California Environmental Quality Act

Initial Study

(As required by Sec. 15063 of the Public Resources Code)
Prepared: July 2017

1.	**Project Title:**	Upper East Lot 3, Proposed Residence
2.	**Lead Agency Name and Address:**	City of Sonoma Planning Department
3.	**Contact Person and Phone Number:**	Rob Gjestland, Senior Planner (707) 938-3681
4.	**Project Location:**	Brazil Street / APN 018-051-007 (aka Lot 3 or Lot 228)
5.	**Project Sponsor's Name and Address:**	Walton Architecture & Engineering P.O. Box 7562 Tahoe City, CA 96145
6.	**General Plan Designation:**	Hillside Residential
7.	**Zoning:**	**Base:** Hillside Residential (R-HS) **Overlay:** Historic (/H)

8. Description of Project:

The project involves construction of a ±5,500-square foot residence, ±595-square foot detached garage, and swimming pool in the northern or upper portion of the subject property, near the lower edge of a meadow west of the Ghiggioli residence at 436 Brazil Street. The long axis of the project is oriented parallel to the natural contour of the hillside. Slopes at the development site are fairly consistent, averaging roughly 20%. The structures employ a modern farmhouse architectural style with shed roofs, utilizing neutral-colored exterior materials including gray vertical siding and ledgestone veneer with brown/charcoal railing, posts, metal seam roofing, and window frames. The residence is designed with two offset floors, with the project cut into grade on the uphill side and fill used on the downhill side. The home varies in height from ±10 feet at the main/upper floor level on the north, to a maximum of 29'2" feet when measuring the downhill/south facade. The detached garage is located just behind (north of) the residence partially tucked into the hillside while the swimming pool is located east of the home on terrace that is roughly three feet below the main floor level. Access to the residence (and potentially an additional home on the parcel to the west, Lot 4/227) would be provided by a ±800-foot long driveway that extends off an existing private driveway originating at the corner of Fourth Street East and Brazil Street. Construction activities associated with the project would include tree removal, grading, excavation and trenching for installation of required improvements (e.g., utilities, driveway, and drainage features), preparation of building pads, and construction of the residential buildings. Arborist reports submitted with the application indicate that two trees would be removed at the residential building site and 15 trees would require removal for the proposed driveway, the majority being oak trees with a diameter greater than 12 inches. Earthwork calculations for the residence estimate 580 cubic yards of cut and 1,240 cubic yards of fill resulting in

660 cubic yards of import. However, soil export from the driveway (230 cubic yards) and adjacent residential project on Lot 4/227 (430 cubic yards) are intended to balance the project. Earthwork calculations for the driveway estimate 3,120 cubic yards of cut and 2,890 cubic yards of fill. Additional details are provided in the attached project submittal (Attachment 1).

9. Setting and Context:

The subject property is a 2.69-acre parcel with access from an existing private driveway originating at the intersection of Fourth Street East and Brazil Street. The property is undeveloped supporting open grassland, oak woodlands, and rock outcroppings. Adjoining land uses include single-family homes on large, similarly zoned parcels, as well as undeveloped County-zoned parcels to the north, outside the City limit.

10. Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement).

Sonoma County Water Agency/Sonoma County PRMD, Engineering Division (sanitary sewer connection).

11. Application of CEQA requirements.

This Project is subject to the requirements of the California Environmental Quality Act (CEQA). The City of Sonoma is the CEQA lead agency. Prior to making a decision to approve the Project, the City must identify and document the potential significant environmental effects of the Project in accordance with CEQA. This Initial Study has been prepared under the direction of the City to fulfill the CEQA requirements.

David Goodison, Planning Director

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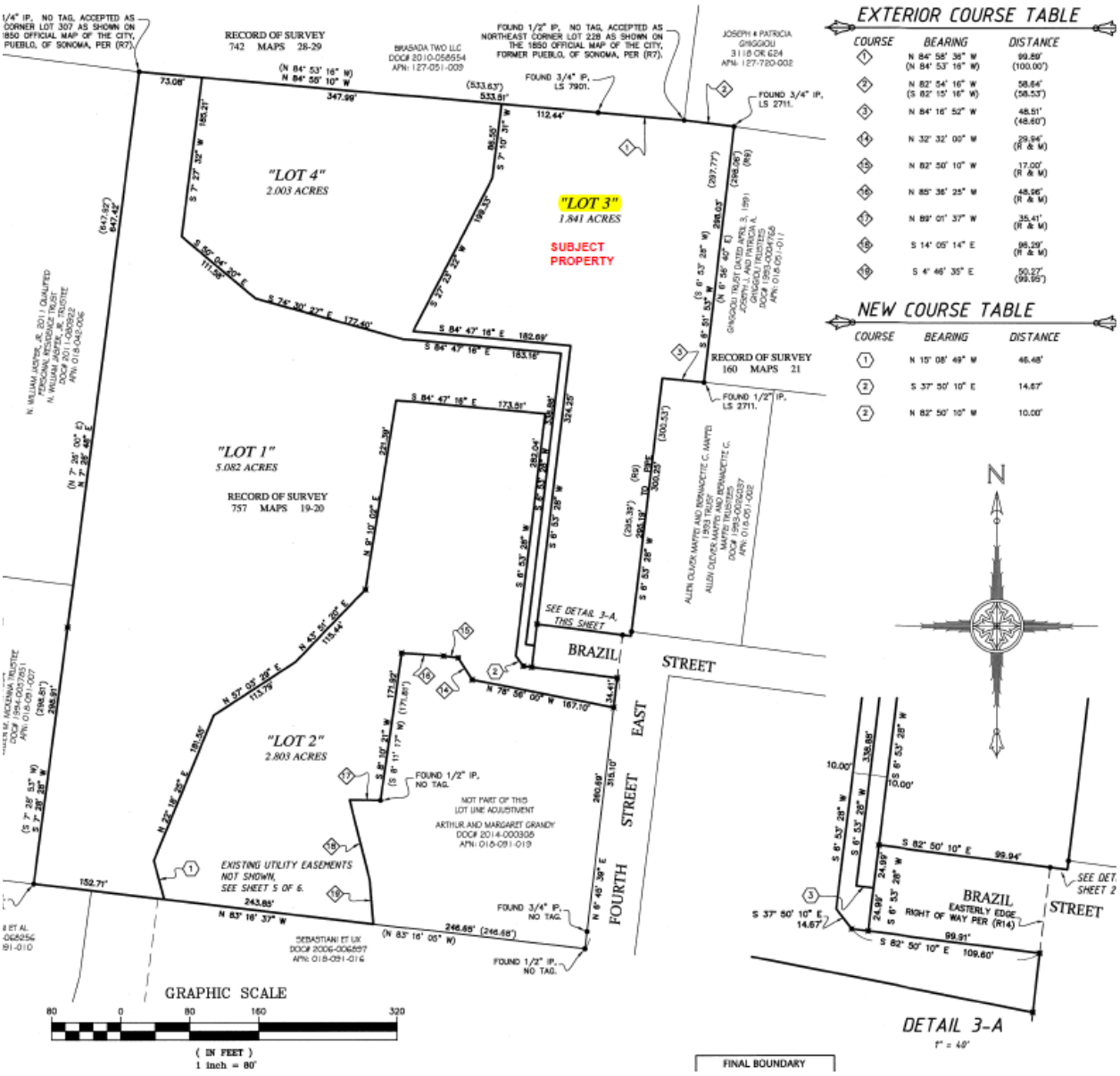
Figure 1 – Location Map



The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Hazards & Hazardous Materials	☐ Public Services
☐ Agriculture Resources	☐ Hydrology / Water Quality	☐ Recreation
☐ Air Quality	☐ Land Use / Planning	☐ Storm Water
☐ Biological Resources	☐ Mineral Resources	☐ Transportation / Traffic
☐ Cultural Resources	☐ Noise	☐ Utilities / Service Systems
☐ Geology / Soils	☐ Population / Housing	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that 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 revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Date

David Goodison, Planning Director City of Sonoma, Planning Department

Printed name For *(Lead Agency)*

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a. Earlier Analysis Used. Identify and state where they are available for review.

   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a. The significance criteria or threshold, if any, used to evaluate each question; and

b. The mitigation measure identified, if any, to reduce the impact to less than significance.

1. AESTHETICS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☑	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☑	☐	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☑	☐

Discussion:

a) Have a substantial adverse effect on a scenic vista?

The property has as General Plan land use designation of Hillside, which is intended to preserve Sonoma's hillside backdrop, while allowing limited residential development. Section 19.40.130 of the Sonoma Municipal Code (SMC) defines "scenic vistas" as a public view, benefiting the community at large, of significant features, including hillside terrain, ridgelines, canyons, geologic features, and community amenities (e.g., parks, landmarks, permanent open space). The view element potentially affected by the project is the hillside area within which the residence and accessory structures would be constructed. The proposed project employs a number of strategies to limit it impacts on public views of the hillside as reflected in the project submittal (Attachment 1):

- The residence and related improvements are placed well below the ridgeline and are aligned with the contours of the site/hillside.
- The placement of the residence allows the tree line below the development site to substantially screen proposed improvements from public views, including the lower floor.
- The residence is cut into the hillside, thereby limiting its apparent mass. The detached garage is placed behind the residence and is also cut into the hillside.
- Elements of the project are stepped on the slope, with the residence, detached garage, and pool at different elevations.
- The residence is divided into two staggered levels, with the main floor stepped back sixteen feet from the lower floor. This design reduces massing by conforming to the slope of the terrain and minimizes the area of grading.
- The shed roof design and the use of simple building forms reduce the visual prominence of the residence.

- Exterior materials and colors have been selected to blend with the natural surroundings and would be further refined through a subsequent design review process with the City's Design Review & Historic Preservation Commission (DRHPC).
- The path of the private driveway extension leading to the residence has been designed to follow the contours of the hillside and would be substantially screened with trees.

To assess potential impacts on public views, story poles were placed on the site to facilitate the preparation of visual simulations depicting the project as viewed from Fourth Street East and Lovall Valley Road. The visual analysis is in included in the project submittal (Attachment 1). The results of this assessment are as follows:

From Fourth Street East: 12%-16% of the face of the residence would be visible. The visible area would primarily be the upper floor/roofline, with most of the first floor screened from view by trees on the site.

From Lovall Valley Road: 11% of the face of the residence would be visible. The visible area would be limited to the upper floor/roofline, with most of the first floor screened from view by trees on the site.

As shown in the simulations, the proposed design strategy is successful in allowing the structure to blend in with the larger hillside. While there would be public views of portions of the residence, the majority of the proposed improvements would be substantially screened by tree clusters and would not create an intrusive visual element. Because the preservation of key tree clusters on the site is a critical element in screening views of the project, pursuant to the letter from the Inman Law Group, LLP to Ross Edwards, dated June 7, 2017 (Attachment 3), the applicant intends to enact restrictive covenant provisions, which would be implemented through CC&R's applicable to the property, to address tree protection and hillside view preservation. In part, these restrictive covenants would ensure the preservation and maintenance of trees located on the property over the long-term (including trees that screen the proposed improvements from public views) with oversight by the City and a licensed arborist. This aspect of the proposal and general tree preservation, mitigation, and replacement requirements related to construction are addressed by Mitigation Measures 4.e-1 and 4.e-2 set forth under Section 4.e of the Initial Study. A Tree Screening and Impact Exhibit (Attachment 4) has been provided that identifies important screening trees (shown in red) that will be preserved, and trees that will require particular care and protection for preservation given their proximity to the development zone (shown in yellow).

Based on the factors discussed above, and with implementation of Mitigation Measures 4.e-1 and 4.e-2, the project would have a ***less-than-significant*** impact on scenic vistas.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

The project site is not located along a Scenic Highway; therefore, the project would have ***no impact*** on scenic resources associated with a Scenic Highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The property is an undeveloped interior 2.69-acre parcel that supports open grassland, oak woodlands, and rock outcroppings. As discussed above under Section 1.a, the siting, architecture, and detailing of the proposed residence are designed to integrate it with the site, protect significant tree clusters, and retain the visual character of the property. As a result, the majority of the proposed improvements would be substantially screened from public view, although some elements of the project, particularly portions of the upper/main floor and roofline, would be visible from public views to the south and southeast. However, as demonstrated by the visual analysis provided within the

project submittal (Attachment 1), public views of the project would be substantially screened by tree clusters below the development site and adjoining the extension of the private drive.

In addition, the proposed development is subject to the Hillside Development chapter of the City's Development Code (SMC 19.40.050), which includes hillside development standards and guidelines intended to preserve and protect views to and from the hillside areas within the City, to preserve significant topographical features and habitats, and to maintain the identity, character, and environmental quality of the City. The project employs a number of design strategies that help to meet many objectives of the City's Hillside Development criteria (SMC 19.40.050), as follows:

- The residence and related improvements are placed well below the ridgeline and are aligned with the contours of the site/hillside.
- The steepest area of the site would remain undeveloped.
- The placement of the residence allows the tree line below the development site to substantially screen proposed improvements from public views, including the lower floor.
- The residence is cut into the hillside, thereby limiting its apparent mass. The detached garage is placed behind the residence and is also cut into the hillside.
- Elements of the project are stepped on the slope, with the residence, detached garage, and pool at different elevations.
- The residence is divided into two staggered levels, with the main floor stepped back sixteen feet from the lower floor. This design reduces massing by conforming to the slope of the terrain and minimizes the area of grading.
- The shed roof design and the use of simple building forms reduce the visual prominence of the residence.
- Exterior materials and colors have been selected to blend with the natural surroundings and would be further refined through a subsequent design review process with the City's Design Review & Historic Preservation Commission (DRHPC).
- The path of the private driveway extension leading to the residence has been designed to follow the contours of the hillside and would be substantially screened with trees. In addition, the driveway is designed to share access with an adjoining parcel, which reduces grading on both lots
- While approximately 17 trees would be removed (two at the residential building site and 15 for the driveway), the majority of trees on the property and around the development area would be preserved and have been incorporated in the layout (see further discussion regarding tree removal, replanting and preservation under Section 4.e).

Lastly, as discussed in greater detail under Section 4.e, to offset tree removal the project includes a tree replacement program set forth toward the end of the Preliminary Grading and Drainage Analysis, dated May 25, 2017, prepared by Bear Flag Engineering (Attachment 2). Under the tree replacement program, trees that are removed due to construction would be replaced/replanted at a ratio of 1.5 trees to every 1 tree removed (a 1.5:1 tree replacement ratio). Replacement trees would be planted at locations adjacent to proposed improvements to further reduce the visibility of those improvements. In addition, pursuant to the letter from the Inman Law Group, LLP to Ross Edwards, dated June 7, 2017 (Attachment 3), the applicant intends to enact restrictive covenant provisions, which

would be implemented through CC&R's applicable to the property, to address tree protection and hillside view preservation. In part, these restrictive covenants would ensure the preservation and maintenance of trees located on the property over the long-term (including trees that screen the proposed improvements from public views) with oversight by the City and a licensed arborist. This aspect of the proposal and general tree preservation, mitigation, and replacement requirements related to construction are addressed by mitigation Measures 4.e-1 and 4.e-2 set forth under Section 4.e of the Initial Study. A Tree Screening and Impact Exhibit (Attachment 4) has been provided that identifies important screening trees (shown in red) that will be preserved, and trees that will require particular care and protection for preservation given their proximity to the development zone (shown in yellow).

Based on the factors discussed above, and with implementation of Mitigation Measures 4.e-1 and 4.e-2, the project would not substantially degrade the existing visual character or quality of the site and its surroundings and would have a ***less-than-significant impact*** in this regard.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Exterior lighting would be necessary for the project, including building light fixtures at all exterior doors for safety as required by the 2016 California Building Code (other exterior light fixtures may also be proposed). However, this lighting would be controlled and typical of similar residential development on other R-HS zoned properties in the vicinity. In addition, all proposed exterior lighting would require review and approval by the City's Design Review and Historic Preservation Commission (DRHPC) and would be subject to the exterior lighting standards of the City's Development Code[1], which specify that exterior light fixtures must be shielded to reduce or eliminate light spillage off-site. Lastly, public views of the proposed improvements would be limited as noted under Sections 1.a and 1.b above. For these reasons, the project would not create a new source of substantial light or glare that would adversely affect views in the area. This would be a ***less-than-significant*** impact

2. AGRICULTURAL RESOURCES: **In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.** **Would the project:**	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**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?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
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?	☐	☐	☐	☑

[1] City of Sonoma Development Code § 19.40.030

Discussion:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The project site is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation. The project site is identified as "Other Lands" on the most recent Important Farmland Map maintained by the Department of Conservation[2]. ***No impact*** would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The subject property is not under a Williamson Act contract and, while the property's Hillside Residential (R-HS) zoning permits agricultural land uses, it also allows for a single-family residence and residential accessory structures as proposed. Accordingly, there is no conflict and ***no impact*** would occur.

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?

The site is not used for agricultural purposes. Accordingly, the project would have ***no impact*** with regard to the conversion of farmland to non-agricultural use.

3. AIR QUALITY: **Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.** **Would the project:**	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☑	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☑	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☑	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐

[2] http://maps.conservation.ca.gov/ciff/ciff.html

e) Create objectionable odors or airborne dust affecting a substantial number of people?	☐	☑	☐	☐

Discussion:

a) Conflict with or obstruct implementation of the applicable air quality plan?

The Bay Area Air Quality Management District (BAAQMD) is the regional air quality agency for the San Francisco Bay Area Air Basin (SFBAAB), which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties; the southern portion of Sonoma County; and the southwestern portion of Solano County. Accordingly, the City is subject to the rules and regulations imposed by the BAAQMD, as well as the California ambient air quality standards adopted by the California Air Resources Board (CARB), and national ambient air quality standards adopted by the United States Environmental Protection Agency (USEPA). On June 2, 2010 the Bay Area Air Quality Management District (BAAQMD) adopted guidelines for analyzing air quality impacts under CEQA that include screening thresholds for development projects. As stated in the BAAQMD Guidelines, the thresholds are intended to provide a *"… conservative indication of whether the proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration."*

The BAAQMD screening criteria indicate that single-family development projects of less than 451 dwelling units would not exceed the operational threshold for requiring a project-specific analysis with respect to air pollutants. Since only one single-family dwelling is proposed, the project obviously falls well below the applicable screening threshold and therefore would be considered to have a negligible or ***less-than-significant impact*** with respect to air quality or any air quality plans.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

See response 3.a, above. BAAQMD has identified screening thresholds for criteria pollutant emissions and criteria air pollutant precursors, including reactive organic gases (ROG), oxides of nitrogen (NOX), coarse inhalable particulate matter (PM10), and fine inhalable particulate matter (PM2.5). Development projects below the significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. This would be considered a ***less-than-significant impact***.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

See response 3.a above.

d) Expose sensitive receptors to substantial pollutant concentrations?

See response 3.a above.

e) Create objectionable odors and/or airborne dust affecting a substantial number of people?

Construction activities associated with the project, particularly grading and other earthmoving activities, may generate airborne dust that could adversely affect residents in vicinity of the project site. With regard to construction

impacts, BAAQMD's CEQA Guidelines identify the following construction air quality screening threshold for single-family development:

Construction Air Quality Thresholds		
Land Use Type	**BAAQMD Screening Threshold**	**Project Element**
Single Family	114 dwelling units (ROG)	One (1) dwelling unit

Since only one single-family dwelling is proposed, the project obviously falls well below the applicable screening threshold and would be considered to have a negligible impact with respect to construction air quality. However, to fully assure that this issue is addressed, Mitigation Measure 3.e, below, has been included requiring implementation of dust control measures during the construction phase of the project. Implementation of the specified measures would ensure that potential impacts from airborne dust are ***less-than-significant***.

Mitigation Measure 3.e: The following dust control measures shall be implemented as necessary during the construction phase of the project:

1. All exposed soil areas (i.e. building sites, unpaved access roads, parking or staging areas) shall be watered at least twice daily or as required by the City's construction inspector.
2. Exposed soil stockpiles shall be enclosed, covered, or watered twice daily.
3. The portions of Fourth Street East and Brazil Street providing construction vehicle access to the project site shall be swept daily, if visible soil material is deposited onto the road.

4. BIOLOGICAL RESOURCES – **Would the project:**	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**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?	☐	☑	☐	☐
b) Have a substantial adverse effect on any 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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☑	☐

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☑	☐	☐
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?	☐	☐	☐	☑

Discussion:

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?

Rare plant surveys were conducted on April 21 and June 20, 2017 by WRA, Inc. (timed to align with the appropriate bloom period) to determine if any rare plant species are located on the project site. Pursuant to the Memorandum from WRA, Inc. to Ross Edwards, dated June 30, 2017 (Attachment 5), the surveys found no rare plants species within the project area**.** Accordingly, the project would have ***no impact*** on any plants identified as a candidate, sensitive, or special status species.

Three special-status bird species (Cooper's hawk, sharp-shinned hawk, and oak titmouse) have the potential to occur on the site. In addition, on-site trees, shrubs and grassland may be used by nesting birds protected by the Migratory Bird Treaty Act of 1918. The proposed residential development would involve grading and tree/shrub removal or pruning on portions of the site that could impact bird species by causing the destruction or abandonment of occupied nests and mortality of young. Given the possibility for nesting birds on the property, a mitigation measure has been included addressing the timing of tree removal. With implementation of Mitigation Measure 4.a below potential impacts to nesting birds and special status bird species would be ***less-than-significant.***

Mitigation Measure 4.a: If grading or removal of nesting trees and habitat is proposed to occur within the nesting season (between February 15 and August 15) a pre-construction nesting bird survey of the grassland, shrubs and trees within and around the development site shall be performed by a qualified biologist within 7 days of proposed ground breaking. If no nesting birds are observed no further action is required and grading shall commence within one week of the survey to prevent "take" of individual birds that could begin nesting after the survey. If active bird nests are observed during the pre-construction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist in consultation with CDFG.

b) Have a substantial adverse effect on any 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?

The project site does not support riparian habitat or any other identified sensitive natural community. ***No impact*** would occur.

c) Have a substantial adverse effect on federally-protected wetlands?

There are no wetlands on the project site. Accordingly, ***no impact*** would occur.

d) Interfere substantially with the movement of any fish or wildlife species or on any wildlife corridor, or impede the use of native wildlife nursery sites?

The project site adjoins other Hillside Residential (R-HS) zoned parcels that are developed with single-family homes and related accessory structures, similar to what is proposed by the project. In addition, the project site does not adjoin/encompass a stream or other waterway and the property is not used as a native wildlife nursery site. As a result, the project would not substantially interfere with the movement of any fish or wildlife species or any wildlife corridor or nursery site. A ***less-than-significant impact*** would occur.

e) Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance?

While the project is not subject to the requirements of the City's Tree Ordinance (SMC 12.08) regarding new development (as construction of a single-family home on an existing lot is exempt), the City of Sonoma 2020 General Plan includes a broad policy calling for the preservation of existing trees and planting of new trees (Environmental Resource Element Policy 2.6). In addition, the preservation of prominent trees and woodlands is an objective of the City's Development Code in regards to Hillside Development (SMC 19.40.050.F). To address these policies and objectives the applicant commissioned arborist reports for the project (Attachment 6, Tree Preservation and Mitigation Report for Lot 228 prepared by Horticultural Associates, dated June 7, 2017 and Tree Preservation and Mitigation Report for Access Driveway prepared by Horticultural Associates, dated June 7, 2017) and provided a Preliminary Grading and Drainage Analysis dated May 25, 2017, prepared by Bear Flag Engineering (Attachment 2) to evaluate and minimize impacts on trees.

The arborist reports indicate that two trees would be removed at the residential building site and 15 trees would require removal for the proposed driveway, the majority being oak trees with a diameter greater than 12 inches. As noted in the Preliminary Grading and Drainage Analysis, the following steps have been taken to limit tree removal to this number and minimize construction and post-construction impacts on trees.

- The primary goal of the drainage design is to maintain the pre-construction drainage scenario to the maximum extent possible. Proposed drainage improvements have been designed to avoid the re-routing of runoff, over concentration of flows, and oversaturation of existing trees. Grading has been designed to minimize cuts and fills, balance earthwork, avoid grading on severely steep slopes, and avoid creating erosion issues.

- The proposed residence has been located in an open area to minimize tree removal. The driveway turnaround has been reduced to minimize impacts on trees 70 and 71 in the arborist report.

- An interceptor swale located west of the detached garage would convey runoff to a drainage inlet above a landscape wall and fire department turnaround. Runoff from the inlet would be conveyed through a storm drain and released through a tee pipe storm drain dissipater in an open area west of the residence at a location that is not above any existing trees.

- The proposed driveway alignment has been designed to provide adequate emergency vehicle apparatus access while minimizing impacts to existing trees where possible. A 4-foot retaining wall is included on the uphill side of the driveway between stations 2 + 50 and 5 + 50, which eliminates a cut bank and saves approximately 25 trees. A 4-foot retaining wall is also included above at the toe of the fill slope between stations 6 + 50 and 7 + 25 to preserve some of the same trees.

- Runoff from the upper portion of the driveway would be collected by an asphalt berm along the edge of the driveway and conveyed to drain inlets and then tee pipe storm drain dissipaters through storm drains. Outlets have been located in areas that are not directly uphill of existing trees.

To offset tree removal the project includes a tree replacement program set forth toward the end of the Preliminary Grading and Drainage Analysis (Attachment 2). Under the tree replacement program, trees that are removed due to construction would be replaced/replanted at a ratio of 1.5 trees to every 1 tree removed (a 1.5:1 tree replacement ratio). Replacement trees would be planted at locations adjacent to proposed improvements to further reduce the visibility of those improvements. Pursuant to the letter from the Inman Law Group, LLP to Ross Edwards, dated June 7, 2017 (Attachment 3), the applicant also intends to enact restrictive covenant provisions, which would be implemented through CC&R's applicable to the property, to address tree protection and hillside view preservation. In part, these restrictive covenants would ensure the preservation and maintenance of trees located on the property over the long-term (including trees that screen the proposed improvements from public views) with oversight by the City and a licensed arborist. Since the specifics of this aspect of the proposal are not fully developed, a mitigation measure has been included below requiring its implementation, along with a separate mitigation measure that requires general tree preservation, mitigation, and replacement requirements related to construction.

Mitigation Measure 4.e-1: Restrictive covenants, including tree protection restrictions, shall be developed subject to review and approval by the City to ensure the long-term preservation and maintenance of trees on the property. A restrictive covenants Declaration shall be recorded on the property and shall include an Exhibit defining the extent of trees/woodlands subject to the tree protection restrictions.

Mitigation Measure 4.e-2: The project shall be constructed in accordance with the following requirements related to tree preservation, mitigation and replacement:

a. The recommendations and tree protection measures set forth in the Tree Preservation and Mitigation Report for Lot 228 prepared by Horticultural Associates, dated June 7, 2017 and Tree Preservation and Mitigation Report for Access Driveway prepared by Horticultural Associates, dated June 7, 2017 (Attachment 6), as amended through any subsequent arborist peer review, shall be adhered to.

b. Trees removed from the project site shall be replaced on-site at a minimum ratio of 1.5:1, consistent with the tree replacement program proposed as part of the project. Replacement trees shall be a minimum 15-gallon size.

c. The recommendations and tree protection measures set forth in the Tree Preservation and Mitigation Report for Lot 228 prepared by Horticultural Associates, dated June 7, 2017 and Tree Preservation and Mitigation Report for Access Driveway prepared by Horticultural Associates, dated June 7, 2017 (Attachment 6), as amended through any subsequent arborist peer review, shall be incorporated into the grading and improvement plans for the project, as applicable. Written confirmation to this effect shall be provided by the project arborist.

d. Tree fencing and any other required protective measures shall remain in place until their removal is authorized by the project arborist.

e. The project arborist shall be on-hand during initial grading and trenching to monitor compliance with tree protection measures.

With implementation of Mitigation Measures 4.e-1 and 4.e-2 above, in conjunction with the proposed tree replacement program, the project would have a ***less-than-significant impact*** on trees.

f) Conflict with the provisions of any adopted or approved local, regional, or state habitat conservation plan?

No habitat conservation plans have been prepared addressing the project site. As a result, the project would not conflict with any adopted or approved habitat conservation plans. ***No impact*** would occur.

5. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☑	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☑	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☑	☐	☐

Discussion:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

The City of Sonoma commissioned Tom Origer & Associates to conduct an historical resources study of 12.7 acres of land that encompasses the subject property/project site, and adjoining parcels. The project site is undeveloped, except for a small pump house, cistern, and water tank. The Historical Resources Study of APNs 018-051-007, 018-051-012, and 018-091-018 prepared by Tom Origer & Associates, dated May 8, 2017 (Attachment 7) found no historical resources on the project site or within the study area. Accordingly, the project would have ***no impact*** on historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource?

The City of Sonoma commissioned Tom Origer & Associates to conduct an historical resources study of 12.7 acres of land that encompasses the subject property/project site, and adjoining parcels. The project site is undeveloped, except for a small pump house, cistern, and water tank. The Historical Resources Study (Attachment 7) found no archaeological site indicators or evidence of warm springs on the project site or within the study area; therefore no resource-specific recommendations were warranted. However, there is a very low probability that buried archaeological deposits could be present at the site that could be uncovered during earth-moving activities. Accordingly, consistent with the historic resource survey, the following mitigation measure has been included to address the potential for accidental discovery. Implementation of this mitigation measure would ensure that potentially significant impacts to archeological resources are reduced to a ***less-than-significant*** level.

Mitigation Measure 5.b: If archaeological remains are uncovered, work at the place of discovery shall be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar dups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources (fossils) are the remains or traces of prehistoric animals and plants. The National Resources Conservation Service has classified site soils as belonging to the Goulding-Toomes complex.[3] The Goulding-Toomes complex consists of well-drained, clay loams that have a gravelly clay subsoil with a total depth of one to two feet to rock from the Sonoma Volcanics. Because the Goulding-Toomes complex and the Sonoma Volcanics are not typically associated with fossils, there is a very low probability that fossils would be encountered during construction activities. However, should a paleontological resource be encountered, the following mitigation measure would reduce impacts to a ***less-than-significant level***.

Mitigation Measure 5.c: If paleontological resources are identified during construction activities, all work in the immediate area will cease until a qualified paleontologist has evaluated the finds in accordance with the standard guidelines established by the Society of Vertebrate Paleontology. If the paleontological resources are considered to be significant, a data recovery program will be implemented in accordance with the guidelines established by the Society of Vertebrate Paleontology.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Although impacts to human remains are not anticipated, there is always the remote possibility that human remains are present below the ground surface and could be unearthed during ground disturbing activities. Consistent with the historic resource survey and CEQA Guidelines Section 15064.5(d), implementation of Mitigation Measure 5.d below would reduce this impact to a ***less-than-significant level***.

Mitigation Measure 5.d: If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the County Coroner contacted. If the coroner determined the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

3 *Soil Survey of Sonoma County, California,* National Resources Conservation Service, 1972.

6. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated 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.)	☐	☐	☐	☑
ii. Strong seismic ground shaking?	☐	☐	☑	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☑	☐
iv. Landslides?	☐	☐	☑	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐
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, liquefaction or collapse?	☐	☐	☑	☐
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?	☐	☐	☑	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☑

Discussion:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated 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?

The project site would not be subject to surface fault rupture. In general, surface fault rupture occurs along active faults. While the project site is located in a seismically active region, the City of Sonoma, including the

project site, is not affected by an Alquist-Priolo Earthquake Fault Zone pursuant to Division of Mines and Geology Special Publication 42[4]. Therefore, ***no impact*** would occur.

ii) Strong seismic ground shaking?

The City of Sonoma is located in the seismically active San Francisco Bay Area, in proximity to several mapped active or potentially active regional faults. The Rodgers Creek fault is nearest to the project site, located approximately five miles to the southwest on the western side of the Sonoma Mountains. As a result, the project could result in the exposure of people, structures, and/or property to seismic ground shaking. While hazards associated with potential ground shaking cannot be eliminated, potential impacts resulting from seismic ground shaking would be reduced to the greatest extent feasible through compliance with the City of Sonoma's building code requirements, which requires that new structures be designed and constructed in a manner to maximize seismic safety, in conformance with the 2016 California Building Code. This would be considered a ***less-than-significant*** impact.

iii) Seismic-related ground failure, including liquefaction?

Refer to Section 6.a.ii and 6.c. Potential impacts associated with seismic-related ground failure would be ***less-than-significant.***

iv) Landslides?

Refer to Section 6.c. Potential impacts associated with landslides would be ***less-than-significant.***

b) Result in substantial soil erosion or the loss of topsoil?

The project site is located on hillside terrain with slopes in the proposed development area averaging roughly 20%. The National Resources Conservation Service has classified site soils as belonging to the Goulding-Toomes complex (GoF), which has a moderate to high hazard of erosion. Given the topography and soil type, there is potential for the project to result in soil erosion, especially during clearing and grading activities necessary to construct driveways and pads for the residence, garage, and patios (earthwork calculations for the residence estimate 580 cubic yards of cut and 1,240 cubic yards of fill and earthwork calculations for the driveway estimate 3,120 cubic yards of cut and 2,890 cubic yards of fill). During this process existing vegetation that currently helps to stabilize site soils would be removed at the development site and construction operations associated with the project could present a threat of erosion by subjecting unprotected bare soil areas to the erosional forces of runoff. However, implementation of the following stormwater/erosion control requirements would apply to the project:

Construction Requirements: The Clean Water Act (CWA) prohibits the discharge of pollutants from point sources to Waters of the U.S. except where those discharges are authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The project applicant would be required to comply with all construction requirements in NPDES Permits CAS000004 (permitting stormwater discharges from the City of Sonoma Municipal Separate Storm Sewer System) and CAS000002 (permitting stormwater discharges from construction sites disturbing more than 1 acre of land) for the construction period.

Under the NPDES program, the applicant would be required to submit a Notice of Intent (NOI) with the State Water Resource Control Board's (SWRCB) Division of Water Quality. The NOI would include general information on the types of construction activities that would occur on the site. The applicant would also be required to submit a

[4] *Fault-Rupture Hazard Zones in California,* Earl W. Hart and William A. Bryant, California Geological Survey, Special Publication 42, supplements 1 and 2 1999.

site-specific plan called the Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would include a description of appropriate erosion control and water quality Best Management Practices (BMPs) to minimize the discharge of pollutants from the site during the construction period. Similarly, under the City's Grading Ordinance (SMC 14.20) and Hillside Development Standards (SMC 19.40.050.D) an Erosion and Sediment Control Plan (ECP) would also be required for the project, likewise identifying measures that would be implemented during construction to appropriately and effectively minimize soil erosion and sedimentation.

Construction-related erosion control and water quality BMPs identified in the SWPPP generally include soil stabilization techniques such as: hydroseeding and short-term biodegradable erosion control blankets; silt fences or some kind of inlet protection at downstream storm drain inlets; post-construction inspection of all drainage facilities for accumulated sediment; and post-construction clearing of all drainage facilities of debris and sediment. Finally, the project applicant would be required to submit a Notice of Termination (NOT) once construction is complete and final stabilization of the site has been achieved.

Post-Construction Requirements: Since the proposed development would create more than 2,500 square feet of new impervious surface, a Storm Water Control Plan (SCP) would be required, subject to review and approval by the City Engineer and Stormwater Compliance Specialist, identifying stormwater BMPs that, when implemented, reduce the quantity of pollutants in stormwater runoff discharging from a project site to the maximum extent practicable. The SCP also outlines BMPs that, when implemented, reduce the total volume of stormwater runoff from the project site (retention) and attenuate peak flows (detention).

With the implementation of these normal requirements, the project would not result in substantial soil erosion and would have a ***less-than-significant*** impact in this regard. See also Sections 9.a, 9.c, 9.d and 9.e.

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, liquefaction or collapse?

The National Resources Conservation Service has classified site soils as belonging to the Goulding-Toomes complex.[5] The Goulding-Toomes complex consists of well-drained, clay loams that have a gravelly clay subsoil with a total depth of one to two feet to rock from the Sonoma Volcanics. Existing residential development near the project site, constructed on similar soils, slopes, and bedrock geology has not experienced landslides, lateral spreading, subsidence, liquefaction, or collapse. Based on site geology and this past experience, it is not anticipated that unstable geologic units or soil would affect the project. In addition, pursuant to Chapter 4 of the California Residential Code (CRC) and Chapter 18 of the California Building Code (CBC), a soils and geotechnical investigation that includes a stabilization study (prepared by a licensed geotechnical engineer) is required for development of the proposed project. As normally required, the recommendations identified in the soils and geotechnical investigation, such as appropriate foundation systems, soil stability measures, on-site soil preparation and compaction levels, must be incorporated into the permits and construction plans for the project (i.e., improvement plans, grading permit, and building permits), which are subject to review and approval by the City Engineer and Plans Examiner prior to the issuance of any building permits for grading or building construction. Incorporation of the recommendations into the plans and permits for the project would ensure that potential impacts relating to unstable geologic units or soils would be ***less-than-significant***.

5 *Soil Survey of Sonoma County, California*, National Resources Conservation Service, 1972.

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?

Refer to Section 6.c. Impacts in this area would be ***less-than-significant***.

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 or wastewater?

The proposed single-family home would be connected to the local sewer system managed by the Sonoma Valley County Sanitation District. Use of septic tanks or alternative wastewater disposal systems is not proposed as part of the project. ***No impact*** would occur.

7. GREENHOUSE GAS EMISSIONS: **Would the project:**	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☑

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

On June 2, 2010 the Bay Area Air Quality Management District (BAAQMD) adopted guidelines for analyzing air quality impacts under CEQA, including screening thresholds for the analysis of greenhouse gas (GHG) impacts from development projects. Under the BAAQMD guidelines, which were updated in May 2017, land use development projects that generate GHG emissions below 1,100 metric tons of carbon dioxide equivalent (MTC2e) per year are considered to have a less than significant impact. The BAAQMD screening criteria indicate that single-family development projects of less than 56 dwelling units would not exceed this GHG operational threshold of 1,100 MTC_2e per year. Since only one single-family dwelling is proposed, the project falls well below the applicable GHG screening threshold and therefore would be considered to have a negligible or ***less-than-significant impact*** with respect to GHG emissions.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The proposed single-family home project would be consistent with the following State and local plans, policies, and requirements addressing GHG reduction:

State Regulations Addressing GHG Reduction:

California Building Code – Building and Energy Efficiency Standards: Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2008 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency

technologies and methods. On May 31, 2012, the CEC adopted the 2013 Building and Energy Efficiency Standards, which went into effect on July 1, 2014. Residential buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes. Most recently, the CEC adopted the 2016 Building and Energy Efficiency Standards. The 2016 Standards improve upon the current 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. These standards went into effect on January 1, 2017. Under the 2016 Standards, residential buildings are required to be 28 percent more energy efficient than the 2013 Standards. The project would be subject to these latest standards.

California Building Code – CALGreen: The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, were updated in 2013, and became effective January 1, 2014. The project would be subject to CALGreen requirements.

2006 Appliance Efficiency Regulations: The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Local Plans, Policies, and Regulations addressing GHG Reduction:

City of Sonoma General Plan: The City of Sonoma 2020 General Plan sets forth policies promoting sustainable practices such as not using renewable resources faster than they can regenerate, not consuming non-renewable resources faster than renewable alternatives can be substituted for them, and ensuring that pollution and waste are not emitted faster or in greater volumes than natural systems can absorb, recycle, or render them harmless. As part of the implementation of these policies, the City adopted the State of California Green Building Code (see above), which raised the level of construction standards in the City in order to encourage water and resource conservation, reduce water generated by construction projects, increase energy efficiency in buildings, provide durable buildings that are efficient and economical to own and operate, and promote the health and productivity of residents, workers, and visitors to the City.

City of Sonoma Municipal Code: Beginning January 1, 2014, the 2013 California Green Building Standards Code (CALGreen) became effective for new buildings and certain addition or alteration projects throughout California. The City of Sonoma has adopted and amended CALGreen as part of the City's Municipal Code to require CALGreen+Tier 1 level of compliance for all new buildings (except the Tier 1 Energy Efficiency measures). The City of Sonoma requires that project applicants hire a third-party green building special inspector to verify compliance with CALGreen requirements as amended by the City of Sonoma. Revisions to CALGreen became effective on July 1, 2015.

2016 Climate Action Plan Measures: Beginning in May of 2013, the City began participating in the development of a County-wide Greenhouse Gas Reduction Implementation Program, subsequently renamed Climate Action 2020. Climate Action 2020 is a collaborative effort among all nine cities and the County of Sonoma to take coordinated action in reducing GHG emissions on a county-wide basis. Through the implementation of this program, participating jurisdictions would achieve compliance with Bay Area Air Quality Management District (BAAQMD) guidelines and

other related policies that establish reduction targets for GHG emissions, including AB 32, CEQA, and local GHG reduction goals. The development of the draft Plan was led by the Regional Climate Protection Authority (RCPA), with the assistance of a Working Group comprised of planning staff from each of the 10 jurisdictions of Sonoma County, including the City of Sonoma.

On August 15, 2016, the City Council began its review of the draft Climate Action 2020 Plan (CAP). For Sonoma, a total of 22 Climate Action Measures were recommended for Council consideration. Although the County-wide adoption of Climate Action 2020 Plan was subsequently postponed as a result of litigation brought against the RCPA, the City Council decided to take separate action to begin implementation of the measures identified in the CAP planning process. On November 21, 2016, the City Council adopted Resolution 40-2016, adopting the local measures identified for Sonoma through the CAP planning process.

Because the project would be subject to and not conflict with applicable State and local plans, policies, and requirements addressing GHG reduction, it would have ***no impact*** in this area.

8. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
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?	☐	☐	☑	☐

Discussion:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The proposed single-family home project would not involve the routine transport, use, or disposal of hazardous materials. Thus, ***no impact*** would occur.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials (including, but not limited to, oil, pesticides, chemicals, or radiation) into the environment?

The proposed single-family home project at this rural location would not reasonably be expected to create a hazard from the release of hazardous materials into the environment. ***No impact*** would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Refer to Section 8.a. and 8.b. above. Furthermore, there are no existing or proposed schools within one-quarter-mile of the site. ***No impact*** would occur.

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?

The project site is not identified on the Hazardous Waste and Substances Site List (Cortese List) for Sonoma County. Therefore, the proposed development would not create a significant hazard to the public or environment due to site contamination, and ***no impact*** would occur.

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?

The project site is not located within an airport land use plan or within two miles of a public airport. ***No impact*** would occur.

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?

The project site does not lie within an Airport Clear Zone or Accident Potential Zone. The nearest private airport, Sonoma Skypark, is over two miles away. Therefore, the project would not reasonably be expected to result in a safety hazard, and thus ***no impact*** would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would not interfere with any adopted emergency response or evacuation plan. Therefore, ***no impact*** would occur.

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?

The project site is located within a wildland-urban interface Fire Area. As a result, the project will be subject to the wildland interface requirements set forth under Chapter 7A of the Building Code, including the use of fire-resistant exterior building materials and vegetation management. Compliance with these Building Code requirements will reduce potential impacts from wildland fires to a ***less-than-significant*** level

9. HYDROLOGY AND WATER QUALITY: **Would the project:**	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☑
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)?	☐	☐	☑	☐
c) Substantially alter the existing drainage pattern of the site or area, including through 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?	☐	☐	☑	☐
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 which would result in flooding on- or off-site?	☐	☐	☑	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☑	☐
f) Otherwise substantially degrade water quality?	☐	☐	☑	☐
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?	☐	☐	☐	☑

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☑
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?	☐	☐	☐	☑
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

Discussion:

a) Violate any water quality standards or waste discharge requirements?

Construction Requirements: The Clean Water Act (CWA) prohibits the discharge of pollutants from point sources to Waters of the U.S. except where those discharges are authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The project applicant would be required to comply with all construction requirements in NPDES Permits CAS000004 (permitting stormwater discharges from the City of Sonoma Municipal Separate Storm Sewer System) and CAS000002 (permitting stormwater discharges from construction sites disturbing more than 1 acre of land) for the construction period.

Under the NPDES program, the applicant would be required to submit a Notice of Intent (NOI) with the State Water Resource Control Board's (SWRCB) Division of Water Quality. The NOI would include general information on the types of construction activities that would occur on the site. The applicant would also be required to submit a site-specific plan called the Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would include a description of appropriate erosion control and water quality Best Management Practices (BMPs) to minimize the discharge of pollutants from the site during the construction period. Similarly, under the City's Grading Ordinance (SMC 14.20) and Hillside Development Standards (SMC 19.40.050.D) an Erosion and Sediment Control Plan (ECP) would also be required for the project, likewise identifying measures that would be implemented during construction to appropriately and effectively minimize soil erosion and sedimentation.

Construction-related erosion control and water quality BMPs identified in the SWPPP generally include soil stabilization techniques such as: hydroseeding and short-term biodegradable erosion control blankets; silt fences or some kind of inlet protection at downstream storm drain inlets; post-construction inspection of all drainage facilities for accumulated sediment; and post-construction clearing of all drainage facilities of debris and sediment. Finally, the project applicant would be required to submit a Notice of Termination (NOT) once construction is complete and final stabilization of the site has been achieved.

Post-Construction Requirements: Since the proposed development would create more than 2,500 square feet of new impervious surface, a Storm Water Control Plan (SCP) would be required, subject to review and approval by the City Engineer and Stormwater Compliance Specialist, identifying stormwater BMPs that, when implemented, reduce the quantity of pollutants in stormwater runoff discharging from a project site to the maximum extent practicable. The SCP also outlines BMPs that, when implemented, reduce the total volume of stormwater runoff from the project site (retention) and attenuate peak flows (detention).

As identified in the Preliminary Grading and Drainage Analysis dated May 25, 2017, prepared by Bear Flag Engineering (Attachment 2), proposed drainage improvements and BMPs for the project would include the following:

- The drainage plan for the residence includes an interceptor swale parallel to the northern property line above the garage, lawn area, and pool terrace. Runoff collected in the swale would be released through a rock riprap outlet below the residence.
- An interceptor swale located west of the detached garage would convey runoff to a drainage inlet above a landscape wall and fire department turnaround. Runoff from the inlet would be conveyed through a storm drain and released through a tee pipe storm drain dissipater in an open area west of the residence at a location that is not above any existing trees.
- Roof and patio drainage would be conveyed to two bio-retention planters located below the residence (Stormwater BMP-1 and Stormwater BMP-2). Stormwater runoff directed to the bio-retention planters would be detained and allowed to infiltrate, with the overflow spread out over a 40-foot wide zone to maintain the pre-construction sheet flow condition below the proposed improvements.
- Runoff from the upper portion of the proposed driveway would be collected by an asphalt berm along the edge of the driveway and conveyed to drain inlets and then tee pipe storm drain dissipaters through storm drains. Outlets have been located in areas that are not directly uphill of existing trees.
- Runoff from the lower portion of the proposed driveway would be collected by an asphalt berm along the edge of the driveway and conveyed to the existing rock-lined drainage swale along the existing driveway.

With the implementation of the normal construction and post-construction requirements noted above, the project would not violate any water quality standards or waste discharge requirements and ***no impact*** would occur.

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)?

The Department of Water Resources (DWR) defines groundwater basins based on geologic and hydrogeological conditions. According to the DWR, the project site is located within the Sonoma Valley groundwater sub-basin. Natural recharge in the sub-basin predominantly occurs where stream channels cut into the alluvial fan deposits. Areas of low relief and sufficiently permeable soil also allow for some slow infiltration from precipitation. While the project would increase the amount of impervious surface on the subject property, the project site is hillside terrain and does not include a stream channel. In addition, site soils (Goulding-Toomes complex) are classified as Hydrologic group D, which means they have a very slow infiltration rate and thus would not allow for a significant amount of infiltration of runoff into the underlying groundwater basin. Regardless, a Storm Water Control Plan would be required for the project (as noted in Section 9.a above) to allow for the treatment and infiltration of surface run-off. For these reasons, the project would not significantly interfere with groundwater recharge. In addition, the project would not involve the construction of new groundwater wells for project water supplies. Water for the proposed project would be supplied by the City of Sonoma. The City of Sonoma obtains its water from the Sonoma County Water Agency (SCWA) and City wells. The majority of water used in the City is supplied by SCWA and is derived from surface water. City wells are considered a secondary water source used only to supplement deliveries from SCWA during peak demands. As a result, the proposed project would not result in the substantial depletion of groundwater supplies. Project impacts on groundwater resources are considered ***less-than-significant***.

c) Substantially alter the existing drainage pattern of the site or area, including through 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?

As noted in the Preliminary Grading and Drainage Analysis dated May 25, 2017, prepared by Bear Flag Engineering (Attachment 2), the subject property is located on hillside terrain with slopes between 5% and 25% (slopes where the residence and accessory structures are proposed average roughly 20%). Soils on the project site consist of clay loams with high rock content that are well-drained. The existing drainage pattern consists of sub-surface flow and sheet flow on the surface through the property. There are no rivers, streams, creeks, or any significant concentrations of runoff on the project site. Drainage from the site is eventually collected by a roadside swale located along the west side of Fourth Street East.

The Preliminary Grading and Drainage Analysis indicates that proposed drainage improvements are intended to maintain the existing drainage scenario to the maximum extent possible. In general, proposed drainage improvements would consist of interceptor swales, drain inlets with culverts, sub-drains, bio-retention planters, rock riprap dissipaters, and tee pipe dissipaters with the following functions:

- Interceptor swales are designed to accept uphill runoff from a building or driveway and convey it to the downhill side of the improvement. Swales are triangular or trapezoidal in shape and approximately 9-inches deep.
- Drain inlets accept runoff from swales, landscape areas or patios and convey runoff through a storm drain downhill of improvements. Inlets are used where surface swales are not feasible.
- Sub-drains are required for building foundations, and areas with constructed fill slopes. They consist of perforated pipe and gravel trenches that collect sub-surface runoff and release it downhill of proposed improvements.
- Bio-retention planters have been designed on the downhill side of the residence to receive runoff directly from roofs and patios. A bio-retention planter is a depression that detains and treats runoff through infiltration of a gravel bed or filtration with plant media. Bio-retention planters will be used to treat runoff in accordance with local stormwater guidelines.
- Rock riprap dissipaters are designed at the end of drainage swales or storm drains to disperse the erosive energy of the runoff and change concentrated flow of the swale to sheet flow, which is similar to the pre-construction condition.
- Tee pipe storm drain dissipaters are designed for release from storm drains. These dissipaters consist of approximately 20-feet of lager diameter pipe with perforation in the crown of the pipe. Runoff from the storm drain fills the dissipater and bubbles out of the top in a manner that spreads out the flow similar to sheet flow.

Pursuant to the Preliminary Grading and Drainage Analysis proposed drainage improvements and BMPs specific to the proposed project would include the following:

- The drainage plan for the residence includes an interceptor swale parallel to the northern property line above the garage, lawn area, and pool terrace. Runoff collected in the swale would be released through a rock riprap outlet below the residence.
- An interceptor swale located west of the detached garage would convey runoff to a drainage inlet above a landscape wall and fire department turnaround. Runoff from the inlet would be conveyed through a storm

drain and released through a tee pipe storm drain dissipater in an open area west of the residence at a location that is not above any existing trees.

- Roof and patio drainage would be conveyed to two bio-retention planters located below the residence (Stormwater BMP-1 and Stormwater BMP-2). Stormwater runoff directed to the bio-retention planters would be detained and allowed to infiltrate, with the overflow spread out over a 40-foot wide zone to maintain the pre-construction sheet flow condition below the proposed improvements.

- Runoff from the upper portion of the proposed driveway would be collected by an asphalt berm along the edge of the driveway and conveyed to drain inlets and then tee pipe storm drain dissipaters through storm drains. Outlets have been located in areas that are not directly uphill of existing trees.

- Runoff from the lower portion of the proposed driveway would be collected by an asphalt berm along the edge of the driveway and conveyed to the existing rock-lined drainage swale along the existing driveway.

With implementation of the proposed drainage improvements noted above, the project would not substantially alter the existing drainage pattern of the site or area. In addition, with implementation of the normally required construction and post-construction erosion control and stormwater control measures/BMPs discussed under Subsections 9.a and 6.b (including the project Storm Water Pollution Prevention Plan, Erosion Control Plan, and Storm Water Control Plan), the project would not result in substantial erosion or siltation on- or off-site and have a ***less-than-significant impact*** in this regard.

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 which would result in flooding on- or off-site?

As noted in the Preliminary Grading and Drainage Analysis dated May 25, 2017, prepared by Bear Flag Engineering (Attachment 2), the subject property is located on hillside terrain with slopes between 5% and 25% (slopes where the residence and accessory structures are proposed average roughly 20%). Soils on the project site consist of clay loams with high rock content that are well-drained. The existing drainage pattern consists of sub-surface flow and sheet flow on the surface through the property. There are no rivers, streams, creeks, or any significant concentrations of runoff on the project site. Drainage from the site is eventually collected by a roadside swale located along the west side of Fourth Street East.

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- Drain inlets accept runoff from swales, landscape areas or patios and convey runoff through a storm drain downhill of improvements. Inlets are used where surface swales are not feasible.

- Sub-drains are required for building foundations, and areas with constructed fill slopes. They consist of perforated pipe and gravel trenches that collect sub-surface runoff and release it downhill of proposed improvements.

- Bio-retention planters have been designed on the downhill side of the residence to receive runoff directly from roofs and patios. A bio-retention planter is a depression that detains and treats runoff through infiltration of a gravel bed or filtration with plant media. Bio-retention planters will be used to treat runoff in accordance with local stormwater guidelines.

- Rock riprap dissipaters are designed at the end of drainage swales or storm drains to disperse the erosive energy of the runoff and change concentrated flow of the swale to sheet flow, which is similar to the pre-construction condition.

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Pursuant to the Preliminary Grading and Drainage Analysis proposed drainage improvements and BMPs specific to the proposed project would include the following:

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- Runoff from the lower portion of the proposed driveway would be collected by an asphalt berm along the edge of the driveway and conveyed to the existing rock-lined drainage swale along the existing driveway.

With implementation of the proposed drainage improvements noted above, the project would not substantially alter the existing drainage pattern of the site or area. In addition, with implementation of the normally required construction and post-construction erosion control and stormwater control measures/BMPs discussed under Subsections 9.a and 6.b (including the project Storm Water Pollution Prevention Plan, Erosion Control Plan, and Storm Water Control Plan), the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. In particular, implementation of BMPs required as part of the Storm Water Control Plan, such as the bio-retention planters proposed downhill of the improvements, would retain runoff and allow it to infiltrate. Accordingly, the project would have a ***less-than-significant impact*** with regard to increased surface runoff and potential flooding.

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?

As discussed under 9.d, the project would not substantially alter the existing drainage pattern of the site/area or substantially increase the rate or amount of surface runoff in a manner that would exceed the capacity of existing or planned stormwater drainage systems.

In addition, with implementation of the normally required construction and post-construction erosion control and stormwater control measures/BMPs discussed under Subsections 9.a and 6.b (including the project Storm Water Pollution Prevention Plan, Erosion Control Plan, and Storm Water Control Plan), the project would not provide substantial additional sources of polluted runoff. In particular, implementation of BMPs required as part of the Storm Water Control Plan, such as the bio-retention planters proposed downhill of the improvements, would retain and treat runoff through infiltration of a gravel bed or filtration with plant media. Accordingly, the project would have a ***less-than-significant impact*** with regard to increased polluted runoff.

f) Otherwise substantially degrade water quality?

The proposed single-family home project would not otherwise substantially degrade water quality. See responses to Items 9.a, 9.c, and 9.e. Impacts would be ***less-than-significant.***

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?

According to the applicable Flood Insurance Rate Map (Map Number 06097C0937E, Panel 937 of 1150), the project site is not located within a 100-year flood hazard area. The property is located within an area designated as "Other Areas, Zone X," which are areas determined to be outside of the 0.2% annual chance floodplain. Housing would not be placed within a 100-year flood hazard area. ***No impact*** would occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The project would not place structures within a 100-year flood hazard area (refer to Section 9.g above). ***No impact*** would occur.

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?

The project would not place people or structures within a 100-year flood hazard zone (refer to Section 9.g above). The project site is not located below a levee or dam. As a result, the project would not expose people or structures to a significant risk of loss, injury, or death involving flood hazards. ***No impact*** would occur.

j) Expose people or structures to inundation by seiche, tsunami, or mudflow?

Sonoma is not located in the vicinity of a large inland water body, along coastal waters, or in the path of a potential mudflow. ***No impact*** would occur.

10. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☑
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?	☐	☐	☑	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑

Discussion:

a) Physically divide an established community?

The subject property is located toward the northern edge of the City adjacent to other Hillside Residential (R-HS) zoned parcels that are developed with single-family homes and accessory structures, similar to what is proposed by the project. As a result, the project would not physically divide the community. ***No impact*** would occur.

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?

As discussed in the other sections of the Initial Study, the project would not conflict with any land use plan, policy or regulation adopted to avoid or mitigate environmental effects. A ***less-than-significant impact*** would occur.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No habitat conservation plans or natural community conservation plans have been prepared addressing the site and adjoining lands. Therefore, ***no impact*** would occur.

11. MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	☐	☐	☐	☑

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?	☐	☐	☐	☑

Discussion:

a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state?

The project site is not identified as containing any valuable mineral resources. The National Resources Conservation Service has classified site soils as belonging to the Goulding-Toomes (GoF) complex.[6] The Goulding-Toomes complex consists of well-drained, clay loams that have a gravelly clay subsoil with a total depth of one to two feet to rock from the Sonoma Volcanics. The project would have ***no impact*** on mineral resources.

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?

Refer to Section 11.a. ***No impact*** would occur.

12. NOISE: Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	☐	☐	☐	☑
b) Exposure of persons to, or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity due to construction activities above levels existing without the project?	☐	☐	☑	☐
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?	☐	☐	☐	☑

6 *Soil Survey of Sonoma County, California,* National Resources Conservation Service, 1972.

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?	☐	☐	☐	☑

Discussion:

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?

According to the Noise Element of the General Plan, the primary source of noise locally is traffic on major streets, especially arterial and collector streets such as Highway 12 (i.e., Broadway, West Napa Street, and Sonoma Highway), Leveroni Road, Napa Road, Fifth Street West, East Napa Street, West Spain Street, Verano Avenue, East MacArthur Street, and West MacArthur Street. Traffic volumes on the rural street sections in proximity to the site (Brazil Street and Fourth Street East) are far below those levels and would not be expected to result in excessive noise levels at the proposed residence. The proposed home site is also setback substantially from the Fourth Street East and Brazil Street. In addition, as a single-family home the project would not be expected to generate or expose other residents in vicinity of the site to noise levels in excess of standards established within the Noise Element of the *City of Sonoma 2020 General Plan,* or the City's Noise Ordinance (Chapter 9.56 of the Sonoma Municipal Code). Thus, ***no impact*** would occur. Refer to Section 12.d below for a discussion of construction noise impacts.

b) Exposure of persons to, or generation of excessive groundborne vibration or groundborne noise levels?

The proposed development would not expose persons to or generate excessive groundborne vibration or groundborne noise levels. There would be ***no impact.***

c) A substantial permanent increase in ambient noise levels in the project vicinity?

Due to the nature of the proposed land use (i.e., a single-family home), any permanent increase in ambient noise levels resulting from the project would be minimal and ***less-than-significant*** with respect to existing ambient noise levels in the area.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity due to construction activities above levels existing without the project?

Construction activities typically associated with new development, including grading, excavation, paving, material deliveries, and building construction, would result in a substantial temporary increase in ambient noise levels in the project vicinity. Although this impact is temporary in nature, increased noise levels during the construction period may adversely affect residents in the area. However, compliance with the City's Noise Ordinance (Chapter 9.56 of the Sonoma Municipal Code) as normally required, would ensure that potential impacts from construction noise are reduced to a ***less-than-significant level***. Pursuant to the City's Noise Ordinance, construction activities and material deliveries are restricted to the hours between 8 a.m. and 6 p.m. Monday through Friday, between 9 a.m. and 6:00 p.m. on Saturday, and between 10 a.m. and 6 p.m. on Sundays and holidays; however, the noise level at any point outside of the property plane of the project shall not exceed (90) dBA. In addition, the City's Noise Ordinance requires sign postings at all site entrances upon commencement of construction to inform contractors and subcontractors, their employees, agents, and materialmen of the allowable construction hours.

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?

The project site is not located within an airport land use plan or within two miles of a public airport. ***No impact*** would occur.

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?

The nearest private airport, Sonoma Skypark, is over two miles away. ***No impact*** would occur.

13. POPULATION AND HOUSING: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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)?	☐	☐	☐	☑
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Discussion:

a) Induce substantial population growth in an area, either directly or indirectly?

The project would create one single-family home and includes an access drive that could provide access to an additional single-family home site. This would not be considered growth inducing. ***No impact*** would occur.

b) Displace substantial numbers of existing housing units?

The site is undeveloped. Accordingly, no housing would be displaced by the project. ***No impact*** would occur

c) Displace substantial numbers of people?

See response 13.b, above. ***No impact*** would occur.

14. PUBLIC SERVICES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
i. Fire protection?	☐	☐	☐	☑
ii. Police protection?	☐	☐	☐	☑
iii. Schools?	☐	☐	☑	☐
iv. Parks?	☐	☐	☐	☑
v. Other public facilities?	☐	☐	☐	☑

Discussion:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:

i. *Fire protection?*

Fire protection services are provided by Sonoma Valley Fire & Rescue Authority (SVFRA). According to the Fire Marshall, the project, which involves development of one single-family residence, would not require new or physically altered fire department facilities. ***No impact*** would occur.

ii. *Police protection?*

The Sonoma County Sheriff's Department currently provides police services for the City of Sonoma. According to Police Department staff, the project, which involves development of one single-family residence, would not require new or physically altered police department facilities. ***No impact*** would occur.

iii. *Schools?*

The project site is located within the Sonoma Valley Unified School District (SVUSD), which operates five elementary schools, two middle schools, and one comprehensive high school. As normally required, the applicant/developer would have to pay school impact fees to offset potential impacts to the SVUSD. As set forth in California Government Code Section 65995, the payment of development fees mitigates any impact to school

districts, and no additional mitigation beyond the payment of these fees is permitted. This would be a ***less-than-significant impact***.

iv. Parks?

Based on the Environmental Resources Element of the 2020 General Plan, a sufficient number of parks exist within the city to serve the existing and projected population. The project, which involves development of one single-family residence, would not require the provision or construction of new public parks. ***No impact*** would occur. See also Section 15 below.

v. Other Public Facilities?

The project, which involves development of one single-family residence, would not require the provision or construction of other public facilities. ***No impact*** would occur.

15. RECREATION	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	☐	☐	☐	☑
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☑	☐

Discussion:

a) Would the project increase the use of existing neighborhood or regional parks, or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The project would create one single-family home, which would not be expected to result in a substantial deterioration of local/regional recreational facilities. Furthermore, in combination with State and County parks that are maintained within and adjacent to the city limits, the City of Sonoma has roughly 250 acres of parkland and other recreational facilities. With the acquisition of the Montini Preserve, an additional 95 acres of open space developed with hiking trail systems has become available to the public. The project site is in proximity to several of these facilities, including the Sonoma Overlook Trail, the Sonoma City Trail Class 1 bicycle/pedestrian path, Depot Park, Sonoma State Historic Park, and the Plaza. There are currently a sufficient number of parks and recreational facilities within the city and region to serve residents of the proposed home. ***No impact*** would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

A private swimming pool is proposed in conjunction with the single-family home. However, this residential accessory feature would not have an adverse physical effect on the environment. A ***less-than-significant impact*** would occur.

16. TRANSPORTATION/TRAFFIC: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	☐	☐	☐	☑
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☑
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?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☑

Discussion:

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?

The project involves development of one single-family residence. Access to the residence (and potentially an additional home on the parcel to the west, Lot 4/227) would be provided by a ±800-foot long driveway that extends off an existing private driveway originating at the corner of Fourth Street East and Brazil Street. The portions of Fourth Street East and Brazil Street in vicinity of the project site are classified as rural roadways that carry low traffic volumes, and the intersection of Fourth Street East and Brazil Street currently operates at an acceptable Level of Service (LOS). The project would add a negligible amount of vehicle trips to the roadway system and would not conflict with any applicable plan, ordinance, or policy related to the performance of the circulation system. ***No impact*** would occur.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?

The project involves development of one single-family residence. Access to the residence (and potentially an additional home on the parcel to the west, Lot 4/227) would be provided by a ±800-foot long driveway that extends off an existing private driveway originating at the corner of Fourth Street East and Brazil Street. The portions of Fourth Street East and Brazil Street in vicinity of the project site are classified as rural roadways that carry low traffic volumes, and the intersection of Fourth Street East and Brazil Street currently operates at an acceptable Level of Service (LOS). The project would add a negligible amount of vehicle trips to the roadway system and would not conflict with any applicable congestion management program. ***No impact*** would occur.

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?

The proposed single-family home would have no effect on air traffic patterns. ***No impact*** would occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed single-family home would be accessed by an extension off an existing private driveway that originates at the intersection of Fourth Street East and Brazil Street (the private driveway would serve a maximum of four homes). In addition, the subject property adjoins other R-HS-zoned parcels that are developed with single-family homes similar to what is proposed by the project. The project would not substantially increase hazards due to a design feature or incompatible uses. ***No impact*** would occur**.**

e) Result in inadequate emergency access?

The proposed single-family home would be accessed by an extension off an existing private driveway originating at the intersection of Fourth Street East and Brazil Street. The proposed driveway extension is 16 feet wide and approximately 800 feet long. The Fire Marshal has confirmed that all Sonoma Valley Fire & Rescue Authority (SVFRA) emergency access requirements have been observed in the proposed driveway layout, including maximum distances, roadway widths, overhead clearances, and minimum radii curves. There are fire department turnouts at 400-foot increments and an emergency vehicle turn-around at the highest point where the driveway splits between Lot 3/228 and Lot 4/227. Accordingly, adequate emergency access would be provided and ***no impact*** would occur.

f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?

The project involves development of one single-family residence. Access to the residence (and potentially an additional home on the parcel to the west, Lot 4/227) would be provided by an ±800-foot long driveway that extends off an existing private driveway originating at the corner of Fourth Street East and Brazil Street. ***No impact*** would occur.

17. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☑
b) Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☑	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☑	☐
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?	☐	☐	☑	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☑
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

Discussion:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The project site is located within the Sonoma Valley County Sanitation District (SVCSD). The SVCSD's service area extends from the unincorporated community of Glen Ellen in the north to Schellville in the south. The wastewater collection system consists of approximately 188 miles of pipeline and two lift stations. The collection system conveys wastewater to the District's treatment facility located in the southern portion of the Sonoma Valley. The treatment facility currently provides tertiary level treatment of wastewater. The SVCSD treatment plant operates under a National Pollutant Discharge Elimination System (NPDES) permit which was granted by the San Francisco Regional Water Quality Control Board. While the estimated maximum capacity of the treatment plant is 20 MGD, the NPDES permit limits the permitted average dry weather flow (ADWF) of the treatment plant to 3.0 million gallons

per day (MGD). According to the most recent inspection report prepared by the RWQCB, the average dry weather flow through the facility in 2016 amounted to 1.78 MGD[7].

Each equivalent single-family dwelling (ESD) in the existing service area is assigned a sewer flow of 200 gallons per day to calculate the average dry weather flow. The project involves development of one single-family residence that would add a negligible amount of flow to the sewer system (1 ESD or 200 gallons per day), and would be well within the permitted capacity of the treatment plant. Because this level of increased treatment would not exceed the permitted treatment capacity of the plant, ***no impact*** would occur.

b) Require or result in the construction of new or expanded wastewater treatment facilities?

See response 17.a. The project would not require or result in the construction of new or expanded wastewater treatment facilities. ***No impact*** would occur.

c) Require or result in the construction of new or expanded storm water drainage facilities, the construction of which could cause significant environmental effects?

As identified in the Preliminary Grading and Drainage Analysis dated May 25, 2017, prepared by Bear Flag Engineering (Attachment 2), proposed drainage improvements and BMPs for the project would include the following:

- The drainage plan for the residence includes an interceptor swale parallel to the northern property line above the garage, lawn area, and pool terrace. Runoff collected in the swale would be released through a rock riprap outlet below the residence.
- An interceptor swale located west of the detached garage would convey runoff to a drainage inlet above a landscape wall and fire department turnaround. Runoff from the inlet would be conveyed through a storm drain and released through a tee pipe storm drain dissipater in an open area west of the residence at a location that is not above any existing trees.
- Roof and patio drainage would be conveyed to two bio-retention planters located below the residence (Stormwater BMP-1 and Stormwater BMP-2). Stormwater runoff directed to the bio-retention planters would be detained and allowed to infiltrate, with the overflow spread out over a 40-foot wide zone to maintain the pre-construction sheet flow condition below the proposed improvements.
- Runoff from the upper portion of the proposed driveway would be collected by an asphalt berm along the edge of the driveway and conveyed to drain inlets and then tee pipe storm drain dissipaters through storm drains. Outlets have been located in areas that are not directly uphill of existing trees.
- Runoff from the lower portion of the proposed driveway would be collected by an asphalt berm along the edge of the driveway and conveyed to the existing rock-lined drainage swale along the existing driveway.

As is presently the case, drainage from the project site would eventually be collected by a roadside swale located along the west side of Fourth Street East.

The proposed on-site drainage improvements noted above would not cause significant environmental affects in that they are intended to maintain the existing drainage condition to the maximum extent possible and include

[7] Sonoma Valley County Sanitation District Wastewater Treatment Plant (NPDES No. CA0037800) Compliance Evaluation Inspection Report, December 2, 2016.

stormwater BMPs designed to reduce the total volume of stormwater runoff from the project site (retention), attenuate peak flows (detention), and reduce the quantity of pollutants in stormwater runoff discharging from the project site (see Sections 9.a, 9.c, 9.d, and 9.e). With respect to potential impacts associated with the actual construction of the proposed drainage improvements, such as erosion during grading and/or earthmoving activities, these would be reduced to a ***less-than-significant*** level through implementation of the erosion control measures required during construction by the City's Grading Ordinance and included the Storm Water Pollution Prevention Plan (SWPPP) for the project (see Sections 9.a, 9.c, 9.e, and 6.b).

d) Have sufficient water supplies available to serve the project from existing entitlements and resources?

The City of Sonoma supplies potable water to a population of approximately 10,800 people and approximately 300 businesses. The City's potable water supply is primarily water purchased from the Sonoma County Water Agency (SCWA) and water pumped from six groundwater wells owned and operated by the City. The SCWA water supply is delivered to the City through the SCWA aqueduct system and is supplied with water from the natural flow of the Russian River. The City is one of eight water contractors under contract with the SCWA, known as the Restructured Agreement for Water Supply. Under the Restructured Agreement, the SCWA is obligated to deliver up to 6.3 million gallons of water per day (mgd) during any month and 3,000 acre-feet of water during a fiscal year. The term of the agreement is through 2037 and can be extended by amendment.

The City's water service area encompasses the city limits, as well as portions of Sonoma County to the east of the city limits, as well as pocket areas that have outside service area agreements with the City along Thornsberry Road, Lovall Valley Road, East Napa Road, East MacArthur Street, and Denmark Street. The City's service area is approximately 2.5 square miles. The City's water distribution system contains three pressure zones that are each served by one or more storage tanks. The principal water mains in the distribution system range in size from 6 to 16 inches. Most of the distribution grid piping in the older sections of the City range in size from 1½ to 4 inches, while the newer areas are served by pipes 6 to 8 inches in diameter.

In compliance with the SB X7-7 and the Urban Water Management Planning Act, the City of Sonoma has a water management plan that evaluates water demands over a 25-year planning horizon. This analysis addresses a variety of scenarios, including years with normal water conditions, single-dry years, and multiple dry year conditions. Additionally, the UWMP attempts to accomplish the following:

- Identify measures to be implemented or projects to be undertaken to reduce water demands and address water supply shortfalls;
- Identify stages of action to address up to 50 percent reduction in water supplies during dry water years;
- Identify actions to be implemented in the event of a catastrophic interruption in water supplies;
- Assess the reliability of the sources during normal, single-dry, and multiple-dry water years; and
- Identify when, how, and what measures the City could undertake in order to meet the State Legislature's call for a 20 percent per capita reduction in urban water use statewide by 2020.

Overall, the City's UWMP, which was updated in 2015[8], determined that the City's combined projected water supplies are sufficient to meet projected demands during normal and multiple-year dry year conditions. Moreover, in compliance with State mandates to reduce water usage, the city of Sonoma has reduced its water use by 29 percent

[8] 2015 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update, City of Sonoma, July 1, 2015.

from July 2015 through November 2015, when compared to the same period in 2013. In addition, the City can produce more groundwater on a short-term basis during peak summer months to supplement the SCWA supply.

Given the factors noted above and because development of the parcel with a single-family is anticipated in the water demand projections of the City's UWMP, the project would have a ***less-than-significant impact*** with respect to water supply.

e) Result in a determination by the wastewater treatment provider that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The project site is located within the Sonoma Valley County Sanitation District (SVCSD), which is managed by the Sonoma County Water Agency (SCWA). As noted under Section 17.a above, the project involves development of one single-family residence that would add a negligible amount of flow to the sanitary sewer system (1 ESD or 200 gallons per day), and would be well within the permitted capacity of the SVCSD's treatment facility. As a result, the project would not be expected to result in a determination by SVCSD/SCWA that there is inadequate capacity to serve the project's low wastewater treatment demand in addition to existing commitments. This would be considered a ***less-than-significant impact.***

f) Be served by a landfill with sufficient permitted capacity to accommodate the project?

The County of Sonoma owns the Central Disposal Site and four other transfer stations located throughout Sonoma County. The Central Disposal Site landfill, located at 500 Mecham Road in Petaluma, California, accommodates solid waste from the City of Sonoma. The Central Disposal Site has a permitted capacity of 19.59 million tons (32.65 million cubic yards). This site includes two landfills, including Landfill 1, which has a permitted capacity of 18.27 million tons (25.65 million cubic yards), and Landfill 2, which has a permitted capacity of 4.98 million tons (7.0 million cubic yards). Landfill 1 currently contains approximately 12.83 million tons (21.38 million cubic yards) of solid waste, and Landfill 2 currently has 1.12 million tons (1.87 million cubic yards) of solid waste. Therefore, remaining capacity at Landfill 1 is 5.44 million tons (4.27 million cubic yards), and remaining capacity at Landfill 2 is 3.86 million tons (5.13 million cubic yards). Further, permitted daily tonnage at the Central Disposal Site is 2,500 tons; however, average daily tonnage is 1,250 tons. Therefore, the landfill is currently receiving less than its permitted daily tonnage of solid waste. Accordingly, the project, which involves development of one single-family residence, would be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs and thus ***no impact*** would occur.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

In order for Sonoma County to help meet the diversion requirements of the California Integrated Waste Management Act of 1989 (AB939), Chapter 22 of the Sonoma County Code (Section 2207A) explicitly bans the disposal at County disposal sites of yard debris, recyclable wood waste, scrap metal and corrugated cardboard. The project would be subject to these limitations. All applicable federal, state, and local regulations related to solid waste would be complied with as part of the project. As a result, ***no impact*** would occur.

17. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☑	☐	☐
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)?	☐	☑	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☑	☐	☐

Discussion:

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The implementation of measures identified in this Initial Study Environmental Checklist would reduce the severity of potential impacts on biological and cultural resources to ***less-than-significant*** levels. No further mitigation beyond Mitigation Measures 4.a, 4.e-1, 4.e-2, 5.b, 5.c, and 5.d would be required.

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)?

The proposed project would not result in cumulative impacts deemed considerable. Impacts on air quality, biological resources, and cultural resources could contribute incrementally, but the combined effect would not be significant. As described in this Initial Study Environmental Checklist, implementation of Mitigation Measures 3.e, 4.a, 4.e-1, 4.e-2, 5.b, 5.c, 5.d would reduce the magnitude of these cumulative impacts to a ***less-than-significant*** level.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The project could have temporary short-term air quality effects on people in vicinity of the site during construction which, with implementation of Mitigation Measures 3.e would be ***less-than-significant.*** With implementation of standard practices required of all projects approved in the City (compliance with the California Building Code, etc.), the project would not pose a hazard to future residents through exposure to geologic hazards.

Attachments:

1. Project Submittal
2. Preliminary Grading and Drainage Analysis prepared by Bear Flag Engineering, dated May 25, 2017
3. Letter from the Inman Law Group, LLP to Ross Edwards
4. Tree Screening and Impact Exhibit
5. Memorandum from WRA, Inc. to Ross Edwards, dated June 30, 2017
6. Tree Preservation and Mitigation Reports for Lot 228 and Access Driveway prepared by Horticultural Associates, dated June 7, 2017
7. Historical Resources Study of APNs 018-051-007, 018-051-012, and 018-091-018 prepared by Tom Origer & Associates, dated May 8, 2017