



Proposed Mitigated Negative Declaration

Publication Date: February 16, 2021
Public Review Period: February 16 to March 16, 2021
State Clearinghouse Number:
Permit Sonoma File Number: **MNS18-0003**
Prepared by: Justin Klaparda
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Pursuant to Section 15071 of the State CEQA Guidelines, this proposed Mitigated Negative Declaration and the attached [Expanded] Initial Study including the identified mitigation measures and monitoring program, constitute the environmental review conducted by the County of Sonoma as lead agency for the proposed project described below:

Project Name:	Wikiup Drive Minor Subdivision
Project Applicant/Operator:	Kent Pearson
Project Location/Address:	1100 Wikiup Drive, Santa Rosa, CA 95403
APN:	039-180-003 & 039-180-004
General Plan Land Use Designation:	Urban Residential
Zoning Designation:	Low Density Residential District (R1), Combining District (B6) 1.5 DU, G
Decision Making Body:	Sonoma County Project Review Advisory Committee
Appeal Body:	Sonoma County Planning Commission
Project Description:	See Item III, below

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation" as indicated in the attached Initial Study and in the summary table below.

Table 1. Summary of Topic Areas

Topic Area	Abbreviation*	Yes	No
Aesthetics	VIS	Yes	
Agricultural & Forest Resources	AG		No
Air Quality	AIR	Yes	
Biological Resources	BIO	Yes	
Cultural Resources	CUL	Yes	
Energy	ENE		No
Geology and Soils	GEO	Yes	
Greenhouse Gas Emission	GHG		No
Hazards and Hazardous Materials	HAZ		No
Hydrology and Water Quality	HYDRO		No
Land Use and Planning	LU		No
Mineral Resources	MIN		No
Noise	NOISE	Yes	
Population and Housing	POP		No
Public Services	PS		No
Recreation	REC		No
Transportation	TRAF	Yes	
Tribal Cultural Resources	TCR	Yes	
Utility and Service Systems	UTL		No
Wildfire	WILD		No
Mandatory Findings of Significance			No

RESPONSIBLE AND TRUSTEE AGENCIES

The following lists other public agencies whose approval is required for the project, or who have jurisdiction over resources potentially affected by the project. Although no tribe has requested consultation under Public Resources Code Section 21080.3.1, Section 5 below includes a list of the tribes that have been contacted regarding the project.

Table 2. Agencies and Approvals Required

Agency	Activity	Authorization
State Water Resources Control Board	Generating storm water (construction, industrial, or municipal)	National Pollutant Discharge Elimination System (NPDES) requires submittal of NOI
Bay Area Air Quality Management District (BAAQMD)	Stationary air emissions	
U. S. Fish and Wildlife Service (FWS) and or National Marine Fisheries Service (NMFS)	Incidental take permit for listed plant and animal species	Endangered Species Act

ENVIRONMENTAL FINDING:

Based on the evaluation in the attached Initial Study, I find that the project described above will not have a significant adverse impact on the environment, provided that the mitigation measures identified in the Initial Study are included as conditions of approval for the project and a Mitigated Negative Declaration is proposed. The applicant has agreed in writing to incorporate identified mitigation measures into the project plans.

Prepared by: Justin Klaparda Date

Kent Pearson (Applicant) Date:



County of Sonoma
Permit & Resource Management Department

Initial Study

I. INTRODUCTION:

Kent Pearson, with the assistance of BC Engineering Group Inc, is applying for a Minor Subdivision Permit to subdivide two existing parcels to create four (4) total parcels at 1100 Wikiup Drive in Santa Rosa, California. The project site is on a 6.94-acre vacant parcel (APN 039-180-003 & -039-180-004) located northeast of Old Redwood Highway and north of Mark West Springs Road. Existing land uses surrounding the project site include residential to the North, South, East and West. The topography of the project is sloped from the former residence as the highest point, sloping to lower elevations in all directions.

The 6.94-acre, four separate lot subdivision would consist of the following: parcel 1 at 1.65-acres, parcel 2 at 1.75-acres, parcel 3 at 1.62-acres, and parcel 4 at 1.93-acres. A shared private road off Wikiup Drive provides access to the proposed lots. Storm water drainage would be located on the northern and southern sides of the project site. The project does not include construction of any structures; however, the applicant intends to re-build the existing fire-damaged home on APN 039-180-004. Future development of others lots consistent with the zoning code can be expected.

This report is the Initial study required by the California Environmental Quality Act (CEQA). The report was prepared by Alberto Santos-Davidson, Contract Planner with MIG. Information on the project was provided by Kent Pearson and Tom Billeter of BC Engineering Group, Inc. Other reports, documents, maps and studies referred to in this document are available for review at the Permit Sonoma Planning Department.

Please contact Justin Klaparda, Contract Planner, at (510) 845-7549, for more information.

II. SITE LOCATION AND SETTING

The proposed minor subdivision would be located at 1100 Wikiup Drive, Santa Rosa (Figure 1). Prior to the October 2017 Sonoma Complex Fire, the site included a single residence with accessory structures, paved drive lane, and in-ground pool. Due to fire damage the project parcels currently have no standing structures. The 6.94-acre parcel is zoned Low Density Residential District (R1) and Combining Districts (B6) with a 1.5 acre per dwelling unit density. This area is mostly residential, located approximately 0.5 miles north of the City of Santa Rosa. The property is currently connected to a public sewer system operated by Sonoma County Water Agency; water is provided by California American Water. The property is served by the Rincon Valley Fire Protection District. Electricity is brought in by existing overhead utilities and power poles which run north to south.

III. PROJECT DESCRIPTION

Kent Pearson proposes a minor subdivision to turn two existing parcels into four separate parcels located at 1100 Wikiup Drive, in Santa Rosa, California. The lot size of each parcel is, parcel 1 at 1.65-acres, parcel 2 at 1.75-acres, parcel 3 at 1.62-acres and parcel 4 at 1.93-acres. The project site is not located within the boundaries of a specific plan. Based on the potential building envelopes shown in Figure 4 below, the proposed improvements associated with the project and future anticipated residential construction could cover an area up to approximately 302,431 square feet. The project construction

activities would include earthwork, grading, paving, concrete flatwork, and installation of underground utilities (including water, sewer, storm drainage, irrigational facilities and the four proposed building locations). The project construction is proposing a cut maximum of 1,000 cubic yards (CY), maximum fill of 1,000 CY and a fill area of 10,000 square feet (SF). Eventually, future development is anticipated; new residences will be constructed within the building footprints on four of the newly created lots identified on the map. The project has the potential to create approximately 1.34 acres of new impervious surface area; this estimate includes access improvements as well as the anticipated future building footprints. The three newly proposed parcels do not have existing utilities and would require hook-ups.

The project would include construction of a 20-foot wide private road with two turnarounds which provides access to the parcels and connects the newly created parcels to the main street. The proposed private road is approximately 425 feet long and would provide the proposed lots access to the public right of way at Wikiup Drive. Driveways to future individual residences would be designed as part of future development plans for each of the four undeveloped lots, subject to review and approval by Sonoma County. Two new vehicle turnarounds are also proposed for the project: one at the end of the access road, between parcels 1 and 2; the other turnaround would be on parcel 3, abutting parcel 4.

The project site previously consisted of a single-family residence and associated outdoor pool and driveway. All structures on the property were burned in the fires of October 2017. The former residence was located at the highest point on the property with gradual slopes to each side of the project boundary. Debris from the former residence has been removed; however, the project site still contains burnt vegetated debris, and access to some areas of the project site was limited during a site visit on March 29, 2019.

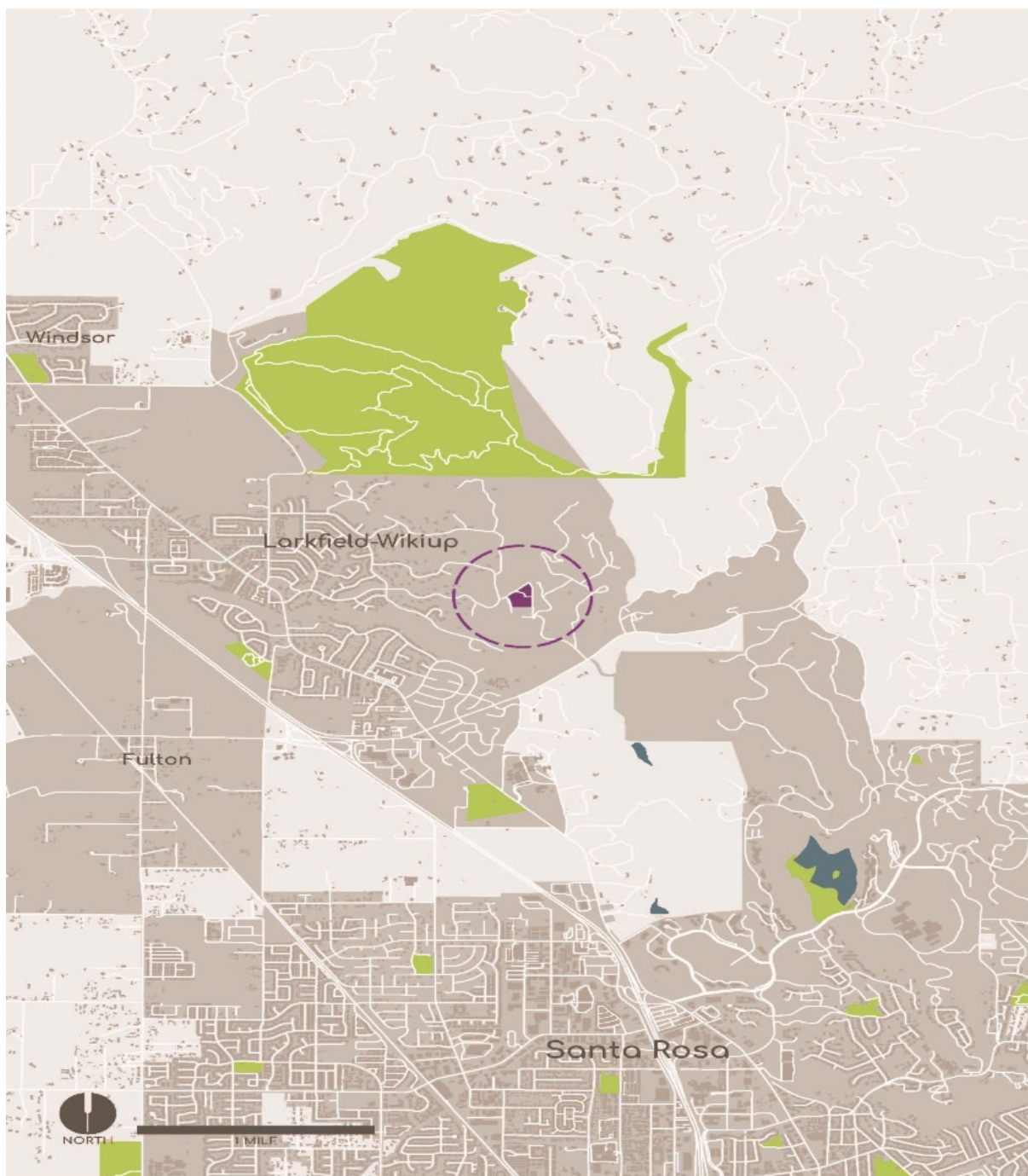


Figure 1. Project Vicinity Map

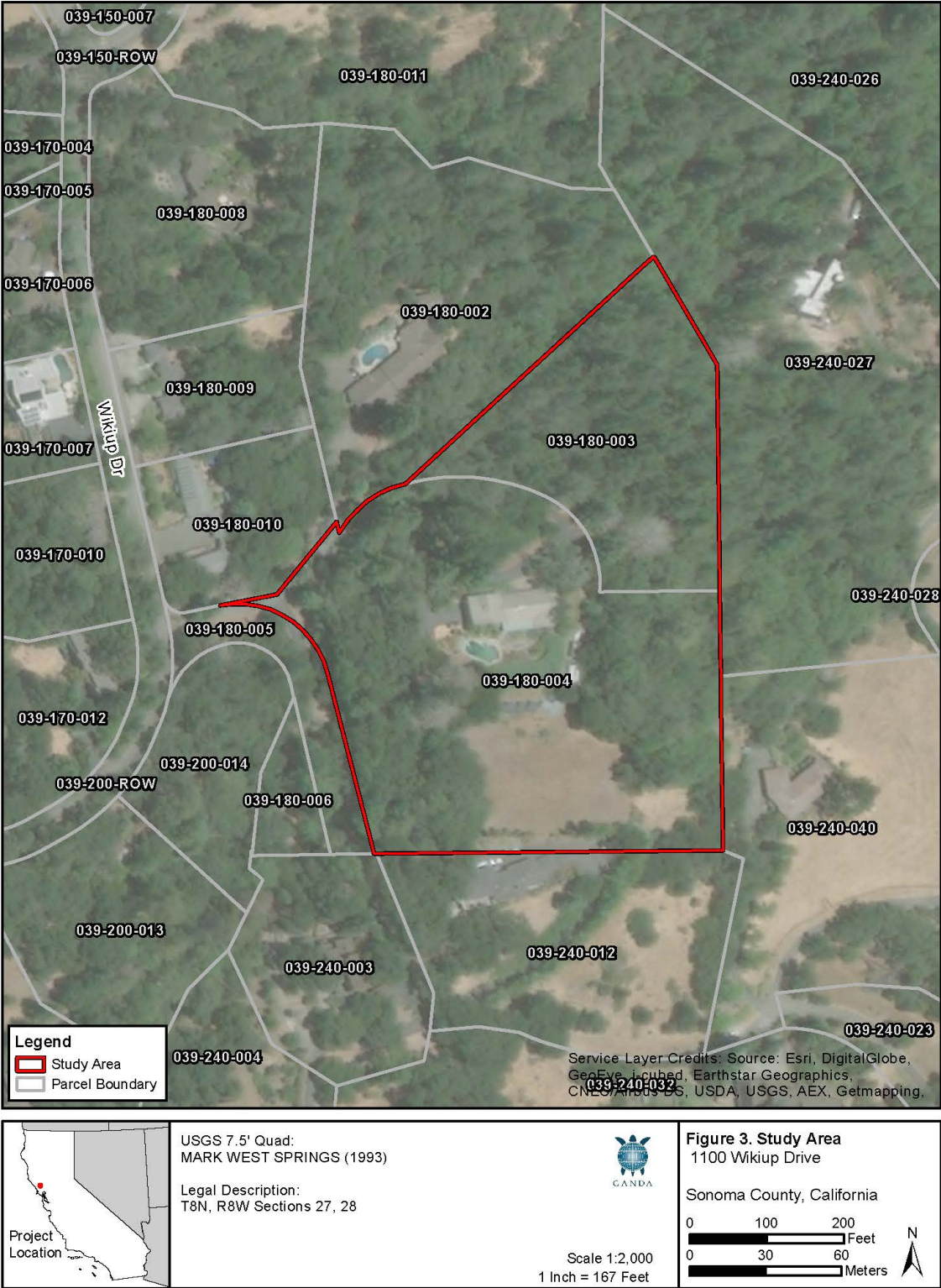


Figure 2. Project Site and Surrounding Areas



Figure 3. Post Fire Project Site

Existing Uses: The project site is currently comprised of two lots. Prior to the 2017 wildfire, the existing use consisted of a single-family residence. Please see Figure 2 which depicts the project site before the wild fire and Figure 3 which depicts the project site after the 2017 wildfire. The site is now undeveloped.

Topography: The project site drains from the former residence, outwards in all directions. The topography of the project site is sloped down from the former residence, with slopes ranging from 0%-10% to 50% and greater in all directions away from the former residence site. ¹The former residence site and the proposed building 1 location is predominately 0%-10% slope. The proposed building 2 and proposed building 4 site locations are majority 10%-50% slope with some 50% or greater elevation changes to the eastern portion of the area. Elevation ranges on the entire project parcel from approximately 370 at the lowest point to approximately 530 feet above mean sea level (msl) at the highest point.

Drainage: The project site drains outward in all directions from the former residence location prior to the wildfires which serves as the high point of the site. Runoff is directed east and south towards Mark West Creek via natural drainage ditches located outside of the subject property. The lowest existing elevations are on the northern (370 feet) and southern (490 feet) boundary of the site.

Vegetation: The majority of the project site was formerly dominated with mature coast live oaks, blue oak, California bay, and redwood which were all burned by the fire. Current vegetation includes redwoods, oaks and bay regrowth and non-native herbs and forbs. Approximately 1,100 feet southeast of the project site boundary is the Mark West Creek running in a northeast to northwest direction in the vicinity of the

¹ Lands of Pearson Slope Banding Plan, C2.0.

project site. The project would remove 11 trees over 9 inches in diameter to allow for driveway and utility improvements.

Proposed Buildings and Uses: The project does not propose any buildings. It is anticipated that the four-lot subdivision will be used for four new single-family residential homes in the future. Rebuild efforts are underway at the former primary residence.

Parking: All parking would be done on site. There shall be not less than one (1) covered off-street parking space for each dwelling unit. The project does not propose construction of a new parking lot.

Access: All access and egress for vehicles would be via an existing/proposed shared road directly off Wikiup Drive. While there is an existing easement on site, the tentative map proposes a new 32 foot access easement starting at Wikiup Drive and providing access to all four proposed parcels. The private access road would be widened to 20 feet. Sonoma County Department of Transportation and Public Works (DTPW) would require the project to ensure new driveways are improved to conform to American Association of State Highway and Transportation Officials (AASHTO) standards.

Wastewater Disposal: Sanitary sewage would be provided by the Sonoma County Water Agency through existing public sanitary sewer services.

Water Supply: Water will be supplied from California American Water through existing water lines.

Landscaping: There is no proposed landscaping plan nor are landscaping improvements currently anticipated.

Grading and Earthwork: Project improvements would involve a maximum cut of 1,000 CY earth material and maximum fill of 1,000 CY earth material, over a fill area of 10,000 square feet.

Construction: No construction of residences is proposed as part of this project; the construction schedule of the access driveway and supporting utilities has not been determined.

Storm Water Management: Currently, storm water runoff from the site drains outward from the existing residence which serves as the high point of the site. Storm water runs in sheet flow to the north, south, east, and west. Runoff is directed towards Mark West Creek via natural drainage ditches which are not located on the property (Figure 4 depicts the storm drain improvements).

The proposed structures and features on the site would consist of the onsite buildings, asphalt paving, sidewalks and walkways, fencing and gates, site lighting, landscaping, underground utilities, storm water management facilities, LID features and related improvements.

Onsite storm water runoff would be captured by permanent BMPs to reduce pollution leaving the site. Runoff reduction measures proposed for this project include disconnection of rainwater leaders from the storm drain pipe network and interceptor trees. Storm water would be directed to flow over existing grassy vegetation.

Storm drain improvements include priority 2 bioretention swales that are proposed for each treatment area. For proposed parcels 2 and 3, the Bioretention areas would be located directly south of the proposed building location 2 and proposed building location 3. For proposed parcel 4, the bioretention swales would be located west, and for parcel 1 the bioretention swales would be located to the southwest.

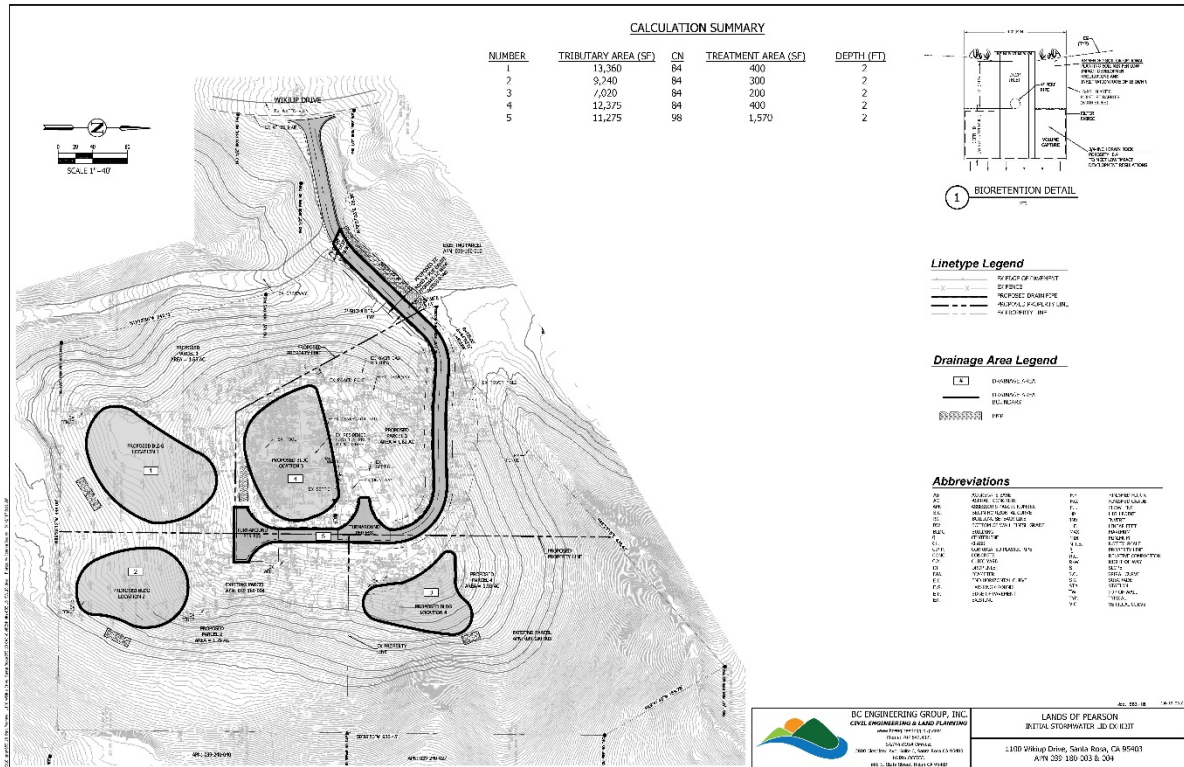


Figure 4. Drainage and Storm Drain Improvements.

IV. ISSUES RAISED BY THE PUBLIC OR AGENCIES

A referral packet was drafted and circulated on November 1, 2018 to inform and solicit comments from selected relevant local and state agencies; and to special interest groups that were anticipated to take interest in the project. As of **MMMM DD YYYY**, the project planner received responses to the project referral from the following Sonoma County departments: Permit Sonoma Health, The Natural Resources Geologist, the Department of Transportation and Public Works, and Fire and Emergency Services. The only issue raised by Sonoma County departments was the request by The Natural Resources Geologist for a geotechnical report because the proposed subdivision is located partially within the Earthquake Fault Zone for the Rodgers Creek Fault (EFZ). The report was provided and proved satisfactory. Comments were also received from the Northwest Information Center which did not recommend further study for archaeological resources. The referral responses included several project subdivision permit conditions of approval. The project planner did not receive referral responses from any state or federal agencies. Four letters were received from tribal entities none of whom requested further consultation.

A neighborhood notification letter was sent on April 24th, 2018 to residents within 300 feet of the subject property. The project planner has received one public comment requesting application materials on the proposed project.

V. EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts of this project based on the criteria set forth in the State CEQA Guidelines and the County's implementing ordinances and guidelines. For each item, one of four responses is given:

No Impact: The project would not have the impact described. The project may have a beneficial effect, but there is no potential for the project to create or add increment to the impact described.

Less Than Significant Impact: The project would have the impact described, but the impact would not be significant. Mitigation is not required, although the project applicant may choose to modify the project to avoid the impacts.

Potentially Significant Unless Mitigated: The project would have the impact described, and the impact could be significant. One or more mitigation measures have been identified that will reduce the impact to a less than significant level.

Potentially Significant Impact: The project would have the impact described, and the impact could be significant. The impact cannot be reduced to less than significant by incorporating mitigation measures. An environmental impact report must be prepared for this project.

Each question was answered by evaluating the project as proposed, that is, without considering the effect of any added mitigation measures. The Initial Study includes a discussion of the potential impacts and identifies mitigation measures to substantially reduce those impacts to a level of insignificance where feasible. All references and sources used in this Initial Study are listed in the Reference section at the end of this report and are incorporated herein by reference.

The Project Applicant has agreed to accept all mitigation measures listed in this Initial Study as conditions of approval for the proposed project, and to obtain all necessary permits, notify all contractors, agents and employees involved in project implementation and any new owners should the property be transferred to ensure compliance with the mitigation measures.

1. AESTHETICS:

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

Comment:

A scenic vista is a public view from a particular location or composition of views along a roadway or trail. Scenic vistas often describe views of natural undisturbed land, but may also include natural and developed areas, or even developed and unnatural areas such as the scenic view of a rural historic town and surrounding agricultural lands.

General Plan and Zoning Ordinance

The purpose of the Sonoma County General Plan Resource and Conservation Element² is to preserve the natural and scenic resources which contribute to the general welfare and quality of life for the residents of the county and to the maintenance of its tourism industry. The scenic resources within the General Plan includes three categories: scenic highway corridors, community separators, and scenic landscape units.

State scenic highways refer to those highways that are designated by the California Department of Transportation Program³ as scenic. As shown on Sonoma County General Plan Figure OSRC-5e, Open Space Map Santa Rosa and Environs, the project site is not adjacent to an identified scenic highway corridor; the closest identified corridor is approximately 0.5 miles from the project site.

The project site is not identified within an area defined as community separator or scenic landscape unit. The project site is adjacent to an area identified as a scenic landscape unit in the General Plan (and a Scenic Resources Combining District in the Zoning Ordinance) but is not located within the boundaries of these scenic designations. The project site includes natural vegetation consisting of redwoods, oaks and bay trees that were growing prior to the Tubbs Fire; existing vegetation, as it grows back from the wildfire, would serve as screening for the future development associated within the single-family residences constructed on the site. Additionally, previous development at the site was a single-family residence. The proposed subdivision will create space for three (3) more single-family residences. The proposed development will be consistent with the surrounding parcels (all rural single-family residences).

As described above, the project site is not within a designated scenic resources area as identified by the General Plan or Zoning Ordinance. Development of the project site would include single-family residential uses, similar to the uses that existed within the area prior to the 2017 Tubbs Fire. Development of the proposed project would not result in a significant adverse effect to a scenic vista.

Significance Level:

Less than Significant Impact

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

Comment:

² Sonoma County Permit and Resource Management Department, 2008. *Sonoma County General Plan 2020, Open Space and Resource Conservation Element*, Amended August 9, 2016.

³ California Department of Transportation. *California Scenic Highway Mapping System*, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm (accessed 12/23/18).

The project site is not located near or on a designated state scenic highway.

Significance Level:

No Impact

- c) **In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Comment:

Prior to the 2017 Tubbs Fire, the existing visual character of the site and surroundings included low density suburban development and natural vegetation; much of the residential development within and adjacent to the project site was destroyed by the wildfire.

The proposed project would create three additional parcels on the project site, enabling future development of three single-family residential homes beyond the rebuild of the former single-family residence. The project is consistent with the land use designation and zoning for the site. Future homes constructed on within the subdivision shall be consistent with the Low Density Residential (R-1) zoning development requirements for the property. Sonoma County Code Section 26.20-005 identifies the purpose of the R-1 zoning as follows: to stabilize and protect the residential characteristics of the district and to promote and encourage a suitable environment for family life. The R1 district is intended for single-family homes in low density residential areas, as provided in Section 2.2.1 of the general plan, which are compatible with existing neighborhood character.⁴

The County has developed Visual Assessment Guidelines⁵ to provide guidance for the assessment of visual impacts in the preparation of initial studies and environmental impact reports. The site is not a gateway to a community or in a zone designated to protect scenic resources. According to the Visual Assessment Guidelines, the property has Moderate Sensitivity because of the existing slopes:

Moderate: The site or portion thereof is within a rural land use designation or an urban designation that does not meet the criteria above for low sensitivity, but the site has no land use or zoning designations protecting scenic resources. The project vicinity is characterized by rural or urban development but may include historic resources or be considered a gateway to a community. This category includes building or construction sites with visible slopes less than 30 percent or where there is significant natural features of aesthetic value that is visible from public roads or public use areas (i.e. parks, trails etc.).

The site has areas with slopes well above 30%, however very limited disturbance and development is proposed within these steeply sloped areas as part of this subdivision and construction of the new access driveway and the improvements will not be visible from the public right of way. Furthermore, the building envelopes generally avoid the steepest areas of the site as well.

The County's Visual Assessment Guidelines also evaluate the visual dominance of the project by comparing the form, line, color, texture, and night lighting with its surroundings. The project (when ultimately developed with single-family homes) is characterized as "Subordinate" because the project is minimally visible from public view due to the natural vegetation and is compatible to the residential character of the surrounding area. Subordinate is defined as:

Subordinate: Project is minimally visible from public view. Element contrasts are weak – they can

⁴ Chapter 26, Sonoma County Zoning Regulations, January 24, 2019.

⁵ Sonoma County, 2019. *Visual Assessment Guidelines*, January.

<http://sonomacounty.ca.gov/PRMD/Regulations/Environmental-Review-Guidelines/Visual-Assessment-Guidelines/> (accessed 2/13/2019).

be seen but do not attract attention. Project generally repeats the form, line, color, texture, and night lighting of its surroundings.

The project's effect on visual character or quality was determined based on County "Visual Assessment Guidelines" Table 3 – Thresholds of Significance for Visual Impact Analysis.

Table 3. Thresholds of Significance for Visual Impact Analysis

Sensitivity	Visual Dominance			
	<i>Dominant</i>	<i>Co-Dominant</i>	<i>Subordinate</i>	<i>Inevident</i>
<i>Maximum</i>	Significant	Significant	Significant	Less than significant
<i>High</i>	Significant	Significant	Less than significant	Less than significant
<i>Moderate</i>	Significant	Less than significant	Less than significant	Less than significant
<i>Low</i>	Less than significant	Less than significant	Less than significant	Less than significant

Considering the project site's moderate visual sensitivity and the project's subordinate visual dominance, the project would be considered to have a less-than-significant effect on the existing visual character or quality of the site and its surroundings.

Significance Level:

Less than Significant Impact

d) Create a new source of substantial light or glare which would adversely affect day or nighttime view in the area?

Comment:

The proposed project would include a minor subdivision which would reasonably be anticipated to result in the construction of four single-family homes. While construction plans have not been developed for the project site, regulations require that new homes generally be compatible with their surroundings. Furthermore, the homes would be required to comply with applicable zoning and design regulations, and design review of the project would evaluate nighttime lighting and exterior materials. Mitigation Measure VIS-1 would ensure that the project would not create a new source of substantial of light or glare which would adversely affect day or nighttime view in the area.

Significance Level:

Less than Significant Impact with Mitigation Incorporated

Mitigation:

Mitigation Measure VIS-1:

Prior to issuance of building permits, an exterior lighting plan shall be submitted to Permit Sonoma for review. Exterior lighting shall be dark-sky compliant and include low mounted, downward casting and fully shielded to prevent glare. Lighting shall not wash out structures or any portions of the site. Light fixtures shall not be located at the periphery of the property and shall not spill over onto adjacent properties or into the night sky. Flood lights are not permitted. All parking lot and streetlights shall be

full cut-off fixtures. Security lighting shall be motion sensor activated.

Mitigation Monitoring:

Mitigation Monitoring VIS-1:

(Ongoing) Permit Sonoma shall not issue the building permit until an exterior night lighting plan has been submitted that is consistent with the approved plans and County standards. Permit Sonoma shall not sign off final occupancy on the building permit until a site inspection of the property has been conducted that indicates all lighting improvements have been installed according to the approved plans and conditions. If light and glare complaints are received, Permit Sonoma shall conduct a site inspection and require the property be brought into compliance or initiate procedures to revoke or modify the permit.

2. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

Comment:

The project site and surrounding parcels, as identified by the California Department of Conservation Division of Land Resource Protection Farmland Mapping and Monitoring Program, do not have a farmland designation. The Sonoma County Important Farmland 2016 Map⁶ identifies the project site as Urban and Built-up Land and Other Land. The definition of these land types are provided below:

Urban and Built-Up Land: Urban and Built-Up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

Other Land: Other Land is land not included in any other mapping category. Common examples include low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as other land.

This project site does not currently support agriculture operations. Prior to the 2017 Tubbs Fire, the project site included low density residential uses; no change in the land use or zoning is proposed

⁶ California Department of Conservation, 2018. *Sonoma County Important Farmland, 2016*, April <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/son16.pdf> (accessed on 2/13/19).

and the primary use of the site would remain residential. The proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

Significance Level:

No Impact

b) Conflict with existing zoning for agricultural use, or Williamson Act Contract?

Comment:

The project site does not include zoning for agricultural use and the project site is not subject to a Williamson Act Land Contract.⁷

Significance Level:

No Impact

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)?

Comment:

The project site is not in a Timberland Production zoning district, nor would it cause a rezoning of forest land.

Significance Level:

No Impact

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Comment:

Prior to the 2017 Tubbs Fire, the project site included mature coast live oaks, California Bay and redwood trees; many of the trees were burned in the fire. The project site is not designated as forest land, and the project would not convert forest land to non-forest land use.

Significance Level:

No Impact

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?

Comment:

The project does not involve other changes in the environment that could result in conversion of farmland to non-agricultural use or forest land to non-forest use.

Significance Level:

⁷ County of Sonoma Permit and Resource Management Department, 2016. *Williamson Act, 2017 Calendar Year*, September 14. <http://www.sonoma-county.org/prmd/gisdata/pdfs/wact.pdf> (accessed 2/13/2019).

No Impact

3. AIR QUALITY:

The methodologies and assumptions used in preparation of this section follow the CEQA Guidelines developed by the Bay Area Air Quality Management District (BAAQMD), as revised in May 2017 (BAAQMD 2017). Information on existing air quality conditions, federal and state ambient air quality standards, and pollutants of concern was obtained from the U.S. Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and BAAQMD.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Comment:

The project is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which is currently designated as a nonattainment area for state and federal ozone standards, the state PM₁₀ standard, and the state and federal PM_{2.5} standard. The District has adopted an Ozone Attainment Plan and a Clean Air Plan in compliance with Federal and State Clean Air Acts. These plans include measures to achieve compliance with both ozone standards. The plans deal primarily with emissions of ozone precursors (nitrogen oxides (NOx) and volatile organic compounds, also referred to as Reactive Organic Gases (ROG)).

The project would create a four parcel subdivision and enable construction of four single-family homes. As described in Sections 3.b and 8.a, below, the proposed project would not result in a significant impact related to air quality or greenhouse gas emissions. Additionally, as described below, the project would implement conditions and measures to reduce air quality emissions during construction. The proposed project would not hinder or disrupt implementation of any control measures from the Clean Air Plan. Implementation of the proposed project would result in a less-than-significant impact related to implementation of an applicable air quality plan.

Significance Level:

Less than Significant Impact

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

Comment:

As described in the BAAQMD CEQA Guidelines,⁸ the BAAQMD has developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions.

If the project meets the screening criteria in Table 3-1 (Operational-Related Criteria Air Pollutant and

⁸ Bay Area Air Quality Management District, 2017. *California Environmental Quality Act, Air Quality Guidelines*, May.

Precursor Screening Level Sizes) of the BAAQMND CEQA Guidelines, the project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the *Thresholds of Significance* shown in Table 2-2 of the BAAQMD CEQA Guidelines. Additionally, operation of the proposed project would also result in a less-than-significant cumulative impact to air quality from criteria air pollutant and precursor emissions.

Based on its size, the proposed project is below the single-family land use construction-related screening size (114 dwelling units) and the operation criteria pollutant screening size (325 dwelling units). Following use of the screening criteria for ROG and NO_x, found in the BAAQMD Air Quality Guidelines (Table 3-1), a detailed air quality study is not required, and emissions of criteria pollutants from the project would be less than significant. Furthermore, as the project would not result in a significant air quality impact, it would not result in a cumulatively considerable contribution to regional air quality impacts.

The project would not have a cumulative effect on ozone because it would not generate substantial traffic which would result in substantial emissions of ozone precursors (ROG and NO_x). The project would have no long-term effect on PM_{2.5} and PM₁₀, because all surfaces would be paved gravel, landscaped or otherwise treated to stabilize bare soils, and dust generation would be minimal. However, there could be a significant short-term emission of dust (which would include PM_{2.5} and PM₁₀) during construction. Mitigation Measure AIR-1 would reduce this potential impact to less than significant.

Although the project would generate some ozone precursors from new vehicle trips, the size of the project is small, and the project would not have a cumulative effect on ozone because it will not generate substantial traffic resulting in significant new emissions of ozone precursors (ROG and NO_x).

Wood smoke from fireplaces and wood stoves are sources of fine particulate matter. Wood smoke is a major contributor to reduced visibility and reduced air quality on winter evenings in both urban and rural areas. Sonoma County building regulations limit fireplaces to natural gas fireplaces, pellet stoves and EPA-Certified wood burning fireplaces or stoves. With the restriction on fireplace design, fine particulate emissions from this project would be a less than significant impact.

Construction activities would generate dust, particulates, and emissions from construction related vehicles. However, Mitigation Measures below would address these impacts

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation Measure AIR-1:

The following dust control measures shall be included in the project:

- a. Water or alternative dust control method shall be sprayed to control dust on construction areas, soil stockpiles, and staging areas during construction as directed by the County.
- b. Trucks hauling soil, sand and other loose materials over public roads shall cover the loads, or will keep the loads at least two feet below the level of the sides of the container, or shall wet the load sufficiently to prevent dust emissions.
- c. Paved roads shall be swept as needed to remove soil that has been carried onto them from the project site.

In addition, the following BAAQMD BMPs shall be included in the project:

- a. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) two times per day during construction and adequately wet demolition surfaces to limit visible dust emissions.

- b. Cover all haul trucks transporting soil, sand, or other loose materials off the project site.
- c. Use wet power vacuum street sweepers at least once per day to remove all visible mud or dirt track-out onto adjacent roads (dry power sweeping is prohibited) during construction of the proposed project.
- d. Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour.
- e. Complete all areas to be paved as soon as possible and lay building pads as soon as possible after grading unless seeding or soil binders are used.
- f. Minimize idling time of diesel-power construction equipment to five minutes and post signs reminding workers of this idling restriction at all access points and equipment staging areas during construction of the proposed project.
- g. Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site.
- h. Post a publicly visible sign with the name and telephone number of the construction contractor and County staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the BAAQMD to ensure compliance with applicable regulations.

Mitigation Monitoring:

Mitigation Monitoring AIR-1:

County staff shall ensure that these construction period air quality measures are listed on all site alternation, grading, building or improvement plans prior to issuance or grading or building permits.

With implementation of the above mitigation measure, the proposed project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

c) Expose sensitive receptors to substantial pollutant concentrations?

Comment:

Sensitive receptors include hospitals, schools, convalescent facilities, and residential areas. The project site is located within an area that included low density residential uses prior to the 2017 Tubbs Fire. As described above in Section 3.b, due to the limited size of the project (a four parcel subdivision and construction and operation of four single-family homes), the project would not contribute to a significant impact related to construction or operational air quality impacts.

Although there would be no long term increase in emissions, during construction there could be significant short term dust emissions that would affect nearby residents. Dust emissions would be reduced to less than significant by the mitigation measure described in item 3b above.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Implement **Mitigation Measures AIR-1.**

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Comment:

The project is not an odor generating use, nor located near an odor generating source that may affect

the use and would have no odor impact. Construction equipment may generate odors during project construction. The impact would be less than significant as it would be a short-term impact that ceases upon completion of the project.

Significance Level:

Less than Significant Impact

4. BIOLOGICAL RESOURCES:

This section of the MND provides an analysis of potential impacts to biological resources on the project site, including sensitive habitats, special-status plant and wildlife species, and protected tree species. A Biological Technical Report was prepared for the project site in June 2018 by Ms. Lucy Macmillan, the project applicant's biological consultant (Appendix A).⁹ The report provides an overview of the biological resources on the project site, including special-status plant and wildlife species and sensitive habitats. The report was reviewed by MIG biologists to verify its adequacy, completeness, and accuracy for use as the basis of the following biological resource impact analysis. In order to conduct a thorough analysis of impacts to sensitive habitats, County-protected biological resources (e.g., protected trees and riparian corridors), and all special-status species with potential to occur on the project site, MIG conducted a supplemental biological site evaluation. Based on information and data collected and analyzed, mitigation measures are provided herein to minimize and/or avoid potential biological resource impacts in accordance with the CEQA Guidelines.

Would the project:

- a) **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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Regulatory Framework

The following discussion identifies federal, state, and local environmental regulations that serve to protect sensitive biological resources and are relevant to the California Environmental Quality Act (CEQA) review process.

Federal

Federal Endangered Species Act (FESA)

FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of the Interior and the Secretary of Commerce are designated in FESA as responsible for identifying endangered and threatened species and their critical habitat, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on listed species. The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) are charged with implementing and enforcing the FESA. USFWS has authority over terrestrial and continental aquatic species, and NOAA Fisheries has authority over species that spend all or part of their life cycle at sea, such as salmonids. Section 9 of FESA prohibits the unlawful "take" of any listed fish or wildlife species. 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 action." USFWS's regulations define harm to mean "an act which actually kills or

⁹ Macmillan, Lucy, M.S., 2018. *Biological Resources Assessment*, 1100 Wikiup Drive, Santa Rosa, Sonoma County, California (APN 039-180-003 and -004), June.

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). Take can be permitted under FESA pursuant to Sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. FESA does not extend the take prohibition to federally listed plants on private land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

Critical Habitat

Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The ESA requires federal agencies to consult with USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species’ recovery. In many cases, this level of protection is similar to that already provided to species by the ESA jeopardy standard. However, areas that are currently unoccupied by the species, but which are needed for the species’ recovery, are protected by the prohibition against adverse modification of critical habitat.

Essential Fish Habitat

Essential Fish Habitat (EFH) is regulated through the NMFS, a division of the National Oceanic and Atmospheric Administration (NOAA). Protection of Essential Fish Habitat is mandated through changes implemented in 1996 to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to protect the loss of habitat necessary to maintain sustainable fisheries in the United States. The Magnuson-Stevens Act defines Essential Fish Habitat as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” [16 USC 1802(10)]. NMFS further defines essential fish habitat as areas that “contain habitat essential to the long-term survival and health of our nation’s fisheries.” Essential Fish Habitat can include the water column, certain bottom types such as sandy or rocky bottoms, vegetation such as eelgrass or kelp, or structurally complex coral or oyster reefs. Under regulatory guidelines issued by NMFS, any federal agency that authorizes, funds, or undertakes action that may affect EFH is required to consult with NMFS (50 CFR 600.920).

Migratory Bird Treaty Act of 1918 (MBTA)

The Federal Migratory Bird Treaty Act (MBTA) (16 USC. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term “take” is defined as meaning, “to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires.” With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that cause nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

California Endangered Species Act (CESA)

Provisions of CESA protect state-listed threatened and endangered species. The California Department of Fish and Wildlife (CDFW) is charged with establishing a list of endangered and threatened species. CDFW regulates activities that may result in “take” of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code (CFGC), but CDFW has interpreted “take” to include the killing of a member of a species which is the proximate result of habitat modification.

California Fully Protected Species and Species of Special Concern

The classification of California “fully protected” (CFP) was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were

created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibians and reptiles at §5050, birds at §3503 and §3511, and mammals at §4150 and §4700) dealing with “fully protected” species state that these species “...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species,” although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species. In 2003, the code sections dealing with “fully protected” species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

California Species of Special Concern (CSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or because they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

Nesting Birds

Nesting birds, including raptors, are protected under CFGC Section 3503, which reads, “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” In addition, under CFGC Section 3503.5, “it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto”. Passerines and non-passerine land birds are further protected under CFGC Section 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by CDFW.

Non-Game Mammals

Sections 4150-4155 of the CFGC protect non-game mammals, including bats. Section 4150 states “A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A non-game mammal may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission.” The non-game mammals that may be taken or possessed are primarily those that cause crop or property damage. Bats are classified as a non-game mammal and are protected under CFGC.

Other Special-Status Plants – California Native Plant Society

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (<http://www.cnps.org/cnps/rareplants/inventory/>).

The Inventory employs the California Rare Plant Ranking (CRPR) to assign plants to the following categories:

- 1A Presumed extinct in California
- 1B Rare, threatened, or endangered in California and elsewhere
- 2 Rare, threatened, or endangered in California, but more common elsewhere
- 3 Plants for which more information is needed – A review list
- 4 Plants of limited distribution – A watch list

Additional endangerment codes are assigned to each taxon as follows:

- 1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat)
- 2 Fairly endangered in California (20-80% occurrences threatened)
- 3 Not very endangered in California (<20% of occurrences threatened, or no current threats known)

CRPR 1A, 1B, and 2 plants consist of individuals that may qualify for listing by state and federal agencies. As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the CFGC. CRPR 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was created in 1977 with the intent to preserve, protect, and enhance rare and endangered plants in California (CFGC Sections 1900 to 1913). The NPPA is administered by CDFW, which has the authority to designate native plants as endangered or rare and to protect them from “take.” CDFW maintains a list of plant species that have been officially classified as endangered, threatened, or rare. These special-status plants have special protection under California law, and projects that directly impact them may not qualify for a categorical exemption under the CEQA Guidelines.

Comment:

The project site contains two (2) habitat types: developed-ruderal and oak woodland alliance. The driveway, former residence, swimming pool, and gardens may be classified as ruderal/developed. Undeveloped portions of the project site support coast live oak woodland alliance, dominated by mature coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), and coast redwood (*Sequoia sempervirens*), which were burned in the fire. Many trees are exhibiting signs of regrowth throughout the project site. The understory vegetation comprises mostly non-native herbs and forb species.

Special-Status Species

To confirm the potential presence of special-status plant and wildlife species identified in the report prepared by Lucy Macmillan, a certified biologist from MIG conducted a site visit on March 29, 2019. The potential occurrences of special-status plant and animal species on the site were initially evaluated by conducting a 9-quadrangle database records search of CDFW’s California Natural Diversity Database (CNDDB), the CNPS Electronic Inventory, and the USFWS Information for Planning and Consultation (IPaC) database/. The search was conducted within the Santa Rosa and eight surrounding USGS 7.5-minute quadrangles to ensure a complete list of species was generated for the follow-up habitat assessment.

The potential occurrences of special-status plant and wildlife species were then evaluated based on the habitat requirements of each species relative to the conditions observed during the habitat evaluation conducted by biologist Lucy Macmillan on June 4, 2018 and on the botanical survey/habitat evaluation conducted by MIG biologists on March 29, 2019. Species without suitable habitat present that have known ranges well outside the project site were eliminated from further evaluation and are not included in this discussion. Appendix D presents the list of special-status plants and animals that were evaluated for their potential to occur on the project site, habitat requirements, and a ranking of potential for occurrence for each species. The following species were determined to have a moderate potential to occur on the project site based on habitats found on the project site, CNDDB occurrences within a five-mile radius of the project site, and observations of site conditions made during the biological surveys.

Special-Status Plants

- Congested-headed hayfield tarplant (*Hemizonia congesta* var. *congesta*)
- Green monardella (*Monardella viridis*)
- Napa false indigo (*Amorpha californica* var. *napensis*)
- Narrow-anthered brodiaea (*Brodiaea leptandra*)
- Oval-leaved viburnum (*Viburnum ellipticum*)

Special-Status Wildlife

- Cooper's hawk (*Accipiter cooperii*)
- Foothill yellow-legged frog (*Rana boylei*)
- Fringed myotis (*Myotis thysanodes*)
- Pallid bat (*Antrozous pallidus*)
- Western pond turtle (*Emys marmorata*)
- White-tailed kite (*Elanus leucurus*)

Potential impacts and associated impact avoidance, minimization, and mitigation measures are discussed below.

Special-Status Plant Species

Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened, or endangered, (2) federal and state candidates for listing, (3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act (CEQA) Guidelines, Section 15380 (Endangered, Rare, or Threatened Species).

A table of special-status plant species with the potential to occur on the project site is provided in Appendix D. The project site was determined to provide no suitable habitat for 20 of the 25 special-status plant species that were evaluated for their potential occurrence, based on the distance of the project site to previously recorded occurrences in the region, lack of typical vegetation types, disturbed habitat conditions, topography, elevation, soil types, and other species-specific habitat requirements.

Five special-status plant species have moderate potential to occur on the project site and are discussed below:

Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*) has been assigned a CRPR Rank of 1B.2 by CNPS, occurs in valley and foothill grassland, and has a documented blooming period from April through November. The grassland habitat on the project site is considered marginally suitable to support congested-headed hayfield tarplant.

Green monardella (*Monardella viridis*) has been assigned a CRPR Rank of 4.3 by CNPS; occurs in broadleaved upland forests, chaparral, and cismontane woodland; and has a documented blooming period from June through September. The grassland habitat on the project site is considered marginally suitable to support green monardella.

Napa false indigo (*Amorpha californica* var. *napensis*) has been assigned a CRPR Rank of 1B.2 by CNPS; occurs in openings in broadleaved upland forests, chaparral, and cismontane woodland; and has a documented blooming period from April through July. The oak woodland habitat on the project site is considered marginally suitable to support Napa false indigo.

Narrow-anthered brodiaea (*Brodiaea leptandra*) has been assigned a CRPR Rank of 1B.2 by CNPS; occurs in broadleaved upland forests, chaparral, cismontane woodland, lower montane coniferous forests, and valley and foothill grasslands; and has a documented blooming period from May through July. The oak woodland habitat on the project site is considered marginally suitable to support narrow-anthered brodiaea.

Oval-leaved viburnum (*Viburnum ellipticum*) has been assigned a CRPR Rank of 2B.3 by CNPS; occurs in chaparral, cismontane woodland, and lower montane coniferous forest; and has a documented blooming period from May through June. The oak woodland habitat on the project site is considered marginally suitable to support oval-leaved viburnum.

If these species are present on the project site, then project construction would result in the removal of individual plants during ground clearing activities. This would be considered a significant impact pursuant to the CEQA Guidelines. Implementation of Mitigation Measure BIO-1 is required to reduce this impact to a less-than-significant level.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation Measure BIO-1: Conduct Special-Status Plant Surveys

Special-status plant species associated with the oak woodland habitat could potentially occur on the project site. In addition, wildfires can lead to species occurrences in areas that were previously unoccupied. A focused survey for special-status plants associated with oak woodland habitats shall be conducted during June to early July 2019, when all species with potential to occur are expected to be blooming and readily identifiable.

- a) To determine presence or absence of special-status plant species on the project site, a qualified botanist shall conduct focused surveys according to CDFW¹⁰ guidelines prior to the onset of construction activities. A qualified botanist is an individual who possesses the following qualifications: (1) experience conducting floristic field surveys; (2) knowledge of plant taxonomy and plant community ecology; (3) familiarity with the plants of the area, including rare, threatened, and endangered species; (4) familiarity with the appropriate state and federal statutes related to plants and plant collecting; and 5) experience with analyzing impacts of development on native plant species. A comprehensive, site-wide survey would be conducted during June to early July 2019 to coincide with the peak blooming periods of five special-status plant species that may be present. Following the completion of the surveys, a survey results report shall be prepared and provided to the County. This report shall be a condition of project approval and shall include, but not be limited to, the following: (1) a description of the survey methodology; (2) a discussion of the survey results; and (3) a map showing the survey area and the location of any special-status plants encountered. If no rare plants are found, then no further mitigation would be required.
- b) If a rare plant(s) is (are) found during the survey, the number of individuals present shall be documented, and the limits of population shall be marked with flagging and avoided by construction personnel. If the species cannot be avoided or may be indirectly impacted, the applicant shall notify CDFW and/or USFWS (depending on protection status) to discuss avoidance, minimization, and mitigation measures as appropriate for each species population, including measures to be taken and protocols to be followed if special-status plants are inadvertently disturbed during construction activities.
- c) CDFW and/or USFWS may require the preparation and implementation of a mitigation plan that details avoidance, preservation, and/or compensation for the loss of individual special-status plant species. Mitigation may include the purchase of mitigation bank credits, preserving and enhancing existing onsite populations, creation of off-site populations through seed collection and/or transplantation and monitoring these populations to ensure their successful establishment, and/or preserving occupied habitat off-site in perpetuity.

Mitigation Monitoring BIO-1:

Prior to issuing a grading permit, the County shall review the focused plant survey report and, for any

¹⁰ CDFW. 2018. Protocols For Surveying And Evaluating Impacts To Special Status Native Plant Populations And Communities. March 20, 2018. Accessible online: http://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html.

rare plant discovered on the project site, and shall inspect the flagged plant locations. The County shall notify USFWS and/or CDFW if these flagged locations cannot be avoided. If required, a qualified botanist shall prepare a mitigation plan to compensate for the loss of any special-status plant species.

Special-Status Wildlife Species

Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; California fully protected and species of special concern; non-game mammals protected by Sections 4150-4155 of the CFGC; and nesting birds protected by the CDFW under CFGC Sections 3503 and 3513.

Based on a review of the USFWS, CNDDDB, CNPS, NOAA Fisheries, and University of California databases, the biologists' knowledge of sensitive species within Sonoma County, and an assessment of the types of habitats on the project site, it was determined that six special-status wildlife species have a moderate potential to occur on or near the project site. These species include: Cooper's hawk (*Accipiter cooperii*), foothill-yellow legged frog (*Rana boylei*), fringed myotis (*Myotis thysanodes*), pallid bat (*Antrozous pallidus*), western pond turtle (*Emys marmorata*), and white-tailed kite (*Elanus leucurus*). This determination was made due to the presence of essential habitat requirements for the species, the presence of known occurrences within five miles of the project site, and/or the project site's location within the species' known range of distribution.

Cooper's hawk, CDFW Watch list. The Cooper's hawk is a yearlong resident in California and occasional long-distance migrator. While likely to stay in California year-round, Cooper's hawks occasionally migrate to central and southern Mexico before returning to the United States to breed. In California, the population of Cooper's hawks declined greatly in the 1990s due primarily to shooting, trapping, and pesticide contamination. This raptor inhabits cismontane woodland, riparian forest, riparian woodland, and upper montane coniferous forest. Cooper's hawk prefer woodland, usually of open interrupted or marginal type. Cooper's hawk nests almost exclusively in trees and will nest in a variety of tree species typically between 20 to 50 feet tall. Nests are constructed in dead or alive trees along riparian areas and in live oaks. The project site is located in a cluster of survey points with confirmed and probable Cooper's hawk nesting. This species has high potential to forage and nest on site and likely nests in and/or near the project site and utilizes surrounding habitats for foraging. Implementation of Mitigation Measures BIO-2 and BIO-3 would reduce impacts to nesting birds, including Cooper's hawk, to a less-than-significant level.

White-tailed kite, Fully Protected Species under California Fish and Game Code. The White-tailed kite is a year-round resident in California in lowland areas west of the Sierra Nevada from the head of Sacramento Valley south, including coastal valleys and foothills, to western San Diego County at the Mexican border. White-tailed kite inhabits low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands that are used for foraging. White-tailed kite nests are generally found in the tops of trees approximately 20 to 50 feet tall, depending on availability of nesting sites. Live oaks are often the preferred tree for nesting. The majority of white-tailed kite nests are associated with woodland or forested areas with nearby water sources. Nesting sites can range from open-country, isolated trees, or along the edge of or within a forested area. The project site is located in a cluster of survey points with confirmed and probable white-tailed kite nesting. This species has high potential to forage and nest on site and likely nests in and/or near the project site and utilizes surrounding habitat for foraging. Implementation of Mitigation Measures BIO-2 and BIO-3 would reduce impacts to nesting birds, including white-tailed kite, to a less-than-significant level.

Other Protected Nesting Birds. Vegetation communities on the project site provide suitable nesting habitat for common, as well as special-status songbird and raptor bird species (e.g., Cooper's hawk and white-tailed kite). Nesting birds may nest within trees, shrubs, grasses, shallow scrapes on bare ground, and man-made structures on the project site. Numerous passerines were noted during the field survey. If construction activities occur during the avian breeding season (generally February 1 through August 31), injury to individuals or nest abandonment could occur. In addition, noise and increased construction activity could temporarily disturb nesting or foraging activities, potentially

resulting in the abandonment of nest sites. The loss of an active nest of common or special-status bird species would be considered a violation of Fish and Game Code Sections 3503, 3503.5, and 3513. This would be considered a significant impact pursuant to the CEQA Guidelines. Implementation of Mitigation Measures BIO-2 and BIO-3 would reduce impacts to nesting birds to a less-than-significant level.

Pallid bat, CDFW Species of Special Concern and Western Bat Working Group High Priority.

The pallid bat is found in a variety of low elevation habitats throughout California. It selects a variety of day roosts including rock outcrops, mines, caves, hollow trees, buildings, and bridges. Night roosts are usually found under bridges, but also in caves, mines, and buildings. Pallid bats are highly sensitive to anthropogenic disturbance. Unlike most bats, pallid bats primarily feed on large ground-dwelling arthropods and are somewhat unique among local bats in that they may forage on the ground. There is moderate potential for this species to occur on the project site. There is marginal roosting habitat within the hollows of coast live oaks and valley oaks on the project site, although pallid bats may roost in these locations. While not all these trees would be expected to provide the conditions appropriate for maternity colonies or hibernaculum (a shelter for hibernating), they may nonetheless support bat use (i.e., day roosts). Project development, including the construction of access roads and installation of utilities for the subdivision, could result in the direct loss of roosting habitat. In addition, the project may result in the degradation of foraging habitat, and temporary disturbance during construction including noise, air turbulence, dust, and ground vibration. Bats that forage near the ground could be subject to crushing or disturbance by vehicles driving at dusk, dawn, or during the night. Implementation of Mitigation Measures BIO-2 and BIO-4 would reduce this potential impact to a less-than-significant level.

Fringed myotis, Western Bat Working Group High Priority. The fringed myotis ranges through much of western North America from southern British Columbia, Canada, south to Chiapas, Mexico and from Santa Cruz Island in California, east to the Black Hills of South Dakota. This species is found in desert scrubland, grassland, sagegrass steppe, old-growth forest, and subalpine coniferous and mixed deciduous forest. Oak and pinyon-juniper woodlands are most commonly used. The fringed myotis roosts in colonies from 10 to 2,000 individuals, although large colonies are rare. Caves, buildings, underground mines, rock crevices in cliff faces, and bridges are used for maternity and night roosts, while hibernation has only been documented in buildings and underground mines. Tree-roosting has also been documented in Oregon, New Mexico, and California. Fringed myotis may roost in trees located on the project site. Project development, including the construction of access roads and installation of utilities for the subdivision, could result in the direct loss of roosting habitat. In addition, the project may result in the degradation of foraging habitat, and temporary disturbance during construction including noise, air turbulence, dust, and ground vibration. Bats that forage near the ground could be subject to crushing or disturbance by vehicles driving at dusk, dawn, or during the night. Implementation of Mitigation Measures BIO-2 and BIO-4 would be required to reduce this potential impact to a less-than-significant level.

Foothill-yellow legged frog (FYLF), CDFW Species of Special Concern, Candidate for State Threatened Listing. On July 7, 2017 FYLF became a candidate for listing under CESA. Previously as a Species of Special Concern, measures for FYLF were only reviewed and determined through the CEQA process. However, species listed under CESA, including candidates for listing, receive additional protections, and take without a permit is illegal. FYLF occurs in aquatic habitats within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows or seeps, riparian forests, and riparian woodland. Typically, this species prefers partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, and requires cobble-sized substrate for egg-laying. The project site does not contain the riparian habitat, standing water, or shrubby/leaf litter habitat typically utilized by this species. However, this species has been documented in lower Mark West Creek approximately 0.2 miles south of the project site, and vegetation and other seasonally inundated water features may provide habitat directly adjacent to the project site. Adults may disperse through the project site, especially following precipitation events, and be impacted during project activities. Implementation of Mitigation Measure BIO-2 and BIO-5 would reduce this potential impact to a less-than-significant level.

Western Pond Turtle (WPT), CDFW Species of Special Concern. WPT is a habitat generalist, inhabiting a wide range of fresh and brackish, permanent and intermittent water bodies from sea level to about 4,500 feet above sea level. Typically, this species is found in ponds, marshes, ditches, streams, and rivers that have rocky or muddy bottoms. WPT is most often found in aquatic environments with plant communities dominated by watercress, cattail, and other aquatic vegetation. WPT is an aquatic turtle that usually leaves the aquatic site only to reproduce and to spend its winter elsewhere. WPT may overwinter on land or in water, or may remain active in water during the winter season; this pattern may vary considerably with latitude, water temperature, and habitat type. WPT also requires upland areas for burrowing habitat where it digs, nests, and buries its eggs. These nests can extend from 52 feet to 1,219 feet from watercourses. Upland nest sites are usually found in areas with sparse vegetation. Sunny, barren, and undisturbed (not disked) land provides optimal habitat, while shady riparian habitat does not provide suitable habitat. Eggs are typically laid from March to August, with most eggs being laid in May and June. Hatchlings will stay in the nest until the following April. Predators of juvenile WPT include the non-native bullfrog and Centrarchid fish (sunfish). This turtle is most visible between April and July when it can be observed basking in the sun. In areas where the water is very warm during these months, however, it will bask in the warm water and will be more difficult to observe. It eats plants, insects, worms, fish, and carrion.

The project site does not contain the permanently inundated habitat or undisturbed upland substrate typically utilized by this species for foraging, migration, and nesting. However, this species has been documented in lower Mark West Creek approximately 0.2 miles south of the project site. Adults may disperse through the project site, especially following precipitation events. Potential loss of individuals as a result of project development is considered a potentially significant impact. Implementation of Mitigation Measures BIO-2 and BIO-5 would reduce potential impacts to a less-than-significant level.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Because project construction activities, including grading, vegetation removal, equipment staging, or other site disturbances, could result in the disturbance of songbird and/or raptor nesting sites, special-status bat species, FYLF, and WPT, the following shall be required by the County to avoid, minimize, and/or mitigate potential project-related impacts.

Mitigation Measure BIO-2: Conduct Environmental Awareness Training for Construction Employees

Prior to beginning construction activities (including, but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), a qualified biologist¹¹ shall develop and conduct an environmental awareness training program for crew members who are involved in project construction. The training shall describe the importance of sensitive biological resources, including potential FYLF and WPT dispersal habitat, songbird and/or raptor nest sites, bat roost sites, and nearby state and federal jurisdictional habitats. The biologist shall also explain the importance of other responsibilities related to the protection of wildlife during construction, such as inspecting open trenches and looking under vehicles and machinery prior to moving them to ensure there are no lizards, snakes, small mammals, or other wildlife that could become trapped, injured, or killed in construction areas or under equipment.

The environmental awareness program shall be provided to all construction personnel to describe the

¹¹ A qualified biologist is an individual who possesses, at a minimum, a bachelor's or advanced degree, from an accredited university, with a major in biology, zoology, wildlife biology, natural resources science, or a closely related scientific discipline, at least two years of field experience in the biology and natural history of local plant, fish, and wildlife resources present at the project site, and knowledge of state and federal laws regarding the protection of sensitive and endangered species.

life history of special-status species on or adjacent to the project site, the need to avoid impacts to sensitive biological resources, any terms and conditions required by state and federal agencies, and the penalties for not complying with biological mitigation requirements. If new construction workers are added to the project, the contractor and/or their project manager(s) shall ensure that all personnel receive the mandatory training before starting work. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions shall be provided to each construction worker.

Mitigation Measure BIO-3: Nesting Bird Avoidance or Conduct Pre-construction Surveys

The following measures shall be taken to avoid potential inadvertent destruction or disturbance of nesting birds on and near the project site as a result of construction-related vegetation removal and site disturbance:

- a) To avoid impacts to nesting birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) shall occur outside the avian nesting season (generally prior to February 1 or after August 31). Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest.
- b) If construction-related activities are scheduled to occur during the nesting season (generally February 1 through August 31), a qualified biologist shall conduct a habitat assessment and preconstruction nesting survey for nesting bird species no more than seven (7) days prior to initiation of work. In addition, the qualified biologist conducting the surveys shall be familiar with the breeding behaviors and nest structures of birds known to nest on the project site. Surveys shall be conducted at the appropriate times of day during periods of peak activity (e.g., early morning or dusk) and shall be of sufficient duration to observe movement patterns. Surveys shall be conducted on the project site and within 100 feet of the construction limits for nesting non-raptors and 500 feet for nesting raptors, as feasible. If the survey area is found to be absent of nesting birds, no further mitigation would be required. However, if project activities are delayed by more than seven (7) days, an additional nesting bird survey shall be performed.
- c) If pre-construction nesting bird surveys result in the location of active nests, no site disturbance (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 100 feet of non-raptor nests and 500 feet of raptor nests. Monitoring by a qualified biologist shall be required to insure compliance with the relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented. Active nests found inside the limits of the buffer zones or nests within the vicinity of the project site showing signs of distress from project construction activity, as determined by the qualified biologist, shall be monitored daily during the duration of project construction for changes in breeding behavior. If changes in behavior are observed (e.g., distress, disruptions), the buffer shall be immediately adjusted by the qualified biologist until no further interruptions to breeding behavior are detected. The nest protection buffers may be reduced if the qualified biologist determines in coordination with CDFW that construction activities would not be likely to adversely affect the nest. If buffers are reduced, twice-weekly monitoring may need to be conducted to confirm that construction activity is not resulting in detectable adverse effects on nesting birds or their young. The qualified biologist and CDFW may agree upon an alternative monitoring schedule depending on the construction activity, season, and species potentially subject to impact. Construction shall not commence within the prescribed buffer areas until a qualified biologist has determined that the young have fledged or the nest site is otherwise no longer in use.

Following completion of pre-construction nesting bird surveys (if required), a report of the findings shall be prepared by a qualified biologist and submitted to the County prior to the initiation of

construction-related activities that have the potential to disturb any active nests during the nesting season.

Mitigation Measure BIO-4: Conduct Pre-Construction Bat Roost Surveys

A qualified wildlife biologist (as defined under Mitigation Measure BIO-2) shall conduct a pre-construction bat survey of all trees located within 50 feet from the project site (where access is feasible) to determine if the trees provide suitable roost habitat (e.g., snags, large trees, trees with cavities or flaking bark, leafy trees) and to search for evidence of bat use (e.g., guano, urine staining, smells associated with bats, sounds indicating bat presence). The survey shall be conducted at dawn or dusk and no more than 30 days prior the initiation of construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, and grading). If no evidence of bat roosts is found, then no further action is required.

If evidence of bat use is found, then nighttime acoustic surveys shall be conducted to determine whether a site is occupied. The survey shall determine if the roost is a maternity roost (if construction work is being performed during the bat maternity season, which is typically May 1 through August 31), hibernacula, or day roost. If a maternity roost is present, delay of the construction may be necessary until after the roost is vacated, or a disturbance exclusion buffer of at least 50 feet would be established around the maternity roost, or as determined by a qualified biologist in coordination with CDFW. If non-maternity bat roosts are detected/observed within trees to be removed as a result of project construction, impact avoidance measures shall be undertaken to clear the bats prior to tree removal activities in consultation with CDFW. Measures to exclude bats from occupied roosts may include, but are not limited to: disturbance to roosting individuals through introduction of light and/or noise to create an undesirable setting and to encourage the bats to vacate the roost. Access points shall be sealed to prevent re-entry of bat species. Project construction may commence upon final approval by CDFW and the County.

Mitigation Measure BIO-5: Conduct Pre-Construction Herptile Surveys

Due to the proximity of the project site to the lower reach of Mark West Creek, the project site has potential to provide dispersal habitat for special-status herptile species (amphibians and reptiles) FYLF and WPT, especially following precipitation. To avoid impacting these species, the following measures shall be implemented:

- a. Within 3 to 5 days prior to initiating work at the project site (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), a qualified biologist (as defined under Mitigation Measure BIO-2) shall perform a pre-construction survey for FYLF and WPT individuals within the boundaries of the project site plus a 500-foot buffer zone downslope of the construction area.
- b. If FYLF are found during the pre-construction survey, the qualified biologist shall immediately inform the construction manager that work should not be initiated until the FYLF has dispersed from the work area. The qualified biologist shall then consult with CDFW immediately and provide a short description of observations, including a count of individuals and the life stage(s), conditions at the site, and other aquatic species observed (if applicable). Unless explicitly authorized by CDFW (e.g., through issuance of an Incidental Take Permit [ITP] or other means), FYLF shall not be relocated if encountered on the project site. If they do not disperse on their own volition, the qualified biologist shall monitor the FYLF and consult with CDFW to determine the appropriate course of action, which may include obtaining an ITP.
- c. In the event that WPT are found on the project site during preconstruction surveys, it shall be left alone to move out of the area on its own. If it does not move on its own, the qualified biologist shall notify CDFW and relocate the individual(s) to Mark West Creek at least 250 feet away from the construction location. Relocation areas shall be of suitable habitat, on shallow banks with slow moving water, and shall be far enough away so as not to be affected by construction activities.
- d. The applicant shall not resume construction activities until CDFW has provided written approval of the proposed avoidance measures or issued an ITP for FYLF (if applicable).

- e. Work shall be avoided if precipitation has been recorded at the project site within a 24-hour window. The NOAA weather forecast may be utilized to plan project work accordingly.

Mitigation Monitoring:

Mitigation Monitoring BIO-2 through BIO-5:

If FYLF are found during the pre-construction surveys, then a copy of CDFW's written concurrence with proposed impact avoidance measures or a copy of CDFW's 2018 Incidental Take Permit (ITP) shall be provided to Sonoma County prior to the commencement of grading on the project site. In addition, prior to issuance of any grading permit(s), the County shall review and approve the results of all pre-construction surveys and any measures recommended by the biologist to avoid sensitive species (i.e., active nest and/or roost protection buffers) which shall be noted on the final project plans. The County shall not issue a grading permit until the applicant has submitted evidence to the County that Mitigation Measures BIO-2, BIO-3, BIO-4, and BIO-5 have been completed to USFWS and/or CDFW satisfaction (if agency involvement is required).

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Regulatory Framework

California Fish and Game Code Section 1600-1603

Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by CDFW under Sections 1600-1616 of the CFGC. Any activity that will do one or more of the following - (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake - generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream," which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life." This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFW 1994). Riparian vegetation is defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFW 1994). In addition to impacts to jurisdictional streambeds, removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

Sensitive Natural Communities

Sensitive natural communities are vegetation communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by CDFW (e.g., California Natural Diversity Database - CNDDB) or the USFWS. The CNDDB identifies a number of natural communities as rare, which are given the highest inventory priority. Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA Statute and Guidelines.

California Oak Woodland Statute

In September 2004, State Bill 1334 was passed and added to the State Public Resources Code as Statute 21083.4, requiring Counties to determine in their CEQA documents whether a project in its jurisdiction may result in a conversion of oak woodlands that would have a significant effect on the environment. In addition, if the County determines that a project may result in a significant impact to oak woodlands, the County shall require one or more of the following mitigation alternatives to mitigate for the impact:

- 1) Conserving oak woodlands through the use of conservation easements.
- 2) Plant an appropriate number of trees, including maintaining the plantings and replacing dead or diseased trees. Required maintenance of trees terminates seven years after the trees are planted. This type of mitigation shall not fulfill more than half of the mitigation requirement for the project. This type of mitigation may also be used to restore former oak woodlands.
- 3) Contribute funds to the Oak Woodlands Conservation Fund.
- 4) Other mitigation measures developed by the County.

The CFGC (Section 1361) defines oak woodland habitat as “an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover.”

Comment:

Sensitive vegetation communities include riparian habitats or other sensitive natural communities identified in local or regional plans, policies, or regulations, or designated by the USFWS, NOAA Fisheries, and CDFW. The project site does not include any creek or wetland areas. However, one sensitive natural vegetation community, oak woodland, occurs on the project site. Oak woodland vegetation communities are protected by state law (Public Resources Code Section 21083.4, see directly above) and represent an important sensitive natural vegetation community that is relatively common within Sonoma County. Project-related impacts to oak woodland would include the removal of 11 trees (coast live oak, redwood, and blue oak) that are over 9 inches in diameter and protected by the Sonoma County Tree Protection Ordinance. Implementation of Mitigation Measure BIO-6 (Compensate for Loss of Protected Trees), below, requires the applicant to adhere to all general provisions, tree protection methods during construction, and compensatory mitigation requirements of the Sonoma County Tree Protection Ordinance. With implementation of Mitigation Measure BIO-6, impacts to oak woodland would be less than significant.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

Refer to Mitigation Measure BIO-6.

Mitigation Monitoring:

See Mitigation Monitoring BIO-6.

- c) **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Regulatory FrameworkFederal

The Clean Water Act (CWA)

The CWA is the primary federal law regulating water quality. The implementation of the CWA is the responsibility of the U.S. Environmental Protection Agency (EPA). However, the EPA depends on other agencies, such as the individual states and the U.S. Army Corps of Engineers (USACE), to assist in implementing the CWA. The objective of the CWA is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” Section 404 and 401 of the CWA apply to activities that would impact waters of the U.S. The USACE enforces Section 404 of the CWA and the California State Water Resources Control Board enforces Section 401.

Section 404. As part of its mandate under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into “waters of the U.S.” “Waters of the U.S.” include territorial seas, tidal waters, and non-tidal waters in addition to wetlands and drainages that support wetland vegetation, exhibit ponding or scouring, show obvious signs of channeling, or have discernible banks and high-water marks. Wetlands are defined as those areas “that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3(b)). The discharge of dredged or fill material into waters of the U.S. is prohibited under the CWA except when it is in compliance with Section 404 of the CWA. Enforcement authority for Section 404 was given to the USACE, which it accomplishes under its regulatory branch. The EPA has veto authority over the USACE’s administration of the Section 404 program and may override a USACE decision with respect to permitting. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions (see below).

Section 401. Any applicant for a federal permit to impact waters of the U.S. under Section 404 of the CWA, including Nationwide Permits where pre-construction notification is required, must also provide to the USACE a certification or waiver from the State of California. The “401 Certification” is provided by the State Water Resources Control Board (State Water Board) through the local Regional Water Quality Control Board (RWQCB). The RWQCB issues and enforces permits for discharge of treated water, landfills, storm water runoff, filling of any surface waters or wetlands, dredging, agricultural activities, and wastewater recycling. The RWQCB recommends the “401 Certification” application be made at the same time that any applications are provided to other agencies, such as the USACE, USFWS, or NOAA Fisheries. The application is not final until completion of environmental review under CEQA. The application to the RWQCB is similar to the pre-construction notification that is required by the USACE. It must include a description of the habitat that is being impacted, a description of how the impact is proposed to be minimized, and proposed mitigation measures with goals, schedules, and performance standards. Mitigation must include a replacement of functions and values, and replacement of wetland at a minimum ratio of 2:1, or twice as many acres of wetlands provided as are removed. The RWQCB looks for mitigation that is onsite and in-kind, with functions and values as good as or better than the water-based habitat that is being removed.

National Pollutant Discharge Elimination System (NPDES)

The NPDES program requires permitting for activities that discharge pollutants into waters of the United States. This includes discharges from municipal, industrial, and construction sources. These are considered point-sources from a regulatory standpoint. Generally, these permits are issued and monitored under the oversight of the State Water Resources Control Board (SWRCB) and administered by each regional water quality control board. Construction activities that disturb one acre or more (whether a single project or part of a larger development) are required to obtain coverage under the state’s General Permit for Dischargers of Storm Water Associated with Construction Activity. All dischargers are required to obtain coverage under the Construction General Permit. The activities covered under the Construction General Permit include clearing, grading, and other disturbances. The permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) with a monitoring program. The project would require coverage under the Construction General Permit.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Act (Porter-Cologne Act) (California Water Code § 13260) requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the “Waters of the State” to file a report of discharge with the RWQCB through an application for waste discharge. Waters of the State are defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. If a project does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to Waters of the State, the Water Board has the option to regulate the dredge and fill activities under its state authority through its Waste Discharge Requirements (WDR) program.

Comment:

On June 4, 2018, a jurisdictional wetland delineation was conducted at the project site by biologist Lucy Macmillan. The project site was surveyed on foot to identify and map potential jurisdictional wetland features on the project site. No potential federal or state jurisdictional wetland features were identified on the project site.

While no wetland features are present on site, state and federal jurisdictional wetlands and waters associated with the Mark West Creek corridor are located approximately 1,100 feet southeast of the project site boundary. This feature would not be directly impacted by the proposed project. As described below under Hydrology, Section 10, Permit Sonoma requires the project applicant to prepare a grading plan and drainage plan which include performance standards and BMPs for pre-construction, construction, and post-construction to prevent and/or minimize the discharge of pollutants, including sediment, from the project site to offsite jurisdictional areas, including Mark West Creek. Furthermore, the applicant is required to obtain coverage under the SWRCB's Construction General Permit, which requires preparation of a SWPPP and implementation of BMPs to protect the quality of storm water runoff. Therefore, potential indirect impacts to Mark West Creek would be avoided or minimized to a less-than-significant level through compliance with County requirements for construction projects.

Significance Level: Less than Significant Impact

- d) 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?**

Comment:

Wildlife corridors are linear and/or regional habitats that provide connectivity between or to other naturally vegetated open spaces. Wildlife corridors can consist of a sequence of stepping-stones across the landscape (e.g., discontinuous areas of habitat such as isolated wetlands), continuous lineal strips of vegetation and habitat (e.g., riparian strips and ridge lines), or they may be parts of larger habitat areas selected for their known or likely importance to local wildlife. Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. The regional movement and migration of wildlife species has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development of open areas, which can result in large patches of land becoming inaccessible and forming a virtual barrier between undeveloped areas. Roads associated with development, although narrow, may result in barriers to smaller or less mobile wildlife species. Habitat fragmentation results in isolated islands of habitat, which affects wildlife behavior, foraging activity, reproductive patterns, immigration and emigration or dispersal capabilities, and survivability.

In the area of the project site, remaining open spaces are fractured by urbanization and other developments that include landscaping and fencing, or that are otherwise actively used by humans. Land uses surrounding the project site include residential development to the north and east, Mark West Springs Road to the south, and urban and residential development to the west. Just north of the residential development, there is an open space area that could potentially support wildlife movement through dense woodland towards Shiloh Ranch Regional Park located approximately 1.5 miles northwest of the project site, or towards the Mayacama Golf Club located approximately 1.4 miles north of the project site. However, both of these open space areas are separated from the project site by steep terrain and residential development. Movement of wildlife species between the project site and undeveloped habitat is expected to be limited due to the lack of physical linkages and existing barriers (e.g., fences and roads). Although limited movement of common species may infrequently occur between the project site and surrounding open space areas, such movement is very unlikely to result in eventual movement of wildlife populations to intact preserved habitats. Therefore, the project site is not considered a major wildlife movement corridor or habitat linkage, and construction of the subdivision would not prevent wildlife from passing through the region. Project-related impacts to wildlife corridors or wildlife nursery sites would be considered less than significant.

Significance Level:

Less than Significant Impact

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Regulatory Framework

Sonoma County General Plan

The *Sonoma County General Plan 2020* (Sonoma County 2008) Land Use Element and Open Space & Resource Conservation Element both contain goals, objectives, and policies to protect natural resource lands including, but not limited to, biotic areas, special-status species habitat, marshes and wetlands, sensitive natural communities, and habitat connectivity corridors, as summarized below.

Biotic Habitat Areas

The 2020 General Plan Open Space and Resource Conservation Element provides policies for protection of biotic habitats both within and outside the designated areas. Currently available information on the location and value of native habitats and sensitive resources is incomplete and changes over time as sites are assessed, new occurrences are reported, and additional locations are identified. As more habitat mapping information becomes available in the future, changes in designations will be considered along with possible policy changes. Regular collection and updating of reliable information and refinement of best management practices are necessary to protect the County's biotic resources over the long term. Following are the types of biotic habitat addressed by Policies OSRC-7a through 7u in this section that are pertinent to the proposed project:

Special-Status Species Habitat

Special-status species are plant and animals which are listed or candidate species under the Federal or State Endangered Species Acts and other species considered rare enough to warrant special consideration. Reported occurrences of special-status species are compiled by the California Natural Diversity Data Base (CNDDB) of the CDFW and are routinely updated as new information becomes available. Detailed surveys are typically necessary to confirm the presence or absence of special-status species.

Sensitive Natural Communities

CDFW has identified certain natural habitats as sensitive natural communities which are rare and vulnerable to further loss. Sensitive natural communities identified in Sonoma County include coastal salt marsh, brackish water marsh, freshwater marsh, freshwater seeps, native grasslands, several types of forest and woodland (including riparian, valley oak, Oregon white oak, black oak, buckeye, Sargent cypress, and pygmy cypress), old growth redwood and Douglas fir forest, mixed serpentine chaparral,

coastal scrub, prairie, bluff, and dunes. Many of these communities support populations of special-status species and are important to native wildlife.

Habitat Connectivity Corridors

Maintaining and improving opportunities for habitat connectivity throughout the County are essential for protecting biodiversity and sustaining native plant and animal populations. Linkages and corridors are needed to allow movement across the landscape and to connect wetlands and other important habitat areas to undeveloped lands and permanent open space. Important linkages and corridors include lands south of Glen Ellen connecting Sonoma Mountain and the Mayacamas Range and lands connecting the Laguna de Santa Rosa to agricultural areas south of Highway 116. It should be noted that riparian corridors also provide habitat connectivity.

Sonoma County Ordinances

Tree Protection

The Sonoma County Tree Protection Ordinance (Sonoma County Code of Ordinances, Chapter 26, Article 88, Sec. 26-88-010 [m]) establishes policies for protected tree species in Sonoma County. Projects shall be designed to minimize the destruction of protected trees. With development permits, a site plan shall be submitted that depicts the location of all protected trees greater than nine inches (9") and their protected perimeters in areas that will be impacted by the proposed development, such as the building envelopes, access roads, and leachfields. Protected trees are defined (Chapter 26, Article 02, Sec. 26-02-140) as the following species: big leaf maple (*Acer macrophyllum*), black oak (*Quercus kelloggii*), blue oak (*Quercus douglasii*), coast live oak (*Quercus agrifolia*), interior live oak (*Quercus wislizenii*), madrone (*Arbutus menziesii*), oracle oak (*Quercus morehus*), Oregon oak (*Quercus garryana*), redwood (*Sequoia sempervirens*), valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), and their hybrids. Lot line adjustments, zoning permits, and agricultural uses are exempt from this requirement.

Protection of Watercourses

Construction grading and drainage within, adjacent to, or involving the alteration of watercourses shall comply with the provisions of Ordinance Number 5819 (Sonoma County Code of Ordinances, Chapter 23, Article II, Sec. 11.16.110), any necessary state and federal permits, approvals, or authorizations, and the following requirements.

- A. Flood carrying capacity. The flood carrying capacity of any altered or relocated portion of a watercourse shall be maintained.
- B. Obstruction of watercourses. Watercourses shall not be obstructed unless an alternate drainage facility complying with Section 11.14.040.B is installed.
- C. Fills within watercourses. Fills placed within watercourses shall have protection against erosion.
- D. Streams in closed conduits. Except for stream crossings, streams shall not be placed in closed conduits. Stream crossings shall be limited to the minimum width necessary to cross the stream.
- E. Heavy equipment. Heavy equipment shall not cross or disturb channels of actively flowing streams unless best management practices referenced or detailed in the department's best management practices for construction grading and drainage are in place.
- F. Materials storage. Materials that could contribute to pollution shall not be deposited or stored in or adjacent to a watercourse. (Ord. No. 6219 , § I (Exh. A), 12-19-2017)

Removal of Trees and Other Vegetation

Construction grading and drainage shall not remove or disturb trees and other vegetation except in compliance with the department's best management practices for construction grading and drainage and the approved plans and specifications. Construction grading and drainage shall be conducted in compliance with the following requirements.

- A. The limits of work-related ground disturbance shall be clearly identified and delineated on the approved plans and specifications and defined and marked on the site to prevent damage to surrounding trees and other vegetation.

- B. Trees and other vegetation within the limits of work-related ground disturbance that are to be retained shall be identified and protected from damage by marking, fencing, or other measures. (Ord. No. 6219 , § I (Exh. A), 12-19-2017)

Comment:

With implementation of Mitigation Measures BIO-1 through BIO-6, the project would be consistent with Sonoma County General Plan 2020 Land Use Element and Open Space & Resource Conservation Element goals, policies, and objectives to protect natural resources and lands including, but not limited to, watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors.

The Sonoma County Tree Protection Ordinance designates 'protected' trees as defined by Chapter 26, Article 02, Sec. 26- 02-140 and provides mandatory standards and regulations for effects on protected trees. The proposed project would result in the removal of, and potential damage to, a minimum of 11 protected trees, including coast live oak, blue oak, and redwood with a circumference greater than nine inches (9") as shown on Figure 5. The applicant shall be required to comply with the tree protection ordinance through implementation of Mitigation Measure BIO-6.

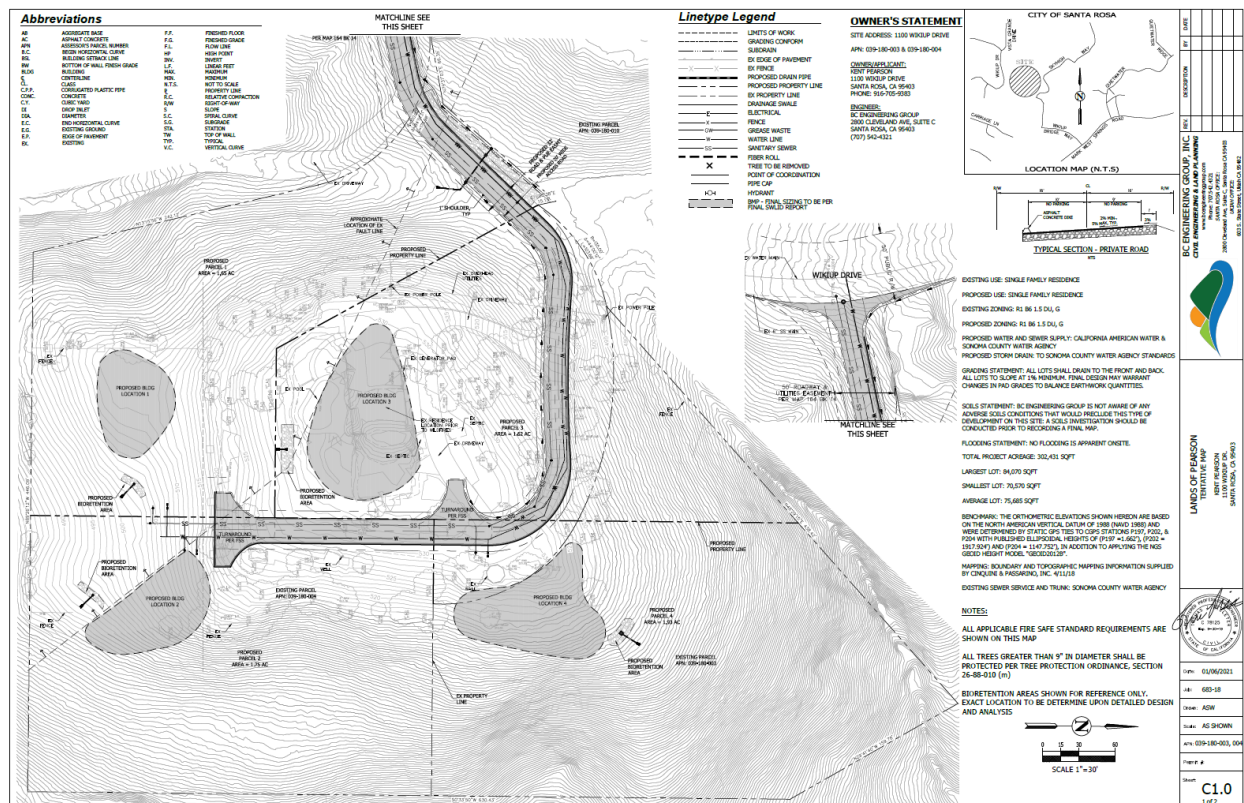


Figure 5, Tentative Site Plan C1.0

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure BIO-6: Compensate for Loss of Protected Trees

The proposed project shall be required to adhere to all general provisions, tree protection methods during construction, and compensatory mitigation requirements of the Sonoma County Tree Protection Ordinance (Sonoma County Code of Ordinances, Chapter 26, Article 88, Sec. 26-88-010 [m]). The applicant may be required to plant replacement trees or prepare and/or issue payment of in-lieu fees that may be used to acquire and protect stands of native trees in preserves or place trees on public lands.

Furthermore, only the minimum amount of vegetation shall be pruned or removed that is necessary to construct the project. Where possible, vegetation shall be tied back in lieu of cutting. Native vegetation that must be removed shall be cut at or above grade to facilitate re-growth. Any pruning that is done, including for utility line clearance, shall conform to the American National Standard for Tree Care Operation Tree, Shrub, and Other Woody Plant Maintenance Standard Practices, Pruning (ANSI A300 Part 1)-2008 Pruning), and the companion publication Best Management Practices: Tree pruning (ISA 2008). Roots shall only be unearthed when necessary.

Mitigation Monitoring:

Mitigation Monitoring BIO-6:

See Mitigation Monitoring BIO-1 through BIO-5. In addition, prior to the issuance of any grading permit, the County shall review and approve the applicant's demonstration of compliance with all provisions of the Sonoma County Tree Protection Ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan?

Comment:

The project site is not located within the plan area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

Significance Level:

No Impact

5. CULTURAL RESOURCES:

An archaeological resources inventory report for was prepared for the project site (Appendix B).¹² The purpose of this investigation was to identify any previously known or newly discovered archaeological resources on the property and to determine whether any cultural resources (if present) are either listed in, or eligible for listing in, the California Register of Historical Resources (CRHR). Information within this section is taken from that report.

The project site is located within a region ethnographically recorded as the territory of the Southern Pomo Indians. This territory spanned an area from the coastal town of Gualala, east to Cloverdale, and south towards Healdsburg, Sebastopol, and Santa Rosa. The Kashaya Pomo, Coast Miwok, and the Wappo groups occupied the lands to the west, south, and east of the Southern Pomo territory. No known village sites have been located within the project site.

Early Spanish exploration of Northern California marked the first European contact in the area to become Sonoma County, though settlements did not proliferate in the region until the 1830s when California, still belonging to Mexico, was largely segmented into land grant ranchos. The project site is located just north of Rancho San Miguel across Mark West Creek, in a historically rural ranching and farming area known

¹² GANDA, 2018. *Archaeological Resources Inventory Report for the 1100 Wikiup Drive Project, Santa Rosa, Sonoma County, California*, June.

as the Russian River Township.

The Gold Rush prompted a rise in agricultural development of the region by the time of California's US statehood, and Sonoma County was among the first 18 California counties created on January 4, 1850. The area was gradually settled by more families as word of the agricultural opportunities of Sonoma County spread, and by 1880 the Russian River Township reportedly contained 125 farms and several schools. Most farms in the vicinity of the project site were dedicated to wheat, prunes, or hops by the turn of the twentieth century.

While Santa Rosa and Windsor gradually grew on either side of the project site, Larkfield-Wikiup remained a sparsely populated area dotted with orchards and small farms. The development of the local airport prompted the development of many residential subdivisions in the area, including within Larkfield-Wikiup where most subdivisions were constructed between the late 1960s and mid-1980s.

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Comments:

Records Search

On May 30, 2018, GANDA archaeologist conducted a records search at the NWIC of the CHRIS at Sonoma State University, Rohnert Park (File No. 17-2881). The NWIC is a repository of all cultural resources site records, previously conducted cultural resources investigations, and historic information concerning cultural resources for 18 counties, including Sonoma County. The purpose of this records search was to compile information pertaining to the locations of previously recorded cultural resources and prior cultural resources studies within a 0.25-mile radius of the project site that inform the sensitivity of the project site for cultural resources. The following sources were consulted during the records search:

- NWIC base map: USGS 7.5-minute series topographic quadrangle of Mark West Springs (1998).
- Survey reports from previous cultural resources investigations and cultural resources site records to identify recorded archaeological sites and built environmental resources (i.e., buildings, structures, and objects) located within a 0.25-mile radius of the project site.
- California Office of Historic Preservation (OHP) sources, including the California Inventory of Historic Resources, California Archaeological Determinations of Eligibility, and the Historic Properties Directory, which combines cultural resources listed as California Points of Historical Interest and California Historical Landmarks and those that are listed in or determined eligible for listing in the NRHP or the CRHR.

The records search did not identify any prehistoric or historic-era resources within the project site. Additionally, the records search results indicated that no previous cultural resources studies have been conducted within the project site.

A total of four previously recorded prehistoric archaeological resources were identified within a one-mile radius of the project site. 

Historical Map Review

Based on a review of available historic topographic maps and aerial photographs, the project site was located within a rural and ranching setting from at least the 1860s until the 1980s when residential development intensified in the Larkfield-Wikiup area. The earliest map reviewed, dating to 1865, shows the project site and surroundings to be virtually undeveloped, with Mark West Creek, a redwood tree, and a canyon the only features within one mile. An 1866 map places the project site

within San Miguel Rancho, undeveloped, though the project site appears within a plot belonging to Michael Meyer. The nearest structure is 0.15-mi northwest. Otherwise the surrounding area is rural, with houses scattered. Old Redwood Highway, Faught Road, Cross Creek Road are the only roadways depicted. The Mark West Homestead is visible on the west side of the Old Redwood Highway on the south side of Mark West Creek.

In an 1877 survey map, the project site still lies within the same plot of land now owned by J. Notti, and the nearest structure is a farm approximately 0.30-mi southwest of project site. By 1898 the project site is shown to be in the southern edge of the Russian River Township (bound to the south by Mark West Creek), on land belonging to Francis Wrightson. Nothing appears to change by 1900 except for the landowner, now shown as Maude T. Jones.

Early 1940s topographic maps still show Rancho San Miguel, and Carriage Lane and Skyhigh Way are drawn as dirt roads. By 1958 Carriage Lane is paved, and part of Wikiup Drive has been developed west of the project site, at this point a dirt road. A water tank is shown about 0.10-mi south of the project site, but otherwise the area retains its rural appearance, continuing through to 1968 and 1978. Historical aerials around the same time, however, show more roads and residences in 1968 than depicted on maps and includes the project site as having a driveway and what appears to be a structure in the location of the house destroyed in the 2017 Tubbs Fire. By 1993 a great amount of suburban development has occurred, and the surrounding streets and house plots appear approximately as they do today.

Native American Heritage Commission Request

GANDA archaeologists initiated consultation with the Native American Heritage Commission (NAHC) on May 31, 2018 requesting information via email regarding sacred lands that may be located within the project site and a list of interested Native American groups and individuals. On June 7, 2018, the NAHC responded that a search of the Sacred Lands File was completed with negative results. Due to the fact that the absence of specific site information does not indicate the absence of Native American cultural resources in the APE, the NAHC provided a list of Native American representatives to contact as part of consultation. The project received comments from Middletown Rancheria, Cloverdale Rancheria, Stewarts Point Rancheria and Lytton Rancheria whom all had no concerns or comments at the time of referral.

Local Historical Society Consultation

On May 31, 2018 a GANDA archaeologist contacted the Sonoma County Historical Society via electronic mail requesting any information or concerns regarding historical resources in or around the project site. No response has been received to date.

Field Survey

GANDA archaeologist conducted a pedestrian survey of the project site on May 30, 2018. The purpose of the field survey was to identify cultural resources within the project site. The archaeologist surveyed the entire property pacing in 10 meter-wide transects. Bare patches of ground and rodent runs were closely inspected and troweled to inspect the soil for archaeological materials. Access roads and drainages traversing the property were walked and assessed for evidence of archaeological deposits. Overview photographs were taken using a digital camera. Field notes, including soil conditions, ground visibility, and disturbances were recorded.

The project site is located on the top and slopes of a hill just north of Mark West Creek. The crest of this hill has been graded for the former residence and still-existing swimming pool, landscaped with terraced gardens and a fountain, and paved with a road leading from the entrance gate and forking south and east to form a loop that leads to the former house. Ground visibility during the survey was variable but generally poor, ranging from 0 to 40 percent across the project site, and generally obscured by dense grasses ranging from six to 18 inches in height, duff created by oak trees, and tree debris from emergency removals in the wake of the fire. Rodent runs and bare patches revealed light brown loam soils.

No prehistoric or historic-era resources were identified during field survey. Of the still standing

architecture (swimming pool, gate and fence, fountain, terraced garden), none of these features were determined to be of historic age.

Geoarchaeological Analysis

A desktop geoarchaeological analysis of the project site was conducted to assess the potential for buried prehistoric archaeological sites. Assessing where buried archaeological sites might be encountered is possible by analyzing a suite of specific factors that, when applied to the project site, can provide predictive models regarding the presence or absence of prehistoric archaeological deposits and assist with the identification and subsequent management of those archaeological deposits.

While there are four prehistoric archaeological sites less than one mile from the project site, and Mark West Creek is 1,400 feet from the project site, there is an overall low sensitivity rating for the presence of buried archaeological materials in the project site. This is due to the hilltop landform of the project site, the thin layer of Holocene soils, and the slope of the project site. And while there is a major creek and four recorded archaeological sites less than one mile from the project site, the distance of these features is too great according to the sensitivity model presented in Table 1 of the archaeological report. The low sensitivity finding is further supported by the lack of archaeological materials identified during the pedestrian survey. Buried archaeological sites in the vicinity of the project site are more likely to be discovered on the valley floor of the Mark West Creek floodplain where alluvial sediments have accumulated and there is closer proximity to freshwater.

As described above, there are no historical resources on the property, therefore there will be no impact.

Significance Level:

No Impact

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Comment:

GANDA archaeologists initiated consultation with the Native American Heritage Commission (NAHC) on May 31, 2018 requesting information via email regarding sacred lands that may be located within the project site and a list of interested Native American groups and individuals. On June 7, 2018, the NAHC responded that a search of the Sacred Lands File was completed with negative results. The county received four responses, none of which requested further consultation: The Stewarts Point Rancheria Kashia Band of Pomo Indians (November 9, 2018); the Lytton Rancheria (November 20, 2018), Graton Rancheria (November 7, 2018); and the Middletown Rancheria (November 2, 2018).

The NWIC noted (November 8, 2018) that "*The proposed project area has a low possibility of containing unrecorded archeological site(s). Therefore, no further study for archeological resources is recommended.*" [underline in original] However, although there are no known archaeological resources on the site, the project could uncover such materials during construction. The following measure will reduce the impact to less than significant.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation Measure CULT-1

All building and/or grading permits shall have the following note printed on plan sheets:

NOTE ON MAP:

In the event that cultural resources are discovered at any time during grading, scraping or excavation within the property, all work should be halted in the vicinity of the find. Artifacts associated with prehistoric sites may include humanly modified stone, shell, bone or other cultural materials such as charcoal, ash and burned rock indicative of food procurement or processing activities. Prehistoric domestic resources include hearths, firepits, or house floor depressions whereas typical mortuary resources are represented by human skeletal remains. The Permit Sonoma - Project Review Staff shall be notified. Permit Sonoma Staff should consult with the appropriate tribal representative(s) from the tribes known to Permit Sonoma to have interests in the area to determine if the resources qualify as Tribal Cultural Resources (as defined in Public Resource Code § 21074). If determined to be a Tribal Cultural Resource, Permit Sonoma would further consult with the appropriate tribal representative(s) and project proponents in order to develop and coordinate proper protection/mitigation measures required for the discovery. Permit Sonoma may refer the mitigation/protection plan to designated tribal representatives for review and comment. No work shall commence until a protection/mitigation plan is reviewed and approved by Permit Sonoma - Project Review Staff. Mitigations may include avoidance, removal, preservation and/or recordation in accordance with California law. Evaluation and mitigation shall be at the applicant's sole expense.

If human remains are encountered, work in the immediate vicinity shall be halted and the operator shall notify Permit Sonoma and the Sonoma County Coroner immediately. At the same time, the operator shall be responsible for the cost to have a qualified archaeologist under contract to evaluate the discovery. If the human remains are determined to be of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification so that a Most Likely Descendant can be designated, and the appropriate measures implemented in compliance with the California Government Code and Public Resources Code.

Mitigation Monitoring

Mitigation Monitoring CULT-1:

Action: Stop work if any artifacts or human remains are encountered; include notes on all site plans.

Implementing Party: Project Applicant

Timing: prior to and during ground disturbing activities and project construction

Monitoring Party: Permit Sonoma

Failure by the Permit-Holder to comply with these requirements shall be considered a violation of the Use Permit and may result in the modification or revocation proceedings of the said Use Permit.

c) Disturb any human remains, including those interred outside of formal dedicated cemeteries?

Comment:

No burial sites are known in the vicinity of the project. As described in Mitigation Measures CULT-1, all grading and building permits plans involving ground disturbing activities shall include the following notes:

If human remains are encountered, work in the immediate vicinity shall be halted and the operator shall notify PRMD and the Sonoma County Coroner immediately. At the same time, the operator shall be responsible for the cost to have a qualified archaeologist under contract to evaluate the discovery. If the human remains are determined to be of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification so that a Most Likely Descendant can be designated, and the appropriate measures implemented in compliance with the California Government Code and Public Resources Code.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

Implement **Mitigation Measure CULT-1**

Mitigation Monitoring:

Implement **Mitigation Monitoring CULT-1**

6. ENERGY

Would the project:

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Comment:

The proposed project is in a location that currently has electricity and natural gas service. Prior to the 2017 Tubbs Fire, the project site contained a single-family home. As the project would include the subdivision of the project site into four parcels, and the eventual development of four single-family homes the proposed project would increase electricity and natural gas consumption. In accordance with California Energy Code Title 24, the proposed project would not use energy in a wasteful manner. Minimum efficiency standards for household appliances, water and space heating and cooling equipment and insulation for doors, pipes, walls and ceilings would ensure that the proposed project would not use energy in a wasteful manner.

Significance Level:

Less than Significant Impact

- b) **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Comment:

Construction of the proposed project, due to its scale, would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Significance Level:

No Impact

7. GEOLOGY AND SOILS:

A Geotechnical and Fault Study Report was prepared for the project site in September 2018 by RGH Consultants, the project geological consultants (Appendix C).¹³ Information within this section is taken from that report.

¹³ RGH Consultants, 2018. *Geotechnical and Fault Study Report, Pearson Property Subdivision, 1100 Wikiup Drive, Santa Rosa, California*, September 21.

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Comment:

The project site, along with the entire Northern California Coastal Region, is part of the seismically active region known as the San Andreas Fault System. The Mark West Springs Quadrangle displays one splay of the Healdsburg-Rodgers Creek fault terminating approximately 150 feet southwest of the proposed project site. The fault then reemerges approximately 500 feet west of the proposed project site.

Based on the results of the fault study in the submitted Geological and Fault study report, active faulting is defined by the State of California as faulting that disrupts Holocene (11,000 years before present) or younger deposits. Based on the exposed bedrock in the trench study, the report concludes that the soil deposits range from early Pleistocene (71,000 years) to Pliocene (5 million years). As described in the geotechnical report, evidence of an active fault was not observed or encountered in the trenches during investigation. See Section 7.a.ii below.

The project site is also partially located within the boundaries of a Sonoma County designated Geologic Hazard Area (G) combining district. Approximately two acres of the southwestern portion of APN 039-180-004 lie within this district. The purpose of this district is to reduce unnecessary exposure of people and property to risks of damage or injury from earthquakes, landslides, and other geologic hazards in the Alquist-Priolo Special Studies Zone. Section 26-90-030 of the Sonoma County Code requires a geologic report be conducted for any development of properties within this combining district. As a uniformly applied regulatory process, submittal and review of a geologic report would also align with Sonoma County General Plan Policies PS-1f and PS-1g which regulate development within potentially geologically hazardous areas. As discussed in item 7.a.ii. below, a site-specific geotechnical report would be required for the project. However, reconstruction of the previously burned single family dwelling may forego these regulatory policies, pursuant to General Plan Policy PS-1p; this Policy was resolved on December 11, 2018 to facilitate the reconstruction of homes after the 2017 Sonoma Complex Fires.

Based on this uniformly applied regulatory process, the project would not expose people to substantial risk of injury from rupture of an earthquake fault, and therefore, potential impacts would be reduced to less-than-significant.

Significance Level:

Less than Significant Impact

ii. Strong seismic ground shaking?

Comment:

The project is located within a seismically active region and in the vicinity of five active faults. The Healdsburg-Rodgers Creek Fault is less than one-mile north east of the project site. The Redwood Hill Fault is 2.25 miles north east of the project site. The Maacama fault is 5.75 miles north east. The

West Napa Fault is 24 miles south east and the San Andreas Fault is 20.5 miles south west of the project site.

All of Sonoma County is subject to seismic shaking that would result from earthquakes along the San Andreas, Healdsburg-Rodgers Creek, and other faults. Predicting seismic events is not possible, nor is providing mitigation that can entirely reduce the potential for injury and damage that can occur during a seismic event. However, using accepted geotechnical evaluation techniques and appropriate engineering practices potential injury and damage can be diminished, thereby exposing fewer people and less property to the effects of a major damaging earthquake. The design and construction of future dwellings on new parcels are subject to load and strength standards of the California Building Code (CBC) and/or California Residential Code (CRC), which takes seismic shaking into account. Project conditions of approval require that building permits be obtained for all construction and that all construction activities, including earthwork, grading, trenching, backfilling and compaction operations, shall be conducted in accordance with Sonoma County Code Chapter 11 to ensure that the project meets standard seismic and soil test/compaction requirements. As a matter of practice and state law, all construction activities would be required to meet the California Building Code regulations for seismic safety, including designing all earthwork, cuts and fills, drainage, pavements, utilities, foundations and structural components in conformance with the specifications and criteria contained in the project final geotechnical report, which shall be completed and submitted to Permit Sonoma for review prior to project approval. Standard County development procedures include review and approval of construction plans prior to the issuance of a building/grading permit.

In addition, as required by the building code, the geotechnical engineer would be required to submit an approval letter from Permit Sonoma for the engineered grading plans prior to issuance of the grading permit; prior to final issuance of the grading permit, the geotechnical engineer would be required to inspect the construction work and certify to Permit Sonoma, prior to the acceptance of the improvements or issuance of a certificate of occupancy, that the improvements have been constructed in accordance with the geotechnical specifications. All work would be subject to inspection by Permit Sonoma for conformance with all applicable code requirements and approved improvement plans.

Based on this uniformly applied regulatory process, the project would not expose people to substantial risk of injury from seismic shaking, and therefore, potential impacts would be reduced to less-than-significant.

Significance Level:

Less than Significant Impact

iii. Seismic-related ground failure, including liquefaction?

Comment:

Strong ground shaking can result in liquefaction, the sudden loss of shear strength in saturated sandy material, resulting ground failure. Areas of Sonoma County most at risk of liquefaction are along San Pablo Bay and in alluvial valleys. The project site is located within a very low Susceptibility Liquefaction area as classified by the Counties GIS Tool. Additionally, the project geotechnical report prepared by RGH consultants did not observe conditions within the portion of the property that suggested materials susceptible to seismically induced densification, liquefaction, or lurching.

Significance Level:

Less than Significant Impact

iv. Landslides?

Comment:

Due to mapped landslides in the project area, and a classification of "Many Landslides" by the Counties GIS tool, a geotechnical report was prepared by RGH Consultants. They conducted a surficial reconnaissance of the property in September 2018. Their report determined that while the area could be a large-scale historic landslide activity site, the study did not observe any chaotic landslide conditions consistent with the "Many Landslides" delineation. In addition, the side does have very steep slopes ranging from 0%-50% and greater that have the potential for shallow land sliding or heavy creep. The heavy creeping soil zones are located on the east side of the parcel, directly adjacent to the proposed building location 4.

As part of standard County development procedures, discussed in item 7.a.ii. above, a site-specific geotechnical report would be required for the project, which would address potential landslide hazards. Additionally, pursuant to General Plan Policy PS-1f, prior to project approval, the applicant shall provide the county with a geologic (geotechnical) report that describes the hazards (including from expansive soils) and includes necessary measures to reduce risks to acceptable levels. As engineer's or geologist's certification shall be provided to ensure that risks have been reduced to a level acceptable to the County.

Significance Level:

Less than Significant Impact

b) Result in substantial soil erosion or the loss of topsoil?

The project includes grading, cuts and fills which require the issuance of a grading permit. The project proposed a cut maximum of 1,000 CY, a fill maximum of 1,000 CY and a fill area of 10,000 SF. Improper grading, both during and post construction, has the potential to increase the volume of runoff from a site which could have adverse downstream flooding and further erosional impacts, and increase soil erosion on and off site which could adversely impact downstream water quality.

Erosion and sediment control provision of the Drainage and Storm Water Management Ordinance (Chapter 11, Sonoma County Code) and Building Ordinance (Chapter 7, Sonoma County Code) requires implementation of flow control best management practices to reduce runoff. The Ordinance requires treatment of runoff from the two-year storm event. Required inspection by Permit Sonoma staff ensures that all grading and erosion control measures are constructed according to the approved plans. These ordinance requirements and adopted best management practices are specifically designed to maintain potential water quantity impacts at a less than significant level during and post construction.

In regards to water quality impacts, County grading ordinance design requirements, adopted County grading standards and best management practices (such as silt fencing, straw wattles, construction entrances to control soil discharges, primary and secondary containment areas for petroleum products, paints, lime and other materials of concern, etc.), mandated limitations on work in wet weather, and standard grading inspection requirements, are specifically designed to maintain potential water quality impacts at a less than significant level during project construction.

For post construction water quality impacts, adopted grading permit standards and best management practices require that storm water to be detained, infiltrated, or retained for later use. Other adopted water quality best management practices include storm water treatment devices based on filtering, settling or removing pollutants. These construction standards are specifically designed to maintain potential water quality grading impacts at a less than significant level post construction.

The County adopted grading ordinances and standards and related conditions of approval which enforce them are specific, and also require compliance with all standards and regulations adopted by the State and Regional Water Quality Control Board, such as the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements, Low Impact Development and any other adopted best

management practices. Therefore, no significant adverse soil erosion or related soil erosion water quality impacts are expected given the mandated conditions and standards that need to be met. For further discussion of related issues (such as maintenance of required post construction water quality facilities), please see to the Section 10, Hydrology and Water Quality.

If project construction occurs during wet weather, it is possible that storm water could carry soil offsite into local storm drains. Standard construction erosion control measures at the project site (ABAG, 1995), which would be required as conditions of approval, would minimize this effect.

In addition, as a condition of project approval, the applicant would be required to submit an Erosion and Sediment Control Plan prepared by a registered professional engineer as an integral part of the grading plan. The plan would be required to contain all applicable items in the Grading Permit Required Application Contents (GRD-004) handout, and would be required to show best management practices (BMPs) to be implemented, limits of disturbed areas/total work, vegetated areas to be preserved, and pertinent details, notes, and specifications to prevent damages or minimize adverse impacts to the surrounding properties and the environment, such as temporary erosion control measures to be used during construction of cut and fill slopes, excavation for foundations, and other grading operations at the site to prevent discharge of sediment and contaminants into the drainage system. The Erosion and Sediment Control Plan would also be required to include the following measures, as applicable, which shall be printed on applicable building, grading, and improvement plans:

- a. Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
- b. All drainage ways, wetland areas and creek channels shall be protected from silt and sediment in storm runoff through the use of silt fences, diversion berms and check dams. Fill slopes shall be compacted to stabilize. All exposed surface areas shall be mulched and reseeded and all cut and fill slopes shall be protected with hay mulch and /or erosion control blankets as appropriate.
- c. All erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15th. Erosion control measures shall remain in place until the end of the rainy season, but may not be removed before April 15th. The applicant shall be responsible for notifying construction contractors about erosion control requirement.

The Erosion and Sediment Control Plan would be subject to review and approval of Permit Sonoma prior to the issuance of a grading permit. The Applicant would be required to inspect all storm water BMPs annually and submit the results to Permit Sonoma annually (including but not limited to the Inspection and Maintenance Checklists, photo evidence of BMP existing conditions, and a report of any maintenance activity, remediation, or replacement of BMP features). Application of these conditions of approval would reduce risk of erosion resulting from the project and project construction, and therefore project erosion impacts would be less than significant.

Significance Level:

Less than Significant Impact

- c) **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

Comment:

The project site would be subject to seismic shaking and other geologic hazards as described in

items 7.a.ii, iii, and iv, above. However, as described in those sections, standard County Code and building requirements, combined with conformance with standard CBC and other applicable State and local regulations (all of which shall be required as conditions of approval for the project), would reduce potential soil stability impacts to less than significant. In addition, as a condition of project approval, the County has requested a quantitative slope stability analysis for lots 2 and 4, to assist in properly locating site drainage features.

Significance Level:

Less than Significant Impact

- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

Comment:

Table 18-1-B of the Uniform Building Code is an index of the relative expansive characteristics of soil as determined through laboratory testing. The project site contains some soils that have moderate to high potential for shrink-swell, which could result in soil expansion. The final geotechnical report required as part of standard County development procedures (see item 7.a.ii) would include an analysis of expansive soil hazards and recommended stabilization measures. With implementation of these measures, combined with conformance with standard CBC and other applicable State and local regulations (all of which shall be required as conditions of approval for the project), potential hazards from expansive soils would be less than significant.

Significance Level:

Less than Significant Impact

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?**

Comment:

The project site is in an area served by the Airport-Larkfield-Wikiup Sanitation Zone public sewer. No septic tank or alternative water disposal systems are proposed as part of the project.

Significance Level:

No Impact

- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Comment:

The proposed project was referred to the NWIC on November 8th, 2018 to which the agency responded that "The proposed project area has a low possibility of containing unrecorded archeological site(s)." ¹⁴

An examination of the Geological Map of California¹⁵ indicates that the project area consists of bedrock that is early Pleistocene to Pliocene in age. The surface soils consist of weathered metavolcanics bedrock. The project site contains a thin veneer of Holocene age surface soils formed from eroding *in situ* bedrock, which translates to a low potential for the presence of buried archaeological materials.

¹⁴ Northwest Information Center for project MNS18-0003 November 8, 2018

¹⁵ Geological Map of California, <https://maps.conservation.ca.gov/cgs/gmcl/>, accessed 3/22/19

As noted previously in Section 5, Cultural Resources, an archeological resources inventory report was prepared for the project site by GANDA. As noted in that report, there is an overall low sensitivity rating for the presence of buried archaeological materials in the project site. This is due to the hilltop landform of the project site, the thin layer of Holocene soils, and the slope of the project site.

Therefore, though there are no records of recorded fossil sites within the project area, the proposed project could disrupt, alter, or eliminate as-yet undiscovered paleontological resources that may be present in the soils under the project site. Furthermore, implementation of Mitigation Measure CUL-1 and GEO-1 would require ceasing construction near the find and notification of the County should artifacts associated with prehistoric sites be discovered during construction.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

Mitigation Measure GEO-1:

If paleontological resources are encountered, cease ground-disturbing activities immediately and implement a treatment plan. If paleontological resources and/or unique geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted immediately, or diverted away from the vicinity of the find, so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the applicant and the County. Work shall be allowed to continue outside of the buffer area. The applicant and County shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.

Mitigation Monitoring:

Mitigation Monitoring GEO-1:

Permit Sonoma shall be consulted if a paleontological resource is discovered on site and shall review and approve paleontologist-recommended measures to recover or preserve any data or paleontological resources before ground-disturbing activities may continue.

8. GREENHOUSE GAS EMISSIONS:

The methodologies and assumptions used in preparation of this section follow the CEQA Guidelines developed by the Bay Air Quality Management District (BAAQMD), as revised in May 2017 (BAAQMD 2017).

Would the project:

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Comment:

Construction activities, such as site preparation and site grading, and motor vehicles transporting equipment, materials, and the construction crew would produce combustion emissions. During construction of the project, greenhouse gas emissions (GHGs) would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The BAAQMD does not have a quantitative threshold of significance for construction-related GHG emissions.

The Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines provides suggestions for screening potential air quality impacts for different land uses. The Air District developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. Projects below the applicable screening criteria shown in Table 3-1 of the BAAQMD CEQA Guidelines would not exceed the 1,100 MT of CO₂e/yr GHG threshold of significance for projects other than permitted stationary sources.

Based on its size, the proposed project is below the operational GHG single-family screening size (56 dwelling units). Given this, the project would not be anticipated to generate significant GHG emissions; this impact would be considered less than significant.

Significance Level:

Less than Significant Impact

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Comment:

The County does not have an adopted Climate Action Plan but has established GHG reduction goals and adopted a Climate Change Action resolution (May 8, 2018) *"to support a county-wide framework for reducing greenhouse gas emissions and to pursue local actions that support the identified goals therein."*¹⁶ As a response to litigation against the County's proposed Climate Action Plan and subsequent decision not to appeal the court's ruling, the County's resolution demonstrates commitment to working towards the RCPA's countywide greenhouse gas (GHG) emissions reduction targets: 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050.

The resolution includes the following goals:

- Increase building energy efficiency
- Increase renewable energy use
- Switch equipment from fossil fuel to electricity
- Reduce travel demand through focused growth
- Encourage a shift toward low-carbon transportation options
- Increase vehicle and equipment fuel efficiency
- Encourage a shift toward low-carbon fuels in vehicles and equipment
- Reduce idling
- Increase solid waste diversion
- Increase capture and use of methane from landfills
- Reduce water consumption
- Increase recycled water and graywater use
- Increase water and waste-water infrastructure efficiency

¹⁶ Sonoma County, Long-Range Plans, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Climate-Change-Action-Resolution/>, accessed 3/14/18.

- Increase use of renewable energy in water and wastewater systems
- Reduce emissions from livestock operations
- Reduce emissions from fertilizer use
- Protect and enhance the value of open and working lands
- Promote sustainable agriculture
- Increase carbon sequestration
- Reduce emissions from the consumption of goods and services

In addition, Sonoma County has the goal of increasing resilience by pursuing local actions that support the following goals:

- Promote healthy, safe communities
- Protect water resources
- Promote as sustainable, climate-resilient economy
- Mainstream the use of climate projections

The project, by implementing current county codes would be consistent with local or state plans, policies, or regulations adopted for the purpose of reducing emissions of greenhouse gases.

Significance Level:

Less than Significant Impact

9. HAZARDS AND HAZARDOUS MATERIALS:

Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Comment:

The project is proposing to subdivide land into four parcels and develop four single-family homes. The property is currently undeveloped due to the 2017 Tubbs Fire, but included a single-family dwelling unit prior to the fire. During construction and operation at the project site, small amounts of potentially hazardous materials would likely be used on this project such as fuel, lubricants, and cleaning materials. Proper use of materials in accordance with local, state, and federal requirements, and as required in the construction documents, would minimize the potential for accidental releases or emissions from hazardous materials. In addition, as standard County procedure, project construction contracts would be required to comply with Sonoma County Fire Code regulations for storage of flammable liquids and Sonoma County Municipal Code regulations related to hazardous materials management (protection of surface waters pursuant to Caltrans Standard Specifications, or functional equivalent). Project construction contracts would also be required to specify procedures in the event of a spill of hazardous materials (i.e., Contractor responsible for immediately calling emergency number 9-1-1 to report spill, taking appropriate actions to contain spill to prevent further migration of hazardous materials, contacting County to verify appropriate clean-up procedures). With existing General Plan policies and Federal, State, and Local Regulation and oversight of hazardous materials, the potential threat to public health and safety for the environment from hazardous materials transport, use or disposal would represent a less-than-significant impact.

Significance Level:

Less than Significant Impact

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Comment:

See Section 9.a., above.

Significance Level:

Less than Significant Impact

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Comment:

The project site is within approximately 0.25 miles of the John B. Riebli Elementary School. The project would involve a four parcel subdivision and the development of four single-family homes. However, the project would not be expected to emit hazardous emissions or handle hazardous materials.

Significance Level:

Less than Significant Impact

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Comment:

There are no known hazardous materials sites within or adjacent to the project limits, based on a review of the following databases on February 18, 2019.

1. The State Water Resources Control Board Geotracker database,¹⁷
2. The Department of Toxic Substances Control EnviroStor database (formerly known as Calsites),¹⁸ and
3. The California Integrated Waste Management Board Solid Waste Information System (SWIS).¹⁹

Significance Level:

No Impact

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

Comment:

¹⁷ State Water Resources Control Board Geotracker Database, <http://geotracker.waterboards.ca.gov/>, accessed on 2/18/2019.

¹⁸ The Department of Toxic Substances Control EnviroStor Database, <http://www.envirostor.dtsc.ca.gov/public/>, accessed on 2/19/2019.

¹⁹ The California Integrated Waste Management Board of Solid Waste Information System (SWIS), <https://www2.calrecycle.ca.gov/SWFacilities/Directory>, accessed on 2/19/2019.

The site is not within an airport land use plan as designated by Sonoma County. The Sonoma County Airport is over 3 miles west of the project site.

Significance Level:

No Impact

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Comment:

The project would not impair implementation of, or physically interfere with the County's adopted emergency operations plan. There is no separate emergency evacuation plan for the County. In any case, the project would not change existing circulation patterns significantly, and would have no effect outside the area. See Section 17, Transportation and Traffic, for discussion of emergency access.

Significance Level:

No Impact

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Comment:

According to the Sonoma County General Plan (Figure PS-1g, Wildland Fire Hazard Areas), the proposed project area is located within a State Responsibility Area (SRA) and is designated a Moderate fire hazard severity zone²⁰. As noted in the General Plan Public Safety Element (p. PS-14), *"The Moderate Hazard Severity Zone includes: a) wildland areas of low fire frequency supporting modest fire behavior; and b) developed/urbanized areas with a very high density of non-burnable surfaces and low vegetation cover that is highly fragmented and low in flammability."*

The project site is located in unincorporated Larkfield-Wikiup in central Sonoma County between the cities of Santa Rosa (to the south) and Windsor (to the north). The property occurs in a residential neighborhood that was burned down with the 2017 fires. The property is 551 feet above mean sea level and occurs on the Mark West Springs U.S.G.S 7.5-minute quadrangle. The former residence was located at the highest point of the lot with slopes gradually sloping to lower elevations in all directions. The main source of fire ignition is human activity, such as debris burning, vehicles including *trucks*), and electrical power/power lines.

Environmental factors that influence risk of fire on the project site include topography, weather, and fuel sources. The topography of the area varies around 551 feet above mean sea level. The project site is located at the eastern edge of the Laguna de Santa Rosa watershed and is nestled in the western foothills of the Mayacamas mountain range. The temperature and rainfall vary by distance from the coast and by elevation although heavy rains come during the months of October to April. Temperatures stay moderate most of the year, rarely breaking 90 degrees Fahrenheit during summer months. The county's cool wet winters promote vegetation growth throughout the spring, and the hot dry summers, especially inland result in greater fire susceptibility in vegetation. The "fire season" follows this pattern and is generally considered to run through May through October.²¹

According to the Sonoma County Community Wildfire Protection Plan (p.8), *"the months of August,*

²⁰ Sonoma County FHSZ Map, http://www.fire.ca.gov/fire_prevention/fhsz_maps_sonoma, accessed 3/13/19

²¹ Sonoma County Hazard Mitigation Plan Update, Wildland Fire Hazards, April 2017, p. WH-4, accessed 3/13/19

September and October have the greatest potential for wildland fires as vegetation dries out, humidity levels fall, and off shore winds blow." Although prevailing winds are from the south and southwest from 5-10 miles per hour, they often strengthen to 10 to 15 miles per hour (and more). Winds up to 16 miles per hour are categorized as a moderate breeze on the Beaufort Scale and is described "Dust, leaves, and loose paper lifted, small tree branches move". The Wildfire Protection Plan (p.89) acknowledges that risk: *"Daily westerly winds have the potential to cause grass fires to grow quickly and impact structures in the fire's path."* With summer temperatures that can range from 80 degrees to 100 degrees, and generally lower humidity levels, fire risk increases. In the fall, fueled by off-shore "Santa Ana" winds (from the northeast), fire conditions can become more serious. Potential fuel sources include grasslands, trees, vegetation, and structures (residential).

In addition to the direct risk of fire on people and structures, other effects of fire (i.e., smoke, ash, chemical fire retardants) can result in adverse health effects, especially related to elevated pollutant levels that could be carried by wind and exacerbate respiratory problems or contaminate food and water sources. Other indirect effects of fire include those related to power loss, such as loss of electricity due to a down power line or roads blocked due to fallen trees.

Although the project site is located in an area designated "moderate fire hazard risk," fire risk remains a concern, especially because the project site was affected by the 2017 fire. The project site contains moderate hills and before the wildfire of 2017, the site was covered with mature coast live oaks, California bay and redwood. After the fires, much of the vegetation on site was destroyed although some trees survived the fires. Because of the fires there is presently not much fuel on site and COAs require fuel management to reduce the buildup of fuel in future.

The proposed project would result in the creation of four lots where previously there were two. Previously only one of the lots was developed with a single-family home although the other lot could have been developed with a home as well. The proposed project could result in up to four single family homes being built. However, the proposed lots would be comparable in size to other residential lots on Wikiup Drive which is generally suburban in nature. While there are larger parcels in the area (especially to the east), these are generally zoned Resources and Rural Development (RRD). The potential development of these four resultant lots would need to comply with new code requirements and conditions of approval as outlined below.

Construction of the project would be required to conform to County Fire Safe Standards (Municipal Code Chapter 13) related to emergency access, minimum emergency water supply, fuel modification and defensible space, sprinklers, and road naming and addressing. In addition, pursuant to Public Resource Code 4442, the Applicant would be required to include a note on all construction plans that internal combustion engines be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire. The project would be required to conform to State Building Code requirements (Chapter 7A), which include use of ignition-resistant construction methods and materials, minimum fire-resistance construction standards, fire sprinklers, and minimum fire separation distance. In addition, because the project is in an SRA, it would need to comply with State Fire Code standards for construction in a Wildland-Urban Interface Fire Area, which among other items require maintaining and managing vegetation and fuels around buildings and structures.

Chapter 13A of the Sonoma County Code, Abatement of Hazardous Vegetation and Combustible Material, provides requirements that can be applied to parcels, if deemed necessary by the County, to reduce wildfire risks, such as:

- 1) Maintain a thirty-foot defensible space around all buildings/structures.
 - a. The grass needs to be cut six (6") inches or less.
 - b. The tree branches need to be limbed up six (6') feet from the ground.
- 2) Additional defensible space outward to one hundred feet (100') from all buildings and surroundings, neighboring structures may be required depending on the property slope, fuel load and/or fuel type.
 - a. Fuel load - Amount of vegetation.
 - b. Fuel type – Type of vegetation.

- 3) Remove all portions of trees within ten feet (10') of chimney and/or stove pipe outlets.
 - a. Property owners are responsible for maintaining trees year-round.
 - b. Trees need to be cut ten feet (10') away from chimney in any direction.
- 4) Maintain trees adjacent to or overhanging a structure free of dead/dying wood.
 - a. Cut the trees back and remove any dead or dying wood.
- 5) Maintain the roof of any structure free of leaves, needles, or other dead/dying wood.
 - a. Remove any leaves, needles, branches, or debris from the roof and/or gutters.
- 6) Remove all tree limbs within six feet (6') of the ground.
 - a. Remove lower hanging tree branches from the ground up to six feet (6').
- 7) Remove dead/dying vegetation from the property.
 - a. Remove any and all dead/dying vegetation from the property.

Given that this project site was affected by the 2017 fires the above items 1 through 7 have been included as conditions of approval. These requirements as well as the code requirements discussed above are stricter than those in-place at the time of the 2017 fire. In addition, current building code requirements (fire sprinklers, fire resistant material requirements, etc) exceed those under which development previously occurred. So, while the proposed project will result in a potentially higher density (up to four units as opposed to a previous maximum of two) this development will occur in a safer manner.

The proposed project is in a geographical area prone to wildfires and could result in potential exposure of receptors to harmful pollutant concentrations. The County's web site provides a "Smoke Health Advisory Update," as deemed appropriate, with additional information to the public on air quality.

While the project site and previous residence were burned in the 2017 fires those were an exceptional fire storm and once a fire like that is burning fire-fighting options are limited. The code requirements and discussion above relate to preventing a fire and to avoiding impacts from smaller fires. In large fire events such as those affecting Sonoma County in 2017, high winds blew embers large distances and other factors combined to create a fire storm which cannot be controlled or prevented. While this project could result in the construction of two more residences than over baseline conditions this development would occur under new codes/standard and therefore would not present a significantly higher risk.

Application of County and State fire standards, including items 1 through 7, California Building Code, and the Conditions of Approval would reduce risk of exposing people or structures to significant risk of loss, injury, or death due to wildfires, and therefore project impacts would be less than significant.

Significance Level:

Less than Significant Impact

10. HYDROLOGY AND WATER QUALITY:

Would the project:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Comment:

The project side does not contain any wetlands or water bodies. Storm water runoff from the site currently drains outward from where the prior residence was located, which is the high point of the site. Runoff runs in sheet flow to the north, south, east, and west and is eventually directed towards Mark West Creek via natural drainage ditches, none of which are located on the project site. The

Mark West Creek flows through the Laguna De Santa Rosa watershed and eventually to the Russian River. Current issues in the watershed include bacterial quality, elevated nutrients (nitrogen and phosphorus), invasive non-native aquatic plants, toxic blue-green algae (cyanobacteria) blooms, polluted runoff from urban and agricultural areas, high water temperatures, and altered sediment levels.

The project site is located in the Laguna De Santa Rosa watershed, in the Lower Russian River basin. Water bodies in the Russian River watershed are listed under the Clean Water Act Section 303(d) (per the 2012 List) due to impairments to water quality by several pollutants. The entire Russian River watershed is impaired for sediment and temperature. Recent data show a pathogen impairment throughout the watershed, as well. Green Valley Creek is listed as impaired for dissolved oxygen. Lake Sonoma, Lake Mendocino, and the Laguna de Santa Rosa are impaired for mercury in fish tissue. The Laguna de Santa Rosa is also impaired for phosphorus and dissolved oxygen, in addition to the watershed-wide sediment, temperature, and pathogen impairments.²²

The Mark West Creek is approximately 1,400 feet from the project site. There are no wetlands or riparian areas within the project site.

Permit Sonoma requires the project applicant to prepare a grading and drainage plan in conformance with Chapter 11 Grading and Drainage Ordinance) and Chapter 11a (Storm Water Quality Ordinance) of the Sonoma County Code and the Sonoma County Storm Water Low Impact Development Guide, all of which include performance standards and Best Management Practices for pre-construction, construction, and post-construction to prevent and/or minimize the discharge of pollutants, including sediment, from the project site.

Permit Sonoma requires projects implementing Low Impact Development (LID) techniques to employ a site design strategy of BMPs that mimics the pre-development site hydrology through features that promote storm water infiltration, interception, reuse, and evapotranspiration. LID techniques include use of small scale landscape-based BMPs such as vegetated natural filters and bioretention areas (e.g., vegetated swales and rain gardens) to treat and filter storm water runoff. LID also requires preservation and protection of sensitive environmental features such as riparian buffers, wetlands, woodlands, steep slopes, native vegetation, valuable trees, flood plains, and permeable soils.

As a condition of project approval, the applicant would be required to submit a final Storm Water Low Impact Development Submittal (SW LIDS), for County review and approval. In addition, the Best Management Practices (BMPs) identified in the SW LIDS would be required to be installed and working properly, prior to issuance of grading or building permits.

In addition, standard County development procedures require that if cumulative project land disturbance equals or exceeds one acre, the project would be required to obtain coverage under the State Water Resource Control Board's General Construction Permit (General Permit), and would also be required to provide documentation of coverage to the County prior to issuance of any grading permit for the proposed project.

Also, see Section 7.b, Geology and Soils, for a discussion of standard county erosion control measures.

Application of these standard County and State storm water requirements and County conditions of approval would reduce project storm water runoff impacts to less than significant.

Significance Level:

Less than Significant Impact

²² North Coast Water Quality Control Board, 2019. *Russian River TMDLs*
https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/russian_river/, accessed 2/18/2019.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Comment:

Water for the project site would be supplied from California American Water through existing water lines to the site; groundwater would not be used.

The proposed project would increase impervious surfaces at the project site. As described in the Initial Storm Water Low Impact Development Submittal²³ prepared for the project site, runoff reduction measures proposed for this project include disconnection of rainwater leaders from the storm drain pipe network and interceptor trees, although these measures are not used to reduce initial tributary area calculations at this time. Storm water would be directed to flow over existing grassy vegetation which increases the time of concentration and, in turn, reduces runoff. Onsite storm water runoff would be captured by permanent BMPs to reduce pollution from leaving the site.

Given the limited size of the project site, incorporation of storm water BMPs, and that the project site would not use groundwater supplies, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Significance Level:

Less than Significant Impact

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site;

Comment

Please see Sections 7.b and 10.a for a discussion of potential erosion impacts.

Significance Level:

Less than Significant Impact

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Comment:

There are no blue line streams on the project site and the parcel is not in the 100-year flood zone or Special Flood hazard Area (SFHA) (i.e. the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year). These areas are depicted on the zoning maps with the F1- Flood Zone and F2 – Flood Plain Combining Zones (General Plan 2020 PS-1e).

Prior to grading or building permit issuance, construction details for all post-construction storm water

²³ BC Engineering Group, 2018. *Initial Storm Water Low Impact Development Submittal for Lands of Pearson, 1100 Wikiup Drive, Santa Rosa, Ca 95403*, July 12.

Best Management Practices shall be submitted for review and approval by the Grading & Storm Water Section of Permit Sonoma. The construction plans shall be in substantial conformance with the conceptual plan reviewed at the planning permit stage.

Post-construction storm water Best Management Practices must be installed per approved plans and specifications, and working properly prior to finalizing the grading or building permits. Post-construction storm water Best Management Practices shall be designed and installed pursuant to the adopted Sonoma County Best Management Practice Guide. The Best Management Practices would prevent the alteration of site drainage, or increase in surface runoff and avoid flooding. Project Low Impact Development techniques would include limiting impervious surfaces, dispersing development over larger areas, and creation of storm water detainment areas. Post construction storm water Best Management Practices include filtering, settling, or removing pollutants.

Significance Level:

Less than Significant Impact

(iii) create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or

Comment:

Storm water treatment Best Management Practices will address potential for water quality impacts and shall also address water quantity through storm water flow control Best Management Practices. Storm water treatment Best Management Practices shall be designed to treat storm events and associated runoff to the 85 percentile storm event in accordance with County standards. Storm water treatment Best Management Practices shall be designed to treat storm events and associated runoff to the channel forming discharge storm event which is commonly referred to at the two year 24 hour storm event.

The location of the storm water Best Management Practices are site specific and depend on details of future development. The type and approximate size of the selected storm water Best Management Practices would be in accordance with the adopted Sonoma County Best Management Practice Guide.

As discussed above and in Section 7, Geology and Soils, at the time of submitting of a grading, drainage, or building permit application, a final drainage report for each parcel would need to be submitted for review. A typical drainage report would include a project narrative, on- and off-site hydrology maps, hydrologic calculations, hydraulic calculations, pre- and post-development analysis for all existing and proposed drainage facilities. The drainage report shall abide by and contain all applicable items in the Drainage Report Required Contents (DRN-006) handout. This standard County development procedure would ensure that project runoff effects would be less than significant.

Significance Level:

Less than Significant Impact

(iv) impede or redirect flood flows?

Comment:

There are no blue line streams on the project site and the parcel is not in the 100-year flood zone or Special Flood Hazard Area (SFHA) (i.e., the area that will be inundated by the flood event having a 1-percent chance of being equalled or exceeded in any given year). Elevation ranges on the site area are approximately 490 to 530 feet above mean sea level (msl). There is no potential for flooding at the site. No housing would be placed within a 100-year floodplain.

Significance Level

No Impact

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Comment:

There are no blue line streams on the project site and the parcel is not in the 100-year flood zone or Special Flood hazard Area (SFHA) (i.e., the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year). The project site is not located in an area subject to seiche or tsunami. Seiche is a wave in a lake triggered by an earthquake.

Significance Level

No Impact

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Comment:

The proposed project would involve development of a four parcel subdivision. As described above, water would be supplied to the project site by California American Water through existing water lines to the site; groundwater would not be used at the project site. Project compliance with standard County Code and other development requirements would ensure protection of water quality. The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Significance Level

Less than Significant Impact

11. LAND USE AND PLANNING:

Would the project:

a) Physically divide an established community?

Comment:

The project would not physically divide a community. It does not involve construction of a physical structure (such as a major transportation facility) or removal of a primary access route (such as a road or bridge) that would impair mobility within an established community or between a community and outlying areas.

Significance Level:

No Impact

b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation) adopted for the purpose of avoiding or mitigating an environmental effect?

Comment:

The proposed project would result in the development of a four parcel subdivision and four single-family homes. The Sonoma County General Plan Land Use Map identifies the project site as Urban Residential – 1, which allows one dwelling unit per acre. The Zoning Ordinance designations for the project site include the following: R1 – Low Density Residential District; B6, 1.5 DU – Combining District Designation 1.5 acres per residential unit; and G – Geologic Hazard Area Combining District.

The proposed project would result in the same land use on the project site that existed prior to the 2017 Tubbs Fire – low density residential. The smallest resultant parcel from the proposed project would be 1.62 acres which is greater than the minimum 1.5 acres specified by Zoning Designation. The project would not conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating an environmental effect, including in the Sonoma County General Plan and zoning ordinance. The project would comply with uniformly applied regulatory standards per the Geologic Hazard Area Combining District, as discussed in Section 7.a.

Significance Level:

No Impact

12. MINERAL RESOURCES:

Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

Comment:

The project site is not located within a known mineral resource deposit area (Sonoma County Aggregate Resources Management Plan, as amended 2010). Sonoma County has adopted the Aggregate Resources Management Plan that identifies aggregate resources of statewide or regional significance (areas classified as MRZ-2 by the State Geologist).²⁴

Significance Level:

No Impact

- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

Comment:

The project site is not located within an area of locally-important mineral resource recovery site and the site is not zoned MR (Mineral Resources) (Sonoma County Aggregate Resources Management Plan, as amended 2010 and Sonoma County Zoning Code). No locally-important mineral resources are known to occur at the site.

Significance Level:

No Impact

²⁴ Sonoma County Aggregate Resources Management Plan, http://www.sonoma-county.org/prmd/docs/misc/arm_plan.pdf, accessed 2/18/2019.

13. NOISE:

Would the project result in:

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Comment:

The proposed project would result in a four parcel subdivision and development of four single-family homes. Noise associated with the single-family homes would expect to be similar to the noise levels experienced at the site prior to the 2017 Tubbs fire. No substantial permanent increase in ambient noise levels in the vicinity of the project is anticipated with the occupation of the four single-family homes.

Short-term construction activities would periodically increase ambient noise levels at the project site and vicinity, and would subside once construction of the proposed project is completed. Mitigation Measure NOISE-1 would reduce the potential temporary noise impact to a less than significant level.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure NOISE-1:

Construction activities for this project shall be restricted as follows:

All plans and specifications or construction plans shall include the following notes:

- a) All internal combustion engines used during construction of this project will be operated with mufflers that meet the requirements of the State Resources Code, and, where applicable, the Vehicle Code. Equipment shall be properly maintained and turned off when not in use.
- b) Except for actions taken to prevent an emergency, or to deal with an existing emergency, all construction activities shall be restricted to the hours of 7:00 a.m. and 5:00 p.m. on weekdays and 9:00 a.m. and 5:00 p.m. on weekends and holidays. If work outside the times specified above becomes necessary, the applicant shall notify the PRMD Project Review Division as soon as practical.
- c) There will be no startup of machines nor equipment prior to 7:00 a.m., Monday through Friday or 9:00 am on weekends and holidays; no delivery of materials or equipment prior to 7:00 a.m nor past 5:00 p.m, Monday through Friday or prior to 9:00 a.m. nor past 5:00 p.m. on weekends and holidays and no servicing of equipment past 5:00 p.m., Monday through Friday, or weekends and holidays. A sign(s) shall be posted on the site regarding the allowable hours of construction, and including the developer- and contractors mobile phone number for public contact 24 hours a day or during the hours outside of the restricted hours.
- d) Pile driving activities shall be limited to 7:30 a.m. to 5:00 p.m. weekdays only.
- e) Construction maintenance, storage and staging areas for construction equipment shall avoid proximity to residential areas to the maximum extent practicable. Stationary construction equipment, such as compressors, mixers, etc., shall be placed away from residential areas and/or provided with acoustical shielding. Quiet construction equipment shall be used when possible.

- f) The developer shall designate a Project Manager with authority to implement the mitigation prior to issuance of a building/grading permit. The Project Managers 24-hour mobile phone number shall be conspicuously posted at the construction site. The Project Manager shall determine the cause of noise complaints (e.g. starting too early, faulty muffler, etc.) and shall take prompt action to correct the problem.

Mitigation Monitoring:

Mitigation Monitoring NOISE-1:

PRMD Project Review Division staff shall ensure that the measures are listed on all site alteration, grading, building or improvement plans, prior to issuance of grading or building permits. PRMD staff shall inspect the site prior to construction to assure that the signs are in place and the applicable phone numbers are correct. Any noise complaints will be investigated by PRMD staff. If violations are found, PRMD shall seek voluntary compliance from the permit holder, or may require a noise consultant to evaluate the problem and recommend corrective actions, and thereafter may initiate an enforcement action and/or revocation or modification proceedings, as appropriate. (Ongoing)

b) Generation of excessive ground borne vibration or ground borne noise levels?

Comment:

The project includes construction activities that may generate minor ground borne vibration and noise. These levels would not be significant because they would be short-term and temporary, and would be limited to daytime hours. There are no other activities or uses associated with the project that would expose persons to or generate excessive ground borne vibration or ground borne noise levels.

Significance Level:

Less than Significant Impact

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Comment:

The site is not within an airport land use plan as designated by Sonoma County.

Significance Level:

No Impact

14. POPULATION AND HOUSING:

Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Comment:

The project would create 4 subdivisions. The designated remainder of the project site is not currently developed but could be in the future with four additional houses. It does not include construction of a substantial amount of homes, businesses or infrastructure and therefore would not induce substantial population growth. The project is within the projected population growth of the county's General Plan and is therefore a less than significant impact would occur.

Significance Level:

Less than Significant Impact

b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?

Comment:

No housing or people would be displaced by the project and no off-site replacement housing is proposed to be constructed.

Significance Level:

No Impact

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Comment:

No people would be displaced by the project and no replacement housing would be required.

Significance Level:

No Impact

15. PUBLIC SERVICES:

Would the project:

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection?

Comment:

The project would be located in the Rincon Valley Fire Protection District (FPD) Local Response Area. The project was sent on referral to the Rincon Valley FPD on November 1, 2018.

The County Fire Marshal reviewed the project description and plan on November 27, 2018 and required that the project comply with Fire Safe Standards, including that the proposed project comply

with the County's Fire Code (Chapter 13) and that prior to occupancy, written approval that the required improvements have been installed shall be provided to PRMD from the County Fire marshal/Local Fire Protection District. In addition, the County Fire Marshal requested the project comply with Fire Safe Standards, including fire access roads, appropriate signage and building numbering, names on roads, emergency water supply, appropriate setbacks, vegetation management, hazardous materials management and management of flammable or combustible liquids and gases. These are standard conditions of approval required by County Code. Because none of the conditions and/or requirements requires construction of new or expanded fire protection/EMS facilities, project impacts on fire protection/EMS would be considered less-than-significant.

Significance Level:

Less than Significant Impact

ii. Police?

Comment:

The Sonoma County Sheriff would continue to serve this area. There would be no increased need for police protection resulting from the project.

The proposed project would create part-time jobs for the construction work of the proposed minor subdivision. The addition of 4 single family homes does not constitute construction of a substantial amount of homes, businesses or infrastructure and therefore would not induce substantial population growth. Existing police protection facilities would be adequate to serve the project and additional facilities would not be needed. There would be no increased need for protection resulting from the creation of a new residential parcel that was already developed with a single-family dwelling.

Significance Level:

Less than Significant Impact

iii. Schools?

Comment:

Development fees to offset potential impacts to public services, including school impact mitigation fees, are required by Sonoma County code and state law for new subdivisions and residential developments. No new schools are reasonably foreseeable as a result of this development.

Significance Level:

Less than Significant Impact

iv. Parks?

Comment:

Construction of the project would not involve substantial adverse physical impacts associated with parks. The project would not alter or impede any existing or future park plans as the project site was already partially developed before the fire and does not propose a substantial increase in housing or population.

Sonoma County Code, Chapter 20 requires payment of parkland mitigation fees for all new residential development for acquisition and development of added parklands to meeting General Plan Objective OSRC-17.1 to "provide for adequate parkland and trails primarily in locations that are convenient to urban areas to meet the outdoor recreation needs of the population..." Development fees collected by

Sonoma County are used to offset potential impacts to public services including park mitigation fees. The project would not result in the need for any park facilities, and demand for parks in general is addressed through fees.

Significance Level:

Less than Significant Impact

v. Other public facilities?

Comment:

The project would be served by the Airport Larkfield/Wikiup/Sanitation Zone facilities. Expanded facilities are not currently reasonably foreseeable. Expansion or construction of additional types of public facilities is not anticipated as a result of the development of this project.

Significance Level:

Less than Significant Impact

16. RECREATION:

Would the project:

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Comment:

The proposed project to construct 4-single family residences would not result in activities that would cause or accelerate substantial physical deterioration of parks or recreational facilities. Although the construction of 4 home might increase visitation of neighborhood and regional park facilities, this increase would be negligible. The project would have a less than significant impact on the use of existing neighborhood and regional parks or other recreational facilities.

Significance Level:

Less than Significant Impact

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Comment:

The proposed project does not involve construction of recreational facilities. See item 15.a. above.

Significance Level:

No Impact

17. TRANSPORTATION:

Would the project:

- a) **Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Comment:

A traffic study was not prepared for the project; however, staff used the Trip Generation Rates from the 8th Edition ITE Trip Generation Report²⁵ to estimate that 4-units of single-family homes would result in an average of 38 daily vehicle trips per day. The County of Sonoma Traffic Volume GIS²⁶ tool does not have average traffic volume counts for Wikiup Drive. However, Fought Road, which is 1-mile east is similar in size and number of lanes to Wikiup Drive. Fought road has an average volume of 1,853 trips per day based on the County of Sonoma Traffic Volume GIS tool. An additional 38 average daily trips for the project would not have a significant impact on Wikiup Drive due to its minimal volume. Additionally, before the fire there was a single-family residence at the project site. The construction of 3 additional single-family homes would not result in a substantial increase in traffic, and therefore would not conflict with an applicable plan, ordinance or policy addressing the circulation system.

Wikiup Drive is a rural road with no shoulders, fencing, or other physical separation from the surrounding trees. However, due to the wildfires, the area is barren from vegetation. As a condition of approval, Public Works has requested that the applicant construct a private roadway entrance that conforms to AASHTO standards that allows passenger vehicles to enter and exit from the public road (Wikiup Drive). Public Works reviewed the project description and plans on January 15, 2019 and offered standard conditions including paying a Traffic Mitigation Fee and construction of proper intersections of roads and driveways. Because the conditions are standard practice of the Department of Transportation and Public Works, the project would not conflict with an applicable plan, ordinance or policy.

Pedestrian and Bicycle Facilities - There are no marked bicycle facilities in the project vicinity. Wikiup Drive does not have provisions for bike lanes or pedestrians. There is no sidewalk along the project vicinity. As such, pedestrian and bicycle facilities will not be impacted.

Transit Stops - The project site is served by Sonoma County Transit (SCT), however, the closest bus stop is at Old Redwood Hwy/fought Road, about 1 mile from the project site.²⁷ Increased traffic associated with the proposed project would not conflict with the use of public transit resources due to the distance from them.

Traffic Conclusions. The project is not proposing a significant increase in traffic, and traffic resulting from the project would not be expected to substantially affect existing traffic operations. As discussed below in Section 17.c, the applicant would be required by County Transportation and Public Works to ensure that the sightlines, road material, and width for both the existing and proposed driveways meet American Association of State Highway and Transportation Officials (AASHTO) and County design standards. Therefore, because project operations and design would not interfere with bicycle, pedestrian, or transit facilities, the proposed project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities. In addition, the County would require the project, as a condition of approval, to pay a development fee (Traffic Mitigation Fee), per Chapter 26, Article 98 of the County Code.

²⁵ Trip Generation Rates from the 8th Edition ITE Trip Generation Report, accessed 3/12/19.

²⁶ Transportation & Public Works, County of Sonoma Traffic Volume GIS tool, <https://sonomamap.maps.arcgis.com/apps/webappviewer/index.html?id=d7d74af9e42c4218891eb0ddbfeae292>, accessed 3/12/19.

²⁷ Sonoma County Transit, <http://sctransit.com/maps-schedules/>, accessed 3/21/19.

Significance Level:

Less than Significant Impact

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Comment:

Traffic impacts under CEQA have traditionally been assessed based on increases in intersection delay measured by Level of Service (LOS). However, with the passage of SB 743, transportation impacts under CEQA are now to be measured based on the vehicle miles traveled (VMT) generated by a project (effective July 1, 2020).

Sonoma County has not yet adopted a VMT standard, nor has the County adopted a policy or threshold of significance regarding VMT. As with other cities and counties throughout the state that have not established VMT standards and thresholds, the Governor's Office of Planning and Research (OPR) "Technical Advisory on Evaluating Transportation Impacts in CEQA" (2018) is used in the interim to determine if the project's VMT may or may not cause a transportation impact. According to the guidelines, the screening threshold indicates that projects that generate or attract fewer than 110 trips per day "generally may be assumed to cause a less than significant transportation impact."

As discussed earlier in Section 17.a, the proposed project is anticipated to generate an increase of approximately 38 average daily vehicle trips using standard trip generation rates from the Institute of Transportation Engineers (ITE). Because the project is anticipated to generate an average daily trip count below the 110 average daily trip threshold, it is reasonable to conclude that the project will have a less than significant impact on VMT. Therefore, it is reasonable to conclude that the addition of approximately 38 average daily trips would not lead to a significant impact.²⁸

Significance Level:

Less than Significant Impact

c) Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Comment:

The subdivision would not result in any changes to use of Wikiup Drive. The project proposes to create a 20-foot wide private access road that connects Wikiup Drive to the driveways. Sightlines approaching the project driveway from the north and south could be obscured by tall vegetation. However, due to the fire event there is little to no vegetation currently there, although once the vegetation grows back, there would pose a potential hazard to drivers; however, compliance with AASHTO design and performance standards reduce the impact to a less-than-significant level.

As discussed Section 17.a, the project would be required to submit for Department of Transportation and Public Works (DTPW) review and approval a driveway sightline drawing providing adequate sight distances, in accordance with AASHTO standards or as otherwise specified by DTPW, as a condition of approval,

In addition, because the project is in a rural setting that lacks pedestrian and bicycle facilities, hazards to bicyclists and pedestrians could occur during construction activities; these construction-related hazards could also occur to drivers. While this temporary construction-related impact would cease upon completion of the project, mitigation would reduce the impact to a less-than-significant level.

²⁸ OPR, "Technical Advisory on Evaluating Transportation Impacts in CEQA,"
https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf, accessed January 25, 2021.

Significance Level:

Less than Significant Impact with Mitigation Incorporated

Mitigation:

Mitigation Measure TRANS-1:

The applicant shall submit a *Construction Period Traffic Control Plan* to the County for review and approval. The plan shall include traffic safety guidelines compatible with Section 12 of the Caltrans Standard Specifications ("Construction Area Traffic Control Devices") to be followed during construction. The plan shall also specify provision of adequate signing and other precautions for public safety to be provided during project construction. In particular, the plan shall include a discussion of bicycle and pedestrian safety needs due to project construction and, later, project operation. In addition, the plan shall address emergency vehicle access during construction and provide for passage of emergency vehicles through the project site at all times. The applicant/contractor shall notify local emergency services prior to construction to inform them that traffic delays may occur, and also of the proposed construction schedule.

Mitigation Monitoring:

Mitigation Monitoring TRANS-1:

Prior to approval of a grading permit, the County shall review the project *Construction Period Traffic Control Plan*. During construction, the County shall periodically verify that the traffic control plan provisions are being implemented.

d) Result in inadequate emergency access?

Comment:

The project site is about one mile east of Old Redwood Highway, on Wikiup Drive, which is a County-maintained road serving about 90 parcels (almost all of them zoned for residential). The project proposes a 20-foot wide access road that would extend into the site about 425 feet from Wikiup Drive. The access road would have an average slope of approximately two percent. Two vehicle turnarounds are proposed for the project: one at the end of the access road, between parcels 1 and 2; the other turnaround would be on parcel 3, abutting parcel 4. As a condition of approval, County review and approval of the project access road and turnarounds would be required to ensure compliance with the California Fire Code, as adopted and amended by Sonoma County Code. These standard County Fire Safety review procedures (Sonoma County Code Chapter 13) would ensure adequate emergency access.

Significance Level:

Less than Significant Impact

18. TRIBAL CULTURAL RESOURCES:

- a) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is:**

- i. **Listed or eligible for listing in the California Register of historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5030.1(k), or**

Comment:

Refer to discussion in Section 5.a. Impacts would have no impact.

Significance Level:

No Impact

- ii) **A resource determined by the lead agency. In its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.**

Comment:

Refer to discussion in Section 5.b. Impacts would be less than significant with mitigation incorporated.

Significance Level:

Less than Significant impact with Mitigation Incorporated

Mitigation:

Implement **Mitigation Measure CUL-1 in Section 5.b.**

Mitigation monitoring:

Implement **Mitigation Monitoring for CUL-1 in Section 5.b.**

19. UTILITIES AND SERVICE SYSTEMS:

Would the project:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment of storm water drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects?**

Comment:

The project is located in an area that is served by existing utilities. As such, the project would not result in the relocation or construction of new electric, natural gas, or telecommunication facilities. The project would use water supplied from the California American Water through existing water lines on site. Domestic wastewater disposal will be provided by the Sonoma County Water Agency through an existing sanitary sewer.

The project would incorporate bioretention facilities to capture and treat storm water runoff resulting from creation of new impervious surfaces. The design of these project features would only be permitted after County review and approval of project storm water provisions, and would be part of the project, whose construction impacts have been analyzed in this initial study. Any design or

modifications to the existing water system and/or wastewater system would need to be submitted for County review and approval. Construction impacts were analyzed in Section 9.a of this document.

Significance Level:

Less than Significant Impact

- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Comment:

The project would involve constructing 4 single-family homes and therefore would not contribute to the need for construction of new water or wastewater treatment facilities. The project would use water supplied from the Cal American Water System.

Significance Level:

Less than Significant Impact

- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Comment:

Refer to response for 19a.

Significance Level:

Less than Significant Impact

- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

Comment:

Sonoma County has an existing solid waste management program in place that provides solid waste collection and disposal services for the entire County. The program can accommodate the permitted collection and disposal of the waste that would result from the proposed project. Before the fire, there was one single family home on the parcel. Adding 3 additional single-family homes would not create additional solid waste in excess of the capacity of the County's solid waste system.

Significance Level:

Less than Significant Impact

- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Comment:

Sonoma County has an existing solid waste management program that provides solid waste collection and disposal services for the entire County. The program can accommodate the additional

proposed 3 residential houses in collection and disposal of the waste that would result from the proposed project.

Significance Level:

No Impact

20. WILDFIRE

The proposed project is located within a state responsibility area so the below discussion applies. The potential for significant wildfire impact is less than significant because the project site is located in a Moderate Fire Severity Zone. As discussed further below, fire risks would be further reduced by installation of access improvements associated with the subdivision as well as the application of local and state development standards that require fuel management and defensible space around structures. In addition, the nearest Fire Station is the Rincon Valley Fire Station at 45 Lark Center Drive which is approximately 1.8 miles and a 5-minute drive away. The following discussion provides additional detail to support the conclusion that the project presents a less than significant potential impact.

If located in or near a state responsibility areas or lands classified as very high severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Comment:

There is no adopted emergency response or evacuation plan for this area. The proposed project includes access improvements that comply with County standards and that will support emergency services response to proposed home sites and that will support evacuation in the event of an emergency.

As discussed in Section 17.d, the project site is served by Wikiup Drive, which is a County-maintained road. There are about 90 parcels (almost all of them zoned for residential) located along Wikiup Drive. The project site is at the east end of Wikiup Drive, about one mile from Old Redwood Highway, at a curve that extends north, connecting with Vista Grande Drive before heading west where it terminates at Carriage Lane. The project access road would be 20 feet wide, with two lanes, and would serve the four project parcels, extending from Wikiup Drive approximately 425 feet. The project would also include two vehicle turnarounds: one at the end of the access road, between parcels 1 and 2; the other turnaround on parcel 3, abutting parcel 4.

This site was burned in the 2017 fires and the previous single-family residence on site was destroyed in this fire. The project site was formally a single-family residence; the project creates the possibility of the addition of 3 more single-family residences to the area. The four total residences would be on parcels of 1.65, 1.75, 1.62, and 1.93 acres, which would be larger than many of the existing parcels on Wikiup Drive. There are several paths into and out of the area which facilitates evacuation and access to emergency vehicles. Wikiup Drive itself is a loop which presents two potential routes to/from the subject site. In addition, Vista Grande Dr connects to Wikiup Dr and presents a third option.

The project would be required to comply with the standards identified in Sonoma County Code Chapter 13 (Sonoma Fire Safety Ordinance) and County Fire Safe Standards, and to conform to State Building Code requirements as outlined in Section 9.g above. These requirements include emergency access, minimum emergency water supply, fuel modification and defensible space, sprinklers and road naming and addressing. Many of these requirements were adopted after the 2017 fires in Sonoma County and provide additional protection over what was in place before the 2017

fires. There are now specific defensible space requirements for the first 30 feet and defensible space requirements extend all the way out to 100 feet. While these defensible space requirements are intended to assist in preventing the spread of fire they can also facilitate access by emergency responders in order to fight a fire on site.

The proposed project would not conflict with or impair an adopted emergency response plan or emergency evacuation plan. Project compliance with County Fire Safety Standards and review by the Rincon Valley FPD would ensure that the project would have a less-than-significant impact related to emergency response and evacuation planning.

Significance Level:

Less than Significant Impact

- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from wildfire or the uncontrolled spread of a wildfire?**

Comment:

The project site is approximately 530 feet above mean sea level and the project slopes downwards in all direction from the center. The proposed project site contains slopes of 50% or greater. This significant geographic feature could contribute to and/or augment fire intensity including other geographic features such as steep inclines, gulches, and canyons typical of hills. County and State development standards that establish defensible space requirements around structures will offset the increased risk presented by topographic conditions to a less than significant level.

Strong north-east "Santa Ana" winds can increase the severity of wildland fire in the fall months. During fire season, gradient winds are generally out of the south/southwest at 5-10 mph, strengthening to 10-15 mph in the late afternoon.²⁹ These winds are categorized as a moderate breeze on the Beaufort Scale and is described as "Dust, leaves, and loose paper lifted, small tree branches move." These prevailing wind conditions are common in Sonoma County and will not result in unique factors that exacerbate wildfire risks.

The project would not create any new significant slopes or winds. The project would have a less than significant impact. Refer to Section 9.g for further discussion.

Significance Level:

Less than Significant Impact

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water resources, power lines or other utilities) that may exacerbate fire risk of that may result in temporary or ongoing impacts to the environment?**

Comment:

The proposed project would create a 20-foot-wide and approximately 425-foot-long access road that would connect the driveways of the parcel to Wikiup drive. The access road includes several turn outs to allow vehicles to pass. The project site currently has existing power poles and existing overhead utilities. The project would have a less than significant impact. Refer to Section 19.a for further discussion.

Significance Level:

²⁹ "Sonoma County Community Wildfire Protection Plan", pg 13. Accessed 3/21/19

Less than Significant Impact

- d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

Comment:

Refer to Section 7, Geology and Soils, for further discussion.

Significance Level:

Less than Significant Impact

21. MANDATORY FINDINGS OF SIGNIFICANCE

- a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Comment:

Potential project impacts on special-status plant and fish/wildlife species and habitat are addressed in Section 4. Implementation of the required mitigation measures (Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5) would reduce these potential impacts to a less-than-significant level. Potential adverse project impacts to cultural resources are addressed in Section 5. Implementation of the required mitigation measures (Mitigation Measure CUL-1) would reduce these potential impacts to a less-than-significant level.

Significance Level:

Less than Significant Impact

- b) **Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Comment:

No project impacts have been identified in this Initial Study that are individually limited but cumulatively considerable. The project would contribute to impacts related to aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards, hydrology and water quality, noise, transportation, tribal cultural resources and wildfire, which may be cumulative off-site, but mitigation measures would reduce project impacts to less-than-significant levels.

Significance Level:

Less than Significant Impact

- c) **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Comment:

Proposed project operations have the potential to cause substantial adverse impacts on human beings, both directly and indirectly. However, all potential impact and adverse effects on human beings (resulting from air quality, noise, traffic, aesthetics, geology and soils, wildfire) were analyzed, and would be less than significant with the mitigations identified in the Initial Study and would be incorporated into the project.

Significance Level:

Less than Significant Impact

References

Alquist-Priolo Special Studies Zones; State of California; 1983.

http://www.conservation.ca.gov/cgs/rghm/ap/Pages/official_release.aspx

American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices, Pruning (ANSI A300 (Part 1)-2008 Pruning), American National Standard Institute (ANSI) and National Arborist Association (NAA), 2008;

Assessor's Parcel Maps, County of Sonoma

BAAQMD CEQA Guidelines; Bay Area Air Quality Management District; April 1999; California Air Resources Board (CARB) <http://www.arb.ca.gov/>

Best Management Practices: Tree Pruning, International Society of Arboriculture (ISA), 2008.

California Environmental Protection Agency -

<http://www.calepa.ca.gov/SiteCleanup/corteseList/default.htm>; California Regional Water Quality Control

Board - <http://geotracker.swrcb.ca.gov/>; California Dept of Toxic Substances Control

http://www.dtsc.ca.gov/database/calsites/cortese_list.cfm, and Integrated Waste Management Board -

<http://www.ciwmb.ca.gov/SWIS/Search.asp>

California Natural Diversity Database, California Department of Fish & Game. ADD LINK

Evaluation of Groundwater Resources, California Department of Water Resources Bulletin 118; 2003.

<http://water.ca.gov/groundwater/bulletin118/publications.cfm>

Flood Insurance Rate Maps, Federal Emergency Management Agency <https://msc.fema.gov/portal>

Geological Map of California, <https://maps.conservation.ca.gov/cgs/gmc/>, accessed 3/22/19

General Plan Environmental Impact Report, Sonoma County Permit & Resource Management

Department. <http://www.sonoma-county.org/prmd/gp2020/gp2020eir/index.htm>

Heritage or Landmark Tree Ordinance, County Code Chapter 26D; Sonoma County.

Manual of Standards for Erosion and Sediment Control Measures, Association of Bay Area Governments; May, 1995.

Northwest Information Center referral letter for project MNS18-0003, created on November 8, 2018

OPR, "Technical Advisory on Evaluating Transportation Impacts in CEQA,"

https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf, accessed January 25, 2021.

PRMD, Sonoma County General Plan 2020 (as amended), September 23, 2008.

Soil Survey of Sonoma County, California, Sonoma County, U.S. Department of Agriculture; 1972.

https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/sonomaCA1972/sonomaCA1972.pdf

Sonoma County Community Wildfire Protection Plan, (no date)

Sonoma County Congestion Management Program, Sonoma County Transportation Authority; December 18, 1995.

Sonoma County Aggregate Resources Management Plan and Program EIR, 1994.

Sonoma County Bikeways Plan, Sonoma County Permit and Resource Management Department, August 24, 2010.

Sonoma County Important Farmland Map 1996. California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program.

Sonoma County Permit and Resource Management Department and Department of Transportation and Public Works Traffic Guidelines, 2014

Sonoma County Permit and Resource Management Department, Visual Assessment Guidelines, (no date)

Sonoma County Permit and Resource Management Department Noise Guidelines, 2017

Sonoma County Water Agency, Sonoma Valley Groundwater Management Plan, 2007 and annual reports. <http://www.scwa.ca.gov/svgw-documents/>

Sonoma County Water Agency, Santa Rosa Plain Groundwater Management Plan, 2014.
http://www.water.ca.gov/groundwater/docs/GWMP/NC-5_SRP_SonomaCoWaterAgency_GWMP_2014.pdf

Special Report 120, California Division of Mines and Geology; 1980.
ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_120/SR_120_Text.pdf

Standard Specifications, State of California Department of Transportation, available online:
http://www.dot.ca.gov/hq/esc/oe/specs_html

Valley Oak Protection Ordinance, County Code Section 26-67; Sonoma County, December 1996.