

MNS21-0002 Fire Safe & Vegetation Management Plan

Prepared By: Joshua Melcon, Last Modified 12/26/2021

History:

12/26/2021: Better description of SRA roadway/access compliance based on updated parcel map.

12/2020: Initial version

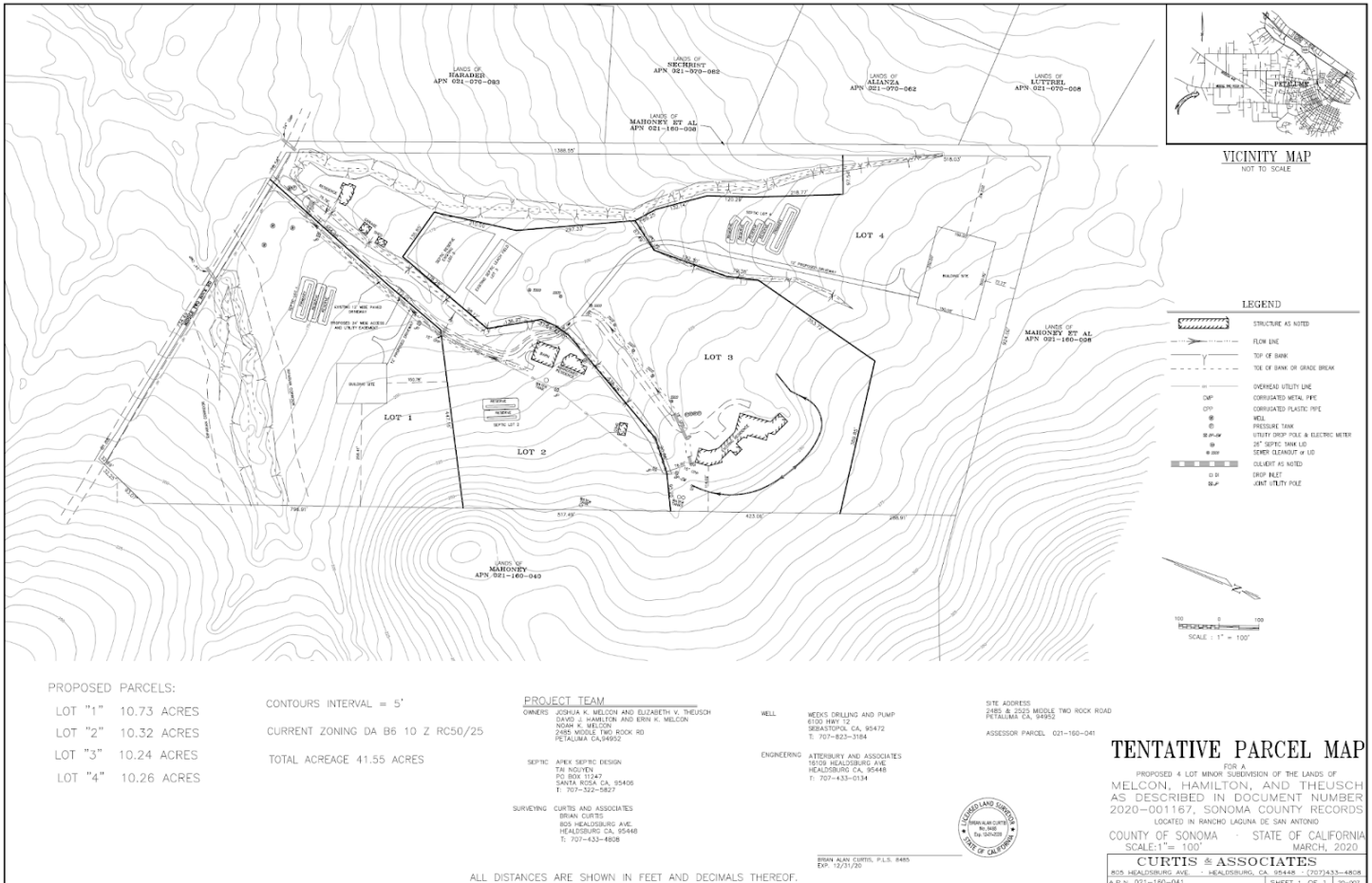
FIRE SAFE & VEGETATION MANAGEMENT PLANNING GUIDELINES

A Fire Safe & Vegetation Management Plan, acceptable to the Sonoma County Fire and Emergency Services Department (FESD), is required with every application for a subdivision. To assist in the preparation of the Fire Safe & Vegetation Management Plan, one can refer to the Fire Safe Standards and Vegetation Management Planning Requirements from the FESD website at http://www.sonoma-county.org/des/fs_permit.htm.

The purpose of the Fire Safe & Vegetation Management Plan is to recognize potential fire hazards and to establish mitigation to minimize those hazards. The Fire Safe & Vegetation Management Plan may be prepared by the applicant and/or a qualified professional depending on the complexity of the project. FESD can be contacted to coordinate requirements.

The Fire Safe & Vegetation Management Plan must address the following items of concern:

1. **Terrain:** Are there steep slopes, deep canyons, loose soil, rugged terrain, or other physical obstacles that may impact wild land fire safety?



See the topography map on page 1:

Summary:

The property is generally a gently sloped hillside with occasional natural drainage channels.

Are there:

- *steep slopes*
 - There are steep slopes in the south west corner of the property and along the western border.
There is a Riparian corridor along the northwest boundary.
- *deep canyons*
 - No.
- *loose soil*
 - No
- *rugged terrain*
 - No
- *or other physical obstacles*
 - Other than the riparian corridor there are two drainage courses that flow through the property.
- *that may impact wild land fire safety?*
 - The entire property is accessible from the existing paved road. It has bridges/crossings with culverts over what might otherwise be problematic drainage obstacles.

2. Vegetation: Describe the vegetation in the vicinity of the building site and also the area. Is it primarily grass, chaparral, heavy/tall brush, sparse trees, and/or heavily wooded? In extreme urban-wild land interface or other high wild land fire hazard area, measures in addition to vegetation management may be required to reduce fire hazards.

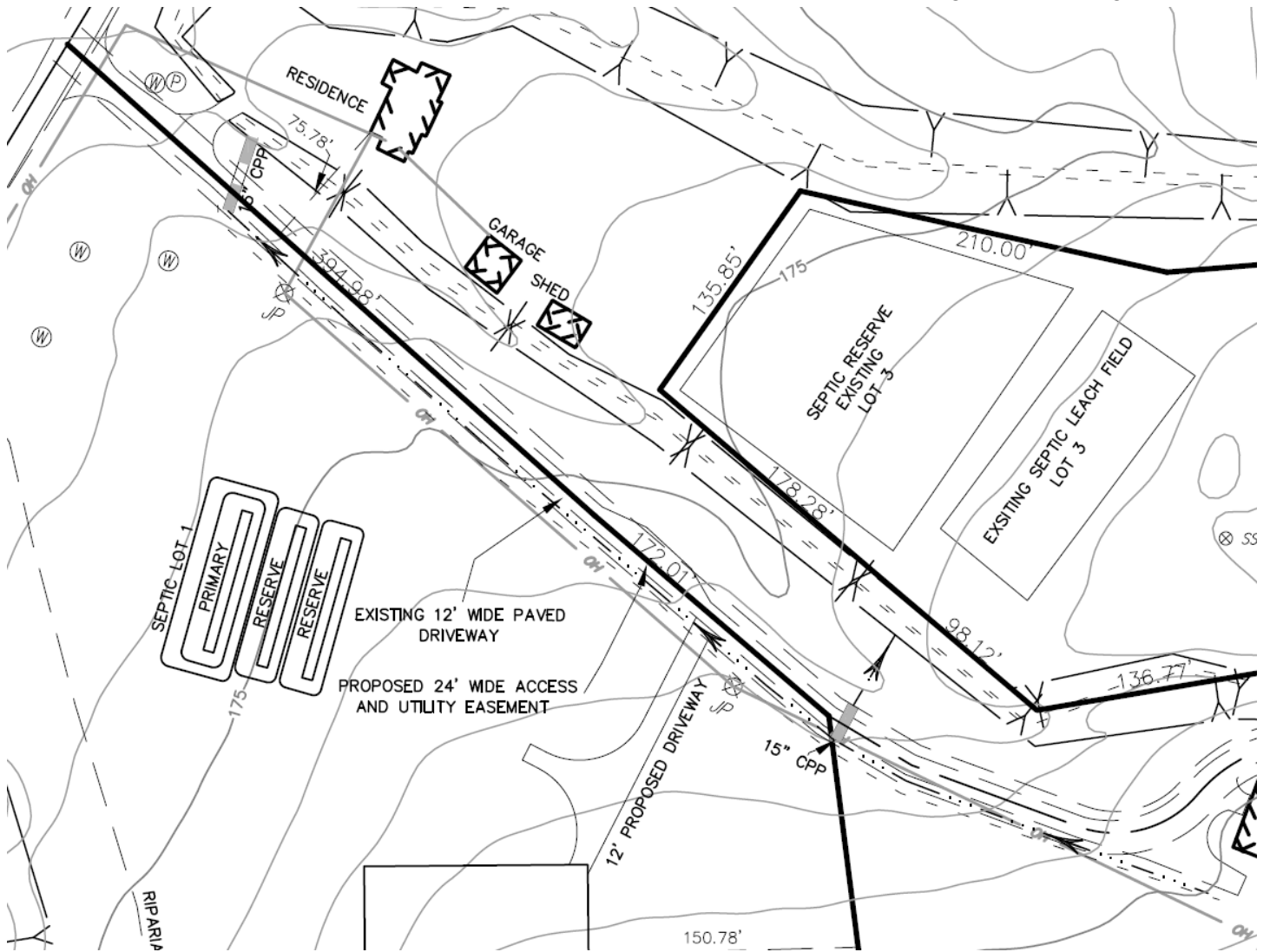
Grass/pasture surrounds proposed new building sites with at least 150' foot setback to any trees/shrubs/non pasture.

Trees (primarily oak) line the natural drainage channels and riparian corridor. There are also eucalyptus trees along the eastern edge of the property, but the vast majority of those are located on the neighboring property.

3. Access to Property: Do the ingress/egress roads meet minimum Fire Safe Standards for grade, width, and turnouts? Is the access road wide enough for a fire apparatus and other emergency equipment? Are there at least two different ingress-egress routes to the building sites?

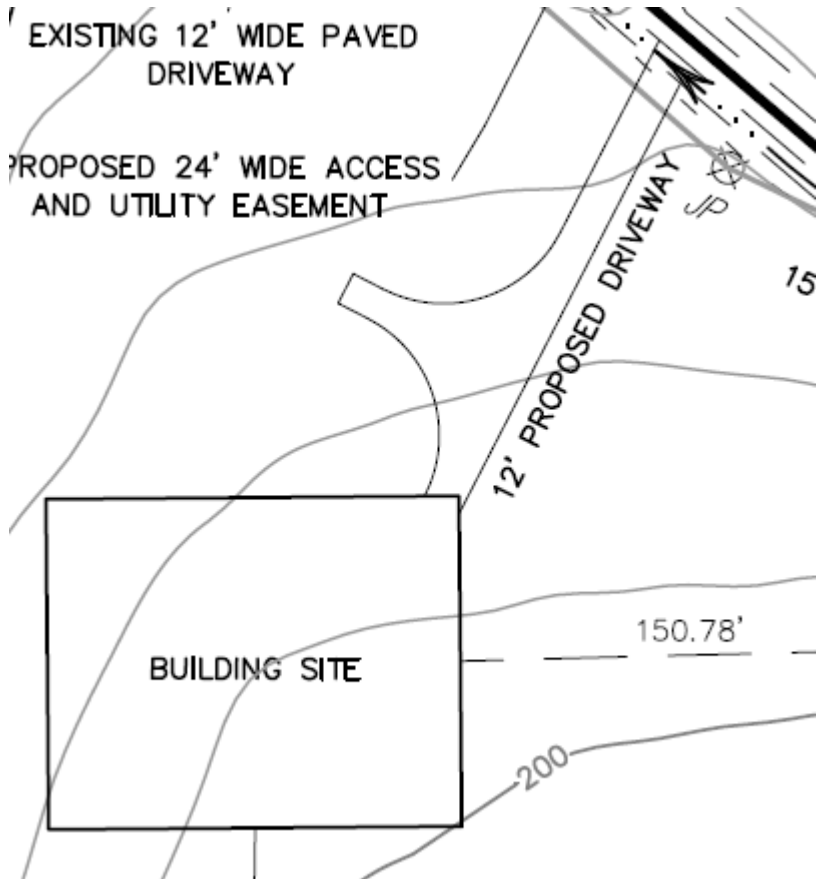
Yes

In the tentative parcel map the driveway from Middle Two Rock Road to the barn in the center of the property will be upgraded to a 20' Road (see parcel map excerpt on next page). This is required because it will provide access to more than 2 parcels.

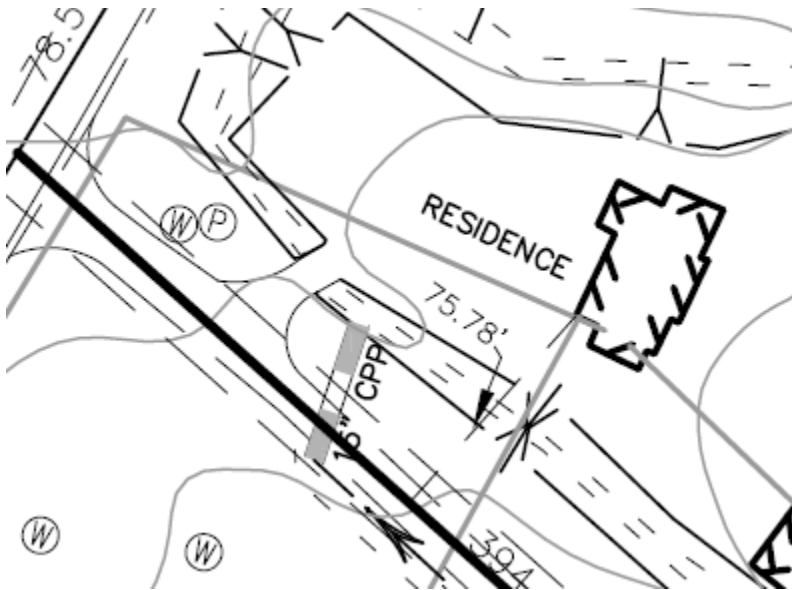


The tentative parcel map also denotes driveways to each lot/teative building site that meet requirements for SRA turn radius, turnouts, widths, and turnouts. These driveways are shown on the following two pages. This tentative design meets all requirements for the SRA area. Additionally any improvements to the tentative design that occurs when it becomes finalized will also meet SRA requirements.

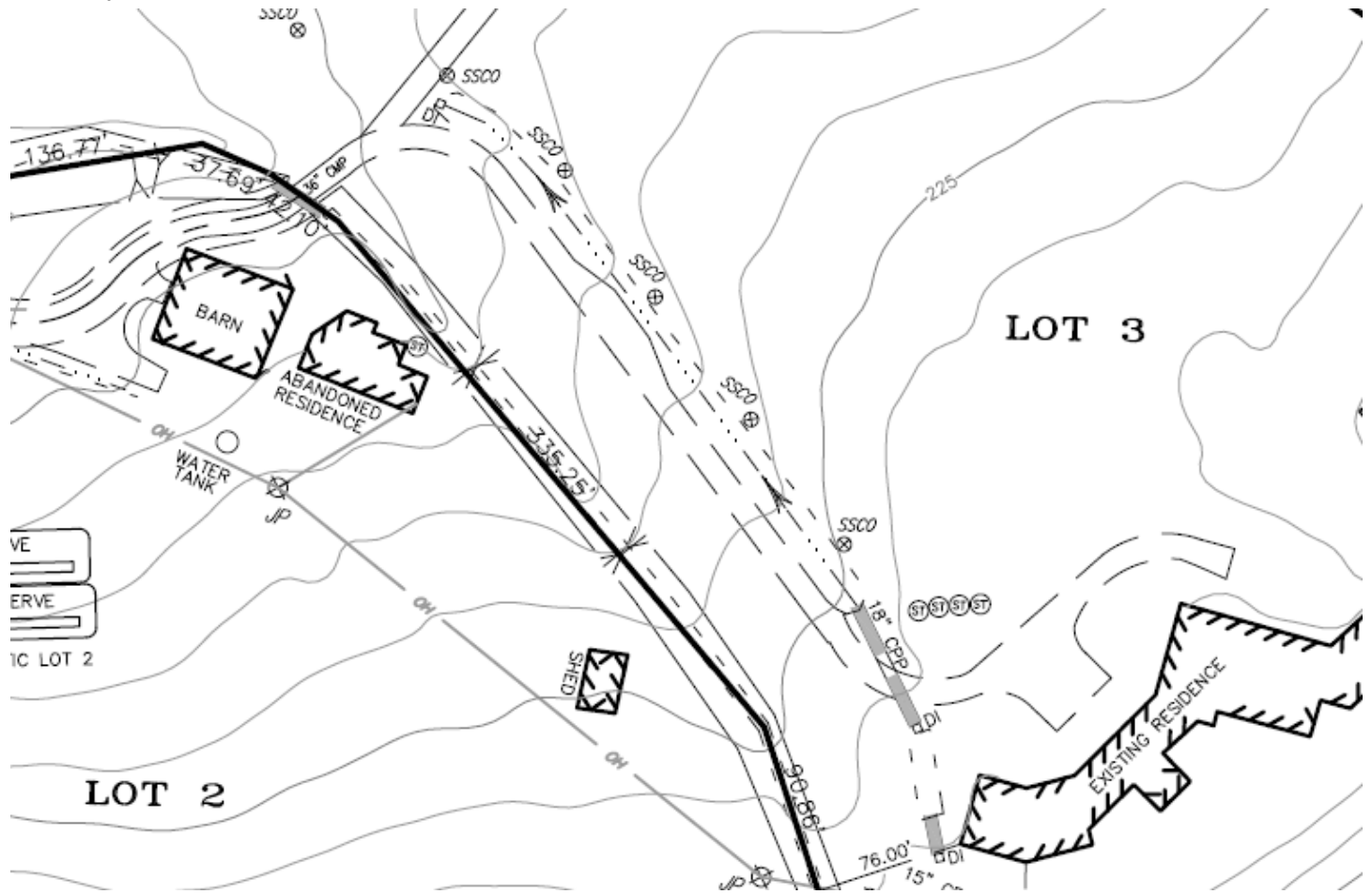
Driveway/turnout for Lot 1:



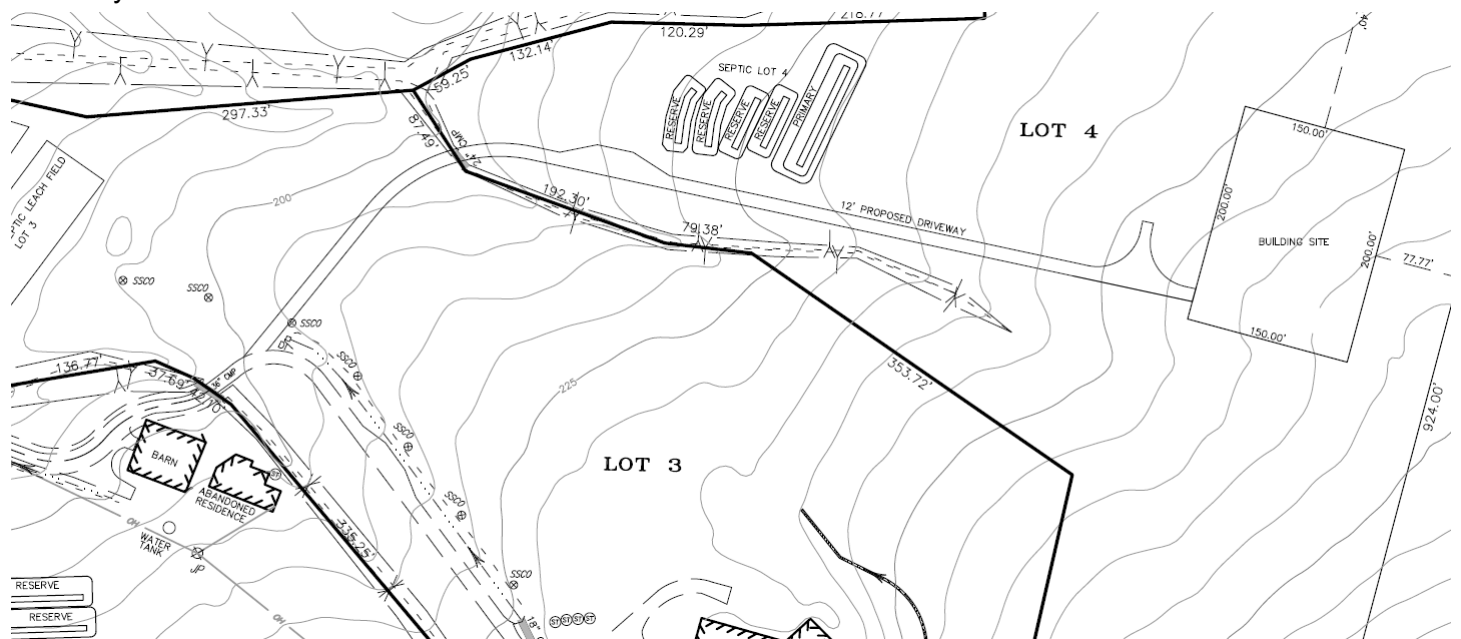
Driveway/turnout for Lot 2:



Driveway/turnout for Lot 3:



Driveway/turnout for Lot 4:



Additionally the Civil engineer on the project, Tim Atterbury, indicates the the project is generally compatible with SRA standards: "[MNS21-0002 SRA Compliance Letter Jun30_2021.pdf](#)"

ATTERBURY & ASSOCIATES, INC.
Consulting Civil Engineers – Land Planners

June 30, 2021
Jn. 20-29

Derik Michaelson, Project Planner
Permit Sonoma
2550 Ventura Avenue
Santa Rosa, CA 95403-2859

Re: MNS21-0002 - 2525 Middle 2 Rock Road, Petaluma
APN. 021-160-041

Dear Derik,

Upon review of SRA Article 2 Emergency Access and Egress fire protection standards, this project can achieve compliance with the roadway, width, turnouts, and dead-end requirements.

Sincerely,



Thomas W. Atterbury, PE

cc: Joshua Melcon, owner
Brian Curtis, L.S.

4. Building Sites: Are building sites situated so as to provide adequate space for the establishment of required defensible space without property line conflicts? In high fire hazard areas, 150 feet of defensible space may be required or prudent. Will proposed structures or building site be located in areas less affected by wild land fire (i.e. away from mid-slope locations, ridgetops, etc.)?

- *Are building sites situated so as to provide adequate space for the establishment of required defensible space without property line conflicts?*
 - Yes
- *In high fire hazard areas, 150 feet of defensible space may be required or prudent*
 - The property is not in a high fire hazard area. However at least 150' of defensible space is available for new building sites. Neighboring properties adjacent to building sites are pasture.
- *Will proposed structures or building site be located in areas less affected by wild land fire (i.e. away from mid-slope locations, ridgetops, etc.)?*
 - Yes. Building sites are on mild slope locations.

5. Fire Services: Who will provide fire services? What is the travel/response time and distance from the proposed subdivision from this service or from other fire services in the area?

There are 3 Fire stations within 3.1 miles of the property:

Distance (by road)	Drive time	Agency	Address	Notes
2.6 Miles	5 minutes	Cal Fire Petaluma Station	655 Lohrman Ln, Petaluma, CA 94952	Seasonal Staffing
2.1 Miles	5 minutes	Wilmar Volunteer Fire Station	3825 Bodega Ave, Petaluma, CA 94952	
3.1 Miles	7 Minutes	Rancho Adobe Fire Station 3	99 Liberty Rd, Petaluma, CA 94952	

Fire services are provided by Wilmar Volunteer Fire Station (<http://www.wilmarfire.com/>).

Wilmar's typical response time includes a minimum of: 5 minutes driving

6. Fire Protection Water Supply: Is there a public water supply system? Does it provide minimum required fire flow? What is the maximum permitted fire hydrant spacing and location? If water tanks are used, can they be cited for gravity flow rather than requiring power for operation? What is the proposed water source (e.g. municipal system, well, spring, creek pond, etc?) Is it on or close to the site? What is the estimated water volume? Is the water supply source reliable year round?

- *Is there a public water supply system?*
 - No
- *Does it provide minimum required fire flow?*

- N/A
- *What is the maximum permitted fire hydrant spacing and location?*
 - N/A
- *If water tanks are used, can they be cited for gravity flow rather than requiring power for operation?*
 - Each building site will have water storage tanks at high elevations with a gravity fed hydrant with storage size determined by Sonoma PRMD regulations.
- *What is the proposed water source (e.g. municipal system, well, spring, creek pond, etc?) Is it on or close to the site? What is the estimated water volume? Is the water supply source reliable year round?*
 - There will be one well per building site that should be operational year round.

7. Building Construction: Will structural “fire hardening” techniques be utilized in the design of the proposed building?

Structures will be built to meet or exceed WUI (Wildland Urban Interface) construction/fire standards.

The items of concern above should be viewed as the minimum that need to be addressed for Fire Safe & Vegetation Management Plans. The Sonoma County Fire Marshal acknowledges that some of these items of concern may not apply to a given proposed subdivision. Conversely, many high fire hazard areas may have high to extreme wild land fire hazards such that additional measures may be necessary to reduce fire hazards. FESD may be contacted for questions regarding the preparation of the Fire Safe & Vegetation Management Plan. On-site fire hazard assessments can be scheduled with the Sonoma County Fire Marshal at 707-565-1152.

Appendix (resource links)

Resources/Context:

<https://gis.data.ca.gov/datasets/CALFIRE-Forestry::california-fire-hazard-severity-zones-fhsz?geometry=-122.811%2C38.213%2C-122.651%2C38.237>

<https://sonomacounty.ca.gov/PRMD/Fire-Prevention/Vegetation-Management-Services/>

[Fire Safe 2005](#)