

“H.1”

Northern Spotted Owl (NSO) Assessment

Tesseron Winery P22-00309
Planning Commission Hearing Date
July 2, 2025



Forest Ecosystem Management

1692 East Road * Deary, ID 83823
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Northern Spotted Owl Assessment

Tesseron Vineyards Winery

Napa County

Report Completed by: Pamela Town, Consulting
Wildlife Biologist on November 4, 2022

Northern Spotted Owls (*Strix occidentalis caurina*)

Northern Spotted Owls (NSO) are listed as Threatened under both the Federal Endangered Species Act (ESA) and California State Endangered Species Act (CESA), as well as Sensitive under California Department of Forestry and Fire Protection (CalFire). They are a common to uncommon owl in the coniferous forest of the Pacific Northwest (PNW), ranging from southern British Columbia south to Marin County in northwestern California.

The northern spotted owl is a subspecies of spotted owl (*Strix occidentalis*) found in western North America. They are a medium-sized (16 to 20 inches) dark brown owl with a barred tail, white spots on their head and breast; and dark brown eyes surrounded by a prominent facial disk. The northern spotted owl is a permanent resident in suitable habitat residing in dense, old-growth, and multi-layered second-growth stands of mixed conifer, redwood, and Douglas-fir habitats.

Northern Spotted Owls are rodent specialists, primarily feeding on woodrats (*Neotoma fuscipes*), deer mice (*Peromyscus spp.*), Sonoma tree voles (*Arborimus pomo*), voles (*Microtus spp.*) and northern flying squirrels (*Glaucomys sabrinus*); but has been known to consume small birds, bats, amphibians, and large arthropods. Foraging is completed by searching for prey from a perch and swooping/pouncing on the prey. NSOs usually nest in stick nests (mistletoe clump, abandoned raptor or squirrel nest), in a cavity tree or snag, or in the broken top of a large tree. In the interior region of their range (as seen in Napa County), there appears to be a preference to well-shaded habitat in narrow, steep-sided canyons with north or east-facing slopes to assist in thermoregulatory needs, as they are intolerant of high temperatures.

Spotted owl life-history traits suggest coevolution with late-seral, old growth forests, and second growth forest with scattered late-seral characteristics. They are relatively long-lived and have high adult survival, low reproductive output, and high parental investment in offspring.

Threats to the northern spotted owl include increased competition, and perhaps predation, from the barred owl (*Strix varia*). In addition to the threats from the barred owls, spotted owl populations may also be negatively impacted by unregulated activities that modify habitat and introduce toxic substances into the environment and food chain (i.e. illegal logging, development, marijuana cultivation, etc.).

This Assessment is for the Tesserone Vineyards Winery Project located at 1000 Wall Road; Napa, California; which occurs within the range of the Northern Spotted Owl. At this time the Project involves site improvements which includes the removal of 21 trees (9 Live Oaks [*Quercus agrifolia*], 11 Bay Laurel [*Laurus nobilis*], and 1 madrone [*Arbutus menziesii*]).

Project General Information

Ownership Location: 1000 Wall Road; Napa, California (Attachment #1)

Legal of Ownership: Sections 23 & 24 T07N, R06W MDB&M

APN Ownership: 027-060-020, 027-060-022, 027-060-023 – Napa County
051-200-016 – Sonoma County

Proposed Project: Site improvements which includes the removal of 21 trees (9 Live Oaks [*Quercus agrifolia*], 11 Bay Laurel [*Laurus nobilis*], and 1 madrone [*Arbutus menziesii*] (Attachment #2).

Known Northern Spotted Owl Territories

According to the California Department of Fish & Wildlife's Spotted Owl viewer dated 04NOV22, there is one known northern spotted owl territory (NAP0042) within 1.3-miles of the Property Ownership (Attachment #3); however, the Project Area is further than 1.3-miles from the known territory. The 1.3-mile assessment area was created by USFWS for a Take Avoidance of northern spotted owls within the California Interior (outside the coastal redwood zone). Although the County does have redwoods, the environmental conditions in the area are hotter/drier than the coastal redwood zone; therefore, the 1.3-mile assessment area was used for this Project.

The following briefly describes the status of the known territory within 1.3 miles of the Ownership:

NAP0042: This territory is located along Wall Road south of the Ownership. The territory was first identified in 2008 with a single male. The territory was monitored in 2011, 2012, and 2013 with spotted owls identified each year. To my knowledge, no further monitoring efforts have occurred. The activity center is further than 1.3 miles from the Project Area; however, within 1.3 miles of the property boundary.

Northern Spotted Owl Surveys

At this time, there are no known northern spotted owl surveys that occurred within or near the Project Area.

Northern Spotted Owl Habitat

The general attributes for northern spotted owl habitat include a forest with:

- Dense, multi-layered canopy of several tree species (conifers and hardwoods).
- Trees of varying sizes and ages.
- Abundant logs, snags/cavity trees, and trees with broken tops or platform-like substrates (i.e., broken tops, mistletoe, debris piles, or old raptor/squirrel nests).
- Open spaces among lower branches to allow flight under the canopy.

USFWS Northern Spotted Owl Take Avoidance Analysis – Interior (Attachment B) dated 27FEB08 further defines NSO habitat as follows:

- High Quality Nesting/Roosting Habitat: Mixed tree species with basal area of 210+ ft² and $\geq 15''$ quadratic mean diameter, and ≥ 8 trees per acre of trees $\geq 26''$ in diameter at breast height, and $\geq 60\%$ canopy closure.
- Suitable Nesting/Roosting Habitat: Mixed tree species with basal area ranging from 150 - 180+ ft² and $\geq 15''$ quadratic mean diameter, and ≥ 8 trees per acre of trees $\geq 26''$ in diameter at breast height, and $\geq 60\%$ canopy closure.
- Suitable Foraging Habitat: Mixed tree species with basal area ranging from 120 - 180+ ft² and $\geq 13''$ quadratic mean diameter, and ≥ 5 trees per acre of trees $\geq 26''$ in diameter at breast height, and a mix of $\geq 40\%$ to 100% canopy closure.
- Low Quality Foraging Habitat: Mixed tree species with basal area ranging from 80 - 120+ ft² and $\geq 11''$ quadratic mean diameter, and $\geq 40\%$ canopy closure.

Recent Wildfire: The ownership falls within the 2017 Nuns Wildfire perimeter; however, widespread wildfire evidence was not noted within and immediately surrounding the Project Area (Scott Butler field visit in November 2022).

Project Area: The Project Area is currently an open hardwood forest with structures (house, barn, winery), road, and vineyards in the immediate vicinity. The trees are primarily Live oak and California Bay. The Project Area and immediate vicinity is unsuitable northern spotted owl habitat due to patchy open canopy cover lacking a conifer component, topography, and buildings; however, there is habitat within $\frac{1}{4}$ mile of the Project Area (Attachment #4).



Picture Looking Toward
Project Area



Tesseron Vineyards Winery Project Recommendations

The Project Proposes to remove a total of 21 hardwood trees in a scattered area (Attachment #2) and is unsuitable northern spotted owl habitat. There is suitable northern spotted owl habitat within ¼-mile of the Project Area; therefore, the following is recommended to reduce disturbance/impacts to northern spotted owls as a result of this Project:

- In years of removing trees (timber operations):
 - Disturbance-Only NSO surveys can be completed in spotted owl habitat within ¼-mile of the Project Area. Disturbance-only surveys allows for a one-year 6-survey visit protocol, rather than the two-year 6-survey visits each year. **OR**
 - Seasonal restrictions from 01FEB – 09JUL for removing trees (timber operations).
- This assessment is for the removal of 21 trees in the vicinity of the existing structures/vineyards. If trees to be removed increases into the surrounding forest, a new assessment may be required.

Attachments

Attachment #1 – Topographical Map – Project Location and NSOs within 1.3 Miles

Attachment #2 – Engineer's Plans

Attachment #3 – CA Fish & Wildlife Spotted Owl Sites Found

Attachment #4 – Aerial of Project Area & Surrounding Habitat

Northern Spotted Owl Contact Information

Questions or comments regarding this NSO information can be directed to:

Pamela Town
Consulting Wildlife Biologist & SOE
Forest Ecosystem Management, PLLC
(406) 490-7427
Pamtown30@gmail.com

Other Information

Definitions:

- Activity Center: Area of concentrated activity of either a pair of NSOs or a single territorial NSO, represented by a mapped location (usually a nest tree) that occurs within, but not necessarily in the exact center of, the core area. Where clusters of site centers exist in a core area a geographic centroid or nearest neighbor calculation may be used as a designated activity center for habitat analysis purposes. A single territory may also have more than one designated activity center.
- Territory: A spatial area of landscape that is defended by a single resident or pair of northern spotted owls. Specific NSO territories generally refer to a fixed geographic area. Over time, individual spotted owls may occupy different territories (i.e. breeding dispersal, interference competition with barred owls, changes in habitat or prey availability, etc.).
- Home Range: In the absence of site-specific data, the home range is a 1.3-mile radius circle centered on the activity center.
- Territory Identification Number (NAP0005): A number generated by the California Department of Fish & Wildlife assigned to a geographic area currently and/or historically occupied by northern spotted owls.
- Suitable Habitat: Areas meeting the criteria for high quality nesting/roosting habitat, suitable nesting/roosting habitat, suitable foraging habitat, and low-quality foraging habitat.
- Unsuitable Habitat: Areas not meeting the criteria for high quality nesting/roosting habitat, suitable nesting/roosting habitat, suitable foraging habitat, and low-quality foraging habitat.
- NSO Breeding Season: February 1 to August 31st within the inland ecotype.
- Degrade Habitat: Signifies when treatments have a negative influence on the quality of habitat due to the removal or reduction of NSO habitat elements but not to the degree where the existing habitat function is changed.
- Downgrade Habitat: Treatments that reduce habitat elements to the degree the habitat will not function in the capacity that exists pre-treatment, but the activities will not remove habitat entirely.
- Assessment Area: The area used to address northern spotted owls includes 1) Project Footprint; 2) Area within ¼ mile of Project Footprint; 3) 1.3 miles from Project Footprint.

References:

CalFire. 2008. Important Information for Timber Operations Proposed within the Range of the Northern Spotted Owl. California Department of Forestry & Fire Protection. February 2008.

Northern Spotted Owl Take Avoidance Analysis and Guidance for Private lands in California. Attachment B: Take Avoidance Analysis – Interior. United States Department of Interior Fish & Wildlife Service. February 2008.

Northern Spotted Owl Take Avoidance Analysis and Guidance for Private lands in California. Attachment B: Take Avoidance Analysis – Interior. United States Department of Interior Fish & Wildlife Service. Updated November 2019.

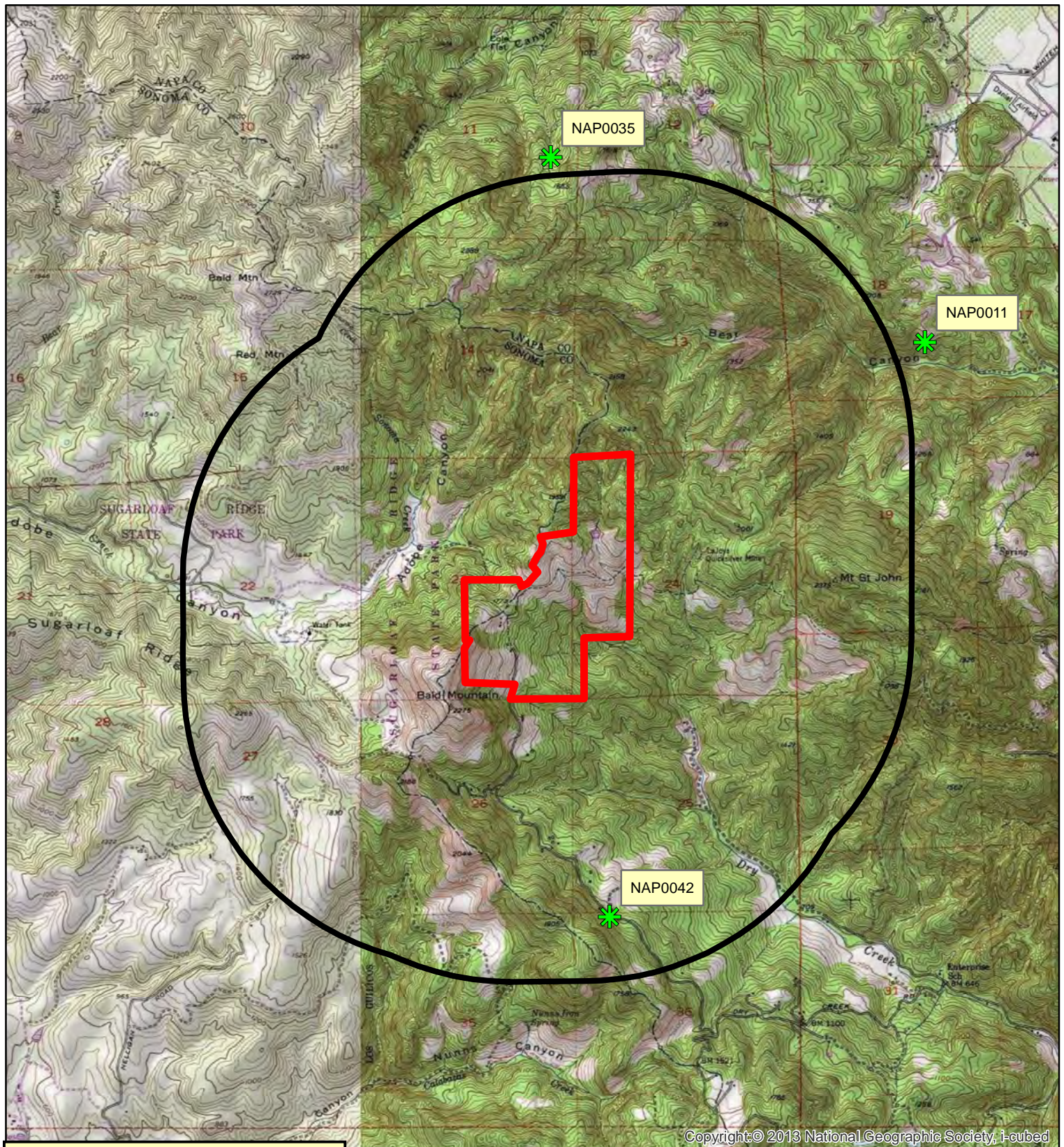
Northern Spotted Owl Viewer (BIOS CA Natural Diversity Database). Managed by California Department of Fish & Wildlife.

Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls. Endorsed by the U.S. Fish & Wildlife Service. February 2, 2011 and Revised January 9, 2012.

Zeiner, D.C., W.F. Laudenslayer, K.E. Mayer, and M. White, eds. 1988 – 1990. California's Wildlife. Vol. I – III. California Department of Fish & Game, Sacramento, CA.

TESSERON VINEYARDS WINERY

NSOs within 1.3 Miles



Legend

- Ownership
- 1.3 Mile NSO Assessment
- ✱ NSO Activity Center

Sections 23 & 24 T07N, R06W MDB&M

APN: 027-060-020, 027-060-022, 027-060-023
 Napa County AND
 APN: 051-200-016
 Sonoma County

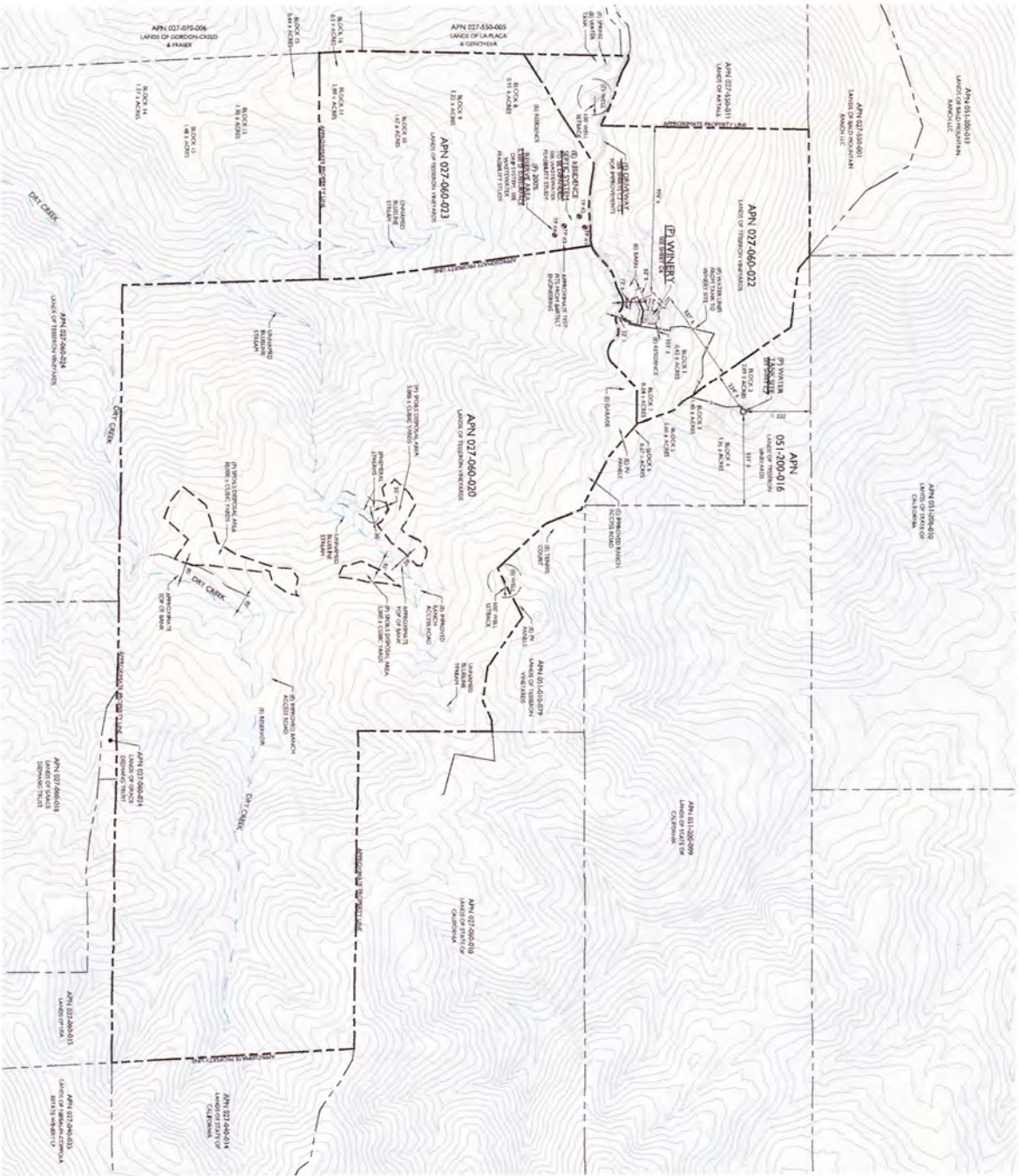


1 in = 4,167 ft

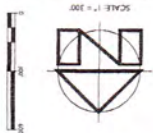
Date: 11/4/2022

TESSERON VINEYARDS WINERY

CONCEPTUAL SITE IMPROVEMENT PLANS



OVERALL SITE PLAN
SCALE: 1" = 200'



LOCATION MAP
SCALE: 1" = 100'

PROJECT INFORMATION:

PROPERTY OWNER & APPLICANT:
TESSERON VINEYARDS
POST OFFICE BOX 46
SAINT HELENA, CA 94574
SITE ADDRESS:
1000 WALL ROAD
NAPA, CA 94558

ASSESSOR'S PARCEL NUMBERS:
027-060-020, 027-060-021, 027-060-023 & 051-200-016
PARCEL: 27400 ±, 4336 ±, 4233 ± & 2400 ± ACRES

PROJECT SITE:
2.0 ± ACRES
ZONING:
AGRICULTURAL (AM)

SHEET INDEX:

- C1 OVERALL SITE PLAN
- C2 DRIVEWAY PLAN STA 9+87 TO STA 20+75
- C3 DRIVEWAY PLAN STA 20+75 TO STA 28+00
- C4 DRIVEWAY PROFILE STA 9+75 TO STA 21+75
- C5 DRIVEWAY PROFILE STA 21+75 TO STA 27+75
- C6 WINERY PROHIBITION & CONCEPTUAL PLAN
- C7 WATER TANK CONCEPTUAL PLAN
- C8 STORMWATER CONTROL PLAN
- C9 IRRIGUOUS SURFACE EXHIBIT

PROJECT DESCRIPTION:

THE PURPOSE OF THIS PROJECT IS TO ELABORATE THE CONCEPTUAL NATURE OF THE SITE IMPROVEMENTS AND TO PROVIDE A BASIS FOR THE PRELIMINARY DESIGN AND CONSTRUCTION OF THE PROJECT.

FLOOD HAZARD NOTE:

ACCORDING TO THE FLOOD HAZARD MAP, THE PROJECT AREA IS NOT IN A FLOOD HAZARD ZONE. HOWEVER, THE PROJECT AREA IS ADJACENT TO A FLOOD HAZARD ZONE. THE PROJECT AREA IS NOT IN A FLOOD HAZARD ZONE.

NOTES:

1. LAND: BACKGROUND, UNIMPROVED, LOTTING, TOPOGRAPHIC, FEATURES, ETC.
2. MATERIALS: CONCRETE, ASPHALT, GRAVEL, ETC.
3. UTILITIES: WATER, SEWER, GAS, ETC.
4. THE PROPERTY AND SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THE PROPERTY LINE HAS BEEN DETERMINED FROM AERIAL PHOTOGRAPHS AND AERIAL PHOTOGRAPHS.
5. THE PROPERTY AND SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THE PROPERTY LINE HAS BEEN DETERMINED FROM AERIAL PHOTOGRAPHS AND AERIAL PHOTOGRAPHS.

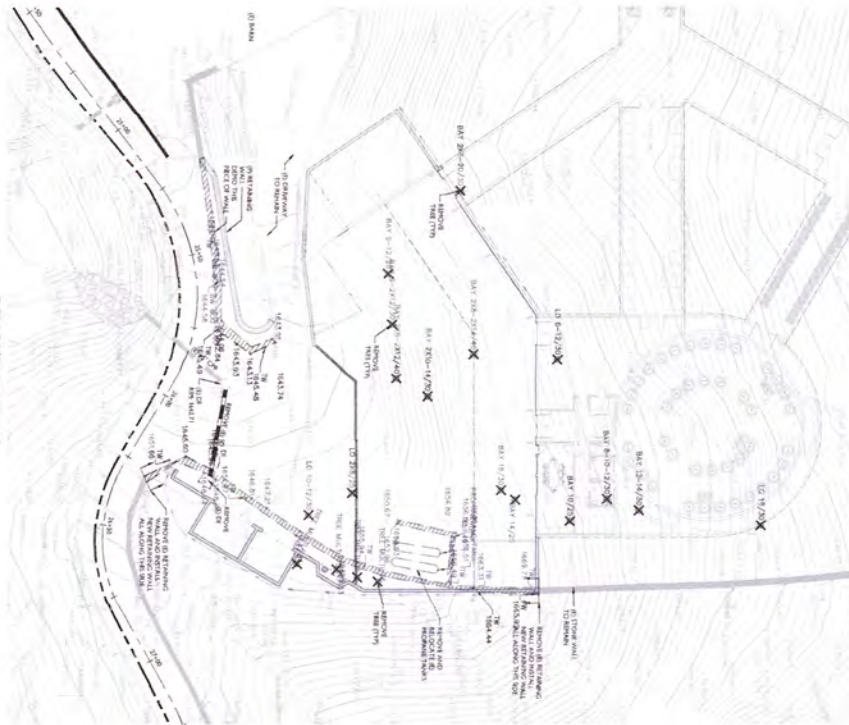
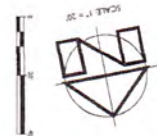


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TESSERON VINEYARDS WINERY
CONCEPTUAL SITE IMPROVEMENT PLANS
OVERALL SITE PLAN

APPLIED
INCORPORATED
2160 Jefferson Street, Suite 220
Napa, CA 94559
(707) 226-4444 | www.appliedcivil.com

- DEMOLITION NOTES:**
1. ALL ITEMS THAT ARE TO BE REMOVED ARE INDICATED BY BLACK 'X' ON THE PLAN FOR REMOVAL.
 2. ALL EXISTING UTILITIES NOT MARKED FOR REMOVAL ARE TO BE PROTECTED AND NOT TO BE REMOVED OR DISRUPTED.
 3. ALL ITEMS THAT ARE DISPOSED AS PART OF THIS PROJECT ARE TO BE DISPOSED OF PROPERLY OFF-SITE.
 4. ALL EXCAVATIONS FOR UNDERGROUND UTILITY REMOVAL MUST BE FILLED WITH COMPACTED GRANULAR MATERIAL PER THE REQUIREMENTS OF THE CALIFORNIA STANDARD SPECIFICATIONS.



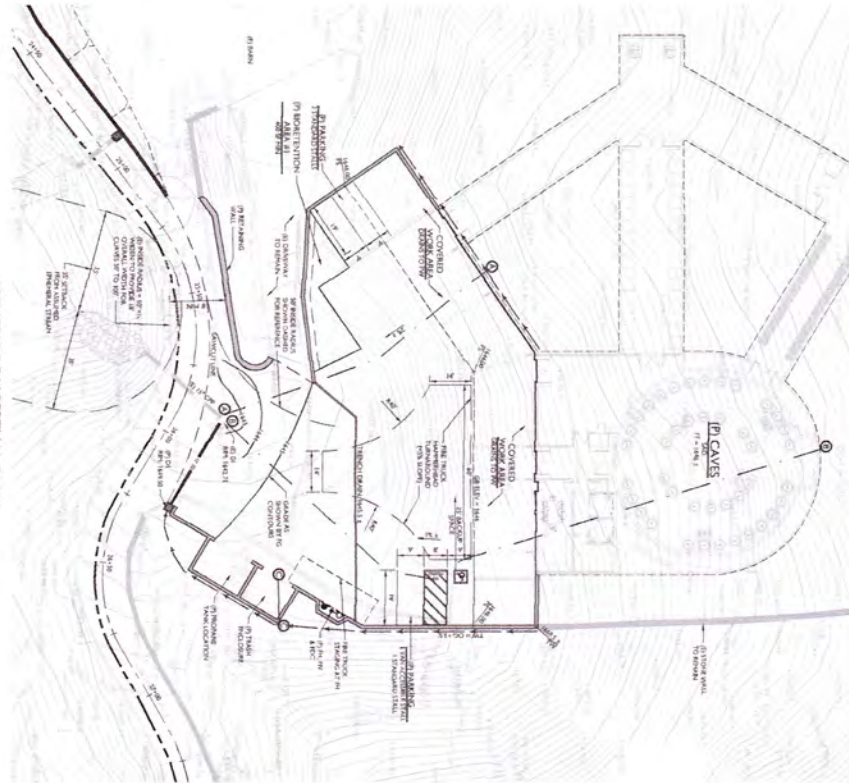
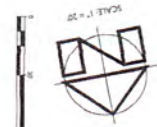
DEMOLITION PLAN
SCALE 1" = 20'

SLOPE SECTIONS

A-A	20%
B-B	20%
C-C	20%
ADDITIONAL	20%

LEGEND:

—	APPROXIMATE PROPERTY LINE (BLACK FRANCHISE)
—	SLOPE SECTION. SEE TABLE THIS SHEET



WINERY CONCEPTUAL PLAN
SCALE 1" = 20'

X - trees to be removed



DESIGNED BY	DATE	REVISION
CHECKED BY	1/1/2012	37
JOE NATHAN		
17.1M		
11.1M/20M/40M/80M		
ORIGINAL SIZE		
24" X 36"		
SHEET NUMBER		
C6		
9		



TESSERON VINEYARDS WINERY
CONCEPTUAL SITE IMPROVEMENT PLANS
WATER TANK CONCEPTUAL PLAN



DESIGNED BY: BT
CHECKED BY: PNM
DATE: MAY 2022
PROJECT: 81

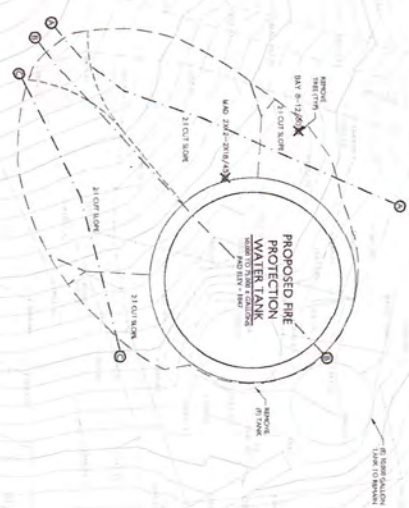
JOE NUTMAN
17 MAY
17. LARSON, JEFFREY
ORIGINAL SIZE
24" X 36"
SHEET NUMBER

C7

LEGEND:

○ --- ○ SLOPE SECTION, SEE TANK THIS SHEET

SLOPE SECTIONS	
A-A	27%
B-B	31%
C-C	38%
AVERAGE	27%



WATER TANK CONCEPTUAL PLAN

SCALE 1" = 80'

X-trees to be removed

Data Version Date:
10/25/2022
Report Generation Date:
11/4/2022

Report #1 - Spotted Owl Sites Found
Known Spotted Owl sites having observations
within the search area.



Meridian, Township, Range, Section (MTRS) searched:

M_07N_06W Sections(10,11,12,13,14,15,22,23,24,25,26,27,34,35,36);

M_07N_05W Sections(18,19,30,31);

NOTES:

Tesseron

Masterowl	Subspecies	LatDD NAD83	LonDD NAD83	MTRS	AC Coordinate Source
NAP0008	NORTHERN	38.408767	-122.468067	M 07N 06W 36	Contributor 2+ Miles
NAP0009	NORTHERN	38.397579	-122.444580	M 06N 05W 05	Contributor 3.5+ Miles
NAP0011	NORTHERN	38.453687	-122.453049	M 07N 05W 18	Contributor 1.8 Mile
NAP0035	NORTHERN	38.465999	-122.484936	M 07N 06W 11	Contributor 1.7 Mile
NAP0036	NORTHERN	38.408611	-122.448657	M 07N 05W 31	Contributor 2.9+ Miles
→ NAP0042	NORTHERN	38.415649	-122.479700	M 07N 06W 36	Contributor
SON0026	NORTHERN	38.388499	-122.485832	M 06N 06W 02	Contributor 3.5+ Miles

Within 1.3 Miles
of ownership
but further
than 1.3 Miles
From Project

Data Version Date:
10/25/2022
Report Generation Date:
11/4/2022



Report #2 - Observations Reported List of observations reported by site.

Meridian, Township, Range, Section (MTRS) searched:

M_07N_06W Sections(10,11,12,13,14,15,22,23,24,25,26,27,34,35,36);

M_07N_05W Sections(18,19,30,31);

NOTES:

Tesseron

*Only
Relevant Pages
Submitted*

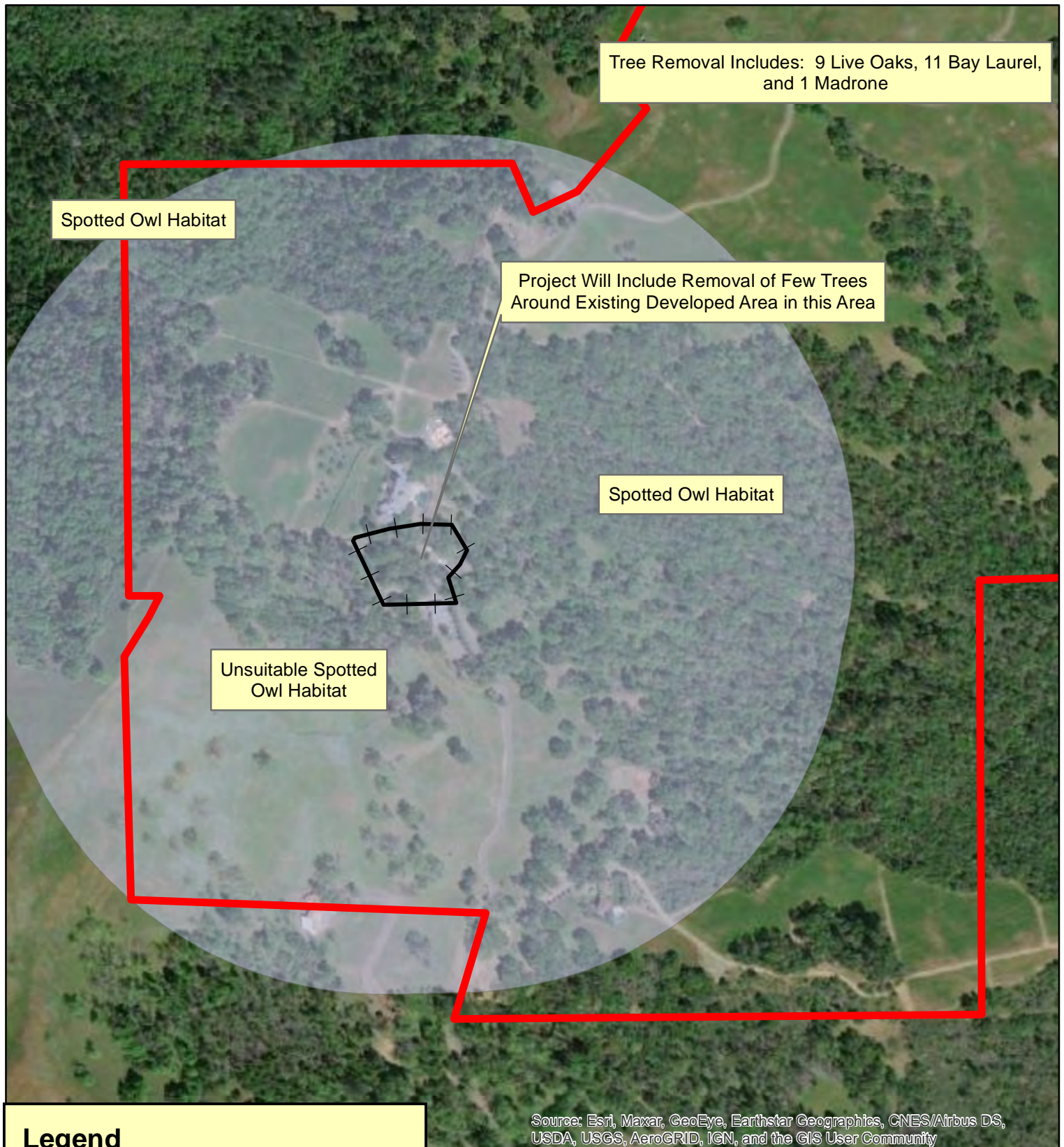
Type	Date	Time	#Adults	Age/Sex	Pair	Nest	#Young	Latitude DD NAD83	Longitude DD NAD83	MTRS	Coordinate Source
NEG	2012-03-20	2046- 2056	0					38.410467	-122.452000	M 07N 05W 31	Contributor
POS	2012-04-15	2201	1	UF				38.408342	-122.455932	M 07N 05W 31	Contributor
POS	2012-04-30	2047	1	UM				38.406056	-122.459326	M 07N 05W 31	Quarter-section centroid
NEG	2013-04-27	1905- 1915	0					38.410575	-122.455310	M 07N 05W 31	Section centroid
AC	2013-04-27	1935	2	UMUF	Y			38.408611	-122.448657	M 07N 05W 31	Contributor
NEG	2013-04-27	1921- 1931	0					38.410575	-122.455310	M 07N 05W 31	Section centroid
POS	2014-03-04	1900	1	UF				38.409096	-122.452208	M 07N 05W 31	Contributor
POS	2015-04-25	2035	2	UMUF	Y			38.408939	-122.450119	M 07N 05W 31	Contributor
Masterrow1: NAP0042 Subspecies: NORTHERN											
POS	2008-02-18	1941	1	UM				38.419842	-122.485486	M 07N 06W 26	Contributor
NEG	2008-02-29	1850- 1900	0					38.422779	-122.492185	M 07N 06W 26	Section centroid
NEG	2008-02-29	1903- 1913	0					38.422779	-122.492185	M 07N 06W 26	Section centroid
NEG	2008-03-20	1953- 2003	0					38.422779	-122.492185	M 07N 06W 26	Section centroid
NEG	2008-03-20	1932- 1942	0					38.422779	-122.492185	M 07N 06W 26	Section centroid
NEG	2011-05-04	2015- 2025	0					38.424849	-122.488299	M 07N 06W 26	Contributor
POS	2011-05-04	2030	2	UMUF	Y			38.414761	-122.479422	M 07N 06W 36	Contributor
POS	2012-03-20	2009	1	UM				38.400470	-122.480210	M 06N 06W 01	Contributor

Type	Date	Time	#Adults	Age/Sex	Pair	Nest	#Young	Latitude DD NAD83	Longitude DD NAD83	MTRS	Coordinate Source
POS	2012-03-20	2035	1	UM				38.415364	-122.479922	M 07N 06W 36	Contributor
POS	2012-04-15	2105	1	UM				38.400470	-122.480210	M 06N 06W 01	Contributor
AC	2012-04-30	1953	2	UMUF	Y			38.415649	-122.479700	M 07N 06W 36	Contributor
POS	2013-02-11	1436	1	UM				38.415765	-122.480789	M 07N 06W 36	Contributor





Masterowl: SON0026 Subspecies: NORTHERN

POS	1990-04-18	2107	1	UM				38.380097	-122.491524	M 06N 06W 11	Section centroid
POS	1992-08-30	2028	1	UM				38.382916	-122.487016	M 06N 06W 11	Contributor
NEG	1999-05-11	1930	0					38.394254	-122.472874	M 06N 06W 01	Section centroid
NEG	1999-05-21	2030	0					38.394254	-122.472874	M 06N 06W 01	Section centroid
NEG	1999-06-03	1918	0					38.394254	-122.472874	M 06N 06W 01	Section centroid
NEG	1999-06-09	2112	0					38.394254	-122.472874	M 06N 06W 01	Section centroid
NEG	1999-06-14	2014	0					38.394254	-122.472874	M 06N 06W 01	Section centroid
NEG	1999-06-21	1949	0					38.394254	-122.472874	M 06N 06W 01	Section centroid
AC	1999-07-14	2138	1	UM				38.388499	-122.485832	M 06N 06W 02	Contributor
NEG	2000-04-04	1850	0					38.390733	-122.477594	M 06N 06W 01	Quarter-section centroid
NEG	2000-04-04	1850	0					38.394254	-122.472874	M 06N 06W 01	Section centroid
NEG	2000-04-24	2013	0					38.390733	-122.477594	M 06N 06W 01	Quarter-section centroid

TESSERON VINEYARDS WINERY PROJECT AREA



Legend

-  Ownership
-  Project Area
-  Project Assessment Area (1/4 Mile)
-  NSO Activity Center

Sections 23 & 24 T07N, R06W MDB&M

APN: 027-060-020, 027-060-022, 027-060-023
Napa County AND
APN: 051-200-016
Sonoma County



1 in = 582 ft
Date: 11/9/2022