacent to the project site (i.e., pools/ponds that flood and hold water into April-May). In addition, as the project site is isolated from extant (i.e., still existing) occupied CTS habitat by intervening high density residential and commercial developments, and heavily trafficked roads and highways, all that constitute significant geographic barriers to CTS migration to the project site, M&A concludes that it does not provide migration habitat or over summering habitat for the CTS.

The project site is located in an area of the Santa Rosa Plain that is designated in the USFWS' *Conservation Strategy* (USFWS 2005c) as within "Urban Growth Boundaries." Accordingly, the USFWS anticipated that the project site would be developed when it prepared the *Conservation Strategy*. Figure 3 in the *Conservation Strategy* (op. cit.) shows the location of the project site as occurring in an area mapped as "*presence of California tiger salamander is not likely and there are no listed plants in this area.*" Similarly, the USFWS' 2016 *Recovery Plan for the Santa Rosa Plain* (USFWS 2016) shows that the project site is located outside of the Santa Rosa Plain CTS Core and Management Areas as shown in Figure 9.

M&A concludes that the proposed project will not result in impacts to the CTS. This conclusion is consistent with an email dated December 19, 2006 from USFWS (Vincent Griego) regarding the then proposed Santa Rosa Village (former name of an a larger project site that included the currently proposed project site) which stated: *This e-mail is to confirm that the parcels above (Santa Rosa Village APNs: 044-051-053; -032; -035; -036; -039; -043; -048; -054; 044-370-002) are identified as not likely to affect or result in take of CTS and/or federally-listed plants according to Figure 3 of the Santa Rosa Plain Conservation Strategy and the Interim Santa Rosa Plain Conservation Strategy. No further consultation with the USFWS is required for these parcels with regards to these species.*

As the proposed project would not result in "take" of CTS, affect its habitat, or affect designated critical habitat, incidental take permits are not warranted from either the CDFW or the USFWS for the proposed project. ***Accordingly, pursuant to the CEQA, the project would not result in potentially significant or significant impacts to the CTS.***

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

6.4.2 WHITE-TAILED KITE

The white-tailed kite is a “Fully Protected” species under the California Fish and Game Code (§3511). Fully protected birds may not be “taken” or possessed (i.e., kept in captivity) at any time. It is also protected under the federal Migratory Bird Treaty Act (50 CFR 10.13). The white-tailed kite is typically found foraging in grassland, marsh, or cultivated fields where there are dense-topped trees or shrubs for nesting and perching. They nest in a wide variety of trees of moderate height and sometimes in tall bushes, such as coyote bush. Native trees used are live and deciduous oaks (*Quercus* spp.), willows (*Salix* spp.), cottonwoods (*Populus* spp.), sycamores (*Platanus* spp.), maples (*Acer* spp.), toyon (*Heteromeles arbutifolia*), and Monterey cypress (*Cupressus macrocarpa*). Although the surrounding terrain may be semiarid, kites often reside near water sources, where prey is more abundant. The particular characteristics of the nesting site do not appear to be as important as its proximity to a suitable food source (Shuford 1993). Kites primarily hunt small mammals, with California meadow voles (*Microtus californicus*) accounting from between 50-100% of their diet (Shuford 1993).

The closest CNDDDB record for white-tailed kite is located 1.0 mile west of the project site where two adults were observed in courtship and nesting in mature landscape trees in 2003 (CNDDDB Occurrence No. 77). The area around this record location has significantly developed since that record was recorded, removing both nesting and available foraging habitat. The project site has very few trees that could provide suitable nesting habitat for this species; however, this species conceivably could use the project site for foraging, and foraging habitat is not a protected resource. In consideration of the open space in the immediate area, the loss of foraging habitat is not regarded as a significant impact. ***Accordingly, impacts to white-tailed kite are regarded as less than significant pursuant to the CEQA.*** Regardless, if project construction would commence between February 1 and September 1 there are mitigation measures (BIO-2 Impacts and Mitigations) for nesting birds that when implemented would ensure that there are no impacts to nesting birds including raptors such as the white-tailed kite.

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 we discuss their pertinence to the proposed development.

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, they are as follows:

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.

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

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

In the case of salt water 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 actually present.

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain an incidental take permit 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), or requires preparation of a Habitat Conservation Plan (HCP) pursuant to Section 10 of FESA (for state and local agencies, or individuals, and projects without a federal "nexus"). 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 nexus 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 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, counties that are considering a discretionary permit, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, for the applicant to obtain an "incidental take permit," 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 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 incidental take permit 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 FESA regulatory authority over federally-listed marine mammals and anadromous fish.

7.1.2 APPLICABILITY TO THE PROPOSED PROJECT

The project site does not support or affect fisheries habitat. Thus, NMFS would have no regulatory authority over the proposed project. No federally-listed plant or animal species would be impacted by the proposed project subject to the regulatory authority of the USFWS (Tables 3 and 4 respectively). M&A did not find any rare plants on the project site during rare plant surveys conducted in 2006 and 2018.

M&A confirmed that Sonoma sunshine, Burke’s goldfields, and Sebastopol meadowfoam were visible and in flower during special-status plant surveys. No rare plants were identified during multiple years of rare plant surveys. Similarly, M&A biologists do not believe that the project site supports CTS. There is no suitable breeding habitat on or adjacent to the project site (i.e.,

pools/ponds that flood and hold water into April-May). Similarly, there is no suitable over-summering habitat on the project site. Finally, the project site is isolated from extant (i.e., still existing) occupied CTS habitat by intervening high density residential and commercial developments, and heavily trafficked roads and highways, all that constitute significant and impenetrable geographic barriers to CTS migration to the project site. Thus, implementation of the project will not destroy habitat that is in use by the CTS, nor would it result in take of CTS. Thus, mitigation for impacts to the CTS is not warranted.

The project site is located in an area of the Santa Rosa Plain that is designated in the USFWS' *Conservation Strategy* (USFWS 2005c) as within "Urban Growth Boundaries." Accordingly, the USFWS anticipated that the project site would be developed when it prepared the *Conservation Strategy*. Figure 3 in the *Conservation Strategy* (op. cit.) shows the location of the project site as occurring in an area mapped as "*presence of California tiger salamander is not likely and there are no listed plants in this area.*" Similarly, the USFWS' *2016 Recovery Plan for the Santa Rosa Plain* (USFWS 2016) at USFWS shows that the project site and the proposed offsite improvements are *located outside of the Santa Rosa Plain CTS Core and Management Areas as shown in Figure 9*. The project site and the proposed offsite improvements are also not in USFWS designated Critical Habitat of the CTS.

M&A concludes that the proposed project will not result in impacts to the CTS. This conclusion is consistent with an email dated December 19, 2006 from USFWS (Vincent Griego) regarding the then proposed Santa Rosa Village (former name of an a larger project site that included the currently proposed project site) which stated: *This e-mail is to confirm that the parcels above (Santa Rosa Village APNs: 044-051-053; -032; -035; -036; -039; -043; -048; -054; 044-370-002) are identified as not likely to affect or result in take of CTS and/or federally-listed plants according to Figure 3 of the Santa Rosa Plain Conservation Strategy and the Interim Santa Rosa Plain Conservation Strategy. No further consultation with the USFWS is required for these parcels with regards to these species.*

As the proposed project would not result in "take" of CTS, affect its habitat, or affect designated critical habitat, and as there would be no impacts to federally listed plants, a FESA incidental take permit is not warranted from the USFWS for the proposed project.

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

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

requires federal agencies to work with the USFWS to develop a 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

Common songbirds could nest on the project site and while in use, these nests would be protected pursuant to the Migratory Bird Treaty Act. If construction would occur in the nesting season, preconstruction nesting bird surveys would have to be conducted by a qualified biologist to ensure that there is no direct take of nesting birds protected by the Migratory Bird Treaty Act, including their eggs, or young. To comply with the Migratory Bird Treaty Act, all active nest sites would have to be avoided while such birds were nesting. Upon completion of nesting, the project could commence as otherwise planned. Please review Potentially Significant Impacts to Nesting Birds and Mitigation Measures that prescribe specific measures that when implemented would ensure no impacts occur to nesting birds protected pursuant to the Migratory Bird Treaty Act.

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 CDFW determines that a proposed project could impact a state-listed threatened or endangered species, 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 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 incidental take permit for federally-listed species). CDFW will issue an incidental take permit 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 a 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).

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 incidental take permit) pursuant to the FESA, to submit the federal opinion or permit to CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days CDFW determines that the federal incidental take permit 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 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 state CESA permit under Section 2081(b). Section 2081(b) is of no use if an affected species is state-listed, but not federally-listed.

State and federal incidental take permits 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 incidental take permit(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.

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

7.3.2 APPLICABILITY TO THE PROPOSED PROJECT

No state-listed plant or animal species would likely be impacted by the proposed project (Tables 3 and 4, respectively). M&A did not find any rare plants on the project site during multiple years of rare plant surveys conducted in March through June 2006, May 2007, April 2009, April 2014, May and July 2018, and March through May 2020. Based on rare plant reference site visits, M&A confirmed that Sonoma sunshine, Burke's goldfields, and Sebastopol meadowfoam were visible and in flower during all special-status plant surveys. No rare plants were identified during surveys.

The CTS is a state-listed species. The project site provides no suitable CTS breeding over summering habitat, and these habitats are not adjacent to the project site. The densely urbanized landscape between extant CTS records and the project site constitutes an effective geographic barrier to CTS movements to/from the project and extant CTS populations or other potential breeding habitats within several miles of the project site.

Please also review FESA above for greater discussion about why CTS are not expected to occur on the project site. CTS are not expected to occur on the project site. As the proposed project would not result in "take" of CTS, pursuant to the CESA an incidental take permit is not warranted from the CDFW. No impacts to state-listed animal or plant species, or candidates for listing, are expected from project implementation.

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

California Fish and Game Code §3503, 3503.5, 3511, and 3513 prohibit the "take, possession, or destruction of 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." Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds, such as the white-tailed kite and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

7.4.1 APPLICABILITY TO THE PROPOSED PROJECT

Preconstruction surveys would have to be conducted for potentially occurring nesting birds (including raptors) that could be directly or indirectly impacted by implementation of the proposed project to ensure that nesting birds including their eggs, or young are not harmed by the project. 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. Please review Impact BIO-2 and Mitigation Measure BIO 2 for measures that must be completed to avoid impacts to nesting birds.

7.5 Santa Rosa Plain Conservation Strategy

The federal listing of CTS 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 CTS, 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* (USFWS 2005c).

The goal of the *Conservation Strategy* is to preserve a large enough area of suitable habitat to ensure the conservation of the CTS and listed plants and contribute to their recovery. In order to do this, areas are identified within the Santa Rosa Plain that currently do or potentially could support CTS and listed plants, as well as the areas that currently do 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 CTS range will fall into one of three categories:

- a.) Projects within 1.3 miles of a known CTS breeding site, and likely to impact CTS breeding and/or upland habitat; or
- b.) Projects beyond 1.3 miles from a known CTS 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* prescribes mitigation requirements for impacts in specified geographic areas. Figure 3 of the *Conservation Strategy* indicates geographic areas where projects may impact FESA protected plant and animal species. It also identifies areas that the USFWS conclude are already developed and thus where species mitigation is not warranted.

7.5.1 APPLICABILITY TO THE PROPOSED PROJECT

The project site is located in an area of the Santa Rosa Plain that is designated in Figure 3 of the *Conservation Strategy* (USFWS 2005c) as within “Urban Growth Boundaries.” Accordingly, the USFWS anticipated that the location of the project site would be developed when it prepared the *Conservation Strategy*. Figure 3 in the *Conservation Strategy* (op. cit.) shows the location of the project site as occurring in an area mapped as “presence of California tiger salamander is not likely and there are no listed plants in this area.” The conclusions in the *Conservation Strategy* are consistent with an email dated December 19, 2006 from USFWS (Vincent Griego) regarding the Santa Rosa Village (former name of this project site) which stated: *This e-mail is to confirm that the parcels above (Santa Rosa Village APNs: 044-051-053; -032; -035; -036; -039; -043; -048; -054; 044-370-002) are identified as not likely to affect or result in take of CTS and/or federally-listed plants according to Figure 3 of the Santa Rosa Plain Conservation Strategy and the Interim Santa Rosa Plain Conservation Strategy. No further consultation with the USFWS is required for these parcels with regards to these species.*

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

In late 2016, the USFWS adopted a formal Recovery Plan for the Santa Rosa Plain (Recovery Plan) addressing recovery efforts necessary to protect and otherwise eventually recover the federally-listed Sonoma County DPS of the CTS and three vernal pool plants: Sonoma sunshine; Burke's goldfields; Sebastopol meadowfoam (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 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 CTS 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. In order 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" (Exhibits A and B) 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 Core habitats, and/or CTS Core habitat (Exhibits A and B), mitigate through preservation and enhancement of extant listed species habitats in the same Core Area where the impacts will occur. 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) (Ryan Olah pers. comm. with G. Monk, January 18, 2017).

7.6.1 APPLICABILITY TO THE PROPOSED PROJECT

The project site is not in USFWS designated Critical Habitat of the CTS and is located outside of the Santa Rosa Plain CTS Core and Management Areas identified in the USFWS' 2016 Recovery Plan for the Santa Rosa Plain (Figure 9) (USFWS 2016). ***The proposed project will result in impacts to Corps-jurisdictional areas. As such, the applicant must acquire a permit from the Corps (see BIO-3 Impacts and Mitigations below). However, since the project site is***

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

not within designated critical habitat of any federally-listed species, and will not impact any FESA listed species, FESA Section 7 consultation by and between the Corps and the USFWS is not warranted for this proposed project.

This conclusion is consistent with an email dated December 19, 2006 from USFWS (Vincent Griego) regarding the Santa Rosa Village (former name of this project area) which stated: “This e-mail is to confirm that the parcels above (Santa Rosa Village APNs: 044-051-053; -032; -035; -036; -039; -043; -048; -054; 044-370-002) are identified as not likely to affect or result in take of CTS and/or federally-listed plants according to Figure 3 of the *Santa Rosa Plain Conservation Strategy* and the *Interim Santa Rosa Plain Conservation Strategy*. No further consultation with the USFWS is required for these parcels with regards to these species.”

7.7 CITY OF SANTA ROSA TREE ORDINANCE

The Santa Rosa City Code, Chapter 17.24, has three articles that pertain to the protection of trees within the City of Santa Rosa to discourage the alteration, removal or relocation of trees, including any heritage, protected, or street tree, without a permit.

7.7.1.1 Article III – Prohibitions – Tree alteration, removal, relocation-Permit required.

Article III has provisions that protect trees which are defined as any woody plant with a single trunk diameter of 4 inches or more or a combination of multiple trunks having a total diameter of 8 inches or more. This article also protects the following types of trees:

- (a) Heritage tree which includes any of the following trees, whether located on public or private property, at a diameter equal to or greater than those listed below:

Species	Diameter
Valley oak (<i>Quercus lobata</i>)	6
Coast live oak (<i>Quercus agrifolia</i>)	18
Black oak (<i>Quercus kelloggii</i>)	18
Oregon white oak (<i>Quercus garryana</i>)	18
Canyon oak (<i>Quercus chrysolepis</i>)	18
Blue oak (<i>Quercus douglasii</i>)	6
Interior live oak (<i>Quercus wislizenii</i>)	18
Coast redwood (<i>Sequoia sempervirens</i>)	24
Bay laurel (<i>Umbellularia californica</i>)	24
Pacific madrone (<i>Arbutus menziesii</i>)	12
Douglas fir (<i>Pseudotsuga menziesii</i>)	24
Red alder (<i>Alnus rubra</i>)	18
White alder (<i>Alnus rhombifolia</i>)	18
Big leaf maple (<i>Acer macrophyllum</i>)	24

- (b) Protected tree which means any tree, including a heritage tree, designated to be preserved on an approved development plan or as a condition of approval of a tentative map, a tentative parcel map, or other development.

- (c) Street tree which means any tree having a single trunk circumference greater than 6 and one-quarter inches or a diameter greater than 2 inches, a height of more than 6 feet, and one half or more of its trunk is within a public right of way or within 5 feet of the paved portion of a City street or a public side walk.

The following tree species are exempt from the above provisions (except for those that may exist as street trees): acacia, silver maple, poplar, ailanthus, hawthorn, fruitless mulberry, privet, pyracantha, Monterey pine, Monterey cypress, and fruit and nut trees (except walnut trees). A permit is not required for these tree species alteration, removal or relocation.

7.7.1.1 Article IV – Permit Category II – Tree alteration, removal or relocation on property proposed for development-Requirements.

Article IV requires the following:

- (a) All development proposals and subdivision applications shall clearly designate all trees and heritage trees on the property by trunk location and accurate outline of the dripline and shall indicate those trees proposed to be altered, removed or relocated. The reasons for the removal of any tree shall be stated in writing. The development plan or tentative subdivision map shall indicate the genus and species, shape, drip-line and trunk circumference of each tree and heritage tree. The owner of the property and person in control of the proposed development shall protect and preserve each tree and heritage tree situated within the site of the proposed development during the period the application for the proposed development is being considered by the City. The proposed development shall be designed so that:
- (1) The proposed lots and/or improvements preserve any heritage trees to the greatest possible extent.
 - (2) The road and lot grades protect heritage trees to the greatest extent possible and the existing grad shall be maintained within each such tree's root zone.
- (b) If the proposed project is approved, the recordation of the final map or issuance of a grading permit or building permit for the project shall constitute a permit to alter, remove or relocate any trees designated for alteration, removal or relocation upon the project's approved plans. Any change in the trees to altered, removed or relocated as designated on the approved development plan or tentative map shall only be permitted upon the written approval of the Director or, when the Director determines that the proposed change may be substantial, by the Planning Commission.
- (c) A tree replacement program that will require the applicant to replace trees and heritage trees approved for removal as part of the approval of the project in accordance with subdivision 1; each protected tree removed or damaged shall be replaced in accordance with subdivision 2. For each 6 inches or fraction thereof of the diameter of a tree which was approved for removal, two trees of the same genus and species as the removed tree (or another approved species), each of a minimum 15-gallon container size, shall be

planted on the project site. For each 6 inches or fraction thereof of the diameter of a tree which was not approved for removal, four trees of the same genus and species as the removed tree (or another approved species), each of a minimum 15-gallon container size, shall be planted on the project site.

- (d) If the development site is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the Director of the City's Recreation and Parks Department. Upon the request of the developer and the approval of the Director, the City may accept an in-lieu payment of \$100.00 per 15-gallon replacement tree on the condition that all such payments shall be used for tree-related educational projects and/or planting programs of the City.
- (e) The following requirements will apply any applicant of property upon which a protected tree is located:
 - (1) Before the start of any clearing, excavation, construction or other work on the site, every protected tree shall be securely fenced off at the "protected perimeter" which shall either be the root zone or other limit as may be established by the City.
 - (2) If the proposed development, including any site work for the development, will encroach upon the protected perimeter of a protected tree, special measures shall be utilized, to allow the roots to obtain oxygen, water and nutrients as needed. Any excavation, cutting, filling, or compaction of the existing ground surface within the protected perimeter, if authorized at all by the Director, shall be minimized and subject to such conditions as may be imposed by the Director. No significant change in existing ground level shall be made within the dripline of a protected tree.
 - (3) No oil, gas, chemicals or other substances that may be harmful to trees shall be stored or dumped within the protected perimeter. All brush, earth and other debris shall be removed in a manner which prevents injury to the protected tree.
 - (4) Underground trenching for utilities shall avoid major support and absorbing tree roots of protected trees. If avoidance is impractical, tunnels shall be made below the roots. Trenches shall be consolidated to USFWS as many units as possible. Trenching within the drip line of protected trees shall be avoided to the greatest extent possible and shall only be done under the at-site directions of a certified arborist.
 - (5) No concrete or asphalt paving shall be placed over the root zones of protected trees. No artificial irrigation shall occur within the root zone of oaks.
 - (6) No compaction of the soil within the root zone of protected trees shall occur.
 - (7) If the trees proposed to be removed can be economically relocated, the developer shall move the trees to a suitable location on the site shown on the approved plans.

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

7.7.1.2 Article V – Permit category II – Street trees and plantings on and adjacent to public streets and sidewalks.

Article V pertains to the alteration, removal, and relocation of street trees and entails the following:

- (a) As per Section 17-24.075, no tree growing within a planting strip or within any public right-of-way shall be removed or altered by or at the instigation of the abutting property owner or anyone other than a duly authorized officer, agent or employee of the City, except upon issuance of a permit therefore by the Director of Recreation and Parks who may require, as a condition of permitting the removal or alteration of a tree, the posting of security for such work and the planting, at the expense of the permittee, of a tree to replace the one removed from a list approved under Section 17-24.070 of the city code.
- (b) As per Section 17-24.080, a permit approved by the Director of Recreation and Parks under the provisions of this article shall be valid for a period of 60 days from its issuance unless a longer term is set forth in the permit. If the work to be done under the permit does not commence prior to the permit's expiration and thereafter expeditiously pursued, the permit shall become null and void.

7.7.2 APPLICABILITY TO THE PROPOSED PROJECT

On November 15, 2018 M&A staff conducted a survey to document and map all of the trees on the project site, and to measure the DBH of each tree (tree diameter measured at 4.5 feet above the ground). Table A below documents the trees identified on the project site and the DBH for each tree. Exhibit A illustrates the location of the trees onsite.

Table A. Tree Survey: Kawana Apartments Phase 2 Project Site

Tree Number	Tree Name	Tree Species	DBH	Condition	Recommendations
3910	Coast Live Oak	<i>Quercus agrifolia</i>	4, 5, 5	Good	To be removed
3911	Weeping Willow	<i>Salix babylonica</i>	44	Poor, many dead branches	To be removed
3912	Plum	<i>Prunus sp.</i>	2, 2, 2.5	Poor, previously cut, re-sprouts	To be removed
3913	English Walnut	<i>Juglans regia</i>	7	Poor, mostly dead	To be removed
3914	Coast Live Oak	<i>Quercus agrifolia</i>	9, 9, 7	Good	To be removed
3915	Black Walnut	<i>Juglans hindsii</i>	5.5	Moderate	To be removed

None of the trees identified onsite qualify as a “heritage tree” and none of the trees on the project site are proposed to be preserved or “protected.” Coast live oak (#3914) and the black walnut (#3915) are considered “street trees” since they are located within the City public right of way or within 5 feet of the paved portion of a City street. These trees will be impacted by the City-

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

required road improvements along Petaluma Hill Road, and will, therefore, be removed by the project.

The remaining trees on the project site will be impacted by grading activities required for the proposed development. The plum tree (#3912) is exempt from the Tree Ordinance provisions (since it is a fruit tree); however, the applicant will be required to obtain a permit to remove the other trees (coast live oak, weeping willow, and English walnut) on the project site listed in Table A above.

Article 4, Section 17-24.050 Permit Category II-Tree Alteration, Removal, or Relocation on Property Proposed for Development, C (1) requires two 15-gallon size trees of the same genus and species to be replanted for each 6 inches or fraction thereof of the diameter of the tree approved for removal. Consequently, the applicant is proposing to plant the following 15-gallon size trees: 14 Coast live oaks, 15 weeping willows, 3 English walnut and 2 black walnuts, or as otherwise stipulated by the City permit. The locations of the planted trees will be illustrated on the landscaping plans prepared for this development. Alternatively, the City may accept an in-lieu payment of \$100.00 per 15-gallon replacement tree.

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, and 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

8.1.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the CWA “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 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 U.S.

In the Federal Register “waters of the United States” are defined as, “...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce...” (33 CFR Section 328.3).

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)

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:

- (1) Extends to the mean 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, 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.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the ordinary high water mark (OHWM) or the upward extent of any adjacent 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 (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the CWA.

8.1.1.1 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 U.S. 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 of the CWA, 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 CWA (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, 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).

The Corps maintains a policy of “no net loss” of wetlands (waters of the U.S.) 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., if a stream channel would be filled, mitigation would include replacing it with a new stream channel), 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. Usually the 2:1 ratio is met by creation of an equivalent amount of wetland as is impacted, in addition to a requirement to preserve or enhance an equivalent amount of wetland as is impacted by the project. In some cases, the Corps allows “out-of-kind” mitigation if the compensation site has greater value than the impacted site. For example, if project designs call for filling an intermittent drainage, mitigation could include creating the same approximate jurisdictional area at an offsite location or on a set-aside portion of the project area. 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.

8.1.2 APPLICABILITY TO THE PROPOSED PROJECT

On June 6, 2006, the Corps confirmed the extent of its jurisdiction pursuant to the CWA on the Ashland Walk (Santa Rosa Village) project site (Corps File Number: 2005-299830N). That Corps’ jurisdictional map expired on September 10, 2008. The northern 4.75 acres of the

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

previously confirmed 2006 jurisdictional map was re-verified by Ms. Roberta Morganstern of the Corps on January 19, 2017 (Corps File No. 299830N) for the Kawana Apartments Phase 2 Project Site, currently known as the 38 Degrees North Phase 2 project site.

The 38 Degrees North Phase 2 Project Site only includes the southern 10.9 acres of the 2006 jurisdictional map. On May 3, 2018, M&A biologists, Ms. Kingma and Ms. Owens, visited the project site to examine potential Corps regulated areas. M&A used the Corps' 1987 *Wetlands Delineation Manual* in conjunction with the Regional Supplement for the Arid West Region to conduct a wetland delineation. The jurisdictional determination request and the Draft Aquatic Resources Delineation Map (Sheet 1) were prepared in compliance with the Corps' 2016 *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* and the 2016 *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program*.

On July 3, 2018, M&A submitted a Request for Reverification of a Jurisdictional Map to the Corps. On July 19, 2018 Ms. Morganstern of the Corps conducted a site assessment to verify the extent of the Corps' jurisdiction on the project site pursuant to Section 404 of the CWA. On July 19, 2018, the Corps provided the jurisdictional determination letter and Corps-stamped jurisdictional map (Attachment B).

The Corps verified that the project site supports 29,107 square feet (0.668-acre) of waters of the U.S. A drainage that bisects the project site and the roadside ditch along Petaluma Hill Road have hydrologic connectivity with other tributaries that eventually flow to the Russian River, a navigable water of the U.S. The seasonal wetlands onsite would be characterized as "adjacent" to these features. Thus, all mapped features on the project site are regulated as "waters of the U.S." pursuant to Section 404 of the CWA.

The shallow 1-foot wide roadside ditch along the northern edge of Yolanda Avenue was constructed in uplands to convey stormwater run-off from adjacent uplands and impervious surfaces. This ephemeral ditch only flows following significant storm events, only drains uplands, and does not support wetlands. As such, this ditch would not be regulated as a "water of the U.S." pursuant to Section 404 of the CWA and the Corps did not take jurisdiction over this feature.

The proposed project avoids impacts to waters of the U.S. to the extent practicable, given the site constraints. This avoidance includes preserving the 0.13-acre of seasonal wetlands and a 0.094-acre linear drainage aka ("Winco Ditch") that bisects the project site within a permanently dedicated Open Space Preserve (Sheet 2, Attachment C).

Unavoidable impacts will include filling 0.02-acre of seasonal wetlands to implement the proposed development project. The 0.02-acre is in addition to the 0.36-acre that was already filled by an unauthorized third party; i.e., not the applicant, for a total of 16,480 square feet (0.38-acre) of seasonal wetland impacts.

In addition, the project will impact 0.061-acre (2,649 square feet) of roadside ditch and 0.003-acre (114 square feet) of other waters (see Table B below) alongside Petaluma Hill Road that will be filled to accommodate City-required widening of Petaluma Hill Road and associated

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

roadside improvements, such as curb, gutter and sidewalk (Sheet 2, Attachment C). The roadside ditch and other waters along Petaluma Hill Road will be filled and flows will be diverted into a stormdrain pipe that will connect to a culvert that currently exists under the Farmers Lane Extension immediately south of the project site. This feature must be placed in a pipe along Petaluma Hill Road to allow for the construction of a community shopping center with underground parking garage directly adjacent.

There will also be impacts to both ends of the linear drainage (Winco Ditch) at the east and west ends of this ditch where it currently turns at 90 degree angles (see location on Sheet 2). The west angle point must be protected and will also divert flows into the Petaluma Hill Road ditch that is being placed into a pipe.

Similarly, a “mitigation ditch” immediately to the east of the project site (known as the Kawana Meadows Project) now jettisons water into the Winco Ditch at a 90 degree angle (a condition that has persisted for many years likely dating to the year the Winco Ditch was originally constructed). The 90 degree bend in this requires a hardened structure to be installed at this 90 degree angle to prevent bank erosion along the Winco Ditch that is otherwise being preserved within the development. There will be a total of 392 square feet (0.009-acre) (Sheet 2) of impact associated with the 90 degree turns in this ditch at both the east and west sides of the project site.

Table A below summarizes all impacts to waters of the U.S. (and State) associated with the proposed project. These acreages are also shown on Sheet 2, Attachment C of this submittal.

Finally, the project will be required to fill and reconstruct the mitigation ditch that was constructed by the Kawana Meadows developer immediately east of the project site. That developer extended the upper reach of the Winco Ditch into a pipe as necessary to construct Franz Kafka Avenue into that development. Relocation of that ditch as mitigation for that impact replaced the ditch in a linear feature alongside Franz-Kafka Avenue. The proposed project includes adding a City of Santa Rosa required second lane to Franz-Kafka Avenue and so this ditch must be moved further westward within the 38 Degrees North Phase 2 project site’s proposed open space preserve. The reconstructed channel will be located within the Open Space Preserve on the project site and will provide 1:1 replacement for this mitigation feature.

Table B. Impacts to Waters of U.S./State

Waters of U.S./State	Impacts (Square feet/acreage)
Seasonal Wetlands	16,480 square feet (0.38-acre)
Roadside Ditch	2,649 square feet (0.061-acre)
Other Waters	114 square feet (0.003-acre)
Drainage	392 square feet (0.009-acre)
Total	19,635 square feet (~0.46-acre)*

Approximately 0.46-acre of “waters of the U.S.” will be impacted by the proposed project. The applicant will acquire a permit from the Corps pursuant to Section 404 of the CWA. Impacts to waters of the U.S. are regarded as significant pursuant to the CEQA.

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

The applicant will be required by the Corps, RWQCB, and the City of Santa Rosa to mitigate impacts to seasonal wetlands on the project site and impacts to “other waters” along Petaluma Hill Road. The applicant proposes to purchase mitigation credits from a Corps/RWQCB-approved wetland mitigation bank to compensate for these impacts (see BIO-3 Impacts and Mitigation Measures below). In addition, the applicant will further compensate for impacts to “waters of the U.S.” via implementation of a riparian planting plan on both sides of the east/west linear drainage that bisects the project site.

With implementation of the avoidance and mitigation measures listed in the “Impacts and Mitigations” section below, impacts to waters of the U.S. can be mitigated to a level considered less than significant pursuant to the CEQA.

8.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)

8.2.1 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 CWA. While the Corps administers a permitting program that authorizes impacts to waters of the U.S., including wetlands and other waters, any Corps 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 CWA, the California Environmental Quality Act, 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.

8.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Corps verified that the project site supports 29,107 square feet (0.668-acre) of waters of the U.S., as shown on Sheet 1 (Attachment B). The RWQCB defers to the Corps jurisdictional mapping process which defines aquatic resources on project sites. The RWQCB uses the Corps confirmed “Aquatic Resource Maps” (aka jurisdictional maps) to define waters of the state. Therefore, if the Corps determines there are a specified number of acres of wetland or other waters within the project site boundaries, these features also constitute waters of the state subject to regulation by the RWQCB.

Any Section Clean Water Act Section 404 permit authorized for the project by the Corps for impacts to waters of the U.S. would be inoperative without also obtaining authorization from the RWQCB pursuant to Section 401 of the CWA (i.e., without obtaining a certification of water quality). Any impacts to waters of the State would have to be mitigated pursuant to conditions in the RWQCB’s Clean Water Act Section 401 permit.

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

8.2.3 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 pursuant to the SWANCC decision (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 Plan (BMPs) of 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 Storm Water Management Plan (SWMP) must be developed and incorporated into any site development plan.

8.2.4 APPLICABILITY TO THE PROPOSED PROJECT

Since any “threat” to water quality can 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 that ensure that downstream receiving waters are not impacted by the project.

Prior to issuance of any permit, the RWQCB will require proof that the City of Santa Rosa has issued a Notice of Determination indicating that the proposed project has completed a review conducted pursuant to CEQA. During the permit application process, the RWQCB can request pertinent sections of the CEQA document (typically the biology section) to determine if regulatory issues pertaining to waters of the State are adequately addressed/mitigated prior to the time this agency will issue a permit for a proposed project.

The North Coast RWQCB will review the projects Storm Water Control Plan (SWCP) prior to issuing a Clean Water Act Section 401 permit for the project. The SWCP must prescribe stormwater treatments that meet the NPDES C.3 Provisions (discussed in the section below) prior to the release of stormwater from the project site. Compliance with the C.3 Provisions requires that proposed projects result in no net increase in overall site runoff. That is post construction run off must 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

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

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 State Water Board-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.

Prior to construction of the project, the project proponent to have prepared and filed a SWPPP with the SWRCB. The prescribed SWPPP BMPs should be in place prior to the initiation of construction of the project. Both the SWPPP and the SWCP are typically prepared by the project civil engineer. Note that the City of Santa Rosa require civil engineers preparing SWCPs to utilize the 2017 Storm Water Low Impact Development (SWLID) guidelines (SWLID Guidelines below) published by the City of Santa Rosa to prepare the SWCP.

8.2.5 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

In 1972, the CWA was amended to state that the discharge of pollutants to waters of the U.S. from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the CWA added Section 402(p) which establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES Program.

While federal regulations allow two permitting options for 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 California RWQCBs. It is also enforceable through citizens’ suits and represents a dramatic shift in the State Water Board’s approach to regulating new and redevelopment sites, imposing new affirmative duties and fixed standards on builders and developers.

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, 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.

Project proponents (landowners) should confirm with the local RWQCB whether or not a particular routine maintenance activity is subject to this General Permit.

The SWRCB's quantitative standards (Order 2009-0009-DWQ) take a two-tiered approach, depending on the risk level associated with the site in question. Exceedance of a benchmark Numeric Action Level ("NAL") measured in terms of pH and turbidity (a measure related to both the amount of sediment in and the velocity of site runoff) triggers an additional obligation to implement additional BMPs and corrective action to improve SWPPP performance.

The SWRCB administers the Construction General Permit (GCP) and projects that impact greater than one acre must obtain coverage under this permit. To obtain coverage under the GCP a SWPPP must be filed with the SWRCB that shows BMPs will be installed prior and during project construction that ensure that the project does not result in deleterious impacts to downstream receiving waters from rainfall events.

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.

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

Pursuant to the CWA, the RWQCB regulates construction discharges under the NPDES. The project sponsor of construction or other activities that disturb more than one acre of land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB¹.

8.2.6 APPLICABILITY TO THE PROPOSED PROJECT

To obtain coverage under the GCP the applicant 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 that are trained in the discipline of maintaining required water quality standards. Once filed, these documents become immediately available to the public for review and comment.

Construction stormwater BMPs are intended to minimize the migration of sediments offsite. They can include:

- covering soil stockpiles,
- sweeping soil from streets or other paved areas,
- performing site-disturbing activities in dry periods,
- planting vegetation or landscaping quickly after disturbance to stabilize soils.

Other typical stormwater BMPs include erosion reduction controls such as:

- hay bales, water bars, covers, sediment fences, sensitive area access restrictions, vehicle mats in wet areas, geotextile blankets, fiber rolls, temporary slope drains, mulching of exposed areas, vehicle mats in wet areas, and other erosion-reducing features, and retention/settlement ponds.

Excavation and other soil-disturbing activities associated with the project could potentially affect water quality as a result of erosion of sediment. In addition, leaks from construction equipment; accidental spills of fuel, oil, or hazardous liquids used for equipment maintenance; and accidental spills of construction materials are all potential sources of pollutants that could degrade water quality.

¹ 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.

9. STORM WATER LOW IMPACT DEVELOPMENT (SWLID)

Participating cities in Sonoma County within the Santa Rosa plain use the *Guidelines for the Standard Urban Storm Water Mitigation Plan (SUSMP), Storm Water Best Management Practices for New Development and Redevelopment for the Santa Rosa Area and Unincorporated Areas around Petaluma and Sonoma* published on June 3, 2005. However, the City of Santa Rosa has updated the process using the 2017 Storm Water Low Impact Development (SWLID) guidelines to better facilitate the processing of Clean Water Act permits. the North Coast RWQCB routinely uses the SWLID Design Manual as an example program on how post-construction BMPs should be presented in project specific Storm Water Control Plans (SWCPs).

To reduce storm water pollution, protect water quality of local waterways, and promote groundwater recharge, SWLID measures are integrated into project SWCPs that prescribed specialized landscape features and storm flow piping or above ground channels that directs runoff into these features that then promoted vertical percolation into the ground. This design approach mimics the storm water benefits of the natural environment. Specialized swales, planters, and raingardens may also be prescribed to treat stormwater and 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 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.

9.1 Projects That Trigger Requirements

Geographic Areas

The requirements set forth in the SUSMP (as refined in the City of Santa Rosa's 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. Although the Sonoma County Water Agency is named in the Permit, it does not have land use authority.

This SUSMP 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 SUSMP treatment features are designed to mitigate for the permanent stormwater runoff impacts caused by flows on and over impervious surfaces, the total amount of impervious surface must be considered when determining whether or not a project triggers SUSMP requirements (or SWLID requirements in the City of Santa Rosa). 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.

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.

9.1.1 APPLICABILITY TO THE PROPOSED PROJECT

The draft SWLID Plan has been submitted to the City of Santa Rosa for review and must be approved by the City of Santa Rosa prior to project commencement. 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

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

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.

9.2 California Department of Fish and Wildlife Protections

9.2.1 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 2014).

Please see Section 1602 of the current California Fish and Game Code for further details.

Please also note that while not stated in the regulations above, 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 CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, 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.

9.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The drainage that bisects the project in an east to west flow direction (“the Winco Ditch”) is a channel with a bed and bank and, therefore, is subject to Fish and Game Code Section 1602 jurisdiction. The applicant proposes to construct a clear span pedestrian bridge over this drainage on the project site. The abutments will be located outside the top-of-banks, but regardless the

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

bridge will be subject to Section 1602 regulation. Impacts to this drainage feature will also occur via the reconstruction of the mitigation ditch along Franz Kafka Avenue, and the filling of the linear roadside ditch along Petaluma Hill Road. Accordingly, a 1602 Streambed Alteration Permit will be required from the CDFW for this project (Please review Mitigation Measure BIO-4. Impacts to CDFW Section 1602 jurisdictional areas).

10. 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” 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.

10.1.1 APPLICABILITY TO THE PROPOSED PROJECT

This report has been prepared as a Biology Section that is suitable for incorporation into the biology section of a CEQA review document (Mitigated Negative Declaration) being prepared by the CEQA lead agency (in this case the City of Santa Rosa). This report addresses potential

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA, and similarly it addresses potential effects of the project on all other known sensitive biological resources. Finally, it provides a regulatory agency review discussing other regulatory requirements of the project that pertain to biological resources.

11. IMPACTS ANALYSIS

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

11.1 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.

11.1.1 THRESHOLDS OF SIGNIFICANCE

11.1.1.1 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.
- 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 federally protected “wetlands” as defined by Section 404 of the CWA (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.

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

- 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 Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

11.1.1.2 Waters of the U.S. and State.

Pursuant to Section 404 of the CWA (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 CWA, 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.

11.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which 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.

12. IMPACT ASSESSMENT AND PROPOSED MITIGATION

In this section, potential impacts to sensitive biological resources, including special-status animal species and waters of the U.S. and/or State, are discussed. Each impact is followed by a mitigation prescription that, when implemented, would reduce impacts to a level regarded as less than significant pursuant to CEQA. This impact analysis is based on the Preliminary CEQA Site Plan: 38 Degrees North Phase 2, prepared by TSD Engineering, Inc., dated January 22, 2020. (Attachment A).

12.1 Impact BIO-1. Nesting Birds (Passerines and Raptors)

If construction of the project would commence during the nesting season (i.e., between February 1 and September 1), nesting birds could be impacted by the proposed project. Raptors (birds of prey) known to nest in the region of the project site and common birds and their active nests are protected pursuant to California Fish and Game Code (Sections 3503, 3503.5), and the federal Migratory Bird Treaty Act. Impacts to nesting birds, their eggs, and/or young caused by implementation of the proposed project would be regarded as **potentially significant**. These impacts could be mitigated to levels considered less than significant pursuant to CEQA.

12.2 Mitigation Measure BIO-1 (Passerines and Raptors)

If construction of the project would commence during the nesting season (i.e., between February 1 and September 1), a preconstruction nesting bird survey should be conducted on the project site and within a zone of influence (approximately 200 feet around the project site). The zone of

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

influence includes those areas off the project site where birds could be disturbed by earth-moving vibrations or construction traffic and noise. Accordingly, the nesting survey(s) must cover the project site and an area around the project site boundary. If project site disturbance associated with the project would commence in the nesting season, nesting surveys should be completed within 7 days of commencement of construction activities.

If common birds are identified nesting on or adjacent to the project site, a non-disturbance buffer of 75 feet should be established. If nesting raptors are found on or adjacent to the project site, buffers of up to 300 feet from the nest site should be established to protect the nesting birds from harm from project related activities. A qualified ornithologist may establish smaller buffers if any bird nest is protected from disturbance by geographic barriers or the nesting birds are confirmed by the ornithologist to be acclimated to disturbance.

Nesting buffer(s) shall be demarcated with painted orange lath or via the installation of orange construction fencing. If nesting sites are located off the project site, but within a zone of influence, buffers shall be established on the project site where buffers intersect the project site. No disturbance should be allowed within established protection buffer(s).

Typically, most raptors and passerine birds in the region of the project site are expected to complete nesting by August 1. However, many species can complete nesting by the end of June or in early to mid-July. *Regardless, nesting buffers should be maintained until the end of the nesting season unless a qualified ornithologist determines that young have fledged and are independent of their nests or that the nest cycle has otherwise been completed.* If buffers are removed prior to the end of the nesting season, the qualified ornithologist should prepare a report for the City of Santa Rosa that provides details about the nesting outcome and that states protective buffers are no longer required to protect nesting birds. This report should be submitted to the City of Santa Rosa a minimum of 5 days prior to the time that nest protection buffers are removed if the date of removal would be before the end of the nesting season.

Implementation of these mitigation measures would reduce impacts to nesting birds to a level considered **less than significant pursuant to CEQA**.

12.3 Impact BIO-2. Development of the Project would have a significant adverse impact on trees (Significant).

A total of six (6) trees were inventoried on the project site. None of the trees identified onsite qualify as a “heritage tree” and none of the trees on the project site are proposed to be preserved or “protected.” Coast live oak (#3914) and the black walnut (#3915) are considered “street trees” since they are located within the City public right of way or within five feet of the paved portion of a City street. These trees will be impacted by the City-required road improvements along Petaluma Hill Road, and will therefore be removed by the project.

The remaining trees on the project site will be impacted by grading activities required for the proposed development. The plum tree (#3912) is exempt from the Tree Ordinance provisions (since it is a fruit tree); however, the applicant will be required to obtain a permit to remove the other trees (coast live oak, weeping willow, and English walnut) on the project site.

Impacts to trees resulting from the proposed project would be regarded as **significant**. These impacts could be mitigated to levels considered less than significant pursuant to CEQA.

12.4 Mitigation Measure BIO-2. Impacts to Trees.

The plum tree is exempt from the Tree Ordinance provisions (since it is a fruit tree); however, the applicant will be required to obtain a permit to remove the coast live oak, weeping willow, and English walnut on the project site.

Article 4, Section 17-24.050 Permit Category II-Tree Alteration, Removal, or Relocation on Property Proposed for Development, C(1) requires two 15-gallon size trees of the same genus and species to be replanted for each 6 inches or fraction thereof of the diameter of the tree approved for removal. Consequently, the applicant is proposing to plant the following 15-gallon size trees: 14 Coast live oaks, 15 weeping willows, 3 English walnut and 2 black walnuts, or as otherwise stipulated by the City permit. The locations of the planted trees will be illustrated on the landscaping plans prepared for this development. Alternatively, the City may accept an in-lieu payment of \$100.00 per 15-gallon replacement tree.

Implementation of this mitigation measure would reduce impacts to trees to a level considered **less than significant pursuant to CEQA**.

12.5 Impact BIO-3. Development of the proposed project would have a significant impact on Waters of the U.S. and/or State (Significant)

The project will result in impacts to approximately 0.46-acre of waters of the U.S./State (Sheet 2, Attachment C). These impacts include 16,480 square feet (0.38-acre) of seasonal wetlands on the project site that will be filled as part of the proposed development and 2,649 square feet of roadside ditch (0.061-acre) and 114 square feet of other waters (0.003-acre) along Petaluma Hill Road that will be filled to accommodate City-required widening of Petaluma Hill Road and associated roadside improvements, such as curb, gutter and sidewalk (Sheet 2, Attachment C). The roadside ditch and other waters along Petaluma Hill Road will be filled and flows will be diverted at the western end of the east/west drainage that bisects the project site to a stormdrain pipe routed parallel with Petaluma Hill Road to where it will connect with an existing culvert under the Farmers Lane Extension that is within the Kawana Meadows Subvision, immediately south of the 38 Degrees North Project Site.

The project will also be required to fill and reconstruct a temporary “mitigation ditch” that was constructed within the Franz Kafka Avenue ROW by the Kawana Meadows Subdivision project as part of that project. That mitigation ditch was constructed along the western edge of Franz Kafka Avenue adjacent to the Kawana Meadows project site. However, to accommodate City-required widening and improvements to Franz Kafka Avenue on the project site, the mitigation ditch will be relocated within an Open Space Preserve within the 38 Degrees North Phase 2 project site. As agreed to by the RWQCB during a meeting on August 8, 2019, the ditch will simply be reconstructed at a 1:1 impacts to replacement ratio.

Where the reconstructed mitigation ditch flows into the east/west drainage that bisects the project site, as it does today, this ditch will have to turn at a 90-degree angle to send flows westward. The east/west alignment flows westwards to where it again turns at a 90-degree angle southward (just as it does today). Impacts to both ends of the east/west drainage will total 392 square feet (0.009-acre) (Sheet 2, Attachment C). In total, the project will result in the loss of 0.46-acre of waters of the U.S. and State. These impacts to waters of the U.S. and State would be regarded as **significant impacts pursuant to the CEQA**. These impacts could be mitigated to a level considered less than significant pursuant to CEQA.

12.6 Mitigation Measure BIO-3. Impacts to Waters of the U.S. and/or State

Impacts to waters of the U.S. and/or State can be reduced to less than significant levels through various means, including avoidance, minimization of impacts, and mitigation compensation. For those jurisdictional areas that cannot be avoided, applicable permits from the Corps and RWQCB shall be acquired to authorize impacts to waters of the U.S. and State.

The project will result in the loss of 0.46-acre of waters of the U.S. and State. The applicant will be required by the Corps and RWQCB to mitigate for impacts to seasonal wetlands on the project site and linear drainages including the roadside ditch along Petaluma Hill Road.

To mitigate impacts to 0.46-acre of waters of the U.S. and State, as approved by the Corps and RWQCB, the applicant shall purchase mitigation credits from an approved wetland mitigation bank at a 1:1 ratio. This mitigation ratio may be modified as otherwise required by the Corps and RWQCB at the time respective permits are issued.

As required by the RWQCB, and as necessary to reduce impacts to levels regarded as less than significant pursuant to the CEQA, the project shall also preserve the east/west drainage (4,107 square feet, 0.094-acre of other waters) and 5,816 square feet (0.13-acre) of seasonal wetland in a permanent 2.54 acre Deed Restricted Open Space Preserve within the project site as shown in Sheet 2, Attachment C.

To further mitigate impacts to waters of the U.S. and State, the applicant shall implement a riparian planting plan that prescribes the establishment of riparian trees along the east/west drainage that bisects the project site. The riparian planting area along the east/west drainage shall be preserved in permanently protected Open Space Preserve that is approximately 50 feet wide from the edge of the jurisdictional waters both to the north and south of the east/west drainage.

Finally, the project will be required to fill and reconstruct the mitigation ditch that was constructed by Kawana Meadows along the edge of Franz Kafka to accommodate City-required widening and improvements to Franz Kafka Avenue, east of the project site. This ditch shall be reconstructed within the Open Space Preserve on the project site and shall provide 1:1 replacement for this impacted feature.

The North Coast RWQCB will also review the Storm Water Control Plan (SWCP) for this project prior to issuing a Clean Water Act Section 401 permit for the project. The SWCP must prescribe stormwater treatments that meet the NPDES C.3 Provisions (discussed in the section

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

below) prior to the release of stormwater from the project site. In addition, prior to construction of the project, the project proponent to file a SWPPP with the SWRCB. The prescribed SWPPP BMPs will be in place prior to the initiation of construction of the project.

Implementation of the measures described above would reduce significant impacts to waters of the U.S./State to a level considered **less than significant pursuant to the CEQA**. Any other conditions that are stipulated for wetland impacts by the Corps and/or RWQCB shall also become conditions of project approval.

12.7 Impact BIO-4. Development of the proposed project would have a significant impact on CDFW Section 1602 jurisdictional areas (Significant)

The applicant proposes to construct a clear span pedestrian bridge over the drainage that bisects the project site. The abutments will be located outside the top-of-banks. Impacts to this drainage feature associated with the reconstructed mitigation ditch along Franz Kafka Avenue, or the filling of the linear roadside ditch along Petaluma Hill Road will be subject to CDFW regulation.

Impacts to CDFW 1602 jurisdiction would be regarded as **significant impacts**. Those impacts could be mitigated to a level considered less than significant pursuant to CEQA.

12.8 Mitigation Measure BIO-4. Impacts to CDFW Section 1602 jurisdictional areas

Construction of a pedestrian bridge that clear spans the east/west drainage that bisects the project site will require a CDFW Section 1602 SBAA. Any mitigation requirements stipulated in the CDFW SBAA will become conditions of project approval.

The applicant will implement appropriate BMPs to prevent construction-related impacts that could introduce de minimus fill or other pollutants into the east/west drainage that bisects the project site. These measures include the installation of wildlife friendly hay wattles and/or silt fence that will prevent unintended de minimus fill impact to the drainage that bisects the project site while the bridge is constructed. In addition, orange silt fencing shall be installed to protect the reconstructed wetlands in the eastern portion of the Open Space Preserve, which is outside of the area where span bridge construction would take place. The limits of the crossing will also be silt fenced to prevent unintended human and equipment traffic, and de minimus fill impacts to the Open Space Preserve and east/west drainage that bisects the project site.

To further mitigate impacts to Section 1602 jurisdictional areas, the applicant shall implement a riparian planting plan that prescribes the establishment of riparian trees along the east/west drainage that bisects the site. The riparian planting area along the east/west drainage shall be preserved in a permanently protected Open Space Preserve as shown in Sheet 2, Attachment C. The project shall preserve the east/west drainage (4,109 square feet, 0.094-acre) and 5,816 square feet (0.13-acre) of seasonal wetland in a permanent 2.54-acre Deed Restricted Open Space Preserve within the project site as shown in Sheet 2, Attachment C.

Mechanized equipment shall be allowed into the Open Space Preserve only to install/construct the pedestrian bridge, pedestrian sidewalk, perimeter 3:1 transitional fill slopes, riparian planting plan and associated irrigation. At this time, a silt fence shall also be installed at the top-of-banks

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

of the east/west drainage to ensure that there will be no inadvertent de minimus fill or intrusion impacts into the east/west drainage. Furthermore high visibility orange fencing should be placed at the limit of work within the Open Space Preserve including silt fence & fiber roll. All disturbed areas shall be replanted with native grasses.

Implementation of these measures would reduce significant impacts to Section 1602 jurisdictional areas to a level considered less than significant pursuant to the CEQA.

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

13. LITERATURE CITED

- Baldwin D.H., Goldman D.H., Keil D.J., Patterson R., Rosatti T.J., Wilken D.H. (ed.). 2012. The Jepson Manual Vascular Plants of California: Second Edition. University of California Press, Berkeley. 1568 pps.
- Beier, P. and Loe, S. (1992). A checklist for evaluating impacts to wildlife movement corridors. Wildlife Society Bulletin. 20: 434-440 pps.
- California Department of Fish and Game. 2000. Guidelines for assessing the effects of proposed developments on rare and endangered plants and plant communities. May 4, 1984; revised May 8, 2000. 2 pps.
- CDFW (California Department of Fish and Wildlife). 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Published September 2008; February 2011 (updated).
- CDFW (California Department of Fish and Wildlife). 2018. Protocols for surveying and evaluating impacts to special-status native plant populations and sensitive natural communities. State of California. California Natural Resources Agency. Department of Fish and Wildlife. March 20, 2018. 12 pps.
- CNDDDB (California Natural Diversity Data Base). 2019. RareFind 5. Computer printout for special-status species within a 3-mile radius of the project site. California Natural Heritage Division, California Department of Fish and Wildlife, Sacramento, CA.
- CNPS (California Native Plant Society). 2001. Inventory of rare and endangered plants of California (sixth edition). Rare plant scientific advisory committee, David P. Tibor, convening editor. California Native Plant Society. Sacramento, CA. x+338 pps.
- CNPS (California Native Plant Society). 2010. Inventory of Rare and Endangered Plants (online edition, v7-11may). California Native Plant Society. Sacramento, CA.
<http://www.cnps.org/inventory>
- Corps (U.S. Army Corps of Engineers). 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report, Y-87-1. US Army Engineer Waterways Experiment Station. Vicksburg, Mississippi. 100 pp.
- Corps (U.S. Army Corps of Engineers). 2008. Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2). Ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center. September 2008.
- Corps (U.S. Army Corps of Engineers). 2016. Minimum Standards for Acceptance of Aquatic Resources Delineation Reports, January 2016

Revision 2 Biological Resources Analysis
 38 Degrees North Phase 2
 City of Santa Rosa, California

Corps (U.S. Army Corps of Engineers). 2016. Updated Map and Drawing Standards for the South Pacific Division Regulatory Program. February 10, 2016.

Jepson Interchange Project. INTERNET: <http://ucjeps.berkeley.edu/interchange/index.html>

Orloff, S.G., 2007. Migratory Movements of California Tiger Salamander in Upland Habitat – A Five-Year Study Pittsburg, California. Prepared By: S. Orloff Ibis Environmental, Inc. 340 Coleman Dr. San Rafael, CA 94901 May 2007. 43 pp. w/ Appendices.

Searcy, C. A., and Shaffer, H. B. (2011). Determining the migration distance of a vagile vernal pool specialist: how much land is required for conservation of California tiger salamanders. Research and recovery in vernal pool landscapes. Studies from the Herbarium (16), 73-87.

Shuford, W.D. 1993. The Marin County breeding bird atlas: A distributional and natural history of coastal California birds. California Avifauna Series 1. Bushtit Books, Bolinas, California.

USFWS (U.S. Fish & Wildlife Service). 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, California (Corps File No. 22342N). July 17, 1998. 28 pps. plus attachments.

USFWS (U.S. Fish & Wildlife Service). 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed Proposed and Candidate Plants. January 2000.

USFWS (U.S. Fish & Wildlife Service). 2003. Sonoma County population of California tiger salamander listed as an endangered species. Federal Register: March 19, 2003 (Volume 68, Number 53), Rules and Regulations, Page 13497-13520. From the Federal Register online via GPO Access [wais.access.gpo.gov]

USFWS (U.S. Fish & Wildlife Service) et. al. 2005a. Santa Rosa Plain Conservation Strategy. Appendix D-Guidelines for conducting and reporting botanical inventories for federally listed plants on the Santa Rosa Plain (modified from the September 23, 1996 USFWS guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants).

USFWS (U.S. Fish & Wildlife Service) 2005b. Guidelines for conducting and reporting botanical inventories for federally listed plants on the Santa Rosa Plain (modified from the September 23, 1996 Service guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants.) INTERNET

USFWS (U.S. Fish & Wildlife Service) et. al. 2005c. Final Santa Rosa Plain Conservation Strategy. Sacramento Office of the U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, North Coast Regional Water Quality Control Board, County of Sonoma, Cities

Revision 2 Biological Resources Analysis
38 Degrees North Phase 2
City of Santa Rosa, California

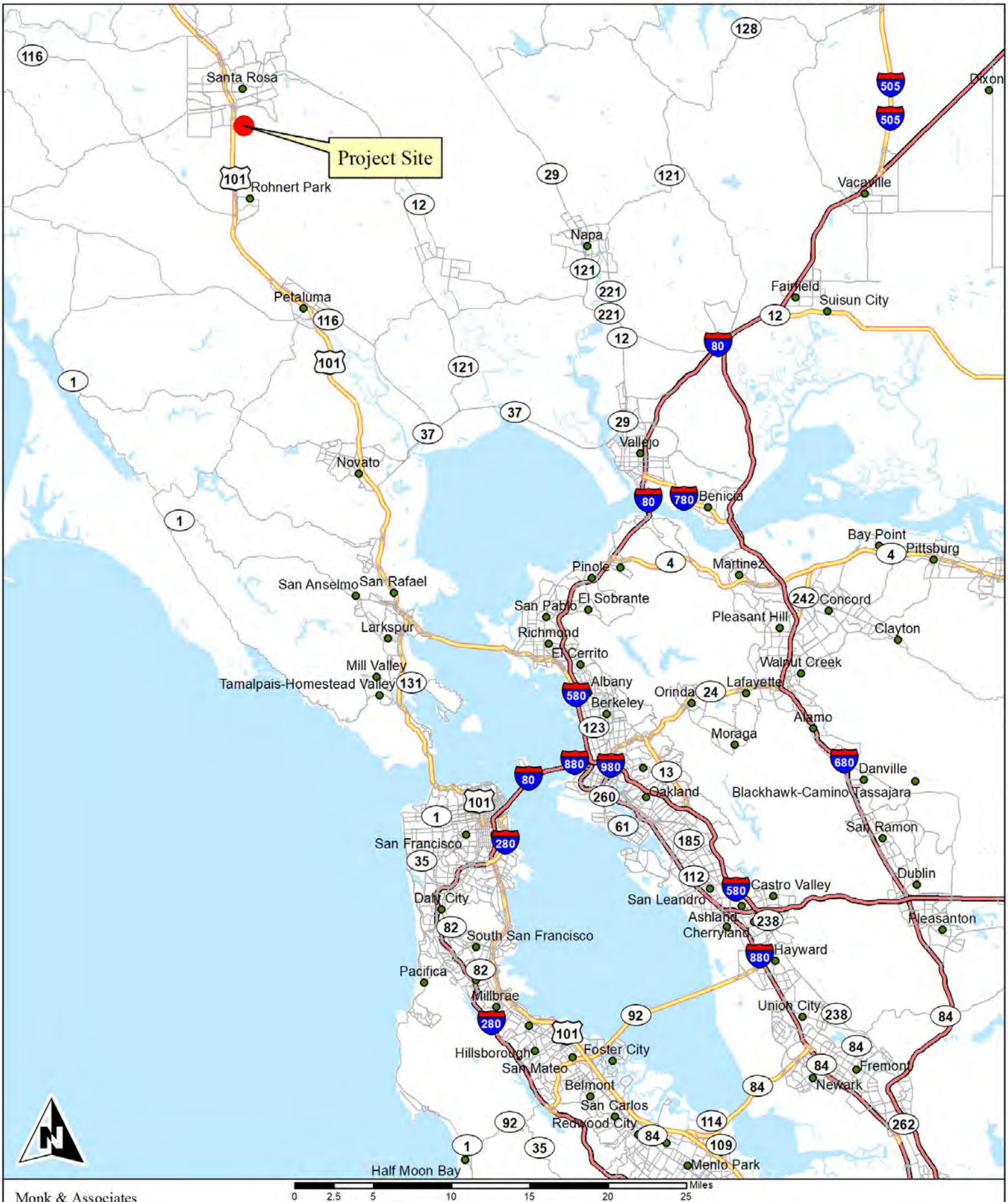
of Cotati, Rohnert Park, and Santa Rosa, Laguna de Santa Rosa Foundation. December 1, 2005.

USFWS. (<http://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/> Documents/
Listed_plant_survey_guidelines_santarosa.pdf). Accessed 2020.

USFWS (U.S. Fish & Wildlife Service). 2007. Programmatic Biological Opinion (Programmatic) for U.S. Army Corps of Engineers (Corps) Permitted Projects that Affect the California Tiger Salamander and Three Endangered Plant Species on the Santa Rosa Plain, California (Corps File No. 223420N). November 9, 2007. 41 pp. w/ Enclosures.

USFWS (U.S. Fish & Wildlife Service). 2011. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for the Sonoma County Distinct Population Segment of California Tiger Salamander; Final Rule. Federal Register 50 CFR Part 17 August 31, 2011 (Volume 76, Number 169) Page 54346.

USFWS (U.S. Fish and Wildlife Service). 2016. Recovery Plan for the Santa Rosa Plain: *Blennosperma bakeri* (Sonoma sunshine); *Lasthenia burkei* (Burke's goldfields); *Limnanthes vinculans* (Sebastopol meadowfoam); California Tiger Salamander Sonoma County Distinct Population Segment (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. vi + 128 pp. June 20, 2016. Federal Register. Pages: 39945-39946.

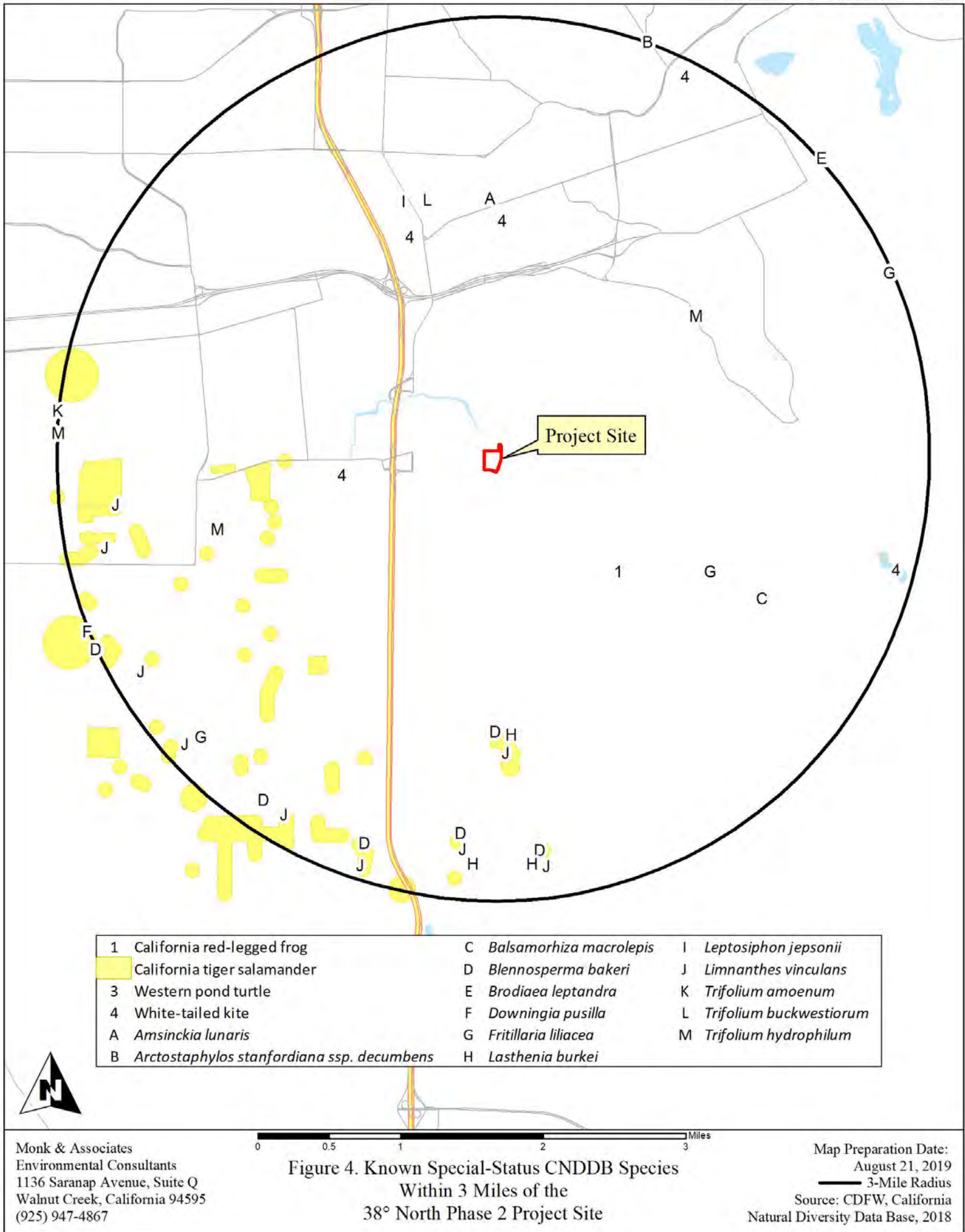


Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 1. 38° North Phase 2
Project Site Regional Map
Santa Rosa, California

County: Sonoma
Map Preparation Date: August 21, 2019





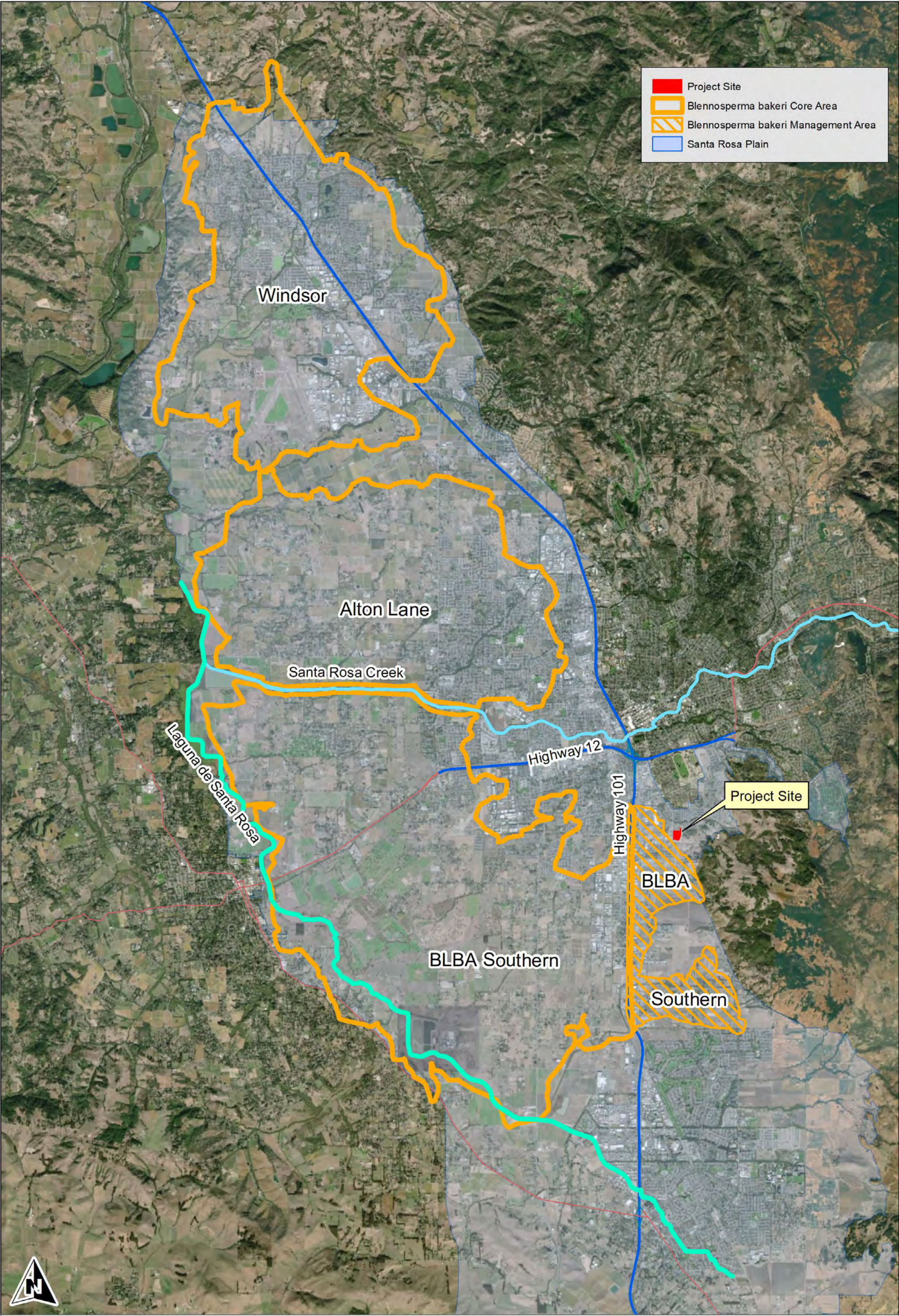


Figure 5. Blennosperma bakeri Core and Management Areas
(from USFWS 2016) in the Vicinity of the
38° North Phase 2 Project Site

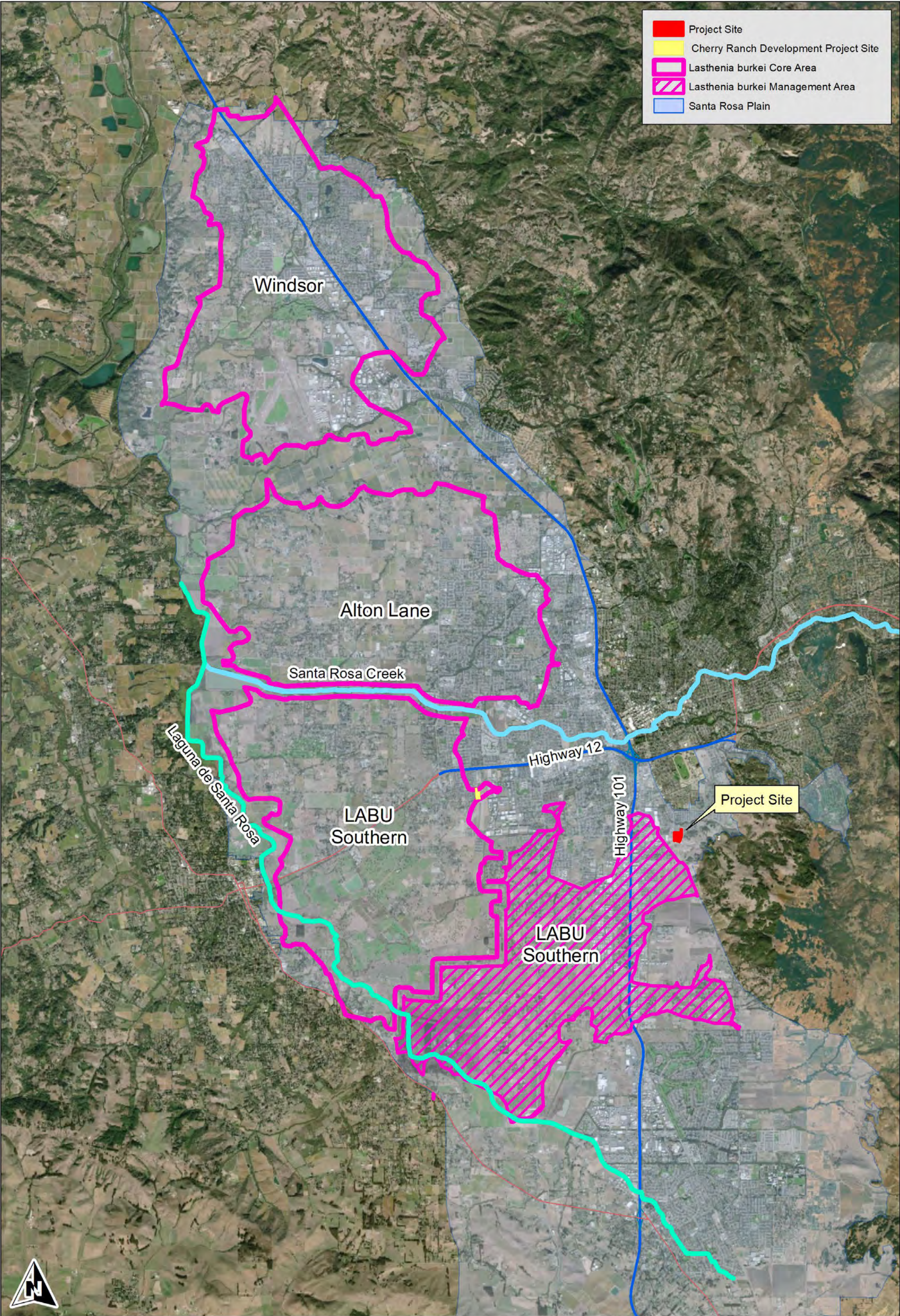


Figure 6. Lasthenia burkei Core and Management Areas
(from USFWS 2016) in the Vicinity of the
38° North Phase 2 Project Site

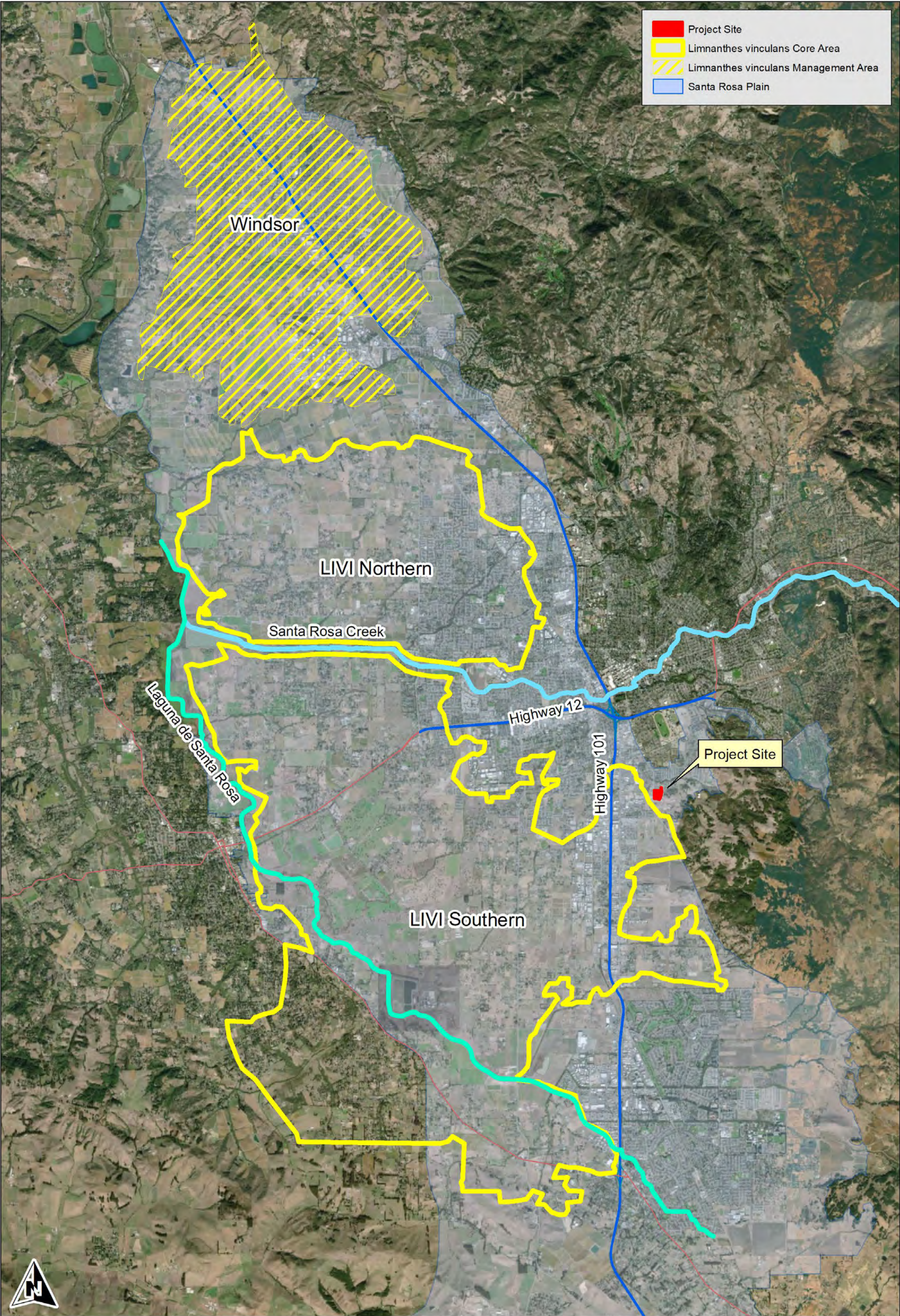
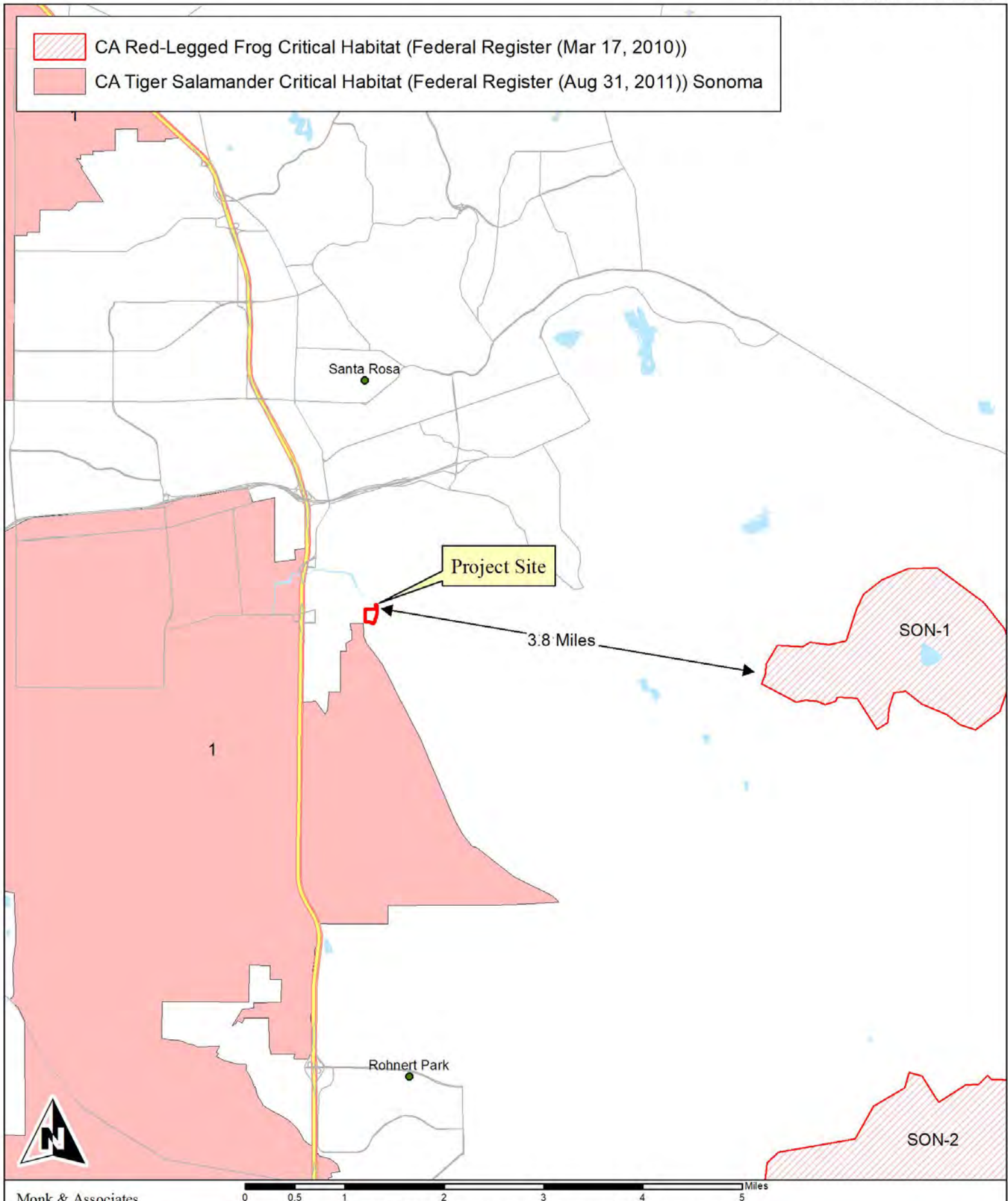


Figure 7. *Limnanthes vinculans* Core and Management Areas
(from USFWS 2016) in the Vicinity of the
38° North Phase 2 Project Site



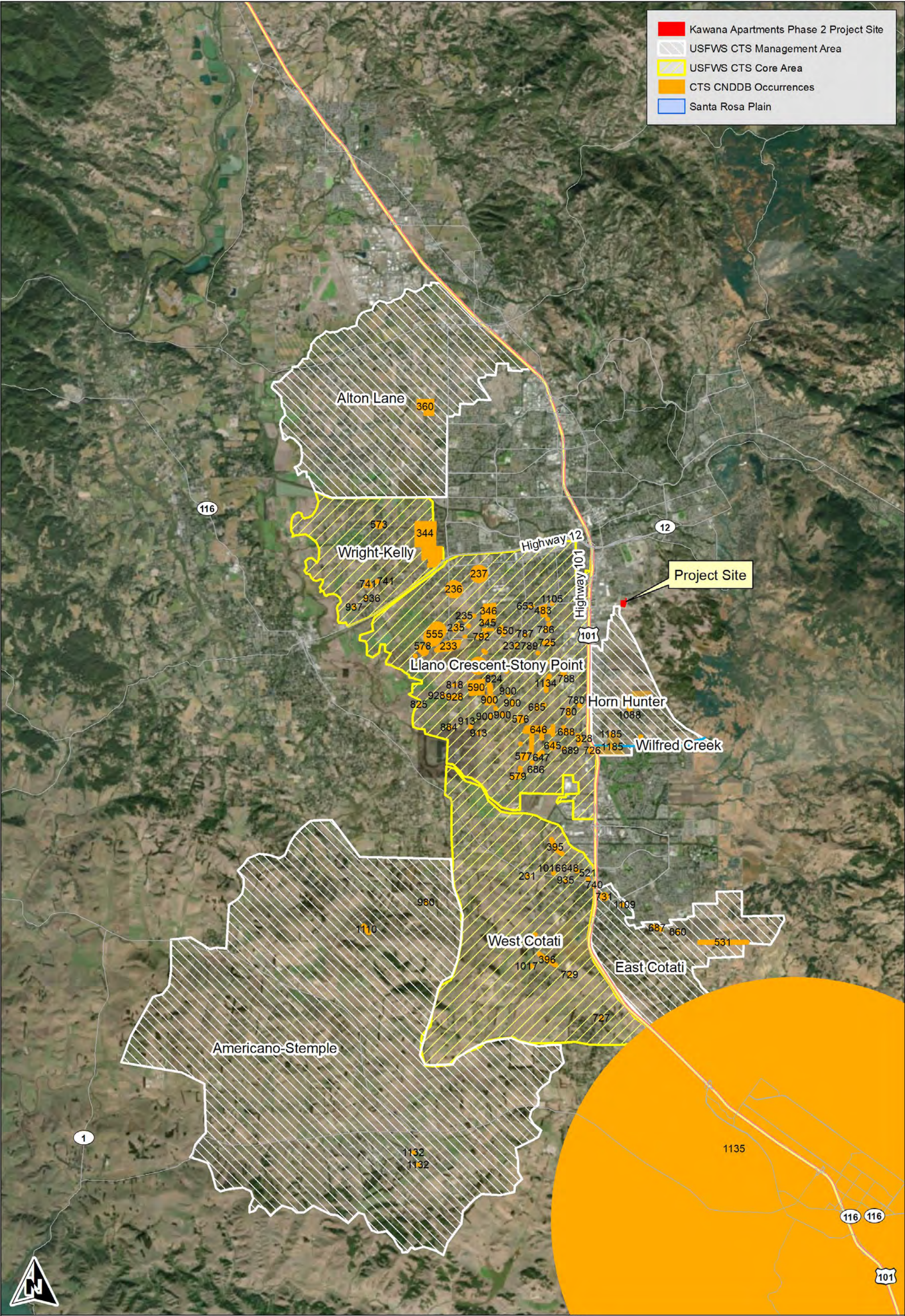


Figure 9. 38° North Phase 2 Project Site, Santa Rosa, California
Santa Rosa Plain California Tiger Salamander Core and Management Areas
(from USFWS 2016)

Table 1
Plant Species Observed on the 38° North Phase 2 Project Site

Angiosperms - Dicots

Asteraceae

<i>Baccharis pilularis</i> subsp. <i>consanguinea</i>	Coyote brush
* <i>Cichorium intybus</i>	Chicory
<i>Erigeron canadensis</i>	Horseweed
* <i>Lactuca serriola</i>	Prickly lettuce
* <i>Sonchus oleraceus</i>	Common sow-thistle
* <i>Tragopogon</i> sp.	Salsify

Brassicaceae

* <i>Brassica nigra</i>	Black mustard
* <i>Hirschfeldia incana</i>	Short-podded mustard
* <i>Raphanus sativus</i>	Wild radish

Chenopodiaceae

* <i>Atriplex prostrata</i>	Hastate orache
-----------------------------	----------------

Fabaceae

* <i>Trifolium subterraneum</i>	Subterranean clover
* <i>Vicia sativa</i>	Common vetch

Geraniaceae

* <i>Geranium dissectum</i>	Cut-leaf geranium
-----------------------------	-------------------

Polygonaceae

* <i>Rumex crispus</i>	Curly dock
------------------------	------------

Angiosperms - Monocots

Amaryllidaceae

* <i>Amaryllis belladonna</i>	Naked ladies
* <i>Narcissus</i> sp.	Narcissus

Cyperaceae

<i>Cyperus eragrostis</i>	Tall flatsedge
---------------------------	----------------

Juncaceae

<i>Juncus patens</i>	Spreading rush
----------------------	----------------

Poaceae

* <i>Avena barbata</i>	Slender wild oat
* <i>Bromus hordeaceus</i>	Soft chess
* <i>Festuca perennis</i>	perennial ryegrass
* <i>Glyceria declinata</i>	Low mannagrass
<i>Hordeum brachyantherum</i>	Meadow barley
* <i>Hordeum marinum</i> subsp. <i>gussoneanum</i>	Mediterranean barley
* <i>Hordeum murinum</i> subsp. <i>leporinum</i>	Hare barley
* <i>Phalaris aquatica</i>	Harding grass
<i>Pleuropogon californicus</i> var. <i>californicus</i>	Annual semaphore grass

Table 2
Wildlife Species Observed on the 38° North Phase 2 Project Site

Reptiles	
Western fence lizard	<i>Sceloporus occidentalis</i>
Birds	
Turkey vulture	<i>Cathartes aura</i>
California quail	<i>Callipepla californica</i>
Mourning dove	<i>Zenaida macroura</i>
Anna's hummingbird	<i>Calypte anna</i>
Pacific-slope flycatcher	<i>Empidonax difficilis</i>
California scrub jay	<i>Aphelocoma californica</i>
American crow	<i>Corvus brachyrhynchos</i>
Oak titmouse	<i>Baeolophus inornatus</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
California towhee	<i>Pipilo crissalis</i>
Dark-eyed junco	<i>Junco hyemalis</i>
House finch	<i>Haemorhous mexicanus</i>
Mammals	
Columbian black-tailed deer	<i>Odocoileus hemionus ssp. columbianus</i>
Raccoon	<i>Procyon lotor</i>
Striped skunk	<i>Mephitis mephitis</i>

Table 3**Special-Status Plant Species Known to Occur Within 3 Miles of the 38° North Phase 2 Project Site**

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Asteraceae					
<i>Balsamorhiza macrolepis</i> Big-scale balsam-root	Fed: - State: - CNPS: Rank 1B.2	March-June	Cismontane woodland; chaparral; valley and foothill grassland; [sometimes serpentinite]. 90 - 1555 meters	Closest record for this species located 2.0 miles southeast of the project site (Occurrence No. 17)	None. Grassland habitat present but not found during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
<i>Blennosperma bakeri</i> Sonoma sunshine	Fed: FE State: CE CNPS: Rank 1B.1	February-April	Valley and foothill grassland (mesic); vernal pools.	Closest record for this species located 1.9 miles south of the project site (Occurrence No. 39)	Unlikely. Marginal wetlands present but not found during appropriately timed surveys in 2006 and 2018. Additional surveys will be conducted in 2020. See text.
<i>Hemizonia congesta congesta</i> White seaside tarplant	Fed: - State: - CNPS: Rank 1B.2	April-November	Valley and foothill grassland. 20 to 560 meters. Clay soils	On CNPS 1-Quad Search	None. Grassland present but not found during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
<i>Lasthenia burkei</i> Burke's goldfields	Fed: FE State: CE CNPS: Rank 1B.1	April-June	Meadows and seeps (mesic); vernal pools.	Closest record for this species located 1.9 miles south of the project site (Occurrence No. 43)	Unlikely. Marginal wetlands present but not found during appropriately timed surveys in 2006 and 2018. Additional surveys will be conducted in 2020. See text.
<i>Layia septentrionalis</i> Colusa layia	Fed: - State: - CNPS: Rank 1B	April-May	Chaparral; cismontane woodland, valley and foothill grassland; [sandy, serpentinite].	On CNPS 1-Quad Search	None. No grassland with sandy, serpentine soils on the project site. Not observed during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
Boraginaceae					
<i>Amsinckia lunaris</i> Bent-flowered fiddleneck	Fed: - State: - CNPS: Rank 1B.2	March-June	Cismontane woodland, valley and foothill grassland, coastal bluff scrub.	Closest record for this species located 1.9 miles north of the project site (Occurrence No. 67)	None. Grassland habitat present but not found during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.

Table 3

Special-Status Plant Species Known to Occur Within 3 Miles of the 38° North Phase 2 Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Ericaceae					
<i>Arctostaphylos stanfordiana decumbens</i> Rincon manzanita	Fed: - State: - CNPS: Rank 1B.1	February-April	Chaparral (rhyolitic).	Closest record for this species located 3.0 miles northeast of the project site (Occurrence No. 2)	None. No chaparral or rhyolitic soils onsite. No species of <i>Arctostaphylos</i> observed onsite during 2006 or 2018 surveys. No impacts to this species anticipated.
Fabaceae					
<i>Amorpha californica napensis</i> Napa false indigo	Fed: - State: - CNPS: Rank 1B.2	April-July	Broadleaved upland forest (openings); chaparral, cismontane woodland. 150-2000 m.	On CNPS 1-Quad Search	None. No woodland or chaparral onsite. Not detected during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
<i>Astragalus claranus</i> Clara Hunt's milkvetch	Fed: FE State: CT CNPS: Rank 1B.1	March-May	Cismontane woodland; valley and foothill grassland; [serpentinite, volcanic clay].	On CNPS 1-Quad Search	None. No serpentine or volcanic soils onsite. Not detected during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
<i>Trifolium amoenum</i> Showy Indian clover	Fed: FE State: - CNPS: Rank 1B.1	April-June	Valley and foothill grassland (sometimes serpentinite)	Closest record for this species located 3.0 miles west of the project site (Occurrence No. 20)	None. Grassland habitat present but not found during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
<i>Trifolium buckwestiorum</i> Santa Cruz clover	Fed: - State: - CNPS: Rank 1B	May-July	Broadleaf upland forest; coastal prairie; [margins].	Closest record for this species located 1.8 miles north of the project site (Occurrence No. 35)	None. No forest or coastal prairie onsite. Not observed during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
<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.	Closest record for this species located 1.6 miles northeast of the project site (Occurrence No. 15)	None. Grassland habitat present but not found during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.

Table 3**Special-Status Plant Species Known to Occur Within 3 Miles of the 38° North Phase 2 Project Site**

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Liliaceae					
<i>Fritillaria liliacea</i> Fragrant fritillary	Fed: - State: - CNPS: Rank 1B.2	February-April	Coastal prairie; coastal scrub; valley and foothill grassland; [often serpentinite].	Closest record for this species located 1.6 miles southeast of the project site (Occurrence No. 62)	None. No serpentine grassland onsite. Not observed during appropriately timed surveys in 2006. No impacts to this species anticipated.
Limnanthaceae					
<i>Limnanthes vinculans</i> Sebastopol meadowfoam	Fed: FE State: CE CNPS: Rank 1B.1	April-May	Meadows (mesic); vernal pools.	Closest record for this species located 1.9 miles south of the project site (Occurrence No. 57)	Unlikely. Marginal wetlands present but not found during appropriately timed surveys in 2006 and 2018. Additional surveys will be conducted in 2020. See text.
Polemoniaceae					
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	Fed: - State: - CNPS: Rank 1B.2	March-May	Chaparral; cismontane woodland (usually volcanic).	Closest record for this species located 1.8 miles north of the project site (Occurrence No. 3)	None. No chaparral or woodland onsite. Not observed during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
<i>Navarretia leucocephala bakeri</i> Baker's navarretia	Fed: - State: - CNPS: Rank 1B.1	May-July	Cismontane woodland; lower montane coniferous forest; meadows (mesic); valley and foothill grassland; vernal pools.	On CNPS 1-Quad Search	None. Grassland habitat present but not found during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.
Rhamnaceae					
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	Fed: - State: - CNPS: Rank 1B.1	February-April	Closed-cone coniferous forest; chaparral; cismontane woodland; [volcanic or serpentinite].	On CNPS 1-Quad Search	None. No chaparral or woodland onsite. No species of Ceanothus observed onsite during 2006 or 2018 surveys. No impacts to this species anticipated.

Table 3**Special-Status Plant Species Known to Occur Within 3 Miles of the 38° North Phase 2 Project Site**

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<i>Ceanothus divergens</i> Calistoga ceanothus	Fed: - State: - CNPS: Rank 1B.2	March-April	Chaparral (serpentine or volcanic).	On CNPS 1-Quad Search	None. No chaparral onsite. No species of Ceanothus observed onsite during 2006 or 2018 surveys. No impacts to this species anticipated.
Themidaceae					
<i>Brodiaea leptandra</i> Narrow-anthered California brodiaea	Fed: - State: - CNPS: Rank 1B.2	May-July	Broadleafed upland forest; chaparral; cismontane woodland; lower montane coniferous forest; valley and foothill grassland. Elevation 110 - 915 meters.	Closest record for this species located 3.0 miles northeast of the project site (Occurrence No. 8)	None. Grassland present but not found during appropriately timed surveys in 2006 and 2018. No impacts to this species anticipated.

***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 4 - Plants of limited distribution - a watch list

Table 4**Special-Status Wildlife Species Known to Occur Within 3 Miles of the 38° North Phase 2 Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Amphibians				
California tiger salamander (So Co DPS) <i>Ambystoma californiense</i>	Fed: FE State: CT Other:	Found in grassland habitats of the valleys and foothills. Requires burrows for aestivation and standing water until late spring (May) for larvae to metamorphose.	Closest record for this species located 1.5 miles west of the project site (Occurrence No. 1105).	Unlikely. Site is isolated from all known occurrences in the Santa Rosa plain. See text.
Reptiles				
Western pond turtle ** <i>Emys marmorata</i>	Fed: - State: CSC Other:	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County.	Closest record for this species located 1.5 miles north of the project site (Occurrence No. 648).	Unlikely. No suitable habitat occurs on or adjacent to the project site.
Birds				
White-tailed kite <i>Elanus leucurus</i>	Fed: State: FP Other:	Found in lower foothills and valley margins with scattered oaks and along river bottomlands or marshes adjacent to oak woodlands. Nests in trees with dense tops.	Closest record for this species located 1.1 miles west of the project site (Occurrence No. 77).	Low. Suitable nesting and foraging habitat occurs on the project site. See text.

Table 4**Special-Status Wildlife Species Known to Occur Within 3 Miles of the 38° North Phase 2 Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
*Status				
Federal:		State:		
FE - Federal Endangered		CE - California Endangered		
FT - Federal Threatened		CT - California Threatened		
FPE - Federal Proposed Endangered		CR - California Rare		
FPT - Federal Proposed Threatened		CC - California Candidate		
FC - Federal Candidate		CSC - California Species of Special Concern		
FPD - Federally Proposed for delisting		FP - Fully Protected		
		WL - Watch List. Not protected pursuant to CEQA		

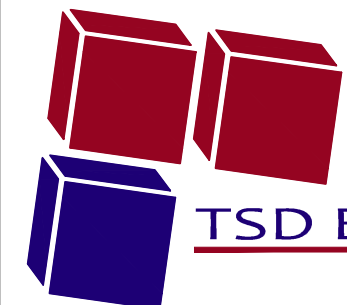
**The USFWS hopes to finish a 12-month finding for western pond turtle in 2021 but until formally listed, it is not afforded the protections of FESA.

PRELIMINARY SITE PLAN
38 DEGREES NORTH PHASE 2
2660 PETALUMA HILL ROAD
CITY OF SANTA ROSA, CA

PROJECT INFORMATION	
ADDRESS:	2660 PETALUMA HILL ROAD SANTA ROSA, CA SONOMA COUNTY
APN:	044-051-055
PROPERTY AREA:	±10.87 AC (GROSS) ±9.62 AC (NET)
RESIDENTIAL AREA:	±9.58 AC (GROSS) ±8.58 AC (NET)
COMMERCIAL AREA:	±1.29 AC (GROSS) ±1.04 AC (NET)
BUILDING DESCRIPTION	
20-PLEX 3 STORY, 5 BUILDINGS	
1 BEDROOM	10
2 BEDROOM	8
3 BEDROOM	2
24-PLEX 3 STORY, 3 BUILDINGS	
1 BEDROOM	10
2 BEDROOM	14
TOTAL UNIT	
1 BEDROOM UNITS	80
2 BEDROOM UNITS	82
3 BEDROOM UNITS	10
TOTAL UNITS	172
CLUBHOUSE 2 STORY	4,300 SF
NOTES:	
1. THE ADJACENT KAWANA SPRINGS APARTMENTS (PHASE 1), AND 38° NORTH (PHASE 2) WILL ENTER INTO A RECIPROCAL ACCESS AND PARKING AGREEMENT.	
2. THERE IS NO LOT LINE ADJUSTMENT OR MERGER PLANNED WITH THIS PROJECT.	
3. PROJECT DRIVEWAYS WILL REQUIRE AN ENGINEERING VARIANCE.	
4. THE MAINTENANCE AND HEALTH OF TREES ARE TO BE THE RESPONSIBILITY OF THE OWNER OR OWNER'S AGENT AS PER CITY OF SANTA ROSA CITY CODE 13.32.010.	
5. THE OPEN SPACE PRESERVE WILL NOT BE DEEDED TO THE CITY OF SANTA ROSA. THE OWNER OR OWNER'S AGENT IS RESPONSIBLE FOR MAINTENANCE AND IRRIGATION OF THE TREES WITHIN THE OPEN SPACE PRESERVE.	
6. FOR SITE PARKING TOTALS SEE SHEET C1.1	

LEGEND	
	AC PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	SITE LANDSCAPING
	IMPERVIOUS SURFACES PER A4.106.4
	SIDEWALK PERVIOUS PAVERS
PHASE 2 NORTH AREA IMPERVIOUS SURFACES = 35,548 SF PERVIOUS PAVERS = 7,175 SF (20.2%)	
PHASE 2 SOUTH AREA IMPERVIOUS SURFACES = 8,625 SF PERVIOUS PAVERS = 1,860 SF (21.6%)	

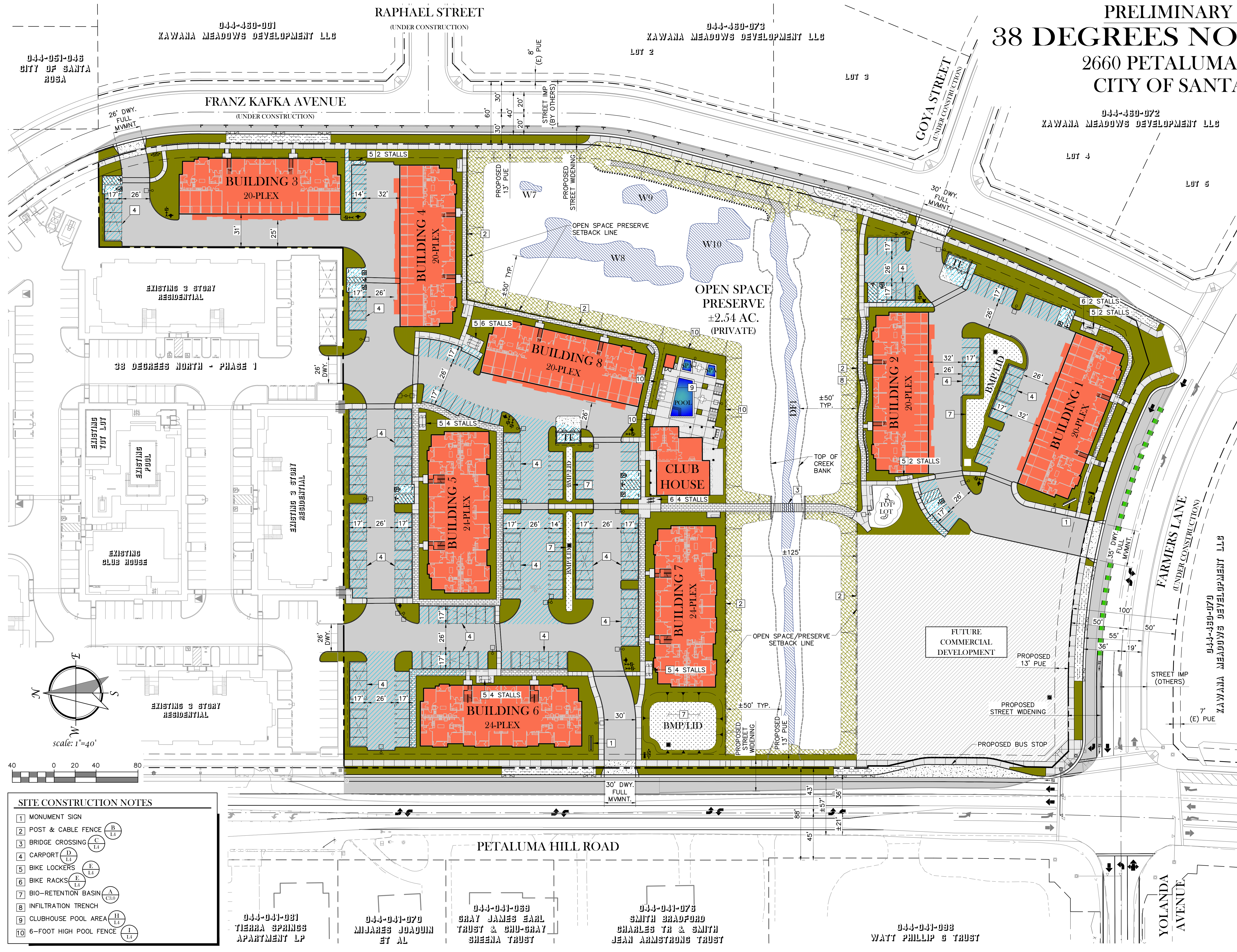
PRELIMINARY SITE PLAN
JANUARY 22, 2020



TSD ENGINEERING, INC.
expect more.

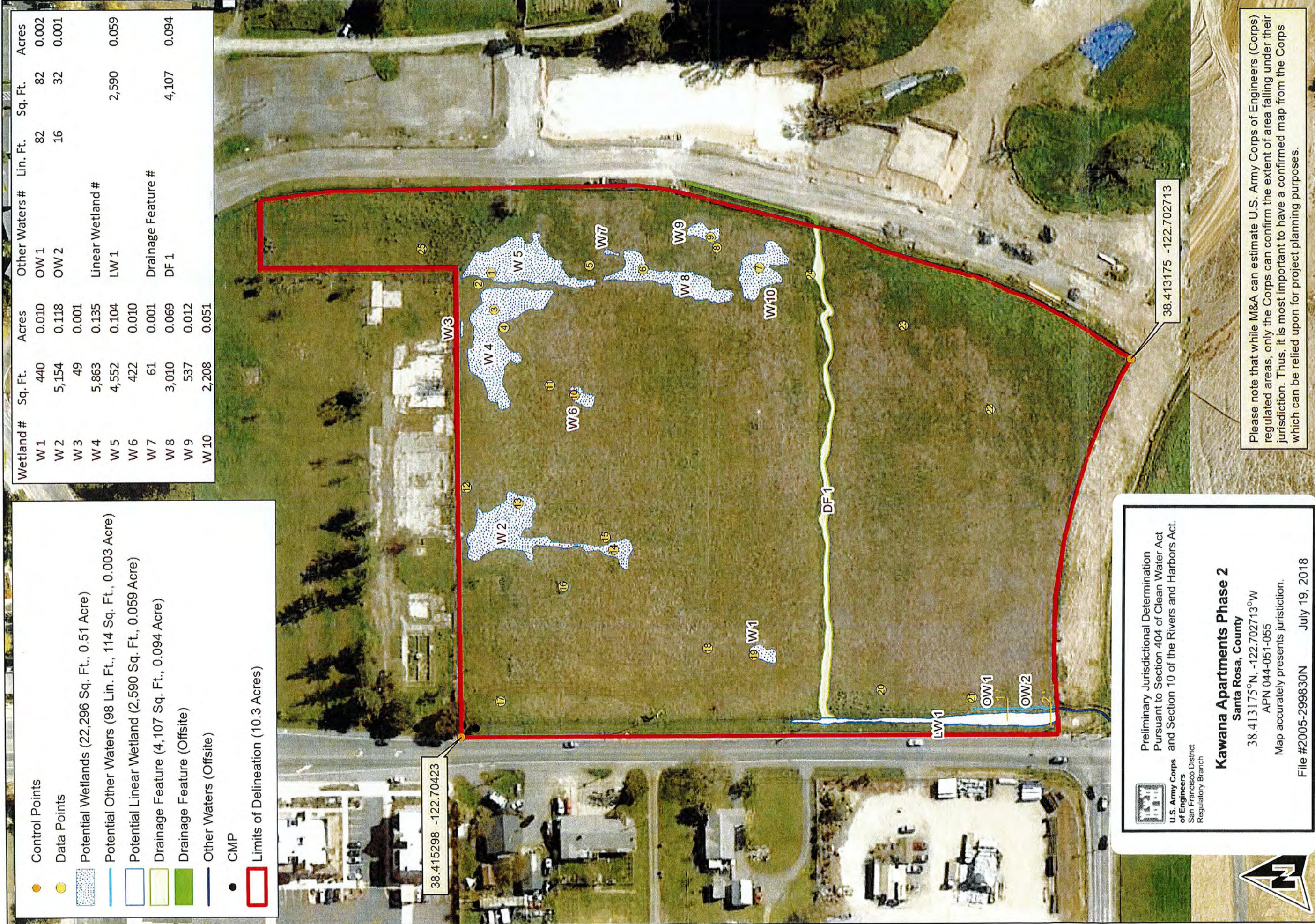
785 ORCHARD DRIVE, SUITE #110
FOLSOM, CA 95630
PHONE: (916) 608-0707
FAX: (916) 608-0701

C1.0



SITE CONSTRUCTION NOTES

- MONUMENT SIGN
- POST & CABLE FENCE
- BRIDGE CROSSING
- CARPORT
- BIKE LOCKERS
- BIKE RACKS
- BIO-RETENTION BASIN
- INFILTRATION TRENCH
- CLUBHOUSE POOL AREA
- 6-FOOT HIGH POOL FENCE



Control Points

Data Points

Potential Wetlands (22,296 Sq. Ft., 0.51 Acre)

Potential Other Waters (98 Lin. Ft., 114 Sq. Ft., 0.003 Acre)

Potential Linear Wetland (2,590 Sq. Ft., 0.059 Acre)

Drainage Feature (4,107 Sq. Ft., 0.094 Acre)

Drainage Feature (Offsite)

Other Waters (Offsite)

• CMP

□ Limits of Delineation (10.3 Acres)

Wetland #	Sq. Ft.	Acres	Other Waters #	Lin. Ft.	Sq. Ft.	Acres
W 1	440	0.010	OW 1	82	82	0.002
W 2	5,154	0.118	OW 2	16	32	0.001
W 3	49	0.001				
W 4	5,863	0.135	Linear Wetland #			
W 5	4,552	0.104	LW 1		2,590	0.059
W 6	422	0.010				
W 7	61	0.001	Drainage Feature #			
W 8	3,010	0.069	DF 1		4,107	0.094
W 9	537	0.012				
W 10	2,208	0.051				

Preliminary Jurisdictional Determination
Pursuant to Section 404 of Clean Water Act
and Section 10 of the Rivers and Harbors Act.



U.S. Army Corps
of Engineers
San Francisco District
Regulatory Branch

Kawana Apartments Phase 2

Santa Rosa, County

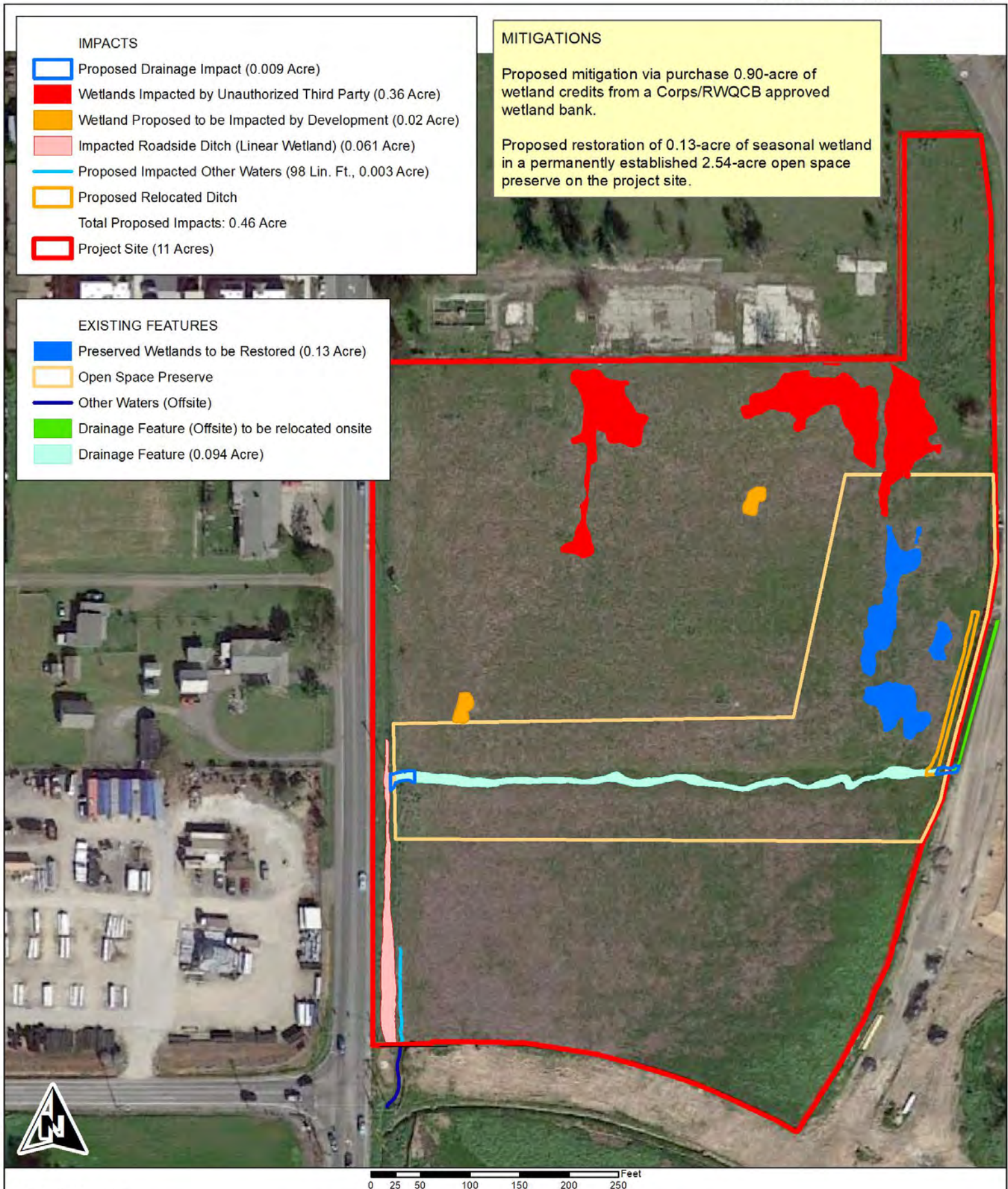
38.413175°N, -122.702713°W

APN 044-051-055

Map accurately presents jurisdiction.

File #2005-299830N July 19, 2018

Please note that 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.





Tree Survey					
Tree Number	Tree Name	Tree Species	DBH (inches)	Condition	Recommendations
3910	Coast Live Oak	Quercus agrifolia	4, 5, 5	Good	To be removed
3911	Weeping Willow	Salix babylonica	44	Poor, many dead branches	To be removed
3912	Plum	Prunus sp.	2, 2, 2.5	Poor, previously cut, re-sprouts	To be removed
3913	English Walnut	Juglans regia	7	Poor, mostly dead	To be removed
3914	Coast Live Oak	Quercus agrifolia	9, 9, 7	Good	To be removed
3915	Black Walnut	Juglans hindsii	5.5	Moderate	To be removed



0 50 100 200 300 400 500 Feet

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Exhibit A. Tree Survey
38° North Phase 2 Project Site
Santa Rosa, California

Aerial Photograph Source: Google Earth
Map Preparation Date: August 21, 2019