



March 9, 2020

Bob Biederman
Munselle Civil Engineering
513 Center Street
Healdsburg, CA 95448

RE: Summary of Potential Impacts to Aquatic Resources at Chalk Vista Jensen Lane Project

Dear Mr. Biederman:

This letter is intended to address the potential for environmental impacts from two septic lines and one culvert upgrade underlying an access road for the proposed Chalk Vista Jensen Lane subdivision located at the end of Jensen Lane, Windsor, California. It is my understanding the Sonoma County Permit Resource and Management District (PRMD) has requested specific information regarding these potential project elements and potential impacts to on-site streams and other potentially occurring sensitive biological resources.

The potential road and culvert upgrade is situated in the south-central portion of the Study Area. It is my understanding that the septic lines would be jack-and-bore underneath the drainages they cross. These potential crossings are located in the north-central and northwestern portion of the Study Area. Because these lines would be beneath the channels and thereby avoiding direct impacts to the streams and riparian habitats, permitting with the aquatic resource agencies is likely not required. However, it is advisable to provide the resource agencies with details of the project (e.g., geotechnical studies, frac-out contingency plan) to ensure permitting or other considerations is not necessary. Because there would be in-channel work, the culvert upgrade would require the following studies and permits to comply with regulations protecting aquatic resources and associated sensitive biological resources.

Formal Delineation of Waters of U.S. and Waters of the State: The biological resources assessment (BRA) conducted by our office (WRA 2018) mapped out the site's streams centerlines and top-of-bank. However, the mapping was not at a resolution sufficient for the regulatory agencies to provide permits. Therefore, a formal delineation of Waters of the U.S. and Waters of the State. The ordinary high water mark (OHWM) would be mapped for the U.S. Army Corps of Engineers (Corps), and the top-of-bank and riparian habitat edge for the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW). The mapping should be conducted with mapping grade GPS units or higher resolution equipment such as a ground survey. These data should then be documented in a digital spatial format (e.g., ArcGIS Shapefile, AutoCAD DWG) to inform the project design and be provided to the regulatory agencies.

Aquatic Resources Permit Application: Once verified by the regulatory agencies, a permit application should be filed with the respective regulatory agencies. The following permits and associated agencies would be necessary for the project to be in compliance:

Section 404 Nationwide Permit #3, #13, or #14: Under Section 404 of the Clean Water Act (CWA), Nationwide Permits (NWP) can be issued by the Corps for small scale projects without substantial cumulative impacts. The threshold is typically less than one-half acre of impacts or similarly spatially confined impact; a culvert replacement would meet this threshold. One of several NWPs could be applied for: NWP #3 Maintenance (for maintenance on any previously authorized fill or fill placed before 1978); NWP #13 Bank Stabilization (to stabilize banks for erosion control or prevention); or NWP #14 Linear Transportation Projects (to construct or improve roads). In addition to the permit application, the applicant would need to provide the formal delineation, a project description (including timing, extent, equipment, materials), plan drawings, biological assessment, and any mitigation plans/actions to avoid or minimize impacts to sensitive biological resources. The Corps can be consulted prior to submittal of the permit to determine which NWP should be selected and outline the permit and mitigation to meet the Corps standards.

Section 401 Water Quality Certification: Under Section 401 of the CWA, federal permits (i.e., NWP) must be in compliance with state water quality requirements. Obtaining a Section 401 Water Quality Certification (WQC) from the RWQCB would run concurrent with the Corps permitting timelines, and must be issued within one year. Prior to completing the final WQC, RWQCB requires documentation of CEQA review by the lead agency (e.g., IS/MND, EIR). In addition to the permit application, the applicant would need to provide the formal delineation, a project description (including timing, extent, equipment, materials), plan drawings, biological assessment, and any mitigation plans/actions to avoid or minimize impacts to sensitive biological resources. The RWQCB can be consulted prior to submittal of the LSAA to ensure that the proposed project and mitigation is sufficiently compensatory for the project impacts.

Section 1600 Lake and Streambed Agreement: Under Section 1600 of the California Fish and Game Code (CFGF), individuals or agencies must notify the California Department of Fish and Wildlife (CDFW) prior to conducting activities in or around lakes, rivers, or streams that may (1) divert or obstruct natural flow; (2) change the bed, channel, or bank; (3) use of material; and/or (4) deposit or dispose of material in. In addition to the permit application, the applicant would need to provide the formal delineation, a project description (including timing, extent, equipment, materials), plan drawings, biological assessment, and any mitigation plans/actions to avoid or minimize impacts to sensitive biological resources. The Lake and Streambed Agreement (LSAA) can be concurrent with the NWP and WQC, and would require completed CEQA documentation. The CDFW can be consulted prior to submittal of the LSAA to ensure that the proposed project and mitigation is sufficiently compensatory for the project impacts.

Best Management Practices and Mitigation: As part of the application and to complete the project, all three agencies will require compensatory mitigation for temporal and spatial loss of aquatic resource functions, and the implementation of best management practices (BMPs) during project activities. Typical mitigation for culvert replacements (and similar project types in streams), includes grading or shaping of the streambank to prevent erosion; riparian and/or wetland plantings; and/or similar activities to uplift stream functions. A mitigation plan will necessarily be provided as part of the permit application, and should consider pre-project consultation with the

resource agencies to ensure approval. BMPs will necessarily be included as part of the project to protect the stream and other potentially occurring sensitive biological resource. Typical BMPs for these project types include: seasonal work windows, biological monitoring, sediment trapping, exclusion areas, material and equipment restrictions, etc.

Please contact us if you have questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Aaron Arthur', with a stylized, cursive script.

Aaron Arthur
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Certified California Consulting Botanist #0016
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