DEPARTMENT OF CONSERVATION AND DEVELOPMENT COMMUNITY DEVELOR. ENT DIVISION

30 Muir Road

Martinez, CA 94553-4601 Phone: 925-674-7205 Fax: 925-674-7258





AGENCY COMMENT REQUEST

Date 7/31/18

we request your comments regarding the attached ap	plication currently under review.
DISTRIBUTION	Please submit your comments to:
Interpel	Project Planner Danie Barrios
Building InspectionGrading Inspection	Phone # (925) 674-77 88
Advance PlanningHousing Programs	E-mail Daniel Barrios @dcd.cccounty.us
Trans. PlanningTelecom Planner	County File # MS 18 - 0008
ALUC StaffHCP/NCCP Staff	
APC Floodplain Tech	Prior to August 31, 2017
Health Services Department	****
Environmental HealthHazardous Materials	We have found the following special programs apply to this application:
Public Works Department	Active Fault Zone (Alquist-Priolo)
Engineering Services (Full-size)Traffic	X Flood Hazard Area, Panel #
Flood Control (Full-size)Special Districts	MA 60-dBA Noise Control
Local Condess (ALC)	NA CA EPA Hazardous Waste Site
Fire District SAN RAMON VALCE	****
Consolidated – (email) fire@cccfpd.org	AGENCIES, Places indicate the andi Li
Sanitary District CENTRAL SAN	AGENCIES: Please indicate the applicable code section for any recommendation required by law or
Water District	ordinance. Please send copies of your response to
City of SAN RAMON	the Applicant and Owner.
School District(s)	Comments:NoneBelowAttached
LAFCO	
Reclamation District #	
East Bay Regional Park District	
Diablo/Discovery Bay/Crockett CSD	
MAC/TAC	
Improvement/Community Association	
X CC Mosquito & Vector Control Dist (email)	
Others/Non-local	
CHRIS - Sonoma State	
CA Fish and Wildlife, Region 3 – Bay Delta	
Native American Tribes	
Additional Recipients	Print Name ABED CHOWSPURY
	Ole Parll 8-17-18
	Signature DATE
	Agency phone # 679 - 77 \$



Bran M. Balbas, Director
Deputy Directors
Stephen Kowalewski – Chief
Mike Carlson
Warren Lai
Carrie Ricci
Joe Yee

Memo

January 17, 2019

TO:

Daniel Barrios, Project Planner, Department of Conservation and Development

FROM:

Jocelyn A. Bolibol LaRocque, Senior Civil Engineer, Engineering Services Division

By: Larry Gossett, Consulting Civil Engineer, Engineering Services Division

SUBJECT:

SUBDIVISION MS18-0008

STAFF REPORT & CONDITIONS OF APPROVAL

(Freitas/Norris Canyon Rd./San Ramon/APN 211-210-029 & 075)

FILE:

MS18-0008

The attached conditions of approval, based on the site plan, include road and drainage requirements. The applicant shall comply with the Ordinance Code requirements as they pertain to this development. The following issues should be carefully considered with this project:

ISSUES:

Background

The applicant proposes to subdivide a 69.32-acre parcel bisected by Norris Canyon Road into two parcels; a 38.38 acre parcel north of the road and a 30.96-acre parcel south of the road.

The north parcel has an existing house and full driveway improvements connecting to Norris Canyon Road. No additional development of this property is anticipated under the current A-4 zoning restrictions. Parcel B, the southern site, is undeveloped.

The October 29, 2018 resubmittal included a letter from the applicant's engineer discussing exceptions from the County Ordinance Code and citing the three findings required per the requirements specified per Section 92-6.002 of said Code, but these findings are related to General Plan, land use and zoning related issues. The final sentence states that, "The applicant is not requesting any exceptions from County Ordinance Code Standards".

Traffic and Circulation

Norris Canyon Road is designated as a two lane arterial on the County General Plan. Right of way acquisition and improvements to these standards were completed as part of the nearby

Daniel Barrios January 17, 2019 Page 2 of 3

Norris Canyon Estates subdivision in the early 2000's. While no additional widening or improvements would be required under the County Ordinance Code relative to this subdivision, the County is contemplating some safety improvements. This may require some additional right of way dedication.

As previously noted, there is an existing house on Parcel A with full driveway improvements. Parcel B is undeveloped. Physical access to Parcel B from Norris canyon Road is severely restricted due to the presence of San Catanio Creek, which parallels the road. Tract 7578 which abuts a portion of the east boundary of Parcel B dedicated access and utility easements to Parcel B over Ashbourne Drive south of the creek to provide alternate access to Norris Canyon Road.

Underground Utilities

Chapter 96-10 of the County Ordinance Code requires undergrounding of utilities.

Drainage

Division 914 of the County Ordinance Code requires that all storm water entering and/or originating on this property to be collected and conveyed, without diversion and within an adequate storm drainage system, to an adequate natural watercourse having a definable bed and banks or to an existing adequate public storm drainage system which conveys the storm waters to an adequate natural watercourse. San Catanio Creek traverses the southern parcel. The northern parcel slopes towards Norris Canyon Road, where the runoff is collected by the road's drainage system and conveyed to the creek. No drainage improvements would be necessary to comply with this requirement.

Creek Structure Setbacks

The applicant should be aware that §914-14-012 & 014 requires the establishment of structure setbacks from San Catanio Creek. The setbacks established per a previous subdivision on Parcel B appear to meet or exceed the Ordinance Code requirements.

Stormwater Management and Discharge Control

A Stormwater Control Plan (SWCP) is required for applications to subdivide land where the resulting project may result in a total amount of impervious surface area exceeding 10,000 square feet. As the north parcel is already developed and the southern parcel has nearby access rights to Ashbourne Drive (a private street) and public utilities, it is conceivable the new impervious surfaces resulting from development of Parcel B will fall below the 10,000 square foot threshold requiring a SWCP at this time. However, further development of the parcel may need to comply with the latest Stormwater Management and Discharge Control Ordinance (§1014) and Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit.

Daniel Barrios January 17, 2019 Page 3 of 3

Floodplain Management

This subdivision does not lie within the Special Flood Hazard Area (100-year flood boundary) as designated on the Federal Emergency Management Agency's Flood Insurance Rate Maps. No action is necessary.

Lighting District Annexation

Applicant shall annex Parcel A to the Community Facilities District (CFD) 2010-1 formed for Countywide Street Light Financing. Parcel B has already been annexed.

Area of Benefit Fee

This property is subject to the requirements of the Bridge/Thoroughfare Fee Ordinances for the South County, Tri-Valley, Southern Contra Costa (SCC) Sub Regional and SCC Regional Areas of Benefit as adopted by the Board of Supervisors. Applicant shall pay these fees prior to issuance of a building permit.

Drainage Area Fee and Creek Mitigation

The subject property is located in unformed Drainage Area 95, and not subject to a drainage fee ordinance.

JL:LG:ss G:\engsvc\Land Dev\MS\MS 18-0008\MS 18-0008 Staff Report & COAs.docx

Cc:

S. Gospodchikov, Engineering Services
R. Sanders, Engineering Services
Robert Freitas, Owner/Applicant
2350 Norris Canyon Road, San Ramon, CA 94583
Ross Avedian, Contact
P/A Design Resources, Inc.
3012 Citrus Circle, Suite 150, Walnut Creek, CA 94598

PUBLIC WORKS RECOMMENDED CONDITIONS OF APPROVAL FOR SUBDIVISION MS18-0008

Applicant shall comply with the requirements of Title 8, Title 9 and Title 10 of the Ordinance Code. Any exception(s) must be stipulated in these Conditions of Approval. Conditions of Approval are based on the tentative map submitted to the Department of Conservation and Development on October 29, 2018.

COMPLY WITH THE FOLLOWING CONDITIONS OF APPROVAL PRIOR TO FILING OF THE PARCEL MAP.

General Requirements:

- In accordance with Section 92-2.006 of the Ordinance Code, this subdivision shall conform to all applicable provisions of the Subdivision Ordinance (Title 9). Any exceptions therefrom must be specifically listed in this conditional approval statement. The drainage, road and utility improvements outlined below shall require the review and approval of the Public Works Department and are based on the Vesting Tentative Map received by the Department of Conservation and Development, Community Development Division, on October 29, 2018.
- Improvement plans prepared by a registered civil engineer shall be submitted, if necessary, to the Public Works Department, Engineering Services Division, along with review and inspection fees, and security for all improvements required by the Ordinance Code for the conditions of approval of this subdivision. Any necessary traffic signing and striping shall be included in the improvement plans for review by the Transportation Engineering Division of the Public Works Department.

Roadway Improvements (Norris Canyon Road/Ashbourne Drive):

- Applicant shall locate any vehicular entrance gates a minimum of 20 feet from the edge
 of pavement to allow vehicles to queue without obstructing through traffic. Sufficient
 area shall be provided outside any gate to allow a vehicle to turn around and re-enter
 Norris Canyon Road in a forward direction.
- Applicant shall pave the first 50 feet of all new driveways, measured from the existing edge of pavement of Norris Canyon Road or Ashbourne Drive into the property, to allow vehicles to pull completely off of the roadway and still remain on a paved surface, and to prevent dust, gravel, and debris from spilling on to Norris Canyon Road or Ashbourne Drive.

Encroachment Permit

 Applicant shall obtain an encroachment permit from the Application and Permit Center, if necessary, for construction of driveways or other improvements within the right-of-way of Norris Canyon Road.

Abutter's Rights

 Applicant shall relinquish abutter's rights of access along Norris Canyon Road with the exception of the existing driveway serving Parcel A.

Road Alignment/Intersection Design/Sight Distance:

Sight Distance

• Applicant shall provide sight distance at the intersection of the private driveways with Norris Canyon Road and Ashbourne Drive in accordance with Chapter 82-18 "Sight Obstructions at Intersections" of the County Ordinance Code. The applicant shall trim vegetation, as necessary, to provide sight distance at this intersection, and any new signage, landscaping, fencing, retaining walls, or other obstructions proposed at this intersection shall be setback to ensure that the sight line is clear of any obstructions.

Street Lights:

 Applicant shall annex Parcel A to the Community Facilities District (CFD) 2010-1 formed for Countywide Street Light Financing. Annexation into a street light service area does not include the transfer of ownership and maintenance of street lighting on private roads.

Utilities/Undergrounding:

• Applicant shall underground all new and existing utility distribution facilities, including those along the frontage of Norris Canyon Road. The developer shall provide joint trench composite plans for the underground electrical, gas, telephone, cable television and communication conduits and cables including the size, location and details of all trenches, locations of building utility service stubs and meters and placements or arrangements of junction structures as a part of the Improvement Plan submittals for the project. The composite drawings and/or utility improvement plans shall be signed by a licensed civil engineer.

Drainage Improvements:

Collect and Convey

The applicant shall collect and convey all stormwater entering and/or originating on this
property, without diversion and within an adequate storm drainage system, to an
adequate natural watercourse having definable bed and banks, or to an existing

adequate public storm drainage system which conveys the stormwater to an adequate natural watercourse, in accordance with Division 914 of the Ordinance Code.

Hold Harmless

• The property owner shall be aware that the creek banks on the site are potentially unstable. The property owner shall execute a recordable agreement with the County which states that the developer and the property owner and the future property owner(s) will hold harmless Contra Costa County and the Contra Costa County Flood Control and Water Conservation District in the event of damage to the on-site and off-site improvements as a result of creek-bank failure or erosion.

Miscellaneous Drainage Requirements:

 The applicant shall design and construct all storm drainage facilities in compliance with the Ordinance Code and Public Works Department design standards.

National Pollutant Discharge Elimination System (NPDES):

• The applicant shall be required to comply with all rules, regulations and procedures of the National Pollutant Discharge Elimination System (NPDES) for municipal, construction and industrial activities as promulgated by the California State Water Resources Control Board, or any of its Regional Water Quality Control Boards (San Francisco Bay - Region II).

Compliance shall include developing long-term best management practices (BMPs) for the reduction or elimination of stormwater pollutants. The project design shall incorporate wherever feasible, the following long-term BMPs in accordance with the Contra Costa Clean Water Program for the site's stormwater drainage:

- Minimize the amount of directly connected impervious surface area.
- Install approved full trash capture devices on all catch basins (excluding catch basins within bioretention basins) as reviewed and approved by Public Works Department. Trash capture devices shall meet the requirements of the County's NPDES permits.
- Place advisory warnings on all catch basins and storm drains using current storm drain markers.
- Construct concrete driveway weakened plane joints at angles to assist in directing run-off to landscaped/pervious areas prior to entering the street curb and gutter.
- Other alternatives comparable to the above, as approved by the Public Works Department.
- Shallow roadside and on-site swales.

Stormwater Management and Discharge Control Ordinance:

 The applicant shall not be subject to the requirements of Provision C.3 of the County Stormwater Management and Discharge Control Ordinance, since the proposed project will not create or replace at least 10,000 square feet of impervious surface. However, this project is subject to all other provisions of the County Stormwater Management and Discharge Control Ordinance (§1014, Ordinance No. 2005-01) and future development applications on the subject parcel may be required to comply with Provision C.3.

4 . .

ADVISORY NOTES

- The applicant will be required to comply with the requirements of the Bridge/Thoroughfare Fee Ordinances for the South County, Tri-Valley, SCC Sub Regional and SCC Regional Areas of Benefit as adopted by the Board of Supervisors.
- This project may be subject to the requirements of the Department of Fish and Wildlife. It is the applicant's responsibility to notify the Department of Fish and Wildlife, P.O. Box 47, Yountville, California 94599, of any proposed construction within this development that may affect any fish and wildlife resources, per the Fish and Wildlife Code.
- This project may be subject to the requirements of the Army Corps of Engineers. It is the applicant's responsibility to notify the appropriate district of the Corps of Engineers to determine if a permit is required, and if it can be obtained.
- Further development of the parcel may need to comply with the latest Stormwater Management and Discharge Control Ordinance (§1014) and Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit. This compliance may require a Stormwater Control Plan and an Operations and Maintenance Plan prepared in accordance with the latest edition of the Stormwater C.3 Guidebook. Compliance may also require annexation of the subject property into the Community Facilities District 2007-1 (Stormwater Management Facilities) and entering into a standard Stormwater Management Facilities Operation and Maintenance Agreement with Contra Costa County.



COUNTY COSTA

2019 JUN -3 P 2: 22

DEPARTMENT OF CONSERVATION

September 21, 2018

Daniel Barrios, Project Planner Contra Costa County Department of Conservation & Development Current Planning Division 30 Muir Road Martinez, CA 94553

Subject:

Geologic Peer Review - MS18-0008

Robert Freitas (owner & applicant)

APN 211-210-029 & -075 / 2350 Norris Cyn. Rd.

San Ramon Area, Contra Costa County

DMA Project # 3033.18

Dear Daniel:

At your request we have reviewed pertinent published mapping, and analyzed 1973 vertical angle aerial photographs with a mirror stereo-scope. The documents reviewed included publications of the California Geological Survey (CGC) and U.S. Geological Survey (USGS), along with the dissertation of Wagner² and thesis mapping of Newton. 3 With this background we reviewed the Tentative Parcel Map submitted by the project proponent, which was prepared by the project civil engineers. The application was not accompanied by a geotechnical report. Our comments are organized to first provide background information on site conditions. We then present Safety Element policies followed by our evaluation and recommendations. Figure 1, Vicinity Map, shows the location of the site on a base map at a scale of 1 in.= ½ mi. The site consists of two parcels that are outlined in red. For reference purposes this figure also shows (i) topography (10 ft. contours), (ii) creeks (delineated with a blue line), (iii) parklands (shaded green), (iv) local road network (shaded gray), (v) Alameda / Contra Costa County line (which passes tangent to the northwest site boundary) and (vi) the nearest known Alquist-Priolo Earthquake Fault Zone (EFZ). The CGS has issued maps of all faults it considers to be active. Because technical data on the precise location of active faults traces is variable, the CGS has delineated Alquist-Priolo EFZs that encompass the recently active and potentially active traces of the known active faults. Typically EFZs are at least ¼ mile in width (and locally wider where there are subparallel or branching fault traces.) The nearest EFZ encompasses traces of the active Calaveras fault. It is the northwest-trending zone that is shaded brown and passes approximately 1½ mi. northeast of the site.

¹ Pacific Aerial Surveys, 1973, Photographs #CC3526-3-37 thru -39; scale 1 in. = 1,000 ft. (flown on May 7, 1973).

² Wagner, J.R., 1978, Late Cenozoic History of the Coast Ranges East of San Francisco Bay, University of California, Berkeley, Ph.D. Dissertation.

³ Newton, R.J., 1948, *The Geology Northwest of Dublin, California, in the Vicinity of Divide Ridge*, University of California, Berkeley, M.S. Thesis.

⁴ P/A Design Resources, Inc., 2018, *Tentative Parcel Map, Subdivision MS 18-XXXX*, *Freitas Ranch, Contra Costa County*, *California*, P/A Job #17023-20 (1 Sheet, wet signed and stamped by the project civil engineer on July 31, 2018).

Understanding of Project

The application is a request for approval of a Tentative Parcel Map of a property that fronts on both sides of Norris Canyon Road, near the Alameda/ Contra Costa County boundary. The terrain is steep and the site is located in an area which is known to have landslides, both dormant and active.

Background

1. Bedrock Geology

In 1994 the U.S. Geological Survey (USGS) issued a color, digitized bedrock geology map of Contra Costa County. This map, which was based on compilation of previous published mapping, is presented in Figure 2. The boundary of the two existing parcels that make up the MS18-0008 project site are identified with a heavy black line. According to this map the site is in the outcrop belt of sedimentary rocks, including Unnamed sedimentary and volcanic rocks of Pliocene age (Tus), along with three formations of Miocene age: Cierbo Sandstone (Tc), Briones Formation (Tbr) and Briones Formation, G-Member (Tbg). With regard to geologic structure, the rocks on site are tightly folded. Bedding strikes approximately north-south, and dips to the east. Based on interpolation from nearby measurement, the dip of bedding is inferred to range from 45 to 60°. Although no active faults bisect the site, Figure 2 shows an inactive fault crossing the easternmost portion of the property. Even inactive faults may present foundation problems associated with the contrasting properties on bedrock on opposite sides of the shear zone, along with the adverse engineering properties of the fractured and sheared rock in the fault zone.

2. Engineering Geology

In 1995 the USGS issued a professional paper that characterizes the composition and engineering properties of rock and soils that most influence slope stability (Ellen et. al., 1995). The unit descriptions are intended to provide a guide to the physical nature of the ground from place-to-place in hillside terrain of the region. The report does not classify geologic units according to their slope stability characteristics. Instead, it provides a unit description, emphasizing physical properties that most influence the performance of hillsides. Table 1 provides a description of the formations, along with providing data on engineering properties.

In summary there are two basic rock types on the property. The eastern ¼ of the northernmost parcel is within the outcrop belt of Tus. This a chiefly a non-marine formation of Pliocene age. It is weakly consolidated, clayey and prone to shallow to intermediate depth landslides and slope creep. The remainder of the site is underlain by marine sedimentary rocks (chiefly sandstone) of Miocene age. In general the Miocene age formations (Tc, Tbr and Tbg) present good foundation conditions. However, the adjacent Norris Canyon Estates project had on the order of fifty landslides, several of which were deep seated. Considerable remedial work was performed to create stable building pads. The rough grading for that project took three grading seasons. In summary, the Miocene bedrock typically consists of alternating beds of dense hard sandstone, with interbedded weak rock (mudstone, siltstone and soft, clayey

⁵ Graymer, R., D.L. Jones & E.E. Brabb, 1994. *Preliminary Geologic Map Emphasizing Bedrock Formations in Contra Costa County, California*. U.S. Geological Survey Open File Report 94-622.

⁶ Ellen, S.D., and C.M. Wentworth, 1995. *Hillside Materials and Slopes in the San Francisco Bay Region, California*. U.S. Geological Survey Professional Paper 1357.

sandstone). Additionally, the terrain on the MS18-0008 site is steep and at least locally the rock is deeply weathered, sheared/ highly fractured or experiencing seepage. These adverse conditions can result in shallow, moderate depth and deep seated slope failure.

Table 1

Composition and Properties of Geologic Units Mapped on the MS18-0008 Site

Tus Unnamed sedimentary and volcanic rocks (Chiefly Pliocene Age)

This unit is characterized as weakly consolidated mudstone, sandstone and conglomerate; proportions may vary in different areas. Intergranular permeability of mudstone is very low to possibly low; sandstone and conglomerate largely low, some moderate. Sandstone and conglomerate are typically weathered to depths greater than 30 ft. Conversely, mudstone is weathered to depths of 5 to 10 ft. This formation, sometimes referred to as the Contra Costa Group, includes volcanic tuff beds which are mapped separately. The soils formed in the outcrop belt of Tus are described by the USGS as largely clayey, some granular; most is stony owing to pebbles from conglomerate. Much bedrock is expansive, some severely expansive (mudstone). Much to most soils and alluvium is considered severely expansive.

Tc Cierbo Sandstone (Miocene age)

This unit is almost entirely sandstone, well to moderately sorted, mostly medium-grained. Much of the sand grains are clay coated and approaching saturation. The clay content suggests a tuffaceous origin. This unit includes minor fossiliferous shell horizons and shell beds. Weathered sandstone is firm to soft; lime cemented beds can be hard. This sandstone formation has low to moderate permeability, depending on the extent of the clay coatings. This formation is weathered to depths of 35 ft. and greater. The bedrock is largely unexpansive, but much of the soil mantle is severely expansive.

Tbr Briones Formation (Miocene)

This unit is a marine formation. It consists of interbedded sandstone, siltstone, conglomerate and shell breccia. In this formation is a volcanic tuff layer, which has an absolute age determination. Utilized the K/Ar method, the sample tested was dated at 14.5±0.4 million years before present. ⁷ The relative abundance of the three rock types is variable from site to site. Much to most bedrock is significantly expansive, some severely expansive. Most mantle (i.e. soils and alluvial deposits that overlie the bedrock) are considered to be severely expansive.

Tbg Briones Formation (G-Member of Wagner; Miocene)

The western half of the site is mapped as Briones Sandstone G-Member. It consists of bold outcropping of firm to hard, mainly medium-grained tuffaceous sandstone. This sandstone has clay coatings on sand grains that fill or nearly fill intersticies. It occurs in thick to very thick (30 ft.) beds between non-erosion resistant, very thick (5 to 100 ft.) intervals of silty and clayey sandstone and shale. The outcropping sandstone is firm to hard; the non-outcropping beds range from firm to soft. The outcropping sandstone is characterized by a fracture spacing that is moderate to very wide (10 ft.), but the non-erosion resistant beds are fractured at very close to moderate spacing. With regard to permeability, the G-member is characterized by low intergranular permeability; some moderate permeability; some very low permeability. The weathering characteristic of this unit is that it weathers from fractures inward; partially weathered at depths of 8 ft. below the ground surface. Almost all bedrock is unexpansive; most to almost all mantle (i.e. soils and alluvial deposit) is unexpansive.

3. Seismicity

The San Francisco Bay Region is considered one of the most seismically active regions of the United States. Consequently, it can be assumed that the proposed improvements will be subject to one or more major earthquakes during their useful life. Earthquake intensities vary depending on numerous factors, including (i) earthquake magnitude, (ii) distance of the site from the causative fault, (iii) geology of the

⁷ Lindquist, T.A. and Morganthaler, J.D., 1991, Radiometric ages of rocks in the San Francisco-San Jose Quadrangles, California Div. of Mines & Geology, Map No. 5A, Sheet 4.

site. The USGS has stated that there is a 72 percent chance of at least one magnitude 6.7 or greater earthquake striking the Bay Region between 2014 and 2043.

The Safety Element includes a figure titled "Seismic Ground Response" (General Plan, page 10-13). This map classifies the portion of the site within the outcrop belt of Tus as *Moderately Low Damage Susceptibility*. This designation is applied to sites that are underlain by Pliocene bedrock or Pleistocene Alluvium. This assessment assumes sound structures sited on competent foundation materials, and where critical slopes stable. The remainder of the MS18-0008 site is within the outcrop belt of Miocene bedrock. This portion of the site is rated *Lowest Damage Susceptibility*. Sound structures sited on bedrock typically perform satisfactorily if foundation materials and critical slopes are stable.

The risk of structural damage from earthquake ground shaking is controlled by building and grading regulations. The California Building Code (CBC) mandates that for structures requiring building permits (including residential buildings, retaining walls over 3 ft. in height, and most types of accessory structures), the design must take into account both foundation conditions, proximity of active faults and their associated ground shaking characteristics. Design-level geotechnical reports must include CBC seismic design parameters. Those parameters are used by the structural engineer in the design of civil engineering structures. With conservative design and quality construction, ground shaking damage can be kept to a practical minimum.

4. Landslides

In 1975 the U.S. Geological Survey issued photo-interpretation maps of landslide and other surficial deposits of Contra Costa County. (That mapping is presented on Page 10-24 of the Safety Element of the County General Plan.) To enhance readability the USGS landslide map of the site and surrounding area has been enlarged to a scale of 1 in.= 500 ft. and transferred to a base map that is an aerial photograph that shows topography (10 ft. contours), creeks (represented with a blue line), the local road network, and the Alameda/ Contra Costa County line (see Figure 3). The boundary of the two parcels that make up the site is indicated with a green line. A large landslide complex is indicated on the southern-most parcel that is queried in area of the toe-of-slide, indicating geomorphic evidence of the toe is not well defined. (Typically landslides are most clearly defined in the scarp area, but in the case of dormant slides, the toe and lateral margins are less well defined.) Nine (9) smaller landslides are delineated on the northernmost parcel. The density of slides on this parcel can be considered the site is marginally stable, and likely to be sensitive to grading and development. Note that landslides daylight at/near the Norris Canyon Rd. right-of-way. The activities of man of the northern parcel could risk reactivation of those slides.

It should be recognized that the landslides shown in Figure 3 were mapped by an experienced USGS geologist who relied solely on geologic interpretation of stereo pairs of aerial photographs, without the benefit of a site visit or any subsurface data. Furthermore, landslides mapped by the USGS are not classified on the basis of the (i) activity status (i.e. active or dormant), (ii) depth of slide plane (shallow or deep seated), or (iii) type of landslide deposit. Additionally the map was based chiefly on geologic interpretation of photographs from the 1960s and early 1970s. Consequently, it does not show landslides that have occurred within the last 50 years±. Nevertheless, the map fulfills its function, which is to red flag sites that may be at risk of landslide damage, where detailed geologic and geotechnical investigations are required to evaluate risks and develop measures to reduce risks to a practical minimum.

⁸ Aagaard, Blair, Boatwright, Garcia, Harris, Michael, Schwartz, and DeLeo, 2016, Earthquake Outlook for the San Francisco Bay Region, 2014-204M3, USGS Fact Sheet 2016-3020, revised August 2016; ver. 1.1).

⁹ Nilsen, T.H., 1975. Preliminary Photointerpretation Map of Landslide and Other Surficial Deposits of the Las Trampas Ridge 7.5-Minute Quadrangle, Contra Costa and Alameda Counties, U.S. Geological Survey, Open File Maps 75-277-24.

Another published landslide map of the San Ramon area was issued by the California Geologic Survey (CGS). With regard to the MS18-0008 site, this CGS map indicates that nearly 100 % of the southernmost parcel is identified as a slide area. However, only one slide was identified on the northernmost parcel. That slide area corresponds to the largest landslide identified by on the northern parcel by the USGS.

The CGS publication also included a *Relative Slope Stability Map*. That map classifies the entire MS18-0008 project site as *Most Susceptible Area*, with the exception of narrow ridge crests, which were classified *Generally Susceptible Area*. The explanation presented for the Relative Slope Stability Map states that lands classified *Most Susceptible Area* include steep hillsides that are pock-marked with landslide scars. The intervening areas that are between mapped landslides are considered subject to slope creep, and to present a substantial risk of slope failure. The explanation concludes with the following statement: Slopes in the *Most Susceptible Area* should be considered naturally unstable, subject to failure even in the absence of the activities of man.

5. Soils

According to the Soil Survey of Contra Costa County, the soil series mapped on the site is the Los Gatos loam (LhF, 30 to 50% slopes; LhG, 50-75% slopes). This soil series is well-drained, underlain by soft sandstone. The typical soil profile is a surface layer of gray, slightly acid clay loam that is 10 inches thick. The subsoil is gray to grayish brown, slightly acid clay. The subsoil is underlain by bedrock at a depth of approximately 32 in. The permeability of the soil is rated slow; runoff is rated "medium to rapid" for LhF; and "rapid" for LhG. The hazard of erosion is rated "moderate to high" for LhF; and "high" for LhG. The Soil Survey indicates that soil slips that 2 to 5 feet deep make up 5% of the area mapped as LhFand LhG.

The Los Gatos loam is rated "moderately" expansive and "moderately" corrosive. Expansive soils expand when water is added and shrink when they dry out. This continuous change in soils volume causes homes and other structures to move unevenly and crack. It should also be recognized that corrosive soils tend to damage concrete and/or uncoated steel that is in contact with the ground. Routinely, the project geotechnical engineer performs subsurface exploration, laboratory testing and engineering analysis. Based on the data gathered, the geotechnical report provides specifics criteria and standards to avoid/minimize damage from these adverse soil conditions.

Safety Element

The mapping of landslides by the USGS (Nilsen, 1975) was incorporated into the Safety Element (General Plan Figure 10-6, page 10-24). In areas where there is a concentration of landslides, an engineering geologic and/or geotechnical investigation are routinely required to confirm/ refine the interpretation of the USGS, based on field reconnaissance mapping, subsurface exploration and laboratory testing of selected samples and engineering analysis of the data gathered (possibly including slope stability analysis). If landslides are confirmed to be present on a site, recommendations are required to mitigate the landslide hazard.

The Safety Element of the General Plan includes a number of policies that require evaluation of geologic hazards for proposed land development projects in areas of potential hazards. Table 2 presents ground failure and landslide hazard policies that appear most applicable to the proposed project. Policy 10-22 of the Safety Element states that geologic conditions should be a primary determinant of land use; Policy 10-

¹⁰ Majmundar, H.H., 1995, Landslide Hazards in the Las Trampas Ridge and Parts of the Diablo Quadrangles, Alameda and Contra Costa Counties, California, Open File Report 95-15 (2 Sheets).

27 states that the geotechnical reports / geologic reports submitted by the project proponent are subject to technical review by the County Peer Review Geologist; Policy 10-30 states that applications can be denied if landslides cannot be adequately repaired; and Policy 10-32 states that the County will not approve private roads where there is evidence that an excessive degree of maintenance would be required.

Table 2 Safety Element Ground Failure and Landslide Policies

Policy 10-22. Slope stability shall be a primary consideration in the ability of land to be developed or designated for urban uses.

Policy 10-23. Slope stability shall be given careful scrutiny in the design of development and structures, and in the adoption of conditions of approval and required mitigation measures.

Policy 10-26. Approvals of public and private development projects in areas subject to slope failures shall be contingent on geologic and engineering studies which define and delineate potentially hazardous conditions and recommend adequate mitigation.

Policy 10-27. Soil and geological reports shall be subject to the review and approval of the County Planning Geologist.

Policy 10-28. Generally, residential density shall decrease as slope increases, especially above a 15 percent slope.

Policy 10-29. Significant very steep hillsides shall be considered unsuitable for types of development which require extensive grading or other land disturbances.

Policy 10-30. Development shall be precluded in areas when landslides cannot be adequately repaired.

Policy 10-32. The County shall not accept dedication of public roads in unstable hillside areas, or allow construction of private roads there which would require and excessive degree of maintenance and repair costs.

Tentative Parcel Map

The application was not accompanied by a geologic/ geotechnical report. Additionally, the TPM and it does not show topography. In a rugged, unstable/ marginally stable, a topographic map is a critical first step toward identifying a potential building site with suitable access. Without data on (i) location and significance of landslides, and (ii) topographic map of appropriate contour interval, the Tentative Parcel map cannot be used to identify a potential building site on each parcel or demonstrate that the candidate site has suitable access. In the absence of such data the TPM cannot be recommended for approval.

DMA Evaluation

1. Potential Geologic Hazards

Based on reconnaissance data, the potential hazards include (i) landslides/ slope stability, (ii) earthquake shaking, (iii) slope creep, and (iv) expansive and corrosive soils. Evaluation of these hazards requires a geotechnical investigation, and peer review of the report

2. General Plan Compliance

Safety Element Policies were discussed in the peer review letter, commencing on page 5. In our opinion these policies require a geologic/ geotechnical investigation. The findings and recommendations that are presented in the report shall service as the primary data source when preparing the CEQA "Geology and Soils" Chapter of the CEQA document for this project. Additionally there are Open Space Element policies that appear to be operative (see Scenic Resource Policies 9-13 through 9-30. Selected policies from the Open Space Element are presented in Table 3.

Table 3 Selected Scenic Resource Policies

Policy 9-24. Any new development shall be encouraged to generally conform with natural contours and avoid excessive grading.

Policy 9-25. All new development located below a major scenic ridge shall be reviewed with an emphasis on protecting the visual qualities of the ridge.

Policy 9-27. The appearance of the County shall be improved by eliminating negative features... and by encouraging aesthetically designed facilities with adequate setbacks and landscaping.

DMA Findings

The immediate need of the Department of Conservation & Development is to determine if there is sufficient data to allow the processing of the pending application, including preparation of the California Environmental Quality Act (CEQA) document. The provisions of CEQA and associated case law acknowledge that final design studies are not needed for the purposes of CEQA compliance. However, there must be sufficient information on the extent of potential geologic and geotechnical hazards, and guidance must be provided to the project designers pertaining to the layout of the planned improvements. Therefore, the type of data needed at this time is limited to the following:

- i. Evaluation of the project plans by the geotechnical engineers to ensure the layout is sensitive to geologic and geotechnical constrains (i.e. identify areas suitable for grading and construction).
- ii. Assessment of the gamut of potential geologic, seismic and geotechnical hazards identified in Appendix G of the CEQA Guidelines issued by the State of California (see Table 4). In our experience, the County expects the project geologists and geotechnical engineers to provide at least a preliminary evaluation of potential geologic hazards based on adequate data, and provide recommendations to mitigate any significant hazards that are confirmed to be present (e.g. landslides).

Table 4 Significance Criteria for Assessment of Potential Geologic Impacts

Appendix G of the CEQA Guidelines identifies environmental issues to be considered when determining whether a project could have significant effects on the environment. As identified in Appendix G, a project would have a significant impact to geology and soils if it would:

- 1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - a) 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;
 - b) Strong seismic ground shaking; c) Seismic-related ground failure, including liquefaction; or d) Landslides:
- 2) Result in substantial soil erosion or the loss of topsoil;
- 3) 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;
- 4) 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; or
- 5) 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.

DMA Recommendations

From a geologic perspective, it is our opinion there is insufficient available data available to deem the application complete. We recommend that the project proponent be directed to submit the following:

- Provide a topographic map of project area (The "Notes" on the Tentative Parcel Map reference a year 2000 topographic survey prepared by HJW & Associates.) The topography was not indicated on the TPM prepared by P/A Design Resources, Inc. We are not certain what the contour interval was for that survey, which is now 20 years old. We suggest that consideration be given to requiring a new survey that is based on a 5 ft. contour interval.
- Geologic/geotechnical report. The primary objective of the investigation shall be to establish that there is an potential building site(s) on each parcel, with adequate access; provide a corrective grading plan (or outline alternative approaches to corrective grading); and provide detailed recommendations to guide the scope of the future geologic/ geotechnical investigation when plans are being prepared for a rural residential use of each parcel.

In our opinion the investigators should include both an engineering geologist and geotechnical engineer. The anticipated scope of work shall include (i) literature review; (ii) geologic interpretation of historic aerial photographs (stereo pairs that provide decade-by-decade coverage for the last 70 yrs±); (iii) adequate subsurface exploration to identify a feasible building area(s) on each lot, (iv) adequate laboratory testing of selected samples, to include Atterberg Limits testing, corrosion potential testing, and engineering properties of the soil and rock needed for slope stability analysis; and (v) engineering analysis of the data gathered, including slope stability analysis.

The critical element of the report is an original geologic map of the site presenting the consultant's interpretation of site conditions. That geologic map should present the consultant's interpretation of bedrock geology, map any faults on the site, provide site specific information on the orientation of bedding, and map the distribution of surficial deposits – i.e. landslides (possibly classified by activity status, estimated depth to slide plane, and/or type of landslide), along with alluvial deposits.

Finally, the report shall provide an assessment of the range of potential geologic hazards identified in Appendix G of the State CEQA Guidelines

Submit a revised TPM that includes topography, and which shows landslides and other hazardous areas of the site (e.g. existing fills, areas exhibiting an excessive rate of erosion, over-steepened creek banks, etc.), and provide a slope map of the property.

Limitations

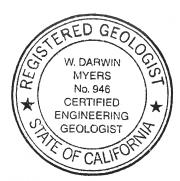
The purpose of our review was to provide a professional opinion of an engineering geologist for limited purposes of determining if the application could be considered complete. Specifically, we provide advice to assist the Community Development Division with discretionary permit decisions. Our services have been limited to interpretation of 1973 aerial photographs and review of the referenced reports and maps. Our opinions and conclusions are made in accordance with generally accepted principles and practices of the engineering geology profession.

We trust this letter provides the evaluation and comments that you requested. Please call if you have any questions.

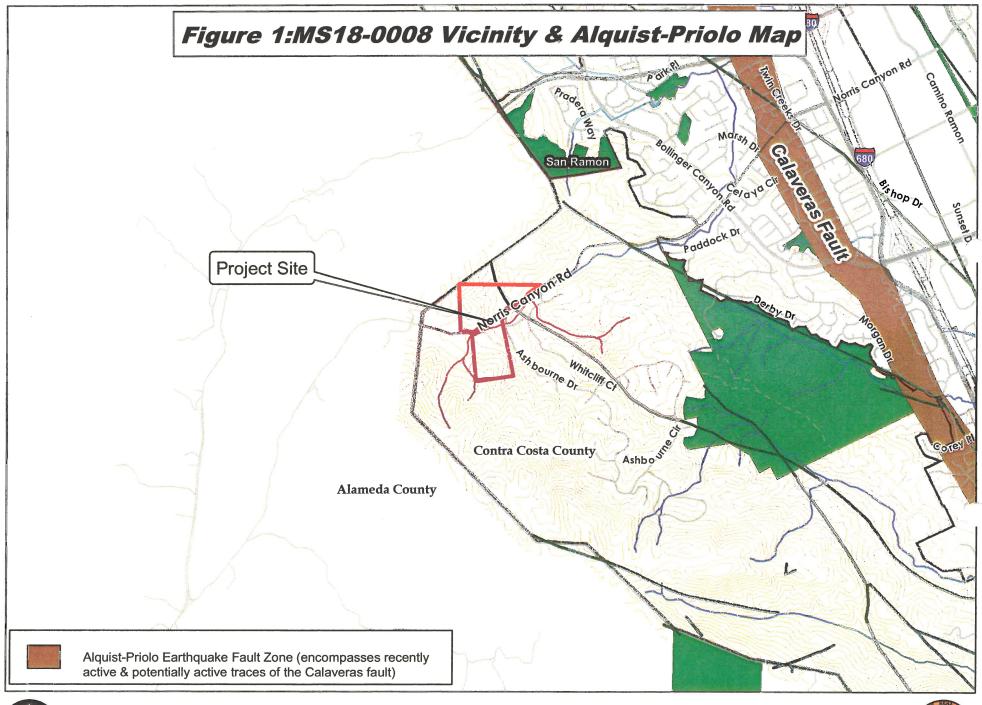
Sincerely,
DARWIN MYERS ASSOCIATES

Darwin Myers, CEG 946

Principal



cc. Nestor Baligod, Sr. Grading Inspector, BID
 Robert Freitas, 2350 Norris Canyon Road, San Ramon, CA 94583
 Raz Avedian, P/A Design Resources, Inc., 3021 Citrus Circle, Suite 150, Walnut Creek, CA 94598





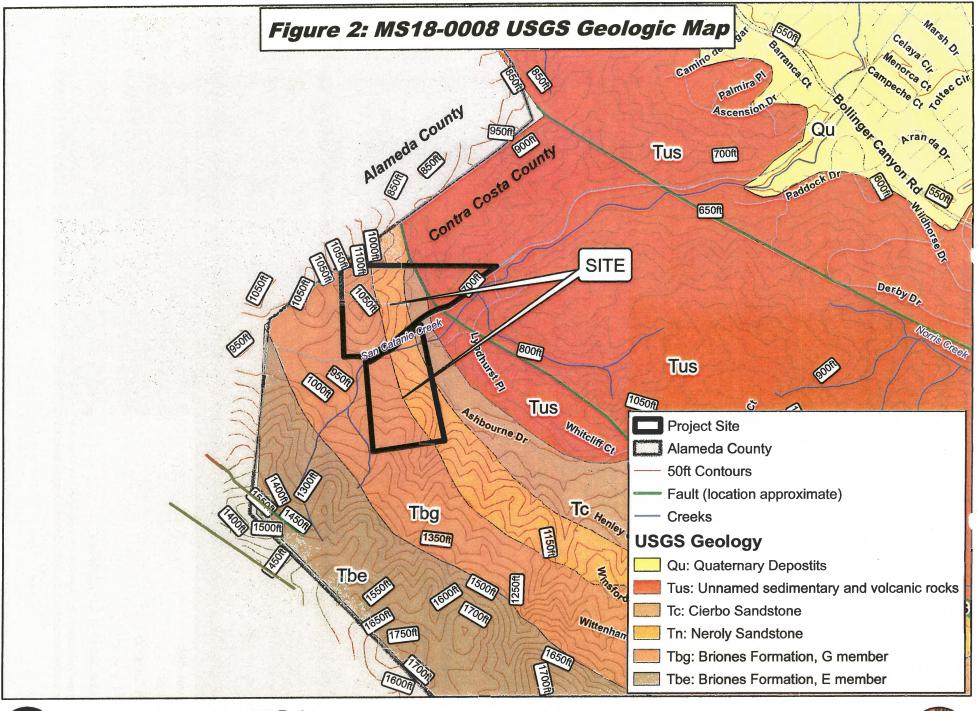
Mile:

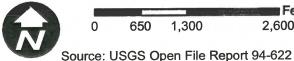
Map Created 8/28/2018 by Contra Costa County Department of Conservation and Development, GIS Group 30 Muir Road, Martinez, CA 94553 37:59:41.791N 122:07:03.756W

This map was created by the Contra Costa County Department of Conservation and Development with data from the Contra Costa County GIS Program. Some base data, primarily City Limits, is derived from the CA State Board of Equalization's rate areas. While obligated to use this data the County assumes no responsibility for its accuracy. This map contains copyrighted information and may not be altered. It may be reproduced in its current state if the source is cited. Users of this map agree to read and accept the County of Contra Costa disclaimer of liability for geographic information.



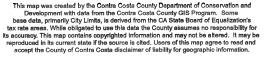
0.5



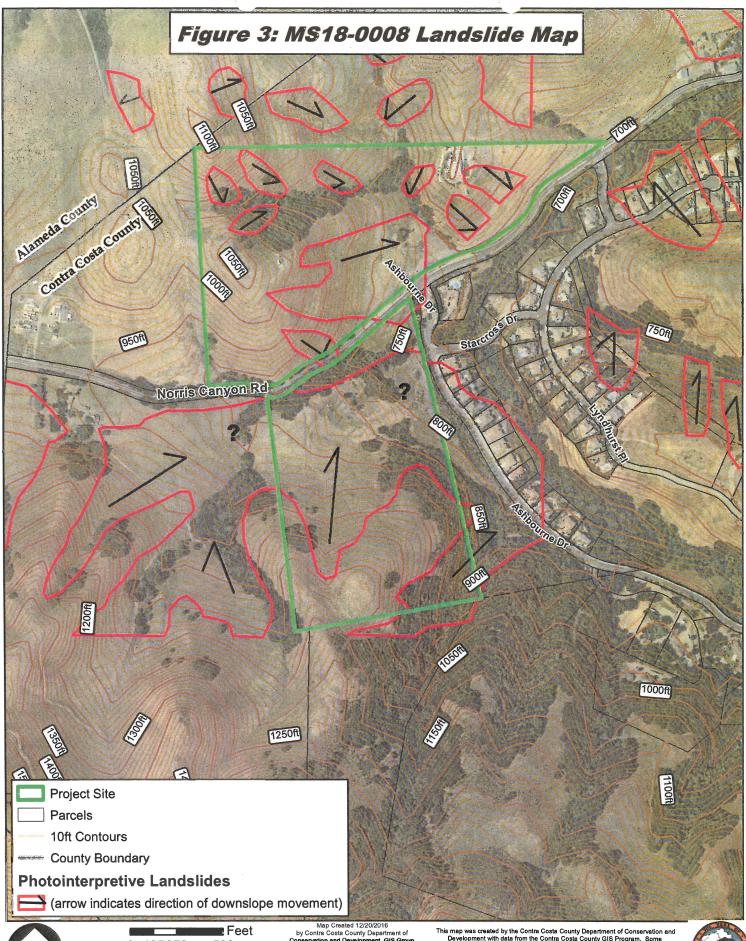




Map Created 1/22/2018 by Contra Costa County Department of Conservation and Development, GIS Group 30 Muir Road, Martinez, CA 94553 37:59:41.791N 122:07:03.756W









0 125250 500 Map Created 12/20/2016 by Contra Costa County Department of Conservation and Development, GIS Group 30 Multi Road, Mertinez, CA 94553 37:59:41.791N 122:07:03.756W

This map was created by the Contra Costa County Department of Conservation and Development with data from the Contra Costa County GIS Program. Some base data, primarily City Limits, is derived from the CA State Board of Equalization's tax rate areas. While obligated to use this data the County assumes no responsibility for its accuracy. This map contains copyrighted information and may not be altered. It may be reproduced in its current state if the source is cited. Users of this map agree to read and accept the County of Contra Costa disclaimer of liability for geographic information.





SAN RAMON VALLEY FIRE PROTECTION DISTRICT

08/08/2018

Permit: CP184441559 - Submitted Plan: Planning and site development review

Project: Planning MS18-0008 - Business: null

Contra Costa County - DCD - Community Development 30 Muir Road Martinez, CA 94553-4601

RE: PLANNING APPLICATION REVIEW AT

rlendel

2350 Norris Canyon RD

Contra Costa Cty, CA 94583

APN: 211210075

Dear Planner Barrios:

The District has reviewed the planning application for the above address. Based upon the information provided, comments and requirements have been made as conditions of approval (see the attached report).

If during the course of the entitlement process the project changes, additional requirements may apply. Thank you for the opportunity to comment on this proposed project. If you have any questions please contact me at (925) 838-6687 or rwendel@srvfire.ca.gov

Sincerely,

Roy Wendel

Fire Plans Examiner

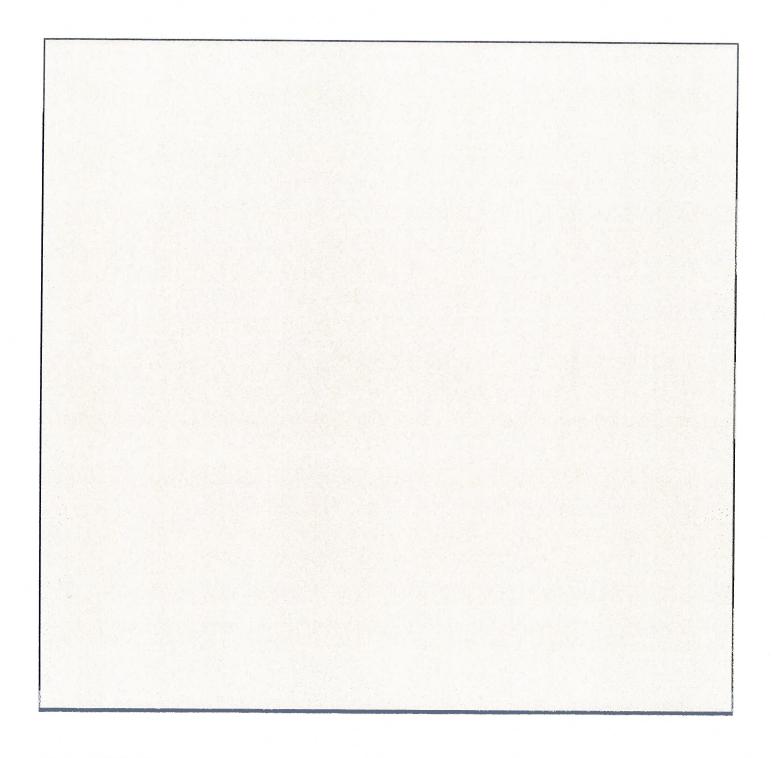
San Ramon Valley Fire Protection District Planning Application Review

Submittal Information			
Permit Number	CP184441559	Submittal Number	SN3341006
Submittal Type	Planning and site development review	Submitted Date	08/07/2018 06:12:53

Condition #	Category	Condition
6585883	Access & Water	Fire apparatus roadways (public, private streets, roads and in some instances driveways used for vehicle access) shall extend to within 150 ft. (45.72 m) of any portion of an exterior wall of the first story of any building.
6585884	Access & Water	Fire apparatus roadways (public, private streets, roads, and in some instances driveways used for vehicle access) shall have a minimum unobstructed width of 20 feet (6 m) and an unobstructed vertical clearance of not less than 13 feet 6 inches (4 m).
6585885	Access & Water	Fire apparatus roadways (public, private streets, roads and in some instances driveways used for vehicle access) shall be capable of supporting the imposed weight of fire apparatus (75,000 pounds) and shall be provided with an all weather driving surface.
6585886	Access & Water	The maximum grade for a fire apparatus roadway is 20%. Roadways with grades of 16-20% shall be grooved concrete. Grooved concrete shall be ½" wide, ½" deep, and spaced 1½" on center. If alternate surfacing is proposed, provide a letter stamped by the civil engineer documenting that the skid resistance is better than or equal to the grooved concrete specification. The alternate surfacing must also be approved by the appropriate city, town or county department.
6585887	Access & Water	Fire apparatus roadways (public or private streets or roads used for vehicle access) shall be installed and fire hydrants in service prior to commencement of framing: PRIOR TO COMMENCEMENT OF FRAMING, CONTACT THE SAN RAMON VALLEY FIRE PROTECTION DISTRICT TO SCHEDULE AN INSPECTION OF ROADWAYS AND FIRE HYDRANTS.
6585888	Access & Water	Fire apparatus roadways in excess of 150 ft. (45.72 m) in length shall make provisions for approved fire apparatus turnarounds.
6585889	Access & Water	Provide a weed abatement program before, during and after construction. Maintain grass or brush clearance of 100 ft. (30.48 m) from combustible construction and 30 feet (9.144 m) from street and property lines.
6585890	Fire Sprinklers	Residential Automatic Fire Extinguishing Sprinkler System is required.
6585891	Planning	Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Said numbers shall contrast with their background. Individual suite numbers shall be permanently posted on the main entrance doors of tenant spaces. If rear outside doors to tenant spaces are installed, they shall include the installation of numerical address numbers corresponding to front addressing.

Permit Number: CP184441559

Condition #	Category	Condition
6585892		Any/all gates across Fire District access roadways shall have the same minimum clear, unobstructed linear width of the road and a clear vertical height of 13 feet 6 inches (4.1 meters). All locking devices shall provide for Fire District emergency access. All gate plans shall be approved by San Ramon Valley Fire Protection District prior to construction.
6585893	Planning	Prior to the issuance of a Building Permit, submit full set of building plans to the San Ramon Valley Fire Protection District for review and approval.



CONTRA COSTA COUNDEPARTMENT OF CONSERVATION AND DEVELOPMENT

COMMUNITY DEVELOPMENT DIVISION

30 Muir Road

Martinez, CA 94553-4601 Phone: 925-674-7205

Fax: 925-674-7258

RECEIVED CONTRA COSTA COUNTY

AUG 3 2018



AGENCY COMMENT REQUEST

Date 7/31/18

we request your comments regarding the attached ap	plication currently under review.
DISTRIBUTION	Please submit your comments to:
Internal	Project Planner Daniel Barrios
Building InspectionGrading Inspection	Phone # (925) 674-7788
Advance PlanningHousing Programs	E-mail Danie / Barrios @dcd.cccounty.us
Trans. PlanningTelecom Planner	County File # MS 18 - 0008
ALUC StaffHCP/NCCP Staff	2
APC Floodplain TechCounty Geologist	Prior to August 31, 2018
Health Services Department	****
Environmental HealthHazardous Materials	We have found the following special programs apply to this application:
Public Works Department	N/A Active Fault Zone (Alquist-Priolo)
Engineering Services (Full-size)Traffic	X Flood Hazard Area, Panel #
Flood Control (Full-size)Special Districts	NA 60-dBA Noise Control
Local Caracal (Alcard	NA CA EPA Hazardous Waste Site
Fire District SAN RAMON VALCEY	****
Consolidated – (email) fire@cccfpd.org	AGENCIES: Please indicate the applicable code
Sanitary District CENTRAL SAN	section for any recommendation required by law or
	ordinance. Please send copies of your response to the Applicant and Owner.
School District(s)	Comments:BelowAttached
Reclamation District #	
East Bay Regional Park District	
Diablo/Discovery Bay/Crockett CSD	
MAC/TAC	
Improvement/Community Association	
X CC Mosquito & Vector Control Dist (email)	
Others/Non-local	
CHRIS – Sonoma State	
CA Fish and Wildlife, Region 3 – Bay Delta	
Native American Tribes	
Additional Recipients	Print Name <u>Jeremy Shannon</u>
	Oeremy Shannon 8/3/2018
	Signature DATE
	Agency phone #_925-685-9301

Daniel Barrios

From:

Driscoll, Ryan <rdriscoll@sanramon.ca.gov>

Sent:

Monday, August 13, 2018 11:39 AM

To:

Daniel Barrios

Subject:

MS 18-0008 Agency Comment Request - San Ramon Response

Attachments:

MS 18-0008 Agency Comment Request.pdf

Daniel,

San Ramon Planning Services received the attached Agency Comment Request for MS 18-0008. San Ramon has no comments on this application. Thank you for the opportunity to comment on the application.

Regards,

-Ryan

Ryan Driscoll - Associate Planner

Direct Phone: (925) 973-2568 – Fax: (925) 838-3231 – <u>rdriscoll@sanramon.ca.gov</u>
City of San Ramon – Planning Services Division – 2401 Crow Canyon Road, San Ramon, CA 94583

Daniel Barrios

From:

Farinha, Melissa@Wildlife < Melissa.Farinha@wildlife.ca.gov>

Sent:

Friday, August 17, 2018 10:14 AM

To:

Daniel Barrios

Subject:

MS18-0008 Minor Subdivision Application

Dear Mr. Barrios

Please note that the proposed project and its reasonably foreseeable impacts (i.e. construction of additional structures) could require notification to CDFW for Lake or Streambed Alteration under Fish and Game Code (FGC) section 1600 et. Seq. if project activities would result in:

- Diversion or obstruction the natural flow of any river, stream, or lake
- Change of the bed, channel, or bank of any river, stream, or lake
- Use of material from any river, stream, or lake
- Deposit or disposal of material into any river, stream, or lake

https://www.wildlife.ca.gov/Conservation/LSA

In addition, the proposed project and its reasonably foreseeable impacts has potential to result in take of the state-listed threatened Alameda whipsnake and an Incidental Take Permit should be obtained (FGC 2081(b)).

https://www.wildlife.ca.gov/Conservation/CESA/Incidental-Take-Permits

Thank You,

Melissa Farinha Senior Environmental Scientist (Supervisory) Bay Delta Region, Habitat Conservation Unit 2825 Cordelia Road Fairfield, CA 94534 (707) 944-5579 CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM

ALAMEDA COLUSA CONTRA COSTA DEL NORTE

HUMBOLDT LAKE MARIN MENDOCINO MONTEREY NAPA SAN BENITO SAN FRANCISCO SAN MATEO SANTA CLATA SANTA CRUZ SOLANO SONOMA YOLO Northwest Information Center Sonoma State University

150 Professional Center Drive, Suite E Rohnert Park, California 94928-3609 Tel: 707.588.8455 nwic@sonoma.edu http://www.sonoma.edu/nwic

File No.: 18-0267

August 22, 2018

Daniel Barrios, Project Planner
Contra Costa County
Department of Conservation and Development
Community Development Division
30 Muir Road
Martinez, CA 94553-4601

RECEIVED
CONTRA COSTA COUNTY

AUG 2 2 2018

Dept of Conservation & Development

re:

MS18-0008 / APNs 211-210-075 & 211-210-029 at 2350 Norris Canyon Road, San Ramon / Robert Freitas

Dear Daniel Barrios

Records at this office were reviewed to determine if this project could adversely affect cultural resources.

Please note that use of the term cultural resources includes both archaeological sites and historical buildings and/or structures.

The review for possible historic-era building/structures, however, was limited to references currently in our office and should not be considered comprehensive.

Project Description: Approval of minor subdivision for two lots APN 211-210-075 & 211-210-029 created by the construction of Norris Canyon Rd, with a variance to the minimum lot size requirement for both lots. A 69.323 acre parcel "B" to the north and South of Norris Canyon Rd.

Previous Studies:

XX This office has record of five previous <u>cultural resource</u> studies that include portions of the proposed project area. Study # 8896 (Holman 1986), Study # 29662 (Billat 2004), Study # 31833 (Billat 2006), Study # 35428 (Hatoff 2007) in total, covered approximately 15% of the proposed project area. Study # 23938 (Ananian 2001) covered approximately 100% of the proposed project area. See recommendations below.

Archaeological and Native American Resources Recommendations:

- XX We recommend the lead agency contact the local Native American tribe(s) regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at 916/373-3710.
- XX Due to the negative findings of the study completed in 2001 (Ananian) that covered approximately 100% of the project area, no further study for archaeological resources is recommended at this time.

Built Environment Recommendations:

XX Since the Office of Historic Preservation has determined that any building or structure 45 years or older may be of historical value, if the project area contains such properties, it is recommended that prior to commencement of project activities, a qualified professional familiar with the architecture and history of Contra Costa County conduct a formal CEQA evaluation.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

For your reference, a list of qualified professionals in California that meet the Secretary of the Interior's Standards can be found at http://www.chrisinfo.org. If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation. If you have any questions please give us a call (707) 588-8455.

Sincerely, Killian anddelmin

Jillian Guldenbrein Researcher

cc:

Robert Freitas 2350 Norris Canyon Road San Ramon, CA 94583