

**MITIGATED NEGATIVE DECLARATION  
OF THE  
SOLANO COUNTY DEPARTMENT OF RESOURCE MANAGEMENT**

**PROJECT TITLE:** LANDS OF MORGAN GENERAL PLAN AMENDMENT, REZONE & TENTATIVE SUBDIVISION MAP (GP-18-01, Z-18-01, S-18-02)

**PROJECT DESCRIPTION AND LOCATION:** The property is located at the southwest corner of Cantelow and Gibson Canyon Road, within the unincorporated portion of Vacaville.

The project proposes to amend the General Plan land use designations to Agriculture and Rural Residential, rezone portions of the property to Rural Residential 2.5 acre minimum (RR-2.5), Rural Residential 5 acre minimum (RR-5) and Rural Residential 10 acre minimum (RR-10) and; subdivide into 19 lots. Public water connections, 1 well water, private streets and individual sewage disposal are proposed. The development is proposed in three phases.

**FINDINGS:**

The Solano County Department of Resource Management has evaluated the Initial Study which was prepared in regard to the project. The County found no potentially significant adverse environmental impacts likely to occur. The County determined that the project qualifies for a Mitigated Negative Declaration. The Initial Study of Environmental Impact, including the project description, findings and disposition, are attached.

**MITIGATION MEASURES INCORPORATED INTO PROJECT DESCRIPTION:**

**AIR QUALITY**

**Mitigation Measure AQ-1:**

- A. Prior to issuance of a grading/improvement plan permit and phased Final Map recordation, the subdivider shall require its construction contractor to prepare and implement a Dust Control and Construction Exhaust Mitigation Plan subject to the satisfaction of the Public Works Division and Yolo Solano Air Quality Management District.

**BIOLOGICAL RESOURCES**

**Mitigation Measure Bio- 1 (American Badger)**

- A. Prior to issuance of a grading/improvement plan or recordation of a phased Final Map, the subdivider, shall hire a qualified biologist to survey the areas for development for the presence of the American Badger and develop a monitoring plan to keep the badgers out of the area during construction activities involving roads, driveways, residences or accessory structures including swimming pools. The survey shall be conducted no more than 30 days prior to construction. The biologist report and monitoring plan shall be submitted to the Department of Resource Management prior to issuance of a grading permit or building permit.

### **Mitigation Measure Bio – 2 (Burrowing Owls)**

- A. Prior to issuance of grading/improvement plan and recordation of a phased Final Map, pre-construction burrowing owl surveys shall be conducted in all areas that may provide suitable nesting habitat according to the California Department of Fish and Wildlife (CDFW) (1995) guidelines, shall be implemented by the subdivider or individual lot owners, prior to construction. Pre-construction burrowing owl surveys shall be conducted in all areas that may provide suitable nesting habitat according to CDFW (1995) guidelines.
  - i. No more than 30 days before construction, a habitat survey including documentation of burrows and burrowing owls shall be conducted by a qualified wildlife biologist within 500 feet of the construction area in areas suitable for burrowing owls.
  - ii. The survey shall conform to the protocol described by the California Burrowing Owl Consortium, which includes up to four surveys on different dates if there are suitable burrows present. The CDFW shall be consulted by the subdivider prior to survey initiation to ensure the most current pre-construction survey methodologies are utilized.
  - iii. The CDFW defines impacts as disturbance within approximately 160 feet of occupied burrows during the non-breeding season of September 1 through January 31, or within approximately 250 feet during the breeding season of February 1 through August 31. Even when these buffer distances are maintained, the alteration of breeding and behavioral patterns of burrowing owls during construction activities shall be considered adverse disturbance to the owls, as determined by the subdivider.
- B. The subdivider shall avoid disturbing active burrowing owl nests and occupied nesting burrows and shall implement standard CDFW mitigation guidelines.
- C. If, as determined by the qualified wildlife biologist, construction activities will not adversely affect occupied burrows or disrupt breeding behavior, construction may proceed without any restriction or mitigation measures for burrowing owls.
- D. If, as determined by the qualified wildlife biologist, in consultation with CDFW, construction could adversely affect occupied burrows during the September 1 through January 31 non-breeding season, the subject owls may be passively relocated from the occupied burrow(s) using one-way doors, according to CDFW guidelines, using the following measures:
  - i. There shall be at least two unoccupied burrows suitable for burrowing owl within 300 feet of the occupied burrow before one-way doors are installed in the occupied burrow.
  - ii. The unoccupied burrows shall also be located at least 160 feet from construction activities and can be natural burrows or artificial burrows constructed according to current design specifications.
  - iii. If artificial burrows are created, these burrows shall be in place at least 1 week before one-way doors are installed on the currently occupied burrows.
  - iv. One-way doors must be in place for a minimum of 48 hours to ensure that owls have

left the burrow before the burrow is excavated.

- v. Mitigation for the loss of occupied habitat shall be based upon the recommendations of the qualified biologist in consultation with CDFW.

#### **Mitigation Measure Bio - 3 (Western Pond Turtle)**

- A. No more than 30 days prior to construction, a qualified biologist shall conduct surveys for western pond turtles within the creeks or ponds. If nests or active basking sites are found, then the biologist shall implement a plan to relocate or protect the species, in consultation with CDFW. The biologist shall also conduct on-site training to the construction foreman and construction workers to educate them on identifying this species of turtle and location of potential basking, nesting and/or estivation sites that may be present during construction.

#### **Mitigation measure Bio - 4 (Swainson Hawk & Preconstruction Foraging Habitat)**

- A. Prior to recordation of the phased Final Map, the subdivider shall compensate for the loss of 4.8 acres of Swainson Hawk of foraging habitat at a ratio of 1:1 (1 acre for every 1 acre removed).
- B. Mitigation may be in the form of fee-title or a conservation easement or credits, held by a non-profit land management organization, on lands containing suitable Swainson's hawk foraging habitat and as approved by the CDFW in Solano County. The purchase of Swainson's Hawk mitigation credits at a mitigation bank or conservation area located in Solano County is acceptable.

#### **Mitigation measure Bio - 5 (Avoidance of avian nests and protected avian species):**

- A. If construction activities are scheduled to occur during the breeding season (February 1-August 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential suitable nesting habitat within 0.5 miles of active construction areas, including trees, shrubs, grassland and wetland vegetation. The qualified wildlife biologist shall determine the timing of the preconstruction surveys based upon the time of year and habitats that are present. The qualified wildlife biologist shall conduct surveys no more than 30 days prior to construction.
- B. If active nests are found, maintain a no disturbance buffer zone around the active nests during the breeding season or until it is determined that the young have fledged. The no disturbance buffer zone from active Swainson Hawk nest(s) or any protected avian species shall be 0.5 miles or as may otherwise be determined by the Planning Services Division, Department of Resource Management, in consultation with a qualified biologist, United States Fish and Wildlife Service (USFWS) and CDFW as appropriate.

### **Mitigation Measure Bio – 6 (Special Status Plants)**

- A. Prior to issuance of grading/improvement plan or recordation of a phased Final Map, survey the site for special status plant species. The survey area should include staging areas, roadways (internal access and driveways), ponds and drainage corridors. A qualified biologist shall time the survey appropriately and submit a report to the Department of Resource Management. Special status plants shall be avoided and if removed or harmed, the qualified biologist shall recommend on-site mitigation measures.

### **Mitigation measure Bio- 7: (Aquatic Resource/Potential waters of the USA)**

- A. Prior to the issuance of any grading/improvement plan permit or recordation of a phased Final Map, obtain and comply with all necessary Clean Water Act 404 (United States Army Corp of Engineers), 401 (California Regional Water Quality Control Board) and California Fish and Game Section 1600 permits in advance of project construction. Submit evidence of final verification from the Army Corp of Engineers of the preliminary jurisdictional delineation to the Department of Resource Management.
- B. Avoid any impacts or loss to an aquatic resource/potential waters of the United States (seasonal wetlands or seasonal swale) by either:
  - i. Relocate Gibson Canyon Court, detention ponds, driveways, primary and accessory structures or septic systems/leachfields on the subject property, to avoid any alteration of an aquatic resource, or
  - ii. Compensate by purchasing wetland mitigation credit created for the permanent impacts related to the construction of Gibson Canyon Court, detention ponds as shown on the tentative subdivision map. The actual acreage shall be determined in consultation with the Army Corp of Engineers. The subdivider shall submit evidence in the form of a sales agreement or receipt, of the purchase, prior to issuance of a grading/improvement plan and recordation of the phased Final Map.
- C. Construction staging areas shall be located 100 feet from any jurisdictional waters of the USA.
- D. Identify all aquatic resource and the 100-foot setback from the aquatic resource on the grading & improvement plans.
- E. Prior to construction activity or ground disturbance, stake or flag the boundaries of the seasonal and non-seasonal wetlands, and tributaries, as areas to be avoided. Exclusion flagging and signs that can be read 20 feet away shall be placed 100 feet away, to indicate clearly where areas must be avoided by construction activities. This task shall be under the direct supervision of a qualified biologist with 6 years of field experience.
- F. Record a declaration on the phased Final Map that each individual lot owner shall be responsible for implementing mitigation measure Bio- 7 C, D, and E, prior to issuance of any grading/improvement plan or building permit for construction of the driveways leading to the primary or accessory residence, and/or any accessory structures.

**Mitigation measure Bio- 8 (Riparian Corridor):**

A. In order to protect the riparian corridor and the tributaries, delineate on the phased Final Map a 100-foot wide setback, measured from the centerline of the tributaries or creek. Development including any structures, sewage disposal areas, swimming pool, residences, patio or driveways, shall be prohibited within the setback.

**Mitigation Measure Bio-9 (Wildlife Migration):**

A. In order to allow wildlife migration and improve passage, record on the phased Final Map that perimeter fencing between the lots and along the drainage corridor English Creek and Gibson Canyon Creek, shall not harm wildlife or preclude passage. Solid fencing, barb wire or other sharp material are prohibited. Fencing shall be open and made of materials that do not harm wildlife.

**Mitigation Measure Bio-10 (Oaks/Riparian Vegetation)**

A. In order to protect and preserve Oak Woodlands and Heritage trees, prior to issuance of a grading permit/improvement plans or recordation of the phased Final Map, subdivider shall comply with the following:

- i. Prior to improvement plan approval for Lot 9 and 10 and recordation of Phase 3, hire a qualified and certified Arborist to prepare a tree inventory/resources report. Identify all Oak species 6" dbh or greater, on the grading/improvement plan to be retained or removed. Identify heritage trees on the plans. Consistent with General Plan policy RS. I-3, heritage trees are defined as (a) trees with a trunk diameter of 15 inches or more measured at 54 inches above natural grade, (b) any oak tree native to California with a diameter of 10 inches above natural grade, or (c) any tree or group of trees special significance in consultation with the Department of Resource Management. The Arborist shall recommend and monitor specific measures to protect Oak trees 6" dbh or greater or heritage trees from construction impacts. If Oak trees or heritage trees are not identified by the Arborist, then Mitigation Measure Bio-10 shall not apply.
- ii. Any loss of oak trees 6 inches or greater dbh shall be compensated on site subject to a mitigation and replanting plan prepared by the certified Arborist. Compensation shall be with in-kind species at ratio of recommended by the Arborist in consultation with the Department of Resource Management. The replanting shall be on-site and a landscape plan with irrigation shall be submitted to the Planning Services Division for review and approval.

## CULTURAL RESOURCES

### Mitigation Measure CR-1 (Cultural Resources)

- A. Prior to issuance of grading permit/improvement plan approval or phased Final Map recordation, a qualified archeologist shall provide training to the construction personnel and periodic construction monitoring to identify artifacts.
- B. Prior to improvement plan approval/grading permit or phased Final Map recordation for Lot 5, for any ground disturbances within 50 feet of the western portion of P-47-000167, a qualified archeologist shall conduct archeological testing and evaluation to properly assess the resource for CRHR eligibility criteria.
- C. Prior to issuance of building permit for modifications to the residence (SAS-004) at 4142 Cantelow Road/APN 0105170150), a researcher meeting the federal Secretary of the Interior's Professional Qualifications Standards in history/architectural history shall conduct a California Register of Historic Resources evaluation of the structure.
- D. In the event that presently undocumented buried archeological deposits are encountered during any Project-associated construction activity, work must cease within 50-foot radius of the discovery. A qualified archeologist must be retained to document the discovery, assess its significance, and recommend treatment. If human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the Solano County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission which will in turn appoint a Most Likely Descendent (MLD) to act as a Tribal Representative. The MLD will work with the subdivider and a qualified archeologist to determine the proper treatment of the human remains and associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via project construction design change.

## GEOLOGY/HAZARDS

### Mitigation Measure Geo-1:

- A. In order to protect property and persons from future landslides, delineate areas of debris flow or earthflow landslide identified by the Geotechnical Report prepared by KC Engineering Company, dated February 16, 2018, on the phased Final Map. Placement of structures (primary or accessory structures including swimming pools) and driveways shall not be located in the downslope of the currently mapped shallow land sliding, as recommended by the Geotechnical Report.
- B. In order to protect property and persons from the susceptibility of soil erosion and landslide susceptibility, record on the phased Final Map that grading on slopes of 25% or greater at natural grade shall be prohibited. Grading of roadway or driveway grading shall follow the natural topography. Cut and fill will require erosion control measures subject to the approval of the Public Works Division, Department of Resource Management prior to issuance of a

grading/improvement plan permit.

- C. Prior to issuance of building permits or grading permits for primary or accessory structures including swimming pool and driveways, parcel specific geotechnical recommendations shall be prepared by a Geotechnical Engineer licensed in California, and submitted to the Building Division for approval.

## STORMWATER RUN-OFF

### Mitigation Measure HYDRO-1:

- A. A storm water maintenance program for detention basins and drainage facilities shall be included in a Road Improvement Maintenance Agreement recorded on each lot within the subdivision. Responsibility for maintenance of storm water facilities shall reside with the property owner on which the storm water facility is located. Said facilities shall be periodically inspected to the satisfaction of Public Works Engineering. The subdivider shall demonstrate, to the satisfaction of Public Works Engineering, that contractual agreements have been reached with all affected parties to implement said inspection prior to the performance of any grading work associated with the subdivision.
- B. Prior to issuance of a grading/improvement plan permit and recordation of a phased Final Map, the subdivider shall develop a storm water maintenance program to the satisfaction of Solano County Public Works Engineering that shall include, at a minimum, the following requirements:
  - i. Periodic cleaning of the drainages, culverts, detention basins and related facilities.
  - ii. Periodic maintenance of the embankments, spillways and piping.
  - iii. Contingencies for anticipated and unexpected repair and/or replacement of the above as applicable.
  - iv. Annual inspections by an independent engineer of the detention basins, embankments and spillways to verify that the facilities are in sound condition. A copy of the annual inspection report shall be furnished to Public Works Engineering upon completion.
- C. Subdivider or property owner must obtain a grading permit from Solano County Public Works Engineering prior to performance of any grading work associated with the subdivision improvements or individual lot improvements,
- D. Prior to recordation of the phased Final Map, subdivider shall complete all storm water detention and discharge improvements relating to the phased development, subject to the final approval of Public Works Engineering.
- E. All watercourses where flows will be increased at final build out must have controls installed to retain sediment or restrict flows to predevelopment levels.
- F. All detention ponds must be maintained with emergency overflows that are lined with non-

erosive materials.

## **WATER SUPPLY**

### **Mitigation measure Water Supply-1:**

- A. Prior to recordation of the Final Map for Phase 2, submit updated water quantity test results to the Environmental Health Division which demonstrates that ample water for domestic purposes is available for Lot 3, pursuant to Section 26-80 of the County Code. A minimum yield of 3 gallons per minute shall be deemed acceptable for domestic use provided that a note is included on the Final Map or parcel map that at least 500 gallons of water storage capacity will be required at the time of lot development. A yield of five gallons per minute shall be deemed acceptable for residential development with no additional storage requirements for drinking water supplies; however, additional storage may be required to meet the current fire code. If the water test fails, installation of public water service and connection is required for Lot 3. The recorded map shall indicate whether Lot 3 may be served by public water or well water service.
- B. Prior to the recordation of the phased Final Map, complete all engineering and construction related to the public water system, according to the terms of agreement with the Rural North Vacaville Water District, in compliance with the rules and regulations of the Rural North Vacaville District. Submit evidence to the Department of Resource Management that the engineering plans and necessary infrastructure installation is complete to the satisfaction of the Rural North Vacaville Water District.

## **NOISE**

### **Mitigation measure Noise – 1:**

- a. Construction shall only occur during the hours of 8 a.m. to 5 p.m., Monday through Friday; and 9 a.m. to 4 p.m. on Saturdays, and no work should occur on Sundays and Federal holidays.

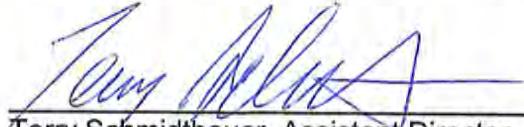
## **PUBLIC SERVICES**

### **Mitigation Measure PS-1:**

- A. Prior to phased Final Map recordation, install the fire hydrants and necessary infrastructure on the engineering improvement plans required by the Vacaville Fire Protection District. Submit evidence to the Department of Resource Management that installation of the infrastructure is completed to the satisfaction of the Vacaville Fire Protection District, prior to the phased Final Map recordation.

**PREPARATION:**

This Mitigated Negative Declaration was prepared by the Solano County Department of Resource Management. Copies may be obtained at the address listed below or at [www.solanocounty.com](http://www.solanocounty.com) under Departments, Resource Management, Documents, Departmental Reports.



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Terry Schmidbauer, Assistant Director  
Solano County Dept. of Resource Management  
675 Texas Street, Suite 5500, Fairfield, CA 94533  
(707) 784-6765

**Lands of Morgan**  
**Application No.: G-18-01, Z-18-01 & S-18-02**

**Public Draft Initial Study and  
Mitigated Negative Declaration**



**December 2019**

**Prepared By**  
**Department of Resource Management**  
**County of Solano**

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**DEPARTMENT OF RESOURCE MANAGEMENT**  
**PART II OF INITIAL STUDY OF ENVIRONMENTAL IMPACTS**

**Introduction**

The following analysis is provided by the Solano County Department of Resource Management as a review of and supplement to the applicant's completed "Part I of Initial Study". These two documents, Part I and II, comprise the Initial Study prepared in accordance with the State CEQA Guidelines, Section 15063.

<b>Project Title:</b>	LANDS OF MORGAN
<b>Application Number:</b>	GP 18-01, Z-18-01 and S-18-02
<b>Project Location:</b>	Southwest corner of Gibson Canyon and Cantelow Road
<b>Assessor Parcel No.(s):</b>	105-110-070, 100, 440, 450; 105-160-130; 105-170-150,010
<b>Project Sponsor's Name and Address:</b>	Bill Morgan 7545 Pleasant Valley Road, Vacaville, CA 95688

**General Information**

This document discusses the proposed project, the environmental setting for the proposed project, and the impacts on the environment from the proposed project and any measures incorporated which will minimize, avoid and/or provide mitigation measures for the impacts of the proposed project on the environment.

- Please review this Initial Study. You may order additional copies of this document from the Planning Services Division, Resource Management Department, County of Solano County at 675 Texas Street, Fairfield, CA, 94533.
- We welcome your comments. If you have any comments regarding the proposed project, please send your written comments to this Department by the deadline listed below.
- Submit comments via postal mail to

Planning Services Division  
Resource Management Department  
Attn: Nedzlene Ferrario, Senior Planner  
675 Texas Street, Suite 5500  
Fairfield, CA 94533

- Submit comments via fax to: (707) 784-4805
- Submit comments via email to: [nnferrario@solanocounty.com](mailto:nnferrario@solanocounty.com)
- Submit comments by the deadline of: January 27, 2020**

**Next Steps**

After comments are received from the public and any reviewing agencies, the Department may recommend that the environmental review is adequate and that a Mitigated Negative Declaration be adopted, or that the environmental review is not adequate and that further environmental review is required.

## ENVIRONMENTAL DETERMINATION

### On the basis of this initial study:

- I find the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project proponent has agreed to revise the project to avoid any significant effect. **A MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find the proposed project could have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT (EIR)** is required.
- I find the proposed project could have a significant effect on the environment, but at least one effect has been (1) adequately analyzed in a previous document pursuant to applicable legal standards, and (2) addressed by mitigation measures based on the previous analysis as described in the attached initial study. An EIR is required that analyzes only the effects that were not adequately addressed in a previous document.
- I find that although the proposed project could have a significant effect on the environment, no further environmental analysis is required because all potentially significant effects have been (1) adequately analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are included in the project, and further analysis is not required.

Date

12/19/2019

Nedzlene Ferrario

Nedzlene Ferrario  
Senior Planner

## INCORPORATION OF MITIGATION MEASURES INTO THE PROPOSED PROJECT

By signature of this document, the project proponent amends the project description to include the mitigation measures as set forth in Section 2.

Date

12/19/19

Bill Morgan

Bill Morgan  
Applicant and owner

## **1.0 ENVIRONMENTAL SETTING and PROJECT DESCRIPTION**

### **1.1 ENVIRONMENTAL SETTING:**

The property is located north of Vacaville, California, bordered by Cantelow Road to the north and Gibson Canyon Road to the east. Portions of the property are located on the northside of Cantelow adjacent to English Creek. Refer to Location Map on the next page.

The property is characterized with rolling hills and steep hillsides, approximately 184 acres is steep (more than 25% slope). The steep hillside is a part of the English Hills ridgeline which is a highly prominent feature of the community. Elevations ranging from 190 feet to 612 feet at the highest peak. Twelve (12) ephemeral streams run through the site, and two stock ponds are located on the north side. The property is primarily vegetated with grasslands and mixture of Oak Woodland, Oak Savannah and riparian forest. The Rural North Vacaville Water District water tank is located on the western portion of the site and high voltage PG&E overhead lines traverse the southeastern portion of the property. The mobile home unit on Lot 12 was evaluated as an office in 2007 but permits were never obtained. This structure is proposed to be removed or improved to current code standards. The 1,432 sq. ft residence on Lot 13 was permitted as farm labor housing (U-01-30) is occupied and proposed to remain. The existing barn on lot 11 is proposed to remain.

The remaining property, on the northside of Cantelow Road, bordered on the north by English Creek is approximately 2.9 acres (lot 19). There site is developed with a mobile home permitted for employee housing in 2004. The property is relatively flat and vegetated with riparian forest. The structures are proposed to remain.

### **1.2 PROJECT DESCRIPTION:**

The proposal consists of three parts:

- A. Amend the General Plan Land Use Designation from Specific Project area to Rural Residential 1-10 acres per dwelling unit (portions of APN 0105-170-150 & 440), totaling 64.1 acres and Agriculture, 24.43 acres; and Rural Residential 1-10 acres per dwelling unit to Agriculture (portions of 0105-170-150), totaling 18.2 acres.
- B. Tentative Subdivision Map to divide 310.5 gross acres in to 19 lots consisting of one (1) 2.9-acre parcel (Lot 19), three (3) lots ranging in size between 6.3 – 7.5 acres, four (4) lots ranging in size between 10.1 – 11.7 acres in size and eleven (11) lots ranging in size between 20 - 35.6 acres. The residences located on Lot 12, 13 and 19 are proposed to remain. Access for this subdivision is proposed off two new private roadways, named Gibson Canyon Court and Turkey Hollow Road, and private access driveways via Cantelow or Gibson Canyon Road. Individual septic systems for sewage disposal, and public water service by the Rural North Vacaville Water District is proposed except for Lot 3. Lot 3 is proposed to be served by the existing well on the property.

The subdivision is proposed in three phases:

- Phase 1 - Lots 11-13 and 19
- Phase 2 – Lots 1-5 and 14-18 and construction of Gibson Canyon Court.
- Phase 3 - Lots 6-10 and construction of Turkey Hollow Court.

- C. Rezoning a total of 67 acres from Exclusive Agriculture 20-acre minimum (A-20) to Rural Residential 2.5-acre minimum (RR 2.5) zoning district (Lot 19) on APN 0105-170-010; to RR-5 (Lots 16-18) and RR-10 (lots 1,2,13,14) on portions of APN 0105-170-150.

The applicant intends to build the infrastructure only, record the Final Map and sell the lots to individuals. Homes are to be custom built and constructed at the individual owner's pace. Phase 1 is anticipated to be completed by August 2020 and the timeline for Phase 2 and 3 is unknown.

## PROJECT LOCATION MAP



Document Path: Z:\P1001-1900\PLU\_1884\_0\Parcels\genMBC\Location02\2019.indd

### 1.2.1 ADDITIONAL DATA:

NRCS Soil Classification:	Clay (38%), Clay Loam (8%), Millshom Loam (54%)
Agricultural Preserve Status/Contract No.:	Not applicable
Non-renewal Filed (date):	Not applicable
Airport Land Use Referral Area:	Not applicable
Alquist-Priolo Special Study Zone:	Not applicable
Primary or Secondary Management Area of the Suisun Marsh:	Not applicable
Primary or Secondary Zone identified in the Delta Protection Act of 1992:	Not applicable
Other:	Not applicable

### 1.2.2 Surrounding General Plan, Zoning and Land Uses

	General Plan	Zoning	Land Use
Property	Agriculture/Specific Project Area	A-20	Residential
North	Agriculture/Rural Residential	RR 2.5/A-20	Residential
South	Rural Residential	RR 2.5/RR-5/A-20	Residential
East	Rural Residential	RR-5/A-20	Residential
West	Rural Residential	RR-2.5/A-20	Residential

### 1.3 CONSISTENCY WITH EXISTING GENERAL PLAN, ZONING, AND OTHER APPLICABLE LAND USE CONTROLS:

#### 1.3.1 General Plan

The property has multiple General Plan Land Use Designations - Specific Project Area, Agriculture and Rural Residential. The applicant proposes to amend portions of APN 0105-170-150 from Specific Project Area to Rural Residential 1-10 acres per dwelling unit and Rural Residential 1-10 acres per dwelling unit per acre to Agriculture. Areas currently designated Agriculture will remain Agriculture. Refer to the Land Use Section for the discussion.

#### 1.3.2 Zoning

The property is zoned Exclusive Agriculture 20-acre minimum (A-20) and the project proposed to establish RR-10, RR-5 and RR-2.5 zoning districts. Portions of the property will remain Exclusive Agriculture 20-acre minimums (A-20).

### 1.4 Permits and Approvals Required from Other Agencies (Responsible, Trustee and Agencies with Jurisdiction):

- A. Army Corp of Engineers
- B. CA Regional Water Quality Board
- C. California Department of Fish and Wildlife
- D. Vacaville Fire Protection District
- E. Rural North Vacaville Water District

## **1.41 Agencies that May Have Jurisdiction over the Project:**

Unknown

## **2.0 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES AND AVOIDANCE, MINIMIZATION AND/OR PROTECTION MEASURES**

This chapter discusses the potential for adverse impacts on the environment. Where the potential for adverse impacts exist, the report discusses the affected environment, the level of potential impact on the affected environment and methods to avoid, minimize or mitigate for potential impacts to the affected environment.

### **Findings of SIGNIFICANT IMPACT**

Based on the Initial Study, Part I as well as other information reviewed by the Department of Resource Management, the project does not have the potential for significant impacts to any environmental resources.

### **Findings of LESS THAN SIGNIFICANT IMPACT Due to Mitigation Measures Incorporated Into the Project**

Based on the Initial Study, Part I as well as other information reviewed by the Department of Resource Management, the following environmental resources were considered and the potential for significant impacts was reduced to less than significant due to mitigation measures incorporated into the project. A detailed discussion of the potential adverse effects on environmental resources is provided below:

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<input type="checkbox"/> Air Quality	<input type="checkbox"/> Geology & Soils
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Hydrology & Water
<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Utilities and Service System
<input type="checkbox"/> Noise	<input type="checkbox"/> Public Services

### **Findings of LESS THAN SIGNIFICANT IMPACT**

Based on the Initial Study, Part I as well as the review of the proposed project by the Department of Resource Management, the following environmental resources were considered and the potential for impact is considered to be less than significant. A detailed discussion of the potential adverse effects on environmental resources is provided below:

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Greenhouse gas emissions	<input type="checkbox"/> Transportation & Traffic
<input type="checkbox"/> Hazards and Hazardous Materials	<input type="checkbox"/> Population and Housing
	<input type="checkbox"/> Recreation

### **Findings of NO IMPACT**

Based on the Initial Study, Part I as well as the review of the proposed project by the Department of Resource Management, the following environmental resources were considered but no potential for

adverse impacts to these resources were identified. A discussion of the no impact finding on environmental resources is provided below:

- Agriculture Resources
- Land Use and Planning

- Mineral Resources

## 2.1 Aesthetics

Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Increase the amount of shading on public open space (e.g. parks, plazas, and/or school yards)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, c: The property is part of the English Hills ridgeline, a highly distinctive natural feature of the rural Vacaville community and contributes to the scenic quality of the area. The grassland hillside is vegetated with scattered oaks and clusters of oak woodlands are located on the hillside and ridgeline. The highest peak on the property is approximately 612 feet above sea level. The grassy, vegetated hillside and ridgeline creates an aesthetically pleasing backdrop when viewed from Gibson Canyon and Cantelow Road. A photo of this view is attached to this report.

Protection of the scenic qualities of the hillside and ridgeline are specified in General Plan policy RS.1-20. Subdivision Ordinance Design Guidelines (Section 26-73.1) standards which protect the scenic quality of the hillsides state that building pads should avoid atop ridgelines and knolls, and on gradients exceeding 25%, and by reducing mass and bulk. Stepped or terracing is preferred. Slope restrictions are recommended due to the landslide susceptibility. There are vast areas on the property that exceed 25% natural grade, multiple knolls on the lower ridgeline, highly visible along Gibson Canyon and Cantelow Road. Compliance with Section 26-73.1 will minimize visual impacts. **Less than significant impacts are anticipated.**

b & e: The property is not located within a Scenic Highway or has the potential to increase the amount of shading on public open space. **No impacts are anticipated.**

d: Additional residential units proposed on the property have the potential to create glare and additional nighttime lighting. Compliance with Zoning Regulations 28.70.10 (B)(1)(c) requires prevention of glint or glare beyond the property line will reduce the impacts to **less than significant**.

## 2.2 Agricultural Resources

Checklist Items: Would the project

		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a-c: According to the Department of Farmland Mapping and Monitoring Program, the property is designated Grazing Land. The project will not convert lands of Prime, Statewide Importance or Unique classification. In addition, no conflict with Williamson Act Contract as the property is not encumbered by a Williamson Act Contract. **No impacts are anticipated.**

## 2.3 Air Quality

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a, c-e: The project would generate emissions during construction and normal residential use. However, the proposed residential development does not have the potential to violate ambient air quality standards. The proposed residential subdivision is consistent with the densities assumed in current zoning and the additional household trips generated would not substantially increase criteria pollutants. The project is not anticipated to expose sensitive receptors to substantial pollutants or create objectionable odors. **Less than significant impacts are anticipated.**

b. However, short term air quality impacts due to construction of the new roadways and infrastructure have the potential to increase fugitive dust which can vary depending on the wind conditions, and local weather conditions. Control measures such as watering, stockpile cover, reducing wind speed with windbreaks or chemical stabilization are common methods to mitigate dust. Construction equipment exhaust which are sources of NOx, ROG and PM10 emissions can be mitigated by strategies such as unnecessary vehicle idling, utilizing cleaner repower fleet and newer engines by the construction contractor.

In order to reduce air quality impacts to less than significant level, implement the following mitigation measure:

### Mitigation Measure AQ-1:

- Prior to issuance of a grading/improvement plan permit and phased Final Map recordation, the subdivider shall require its construction contractor to prepare and implement a Dust Control and Construction Exhaust Mitigation Plan subject to the satisfaction of the Public Works Division and Yolo Solano Air Quality Management District.

## 2.4 Biological Resources

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any aquatic, wetland, or riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act including, but not limited to, marsh, vernal pool, coastal, etc., through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A Biological Resource Assessment prepared by LSA dated February 2018 was submitted for review. The Report included preliminary wetland delineation, and evaluation of existing and potential flora and fauna species. A copy of the report is attached.

The following impacts and mitigation measures are recommended according to the presence and potential presence of species identified in the Biological Assessment Report.

### American Badger:

The Biological Assessment identified the potential for the presence of the American Badger due to presence of sandy soils which consists about 43% of the property. The report recommends that areas proposed for development be surveyed prior to construction.

### **Mitigation Measure Bio- 1 (American Badger)**

- A. Prior to issuance of a grading/improvement plan or recordation of a phased Final Map, the subdivider, shall hire a qualified biologist to survey the areas for development for the presence of the American Badger and develop a monitoring plan to keep the badgers out of the area during construction activities involving roads, driveways, residences or accessory structures including swimming pools. The survey shall be conducted no more than 30 days prior to construction. The biologist report and monitoring plan shall be submitted to the Department of Resource Management prior to issuance of a grading permit or building permit.

### **Burrowing Owls:**

The Biological Assessment Report states that the site has California ground squirrels' burrows in multiple locations which could provide suitable nesting burrows for burrowing owl. The following mitigation measure is recommended:

### **Mitigation Measure Bio – 2 (Burrowing Owls)**

- A. Prior to issuance of grading/improvement plan and recordation of a phased Final Map, pre-construction burrowing owl surveys shall be conducted in all areas that may provide suitable nesting habitat according to CDFW (1995) guidelines, shall be implemented by the subdivider or individual lot owners, prior to construction. Pre-construction burrowing owl surveys shall be conducted in all areas that may provide suitable nesting habitat according to CDFW (1995) guidelines.
  - i. No more than 30 days before construction, a habitat survey including documentation of burrows and burrowing owls shall be conducted by a qualified wildlife biologist within 500 feet of the construction area in areas suitable for burrowing owls.
  - ii. The survey shall conform to the protocol described by the California Burrowing Owl Consortium, which includes up to four surveys on different dates if there are suitable burrows present. The CDFW shall be consulted by the subdivider prior to survey initiation to ensure the most current pre-construction survey methodologies are utilized.
  - iii. The CDFW defines impacts as disturbance within approximately 160 feet of occupied burrows during the non-breeding season of September 1 through January 31, or within approximately 250 feet during the breeding season of February 1 through August 31. Even when these buffer distances are maintained, the alteration of breeding and behavioral patterns of burrowing owls during construction activities shall be considered adverse disturbance to the owls, as determined by the subdivider.
- B. The subdivider shall avoid disturbing active burrowing owl nests and occupied nesting burrows and shall implement standard CDFW mitigation guidelines.
- C. If, as determined by the qualified wildlife biologist, construction activities will not adversely affect occupied burrows or disrupt breeding behavior, construction may proceed without any restriction or mitigation measures for burrowing owls.
- D. If, as determined by the qualified wildlife biologist, in consultation with CDFW, construction could adversely affect occupied burrows during the September 1 through January 31 non-breeding season, the subject owls may be passively relocated from the occupied burrow(s)

using one-way doors, according to CDFW guidelines, using the following measures:

- i. There shall be at least two unoccupied burrows suitable for burrowing owl within 300 feet of the occupied burrow before one-way doors are installed in the occupied burrow.
- ii. The unoccupied burrows shall also be located at least 160 feet from construction activities and can be natural burrows or artificial burrows constructed according to current design specifications.
- iii. If artificial burrows are created, these burrows shall be in place at least 1 week before one-way doors are installed on the currently occupied burrows.
- iv. One-way doors must be in place for a minimum of 48 hours to ensure that owls have left the burrow before the burrow is excavated.
- v. Mitigation for the loss of occupied habitat, shall be based upon the recommendations of the qualified biologist in consultation with CDFW.

**Western Pond Turtle:**

The ponds and creeks provide suitable habitat for western pond turtle aquatic habitat while the adjacent grasslands provide suitable habitat for breeding. While western pond turtles were not observed by the biologist, the following mitigation measure is recommended:

**Mitigation Measure Bio - 3 (Western Pond Turtle)**

- A. No more than 30 days prior to construction, a qualified biologist shall conduct surveys for western pond turtles within the creeks or ponds. If nests or active basking sites are found, then the biologist shall implement a plan to relocate or protect the species, in consultation with CDFW. The biologist shall also conduct on-site training to the construction foreman and construction workers to educate them on identifying this species of turtle and location of potential basking, nesting and/or estivation sites that may be present during construction.

**Swainson Hawk Foraging Habitat:**

According to the Biological Assessment report, the presence of rodents, trees and ground squirrels, and proximity to reported nests nearby indicates that the property provides foraging habitat for raptors and Swainson Hawk. The proposed homesites, roadways and detention ponds are considered unsuitable for foraging habitat and the loss shall be mitigated. The total acreage of potential loss is 4.8 acres. The following mitigation is recommended to minimize impacts to a less than significant level:

**Mitigation measure Bio - 4 (Swainson Hawk & Preconstruction Foraging Habitat)**

- A. Prior to recordation of the phased Final Map, the subdivider shall compensate for the loss of 4.8 acres of Swainson Hawk of foraging habitat at a ratio of 1:1 (1 acre for every 1 acre removed).
- B. Mitigation may be in the form of fee-title or a conservation easement or credits, held by a non-profit land management organization, on lands containing suitable Swainson's hawk foraging habitat and as approved by the CDFW in Solano County. The purchase of Swainson's Hawk mitigation credits at a mitigation bank or conservation area located in Solano County is acceptable.

The presence of mature trees indicates the potential for avian nests and other protected species. The following mitigation measure shall apply to the subdivider and any individual lot owner seeking construction permits:

**Mitigation measure Bio - 5 (Avoidance of avian nests and protected avian species):**

- A. If construction activities are scheduled to occur during the breeding season (February 1-August 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential suitable nesting habitat within 0.5 miles of active construction areas, including trees, shrubs, grassland and wetland vegetation. The qualified wildlife biologist shall determine the timing of the preconstruction surveys based upon the time of year and habitats that are present. The qualified wildlife biologist shall conduct surveys no more than 30 days prior to construction.
- B. If active nests are found, maintain a no disturbance buffer zone around the active nests during the breeding season or until it is determined that the young have fledged. The no disturbance buffer zone from active Swainson Hawk nest(s) or any protected avian specie shall be 0.5 miles or as may otherwise be determined by the Planning Services Division, Department of Resource Management, in consultation with a qualified biologist, USFWS and CDFW as appropriate.

**Plants**

According to the report, no special status species plants were identified during the reconnaissance survey; however, timing of the survey was late for most species. Therefore, the following is recommended:

**Mitigation Measure Bio – 6 (Special Status Plants)**

- A. Prior to issuance of grading/improvement plan or recordation of a phased Final Map, survey the site for special status plant species. The survey area should include staging areas, roadways (internal access and driveways), ponds and drainage corridors. A qualified biologist shall time the survey appropriately and submit a report to the Department of Resource Management. Special status plants shall be avoided and if removed or harmed, the qualified biologist shall recommend on-site mitigation measures.

**(b and c) Potential for jurisdictional Waters of the USA/Aquatic Resource.**

The Biological Assessment identified 0.94 acres of tributaries, 2.1 acres of impoundments/ponds and 2.60 acres of seasonal wetland or swale, totaling 5.70 acres of jurisdictional area. The potential jurisdictional features are shown on Figure 5 of the Biological Assessment Report. Construction of roadways, driveways, residences and accessory structures due to grading and trenching could impact the sensitive resource areas to significant level.

Construction of Gibson Canyon Court as proposed will cause permanent impacts to the aquatic resource (generally in proximity to lot 1, 2, 13-15), and the loss of aquatic resources are potentially significant. Approximate area of impact is estimated to be approximately 0.06 acres; however, the actual area of impact should be verified with the US Army Corp of Engineers. Relocation of the proposed road could avoid impacts. Alternatively, compensation at 1:1 ratio may minimize the impacts. Implementation of the Bio-7 is recommended to minimize impacts to aquatic resources to a less than significant level.

**Mitigation measure Bio- 7: (Aquatic Resource/Potential waters of the USA)**

- A. Prior to the issuance of any grading/improvement plan permit or recordation of a phased Final Map, obtain and comply with all necessary Clean Water Act 404 (USACE), 401 (RWCB) and California Fish and Game Section 1600 permits in advance of project construction. Submit evidence of final verification from the Army Corp of Engineers of the preliminary jurisdictional delineation to the Department of Resource Management.
- B. Avoid any impacts or loss to an aquatic resource/potential waters of the United States (seasonal wetlands or seasonal swale) by either:
  - i. Relocate Gibson Canyon Court, detention ponds, driveways, primary and accessory structures or septic systems/leachfields on the subject property, to avoid any alteration of an aquatic resource, or
  - ii. Compensate by purchasing wetland mitigation credit created for the permanent impacts related to the construction of Gibson Canyon Court, detention ponds as shown on the tentative subdivision map. The actual acreage shall be determined in consultation with the Army Corp of Engineers. The subdivider shall submit evidence in the form of a sales agreement or receipt, of the purchase, prior to issuance of a grading/improvement plan and recordation of the phased Final Map.
- C. Construction staging areas shall be located 100 feet from any jurisdictional waters of the USA.
- D. Identify all aquatic resource and the 100-foot setback from the aquatic resource on the grading & improvement plans.
- E. Prior to construction activity or ground disturbance, stake or flag the boundaries of the seasonal and non-seasonal wetlands, and tributaries, as areas to be avoided. Exclusion flagging and signs that can be read 20 feet away shall be placed 100 feet away, to indicate clearly where areas must be avoided by construction activities. This task shall be under the direct supervision of a qualified biologist with 6 years of field experience.
- F. Record a declaration on the phased Final Map that each individual lot owner shall be responsible for implementing mitigation measure Bio- 7 C, D, and E, prior to issuance of any grading/improvement plan or building permit for construction of the driveways leading to the primary or accessory residence, and/or any accessory structures.

#### **Mitigation measure Bio- 8 (Riparian Corridor):**

- A. In order to protect the riparian corridor and the tributaries, delineate on the phased Final Map a 100-foot wide setback, measured from the centerline of the tributaries or creek. Development including any structures, sewage disposal areas, swimming pool, residences, patio or driveways, shall be prohibited within the setback.

#### **d: Wildlife movement**

Due to the presence of two major creek corridors, and the relatively large size of the project, makes the property suitable for migration habitat for species moving along existing migration corridors. These drainages are used by deer, coyote, raccoon and turkey; have been observed at the site. Subdivision of the property could impact the movement of these species and be reduced by additional buildings, pets and general disturbance. Solid fencing or barb wire would preclude or harm wildlife movement. In order to mitigate to a less than significant level, compliance with Bio-7 would allow

space and movement along the drainage corridor and the following mitigation measure is recommended along the perimeter of the lots:

**Mitigation Measure Bio-9:**

- A. In order to allow wildlife migration and improve passage, record on the phased Final Map that perimeter fencing between the lots and along the drainage corridor English Creek and Gibson Canyon Creek, shall not harm wildlife or preclude passage. Solid fencing, barb wire or other sharp material are prohibited. Fencing shall be open and made of materials that do not harm wildlife.

**e: Trees**

General Plan policy RS. P-6 states that the County shall protect Oak Woodlands and Heritage Trees and encourage the planting of native trees species in new development and along road right of way. The Biological Assessment Report identifies locations of Oak Woodlands, Oak Savannah and Riparian Forest on the property. The potential impact to Oak Woodlands and Savannah appears to be in the vicinity of Lot 9 and 10 due to potential ground disturbances due to the proposed construction of a driveway and water service lines for Lot 10. The Subdivision Ordinance requires that all oak species 6 inches or more at dbh, shall be identified on a tentative map. An Oak Woodland and Heritage Tree ordinance has yet to be adopted; however, implementation of the General Plan policies is recommended to mitigate to less than significant level.

**Mitigation Measure Bio-10 (Oaks/Riparian Vegetation)**

- A. In order to protect and preserve Oak Woodlands and Heritage trees, prior to issuance of a grading permit/improvement plans or recordation of the phased Final Map, subdivider shall comply with the following:
  - i. Prior to improvement plan approval for Lot 9 and 10 and recordation of Phase 3, hire a qualified and certified Arborist to prepare a tree inventory/resources report. Identify all Oak species 6"dbh or greater, on the grading/improvement plan to be retained or removed. Identify heritage trees on the plans. Consistent with General Plan policy RS. I-3, heritage trees are defined as (a) trees with a trunk diameter of 15 inches or more measured at 54 inches above natural grade, (b) any oak tree native to California with a diameter of 10 inches above natural grade, or (c) any tree or group of trees special significance in consultation with the Department of Resource Management. The Arborist shall recommend and monitor specific measures to protect Oak trees 6" dbh or greater or heritage trees from construction impacts. If Oak trees or heritage trees are not identified by the Arborist, then Mitigation Measure Bio-10 shall not apply.
  - ii. Any loss of oak trees 6 inches or greater dbh shall be compensated on site subject to a mitigation and replanting plan prepared by the certified Arborist. Compensation shall be with in-kind species at ratio of recommended by the Arborist in consultation with the Department of Resource Management. The replanting shall be on-site and a landscape plan with irrigation shall be submitted to the Planning Services Division for review and approval.

f: The County has not adopted a Habitat Conservation Plan; therefore, the project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## 2.5 Cultural Resources

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a-d: The applicant submitted a Cultural Resources Inventory Report prepared by Solano Archeological Services. Several resources were identified on site; however, recommendations were specific to the residence on Lot 13 (4142 Cantelow Road) and P48-00167 site, located in lot 5, is potentially eligible for California Register of Historic Resources (CRHR) listing. The Cultural Resource Report made the following recommendations for the specific resources:

### Mitigation Measure CR-1 (Cultural Resources)

- A. Prior to issuance of grading permit/improvement plan approval or phased Final Map recordation, a qualified archeologist shall provide training to the construction personnel and periodic construction monitoring to identify artifacts.
- B. Prior to improvement plan approval/grading permit or phased Final Map recordation for Lot 5, for any ground disturbances within 50 feet of the western portion of P-47-000167, a qualified archeologist shall conduct archeological testing and evaluation to properly assess the resource for CRHR eligibility criteria.
- C. Prior to issuance of building permit for modifications to the residence (SAS-004) at 4142 Cantelow Road/APN 0105170150), a researcher meeting the federal Secretary of the Interior's Professional Qualifications Standards in history/architectural history shall conduct a CRHR evaluation of the structure.
- D. In the event that presently undocumented buried archeological deposits are encountered during any Project-associated construction activity, work must cease within 50-foot radius of the discovery. A qualified archeologist must be retained to document the discovery, assess its significance, and recommend treatment. If human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the Solano County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission which will in turn appoint a Most Likely Descendent (MLD) to act as a Tribal Representative. The MLD will work with the subdivider and a qualified archeologist to determine the proper treatment

of the human remains and associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via project construction design change.

The Native American Heritage Commission was contacted in a timely manner and appropriate Tribes were informed of the project; however, none of the Tribes requested consultation.

## 2.6 Geology and Soils

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.				
1) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, differential settlement, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a-d: The property is not located within the Alquist-Priolo Earthquake Fault Zone or identified with Liquefaction potential. However, is identified as General and Most Susceptible to Land sliding (Figure HS – 8 of the Public Health and Safety Chapter, General Plan). A geotechnical report was submitted and states that the property has the potential to be unstable and is susceptible to expansive soils, presence of debris-flow and earthflow slides are confirmed (Figure 2 of the Geotechnical Report) and the hillside areas are susceptible to land sliding. Placement of structures shall avoid the downslope of the areas identified as debris-flow and site-specific geotechnical evaluation for the proposed home sites or any additional structures shall be required prior to issuance of a building permit, as recommended by the geotechnical report.

Development on this property has the potential to cause significant impacts due to the steep slopes, and susceptibility to erosion and land sliding. In order to protect the integrity of the hillside and the English Hills Ridgeline, development (dwellings, driveways, accessory structures including swimming pools) shall prohibited on natural grades of 25% or greater. Implementation of the following mitigation measure shall preclude siting homes or structures on vulnerable areas of the property.

**Mitigation Measure Geo-1:**

- A. In order to protect property and persons from future landslides, delineate areas of debris flow or earthflow landslide identified by the Geotechnical Report prepared by KC Engineering Company, dated February 16, 2018, on the phased Final Map. Placement of structures (primary or accessory structures including swimming pools) and driveways shall not be located in the downslope of the currently mapped shallow land sliding, as recommended by the Geotechnical Report.
- B. In order to protect property and persons from the susceptibility of soil erosion and landslide susceptibility, record on the phased Final Map that grading on slopes of 25% or greater at natural grade shall be prohibited. Grading of roadway or driveway grading shall follow the natural topography. Cut and fill will require erosion control measures subject to the approval of the Public Works Division, Department of Resource Management prior to issuance of a grading/improvement plan permit.
- C. Prior to issuance of building permits or grading permits for primary or accessory structures including swimming pool, and driveways, parcel specific geotechnical recommendations shall be prepared by a Geotechnical Engineer licensed in California, and submitted to the Building Division for approval.
- e: Site and Soil evaluation reports were submitted for the undeveloped lots and prior site and soil evaluations were prepared for the developed lots. The Environmental Health Division is satisfied that alternative septic systems will be required on the undeveloped lots. Compliance with Chapter 6.4 Sewage Standards of the County Code will reduce impacts to a less than significant impacts are anticipated.

## 2.7 Greenhouse Gas Emissions

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a-b: Vehicle emissions are the main source of greenhouse gases in residential development. However, as discussed in the Traffic Section of the Initial Study, the trip generation for 16 new households is not significant, therefore, the additional trips for this project is not expected to significantly increase vehicle emissions or greenhouse gas emissions. The project does not conflict with County's Climate Action Plan. **Less than significant impacts are anticipated.**

## 2.8 Hazards and Hazardous Materials

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a – g: The proposed project is a residential development and will not create the potential be a significant hazard to the transport or disposal of hazardous materials and conditions involving release of hazardous materials. The site is not located within ¼ mile of an existing or proposed school and not located within a proximity of an airstrip. **No impacts are anticipated.**

h: The property is located in a State Responsibility Area and designated as Moderate Severity Fire Zone. Nevertheless, additional housing has the potential to increase the risk of loss to people or structure with regard to fires. The subdivider shall be responsible for installing roads, accessible by the Vacaville Fire Protection District, fire hydrants and other infrastructure as required by the Vacaville

Fire Protection District prior to recordation of the Final Map and sale of the lots. As the lots are sold and built, each homeowner or builder shall be responsible for compliance with driveway width and paving standards and preventative measures which include maintaining a 100-foot wide defensible space around the residence. Compliance with the Vacaville Fire Protection District rules and regulations will minimize risk to a **less than significant level**.

**Powerlines:**

There are 230 kV overhead PG&E powerlines contained within a 150 wide easement located in the proximity of proposed Lot 3-5, 17 and 18 adjacent to Gibson Canyon Road. PG&E review and comment regarding the project has not been received.

Concerns regarding electromagnetic frequency (EMF) and possible health effects adjacent to residential development are usually a topic of concern. EMF is an invisible force field that comes from electric voltage and current, known as magnetic fields. Electromagnetic fields occur where a flow of energy is present.

The California Public Utilities Commission (CPUC) and the California Department of Health Services (DHS) have not concluded that exposure to magnetic fields from utility electric facilities poses health risks. There are no health-related standards for long term exposure to EMF because there are no reported adverse health effects.

The proposed building pads are located 100 feet or more from the edge of the easement. Due to the large lot sizes, more than adequate buildable area is located on the property should a buyer choose to build further away from the existing powerlines in order to reduce risk of exposure. Adverse impacts are not anticipated.

## 2.9 Hydrology and Water

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

### **Water Quality and Storm Water Run-off:**

a: Water quality is regulated by both state and federal agencies under the authority of the Clean Water Act (CWA). Projects that have the potential to degrade water quality are subject to the regulations of those agencies. Operational activities may involve common urban pollutants such as surface litter, oil, gasoline, grease, paint, fertilizers, pesticides, and herbicides. Construction activities involving soil disturbances such as excavation, demolition, stockpiling, and grading activities could result in increased erosion and sedimentation to surface waters, and could produce contaminated storm water runoff, a major contribution to the degradation of water quality. These activities could result in the discharge of pollutants into the surface water resources that could degrade water quality.

Site development and grading activities will be required to implement Best Management Practices (BMP's) to address construction related surface runoff and vehicle and construction equipment clean out areas. With an approved grading/drainage and erosion control plan utilizing the latest BMP technologies and compliance with the recommended riparian corridor mitigation measures, impacts to on-site and off-site water quality should be reduced to a less than significant level. **Less than significant impacts are anticipated.**

c – f: A hydrology report and detention basin plan were prepared in June 2019 by Foulk Civil Engineering, Inc. and reviewed by the Department of Resource Management (attached to this report). The report concludes that the storm run-off quantity difference in the pre-development and post-development condition without mitigation would result in a runoff increase of approximately 2.3-2.6%. The increased runoff will be mitigated with on-site detention basins and drainage facilities. The total impervious surface for the project will be approximately 4.8 acres, including the common roads, private driveways, houses and hardscape. The run-off flow increases from 0.350 (existing) to 0.359 (developed) will be controlled so it does not exceed the pre-developed conditions following the construction of roads, houses and hardscape. There is sufficient capacity in each pond to mitigate the increased run-off due to construction of impervious surfaces for the development. The storm water will then be released with a flow rate equivalent to or less than the flow rate the site generates in its present undeveloped condition. The Division of Public Works recommends that further storm water improvements, which mitigate increases in storm water runoff, be evaluated for each lot prior to any new building development, and that any proposed improvements shall be included in all building and grading permit applications.

The following mitigation measures will ensure that the development will result in a less than significant impact:

### **Mitigation Measure HYDRO-1:**

- A. A storm water maintenance program for detention basins and drainage facilities shall be included in a Road Improvement Maintenance Agreement recorded on each lot within the subdivision. Responsibility for maintenance of storm water facilities shall reside with the property owner on which the storm water facility is located. Said facilities shall be periodically inspected to the satisfaction of Public Works Engineering. The subdivider shall demonstrate, to the satisfaction of Public Works Engineering, that contractual agreements have been reached with all affected parties to implement said inspection prior to the performance of any grading work associated with the subdivision.
- B. Prior to issuance of a grading/improvement plan permit and recordation of a phased Final Map, the subdivider shall develop a storm water maintenance program to the satisfaction of Solano County Public Works Engineering that shall include, at a minimum, the following requirements:

- i. Periodic cleaning of the drainages, culverts, detention basins and related facilities.
- ii. Periodic maintenance of the embankments, spillways and piping.
- iii. Contingencies for anticipated and unexpected repair and/or replacement of the above as applicable.
- iv. Annual inspections by an independent engineer of the detention basins, embankments and spillways to verify that the facilities are in sound condition. A copy of the annual inspection report shall be furnished to Public Works Engineering upon completion.

C. Subdivider or property owner must obtain a grading permit from Solano County Public Works Engineering prior to performance of any grading work associated with the subdivision improvements or individual lot improvements,

D. Prior to recordation of the phased Final Map, subdivider shall complete all storm water detention and discharge improvements relating to the phased development, subject to the final approval of Public Works Engineering.

E. All watercourses where flows will be increased at final build out must have controls installed to retain sediment or restrict flows to predevelopment levels.

F. All detention ponds must be maintained with emergency overflows that are lined with non-erosive materials.

## **Water Supply**

b. According to the Environmental Health Division, the property is located within a groundwater scarce area. The entire property is designated as an "A" zone for water bearing rocks in the San Francisco Bay Area by D.A. Webster 1972 - US Department of Interior of Geological Survey. The "A" water zone has the lowest probability of success when attempting to develop a domestic drinking water well with a minimum sustained yield of 3 gallons per minute, when compared to water bearing rock zones with higher probability such as "B, C and D".

The Subdivision Ordinance allows well water to serve as the water supply for lots 5 acres or more; however, the low probability of success raises the risk of water availability and concern for domestic use feasibility for project approval. The applicant has proposed public water service connections by the Rural North Vacaville Water District for 18 lots and well water service for Lot 3 due to an existing well located on-site, permitted in 2004 for residential use (W-04-69). The proposed public water system plan is attached.

Public water service connection will ensure adequate water supply for the project in a groundwater scarce area. The Rural North Vacaville Water District has issued a Will Serve Letter for the project. The property owner has 1 water right, purchased 2 water rights and reserved 16 water rights from the District through an "Option Agreement, totaling 19 water rights. The District letter is attached. Infrastructure installation for the public water system is required prior to the phased Final Map recordation and prior to the sale of each lot. The Option Agreement expires August 14, 2020 and Rural North Vacaville Water District Board approval is required to extend the agreement if the subdivider is unable to purchase 16 water rights before expiration.

With regard to Lot 3 and use of well water, updated pump and yield tests subject to Section 26-80 of the County Code is required prior to Final Map recordation. However, if the pump and yield

tests fail, then Lot 3 shall be serviced by public water. The Final Map shall indicate the type water supply service for Lot 3. The applicant has adequate water rights reserved with the District and infrastructure installation will be required prior to recording Phase 2.

Individual well water usage for 18 additional lots in a groundwater scarce area has the potential to cause a significant impact; therefore, the following mitigation measure is recommended to minimize impacts to a **less than significant level**:

**Mitigation measure WS-1:**

- A. Prior to recordation of the Final Map for Phase 2, submit updated water quantity test results to the Environmental Health Division which demonstrates that ample water for domestic purposes is available for Lot 3, pursuant to Section 26-80 of the County Code. A minimum yield of 3 gallons per minute shall be deemed acceptable for domestic use provided that a note is included on the Final Map or parcel map that at least 500 gallons of water storage capacity will be required at the time of lot development. A yield of five gallons per minute shall be deemed acceptable for residential development with no additional storage requirements for drinking water supplies; however, additional storage may be required to meet the current fire code. If the water test fails, installation of public water service and connection is required for Lot 3. The recorded map shall indicate whether Lot 3 may be served by public water or well water service.
- B. Prior to the recordation of the phased Final Map, complete all engineering and construction related to the public water system, according to the terms of agreement with the Rural North Vacaville Water District, in compliance with the rules and regulations of the Rural North Vacaville District. Submit evidence to the Department of Resource Management that the engineering plans and necessary infrastructure installation is complete to the satisfaction of the Rural North Vacaville Water District.

g – h: According to FEMA flood maps, the project site is not located within the Federal Emergency Management Agency's (FEMA) Flood Zone A (100-year flood zone). The site lies within FEMA Flood Zone X according to Firm Panels 06095C 0161F and C0695C 0150E. Zone X is defined as an area of minimal flood hazard. Therefore, there would be **no impact** and no further discussion is required.

i, j: The project site is inland and is not threatened by potential seiche or tsunami. Therefore, **no impact** would occur and no further discussion on this issue is required.

## 2.10 Land Use and Planning

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. The project will not physically divide an established community. <b>No impacts are anticipated.</b>				
b. Portions of the property is designated Specific Project Area, Agriculture and Rural Residential 1-10 acre per dwelling unit. The project proposes to amend the Specific Project Area designation to Rural Residential & Agriculture and Rural Residential designation to Agriculture. Refer to the attached General Plan Amendment exhibit.				

The Specific Project Area land use designation (Table LU-5, Land Use Chapter, General Plan) applies to the north east portion of the site, is a land use policy that provides for future development after adoption of a specific plan, policy plan or completion of special plans and studies. This designation is applied to areas where future development and conservation objectives have not been fully defined and will be subject to future planning studies. Planned densities and intensities for each area are assumed for purposes of evaluation the environmental impacts associated with future development pursuant to implementation of the General Plan. Within the County, the Specific Project Area applies to Middle Green Valley, Lambie Industrial Park, North Vacaville Limited Industrial Area and the subject property – Pippo Ranch. Rural residential is assumed for the development of the property and any future subdivision is subject to completion of a master circulation plan and water service plan.

The Specific Project Area totals 88.53 acres. The project proposes 7 lots within 64.1 acres of the Specific Project Area at a density of 1 unit/9.16 acres, consistent with the proposed Rural Residential 1-10 acres per dwelling unit. The remaining 24.43 acres is proposed to be developed with 1 dwelling unit, consistent with the Agriculture land use designation. **No impacts are anticipated as proposed.**

Portions of the property (APN 0105-170-150) is designated Rural Residential 1-10 acres per dwelling unit and the project proposes to amend to Agriculture in order to allow 20-acre lot sizes. The proposed density is 1 unit per 18.26 acres. **No impacts are anticipated.**

The applicant submitted a public water service plan for the project. The public water service plan which includes fire hydrants were reviewed by the Rural North Vacaville Water District and Vacaville Fire Protection District. Public water service is required for the subdivision due its location within a groundwater scarce zone (Refer to Section 2.9). With regard to a master circulation, access and circulation were evaluated via the tentative subdivision map process.

Access is proposed off existing driveway locations or limited to new private streets (Gibson Ca Canyon Court and Turkey Hollow Court), as shown on the tentative subdivision map. **No impacts are anticipated.**

**Rezone/Refer to rezone exhibit attached to this report.**

Portions of APN 0105-170-150 are proposed to be rezoned Exclusive Agriculture 20-acre minimum to RR-5 for lot 16-18 and RR-10 for lot 1-2, 13, 14, respectively. No policy conflicts have identified with regard to the rezone. **No impacts are anticipated.**

APN 0105-170-010: The project includes rezoning 2.9 acres from A-20 to RR 2.5 consistent with the Rural Residential Land Use Designation. **No impacts are anticipated.**

- c. Solano County has not adopted a habitat conservation or natural community conservation plan; therefore, the project does not conflict with such plans. **No impacts are anticipated.**

## 2.11 Mineral Resources

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a - b: The project would not result in the loss of availability of known mineral resources of value to the state or locally important. The property is not designated as a known site of importance per Figure RS-4 of the Mineral Resource Chapter of the General Plan. **No impacts are anticipated.**

## 2.12 Noise

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of, excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, c-d: The project has the potential to increase the ambient noise levels during construction and post construction. Short-term noise levels will increase due to construction activities and long-term noise levels will increase due to normal residential and road noises. The anticipated noise increases would be typical for residential development, including new roadways, and would be consistent with that anticipated under the General Plan. As such, these impacts are expected to be **less than significant**.

Short-term noise level will increase due to the construction activities, which will primarily include construction of the infrastructure such as Turkey Hollow and Gibson Canyon Court and underground utilities, and drainage improvements within the project, and individual homes over time. The noise levels during construction have the potential to exceed maximum noise levels. In order to mitigate to a less than significant level the following measure is recommended:

### Mitigation measure Noise – 1:

- Construction shall only occur during the hours of 8 a.m. to 5 p.m., Monday through Friday; and 9 a.m. to 4 p.m. on Saturdays, and no work should occur on Sundays and Federal holidays.

Long-term noise will increase due to the addition of new residential activities. However, noise levels associated with normal residential use is less than significant.

- b. Persons could be exposed to excessive groundborne vibration or groundborne noise levels during grading phases of construction, but the amount and duration of this groundborne vibration will be minimal and short-term. Therefore, the exposure of persons to groundborne vibrations is anticipated to be **less than significant**.
- e – f: The property is not located within an airport land use plan or the vicinity of a private airstrip. **No impacts are anticipated**. However, the project is located within the Travis Air Force Base Sphere of Influence and the Airport Land Use Committee (ALUC) review is required prior to the Board of Supervisors action.

## 2.13 Population and Housing

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a: Given that the average household size in Solano County is 2.88 (2013-2017 Census Data), 55 additional persons are anticipated. The project will not induce substantial population growth and <b>less than significant impacts are anticipated</b> .				
b,c: The project involves the addition of residential homes, not the displacement of homes or people. Therefore, <b>no impacts are anticipated</b> .				

## 2.14 Public Services

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire Protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1) The project is located within the Vacaville Fire Protection District and located across from an existing Fire Station (Number 67, 4135 Cantelow Road). According to the District, the project will not create a need for a new fire station facility. However, additional fire hydrants will be required to be constructed by the subdivider prior to phased Final Map recordation. There are 3 existing fire hydrants in the vicinity and 4 proposed. Compliance with the Vacaville Fire Protection rules and regulations will reduce impacts to a **less than significant impacts are anticipated**. The following mitigation measure is recommended:

### Mitigation Measure Public Services (PS-1):

- A. Prior phased Final Map recordation, install the fire hydrants and necessary infrastructure on the engineering improvement plans required by the Vacaville Fire Protection District. Submit evidence to the Department of Resource Management that installation of the infrastructure is completed to the satisfaction of the Vacaville Fire Protection District, prior to the phased Final Map recordation.
- 2) The project proposes 16 additional homesites, in an existing service area of the Sheriff's Department and the relatively small number of new parcels being created would not typically require additional staffing resources by the Sheriff. **Less than significant impacts are anticipated**.
- 3) Individual property owners will pay fees prior to issuance of building permits which will help pay for new schools or additional facilities, in the Vacaville Unified School District. **Less than significant impacts are anticipated**.
- 4) The project is not anticipated to generate the need or impact for additional recreational facilities. **Less than significant impacts are anticipated**.

- 5) The project will utilize public water service by the Rural North Vacaville Water District. The project proponent will be required to install public water infrastructure lines within the proposed streets prior to recordation of the phased Final Map and prior to the sale of each individual lots. Each individual lot owner will be responsible for installation to the home. Installation of the infrastructure will be subject to the rules and regulations of the Rural North Vacaville Water District. **Less than significant impacts are anticipated.**

## 2.15 Recreation

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Physically degrade existing recreational resources?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a -c: Additional households are anticipated as mentioned in the Population and Housing Section, however, the project is not anticipated to substantially cause the physical deterioration of existing parks or increase the demand for recreational facilities. **Less than significant impacts** are anticipated.

## 2.16 Transportation and Traffic

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a – b: As part of the County's General Plan process, a Traffic and Circulation Master Plan was prepared in 2008. This study examined the existing traffic conditions and future buildout conditions under the General Plan to the year 2030. Subsequently, the Solano Transportation Authority updated the Solano-Napa Travel Demand Model analyzing current (20150 and future (2040) traffic conditions within Solano County. The proposed project site was included in the land use plan for the General Plan as well as the Solano-Napa Travel Demand Model.

The County uses the level of service (LOS) standards at key intersections and roadway segments to analyze a project's potential impact on the overall vehicle operation. Levels that are considered acceptable range from LOS A to LOS D. Unacceptable levels include LOS E and LOS F. If a project would cause a currently acceptable LOS to drop to an unacceptable LOS, it would be considered a significant impact.

The project site would be accessed by two public roads, namely Cantelow Road and Gibson Canyon Road. Figure TC-1 of the 2008 Solano County General Plan classifies these roads as collector roads. The Solano-Napa Travel Demand Model shows that Cantelow Road and Gibson Canyon Road currently operate at LOS A and are expected to continue to operate at LOS A in 2040. The daily trip generation rate for a single-family residence is 9.6 vehicles per day according to the Institute of Transportation Engineers Trip Generation Manual. This proposed project includes creation of 16

residential lots including three lots with existing residential homes. Using the ITE trip generation rate it is expected that 16 new single-family residences would generate 154 daily trips. Access to 10 of the new residential lots is provided from Gibson Canyon Road and access for the remaining new residential lots is provided from Cantelow Road. The increase in traffic caused by these 16 new residential lots would not have a significant impact on the existing traffic load and capacity of the street system and **impacts will be considered less than significant**.

c: Three international airports are located within 60 miles from the project site: San Francisco International, Oakland International and Sacramento International Airports. Three airports operate in Solano County. The Nut Tree Airport is located approximately 3.1 miles from the project site. Rio Vista Airport (Baumann Field) are public use facilities and Travis Air Force Base (AFB) is a military field. Rio Vista Airport is located approximately 22 miles from the project site. Travis Air Force Base is located approximately 11 miles from the project site. The proposed project will not alter or change existing air traffic patterns. Therefore, implementation of the project would result in a less than significant impact from the safety risks associated with air traffic patterns. **No impacts are anticipated**. However, the project is located within the Travis Air Force Base Sphere of Influence and Airport Land Use Committee (ALUC) review is required prior to the Board of Supervisors action.

d – e: The County's Subdivision Ordinance and Road Improvement Standards requires the subdivider to make reasonable improvements to adjacent public roads, the proposed private roads, private driveways and secondary emergency access. The private driveways will be extended from public or private roads to each lot and improved to Public Works and fire safety standards. All new road construction and grading will be subject to a grading permit issued by the Department of Resource Management, which will ensure that no hazards result from the design. Therefore, **impacts are considered less than significant**.

f – g: The future residential units on the proposed lots will be required to meet County zoning regulations for parking. Parking on the private drives will not be allowed due to fire safety regulations and proposed private road widths. The proposed project does not conflict with adopted policies or programs supporting alternative modes of transportation; therefore, **no impacts are anticipated**.

## 2.16 Utilities and Service Systems

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a: The project will not exceed the Regional Water Quality Control Board requirements if recommended mitigation measures are adopted as discussed in the Hydrology Section of this report. **Less than significant impacts are anticipated.**

b & e: Individual sewage system disposal is proposed, and approved sewage disposal plans by the Environmental Health Division consistent with Chapter 6.4 Sewage Standards of the County Code prior to issuance of a building permit, will minimize impacts to **less than significant**.

c: The project proposes detention ponds and drainage facilities as discussed in the Hydrology Section of this report. Compliance with the recommended mitigation measures will reduce the impacts to **less than significant level**.

d: As indicated in the Hydrology and Water Section, installation of public water infrastructure will be required prior to the phased Final Map recordation and sale of each lot serviced with public water. Will Serve letters will be required prior to issuance of the building permit for each lot under public water service. Well water usage is available for Lot 3 and updated pump and yield results will be required prior to Final Map recordation. If the test fails, public water connection is required prior to

Final Map recordation. The Rural North Vacaville Water District issued a Will Serve Letter for the project. As such, sufficient water supplies are available to serve the project site and the impact is considered to be **less than significant**.

f - g: Solid waste will be disposed at the Recology Hay Road landfill which has adequate capacity. **Less than significant impacts are anticipated.**

## 2.17 Mandatory Findings of Significance

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Does the project have the potential to (1) degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of the major periods of California history or prehistory?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a. Compliance with the recommended mitigation measures will not cause an adverse impact to the quality of the environment, reduce habitat or harm endangered species or eliminate important examples of major periods of California history.				
b. The project will not cause significant and adverse cumulative impacts as the proposal is to develop the site is consistent with zoning requirements.				
c. The project will not cause substantial adverse effects on human beings directly or indirectly if the recommended mitigation measures are adopted.				

## **3.0 Agency Coordination and Public Involvement**

### **3.1 Consultation and Coordination with Public Agencies**

The Initial Study is being circulated for public comment and referred to the State Clearinghouse for coordinated review by state agencies. In addition, it will be sent to the Department of Conservation and the Solano County Agriculture Commissioner and other local agencies for review and comment. (See Section 5.0 Distribution List)

### **3.2 Public Participation Methods**

The Initial Study is available at the Solano County Department of Resource Management and online at the Department's Planning Services Division website at:

<http://www.solanocounty.com/depts/rm/documents/eir/default.asp>

Interested parties may contact the planner assigned to this project at the contact points provided below:

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## 4.0 List of Preparers

This Initial Study was prepared by the Solano County Department of Resource Management. The following staff and consultants contributed to the preparation of this Initial Study:

### **Solano County Department of Resource Management**

Nedzlene Ferrario, Planning Services  
Jason Riley, Public Works Division

## 5.0 Distribution List

### **See Notice of Completion**

**Army Corp of Engineers-Sacramento**  
**City of Vacaville**  
**PG&E**  
**Vacaville Fire Protection District**  
**Rural North Vacaville Water District**  
**Solano Irrigation District**  
**Vacaville Unified School District**  
**Yolo Solano Air Quality Management District**

## 6.0 Appendices

### **6.1 Application Form and Part 1 Initial Study**

### **6.2 Tentative Subdivision Map – 12/18/2019**

### **6.3 General Plan Amendment & Rezone Exhibits**

### **6.4 Water System Plan**

### **6.5 Preliminary Detention Pond Plan**

### **6.6 Biological Resources Assessment Report**

### **6.7 Geotechnical Report- February 2018**

### **6.8 Cultural Resource Study**

### **6.9 Vacaville Fire Department Comment Letter**

### **7.0 Rural North Vacaville Water District Will Serve Letter**

### **7.1 English Hills Ridgeline View – looking southwest from Cantelow and Gibson Canyon Road**