

Land Use Application

Applicant(s): Chip and Val Fowler

Property Owner(s): Chip and Val Fowler

Mailing Address: Unit
4150, Box 1, DPO AP, 96554-0001

Mailing Address: same

Phone: 206-372-4881

Phone: same

Email:
cwfsleddog@aol.com

Email: same

Location of property:

Township: 3 North

Range: Range 12

Parcel address: 381 Old Hwy 8
Lyle, WA 98635

Section & Qtr. Section:
SE Qtr of Section 30

County: Klickitat

Tax Lot No(s): 031230 000000400

Parcel Size (acres): 55.95

Existing use of parcel:

Farm and agricultural Single family dwelling, orchard, pasture for cattle

Use of adjacent parcels:

Farm

Project description: This should include all proposed activities and details on size, height, exterior colors, and construction materials of proposed structures. Any areas of ground disturbance and landscaping details should also be described. It is important to describe all aspects of your project so that you may gain approval for all of the development activities you plan to do.

See attached

Application checklist: The following is required to complete your application:

- Application form completed and signed
- Site plan
- Key viewing areas checklist, elevation drawings, and landscape details, if required
- Names and addresses of adjacent property owners, if required
- Any additional information as required

Signature of the property owner(s) indicates that the property owner(s) is/are aware that an application is being made on the subject property. **Signature of the property owner(s) also authorizes the Gorge Commission or the Commission's designee(s) reasonable access to the site in order to evaluate the application.**

Applicant(s) signature: Charles W. Fowler III date 17 FEB 2017

date

Property owner(s) signature: Charles W. Fowler III date 17 FEB 2017

date

Key Viewing Areas:

Key viewing areas are important public viewpoints and areas that afford opportunities to view the Gorge scenery. Key viewing areas are listed below.

Please check those sites which can be seen from your property:

- Historic Columbia River Highway
- Old Highway 8 (County Road 1230)
- Highway I-84
- Washington State Route 142
- Washington State Route 14
- Washington State Route 141
- Panorama Point Park
- Columbia River
- Rowena Plateau and Nature Conservancy Viewpoint
- Cook-Underwood Road

If your project would be visible from one or more key viewing areas, then you must submit elevation drawings and landscaping details.

Elevation drawings must show the sides of proposed buildings which would be visible from key viewing areas, including:

- N/A
- the appearance of proposed buildings over 400 square feet in size*
 - surrounding final grades*

Landscape details must show how your project will be screened from key viewing areas, including:

- location of plants used*
- number of plants*
- size of plants*
- type of plants*
- irrigation provisions or other measures to ensure the survival of landscaping planted for screening purposes*
- location of existing and proposed topographical features which would screen your project.*

Adjacent Property Owners:

If your project is included in one of the categories below, then you must submit names and address of adjacent property owners within a specified distance (200 feet or 500 feet) of the perimeter of your parcel. The following list specifies the distance within which property owners must be notified of your proposal. You only need to provide the names and address (along with the parcel number); the Commission will send the notice.

Your county Assessor's Office can assist you in obtaining this property owner information. You may use the back of this form to record the names and addresses or you may submit forms which the county may provide you.

Notification of landowners within 200 feet:

- Uses within Residential designation (except single-family dwellings located adjacent to Agriculture or Forest designations - see notification of landowners within 500 feet)
- Uses within Agriculture designation (except non-farm single-family dwellings in Large-Scale Agriculture designation - see notification of landowners within 500 feet)
- Uses within Forest designation (except utility facilities, railroads, home occupations, cottage industries, wineries, agriculture product processing and packaging, mineral resources, geothermal resources, aquaculture, boarding of horses, temporary asphalt/batch plants, expansion of non-profit camps-retreats-conference centers, bed and breakfasts, and non-profit learning/research facilities - see notification of landowners within 500 feet)
- Uses within Commercial designations
- Uses within Recreation designations
- Uses within Open Space designations
- Uses within Agriculture-Special designations
- Uses within Special Management Areas

Notification of landowners within 500 feet:

- Single-family dwellings within Residential designation located adjacent to Agriculture or Forest designations
- Non-farm single-family dwellings within Large-Scale Agriculture designation
- Utility facilities, railroad, home occupations, wineries, agriculture product processing and packaging, mineral resources, geothermal resources, aquaculture, boarding of horses, temporary asphalt/batch plants, expansion of nonprofit camps/retreats/conference centers, and bed and breakfasts, non-profit learning/research facilities within Forest designations

Project description

Vineyard:

We propose to convert an abandoned orchard (more than 90 percent of the trees are dead) and several areas of pasture land into a 16-20 acre wine grape vineyard, approximately 28.5% of the entire 55.95 acre ranch. It is our intent to maintain the existing four strand barbed wire fence around the exterior of our property to allow for the continued grazing of cattle around the periphery; however, we also plan to install an 8' woven wire game fence to protect the wine grape vines from the cattle and deer. The land is currently zoned for farming and agriculture by Klickitat County and has been in active pasture management for cattle livestock and orchard farming since the late 1970s. Our intent is to remove the abandoned orchard and replace it with a wine grape vineyard and extend this vineyard into adjacent pasture areas. Beyond the immediate orchard area we do not plan to remove any of the existing native trees that line the gullies for this proposal.

The land is classified by Klickitat County as farm and agricultural land under Chapter 84.34 RCW. It is bounded to the west by Major Creek Road, to the south by Old Highway 8, to the east by a ranch consisting of range land owned by David Sauter, and to the north by a 240 acre uninhabited parcel belonging to the Yakama Nation. The entire parcel is bounded with four strand barbed wire fence. The elevation of the property ranges from a low of about 220 feet on the SW corner to a high of about 485 feet at the NE corner of the property. About 60% of the property, primarily the central and northern part, is on the "Lyle Bench" (called a bench because it forms a relatively flat landform with an elevation about 300-600 feet above the reservoir pool of the Columbia River) with gentle southwesterly and southerly slopes of 5 degrees to 25 degrees.

The vineyard proposal involves several vineyard blocks. The

soils throughout this parcel are cobbly, loam Balake series with a base of young Missoula Flood gravels which are highly regarded for grapevines due to exceptional drainage properties. An assessment of the suitability of this land for wine grapes was provided by a noted viticulture and soils expert Dr. Alan Busacca (Appendix 1) who stated: "I rate the property as excellent for wine grapes, favorable in all major respects to top vineyards already in existence in the Columbia Gorge AVA and likely superior to many. The site rating of excellent is based on an assessment of soils primarily, but also growing season climate, elevation, landscape slope and aspect, developed infrastructure (road access to the property to transport fruit to market, irrigation water piped to the top of the plantable areas) and proximity to wineries who will buy the fruit."

The other beneficial site characteristics for this proposal cited by Dr. Busacca include: "low to moderate amounts of natural precipitation during the dormant season to refill the soil profile with water prior to bud break, followed by a generally dry summer growing season during which the vineyard manager can use precisely applied drip irrigation to control stages of plant canopy growth and fruit development; and low relative humidity and nearly constant air movement to help reduce fungal diseases." As noted above, the plantable land totals about 16 acres in two main, contiguous parcels separated by two primary shallow gullies that contain a line of native trees. The two blocks are assessed to be easy to develop into a vineyard as the pasture land is smooth, slightly convex, with excellent southwest and south aspects and gentle slopes ranging from flat to about 24% slope for more than 90 percent of the plantable area. The Busacca report also suggests that the property is excellent for wine grape production because its "positive landscape position allows unimpeded drainage of cold air to lower elevations." The system of stream valleys to the west (Major Creek) and to the north (Hanson Creek) above the property will channel cold alpine air around and beside the property to the west.

The Busacca report makes a significant point that the exposed

position of the plantable areas relative to the strong westerly winds common in the Gorge from spring through fall may challenge tender grape varieties. For this reason, we plan to retain every existing tree located in the tree lines that line the gullies as well as the native trees encircling the current ranch house to serve as windbreaks to help mitigate the effect of the winds on Block 1 and Block 3 as noted in Figure 1. The westerly winds flowing up the Columbia River do provide positive benefits for wine grapes, as the strong breezes reduce disease pressures common in other AVAs while promoting thicker skins, better color, and tannin development in red varieties.

The other critical factor when assessing the suitability of the land for growing wine grapes is the soil or “terroir.” As part of the field and laboratory study of the site, nine soil pits were excavated to depths of five to six feet deep in all parts of the plantable areas of the ranch, to include the abandoned orchard. The findings of the field research and follow on laboratory research revealed that all nine pits consisted of the same soil series, the Balake soils, which are Ultic Argixerolls. The Busacca report further described the soils as “dark thick, organic matter-rich topsoils with slightly gravelly silt loam textures” and “they have gravelly to extremely gravelly, slightly clay enriched weak argillic subsoils that transition to openwork gravels at about 40-60 inches.” The bottom line according to Dr. Busacca: “Root penetration and water infiltration is completely unimpeded to many feet.” He went on to observe that the soils developed from sand and gravel deposited from glacial-age mega floods through the Columbia Gorge with capping of post-glacial loess dust. Soil samples from each of the nine pits were analyzed by Solidest Farm Consultants from Moses Lake, and confirmed Dr. Busacca’s findings with the results all falling in the “normal to excellent” range when looking at texture, organic matter content, pH, nitrate and ammonium nitrogen content, and plant available macro and micro nutrients. The plantable lands and the soil pits referenced above are highlighted in Figure 1. Several other positive considerations were examined:

* Rainfall and average Growing Season Temperatures (GST): Based on data from the AgWeatherNet stations at Underwood

Mountain and the Maryhill winery, the Lyle Bench area that includes our ranch receives annually about 20-24 inches of precipitation (approximately 80% of that rain between the months of November and May). These somewhat dry conditions during the primary growing season enable the use of precise drip irrigation techniques to best influence the vines. The average GST was calculated to be a warm 64 degrees F. that will enable the growing of both white and some red varieties and the heat summation index or Growing Degree Days (GDD) was estimated to range from 2600 GDD in a cool year and up to 3100 GDD in a hot year, based on data from the nearby Syncline Winery and several other locations. This is an excellent temperature range for the planting of white and early ripening red varieties.

* Slope: A key factor in vineyard development is that of the slope. The slopes in the plantable areas of the property are described in the Busacca report (see Figure 2) as "simple, smooth, and almost planar to slightly convex, moderately inclined" ranging from less than 6% slope at the north of the plantable area, to 6% to 24% over the majority of the plantable acreage, with only a small amount greater than 24% near the bottom of the slope to the south. This means that tractors/sprayers can easily maneuver around the two blocks and that terracing or other land modifications will not be required to establish the grapevines.

*Aspect: Another key consideration in vineyard establishment is the aspect of the land to the compass direction. Southerly and southwesterly aspects are most favored for vineyards in the northern hemisphere to maximize sun exposure to the grape canopy. As noted in Figure 3, 92% of the proposed plantable area are southwesterly or southerly facing, so the geo-physical location of the proposed vineyard is naturally blessed by the aspect to the sun.

*Air Flow and Air Drainage: The proposed vineyard location south of Hanson Creek and east of Major Creek is ideally situated to enable the vectoring of cold winds flowing down the Bingen anticline from Hanson Creek into Major Creek and down to the Columbia River (See Figure 4), enabling warmth and protection of the vineyard from winter cold and freeze. Additionally, the location of Major Creek several hundred feet below the steep hill that bounds the

property to the west provides additional protection from cold air flowing down Major Creek. As suggested by the Busacca report, we will maintain and continue to grow the mature and growing tree line that provides current wind protection to the existing ranch house. Finally, the favorable location of the vineyard site on the Lyle Bench and southerly slope of the land will help ensure that cold air will drain down to the river unimpeded by any physical obstructions.

*Soils: As noted above, nine soil pits were excavated in October 2016 and are highlighted in Figure 5. The conclusion from the field work undertaken by Dr. Busacca is that all three vineyard blocks consist of the same soil series (Balake) which is considered to be outstanding soil for vineyard development, having about 20 inches of "slightly to moderately gravelly silt loam topsoil with good nutrient holding capacity, excellent water holding capacity and an extraordinarily well drained gravelly subsoil with excellent root penetrability and nearly limitless potential rooting depth. The descriptions of the soil pit excavations are extensively covered in Appendix 1. The soil laboratory analysis that reviewed both the physical properties of the soil as well as the chemical properties similarly determined that the Balake series soil found in Blocks 1 and 2 and 3 would be "superior for a wine grape vineyard."

The following provides more detail about Blocks 1, 2 and 3:

Block 1 is also a southwesterly/southernly facing, gentle sloping hill which contains both the abandoned orchard that is screened by two lines of mature native trees growing on both sides of a gully, to include several very large Ponderosa pines aged from 100-240 years old. These trees collectively provide an effective screen from key viewing points across the Columbia River. No trees will be removed from this lines of screening trees; we plan to only remove the dead/dying trees associated with the orchard within the perimeter of the block. We plan to use roughly the same orientation as Block 3 in terms of a north-south alignment of the rows and do not plan to use any heavy equipment for rock clearing, grading, or leveling. We will use a light weight ripper to prep the soil for the introduction of the

vines.

Block 2 is the small triangular shaped section of the pasture that forms a wedge between Block 1 and Block 3. The block is bounded to the north by the small stone wall that bisects our property and the tip of Block 2 points to a major gully that contains an impressive array of trees that form an effective windscreen and barrier to help protect Block 3 from strong westerly winds. Again, no trees will be removed from this protective screen of trees. Additional soil depth analysis will have to be completed to confirm sufficient soil depth for this proposed block as there is exposed bedrock to the west of this area between Block 1 and Block 2.

Block 3, the largest block, is a southwesterly/southernly facing, gentle sloping pasture that lends itself perfectly for the establishment of trellising and the planting of vines in a generally north-south configuration. No native trees will be removed in the planting of the vineyard rows and we may seek to add additional native trees along the gully between the soil pits FFV-06 and FFV-05 to reinforce the windbreak. Again, we do not anticipate any heavy equipment use for rock clearing, grading, terracing or leveling.

The trellis system design for the proposed vineyard will be Vertical Shoot Positioning and the trellis height will not exceed the industry standard of eight feet. We plan to space the rows seven feet apart and vines will be planted every four feet. We will use metal posts for end posts and smaller pre-rusted metal posts inline spaced every 16 feet. High-tensile strength galvanized wire will be used to support the vine canopy, a black drip line will be used and all hardware and fasteners will be non-reflective galvanized metal. A light weight ripper will be used to produce a homogeneous, uniform planting root zone along each row of the planned vineyard and the vines will be planted into the existing pasture after decompaction of the soil. Adequate space at the ends of each north-south row will be preserved to enable efficient tractor turnaround space and transit to and from the block.

All three blocks will use black polypropylene drip lines to provide irrigation to the vines for at least the first three years. We will use the existing gravity-fed spring water and piping system that has provided water to the 40+ acres of pastureland since 1978 with only minor modifications to the current underground water irrigation system. An exempt well will also be dug to provide emergency backup water if needed for the vineyard and to provide water for the livestock outside of the 8' game fence. We also plan to use existing roads and lanes for farm equipment and we do not require any additional agricultural buildings to support the vineyard.

We believe that this proposal meets the requirements of the Scenic Area Land Use Ordinance by enhancing and maintaining viable farmland. This land has been farmed continuously by the Sauter family for several generations and, as the new owners, we are simply seeking permission to convert to a different farming method while enhancing the beauty of the Gorge by removing a dead orchard. There is a long history of orchard and vineyard farming throughout the Gorge area and this proposal is very similar in size, scope, and visual impact to other vineyards located on adjacent ranches and nearby areas of the Scenic Area. We further believe the proposal is an appropriate use of farm and agricultural land as it is currently classified and is consistent with the guidelines put forth in the Management Plan.

Summary: We request approval from the Columbia River Gorge Commission to convert 16-20 acres of an abandoned orchard and existing pasture into a vineyard and install approximately 3700 linear feet of new 8-foot woven wire game fencing to protect the vines and grapes. The proposal will not involve any terracing or major movements of soil or bedrock and will require only a slight adjustment to the current irrigation system. No existing native trees will be removed as the existing tree lines along the gullies provide two critical and beneficial functions: serve as windbreaks to mitigate the effects of the strong westerly winds and to help obscure existing farm

buildings from key observation areas across the Columbia River. No additional agricultural buildings will be required to support the vineyard and there is no need to modify any of the existing roads or lanes on the property.

Applicant: Charles and Valerie Fowler

Landowner: Charles and Valerie Fowler

Legal description of property: Southeast quarter of Section 30, Township 3 North, Range 12 East of the Willamette Meridian in the County of Klickitat, Washington.

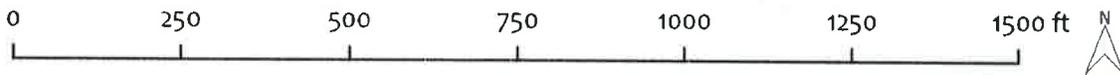
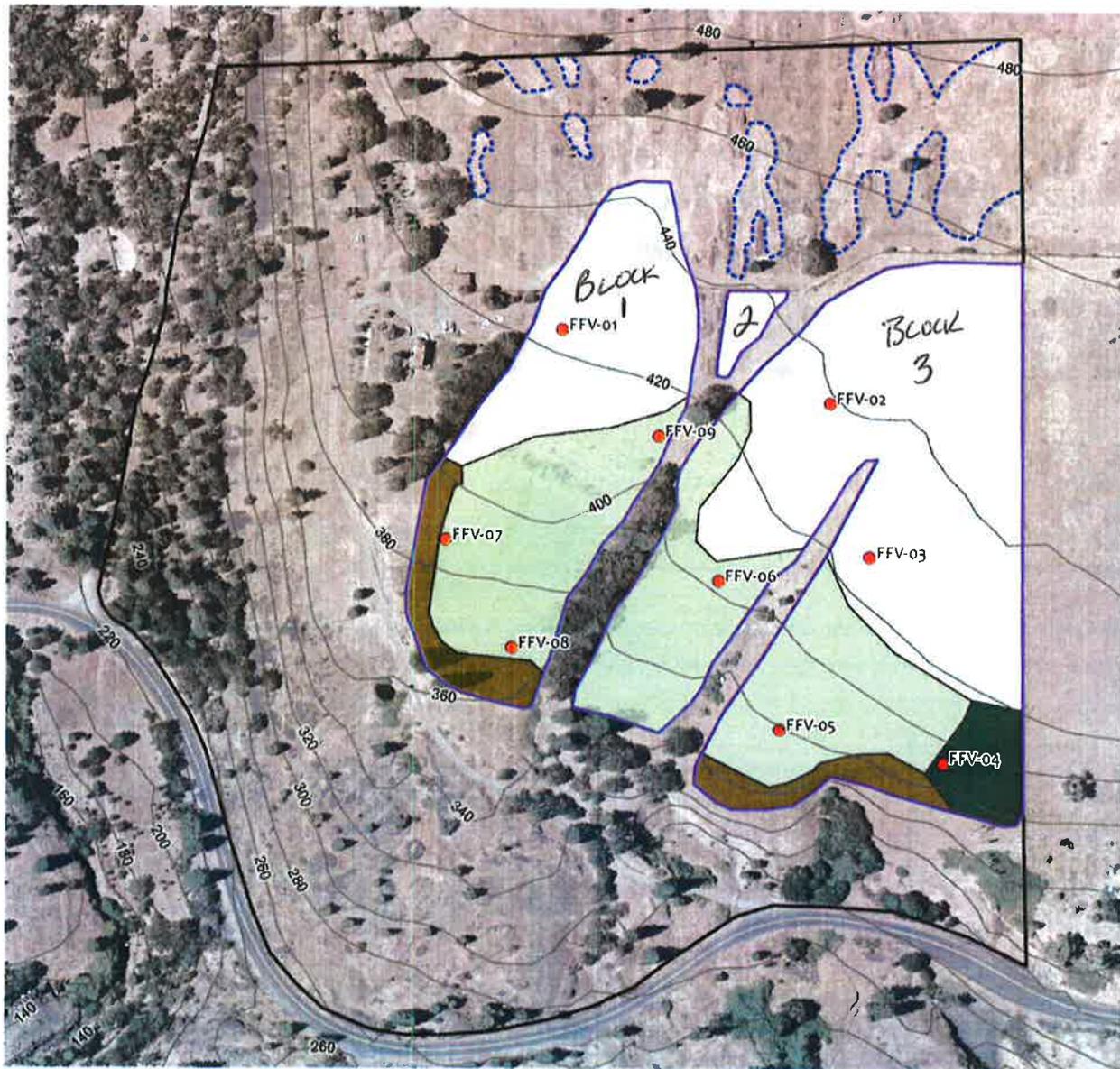
Address: 381 Old Highway 8, Lyle, WA 98635

Land Classification under Chapter 84.34: Farm and agricultural land (55.95 acres)

Zoning: General Rural

Fowler Family Vineyards

Soils



- Property boundary
- Potential vineyards
- Sample Pits
- 20 foot contours
- Loess Biscuits to be examined in future for soil depth

Soils

- Balake very gravelly loam, 5 to 10 percent slopes
- Balake very gravelly loam, 10 to 15 percent slopes
- Balake very gravelly loam, 15 to 30 percent slopes
- Rock outcrop-Haploxerolls complex, 30 to 50 percent slopes

Scale 1:3,000

Map Projection: UTM Zone 10 NAD 1983

Map prepared by Richard Rupp, Palouse Geospatial

January 2017

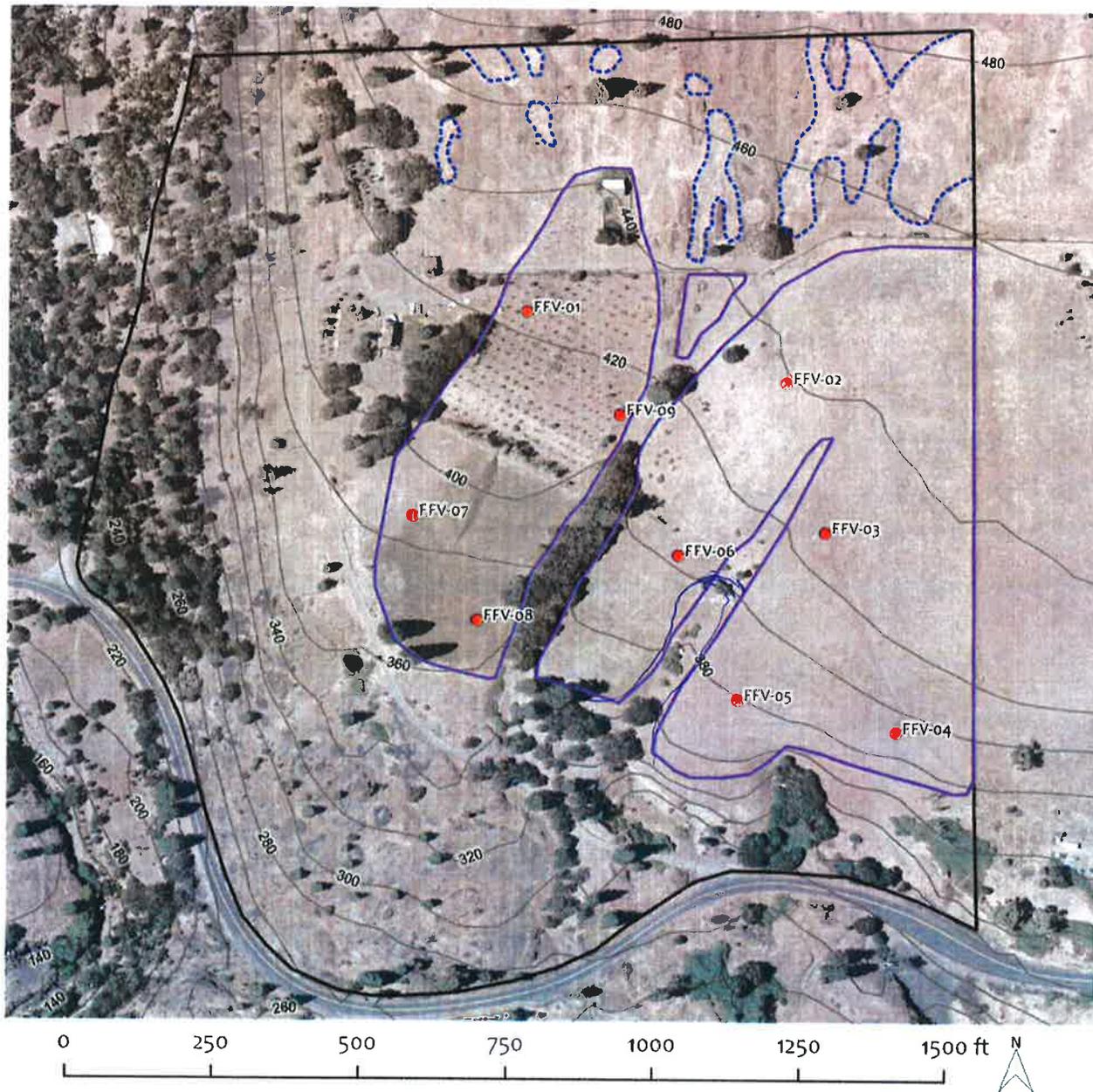
Background image provided by Mapbox.

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Figure 5

Fowler Family Vineyards

Potential vineyards



-  Property boundary
-  Potential vineyards
-  Sample Pits
-  20 foot contours
-  Loess Biscuits to be examined in future for soil depth

Scale 1:3,000
Map Projection: UTM Zone 10 NAD 1983
Map prepared by Richard Rupp, Palouse Geospatial
January 2017

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Figure 1

Red- current spring fed irrigation piping. Blue: 8' Game fence

Google Earth

feet
meters



Google Earth

