

Initial Study Draft Negative Declaration

COUNTY OF NAPA PLANNING, BUILDING & ENVIRONMENTAL SERVICES DEPARTMENT 1195 THIRD ST., SUITE 210 NAPA, CA 94559 (707) 253-4416

Initial Study Checklist (form updated October 2016)

- 1. **Project Title**: Carroll Property Rezoning and Development Agreement, File No. P14-00111.
- 2. Property Owner: David and Elizabeth Carroll, 1055 Monticello Road, Napa, CA 94558
- 3. County Contact Person, Phone Number and email: John McDowell; (707) 299-1354; john.mcdowell@countyofnapa.org
- 4. **Project Location and APN**: The project is located on an approximately 3.96 acre site at 1055 Monticello Road, Napa, approximately 550 ft. east of the intersection of Monticello Road and Silverado Trail, Assessor's Parcel Number: 049-161-009.
- 5. Project Sponsor's Name and Address: David and Elizabeth Carroll, 1055 Monticello Road, Napa, CA 94558
- 6. **General Plan description**: Rural Residential (RR) designation.
- 7. **Zoning**: (existing) Residential Single: Building Site 2 Acre Minimum (RS:B-2).
- 8. **Background/Project History:** The approximately 3.96 acre parcel contains a single family residence, secondary living unit, barn, water tower, and accessory buildings. The existing main residence was constructed in the 1920s. In 2014, the property owner made application to change County zoning regulations to allow a then proposed vineyard. The initial 2014 application requested changing the RS regulations to allow agriculture as an allowed use. This application was withdrawn, and replaced with the current application (File No. P14-00111) to rezone the property from RS:B-2 to Residential Country (RC), which is a zoning designation that already allows agriculture. In 2016, before completing processing of the requested rezoning, the 2.1 acre vineyard was installed. The project now involves completing the rezoning application to allow the existing vineyard to remain if rezoning is approved. Consequently, the existing environmental setting includes the vineyard for which approval is currently requested. The project, if approved, will therefore, not result in any additional foreseeable improvements beyond that which exists on site presently.

However, RC zoning allows, by right, three land uses that are not allowed within the RS district which would be permitted upon rezoning to RC. The uses are public stables, temporary off-site parking for events, and farm management uses. It is highly unlikely any of these three new uses would occur on this property. Temporary off-site parking for events is subject to an administrative temporary event permit process. Such parking occurs in close proximity to event venues. The nearest event venue where temporary off-site parking occurs is Silverado Country Club approximately two miles from the site, which already has off-site temporary parking lots. Both public stables and farm management uses would require increased groundwater use which would trigger issuance of a discretionary groundwater permit under the provisions of the Napa County Code Chapter 13.15. The applicant has expressed no interest in conducting any of these activities, and the proposed terms of the Development Agreement (DA) place limits on the scale and scope of allowed uses that can occur on the property to ensure that the proposed rezoning does not result in uses and potential environmental effects that are beyond the scope of what is evaluated in this document.

9. **Project Description**: Proposal to Rezone an approximately 3.96 acre parcel from Residential Single (RS), which does not permit agriculture or agricultural land uses, to Residential Country (RC), which permits agriculture and agricultural land use to bring an existing 2.1 acre vineyard planted in 2016 into conformance with County Code. The project includes adoption of a Development Agreement (DA) establishing operating parameters for the agricultural use including: 1) Trailer hauled import of recycled water from Napa Sanitation District (NSD) for all vineyard-related water demand; 2) Limiting and monitoring groundwater use for existing non-agricultural land uses not to exceed 1.2 acre-feet annually; 3) Agricultural uses limited to vineyards or other crop raising with no visitation, tours, tastings or marketing events; 4) Vineyards farmed by professional vineyard manager; and 5) Noise and lighting limits to reduce potential for annoyance to adjoining residences.

10. Describe the environmental setting and surrounding land uses:

The subject property is takes access from an approximately 45 ft. wide by 190 ft. long corridor that contains a 14 ft. wide all-weather surface driveway and which fronts on Monticello Road to the north. This approximately 4 acre flag-shaped lot is surrounded by 18 existing single family residential lots ranging in size from approximately 15,000 sq. ft. to 1.00 acre. This parcel represents a remnant of a once larger orchard farming property that was subdivided in the 1950's and 1960's as orchards declined in Napa Valley. The property is relatively level and located well outside of nearby lower lying flood plains for Milliken Creek and the Napa River approximately a quarter mile to the west and south. The site contains the 1920's era farmhouse and several accessory structures and residential improvements including mature landscaping and trees. USDA Soil Survey of Napa County identifies the site as containing Coombs gravelly loam (2 to 5 percent slopes) soil throughout the project site. These soils have a "low" run-off rate and erosion hazard. The project site is located within an area that has a "low" liquefaction index. The site does not contain any known sensitive biological resources or wetlands. The site is not on or adjacent to any listed hazardous materials site. The residence and accessory improvements are served by an on-site private groundwater well, and privately maintained septic system.

Eighteen single family residential lots surround the subject property all of which contain custom residential homes of varying ages dating back as far as the mid 1950's. Surrounding lots are configured to back onto the subject parcel and thus take access from other nearby streets. These properties are also on private well and septic.

11. Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement).

The DA component of the project would require issuance of a groundwater permit from the Environmental Services Division of Planning, Building and Environmental Services. No other permitting would be triggered by the project.

Responsible (R) and Trustee (T) Agencies

Other Agencies Contacted

(R) Napa Sanitation District – Recycled water provider

None Required.

12. **Tribal Cultural Resources**. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

On September 27, 2017, County Staff sent invitations to consult on the proposed project to Native American tribes who had a cultural interest in the area and who as of that date had requested to be invited to consult on projects, in accordance with the requirements of Public Resources Code section 21080.3.1. One response from Yoche Dehe Wintun Nation was received stating that the tribe had no comments on the proposal. No requests for consultation were received from the other Native American tribes traditionally and culturally affiliated with the project area during the 30-day consultation request period or afterward.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL IMPACTS AND BASIS OF CONCLUSIONS:

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of the Napa County Environmental Resource Maps, the other sources of information listed in the file, and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site. For further information, see the environmental background information contained in the permanent file on this project.

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

	significant effect in this case because revisions in the	a significant effect on the environment, there will not be a project have been made by or agreed to by the project
	proponent. A MITIGATED NEGATIVE DECLARATION I find that the proposed project MAY have a significa IMPACT REPORT is required.	on will be prepared. It effect on the environment, and an ENVIRONMENTAL
	I find that the proposed project MAY have a "potential mitigated" impact on the environment, but at least on document pursuant to applicable legal standards, an	Illy significant impact" or "potentially significant unless e effect 1) has been adequately analyzed in an earlier d 2) has been addressed by mitigation measures based on An ENVIRONMENTAL IMPACT REPORT is required, addressed
	I find that although the proposed project could have a potentially significant effects (a) have been analyzed DECLARATION pursuant to applicable standards, ar	a significant effect on the environment, because all
	John McDowell	June 20, 2018
John Mo	Dowell Spounty Planning, Building, and Environmental Services	Date

I.	AE:	STHETICS. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a)	Have a substantial adverse effect on a scenic vista?				
	b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			\boxtimes	
	c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			\boxtimes	
	d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			\boxtimes	

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Discussion:

- a-c. No changes to the physical environment will result from the project. The project will allow the applicant to retain 2.1 acres of recently planted vineyards. The site is located about 500 feet (0.11 mile) from the intersection of Monticello Road and Silverado Trail. Silverado Trail is a designated "Scenic Highway' listed in the *Scenic Highway Element* of the Napa County General Plan. The project will not create any impacts to a scenic vista. This project does not involve the conversion of a scenic resource. The project is not subject to Napa County Zoning Ordinance, Chapter 18.106 (*Viewshed Protection Ordinance*) because no new structures are proposed and the site is not in a hillside area.
- d. The rezoning will not degrade the existing character of the site and its surroundings and will not create a new source of substantial light or glare or in the area. Some farming activities may occur at night but light associated with farming will be minimal and temporary, with any disturbance to nearby residential uses considered less-than-significant. Pursuant to the terms of the proposed DA, the vineyard manager will be directed to manage any lighting used for nighttime farming so as to limit the amount of off-site light and glare. Typically, nighttime vineyard management occurs when fruit is being harvested in the fall which would likely be performed in several hours for a vineyard of this size; for frost protection on several cold nights in the spring; and for application of pesticide management products occasionally during spring through summer.

Mitigation Measure(s): None.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significan t Impact	No Impact
l.	AG	RICULTURE AND FOREST RESOURCES. 1 Would the project:				
	a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Important (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
	b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
	c)	Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code Section 12220(g), timberland as defined in Public Resources Code Section 4526, or timberland zoned Timberland Production as defined in Government Code Section 51104(g)?				
	d)	Result in the loss of forest land or conversion of forest land to non-forest use in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, or other public benefits?				
	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?				

a/b/e. The proposed project will not convert any Farmland to a non-agriculture use. The proposed project would authorize an existing agricultural use to remain. Adjoining properties are zoned and used for single family residential development, and therefore the project will not conflict with any existing agricultural zoning. The project site is presently zoned as Residential Single (RS), which does not allow agricultural uses but with this request will be zoned Residential Country (RC) which allows agricultural uses. The project site is not designated Prime Farmland and would not result in the conversion of Prime Farmland, Unique Farmland or Farmland of Statewide Important as shown on the Napa County Important Farmland Map 2012 prepared by the California Department of Conservation District, Division of Land Resource Protection, pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.

c/d. The project site is zoned Residential Single (RS) and presently contains the 2.1 acre vineyard that would be authorize as part of this rezoning application. The project would not remove any existing trees or native vegetation. According to the Napa County Environmental resource maps (based on the following layers – Sensitive Biotic Oak Woodlands, Riparian Woodland Forest and Coniferous Forest) the project site does not contain Riparian Woodland. Therefore, the proposed project will not conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production.

Mitigation Measure(s): None.

¹ "Forest land" is defined by the State as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." (Public Resources Code Section 12220(g)) The Napa County General Plan anticipates and does not preclude conversion of some "forest land" to agricultural use, and the program-level EIR for the 2008 General Plan Update analyzed the impacts of up to 12,500 acres of vineyard development between 2005 and 2030, with the assumption that some of this development would occur on "forest land." In that analysis specifically, and in the County's view generally, the conversion of forest land to agricultural use would constitute a potentially significant impact only if there were resulting significant impacts to sensitive species, biodiversity, wildlife movement, sensitive biotic communities listed by the California Department of Fish and Wildlife, water quality, or other environmental resources addressed in this checklist.

III.	air qu	ALITY. Where available, the significance criteria established by the	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation quality manageme	Less Than Significant Impact nt or air polluti	No Impact on control
	district m	nay be relied upon to make the following determinations. Would the pro	oject:			
	a)	Conflict with or obstruct implementation of the applicable air quality plan?				
	b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			\boxtimes	
	c)	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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			\boxtimes	
	d)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
	e)	Create objectionable dust or odors affecting a substantial number of people?				

Discussion:

On June 2, 2010, the Bay Area Air Quality Management District (BAAQMD) Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act (CEQA). These thresholds are designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA, and were posted on the BAAQMD website and included in the BAAQMD updated CEQA Guidelines (May 2012). The thresholds are advisory and may be followed by local agencies at their own discretion.

The thresholds were challenged in court. Following litigation in the trial court, the court of appeal, and the California Supreme Court, all of the thresholds were upheld. However, in an opinion issued on December 17, 2015, the California Supreme Court held that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards unless the project would exacerbate existing environmental hazards. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA.

In view of the Supreme Court's opinion, local agencies may rely on thresholds designed to reflect the impact of locating development near areas of toxic air contamination where such an analysis is required by CEQA or where the agency has determined that such an analysis would assist in making a decision about the project. However, the thresholds are not mandatory and agencies should apply them only after determining that they reflect an appropriate measure of a project's impacts. The Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or BAAQMD to any specific course of regulatory action. BAAQMD published a new version of the CEQA Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The May 2017 CEQA Guidelines update does not address outdated references, links, analytical methodologies, or other technical information that may be in the Guidelines or Thresholds Justification Report. BAAQMD is currently working to revise any outdated information in the Guidelines as part of its update to the CEQA Guidelines and thresholds of significance.

a-c. As noted in Section 8, Background/Project History, no other improvements to the site beyond the existing residential uses and 2.1 acre vineyard are proposed but the rezoning action will technically enables three new by-right land uses consisting of public

stables, temporary event parking lots, and farm management. As noted earlier, it is highly unlikely than any of those three uses is possible on the subject property. Temporary off-site parking is subject to an administrative permitting process in concert with a temporary event venue. Silverado Country Club is the nearest event venue approximately two miles from this property and the facility already has temporary event parking. Public stables and farm management uses would be subject to discretionary groundwater permits for increased groundwater demand, and therefore would be subject to new CEQA evaluation in the unlikely event they were proposed. Therefore, for the purposes of evaluating the project's potential to result in air quality impacts, only the ongoing operations of the recently planted 2.1 acre vineyard have the potential to result in foreseeable changes as a result of the rezoning action.

The project site is generally located on the eastern side of the Napa Valley floor just northeast of the City of Napa, within the Napa County climatological subregion of the San Francisco Bay Area Air Basin, which is under the jurisdiction of BAAQMD. The topographical and meteorological features of the Napa Valley subregion create the potential for air pollution. Vineyard development has the potential to impact air quality resulting for short term construction related impacts, and long term post construction operation impacts. This small vineyard (2.1 acres) was planted in 2016 and any fugitive dust or other air pollutants that resulted where likely quite minor based on the relatively small size of the site and the minimal earth disturbance that would have occurred in order to establish plantings on the level site. No complaints of air quality impacts were received from adjoining neighbors when the vineyard was installed. In the long term, potential air quality impacts would likely result from ongoing activities associated with the operation and maintenance of the vineyard. Operational-related emissions, which are primarily seasonal in nature, are generated from vehicular trips associated with workers going to and from the site (including NSD recycled water and grape harvest haul trucks) and equipment necessary for ongoing vineyard maintenance. Refer to Section XVI (Transportation/Traffic) for the anticipated number of operation-related trips.

The impacts associated with implementation of the project were evaluated consistent with guidance provided by BAAQMD. Ambient air quality standards have been established by state and federal environmental agencies for specific air pollutants most pervasive in urban environments. These pollutants are referred to as criteria air pollutants because the standards established for them were developed to meet specific health and welfare criteria set forth in the enabling legislation. The criteria air pollutants emitted by development, traffic, and other activities anticipated under the proposed development include ozone, ozone precursors oxides of nitrogen and reactive organic gases (NO_x and ROG), carbon monoxide (CO), nitrogen dioxide (NO_2), and suspended particulate matter of ten micrometers or less and two and a half micrometers or less (PM_{10} and $PM_{2.5}$). Other criteria pollutants, such as lead and sulfur dioxide (SO_2), would not be substantially emitted by the proposed development or associated traffic, and air quality standards for them are being met throughout the Bay Area.

BAAQMD has not officially recommended the use of its thresholds in CEQA analyses and CEQA ultimately gives lead agencies the discretion to determine whether a particular environmental impact would be considered significant, as evidenced by scientific or other factual data. BAAQMD also states that lead agencies need to determine appropriate air quality thresholds to use for each project they review based on substantial evidence that they include in the administrative record of the CEQA document. One resource BAAQMD provides as a reference for determining appropriate thresholds is the Guidelines described above. These Guidelines outline substantial evidence supporting a variety of thresholds of significance.

The thresholds of significance identified in **Table 3** are consistent with the BAAQMD 2017 CEQA Air Quality Guidelines, and are used to determine if an air quality impact would be significant.

In order to assess potential air quality and GHG emissions, a review of the emissions analysis associated with vineyard development/construction and operations performed for three certified Environmental Impact Reports (EIR) in Napa County was completed: Suscol Mountain Vineyards² for an approximately 560-acre vineyard development, Walt Ranch Vineyard³ for an approximately 507-acre vineyard development, and Circle-S Ranch Vineyards⁴ for an approximately 400-acre vineyard development.⁵

² #P09-00176-ECPA, Analytical Environmental Services (AES) March 2012, SCH #2009102079 certified February 3, 2013

³ #P11-00205-ECPA, AES March 2016, SCH #2008052075 certified August 1, 2016

⁴ #P06-01508-ECPA, AES April 2011, SCH #2007062069 certified December 22, 2011

⁵ These EIRs are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services permanent files.

The analysis within the Circle-S EIR anticipated construction in phases of approximately 150 acres, which would generate approximately 100 15-mile one-way trips per day (75 worker trips and 25 truck trips). The analysis anticipated that maximum operational emissions, occurring during harvest, of an approximately 400-acre vineyard would generate approximately 170 15-mile one-way trips per day (approximately 160 worker trips and 8 grape haul truck trips). The Walt Ranch EIR analysis anticipated vineyard development in phases of approximately 127 acres, which would generate approximately 160 15-mile one-way trips per day, and annual vineyard operations generating up to approximately 160 one-way trips of approximately 15 miles per day occurring during harvest. The Suscol Mountain EIR analysis anticipated vineyard development in phases of either approximately 150 or 250 acres, which would generate approximately 50 to 60 15-mile one-way trips per day, and annual vineyard operations generating up to approximately 116 15-mile one-way trips occurring during harvest.

Table 3 shows the approximate anticipated construction emissions associated with the development of vineyards of the sizes described above. Also shown in **Table 3** are the BAAQMD CEQA Guidelines draft thresholds of significance for emission of the following criteria pollutants: ROG, NO_x, PM₁₀, and PM_{2.5}.

Variations or similarities in emissions modeling results between the three projects can be attributed to the modeling platform and version used, and differences in modeling assumptions and inputs such as quantities and types of vegetation to be removed, construction trips, construction equipment and duration of use/operation, and operational equipment operation and trips.

Table 3 – Emissions from	i vineyard	Developmen	it and	a Ope	eratio	on

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	Criteria Pollutants – Constituents				
Emissions and Thresholds	ROG	NO _x	$PM_{2.5}$	PM ₁₀	
		Construction	n Emissions		
Pounds per day: 150-acre vineyard	8.43 to 11.39	34.39 to 52.16	3.93 to 4.47	13.93 to14.53	
development ¹					
Pounds per day: 150- to 250-acre vineyard	9.43 to11.03	43.85 to 53.16	3.91 to 4.62	12.87 to 17.22	
development ²					
Pounds per day: 127-acre vineyard	4.6	42.3	5.214	24.214	
development ³					
Construction threshold	54	54	54	82	
		Operational	Emissions		
Pounds per day: 400-acre vineyard operation ¹	7.78	2.85	0.80	4.22	
Pounds per day: 560-acre vineyard operation ²	6.58	1.84	0.75	3.91	
Pounds per day: 507-acre vineyard operation ³	4.3	22.3	1.4	2.3	
Operational threshold (lbs/day)	54	54	54	82	
Tons per year (Metric) ^{1,5}	0.78	0.35	0.11	0.58	
Operational threshold (tons per year)	10	10	10	15	

¹ As identified in Circle-S EIR; ² As identified in Suscol Mountain EIR; ³ As identified in Walt Ranch EIR; ⁴ Includes dust and exhaust emissions; ⁵ Calculation based on 365 days of operation. Project emissions are anticipated to be less than identified as vineyard operations are seasonal in nature. Sources: Circle-S Ranch Vineyard EIR 2011; Suscol Mountain Vineyard EIR 2013; Walt Ranch Vineyard EIR 2016; BAAQMD CEQA Guidelines May 2017.

Because this project's 2.1-acre vineyard is substantially much smaller than any of the projects presented above, operational emissions from the proposed project that could negatively affect air quality are expected to be considerably less that those identified in **Table 3** and therefore well below identified thresholds. Given that the vineyard is expected to generate emissions that are well below identified thresholds, and introduce a minimal number of new vehicle trips to the project parcel during operation, the project would result in less than significant air quality impacts, and would not violate air quality standards or result in cumulatively considerable effects. Allowed uses under the new RC zoning designation are limited under the terms of the DA to the vineyard use and existing residences.

d-e. Land uses such as schools, playgrounds, child care centers, hospitals and convalescent homes are considered sensitive to poor air quality, because infants and children, the elderly, and people with health afflictions, especially respiratory ailments, are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential areas are also considered to be sensitive to air pollution because residents, which include children and the elderly, tend to be at home for

extended periods of time. Land uses adjacent to the project parcel include single family residences on larger lots ranging in size from 15,000 sq. ft. to 1 acre. The closest sensitive land use to the project site is the Rosemont Care Home located approximately 600 ft. west of the vineyard. The closest school is located approximately .9 mile east (Napa County GIS schools layer). Given the relatively small size of the vineyard and the separation of residences and sensitive land uses from the vineyard, the project would not expose sensitive receptors or a substantial number of people to pollutants or objectionable odors, resulting in a less than significant impact.

Mitigation Measure(s): None.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. B	IOLOGICAL RESOURCES. 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 Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, Coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
ď,	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?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			\boxtimes	
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?			\boxtimes	

Discussion:

a-f. According to Napa County Environmental Resource Maps (Watershed layer), the project site is not located in any designated habitat areas of 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. The project will not result in new construction and therefore the project would not result in any significant impacts to any special-status species. Napa County Environmental Sensitivity Maps (Watershed Overlay) and the Baseline Data Report (Chapter 15. Surface Water Hydrology, Map 15-6, Land Cover) do not indicate the presence of any wetlands or potential wetlands within the project boundary. The project would not result in substantial impacts to federally protected or potentially sensitive wetlands. The project will take place on an already-disturbed residential site and would not interfere 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. The proposed project would not conflict with the

provisions of an adopted Habitat Conservation Plans, Natural Community Conservation Plans or other approved local, regional or state habitat conservation plans. There are no plans applicable to the subject parcel.

Mitigation Measure(s): None.

V. CI	JLTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?			\boxtimes	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines§15064.5?			\boxtimes	
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?				\boxtimes
d)	Disturb any human remains, including those interred outside of formal cemeteries?				\boxtimes
ъ.					

Discussion:

- a-c. According to Napa County Environmental Sensitivity Maps (Archaeological Resources Layer, historical site, points & lines), no known historically sensitive sites or structures, archaeological or paleontological resources, sites or unique geological features have been identified within the project site or on any contiguous parcel. There is no information in the record that would indicate that there is a potential for occurrence. The project involves no changes to the existing conditions As noted in Section 8, Background/Project History, no other improvements to the site beyond the existing residential uses and 2.1 acre vineyard are proposed but the rezoning action will technically enables three new by-right land uses consisting of public stables, temporary event parking lots, and farm management. As noted earlier, it is highly unlikely than any of those three uses is possible on the subject property. Temporary off-site parking is subject to an administrative permitting process in concert with a temporary event venue. Silverado Country Club is the nearest event venue approximately two miles from this property and the facility already has temporary event parking. Public stables and farm management uses would be subject to discretionary groundwater permits for increased groundwater demand, and therefore would be subject to new CEQA evaluation in the unlikely event they were proposed. The existing vineyard will remain as well as existing residential structures and improvements, and therefore the project does not have the potential to cause a substantial adverse change in a significant archaeological resource.
- d. No human remains have been encountered on the property and no information has been encountered that would indicate that human remains would be encountered on this site in the future.

Mitigation Measure(s): None.

				Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. GEO	OLO	GY A	AND SOILS. Would the project:		·		
	a)		pose people or structures to potential substantial adverse ects, 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.				\boxtimes
		ii)	Strong seismic ground shaking?				\boxtimes
		iii)	Seismic-related ground failure, including liquefaction?				\boxtimes
		iv)	Landslides?				\boxtimes
	b)	Re	sult in substantial soil erosion or the loss of topsoil?				\boxtimes
	c)	bed on-	located on a geologic unit or soil that is unstable, or that would come unstable as a result of the project, and potentially result in or off-site landslide, lateral spreading, subsidence, liquefaction collapse?				\boxtimes
	d)	pro ind	located on expansive soil creating substantial risks to life or operty? Expansive soil is defined as soil having an expansive ex greater than 20, as determined in accordance with ASTM merican Society of Testing and Materials) D 4829.				
	e)	tan	ve soils incapable of adequately supporting the use of septic lks or alternative waste water disposal systems where sewers enot available for the disposal of waste water?				\boxtimes
Discuss	sion	<u>:</u>					
a.			oposed project site is not located within any designated Alquist-F mental Sensitivity Maps (Soil Types, Landslides), Coombs grav				

- a. The proposed project site is not located within any designated Alquist-Priolo earthquake fault zone. According to Napa County Environmental Sensitivity Maps (Soil Types, Landslides), Coombs gravelly loam (2 to 5 percent slopes) soil is located on the project site have low liquefaction potential. While seismic activity is endemic to the Bay Area, no structures will be constructed as part of this project and therefore no impact to people or structures.
- b. The project site lies on slopes with less than 5% grade. The soils on site are characterized by medium runoff with low erosion potential. The project involves rezoning the site to allow an existing vineyard to remain. No new earth disturbance will occur as a result of the rezoning action. Erosion potential from the existing vineyard is less than significant due to the site's minimal slope and soils with medium runoff potential, and thus the project would result in less than significant impact with regard to soil erosion, soil loss, and sedimentation.
- c. According to Napa County Environmental Resource Maps (Liquefaction Overlay), the project is located in an area with "Low" liquefaction potential. While seismic activity is endemic to the Bay Area, no structures will be constructed as part of this project and therefore no impact to people or structures.

- d. The soil types located on the site are not considered to be expansive, as defined in table 18.1B of the California Building Code and would not create substantial risks to life or property.
- e. The existing residence has a private septic sanitary sewage system. No improvements to existing systems are needed as part of this project and any new system proposed in the future will be designed by a licensed engineer and will be subject to Napa County Environmental Health Division review and approval. There does not appear to be any limitation on this parcel's ability to support an on-site septic system which will be able to support the proposed project.

Mitigation Measure(s): None.

VII.	GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Generate a net increase in greenhouse gas emissions in excess of applicable thresholds adopted by the Bay Area Air Quality Management District or the California Air Resources Board which may have a significant impact on the environment?				
b)	Conflict with a county-adopted climate action plan or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	

Discussion:

See Section III (Air Quality) for other air quality emissions disclosures and impact assessments.

Napa County has been working to develop a Climate Action Plan (CAP) for several years. The 2012 Draft CAP (March 2012) recommended using the emissions checklist provided therein, on a trial basis, to determine potential greenhouse gas (GHG) emissions associated with project development and operation. At the December 11, 2012, Napa County Board of Supervisors (BOS) hearing, the BOS considered adoption of the proposed CAP. In addition to reducing Napa County's GHG emissions, the proposed plan was intended to address compliance with CEQA for projects reviewed by the County and to lay the foundation for development of a local offset program. While the BOS acknowledged the plan's objectives, it requested that the CAP be revised to better address transportation-related GHG emissions, to acknowledge and credit past accomplishments and voluntary efforts, and to allow more time for establishment of a cost-effective local offset program. The BOS also requested that BMPs be applied and considered when reviewing projects until a revised CAP is adopted to ensure that projects address the County's policy goal related to reducing GHG emissions. In addition, the BOS recommended utilizing the emissions checklist and associated carbon stock and sequestration factors in the Draft CAP to assess and disclose potential GHG emissions associated with project development and operation pursuant to CEOA.

In July 2015, the County recommenced preparation of the CAP to: i) account for present day conditions and modeling assumptions (such as methods, emission factors, and data sources); ii) address the concerns with the previous CAP effort as outlined above, iii) meet applicable State requirements, and iv) result in a functional and legally defensible CAP. As the part of the first phase of development and preparation of the CAP, the County released Final Technical Memorandum #1: 2014 Greenhouse Gas Emissions Inventory and Forecast, April 13, 2016. This initial phase included: i) updating and incorporating the County's community-wide GHG emissions inventory to 2014, and ii) preparing new GHG emissions forecasts for the 2020, 2030, and 2050 horizons. The most recent Draft CAP was released in June 2017 and is continuing to be worked on. Additional information on the County CAP can be obtained at the Napa County Department of Planning, Building and Environmental Services or http://www.countyofnapa.org/CAP/.

For the purposes of this assessment the carbon stock and sequestration factors identified within the 2012 Draft CAP are utilized to calculate and disclose potential GHG emissions associated with agricultural 'construction' and development and with 'ongoing' agricultural maintenance and operation, as further described below. The 2012 Draft CAP carbon stock and sequestration factors are utilized in this assessment because they provide the most generous estimate of potential emissions. As such the County considers the anticipated potential emissions resulting from the

proposed project that are disclosed in this Initial Study reasonably reflect proposed conditions and therefore are considered appropriate and adequate for project impact assessment.

a-b. As noted in Section 8, Background/Project History, no other improvements to the site beyond the existing residential uses and 2.1 acre vineyard are proposed but the rezoning action will technically enables three new by-right land uses consisting of public stables, temporary event parking lots, and farm management. As noted earlier, it is highly unlikely than any of those three uses is possible on the subject property. Temporary off-site parking is subject to an administrative permitting process in concert with a temporary event venue. Silverado Country Club is the nearest event venue approximately two miles from this property and the facility already has temporary event parking. Public stables and farm management uses would be subject to discretionary groundwater permits for increased groundwater demand, and therefore would be subject to new CEQA evaluation in the unlikely event they were proposed. Therefore, for the purposes of evaluating the project's potential to result in greenhouse gas impacts, only the ongoing operations of the recently planted 2.1 acre vineyard have the potential to result in foreseeable changes as a result of the rezoning action.

Overall increases in GHG emissions in Napa County were assessed in the Environmental Impact Report (EIR) prepared for the Napa County General Plan Update and certified in June 2008. GHG emissions were found to be significant and unavoidable in that document, despite the adoption of mitigation measures incorporating specific policies and action items into the General Plan.

Consistent with these General Plan action items, Napa County participated in the development of a community-wide GHG emissions inventory and "emission reduction framework" for all local jurisdictions in the County in 2008-2009. This planning effort was completed by the Napa County Transportation and Planning Agency in December 2009, and served as the basis for development of a refined inventory and emission reduction plan for unincorporated Napa County.

The County requires project applicants to consider methods to reduce GHG emissions consistent with Napa County General Conservation Element Plan Policy CON-65e. Pursuant to State CEQA Guidelines Section 15183, this assessment focuses on impacts that are "peculiar to the project," rather than the cumulative impacts previously assessed, because this initial study assesses a project that is consistent with an adopted General Plan for which an EIR was prepared.

GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including carbon dioxide (CO₂), methane, ozone, and the fluorocarbons, which contribute to climate change. CO₂ is the principal GHG emitted by human activities, and its concentration in the atmosphere is most affected by human activity. It also serves as the reference gas to which to compare other greenhouse gases. Agricultural sources of carbon emissions include forest clearing, land-use changes, biomass burning, and farm equipment and management activity emissions. Equivalent Carbon Dioxide (CO_{2e}) is the most commonly reported type of GHG emission and a way to get one number that approximates total emissions from all the different gasses that contribute to GHG, as described in BAAQMD's CEQA Guidelines. In this case CO₂ is used as the reference atom/compound to obtain atmospheric carbon CO₂ effects of GHG. Carbon stocks are converted to CO_{2e} by multiplying the carbon total by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom (http://ncasi2.org/COLE/fag.html).⁶

One-time "Construction Emissions" associated with vineyard development projects include: i) the carbon stocks that are lost or released when site vegetation is removed, including any woody debris and downed wood; ii) underground carbon stocks, or soil carbon, released when soil is ripped in preparation for vineyard development and planting (referred to as Project Site Emissions below); and iii) emissions associated with the energy used to develop and prepare the project area and plant vineyard, including construction equipment and worker vehicle trips (referred to as Equipment Emissions below). For the purpose of this analysis, construction emissions occurred in 2016 when the vineyard was installed, and consequently no further construction related emissions will result if the proposed rezoning and DA are now approved. Furthermore, had the vineyard not yet been installed, at 2.1 acres the vineyard's size is well below a size that could generate significant amounts of construction related emissions.

"Operational Emissions" of the vineyard are quantified and include: i) any reduction in the amount of carbon sequestered by existing vegetation that is removed as part of the project (referred to as Operational Sequestration Emissions below); and ii) ongoing emissions from the energy used to maintain and farm the vineyard, including farm equipment and vehicles (such as tractors, haul trucks, backhoes, pick-up trucks, and ATVs) and worker vehicle trips (referred to as Operational Equipment Emissions below). See **Section XVI** (**Transportation/Traffic**) for anticipated number of operational trips.

Construction Emissions:

<u>Equipment Emissions:</u> As discussed in **Section III (Air Quality)**, three County Certified EIRs assessed and analyzed potential air quality and GHG emissions associated with vineyard development. Within those EIRs potential GHG emissions associated with construction

⁶ "Carbon stock" refers to the total amount of carbon stored in the existing plant material including trunks, stems, branches, leaves, fruits, roots, dead plant material, downed trees, understory, and soil organic material. Carbon stock is expressed in units of metric tons of carbon per acre. When land is cleared, some percentage of the carbon stored is released back to the atmosphere as CO2. Land clearing or the loss of carbon stock is thus a type of GHG emission (County of Napa, March 2012, Napa County Draft Climate Action Plan).

equipment were calculated and disclosed. An estimation of potential construction equipment emissions per acre of vineyard development was derived using the most generous emissions results from these EIRs. The Circle-S Ranch EIR anticipated approximately 4,293 metric tons (MT) CO_{2e} of construction equipment emissions for a 459-acre vineyard development, resulting in approximately 9.4 MT CO_{2e} of construction equipment emissions per acre of vineyard development. Using this emission factor it is anticipated that Construction Equipment Emissions associated with the proposed 15.2-acre vineyard development would be approximately 142.88 MT CO_{2e} (15.2 acres multiplied by 9.4 MT CO_{2e}).

<u>Project Site Emissions:</u> Project site emissions are emissions resulting from vegetation removal and soil preparation associated with the conversion of approximately 2.1 acres of relatively level open pasture to vineyard. Because there is not yet a universally accepted scientific methodology or modeling method to calculate GHG emissions due to vegetation conversion and soil disturbance, the Green House Gas Emissions Checklist and associated carbon stock factors developed as part of the 2012 CAP efforts are utilized to determine potential project site carbon stocks and emissions. Utilizing the 2012 Draft CAP carbon stocks and the acreages of vegetation types within the project area, total project site carbon stocks for the project site are estimated to be approximately 2.9 MT C or approximately 10.8 CO_{2e} (Table 6).

Table 6 – Estimated Project Site Carbon Stocks/Storage

Vegetation Type/Carbon Storage	Project Acreage	Carbon Storage/Stock per Acre (MT C/acre) ¹	Total Carbon Storage (MT)	Total Carbon Storage in MT CO _{2e}
Grassland ²	2.1	1.4	2.9	10.8

¹ Includes 100% of soil carbon stock; ² Includes non-native grassland.

Sources: March 2012 Napa County Draft Climate Action Plan, and Napa County Engineering and Conservation Division January 2018

There is currently no scientific agreement about the percentage of carbon that would be lost (or emitted) from soils through grading. Some analyses have suggested 20-25% while others have suggested 50%. Using 50% as a more conservative estimate, the project could result in one time project site construction emissions from vegetation removal and soil preparation (i.e. grading and soil ripping) of approximately 207.4 MT CO_{2e} (Table 7).

Table 7 – Estimated Project Carbon Emissions Due to Vegetation Removal

Vegetation Type/Carbon Storage	Project Acreage	Carbon Loss/Emission per Acre (MT C/acre) ¹	Total Carbon Loss/Emission (MT)	Total Carbon Loss/Emission in MT CO _{2e}
Grassland ²	2.1	0.8	1.7	1.4

¹ Includes 50% of soil carbon stock; ² Includes non-native grassland.

Sources: March 2012 Napa County Draft Climate Action Plan, and Napa County Engineering and Conservation Division August 2017

Operational Emissions:

<u>Operational Equipment Emissions:</u> The referenced vineyard development EIRs also assessed ongoing vineyard operation emissions associated with vehicles and equipment. Estimated potential construction equipment emissions per acre of vineyard development were derived using the most generous emissions results from these EIRs. The Suscol Mountain Vineyard EIR anticipated approximately 373 MT CO_{2e} of operational emissions for a 560-acre vineyard, resulting in approximately 0.67 MT CO_{2e} of operational emissions per acre of vineyard per year. Using this emission factor it is anticipated that Operational Equipment Emissions associated with the existing 2.1-acre agricultural development are 1.4 MT CO_{2e} (2.1 multiplied by 0.67 MT CO_{2e}).

Operational Sequestration Emissions: Emissions associated with loss of sequestration due to land use change (i.e., the conversions of grassland to vineyard) have been calculated based the Annual Carbon Sequestration Factors within the 2012 Draft CAP, which indicates that grasslands sequester a negligible quantity of CO₂ acre per year (essentially zero). Utilizing these factors it is anticipated that the annual emissions associated with changes in carbon sequestration as a result of land use changes would be approximately 0.02 MT C per acre per year.

Grapevines are photosynthetic plants and therefore have value in terms of carbon capture. Additionally, the use of cover crops, which are also photosynthetic plants, tends to result in less soil CO₂ loss from vineyard soils. Carbon sequestration loss would be further offset by the proposed vineyard, which would likely act as a sink for atmospheric CO₂, depending on the longevity of grapevine roots and the quantity of carbon stored in deep roots. In addition to vines, the sequestration of atmospheric carbon is also achieved by the soil between vine rows through cover-cropping.

⁷ As discussed in Section III (Air Quality) variations or similarities in emissions modeling results between the three projects can be attributed to modeling platform and version utilized, variations in modeling assumptions and inputs (such as project acreage and vegetation types removed), and anticipated construction and equipment and duration of use

⁸ Napa County, July 12, 2010, Green House Gas Emissions Associated with Vineyard Development & Vineyard Operations, A Compilation of Quantitative Data from Three Recent Projects.

There is no adopted CEQA significance threshold at the State, regional, or local level for construction-related GHG emissions, and the County has therefore evaluated the significance of one-time project-generated emissions of up to approximately 350.28 MT CO_{2e} by considering the size of the proposed vineyard in relation to projected vineyard development in the County. The program level EIR for the 2008 Napa County General Plan Update (SCH#2005102088 certified June 3, 2008) projected 12,500 acres of new vineyard development in the County between 2005 and 2030. The County concluded in the General Plan EIR that emissions from all sources over the planning period would result in significant and unavoidable GHG emissions despite measures adopted to address the impact. Because this determination was based on emissions from all sources, not just agriculture, the General Plan did not determine that emissions solely from projected agricultural development would result in significant unavoidable impacts. Pursuant to Section 15183(a) of the California Code of Regulation (CCR), projects that are consistent with the general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific effects which are peculiar to the project or its site. In the context of 12,500 acres of projected vineyard development, the proposed project would constitute less than approximately 0.02% of the vineyard development anticipated in the General Plan EIR. For these reasons, the County does not consider one-time GHG emissions from the proposed vineyard development to be a significant impact on a project level basis or to be a "considerable" contribution to significant unavoidable cumulative impacts identified in the General Plan EIR.

As described above, total annual GHG emissions from ongoing operations are anticipated to be approximately $1.4 \, \text{MT CO}_{2e}$ per year, which is well below the threshold of $1,100 \, \text{MT CO}_{2e}$ per year that BAAQMD has defined as significant for CEQA purposes when considering land development projects.

Mitigation Measure(s): None required.

VIII. HAZ	ZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				\boxtimes
b)	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				\boxtimes
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				\boxtimes
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?				\boxtimes
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 for people residing or working in the project area?				\boxtimes
f)	For a project within the vicinity of a private airstrip, 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 for people residing or working in the project area?				\boxtimes

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact					
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes					
h)	Expose people or structures to a significant risk of loss, injury or death involving wild-land fires, including where wild-lands are adjacent to urbanized areas or where residences are intermixed with wild-lands?				\boxtimes					
<u>Discus</u>	sion:									
a.	a. The proposed project will not involve the transport of hazardous materials other than those small amounts normally used for vineyard operations. A Business Plan will be filed with the Environmental Health Division should hazardous materials reach reportable levels.									
b.	b. The project would not result in the release of hazardous materials into the environment.									
C.	There are no schools located within one-quarter mile from the propose	d project site.								
d.	d. The proposed site is not on any known list of hazardous materials sites.									
e.	e. The project site is not located within an airport land use plan area or within two miles of any public airport or public use airport.									
f.	The project site is not located within the vicinity of any private airports.									
g.	The access driveway that serves the project is 14 feet wide. The project and Engineering Services Division and complies with standards for the		ewed by the Cour	nty Fire Departr	nent					
h.	The project would not increase exposure of people and/or structures to fires. The project will continue to comply with current California Depart requirements for fire safety.				and					
<u>Mitigat</u>	ion Measure(s): None.									
IX. H	YDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact					
a)	Violate any water quality standards or waste discharge requirements?									

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			\boxtimes	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation onor off-site?			\boxtimes	
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			\boxtimes	
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			\boxtimes	
f)	Otherwise substantially degrade water quality?				
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				\boxtimes
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			\boxtimes	
j)	Inundation by seiche, tsunami, or mudflow?				

Discussion:

On January 14, 2014, Governor Jerry Brown declared a drought emergency in the state of California. That declaration was followed up on April 1, 2015, when the Governor directed the State Water Resources Control Board to implement mandatory water reductions in cities and town across California to reduce water usage by 25 percent. These water restrictions do not apply to agricultural users. However, on April 7, 2017, Governor Jerry Brown signed an executive order lifting California's drought emergency in all but four counties (Fresno, Kings, Tulare and Tuolumne). The County of Napa had not adopted or implemented any additional mandatory water use restrictions. The County requires all Use Permit applicants to complete necessary water analyses in order to document that sufficient water supplies are available for the proposed project and to implement water saving measures to prepare for periods of limited water supply and to conserve limited groundwater resources.

In general, recent studies have found that groundwater levels in the Napa Valley Floor exhibit stable long-term trends with a shallow depth to water. Historical trends in the Milliken-Sarco-Tulucay (MST) area, however, have shown increasing depths to groundwater, but recent stabilization in many locations. Groundwater availability, recharge, storage and yield are not consistent across the County. More is known

about the resource where historical data have been collected. Less is known in areas with limited data or unknown geology. In order to fill existing data gaps and to provide a better understand of groundwater resources in the County, the Napa County Groundwater Monitoring Plan recommended 18 Areas of Interest (AOIs) for additional groundwater level and water quality monitoring. Through the well owner and public outreach efforts of the (GRAC) approximately 40 new wells have been added to the monitoring program within these areas. Groundwater Sustainability Objectives were developed and recommended by the GRAC and adopted by the Board. The recommendations included the goal of developing sustainability objectives, provided a definition, explained the shared responsibility for Groundwater Sustainability and the important role monitoring as a means to achieving groundwater sustainability.

In 2009 Napa County began a comprehensive study of its groundwater resources to meet identified action items in the County's 2008 General Plan update. The study, by Luhdorff and Scalmanini Consulting Engineers (LSCE), emphasized developing a sound understanding of groundwater conditions and implementing an expanded groundwater monitoring and data management program as a foundation for integrated water resources planning and dissemination of water resources information. The 2011 baseline study by LSCE, which included over 600 wells and data going back over 50 years, concluded that "the groundwater levels in Napa County are stable, except for portions of the MST district". Most wells elsewhere within the Napa Valley floor with a sufficient record indicate that groundwater levels are more affected by climatic conditions, are within historical levels, and seem to recover from dry periods during subsequent wet or normal periods. The LSCE Study also concluded that, on a regional scale, there appear to be no current groundwater quality issues except north of Calistoga (mostly naturally occurring boron and trace metals) and in the Carneros region (mostly salinity). The subject property is located within the Western Mountains subarea of Napa County according to the Napa County Groundwater Monitoring Plan 2013. The County has no record of problems or complaints of diminished groundwater supplies at the project site or in the general vicinity. The applicant has not experienced any issues with the availability of groundwater.

Minimum thresholds for water use have been established by the Department of Public Works using reports by the United States Geological Survey (USGS). These reports are the result of water resources investigations performed by the USGS in cooperation with the Napa County Flood Control and Water Conservation District. Any project which reduces water usage or any water usage which is at or below the established threshold is assumed not to have a significant effect on groundwater levels. The project is categorized as "all other areas" based upon current County Water Availability Analysis policies and therefore water use criteria is parcel specific based upon a Tier 2 analysis. A Tier 2 analysis was completed by Condor Earth on September 8, 2017 which included a parcel specific recharge evaluation. According to the recharge evaluation, the property yields "7.8 AF in normal years and 3.2 AF in the dry year." (Condor Earth, 2017)

- a. The project will not violate any known water quality standards or waste discharge requirements. Incorporation of standard stormwater best management practices ensure that the project will have a less than significant impact to water quality and discharge standards.
- b. According to Napa County Code Chapter 13.15, Groundwater Conservation, the approximately 3.96 acre site has a MST Groundwater Deficient Area Allowable Water allotment of 1.2 acre feet/year (AF/YR) with an existing water system permit issued by the Napa County Environmental Health Division. Groundwater resources for the subject property were evaluated in the attached Water Availability Analysis & Report for the Carroll Property Rezoning date August 30, 2017, and prepared by CMP Civil Engineering and Land Surveying. Existing water usage totals 1.05 AF/YR for a single-family residence, second unit and accessory uses. The vineyard includes 2,495 vines, at a spacing of eight feet by six feet. The varietals are drought tolerant rootstocks that will use a lower than average number of gallons once established. Vineyard water use is estimated to be using 0.32 AF/YR of recycled water per year. All vineyard related water demand will be supplied from recycled water from Napa Sanitation District transported to the site by tank trailer. As detailed in the water availability analysis, the vineyard irrigation systems functions independently from the domestic use water system connected to the onsite groundwater well. The irrigation system includes two 5,000 gallon water tanks that are filled using the owner's mobile 1,000 gallon transfer trailer. During peak summer time water use, it is estimated that the 21 round trips to Napa Sanitation District are required during the busiest month which is usually accomplished over 4 to 8 days within the month when transfer trips occur.

Through the Development Agreement the property owner will be required to source all vineyard water needs from Napa Sanitation District. To ensure groundwater use does not increase over existing conditions, the DA requires the property owner to install a monitoring device on the existing residential well. Vineyard water storage and irrigation lines are required to remain on an independent system. In the long term the applicant proposes to dry farm the vineyard and projects that the need to truck in water will decrease over time possibly to zero. Whether that turns out to be the case or not, groundwater monitoring and the requirement to truck in water for any vineyard water use needs will remain in place through the DA and associated subsequent permitting (i.e. groundwater permit) or through property deed restriction.

- c-e. The project will not substantially alter the drainage pattern on site or cause a significant increase in erosion or siltation on or off the cultivated agricultural vineyard site, or contribute to excess water runoff.
- f. There are no other factors in this project that would otherwise degrade water quality.
- q- h. The project site is not located within a designated floodplain zone.
- i-j. The parcel is not located in an area that is subject to inundation by tsunamis, seiches, or mudflows. The project site is located on rolling, level to steeply-sloped hillside land. Potential for tsunami is considered less-than-significant.

Mitigation Measure(s): None.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				\boxtimes
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				\boxtimes
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes

Discussion:

a. – c. The project will establish agriculture as an allowed use on the 4 acre property that is surrounded by a small established community of large lot single family residences. This land use pattern was established in the 1950's and 1960's when the former orchard farms were parceled off and later subdivided for residential development. The subject project represents a 4 acre remnant of the prior orchard farming heritage containing the 1920's era farm house and out building, although orchards were removed several decades ago.

The subject property and all other properties in the immediate vicinity of the project have a Rural Residential (RR) General Plan Land Use designation. Table AG/LU-B: "General Plan and Zoning: For Use in Considering Changes in Zoning" of the 2008 General Plan states that RC is the only allowable zoning designation that can be applied when rezoning property with an RR General Plan designation. Therefore, it is within the Board of Supervisors' scope of discretion to find the proposed rezoning from RS to RC consistent with the RR General Plan Land Use designation. Although the Board of Supervisors is under no obligation to rezone the property, and RS zoning remains an appropriate zoning designation, rezoning the property to RC can be found consistent with the General Plan. The agriculture use that will be authorized by this rezoning was installed in 2016, and the applicant has received written responses from virtually all residential property owner surrounding the property expressing support for the vineyard project.

Agricultural Preservation and Land Use Policy AG/LU-1 of the 2008 General Plan states that the County shall, "preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County." The property's General Plan land use designation is Rural Residential (RR) which allows "single-family dwellings, agriculture, and

stable." Therefore, should the Board of Supervisors wish to approve the proposed rezoning, the project will not result in any conflicts with land use plans or habitat conservation plans, or divide an established community.

<u>Mitiga</u>	ation Measure(s): None.				
VI N/I	INEDAL DESCUIDCES Would the project.	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
∧I. IVI	INERAL 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?				
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?				\boxtimes
a/b.	 <u>ssion:</u> Historically, the two most valuable mineral commodities in Napa Couwater. More recently, building stone and aggregate have become econincluded in the Napa County Baseline Data Report (<i>Mines and Minera</i> known mineral resources nor any locally important mineral resource relation Measure(s): 	omically valuabl al Deposits, BDR	e. Mines and Mine R Figure 2-2) indic	eral Deposits r ates that there	napping
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significan t Impact	No Impact
XII. N	OISE. Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			\boxtimes	
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				

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

working in the project area to excessive noise levels?

public use airport, would the project expose people residing or

 \boxtimes

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significan t Impact	No Impact			
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?							
<u>Discus</u> a-d.	Noise from vineyards operations is generally limited, with the greatest potential for significant noise generation occurring during relatively brief periods of active farming including harvest activities, which often occurs during the night or early morning. The Napa County Noise Ordinance, which was adopted in 1984, sets the maximum permissible received sound level for a rural residence as 45 dBa between the hours of 10 p.m. and 7 a.m. However, under the County's "right to farm" agricultural land use protection policies, farming activities are generally categorically exempt from noise limits. This case is however somewhat unique in that the property presently does not allow agriculture and it is being rezoned to enable the vineyard planted in 2016 to remain. Residential uses surrounding this new vineyard have not previously been subjected to 'right to farm' noise exemption, which will now be the case if the rezoning is approved. Given the relatively small size of the vineyard, noise generation from farming activities has been and will be quite minimal, and any noise from active farming (i.e. pruning, weed and pest management, frost protection, harvesting, tractor operations) will take place over several hours on several intermittent days throughout the year. These relatively brief and intermittent periods of potential noise generation are therefore considered to have a less-than-significant potential to impact adjoining neighbors. Furthermore, as a component of the DA, adjoining residences will be provided the contact information of the property owner and/or vineyard manager should noise generation cause a disturbance.							
e-f.	The project site is not located within an airport land use plan or within private airstrip.	n two miles of a	a public airport or	within the vici	nity of a			
<u>Mitigati</u>	on Measure(s): None.							
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact			
XIII.PO	PULATION 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)?			\boxtimes				
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?							
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?							
<u>Discus</u>	sion:							
a. – c.	The project will not displace any housing or divide any established communicatively considerable increase in the demand for housing units we vicinity. No individuals will be displaced as a result of this project.							

Mitigation	Measure(s):	None.
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		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. PU	IBLIC SERVICES. Would the project result in:		incorporation		
a)	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:				
	Fire protection?				
	Police protection?				
	Schools?				
	Parks?				
	Other public facilities?				
a.	The proposed rezoning would not increase the number of residents on property and the additional demand placed on existing services would significant impact on public services. On Measure(s): None.	the property. Pu			
XV. RF	CREATION. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Increase the use of existing neighborhood and regional parks or				
u)	other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				\boxtimes
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?				\boxtimes
<u>Discuss</u>	ion:				
	=				

a-b. The project would not significantly increase the use of recreational facilities, nor does the project include recreational facilities that may have a significant adverse effect on the environment.

Mitigation Measure(s): None.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. TR	ANSPORTATION/TRAFFIC. Would the project:				
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			\boxtimes	
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			\boxtimes	
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				\boxtimes
d)	Substantially increase hazards due to a design feature, (e.g., sharp				
	curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			\boxtimes	
e)	Result in inadequate emergency access?			\boxtimes	
f)	Result in inadequate parking capacity?			\boxtimes	
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				\boxtimes

Discussion:

- a-b. The property contains a primary residence and secondary dwelling in addition to the vineyard. According to the trip generation rates of the Institute of Transportation Engineers (ITE), rural residences typically generate 10 daily trips per unit with one trip per unit occurring within peak a.m. and p.m. peak periods. Vineyard trip generation is intermittent with most days throughout the year generating no traffic when active farming is not occurring. On days when farming is occurring, traffic generation will consist of a nominal increase in vehicles trips that does not result in a discernable change in the level of traffic generated from the two residential units. The vineyard also results in a nominal (over time) increase of truck trip traffic to accommodate the irrigation water truck deliveries from Napa Sanitation District, which is projected during peak summer time water use to result in 21 round trips during the busiest month, which is usually accomplished over 4 to 8 days within the month when transfer trips occur. This transfer trips will not result in a change in the vehicle to capacity ratio for Monticello Road and therefore have no potential to decrease daily or peak hour levels of service for the roadway or nearby intersections. The current Level of Service along this section of Monticello Road is currently LOS B, and will not change as a result of the project. The project will not exceed, either individually or cumulatively, a Level of Service standard established by the County for designated roads or highways.
- c. The project does not have any impact on air traffic patterns.

residents' vehicles on site, and the proposed rezoning would not increase the number of vehicles on site. No parking will be permitted within the right-of-way of Monticello Road. There is no aspect of this proposed project that would conflict with any adopted policies, plans or programs supporting alternative transportation. Mitigation Measure(s): None Less Than Potentially Significant Less Than Significant With Significant No **Impact** Mitigation **Impact Impact** Incorporation XVII. TRIBAL CULTURAL RESOURCES. 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: a) Listed or eligible for listing in the California Register of Historical \boxtimes Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or b) 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 Resources Code section \boxtimes 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. Discussion: a-b. According to the Napa County Environmental Resource Maps (based on the following layers – Cultural Resources: Historical sites, Historical Sites – Lines, Arch sensitive areas, Arch sites, Arch surveys) no archaeologic or tribal resources have been identified on the property. Invitation for tribal consultation was completed pursuant to Public Resources Code Section 21080.3.1 and no requests for consultation were received within the comment period. Mitigation Measure(s): None. Less Than **Potentially** Significant Less Than Significant With Significant No Impact Mitigation **Impact Impact** Incorporation Carroll Residence Rezone P14-00111 24 of 26

d -e. Access to the project site will be from Monticello Road into the site. The project would result in no significant off-site circulation system operational impacts nor any sight line impacts at the proposed project driveway. The project already accommodates the existing

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII.	UT	ILITIES AND SERVICE SYSTEMS. Would the project:				
	a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
	b)	Require or result in the construction of a new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				\boxtimes
	c)	Require or result in the construction of a new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				\boxtimes
	d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				\boxtimes
	e)	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?				\boxtimes
	f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				\boxtimes
	g)	Comply with federal, state, and local statutes and regulations related to solid waste?				

Discussion:

- a. The project does not require any wastewater treatment system, consistent with Regional Water Quality Control Board standards and as such will have not exceed any wastewater treatment requirements.
- b. The project will not require construction of any new water or wastewater treatment facilities that will result in a significant impact to the environment.
- c. The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, which will cause a significant impact to the environment.
- d. The project has sufficient water supplies to serve projected needs, refer to the discussion under **Hydrology and Water Quality** for more details. All water for vineyard irrigation will be sourced from recycled water from Napa Sanitation District, and imported to the site via tank trailer. Napa Sanitation District has indicated that there are sufficient quantities of recycled water to serve this use. As part of the project DA a groundwater monitoring well will be installed on the existing residential well to ensure that groundwater use does not exceed the 'fair share' standard of 1.2 AF/YR as prescribed in the County's Groundwater Conservation Ordinance (Title 13.15).
- e. The vineyard does not generate wastewater. The existing residential uses are served by an on-site septic system.

- f. The property is served by a landfill with sufficient capacity to meet the projects demands. No significant impact will occur from the disposal of solid waste generated by the project.
- g. The project will comply with federal, state, and local statutes and regulations related to solid waste.

Mitigation Measure(s): None.

IXX.	MA	NDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significan t Impact	No Impact
	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?				\boxtimes
	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)?				\boxtimes
	c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				\boxtimes

Discussion:

- a. The project as proposed will not 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.
- b. The project does not have impacts that are individually limited, but cumulatively considerable. Potential air quality, green house gas emissions, water, and traffic impacts are discussed in the respective sections above. The project would also increase the demands for public services to a limited extent, increase traffic and air pollution, all of which contribute to cumulative effects when future development in Napa Valley is considered. Cumulative impacts of these issues are discussed in previous sections of this Initial Study and would not be of significant impact.
- c. There are no environmental effects caused by this project that would result in substantial adverse effects on human beings, whether directly or indirectly. No hazardous conditions resulting from this project have been identified. The project would not have any environmental effects that would result in significant impacts.

Mitigation Measures: None Required.