TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
4.1 Air Quality			
4.1-1: Construction activities associated with implementation of the Proposed Project, including land clearing, earthmoving, and movement of vehicles, would have the potential to cause nuisance related to fugitive dust. This is a potentially significant impact.	Potentially Significant	**4.1-1:** The owner shall implement a fugitive dust abatement program during the construction of #P11-00205-ECPA, which shall include the following elements: • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard; this mitigation is included in the BAAQMD-approved CalEEMod. • Cover all exposed stockpiles. • Sweep Circle Oaks Drive daily (with water sweepers) if visible soil material is carried onto adjacent streets. • Limit traffic speeds on unpaved roads to 15 miles per hour (mph); this mitigation is included in the CalEEMod. • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. • Any burning of cleared vegetation shall be conducted according to the rules and regulations of the BAAQMD's Regulation 5 (BAAQMD, 2006). Prior notification to BAAQMD shall be made by submitting an Open Burning Prior Notification Form to BAAQMD's office in San Francisco. The measures above (which are consistent with the BAAQMD recommended measures) are in addition to the permanent erosion control measures specified in #P11-00205-ECPA, which include establishing a permanent no till cover crop on all disturbed areas and applying straw mulch over disturbed areas. **Mitigation Measure 4.1-1** would avoid the creation of fugitive dust (PM_{10} and $PM_{2.5}$) emissions during construction of the vineyard by eliminating uncovered stockpiles and controlling traffic speeds in order to minimize fugitive dust from roadways. This will reduce these potentially significant impacts to a less-than-significant level.	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
4.1-2: Construction of the Proposed Project would result in regional emissions from operation of construction equipment. This is a potential significant impact.	Potentially Significant	**4.1-2:** The owner shall implement the required basic construction mitigation measures as recommended by the BAAQMD and mitigation measures used in the CalEEMod during the construction of the Proposed Project, which shall include the following elements: • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • Post a publicly visible sign with the telephone number and person to contact at Napa County regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. • The owner shall equip all construction equipment with a horsepower rating greater than 50 with a diesel particulate filter; this mitigation is included in the CalEEMod. As shown in **Table 4.1-4**, construction of the Proposed Project would not exceed the BAAQMD criteria pollutant threshold. With the implementation of **Mitigation Measure 4.1-2**, construction-related impacts to air quality would be further reduced.	Less than Significant
4.1-3: Operation of the Proposed Project would attract additional vehicles to the project site, resulting in new regional emissions; however, new emissions would not be substantial and a less-than-significant impact would result.	Less than Significant	**4.1-3:** No mitigation is required.	Not Applicable

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
4.1-4: Construction of the Proposed Project would slightly increase traffic volumes and congestion levels on local roadways, resulting in changes to carbon monoxide (CO) concentrations. However, changes in CO concentrations would not be substantial and a less-than-significant impact would result.	Less than Significant	**4.1-4:** No mitigation is required.	Not Applicable
4.1-5: Project emissions have the potential to cause distress to sensitive receptors. However, project-related emissions would not be substantial and a less-than-significant impact would result.	Less than Significant	**4.1-5:** No mitigation is required.	Not Applicable
4.1-6: Project construction and operation could result in odors. However, odors from construction and operation would not be substantial and a less-than-significant impact would result.	Less than Significant	**4.1-6:** No mitigation is required.	Not Applicable
4.2 Biological Resources			
4.2-1: Approximately 166.8 acres of the California Annual Grassland Alliance were mapped on the Walt Ranch property. Approximately 83.94 acres (50.31 percent) of those acres are proposed to be converted to vineyard. However, approximately 4.45 acres meet the criteria for being considered native grasslands within the proposed blocks (**Figure 4.2-2a**). This area was defined based on portions of California Annual Grassland Alliance that contain ten percent or higher of native grass species. The conversion of sensitive grassland vegetation potentially conflicts with Napa County Policy CON-2, which provides that agricultural projects should preserve existing significant vegetation where to the extent feasible. In addition, Policy CON-17 requires no net loss of native grasslands, serpentine grasslands, mixed serpentine chaparral, and other sensitive biotic communities and habitats of limited distribution, through avoidance, restoration, or replacement where feasible. Where avoidance, restoration, or replacement is not feasible, preservation of like habitat at a 2:1 ratio or greater is required. Grasslands in general provide cover for erosion control, important forage and nesting habitat for invertebrates,	Potentially Significant	**4.2-1:** Prior to the approval of #P11-00205-ECPA, the plan shall be modified to include the following (any associated project features that become unnecessary as a result of the avoidance, such as proposed roads, shall also be reflected in the revised plan): Impacts to native grasslands shall be reduced to a less-than-significant level and result in the greatest quality of native grassland mitigation through a combination of avoidance, preservation, and enhancement. Specifically, mitigation for the removal of an estimate 4.45 acres of native grassland on the property would be accomplished through a combination of 1) avoidance of high-quality native grasslands within the project area and the immediate vicinity; 2) preservation and conservation of native grasslands having the highest habitat value and species composition; and 3) through the restoration and enhancement of existing non-native grasslands implemented through the Walt Ranch Biological Resources Management Plan (BRMP). **Avoidance** In order to maintain biodiversity of native grasslands on the property, approximately 3.30 acres of native grasslands shall be avoided. To the maximum extent feasible, access road	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
birds, and mammals, and appropriate vegetative structure for many native plant species. This is a potentially significant impact.		development shall be relocated as necessary to avoid populations of native grasslands. Specifically, avoidance shall occur at the locations detailed in **Table 4.2-5** and shown on **Figure 4.2-4** (please refer to **Section 4.2**). These populations shall be avoided with a buffer of not less than 10 feet. The avoidance proposed in **Table 4.2-5**, in combination with the native grasslands already outside of the clearing limits, will result in the preservation of approximately 8.65 acres (88.3 percent) of native grasslands mapped on the property. Therefore, the Proposed Project will impact 1.15 acres of native grasslands in the avenue around block 13, the avenue around blocks 16A and 16B2, and in blocks 16A, 16B1, 16B2, and 18A5. These impacted areas shall be mitigated at a 2:1 ratio as discussed below. **Preservation and Enhancement** The direct impact of 1.15 acres of native grasslands shall be mitigated by preserving the remainder of the native grasslands mapped onsite and enhancing existing non-native grassland to in- kind native reference grasslands at a 2:1 ratio (2.30 acres). The 8.65 acres of native grasslands mapped on the property shall be preserved in perpetuity. All acreage designated for preservation shall be identified as such in a deed restriction, open space easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection. Land placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (including, but not limited to, conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion), and should otherwise be restricted by the existing goals and policies of Napa County. The areas to be covered by the deed restriction shall be determined by a qualified botanist or biologist, and submitted to Napa County for review and approval. The deed restriction shall be entered into and recorded with the Napa County Recorder's office prior to commencement of the project in a form acceptable to County Counsel. Replacement of native grasslands shall occur on 2.30 acres on	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		the property, and shall be designated in the Walt Ranch BRMP. In order to provide for habitat continuity, the 2.30 acres of native grassland replacement shall occur in suitable areas in proximity to native grassland areas to the maximum extent feasible. This may include, but is not limited to, areas near vineyard blocks 13, 16, 19, or 29. Replacement plantings shall be consistent with the dominant native grassland type (blue wildrye, purple needle grass, and/or California fescue) that was impacted. Any new transplants for replacement shall be propagated from seed found on site. Replanting areas for native grasslands shall be protected with a buffer of not less than 10 feet. Prior to ground disturbing activities associated with the Proposed Project, the Walt Ranch BRMP shall be developed by a qualified professional biologist, and submitted to Napa County for review and approval. The Walt Ranch BRMP shall cover multiple sensitive habitat types, sensitive or special-status species, and other biological considerations on the property, as discussed elsewhere in **Section 4.2.6** of this EIR. Required performance criteria for the Walt Ranch BRMP are as follows: • Management goals: Goals shall include habitat enhancement criteria, such as increased native grass cover, native plant diversity, and wildlife values. If in the event that population totals of the sensitive resources identified within this EIR are determined to have changed during preconstruction surveys, the Applicant and/or the Applicant's representative shall provide Napa County with an assessment sufficiently explaining the reason(s) resources are no longer present or are in increased or reduced numbers. The assessment shall be prepared by a qualified biologist; • Identification of suitable habitat: The BRMP shall clearly identify sufficient areas of suitable habitat for each species subject for replanting. In the event the property lacks adequate suitable habitat area, additional resources shall be avoided in order to meet the specified avoidance criteria; • Restoration and enhancement techniques: Identification of transplanting and mitigation planting techniques for	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		various species and habitat types covered by the BRMP; • Implementation schedule: restoration, enhancement, and planting shall begin during the year following ground disturbance; • Planting goals: A qualified biologist shall work with vineyard personnel to ensure that the spacing of plantings and other requirements of the overall BRMP are met; • Monitoring criteria: Restoration and enhancement areas shall be monitored by a qualified botanist or biologist annually for a minimum of five years. As part of the first year monitoring report, each area planted to offset that years' impacts, the final replacement total, exact location, and size of the replacement plantings shall be recorded; • Reporting criteria: Annual monitoring reports shall be submitted to Napa County by January 1 of each year for five years after the successful completion of the replanting efforts and plan implementation; and • Success criteria: Restoration and enhancement areas must have at least an 80 percent success rate after five years. After mitigation, impacts to native grasslands are less than significant.	
4.2-2: Development of the Proposed Project would impact some sensitive biotic communities ~~and~~ habitats of limited distribution. This would conflict with Policy CON-17, which requires no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible. Where avoidance, restoration, or replacement is not feasible, preservation of like habitat at a 2:1 ratio or greater is required. The Proposed Project would also impact oak woodlands, which would conflict with Policy CON-24 requiring maintenance and improvement of oak woodland habitat, including replacing or preserving like habitat at a 2:1 ratio. This is a potentially significant impact. After implementation of mitigation to avoid or preserve these habitats, impacts are reduced	Potentially Significant	**4.2-2:** Prior to the approval of #P11-00205-ECPA, the plan shall be modified to include the following (any associated project features that become unnecessary as a result of the avoidance, such as proposed roads, shall also be reflected in the revised plan). All features requiring avoidance shall be field verified by a qualified professional biologist prior to ground disturbing activities, including the placement of flagging or construction fencing delineating the areas to be avoided: The Carex spp. – Juncus spp. – Wet Meadow Grasses NFD Super Alliance is only located in Block 16. This habitat type shall be avoided in its entirety. Therefore, the portion of Block 16 that contains the Carex spp. – Juncus spp. – Wet Meadow Grasses NFD Super Alliance shall be removed from the Proposed Project. This will ensure 100 percent avoidance of this sensitive habitat.	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
to less-than-significant levels. The Proposed Project would convert portions of the following designated ~~Sensitive~~ Biotic Communities of Limited Distribution or oak woodlands to vineyard: ***Biotic Communities of Limited Distribution*** • **Carex spp. – Juncus spp. – Wet Meadow Grasses NFD Super Alliance.** The Proposed Project would impact 0.42 acres (16.43 percent) of this habitat on the property. Due to its limited occurrence on the property, it should be avoided in its entirety. • **California Buckeye/Poison Oak/Moss Woodland Alliance.** The Proposed Project would impact 0.085 acres (53.13 percent) of this habitat type on the property. Due to its limited occurrence on the property, it should be avoided in its entirety. • **Valley Oak (California Bay – Coast Live Oak – Walnut – Ash) Riparian Forest NFD Association.** The Proposed Project would impact 6.34 acres (20.58 percent) of this habitat type on the property. Certain portions of this habitat type should be protected where it can provide additional wildlife or plant benefits. ***Oak Woodlands*** • **Black Oak Alliance.** The Proposed Project would impact 38.35 acres (12.08 percent) of this habitat on the property. Given the extent of this habitat type on the property (317.51 acres), this is not a significant impact due to the extensive coverage of this habitat type on the property, and it does not require full avoidance. Certain portions of this habitat type should be protected where it can provide		The California Buckeye/Poison Oak/Moss Woodland Alliance is only located in Block 33. This habitat type should be avoided in its entirety. Therefore, the portion of Block 33 that is the California Buckeye/Poison Oak/Moss Woodland habitat type shall be removed from the Proposed Project. This will ensure 100 percent avoidance of this sensitive habitat. The total acreage of this habitat type (0.16 acres) on the property shall be placed in permanent protection. Valley Oak (California Bay – Coast Live Oak – Walnut – Ash) Riparian Forest NFD Association is located in select areas throughout the property, associated with streams and creeks. The portions of vineyard blocks and avenues 21B, 29A1, 29A2, 29B2, 30A, 42, 43, 45B, 57B, and 58A that contain this sensitive habitat type should be removed from the Proposed Project, resulting in 6.3 acres of gross area removed from the Proposed Project. Avoiding these areas will also protect upland habitat for the western pond turtle (discussed further in **Impact 4.2-10**) and wildlife corridors along riparian areas. After mitigation, 30.8 acres (100 percent) of this habitat type will be preserved on the property. Approximately 2.5 acres of Black Oak Alliance habitat will be avoided in the following vineyard blocks and surrounding avenues: 12, 15B, 16B1, 16B2, 17A, 17B, 31A, 31B, 37A, 37C, 37D, 43, and 60A3, as shown on **Figure 4.2-5**. The blocks chosen for avoidance will provide additional habitat continuity benefits and will also protect certain specimen trees, in addition to conserving Black Oak Alliance. Specimen trees are also discussed in **Impact 4.2-16** below. After mitigation, 35.8 acres of this habitat type will be impacted by the project, and 281.7 acres (88.7 percent) will remain on the property. These impacts shall be mitigated by preserving Black Oak Alliance habitat elsewhere on the property at a 2:1 ratio. This will result in 71.6 acres of Black Oak Alliance preserved in permanent protection on the property. Approximately 3.6 acres of Blue Oak Alliance will be avoided in the following vineyard blocks and surrounding avenues: 28,	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
additional wildlife or plant benefits. • **Blue Oak Alliance.** The Proposed Project would impact 6.26 acres (33.86 percent) of this habitat on the property. Given the extent of this habitat type within the County (44,105 acres), it does not require full avoidance on the project site. Certain portions of this habitat type should be protected where it can provide additional wildlife or plant benefits. • **Coast Live Oak (Foothill Pine) Alliance.** The Proposed Project would impact 21.85 acres (16.9 percent) of this habitat on the property. Given the extent of this habitat type on the property (129.29 acres), this is not a significant impact due to the extensive coverage of this habitat type on the property, and it does not require full avoidance. Certain portions of this habitat type should be protected where it can provide additional wildlife or plant benefits. The impacted acreage should be mitigated by onsite preservation at a 2:1 ratio, consistent with General Plan Policy CON-24. • **Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association.** The Proposed Project would impact 111.45 acres (15.29 percent) of this habitat on the property. Given the extent of this habitat type on the property (7228.68 acres), this is not a significant impact due to the extensive coverage of this habitat type on the property, and it does not require full avoidance. Certain portions of this habitat type should be protected where it can provide additional wildlife or plant benefits. The impacted acreage should be mitigated by onsite preservation at a 2:1 ratio, consistent with General Plan Policy CON-24. • **Mixed Oak (Foothill Pine/Ponderosa Pine) Alliance.** The Proposed Project would impact		29B1, 29B2, 37A, 37D, and 47A1, as shown on **Figure 4.2-5**. Avoiding these blocks will also protect specimen trees, interspersed Fescue Alliance, and wildlife corridors along creeks and tributaries. After mitigation, 2.6 acres of this habitat type will be impacted on the property. The 2.6 acres that will be impacted shall be mitigated by preserving Blue Oak Alliance habitat elsewhere on the property at a 2:1 ratio. This will result in 5.2 acres of Blue Oak Alliance preserved in permanent protection on the property. Approximately 1.75 acres of Coast Live Oak (Foothill Pine) Alliance will be avoided in vineyard Block 18 and surrounding avenues, as shown on **Figure 4.2-5**. Avoiding portions of this block chosen for avoidance will provide additional habitat continuity benefits and will also protect specimen trees and western pond turtle habitat, in addition to conserving Coast Live Oak (Foothill Pine) Alliance. After mitigation, 20.1 acres of this habitat type will be impacted by the project, which shall be mitigated by preserving Coast Live Oak (Foothill Pine) Alliance habitat elsewhere on the property at a 2:1 ratio. This will result in 40.2 acres of Coast Live Oak (Foothill Pine) Alliance preserved in permanent protection on the property. Approximately 11.25 acres of Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association will be avoided in the following vineyard blocks and surrounding avenues: 1B, 2A and 2B, 5A, 17B, 18A, 19A, 20A, 36A and 36B, 37E and 37F, 45B, 48, 51C, 57B, 62A, 63, 64, and 69, as shown on **Figure 4.2-5**. The blocks chosen for avoidance will provide additional habitat continuity benefits and will also protect specimen trees, western pond turtle habitat, northern black walnut, and wildlife corridors, in addition to conserving Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association. After mitigation, 100.2 acres of this habitat type will be impacted by the project, which shall be mitigated by preserving Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association habitat elsewhere on the property at a 2:1 ratio. This will result in 200.4 acres of Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association preserved in permanent protection on the property.	

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116.81 acres (25.29 percent) of this habitat on the property. Given the extent of this habitat type on the property (461.91 acres), this is not a significant impact due to the extensive coverage of this habitat type on the property, and it does not require full avoidance. Certain portions of this habitat type should be protected where it can provide additional wildlife or plant benefits. The impacted acreage should be mitigated by onsite preservation at a 2:1 ratio, consistent with General Plan Policy CON-24.		Approximately 13.01 acres of Mixed Oak (Foothill Pine/Ponderosa Pine) Alliance will be avoided in the following vineyard blocks and surrounding avenues: 1B and 1C, 12, 16A, 16B, 16C, 19A, 24, 25A, 37D, 51C, and 55B, as shown on **Figure 4.2-5**. The blocks chosen for avoidance will provide additional habitat continuity benefits and will also protect specimen trees, notable oak woodland stands, and interspersed native grasslands, in addition to conserving Mixed Oak (Foothill Pine/Ponderosa Pine) Alliance. After mitigation, 103.8 acres of this habitat type will be impacted by the project, which shall be mitigated by preserving Mixed Oak (Foothill Pine/Ponderosa Pine) Alliance habitat elsewhere on the property at a 2:1 ratio. This will result in 207.6 acres of Mixed Oak (Foothill Pine/Ponderosa Pine) Alliance preserved in permanent protection on the property. To the maximum extent feasible, access road development shall be relocated as necessary to avoid sensitive habitats. After avoidance of the proposed vineyard blocks described above, the impacts to sensitive habitats are reduced to a less-than-significant level and the Proposed Project is consistent with General Plan Policy CON-17.~~.~~	
4.2-3: Development of the Proposed Project would not convert rock outcrops to vineyard, and therefore would not conflict with Napa County Goal CON-2 and Policy CON-17. This is a less-than-significant impact.	Less than Significant	**4.2-3:** The project design is sufficient, therefore no additional mitigation is required.	Not Applicable
4.2-4: Development of the Proposed Project could result in impacts to wetlands or waters of the U.S., which would be inconsistent with Policies CON-26, CON-30, and CON-42. This would also conflict with Napa County Code Section 18.108.025 (General provisions – Intermittent/perennial streams). However, after mitigation, impacts would be reduced to less-than-significant levels.	Potentially Significant	**4.2-4:** Project site plans will avoid or mitigate for direct impacts to jurisdictional waters of the U.S, as described below. A Department of the Army nationwide permit (Section 404 permit) shall be obtained from the USACE prior to the discharge of any dredged or fill material within jurisdictional wetlands and other waters of the U.S. If needed, a Streambed Alteration Agreement (SAA) shall be obtained from CDFW prior to construction activities that impact riparian zones. A Clean Water Act Section 401 Water Quality Certification will be obtained from the Regional Water Quality Control Board (RWQCB) prior to any discharge into waters of the United States. ~~Unavoidable~~ Direct impacts to waters of the U.S., specifically the 0.25 acres of	Less than Significant

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		jurisdictional "other waters" shown in **Table 4.2-6**, shall be mitigated by creating or restoring waters of the U.S. onsite. Compensatory mitigation shall occur at a minimum of 1:1 ratio and shall be approved by the USACE prior to any discharge into jurisdictional features. Prior to development of Block 31 (which will result in the direct impact of 0.02 acres of wetland as shown in **Table 4.2-6**), necessary permits by the appropriate agencies will be obtained to remove the isolated wetland inside the proposed block, and mitigation at a minimum of 1:1 will be applied to the Capell Creek drainage area on the property. To avoid indirect impacts to all other wetlands, avoidance buffers of 50 feet shall be established around each of the wetlands, which include a 24-foot vegetated turnaround avenue and a 26-foot undisturbed filter strip. Temporary orange construction fencing, or other method acceptable to Napa County, shall be installed around all wetlands and any drainage features in the vicinity of and outside of the construction area. Fencing shall be located a minimum of 26 feet from the edges of wetlands as identified by a qualified biologist. All fencing shall be installed prior to the commencement of any earthmoving activities and shall be field verified by Napa County. The fencing shall remain in place until all construction activities in the vicinity have been completed. Vineyard development near streams that meet the Napa County definition of a stream will maintain setbacks in compliance with the Napa County Conservation Regulations and Code 18.108.025 (see **Table 4.2-7**). For drainages which do not meet the Napa County definition of a stream, 20-foot minimum setbacks are maintained from the top of bank. Minimum 50-foot setbacks (which includes a 24-foot vegetated turnaround avenue and a 26-foot undisturbed filter strip) are maintained around all wetlands. Using BMPs as proposed by the project, such as cover crop management and integrated pest management, in addition to the proposed setbacks, would effectively filter sediments, agricultural chemicals, and nutrients to a less-than-significant level. Additional buffers are recommended in two locations to provide	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		extra protection to sensitive habitats and species. The buffer around a portion of the wetland in Block 5A3 should be increased by 25 feet as shown on **Figure 4.2-6** in order to provide additional protection to the wetland and the population of Gairdner's yampah immediately adjacent to it. In addition, the buffer surrounding the drainage in the south of Block 8 should be expanded by 50 feet, as shown on **Figure 4.2-6** (please refer to the figure in **Section 4.2**). Construction activities, including, but not limited to earthmoving and staging activities, within 50 feet of any USACE jurisdictional features shall be conducted during the dry season to minimize impacts related to erosion, water quality, and aquatic resources, and activities shall be conducted consistent with **Mitigation Measure 4.2-10** to protect western pond turtle and **Mitigation Measure 4.2-11** for California red-legged frog (CRLF). All disturbed areas shall be seeded and mulched to prevent erosion and sediment deposit into wetlands and waters of the U.S. Staging areas shall be located away from the areas of jurisdictional waters that are fenced off. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas within the gross acres allocated for vineyard development (i.e., approved vineyard blocks and associated acreage). Excess excavated soil shall be used onsite or disposed of at an approved facility or site. Stockpiles that are to remain on the site through the wet season shall be protected to prevent erosion (e.g. with tarps, silt fences, or straw bales). Standard precautions shall be employed by the construction contractor to prevent the accidental release of fuel, oil, lubricant, or other hazardous materials associated with construction activities into jurisdictional features. A contaminant program shall be developed and implemented in the event of release of hazardous materials (as detailed in **Mitigation Measure 4.5-1**). Implementation of **Mitigation Measure 4.2-4** (in addition to the other mitigation measures found in this EIR) would reduce the impacts to a less-than-significant level and would ensure compliance with Policies CON-26, CON-30, and CON-42.	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
4.2-5: Development of the Proposed Project would have the potential to affect populations of non-hybridized northern California black walnut (*Juglans hindsii*; ~~CNPS~~ CRPR 1B.2) within the project area. This would conflict with General Plan Goal CON-3 and related Policies. This is a potentially significant impact.	Potentially Significant	**4.2-5:** As part of the Walt Ranch Biological Resources Management Plan (BRMP) required in **Mitigation Measure 4.2-1**, the following measures will be taken to ensure a less-than-significant impact to northern California black walnut: • An untagged black walnut stump with sprouts that obviously was rootstock for English walnut, located north of the road on the eastern edge of the grassland, may be removed. This tree is in poor health and was not producing nuts in 2009. • If feasible, the three trees on the western edge of the grassland (tag numbers 8628, 8268, and 8795) should not be removed unless they are demonstrated to the County to be of hybrid origin. • If it is determined that the trees must be removed, and they are determined not to be of hybrid origin, walnuts should be collected prior to removing the trees. Walnuts collected from these trees should then be distributed randomly throughout the native walnut preserved area shown in **Figure 4.2-7**. • If the three trees are demonstrated to be of hybrid origin, no mitigation would be necessary for their removal. • No additional northern California black walnut trees shall be removed from the property. • The Applicant is encouraged to remove the grafted English walnut stand adjacent to the northern California black walnut stand to minimize hybridization. • Prior to construction in Block 37, temporary construction fencing shall be placed along the avoidance area shown in **Figure 4.2-7** (please refer to the figure in **Section 4.2**). • The area shown in **Figure 4.2-7** shall be avoided in permanent protection in order to provide sufficient habitat for potential future regrowth and expansion of the population of northern California black walnut trees. Implementation of **Mitigation Measure 4.2-5** would reduce the potential impacts to a less-than-significant level.	Less than Significant
4.2-6: Development of the Proposed Project could	Potentially	**4.2-6:** After implementation of avoidance measures required in	Less than

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interfere with existing wildlife movement corridors and could conflict with General Plan Policy CON-18, which relates to wildlife movement. This is considered a potentially significant impact. After implementation of **Mitigation Measures 4.2-5** and **4.2-6**, the impact would be less than significant.	Significant	**Mitigation Measures 4.2-1**, **4.2-2**, **4.2-7**, **4.2-8**, and **4.2-9**, some deer fencing proposed in #P11-00205-ECPA may not be necessary due to alterations in vineyard layout. The plan shall be modified so that proposed vineyard blocks shall be fenced individually or in small clusters, with corridors of no less than 100 feet in width. After implementation of the mitigation measure described above, this is a less-than-significant impact.	Significant
4.2-7: Development of the Proposed Project would have the potential to affect populations of holly-leaved ceanothus (CEPU2; ~~CNPS~~ CRPR 1B.2) within the project area, which is a potentially significant impact. This could conflict with General Plan Goal CON-3, Policy CON-17, and related Policies. This is a potentially significant impact.	Potentially Significant	**4.2-7:** Prior to the approval of #P11-00205-ECPA, the plan shall be modified to include the following (any associated project features that become unnecessary as a result of the avoidance, such as proposed roads, shall also be reflected in the revised plan): Impacts to CEPU2 would be reduced to a less-than-significant level through a combination of avoidance, preservation, and replanting. Specifically, the mitigation for the removal of an estimated 24.84 acres of holly-leaf ceanothus would be accomplished through a combination of 1) avoidance of high-quality ceanothus populations within the project area; 2) preservation and conservation of CEPU2 with the highest density and greatest health; and 3) through the restoration and enhancement of CEPU2 elsewhere on the property as part of the Walt Ranch Biological Resources Management Plan (BRMP). **Avoidance** In order to maintain the health and viability of the holly-leaf ceanothus populations on the Walt Ranch property, approximately 11.94 acres of CEPU2 shall be avoided in order to protect 80 percent of the population on the property. Proposed avoidance locations are detailed in **Table 4.2-8** and shown on **Figure 4.2-8** (please refer to **Section 4.2**). The locations shown in **Figure 4.2-8** include a 25 foot buffer to protect the populations. To the maximum extent feasible, access road development shall be relocated as necessary to avoid populations of CEPU2; any acreage that is impacted in order to access blocks shall be mitigated in the final Walt Ranch BRMP. Some of the avoidance proposed in **Table 4.2-8** has been	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		targeted to preserve areas where holly-leaf ceanothus and narrow-anthered brodiaea co-occur (narrow-anthered brodiaea is discussed in **Impact 4.2-8**, below). Therefore, some of the avoidance areas proposed in **Table 4.2-8** are also recommended for avoidance in **Table 4.2-9**, below. The avoidance proposed in **Table 4.2-8**, in combination with the populations of CEPU2 already outside of clearing limits, will result in the preservation of approximately 53.35 acres (80.52 percent) of CEPU2 on the property. Therefore, the Proposed Project will impact 12.90 acres of holly-leaf ceanothus, which shall be mitigated at a 1:1 ratio as discussed below. **Preservation and Replanting** The 53.35 acres of preserved CEPU2 on the property shall be preserved in perpetuity. All acreage designated for preservation shall be identified as such in a deed restriction, open space easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection. Land placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (including, but not limited to, conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion), and should otherwise be restricted by the existing goals and policies of Napa County. The areas to be covered by the deed restriction shall be determined by a qualified botanist or biologist, and submitted to Napa County for review and approval. The deed restriction shall be entered into and recorded with the Napa County Recorder's office prior to commencement of the project in a form acceptable to County Counsel. The direct impact of 12.90 acres of holly-leaf ceanothus should be mitigated by preserving the remainder of the CEPU2 population onsite and replanting at a 1:1 ratio (12.90 acres). Mitigation replanting shall be designated in the Walt Ranch BRMP. In order to provide for habitat continuity and population viability, the replanting areas shall occur within the Milliken Reservoir watershed within areas in close proximity to existing populations of holly-leaf ceanothus. The density of mitigation	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		replanting shall be determined by the qualified biologist during preconstruction surveys and shall be similar to the density that is impacted by the project after avoidance mitigation. Additional measures, specific to CEPU2, that shall be included in the Walt Ranch BRMP include: • Transplants shall be planted in suitable areas ecologically similar to the original site as determined by a qualified biologist and approved by Napa County. • A 25-foot buffer shall be established around preserved populations and replanting sites. This buffer shall be flagged in the field by the qualified biologist and inspected by Napa County prior to project commencement. • A qualified biologist or botanist will monitor the BRMP area annually for a minimum of five years to ensure at least an 80 percent success rate for preservation and replanting of CEPU2. After implementation of **Mitigation Measure 4.2-7**, impacts to holly-leaf ceanothus are less than significant.	
4.2-8: Development of the Proposed Project would have the potential to affect populations of narrow-anthered brodiaea (BRLE; ~~CNPS~~ CRPR 1B.2) within the project area, which is a potentially significant impact. This would conflict with General Plan Goal CON-3, Policy CON-17, and related Policies. This is a potentially significant impact.	Potentially Significant	**4.2-8:** Prior to the approval of #P11-00205-ECPA, the plan shall be modified to include the following (any associated project features that become unnecessary as a result of the avoidance, such as proposed roads, shall also be reflected in the revised plan): Impacts to BRLE would be reduced to a less-than-significant level through a combination of avoidance, preservation, and replanting. Specifically, the mitigation for the removal of an estimated 26.4 acres of narrow-anthered brodiaea would be accomplished through 1) avoidance of high-quality BRLE populations within the project area; 2) preservation and conservation of narrow-anthered brodiaea with the highest density and greatest health; and 3) through the restoration and enhancement of BRLE elsewhere on the property as part of the Walt Ranch Biological Resources Management Plan (BRMP).	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		Avoidance In order to maintain the health and viability of the narrow-anthered brodiaea populations on the Walt Ranch property, approximately 17.74 acres of BRLE shall be avoided in order to protect approximately 80 percent of the population on the property. Proposed avoidance locations are detailed in **Table 4.2-9** and shown on **Figure 4.2-9** (please refer to **Section 4.2**). The locations shown in **Figure 4.2-9** include a 25 foot buffer to protect the populations. To the maximum extent feasible, access road development shall be relocated as necessary to avoid populations of BRLE; any acreage that is impacted in order to access blocks shall be mitigated in the Walt Ranch BRMP. Some of the avoidance proposed in **Table 4.2-9** has been targeted to preserve areas where hollyleaf ceanothus and narrow-anthered brodiaea co-occur. Therefore, some of the avoidance areas proposed in **Table 4.2-9** are also required for avoidance in **Table 4.2-8**, above. The avoidance proposed in **Table 4.2-9**, in combination with the populations of BRLE already outside of clearing limits, will result in the preservation of approximately 33.2 acres (79.5 percent) of BRLE on the property. Therefore, the Proposed Project will impact 8.63 acres of narrow-anthered brodiaea, which shall be mitigated at a 1:1 ratio as discussed below. **Preservation and Replanting** The 33.2 acres of preserved BRLE shall be preserved on the property in perpetuity. All acreage designated for preservation shall be identified as such in a deed restriction, open space easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection. Land placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (including, but not limited to, conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion), and should otherwise be restricted by the existing goals and policies of Napa County. The areas to be covered by the deed restriction shall be determined by a qualified botanist or biologist, and submitted to Napa County	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		for review and approval. The deed restriction shall be entered into and recorded with the Napa County Recorder's office prior to commencement of the project in a form acceptable to County Counsel. The direct impact of 8.63 acres of narrow-anthered brodiaea shall be mitigated by preserving the remainder of the BRLE population onsite and replanting at a 1:1 ratio (8.63 acres) in locations designated in the Walt Ranch BRMP. In order to provide for habitat continuity and population viability, the replanting areas shall occur within the Milliken ~~Reservoir~~ Creek watershed within areas in close proximity to existing populations of narrow-anthered brodiaea. The density of mitigation replanting shall be determined by the qualified biologist during preconstruction surveys and shall be similar to the density that is impacted by the project after avoidance mitigation. Additional measures, specific to BRLE, that shall be included in the Walt Ranch BRMP include: • Transplants shall be planted in suitable areas ecologically similar to the original site as determined by a qualified biologist and approved by Napa County. • A 25-foot buffer shall be established around preserved populations and replanting sites. This buffer shall be flagged in the field by the qualified biologist and inspected by Napa County prior to project commencement. • A qualified biologist or botanist will monitor the BRMP area annually for a minimum of five years to ensure at least an 80 percent success rate for preservation and replanting of BRLE. After implementation of **Mitigation Measure 4.2-9**, impacts to narrow-anthered brodiaea will be less than significant.	
4.2-9: Development of the Proposed Project would have the potential to affect habitat for other special status plant species on the project site, in conflict with General Plan Goal CON-3 and related Policies, and could result in conflicts with Goal CON-2 that requires	Potentially Significant	**4.2-9:** Prior to the approval of #P11-00205-ECPA, the plan shall be modified to include the following (any associated project features that become unnecessary as a result of the avoidance, such as proposed roads, shall also be reflected in the revised plan):	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
the maintenance and enhancement of existing levels of biodiversity. This is a potentially significant impact.		For all of the species discussed below, buffers of no less than 25 feet shall be established around any preserved or replanted areas. All preserved areas shall be added to the deed restriction, conservation easement, or other means of permanent protection established on the property. All mitigation plantings shall conform to the same five year annual monitoring and 80 percent success criteria standards found in the Walt Ranch BRMP. To the maximum extent feasible, access road development shall be relocated as necessary to avoid impacts to sensitive plant species. Prior to development of the Proposed Project, a botanical survey for narrow-leaved daisy shall be conducted to re-locate the identified plants on the property. Any plants that are not relocated by the qualified biologist or botanist do not require further mitigation. For any of the ~~five~~ six narrow-leaved daisies that are relocated, seeds shall be collected in the fall, between August and September, and a test transplant shall be conducted in winter. Provided that the plant survives after one year of monitoring by a qualified biologist or botanist, the Applicant may proceed with mitigation replanting for narrow-leaved daisy. If the mitigation transplant does not survive, the Applicant shall protect the three isolated populations in Block 16. Provided that mitigation is successful, the ~~three~~ one isolated population~~s~~ of narrow-leaved daisy that occurs in Block 16 may be removed for vineyard development under the Proposed Project without impacting overall population viability. The ~~two~~ five populations outside of vineyard blocks (~~one occurs~~ located north of Block 10, ~~and the other occurs~~ just east of Block 16B2, east of Block 1A, within a portion of 2A2 avoided per WPT mitigation, and just south of Block 16A2) shall be preserved. The three impacted populations shall be mitigated through replanting and seed collection in a protected and appropriate habitat elsewhere on the property, as determined by a qualified botanist. The replanting areas shall be designated in the Walt Ranch BRMP. Additional measures, specific to narrow-leaved daisy, that shall be included in the Walt Ranch BRMP include:	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		• Transplants shall be planted in suitable areas ecologically similar to the original site as determined by a qualified biologist and approved by Napa County. • A 25-foot buffer shall be established around preserved populations and replanting sites. This buffer shall be flagged in the field by the qualified biologist and inspected by Napa County prior to project commencement. • A minimum of approximately a two-foot diameter by one foot deep plug of soil should be transported intact with the plant. • Transplanting of narrow-leaved daisy shall occur between November and January. • A qualified biologist or botanist will monitor the BRMP area annually for a minimum of five years to ensure at least an 80 percent success rate for preservation and replanting of narrow-leaved daisy. All populations of Jepson's leptosiphon shall be preserved by removing portions of the following vineyard blocks from the Proposed Project: 20A, 48, 55B, and the avenue surrounding 55B. The populations shall be protected with a 50 foot buffer. These areas provide additional benefits by preserving western pond turtle upland habitat (discussed further in **Impact 4.2-10**) and Gairdner's yampah habitat. Therefore, 0.8 acres of vineyard will be required to be removed from the Proposed Project to protect Jepson's leptosiphon, which will result in 100 percent avoidance on the property. Approximately 1.54 acres of Napa bluecurls occurs in one isolated wetland near Block 16. The other isolated population is located outside of the proposed clearing limits. The Proposed Project would impact 0.3 acres (16.5 percent) of the Napa bluecurls on the property. Due to the rarity and extremely limited range of this species, Napa bluecurls shall be avoided in their entirety. Preserving the 0.3-acre population by removing this portion of Block 16 shall result in 100 percent avoidance of this species.	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		Populations of Gairdner's yampah occur throughout the property and within several proposed vineyard areas (see **Figure 4.2-3**). Not all populations on the property were mapped. Populations shall be preserved in vineyard blocks 51C; 5A1, 5A3, and 8A (will also provide for additional stream and wetland buffers, as well as brodiaea and ceanothus protection); 16A and 16C1 (will also protect Napa bluecurls); 17B (will protect specimen trees); 20A (will protect Jepson's leptosiphon); 36A, 37F, and 37G (will also protect black walnut habitat); and 2A, 34A1, 34A2, 43, 45A, and 49 (will also protect western pond turtle upland habitat). Therefore, approximately 1.10 acres of vineyard have been removed from the Proposed Project to protect Gairdner's yampah, and a total of 6.85 acres (76.1 percent) will be preserved on the property. As stated above, this plant occurs throughout the property, and mapping focused predominantly within proposed vineyard blocks; therefore, it is likely that additional populations exist outside of the clearing limits and greater than 80 percent avoidance has been achieved. Preservation of existing appropriate habitats for natural regeneration and persistence of existing perennial populations is sufficient to maintain this species on site. There are five populations of redwood lily on the property. All populations shall be avoided with a 25 foot buffer and preserved in the deed restriction or conservation easement on the property. Green monardella occurs in Blocks 16A, 16B1, and 16B2, as well as areas outside of clearing limits just northwest of Block 16A. The green monardella that overlaps with native grassland in Block 16B1, 16B2, and the avenues outside these blocks shall be avoided. Therefore, approximately 1.11 acres of vineyard has been removed from the Proposed Project to protect this species. This will result in a total of 2.20 acres (48.8 percent) of green monardella preserved on the property. Preservation of existing appropriate habitats for natural regeneration and persistence of existing perennial populations is sufficient to maintain this species on site, and replanting is not required. After implementation of **Mitigation Measure 4.2-9**, impacts to special status plant species are less than significant.	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
4.2-10: Western pond turtles were observed in Capell and Milliken Creeks and their tributaries on many occasions by biological survey personnel (WRA, 2007; AES, 2009). This species utilizes upland habitats in proximity to suitable aquatic habitats to lay eggs and take refuge from flooding or dry conditions. Suitable nesting and refuge habitat is present in the grassland and woodland habitats in proximity to occupied aquatic habitats. Development of the project would have the potential to affect western pond turtles. This is a potentially significant impact.	Potentially Significant	**4.2-10:** Prior to the approval of #P11-00205-ECPA, the plan shall be modified to include the following (any associated project features that become unnecessary as a result of the avoidance, such as proposed roads, shall also be reflected in the revised plan): Impacts to western pond turtle would be reduced to a less-than-significant level through a combination of avoidance and preservation of prime nesting and upland habitat. This is accomplished in through the stream setbacks provided in the project design and in **Mitigation Measure 4.2-4**, as well as the additional avoidance measures discussed below. **Avoidance and Preservation** In order to maintain sufficient nesting habitat for western pond turtle populations on the Walt Ranch property, approximately 4.07 acres of nesting habitat shall be avoided in Blocks 18A1, 18A2, 18A3, 18A5, 19B, 21B, 42, 45A, 45B, and 69, as well as in the vineyard avenues surrounding those blocks. These avoidance locations shall occur at the locations shown on **Figure 4.2-10**. This avoidance, in combination with other nesting habitat outside of clearing limits, will result in the preservation of approximately 20.27 acres (97.93 percent) of the western pond turtle nesting habitat on the property. Upland habitat is also important for natural species behaviors. Portions of vineyard blocks 29B2, 30A, 42, 43, 45B, 57B, and 58A shall be removed from the Proposed Project in order to provide continuous tracts of western pond turtle upland habitat in the Capell Creek watershed. These areas will also protect the sensitive Valley Oak (California Bay – Coast Live Oak – Walnut – Ash) Riparian Forest NFD habitat type. In the central portion of the property, portions of Block 18A3, 18A5, 34A2, 48, 52, and 69 will be avoided in order to provide a larger corridor of unbroken upland habitat. Block 34A2 will also protect Gairdner's yampah, while Block 48 will also protect populations of Jepson's leptosiphon. In the Milliken ~~Reservoir~~ Creek watershed, portions of blocks 1B, 1C, 2A1, 2A2, 2B1, 2B2, 8C, 9A4, and 24 will be removed. Approximately 16.9 acres of western pond turtle upland habitat has been removed from the Proposed Project.	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		The avoidance shown in **Figure 4.2-10**, in combination with the other upland habitat outside of clearing limits, will result in the preservation of 486.56 acres (95.44 percent) of western pond turtle upland habitat on the property. **Other Protective Measures** In addition to avoiding sensitive habitats as discussed above, various additional mitigation measures will ensure a less-than-significant impact to this species: • A preconstruction survey shall be conducted by a qualified biologist within two weeks prior to commencement of any groundbreaking activities within 100 feet of Capell and Milliken Creeks and their tributaries. • Prior to groundbreaking activities, all construction personnel will receive training on western pond turtle. During the training, the biologist shall designate a representative to check for presence of western pond turtle beneath all construction equipment prior to daily construction activities. The representative shall be informed as to the location that any western pond turtle be relocated should one be observed. • Construction and vineyard activities involving loud equipment should be minimized to the extent feasible from February through November within 100 feet of aquatic habitat where the turtles are found. Some habituation to noise is more likely if the noise is sustained (background) rather than in irregular bursts. • Human disturbance within potential habitat should be minimized late afternoon through early evening from May through July to avoid disturbing egg laying activities. • The use of BMPs as required in **Mitigation Measures 4.5-1**, **4.5-2**, **4.5-3**, and **4.5-4**, as well as the use of ~~and~~ Integrated Pest Management (IPM), will minimize agrichemical drift into turtle habitat. • Turtle exclusion fencing will be installed from May	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		through July around all grading and construction activities within or bordering nesting habitat to prevent impacts. From October through March, a turtle exclusion fence shall be installed around all activities within or bordering overwintering habitat to prevent impacts and the fencing shall be field verified by Napa County annually throughout the construction period. The fence shall be constructed from silt fencing to avoid turtle injury and entrapment. Implementation of **Mitigation Measure 4.2-10** would reduce the potential impacts on western pond turtle to less-than-significant levels.	
4.2-11: Development and operation of the Proposed Project would have the potential to affect special status amphibian species, including two species of frogs in the region, California red-legged frog (CRLF) and foothill yellow-legged frog (FYLF). This is a potentially significant impact.	Potentially Significant	**4.2-11:** The wetland and stream setbacks and mitigation provided in **Mitigation Measure 4.2-4** and **Mitigation Measure 4.2-10**, in combination with the overall avoidance in the project design, will reduce impacts to a less-than-significant level. In addition, the applicant shall implement the following measures to ensure that bullfrogs do not become established in the four proposed groundwater reservoirs: • Project applicant shall conduct appropriately timed surveys each year to determine if bullfrogs have become established in any of the onsite reservoirs. If any bullfrog adults, eggs, and/or tadpoles are detected at any time, they shall be managed promptly as to prevent colonization. All surveys and direct removal efforts must be made by a person knowledgeable in species identification using a method approved by CDFW. • If bullfrogs are detected, the applicant shall implement direct removal efforts until adults and/or sub-adults can no longer be detected and are believed to be gone for the season. Bullfrog management efforts shall target the bullfrog's life history stage: 1) egg mass removal, 2) larval removal, and 3) adult and juvenile frog. These bullfrog control methods remove individuals and break the reproductive cycle. Removal methods include manual take of adults and sub-adults, collecting egg masses, capturing larvae, and draining	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		ponds to strand larvae. • Removal efforts shall occur during the active/breeding season occurring (April – July) with at least three efforts done a few days apart and another two efforts separated by two weeks. Direct removal efforts should be completed with at least two people using a small boat, spotlights, and appropriate tools to capture and contain the bullfrogs. Capture and disposal shall be done in compliance with CDFW codes and regulations using appropriate gear. Bullfrog egg mass removal efforts shall occur late June through August. • Bullfrogs may be taken under the authority of a sport fishing license (California Code of Regulations, Title 14 (T-14) section 5.05(a)(28)). There is no daily bag limit, possession limit or hour restriction, but bullfrogs can only be taken by hand, hand-held dip net, hook and line, lights, spears, gigs, grabs, paddles, bow and arrow, or hook and line fishing tackle. Alternatively, California Fish and Game Code Section 5501 allows CDFW to issue a permit to destroy fish that are harmful to other wildlife. The regulations have addressed this under Section CCR T-14 226.5 Issuance of Permits to Destroy Harmful Species of Fish in Private Waters for Management Purposes. This allows the CDFW to issue free permits to destroy harmful aquatic species.~~Therefore, no additional mitigation is required.~~	
4.2-12: Development of the Proposed Project does not have the potential to affect valley elderberry longhorn beetles (VELB). There is no impact.	No Impact	**4.2-12:** No mitigation is required.	Not Applicable
4.2-13: Development of the Proposed Project would have the potential to affect migratory birds and other birds of prey, including white-tailed kite (*Elanus leucurus*) and bald eagle (*Haliaetus leucocephalus*). This is considered a potentially significant impact.	Potentially Significant	**4.2-13:** The Applicant shall implement the following measures to avoid disturbing any special status species nesting above ground. Vegetation removal conducted during the nesting period shall require a pre-construction survey for active bird nests, conducted by a qualified biologist. No known active nests shall be disturbed without a permit or other authorization from USFWS and/or CDFW. • For earth-disturbing activities occurring during the	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		breeding season (March 1 through September 1), a qualified biologist shall conduct pre-construction surveys of all potential nesting habitat for all birds within 500 feet of earthmoving activities. • If active special status bird nests are found during pre-construction surveys 1) a 500-foot no-disturbance buffer will be created around active raptor nests during the breeding season or until it is determined that all young have fledged, and 2) a 250-foot buffer zone will be created around the nests of other special status birds and all other birds that are protected by California Fish and Game Code 3503. These buffer zones are consistent with CDFW avoidance guidelines and CDFW buffers required on other similar ECPA projects; however, they may be modified in coordination with CDFW based on existing conditions at the project site. • If pre-construction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Shrubs and trees that have been determined to be unoccupied by special status birds or that are located 500 feet from active nests may be removed. • If vegetation removal activities are delayed or suspended for more than two weeks after the pre-construction survey, the areas shall be resurveyed. Implementation of **Mitigation Measure 4.2-13** would reduce the potential impacts on migratory birds and other birds of prey to less-than-significant levels.	
4.2-14: Development of the Proposed Project would have the potential to affect special status bat species. This is a potentially significant impact.	Potentially Significant	**4.2-14:** Implementation of the following mitigation measures would reduce the potential impact to a less-than-significant level. • For earth-disturbing activities occurring during the breeding season (March 1 through August 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential bat-roosting habitat for special status bats within 200 feet of earthmoving activities. Roosting habitat surveys shall focus on a) trees slated for removal that have loose bark, or holes/crevices in the	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		trunk and b) rock piles slated for removal that contain crevices. • If active special status bat roosts are found during pre-construction surveys, the biologists shall submit an avoidance plan to CDFW for review and acceptance~~will be consulted~~. A no-disturbance buffer (acceptable in size to CDFW) will be created around active bat roosts during the breeding season or until it is determined that all young have -become sufficiently volant to change roosts ~~fledged~~. The avoidance plan shall evaluate the length of time of disturbance, equipment noise, and type of habitat present at the project site. • If pre-construction surveys indicate that roosts are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees that have been determined to be unoccupied by special status bats may be removed. • If vegetation removal activities are delayed or suspended for more than two weeks after the pre-construction survey, the areas shall be resurveyed. Implementation of **Mitigation Measure 4.2-14** would reduce the potential impacts on special status bat species to less-than-significant levels.	
4.2-15: Development of the Proposed Project would have the potential to affect special status aquatic species. This is a potentially significant impact.	Potentially Significant	**4.2-15:** The wetland and stream setbacks and mitigation provided in **Mitigation Measure 4.2-4**, in combination with the overall avoidance in the project design and avoidance required in other mitigation measures in this section, will reduce impacts to a less-than-significant level. Therefore, no additional mitigation is required.	Less than Significant
4.2-16: Tree removal that occurs as part of the development of the Proposed Project could result in conflicts with Napa County Code Section 18.108.100, and the General Plan Goals CON-2 and CON-6 and Policies CON-17 and CON-24. This would be considered a potentially significant impact.	Potentially Significant	**4.2-16:** Prior to the approval of #P11-00205-ECPA, the plan shall be modified to include the following (any associated project features that become unnecessary as a result of the avoidance, such as proposed roads, shall also be reflected in the revised plan): As discussed in **Mitigation Measure 4.2-2** above, oak woodlands [Black Oak Alliance, Blue Oak Alliance, Coast Live Oak (Foothill Pine) Alliance, Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association, and Mixed Oak (Foothill Pine/Ponderosa Pine)	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		Alliance] and other sensitive woodlands [Valley Oak (California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association] will be preserved in permanent protection. This will result in a total of 524.8 acres of woodland in permanent protection. In addition, as part of the Walt Ranch Biological Resources Management Plan (BRMP) required in **Mitigation Measure 4.2-1**, the following measures will be taken to ensure a less-than-significant impact as a result of tree removal: • Implementation of **Mitigation Measure 4.2-2 ~~6-1~~** will ensure that woodlands shall ~~canopy cover should~~ be preserved at greater than a 1:1 ratio on the property. • Blocks 12 and 19A contain notable oak woodland stands that shall be avoided (**Figure 4.2-2**). • Parts of Block 37 shall be avoided to protect a very rare stand of Northern California black walnut, as shown in **Figure 4.2-7** ~~the extent of which will be verified later this season~~ (see **Mitigation Measure 4.2-6**). To the degree feasible, individual specimen trees (36 inch dbh or above) shall be avoided in the areas adjacent to block boundaries or vineyard avenues. • Seventy-four specimen trees shall be avoided as shown on **Figure 4.2-5**. These specimen trees have been chosen for preservation because they may be preserved compatibly with vineyard development due to their location on the edge of blocks or adjacent to vineyard avenues. Included in these 74 trees are tagged valley oak specimen trees numbered 28403 and 25644 that occur in Valley Oak (California Bay/Coast Live Oak/Walnut/Ash) Riparian Forest NFD Association, a biotic community that Napa County has identified as particularly rare on the project site, shall be avoided. • Thirty-four specimen trees that will be removed for vineyard development shall be mitigated by compensation at a 5:1 ratio (5 replanted seeds or saplings per every 1 specimen tree removed) of the same species, with the ultimate goal of an 80 percent success rate after the end of 5 years of monitoring. In the event it is determined that the site lacks sufficient suitable habitat acreage for replanting, the project area	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		shall be reduced to meet the avoidance criteria. Implementation of **Mitigation Measure 4.2-16** would reduce the potential impacts on specimen trees and ~~tree canopy~~woodlands to less-than-significant levels.	
4.2-17: Development of the Proposed Project would not have the potential to affect special status mosses within the project area, and therefore would not have a significant impact. No special status mosses were observed within the project site, and no impacts to these species would occur.	No Impact	**4.2-17:** The project design is sufficient; therefore no additional mitigation is required.	Not Applicable
4.3 Cultural Resources			
4.3-1: Grading activities, planting of new vineyard, and operation of the Proposed Project within the vicinity of the identified cultural, historical, and paleontological resources could negatively impact cultural resources WR-2, WR-3, WR-4, WR-5, CA-NAP-867, and CA-NP-257. This is a potentially significant impact.	Potentially Significant	**4.3-1:** The following measures will all be taken to minimize impacts to cultural resources: • WR-2, WR-3, WR-4, and CA-NAP-867 shall be avoided. All ground disturbing activities during project implementation and operation shall avoid mapped boundaries of the resource. A permanent 16-foot buffer around the perimeters (including vineyard avenues) shall be established. No grading or disturbance shall occur within these buffers. • WR-5 (rock wall) shall be avoided by all ground disturbing activities during project implementation and operation with a permanent 10-foot buffer around the perimeter (including vineyard avenues), with the exception of the three areas identified in **Figure 4.3-1** where rock walls would be opened. The openings shall be limited to 20 feet each and shall provide necessary access consistent with General Plan Policy CC-21. Aside from these three 20-foot openings, the rock wall shall not be disturbed. Prior to the approval of Erosion Control Plan P11-00205-ECPA, the applicant shall revise the plan to clearly delineate the 10-foot buffer around the perimeter of the rock wall. • Prior to construction of vineyard blocks in the vicinity of CA-NAP-257, a presence and absence test shall be conducted by a qualified archeologist to determine the	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		boundaries of the historical resource. If a proposed vineyard block will impact CA-NAP-257, the block's boundaries will be redrawn to avoid the historic resource. If no vineyard blocks will impact CA-NAP-257, the resource will be fenced off and avoided with a permanent 16-foot buffer. • The Applicant shall install and maintain protective fencing along the outside of the buffers to ensure protection during construction, project implementation, and operation. The precise locations of protective fencing shall be inspected and approved by the County prior to the commencement of any earthmoving activities and shall be maintained and remain in place until all grading, earthmoving, and vineyard development activities are completed. Implementation of this mitigation measure would eliminate the potential impacts or reduce them to less-than-significant levels. In particular, the implementation of this measure would result in avoiding the identified resources, and would establish a buffer to ensure that the resources are not disturbed during project construction and operation. There is one resource that would be disturbed, WR-5 (rock wall). The implementation of this measure, however would limit the impact to the wall to three 20-foot openings. This alteration would not materially alter the historic integrity of the remaining wall. For this reason, the implementation of **Mitigation Measure 4.3-1** would avoid significant impacts to WR-5.	
4.3-2: Planting of new vineyard has the potential to negatively impact previously unknown cultural resources within the project site. This is a potentially significant impact.	Potentially Significant	**4.3-2:** In accordance with CEQA Guidelines § 15064.5, subd. (f), should any previously unknown historical or unique archeological resources, such as, but not limited to, obsidian and chert flaked-stone tools or toolmaking debris; shellfish remains, stone milling equipment, concrete, or adobe footings, walls, filled wells or privies, deposits of metal, glass, and/or ceramic refuse be encountered during onsite construction activities, earthwork within 100 feet of these materials shall be stopped and the owner shall consult with a professional archaeologist. Once the archaeologist has had the opportunity to evaluate the significance of the find and suggest appropriate mitigation measures, as necessary, said measures shall be carried out prior to any	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		resumption of related ceased earthwork. All significant cultural resource materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards. If an unanticipated discovery is found to meet the eligibility criteria for listing on the CRHR, then the resource must either be protected in place and the project altered to preserve the resource, or data recovery excavations must be conducted to mitigate the impact of the resource. The professional archeologist shall prepare a Historic Properties Treatment Plan (HPTP) for submittal to the County for approval. The HPTP shall detail how much excavation is required and what excavation methods and other analytical tests would be required to mitigate the impact on the resource if avoidance or preservation in place is not feasible. The HPTP shall provide for reasonable efforts to be made to permit the resource to be preserved in place or left in an undisturbed state. Methods of accomplishing this may include capping or covering the resource with a layer of soil. To the extent that resource cannot feasibly be preserved in place or not left in an undisturbed state, excavation as mitigation shall be restricted to those parts of the resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archaeological resource if the treatment plan determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource. After data recovery excavations are complete, a technical report detailing the results of the excavation and analysis of results shall be prepared by the cultural resources consultant. All artifacts and documentation pertaining to the data recovery effort shall be cleaned, cataloged, analyzed, and curated at an approved repository. Implementation of this mitigation measure would reduce the impact to a less-than-significant level.	
4.3-3: Planting of new vineyard blocks could result in the discovery and disturbance of unknown human remains. This is a potentially significant impact.	Potentially Significant	**4.3-3:** If human remains are encountered, Health & Safety Code § 7050.5 and CEQA Guidelines § 15064.5, subd. (e) state that no further disturbance can occur within the vicinity of the discovery	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		until the county coroner has made a determination of origin and disposition pursuant to Pub. Resources Code § 5097.98. In the event that human remains are discovered, earthwork within 100 feet of the find shall be stopped and the provisions of the California Health and Safety Code Section 7050.5 (b) shall be followed. The construction contractor shall protect discovered human remains remaining in the ground from additional disturbance. The Napa County Coroner shall be contacted within 24 hours of the find. Upon recognizing the remains as being Native American in origin, the Coroner shall be responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours so that a Most Likely Descendant (MLD) can be identified, as required under California Pub. Resources Code § 5097.98. The NAHC has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned MLD. If the county coroner determines that the human remains are not Native American and not evidence of a crime, project personnel shall coordinate with a qualified archeologist to develop an appropriate treatment plan. This shall include contacting the next-of-kin to solicit input on subsequent disposal of the remains. If there is no next-of-kin, or recommendations by the next-of-kin are considered unacceptable by the property owner, the property owner shall work with the county coroner to reinter the remains in a location outside the project area and where they would be unlikely to be disturbed in the future. Implementation of this mitigation measure would reduce the impact to a less-than-significant level.	
4.3-4: Construction of the Proposed Project has the potential to destroy unknown, unique paleontological and geological resources. This is a potentially significant impact.	Potentially Significant	**4.3-4:** In the event that any paleontological resources are discovered during construction-related earth-moving activities, all work within 50 feet of the resources shall be halted and a qualified paleontologist shall be consulted to assess the significance of the find. If any find is determined to be significant by the qualified professional under the criteria of the SVP, then appropriate agency and project representatives and the qualified paleontologist shall meet to determine the appropriate course of action. All significant cultural or paleontological materials	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified paleontologist according to current professional standards.	
4.4 Geology and Soils			
4.4-1: Development of the Proposed Project would alter the rate of sediment erosion and yield onsite; however, the project is designed to create a decrease in sediment erosion and yield, and a less-than-significant impact to receiving waters would result.	Less than Significant	**4.4-1:** The project design is sufficient, therefore no mitigation is required.	Not Applicable
4.4-2: Development of the Proposed Project would involve earthmoving and grading activities that would alter the existing topographic and geologic conditions at the project site. The Proposed Project would be located on strata or soil that is unstable, or would potentially become unstable as a result of deep ripping and blasting that will occur as part of the development of the Proposed Project. This is a potentially significant impact.	Potentially Significant	**4.4-2:** During construction of the Proposed Project, to avoid potential slope instability impacts associated with adverse construction vibrations, blasting shall be limited to only areas of volcanic rock (Gilpin Geosciences, 2013b). No blasting shall occur in Blocks 15, 16, and 68.	Less than Significant
4.4-3: As discussed in **Section 4.4.1-4**, the development of the Proposed Project would occur on some areas prone to slope failure. This is a potentially significant impact. However, the development of load-bearing structures or housing is not a part of the Proposed Project, so it is unlikely to expose people or structures to risk of loss, injury, or death involving landsliding. Although life safety would not be a factor in project impact from landslides, the potential for activation of dormant and active slope instability would be a significant impact due to erosion and sedimentation. Therefore, mitigation measures are recommended below to reduce these impacts to less-than-significant levels.	Potentially Significant	**4.4-3:** Prior to approval of #P11-00205-ECPA, the plan shall be modified to include the following measures to avoid potential slope instability and associated sedimentation impacts, per Gilpin Geoscience's recommendations in Table 1 of **Appendix F**: 1. For Blocks 20-22, 28-30, 31B, 34, 36, 37D, 37E, 40, 45, 51B, 52, 55D, and 56-58, grading shall not exceed a depth of 24 inches in order to maintain the current level of stability on the east-facing slopes of the site, and trees on the steeper (greater than 30 percent) slopes of the site shall be left in place where possible. 2. Rock repositories shall be prepared by grubbing and excavating a keyway at the toe of the proposed storage area on areas with slopes greater than 4:1 (horizontal:vertical). The keyway shall extend two feet into firm soil or bedrock at the downslope edge of the keyway. 3. Two depressions within Blocks 31B and 37C are proposed as potential rock storage sites, and further	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		subsurface exploration and geotechnical analysis shall be performed to determine the feasibility of these two rock storage areas from a slope stability standpoint. 4. For Blocks 5B, 5C, 25, 27, 40, 45A, 45B, 46, 57, and 58, subdrains shall be constructed to reduce saturated conditions that could trigger rockfalls. 5. For Blocks 18A-18D and 28, headcut repair and rock-line channel shall be implemented to prevent further channel bank erosion and to repair active slumps. 6. For Block 20, the surface/subsurface drain shall be directed to drain to the east. 7. For Block 22A, there shall be a setback from the active landslide and the surface/subsurface drain shall be directed to drain to the northeast. 8. For Blocks 29, 45A, 45B, and 49, the slope shall be buttressed from toe to mid-slope. A grading permit shall be obtained from Napa County prior to this work. 9. For Blocks 55A-55D, 59, 60A, and 60N, drainage shall be directed away from the active landslide or scarp. 10. For Block 65, the poor road drainage shall be improved by relocating the road and directing drainage to a protected outlet. 11. Should unstable landslide deposits be encountered and/or localized slope failures occur during construction, the slope shall be restored to a stable configuration using specifications provided by the project's engineering geologist. Napa County approval and/or grading permits will be obtained as necessary. With the implementation of **Mitigation Measure 4.4-3**, potential impacts to slope stability and associated erosion and sedimentation as a result of the Proposed Project would be reduced to a less-than-significant level. Implementation of this measure would also result in consistency with General Plan Conservation Policy CON-6 and Safety Policy SAF-10 in that development, as mitigated, is limited in environmentally sensitive areas (i.e., geologically hazardous areas) and grading on slopes over 15 percent where landslides or other geologic hazards are	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		present has been reduced.	
4.5 Hazardous Materials			
4.5-1: The Proposed Project would include the storage of hazardous materials, including common vineyard-related materials. However, no pesticide storage will occur on-site and all hazardous pesticides will be brought to and from the project site as they are needed (**Appendix N**). Construction and operation of the Proposed Project could create incidental spills or container leakage, or rupture and spillage when fueling agricultural equipment, which could result in hazards to the public or environment. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose both a hazard to construction employees as well as to the environment. If substantial quantities of diesel or unleaded gasoline reach soil or drainage areas, surface and/or groundwater quality on and off the project site may be degraded. This is a potentially significant impact.	Potentially Significant	**4.5-1**: Prior to the development of the Proposed Project, the property owner shall prepare and submit a Hazardous Materials Business Plan (HMBP) to the PBES Division of Environmental Health and CERS. The HMBP will document all proposed hazardous materials to be used onsite during construction and operation. If storage amounts or the use of hazardous materials change during project operation, the project owner shall update, as necessary, the HMBP. The plan will be on file with the PBES Division of Environmental Health and with CERS. The PBES Division of Environmental Health will review the plan and may conduct inspections to ensure that the HMBP is being followed during project operations. Updates to the HMBP, if warranted, would be made through CERS. The HMBP shall be prepared in accordance with County standards and California 40 CFR, Part 355, Appendix A. Implementation of the mitigation measure above reduces this potentially significant impact to a less-than-significant level.	Less than Significant
4.5-2: The Proposed Project has the potential to release hazardous materials into the environment during construction through the use of equipment. This is a potentially significant impact.	Potentially Significant	**4.5-2:** Vineyard personnel shall follow written SOPs for filling and servicing construction equipment and vehicles. The SOPs, which are designed to reduce the potential for incidents involving hazardous materials, shall include: • Refueling shall be conducted only with approved pumps, hoses, and nozzles. • Catch-pans shall be placed under equipment to catch potential spills during servicing. • All disconnected hoses shall be placed in containers to collect residual fuel from the hose. • Vehicle engines shall be shut down during refueling. • No smoking, open flames, or welding shall be allowed in refueling or service areas. • Refueling and all construction work shall be performed outside of the stream buffer zones to prevent	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		contamination of water in the event of a leak or spill. • Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents. • A spill containment kit that is recommended by the Napa County PBES or local fire department shall be onsite and available to staff if a spill occurs. In the event that contaminated soil and/or groundwater or other hazardous materials are generated or encountered during construction, all work shall be halted in the affected area and the type and extent of the contamination shall be determined. Should a spill contaminate soil, the soil shall be put into containers and disposed of in accordance with appropriate regulations, including Title 22 of the California Code of Regulations (CCR) (66262.34(f)). If the size of the spill and containment is beyond the scope of the contractor, proper authorities shall be notified. The potential release of hazardous materials during construction of the Proposed Project is reduced to a less-than-significant level with the implementation of the mitigation measures above.	
4.5-3: The Proposed Project has the potential to release hazardous materials into the environment during the operation and maintenance of the vineyard. This is a potentially significant impact.	Potentially Significant	**4.5-3:** Chemical mixing and loading areas shall be established outside the proposed stream setbacks and wetland areas and away from any areas that could potentially drain off site or potentially affect surface and groundwater quality. When equipment is cleaned at the existing facility, only rinse water that is free of gasoline residues, pesticides and other chemicals, and waste oils shall be allowed to diffuse back into vineyard areas. Contaminated rinse water will be collected and properly disposed of off-site through methods similar to waste oil management standards provided under **Mitigation Measure 4.5-5**.	Less than Significant
4.5-4: The Proposed Project may include the use of pesticides for vineyard maintenance, including mildewcides (wettable sulfur, stylet oil, mettle, flint, pristine, rally, quintec) and herbicides (Roundup, Rely, Goaltender). The potential uncontrolled release of the pesticides would be considered a potentially significant impact. Non-compliance with hazardous materials regulations including improper pesticide use, storage, or disposal can be hazardous to human health and the	Potentially Significant	**4.5-4:** The owner shall apply for a private applicator certificate and a restricted materials permit from the Napa County Agricultural Commissioner. The owner would comply with the Napa County Agricultural Commissioner's regulations, such as renewing the private applicator certificate every three years and restricted materials permits annually, reporting pesticides use to the Agricultural Commissioner by the 10th of every month following application. All vineyard employees shall be trained annually in the proper use of pesticides.	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
environment, would result in a potentially significant impact. Pesticides will be used on-site in compliance with the Fish Friendly Farming program, California Sustainable Winegrowing Alliance, and Napa Sustainable Winegrowing Group restrictions, although no pesticides will be stored on-site (**Appendix N**).		In addition, personnel shall follow SOPs when applying pesticides to the vineyard. SOPs for pesticide use include the following: • Purchase only enough pesticide that would be used per season. • Utilize IPM techniques where feasible, such as for fungicides, the use of a permanent cover crop, beneficial insects, and minimal to no use of pesticides except when found necessary from monitoring. • Store all pesticides in their original containers. Do not remove labels on the containers. • Keep pesticides in a well-ventilated locked area. • The best way to dispose of a small amount of pesticide is to use it. If a pesticide must be disposed of, contact the Napa County Agricultural Commissioner to locate a hazardous waste facility for proper disposal. • Never pour pesticides down the sink, toilet, or stream. • Utilize proper personal protection equipment when working with pesticides. The mitigation measures above reduce potential impacts from pesticide use to a less-than-significant level.	
4.5-5: Operation of the vineyard included under the Proposed Project would generate waste oil in connection with vehicle use and maintenance. The waste oil would be stored onsite and picked up regularly by a certified waste oil recycler. Potential impacts could occur if the waste oils were to leak during storage. Improperly stored waste oil could cause significant impacts to the environment if not contained and disposed of properly. This is a potentially significant impact.	Potentially Significant	**4.5-5:** Waste oil containers should be stored in secondary containment that includes an oil-impervious bermed area or liner, retaining wall, and/or an impervious concrete floor. The waste oil containers should be covered during rain events and not be stored within the setbacks described in **Impact 4.5-3** above. Waste oil containers should be labeled "waste oil". The containers should also be labeled with the following information: accumulation start date; the hazardous properties of the waste (i.e. flammable, corrosive, reactive, toxic, etc.); and the name and address of the facility generating the waste. All waste oil containers should be transported offsite by a licensed transporter and taken to a waste oil recycling facility. This potentially significant impact is reduced to a less-than-	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		significant level with the implementation of the mitigation measure above.	
4.6: Hydrology and Water Quality			
4.6-1: Development of the Proposed Project would alter the existing drainage pattern of the project site, which is a potentially significant impact. However, after implementation of the following mitigation measure, a slight decrease in the volume and rate of runoff onsite would occur and a less-than-significant impact on flooding hazards and drainage system capacity would result.	Potentially Significant	**4.6-1:** Prior to approval of #P11-00205-ECPA, the plan shall be modified to include the following measures to avoid potential runoff increases and associated sedimentation impacts, per RiverSmith Engineering's recommendations in Appendix F of **Appendix G**: 1. For Blocks 1, 3, 17, 19-20, 24, 26, 30, 33-36, 38, 42, 43, 46, 53-63, and 65-68 install a gravel berm on the downslope edge of the turnaround avenue; 2. For Blocks 31, 40 and 60 install a small detention structure or gravel berm on downslope edge of the turnaround avenue; 3. For Block 37, install a gravel berm on the downslope edge of the turnaround avenue, or reduce the area of forest removed; 4. For Blocks 48-52, install a localized detention structure of appropriate size to reduce predicted increases in runoff to pre-project levels; 5. For Block 69, install a gravel berm on the downslope edge of the turnaround avenue or install rock checks in the drainage swales. Prior to the approval of #P11-00205-ECPA, RiverSmith Engineering shall provide specifications of the above measures to	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		the Applicant for inclusion in the ECP. Potential impacts to flooding hazard could result from increases in peak flow and volume of runoff from implementation of the Proposed Project. However, with the implementation of **Mitigation Measure 4.6-1**, potential impacts to flooding hazards and drainage system capacity would be reduced to a less-than-significant level.	
4.6-2: Development of the Proposed Project may alter the water quality on the project site which would be a significant impact; however, mitigation measures are required to reduce this impact to less-than-significant levels. ~~a~~A slight decrease in the volume and rate of runoff onsite and a decrease in the amount of erosion would result in a less-than-significant impact to sedimentation rates and water quality of receiving waters on the Milliken ~~Reservoir~~ Creek watershed side. Mitigation measures are required below to further minimize these less-than-significant impacts. Small increases in runoff on the Capell Creek watershed side will be reduced to less-than-significant levels with implementation of **Mitigation Measure 4.6-1** above. In addition, measures that are protective of water quality are provided in **Section 4.5 Hazardous Materials** to ensure that fertilizers, pesticides, and other agrichemicals do not enter waterways. **Mitigation Measure 4.6-2**, which requires that the Applicant upgrade all water crossings that are listed in **Table 3-4** for upgrade prior to their use during construction, will ensure that appropriate measures to minimize impacts to water quality are taken.	Less than Significant	**4.6-2:** There are 21 existing stream crossings, listed in **Table 3-4** and shown on **Figure 3-11** of this Draft EIR that will be upgraded to rocked water crossings under the Proposed Project. The Applicant shall not use any of these crossings to transport construction equipment prior to completion of the proposed upgrades.	Not Applicable
4.6-3: The Proposed Project would not be located in a FEMA flood zone. Development of the proposed project would not exacerbate flooding or expose people or structures to a risk of loss. This is a less-than-significant impact.	Less than Significant	**4.6-3:** With implementation of **Mitigation Measure 4.6-1**, no additional mitigation is required.	Not Applicable
4.6-4: The Proposed Project would require the use of local groundwater resources for irrigation purposes, which has the potential to alter local groundwater levels	Potentially Significant	**4.6-4:** The Applicant shall be required (at the Applicant's expense) to provide well monitoring data and analyses of the collected data from a qualified professional Geologist or a	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
and local groundwater flow directions. The effects to groundwater levels could cause drawdown in offsite wells, and if this drawdown interference were to be substantial, the existing pump in the impacted well might become less efficient; if this were to occur, the existing pump might not be able to maintain its normal operational pumping rate. This would be a significant impact. Increased groundwater pumping from the Proposed Project would not impact groundwater supplies in the project region; this is a less-than-significant impact.		Certified Hydrogeologist on a seasonal basis to Napa County PBES Department. Such data shall include, but not be limited to, static water levels, pumping water levels, instantaneous flow rates, and cumulative pumped volumes for each of the three existing onsite wells and any wells that may be developed in the future on the Walt Ranch property. These wells are each located in separate geographic areas of the project site (**Figure 4.6-2**); therefore, monitoring of these wells would help to provide data on groundwater conditions generally representative of the entire project site. In addition, the Applicant shall work with COCWD to provide time-dependent flow rate data and water quality data from the COCWD Horizontal Well. Pumping rates and volumes shall be monitored by the use of a totalizer flow dial (or similar technology) and water levels shall be monitored by the use of an automatically recording pressure transducer (or similar technology). The automatic recorder shall be set to collect data approximately every 60 minutes for the first year to provide sufficient data for the purpose of operational monitoring; the frequency between data recording by the transducer may be increased in the future. These data shall be downloaded every two to three months. This will help to provide a quantity of data that is reasonable to review, as well as account for variations in seasonal groundwater conditions. Water usage shall be minimized by use of best available control technology and best management conservation practices. In the event that changed circumstances, or significant new information, or the results of the monitoring data, provide substantial evidence that use of the onsite wells and the groundwater systems referenced in the ECP would significantly affect the groundwater basin, the Director of Environmental Management shall be authorized to require additional reasonable conditions on the Applicant, or revocation of this permit, as necessary to meet the requirements of the Napa County Groundwater Ordinance and protect public health, safety and welfare. Such additional mitigation might include shifting of groundwater production to other onsite wells for a period of time. That recommendation shall not become final unless and until the Director has provided notice and the opportunity for a hearing in compliance with County Code Section 13.15.070 (G)-(K).	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		After implementation of monitoring, this impact is considered less than significant.	
4.6-5: The Proposed Project would require the construction of irrigation pipelines to transport water onsite, the construction of which could create potentially significant impacts to water quality and stream conditions.	Potentially Significant	**4.6-5:** In order to ensure preservation of regional water quality and local stream conditions, prior to installation of irrigation infrastructure, the Irrigation Plans for the Proposed Project shall be provided to the County for review and approval and shall include the following measure: • The construction of irrigation pipeline stream crossings shall only occur within roadways or vineyard avenues. No irrigation pipelines shall cross a stream or creek outside of roadways or vineyard avenues designated in the ECP (**Appendix A**). The necessary permits by the appropriate agencies will be obtained prior to construction of proposed underground or aboveground pipelines where there will be disturbance to the bed and bank of any onsite drainages or streams.	Less than Significant
4.6-6: Development of the Proposed Project could result in conflicts with Napa County Code Section 18.108.027B. Napa County Code Section 18.108.027B requires the retention of a minimum of 60 percent of the tree canopy cover, or when vegetation consists of shrub and brush without tree canopy, a minimum of 40 percent of the shrub, brush and associated annual and perennial herbaceous vegetation within designated sensitive domestic supply watersheds. Milliken Reservoir watershed is designated as a sensitive domestic supply watershed. On the portion of the project site within the Milliken Reservoir watershed, approximately 66.5 percent of tree canopy cover and 57.0 percent of the shrub and brush would be retained after implementation of the Proposed Project. Impacts would be less than significant.	Less than Significant	**4.6-6:** The project design is sufficient, therefore no mitigation is required.	Not Applicable
4.7: Transportation and Traffic			
4.7-1: Construction of the Proposed Project would	Less than	**4.7-1:** ~~The project design is sufficient; however, to further reduce~~	Less than

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
temporarily increase traffic volumes on roadways in the area; however, the increase in traffic would not be substantial and a less-than-significant impact would result.	Significant	~~construction related transportation impacts, a~~All construction trips (both equipment and worker trips) shall be scheduled outside of the daily AM and PM peak hours.	Significant
4.7-2: Operation of the Proposed Project would increase traffic volumes on roadways in the area; however, the increase in traffic would not be substantial and a less-than-significant impact would result.	Less than Significant	**4.7-2:** ~~The project design is sufficient; however c~~Compliance with **Mitigation Measure 4.7-1** would ~~further~~ reduce operations related traffic impacts by scheduling worker trips outside of the peak AM and PM hours.	Not Applicable
4.7-3: Installation of the Proposed Project could increase potential conflicts between vehicles on area roadways given the additional vehicles that would be entering and exiting the project site. However, traffic volumes as a result of construction and operation of the Proposed Project would not increase substantially as discussed in **Impacts 4.7-1** and **4.7-2**. SR-121 in the vicinity of the project site, designated as a rural two lane highway, contains 12-foot lanes and 1 to 4 foot shoulders. Circle Oaks Drive contains two lanes totaling approximately 24 feet in width. The width of the roadways to and from the project site can accommodate a variety of vehicle types, including construction related equipment, and the available sight distance for drivers at the project site access road is not unduly restricted. This less-than-significant impact would be further reduced with the implementation of **Mitigation Measure 4.7-3**.	Less than Significant	**4.7-3:** Advance warning signs (e.g., "Intersection Ahead" and/or "Truck Crossing Ahead") shall be posted on Circle Oaks Drive and Country Club Lane consistent with Napa County sign placement standards to alert motorists of an intersection ahead with turning vehicles.	Not Applicable
4.7-4: Construction traffic and subsequent operational traffic of the Proposed Project could increase wear-and-tear of area roads; this would be a potentially significant impact.	Potentially Significant	**4.7-4:** The following measures shall be followed during construction activities: • Heavy truck construction traffic shall comply with the CVC sections related to vehicle weight and width. Any extra legal loads needed for specialized deliveries shall be subject to special permit requirements from Napa County. Project applicant shall obtain any necessary Caltrans traffic permits for movement of equipment. • Circle Oaks Drive shall be assessed by an independent third party consultant prior to the start of construction and following the completion of construction. If the third party determines that roadway deterioration, or	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		deterioration of infrastructure located underneath Circle Oaks Drive, has occurred as a result of construction traffic, the applicant shall pay to have the roadway resurfaced to restore the pavement to at least pre-construction condition, unless the resurfacing is already expected to occur within a year or sooner in conjunction with other planned or proposed roadway improvements, and shall repair the identified damage to sub-surface infrastructure.	
4.8: Noise			
4.8-1: Construction of the Proposed Project would expose persons to noise levels in excess of standards established in the General Plan or County noise ordinance, or applicable standards of other agencies. This is a significant impact. **Mitigation Measure 4.8-1** limits construction to the daytime hours when additional ambient noise is less disruptive, requires the use of mufflers and acoustical shields for all equipment, and other procedures to minimize the noise produced during construction of the Proposed Project. This reduces the impact to a less-than-significant level. Operation of the Proposed Project would not expose persons to noise levels in excess of the County General Plan or noise ordinance, and is covered under the right-to-farm ordinance; therefore noise as a result of operation of the Proposed Project is a less-than-significant impact.	Potentially Significant	**4.8-1**: The following measures shall be enacted during construction of the Proposed Project to minimize noise impacts to all nearby sensitive receptors: • Stationary equipment and staging areas shall be located as far as practical from noise-sensitive receptors. • All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and acoustical shields or shrouds, in accordance with manufacturers' recommendations. • Construction shall occur only between the hours of 7 a.m. to 7 p.m. • For construction occurring less than 150 feet from sensitive receptors, temporary sound walls should be constructed to shield residents from construction noise. No temporary sound walls are necessary for construction occurring greater than 150 feet from sensitive receptors. • Applicant shall install mufflers on any wind machines located less than 150 feet from existing residences.	Less than Significant
4.8-2: The Proposed Project could expose persons to or generate excessive groundborne vibration or groundborne noise levels. This is a significant impact.	Potentially Significant	**4.8-2:** Blasting within 775 feet of a residence exceeds Caltrans significance thresholds for vibration. Therefore, no blasting shall occur within vineyard blocks 15, 16, and 68. ~~During construction, the following measures shall be completed prior to blasting, should blasting occur within 775 feet of a residence:~~ ~~Limit blasting to weekdays only between 7 a.m. and 7 p.m.~~	Not Applicable

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		~~Notify nearby residents at least 24 hours in advance of blasting activities.~~ ~~Follow the best management practices given in the Caltrans Transportation Construction Vibration Guidance Manual (2013), including but not limited to:~~ ~~Identify potential problem areas surrounding the project site;~~ ~~Determine existing conditions before construction begins~~ ~~Inform the public about the project and potential blasting-related consequences;~~ ~~Schedule the work to reduce adverse effects;~~ ~~Design the blast to minimize vibration and air overpressure;~~ ~~Use blast signals to notify nearby residents that blasting is imminent;~~ ~~Monitor and record the vibration and air overpressure effects of the blast;~~ ~~Respond to and investigate complaints.~~	
4.8-3: The Proposed Project is not 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, or in the vicinity of a private airstrip; therefore, the Proposed Project would not expose people residing or working in the project area to excessive noise levels. This is a less-than-significant impact.	Less than Significant	**4.8-3:** The project as designed is sufficient; therefore, No mitigation is required.	Not Applicable
6.0: Other CEQA-Required Sections			
6-1: Construction of the Proposed Project would emit GHGs and would have the potential to exacerbate global climate change. Project sources of GHG emissions during construction would include the transport and delivery of construction equipment to the project site; operation of construction equipment, including equipment used for planting and irrigation system installation; worker trips, fuel use, and material transport, loss of sequestration due to removal of oak woodlands, tree removal, tillage of soil, etc. This is a potentially significant impact.	Potentially Significant	**6-1:** In order to offset the construction emissions from development of the Proposed Project, the Applicant shall place in permanent protection no less than 248 acres of woodland habitat. All acreage designated for preservation shall be identified as such in a deed restriction, open space easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection. Land placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (including, but not limited to, conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle	Less than Significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		use that increases erosion), and should otherwise be restricted by the existing goals and policies of Napa County.	
6-2: Operation of the Proposed Project would emit GHGs and would have the potential to exacerbate global climate change. Project operational sources of GHG emissions would include vehicles (produce and material transports and workers) traveling to and from the project site and water transport. The operational threshold for GHG emissions is 1,100 metric tons per year per the BAAQMD CEQA Guidelines. The project would not exceed this threshold; this is a less-than-significant impact.	Less than Significant	**6-2:** The project as designed is sufficient; therefore, no mitigation is required.	Not Applicable