# **EXHIBIT 1**

**Engineer's Report** 

### **ENGINEER'S REPORT**

for

## WIEDEMANN RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT ELWORTHY RANCH DEVELOPMENT ANNEXATION CONTRA COSTA COUNTY, CALIFORNIA

August 26, 2014



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# **ENGINEER'S REPORT**

### WIEDEMANN RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT ELWORTHY RANCH DEVELOPMENT ANNEXATION (Pursuant to the Public Resources Code of the State of California, Section 26500 et seq.)

### **CERTIFICATION OF FILING**

The Geologic Hazard Abatement District ("GHAD") provides monitoring and maintenance of improvements related to geologic hazard management and other responsibilities as a landowner, within the Elworthy Ranch Development portion of the Wiedemann Ranch GHAD and levies and collects assessments in order to perform its activities.

The improvements, which are the subject of this report, are defined as any activity necessary or incidental to the prevention, mitigation, abatement, or control of a geologic hazard, construction, maintenance, repair, or operation of improvement; or the issuance and servicing of bonds issued to finance any of the foregoing (Section 26505).

This report consists of seven parts, as follows:

- I. INTRODUCTION
- II. BACKGROUND
- III. GEOLOGIC HAZARD ABATEMENT DISTRICT DIAGRAM
- IV. SERVICE LEVELS
- V. DESCRIPTION OF GHAD MAINTAINED IMPROVEMENTS
- VI. ASSESSMENT METHOD
- VII. ASSESSMENT LIMIT BUDGET PROJECTION
- VIII. DEVELOPER RESPONSIBILITIES



The undersigned respectfully submits the enclosed Engineer's Report.

Date: August 26, 2014

By: ENGEO Incorporated

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I HEREBY CERTIFY that the enclosed Engineer's Report was filed on the 26th day of August 2014.

Patricia Curtin Attorney and Acting Clerk of the Board Wiedemann Ranch Geologic Hazard Abatement District Contra Costa County, California

I HEREBY CERTIFY that the enclosed Engineer's Report was approved and confirmed by the GHAD Board on the 9<sup>th</sup> day of September 2014.

Karen Mitchoff Chair of the Board Wiedemann Ranch Geologic Hazard Abatement District Contra Costa County, California



### **ENGINEER'S REPORT**

for

### WIEDEMANN RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT ELWORTHY RANCH DEVELOPMENT ANNEXATION CONTRA COSTA COUNTY, CALIFORNIA for the ESTABLISHMENT OF AN ASSESSMENT LIMIT

### I. INTRODUCTION

The Contra Costa County Board of Supervisors formed the Wiedemann Ranch Geologic Hazard Abatement District ("GHAD" or "District") on September 1, 1998 (Resolution No. 98/438), under the authority of the California Public Resources Code, Division 17, Section 26500 et seq. The GHAD Board of Directors approved the annexation of the Elworthy Ranch development into the GHAD on July 29, 2014 ("GHAD Annexation Area"). The Contra Costa County Board of Supervisors act as the Board of Directors of the GHAD.

### II. BACKGROUND

The developer of the Elworthy Ranch development site ("Site") has submitted the Wiedemann Ranch GHAD Plan of Control – Elworthy Ranch Development Annexation ("Plan of Control") that describes the GHAD's responsibilities to permanently monitor and maintain GHAD improvements within the GHAD Annexation Area. This Engineer's Report describes the establishment of an assessment level to fund GHAD activities necessary or incidental to geologic hazard mitigation, abatement and control.

### III. GEOLOGIC HAZARD ABATEMENT DISTRICT BOUNDARIES

The boundaries for the GHAD Annexation Area are shown in the legal description and plats attached hereto as Exhibit A.

### IV. SERVICE LEVELS

The GHAD's activities are those that are necessary or incidental to the prevention, mitigation, abatement, or control of geologic hazards including construction, maintenance, repair, or operation of any improvement; and the issuance and servicing of bonds issued to finance any of the foregoing.

The GHAD provides for the administration and review of facilities within the budgeted limits, including the following services:

1. Oversight of GHAD operations, including reporting to the GHAD Board of Directors.



- 2. In conjunction with the County Assessor's Office, setting the annual levying of assessments on the property tax rolls.
- 3. Engagement of technical professionals to perform the monitoring duties as described in the Plan of Control.
- 4. Performance of GHAD maintenance activities in accordance with the Plan of Control. These maintenance activities include:
  - Monitoring of developer or GHAD constructed retaining walls and maintenance, if structural integrity of a wall or adjacent structure(s) is threatened.
  - Water detention basin facility maintenance, including access road.
  - Maintenance of bioretention facility adjacent to intersection of Elworthy Ranch Circle and Street "S".
  - Maintenance of lined and unlined drainage ditches in developed areas and open space.
  - Vegetation control within open space (Parcels "P" and "T").
  - Maintenance of drainage facilities within the East Bay Regional Park District (EBRPD) trailhead parking lot area (Parcel "S") that directly impact the GHAD Annexation Area.
  - Maintenance of storm drain system improvements, subdrains, and subdrain outlets in open space (Parcels "P" and "T").
  - Trail and fire break maintenance on Parcels "P" and "T".
  - Vertical curb, curb, and guard rail on Street "S" on Parcel "P".
- 5. The GHAD will also have maintenance, monitoring and repair responsibilities for slopes, which will include natural, reconstructed or partially reconstructed landslides.
- 6. Preparation of annual GHAD budgets for approval by the GHAD Board of Directors.

# V. DESCRIPTION OF THE IMPROVEMENTS MAINTAINED BY THE GHAD

The GHAD-maintained improvements are described in the Plan of Control. In general, these improvements include water quality facilities; drainage systems, including lined ditches in developed areas and open space; open-space storm drain inlets and outlets; subdrains and outlets; retaining walls; access roadways; and drainage facilities within the EBRPD trailhead parking lot area.



## VI. ASSESSMENT METHOD

With the exception of the EBRPD trailhead parking lot area, the improvements and GHAD responsibilities described in Section V are distributed within the GHAD Annexation Area. The improvements described in this document will confer the following special benefits to the assessed parcels:

- 1. Protection from slope instability
- 2. Protection from erosion due to uncontrolled surface water
- 3. Protection of water quality
- 4. Protection from wild land fires associated due to unmanaged vegetation

The GHAD assessment is distributed among all residential property owners within the GHAD Annexation Area. The improvements and responsibilities listed in Section V provide specific benefits to the properties within the GHAD Annexation Area and the improvements are constructed for the benefit of those assessed and not the general public.

As listed above and in Section 3.3 of the Plan of Control, the GHAD will monitor and maintain drainage facilities within the EBRPD staging area parking lot on Parcel "S". Although this area is outside the GHAD boundary, the maintenance of these facilities (including drainage pipes, two rock-lined outfall aprons, an earth swale, and an erosion control blanketed area) is necessary to reduce the potential for uncontrolled stormwater infiltration, erosion, and other potential geologic hazards that could affect properties and improvements within the GHAD Annexation Area.

Single-family residential lots are assessed as one unit. Apartments are assessed as one-half unit. The GHAD Annexation Area consists of 84 single-family residences and 13 apartments. With each apartment assessed at one-half unit, there are a total of 90½ equivalent units within the Site. The total number of equivalent residential units within the GHAD Annexation Area was considered in light of the annual GHAD Annexation Area budget in developing the annual assessment amount.

The Engineer hereby finds that residential properties within the GHAD Annexation Area receive substantially proportional special benefit based on the average square footage for each residential product type (Single-family residences and apartments). Within the GHAD Annexation Area, the average square footage of the apartments is approximately one-half the square footage of the average single-family residential unit.

A financial analysis was performed to provide a framework for an operating budget for the on-going abatement, mitigation, prevention and control of geologic hazards within the GHAD Annexation Area. In preparation of the budget, several factors were considered including:

- Site geology
- Remedial grading
- Proximity of geologic hazards to proposed residences



- Improvements or structures
- Site access considerations
- Elements Requiring Routine Maintenance, including:
  - 1. Surface Drainage Facilities
  - 2. Graded Slopes
  - 3. Retaining Walls
  - 4. Bioretention and Detention Basin Facilities
  - 5. Trails and Fire Breaks

### VII. ASSESSMENT - BUDGET

The purpose of this Engineer's Report is to establish the assessment level and the apportionment of the assessment within the GHAD Annexation Area as required under Proposition 218. The annual budget in each subsequent fiscal year will apprise the GHAD Board of Directors of the estimated budget for the upcoming year.

Based on the estimated expenses for on-going operations, and allowing for larger (approximately \$1,000,000) geologic events at 20-year intervals, a budget was prepared for the purpose of estimating initial assessment levels (Exhibit B).

The Engineer recommends an annual assessment limit for the GHAD Annexation Area of \$1,360.00 per detached single-residential and \$680.00 per apartment unit (Fiscal Year 2014/15 dollars). The proposed initial assessment level will be automatically adjusted annually on June 30 to reflect the percentage change in the San Francisco-Oakland-San Jose Consumers Price Index for All Urban Consumers.

While the assumptions and estimated expenses listed in Exhibit B were used to determine the assessment levels for the GHAD Annexation Area, they do not represent the actual budget for any one year of the GHAD's operation, since assessment of the individual parcels will be based on the issuance of building permits, which will occur over a number of years. In addition, the Engineer anticipates that the projected expense amounts will be reached over time and that these amounts will be inflation-adjusted in the year that the expenses occur.

The developer of the Site shall contribute to the GHAD an amount equal to 19 percent of the total cumulative reserve amount in the GHAD at the time the annexation resolution was adopted by the Board of Directors on July 29, 2014 or at the time of transfer whichever is less ("Buy-in Contribution"). The Buy-in Contribution is based on the percentage of residential parcels in the GHAD Annexation Area as compared to the remaining GHAD. The GHAD Annexation Area contains 90½ equivalent parcels and the remaining GHAD has 474 parcels subject to a GHAD assessment. On July 29, 2014 the GHAD had a total cumulative reserve amount of \$2,796,018; therefore, the developer of the Site will be required to make a maximum Buy-in Contribution of \$531,124 at the time of transfer (Plan of Control - Exhibit B).

The Buy-in Contribution shall be provided to the GHAD prior to its acceptance of the monitoring and maintenance responsibilities for the GHAD Annexation Area. Funds collected



and remaining from the levy of assessments during the period that the developer is responsible for performing monitoring and maintenance activities shall be applied to meet the required Buy-in Contribution. In addition, receivables from the Contra Costa County Tax Collector will be considered as part of the Buy-in Contribution.

# VIII. DEVELOPER RESPONSIBILITIES

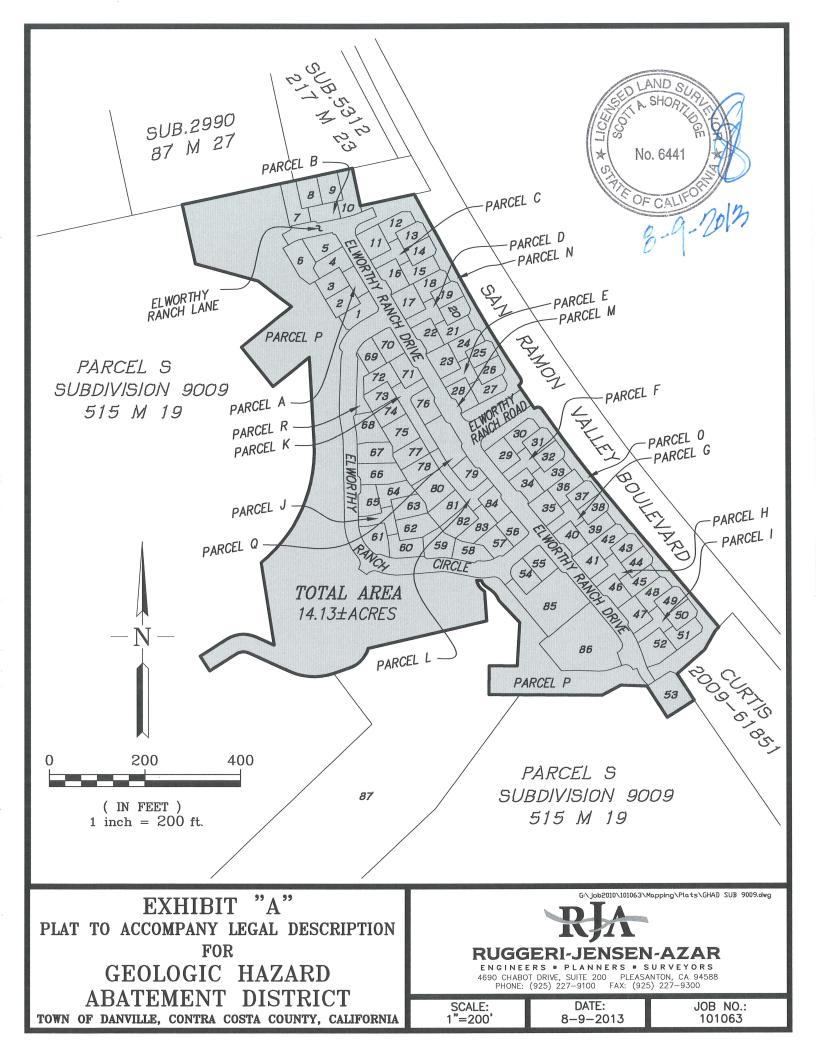
The developer of the Site is responsible for managing and maintaining the GHAD Annexation Area until the GHAD accepts responsibility for the GHAD Improvements as set forth in the Plan of Control. In addition, the developer is responsible for funding any necessary GHAD functions or business undertaken for the GHAD Annexation Area that the GHAD Officers or Board of Directors determine are necessary before the GHAD accepts the GHAD Improvements. If the developer fails to fund all or a portion of these costs during, these costs shall be covered by the funds generated by and for the GHAD Annexation Area (i.e., through the assessment) and the developer shall be required to reimburse the GHAD for such costs before the GHAD can accept monitoring and maintenance responsibilities for the GHAD Improvements.

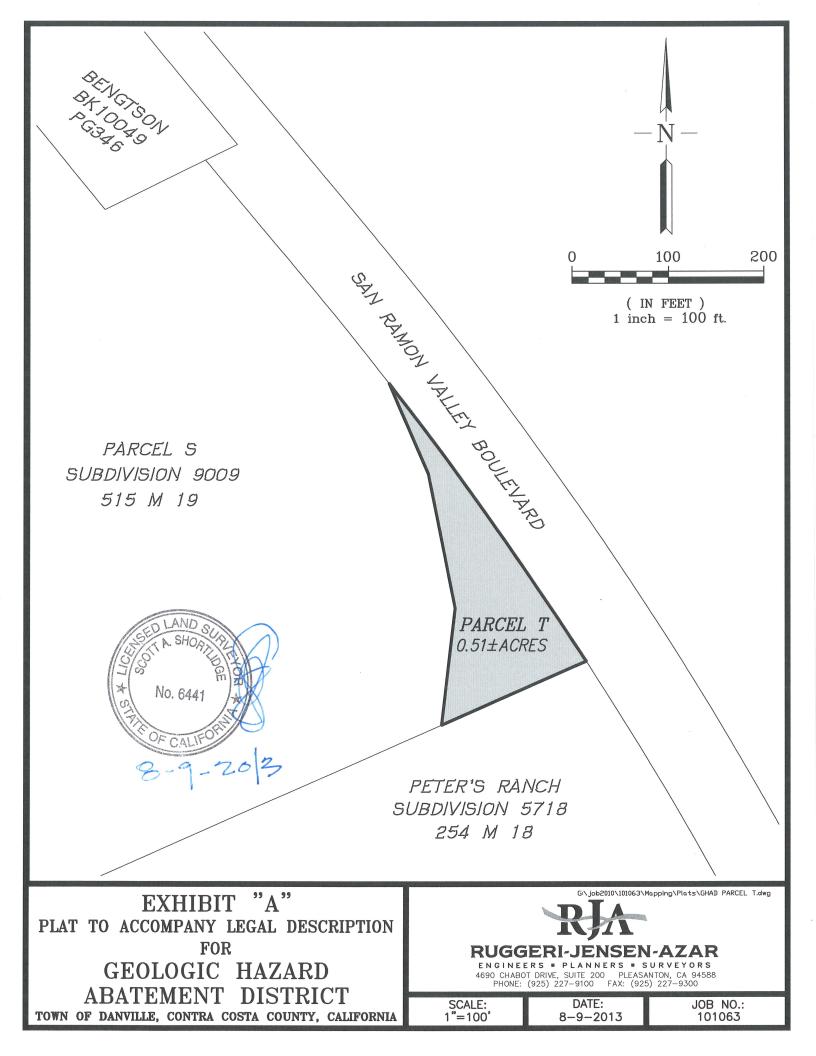
The GHAD may utilize funds generated by or for the GHAD Annexation Area to conduct any necessary GHAD functions or business for the GHAD Annexation Area required before the GHAD accepts the GHAD improvements. Such functions and business can include periodic reporting to the GHAD Board of Directors and work performed by GHAD Officers to verify the GHAD is implemented in accordance with the Plan of Control and GHAD Law.



# EXHIBIT A

Legal Description and Plats to Accompany Legal Description





#### EXHIBIT "A"

All the Real Property situate in the Town of Danville, County of Contra Costa, and State of California; and being all of Lots 1 thru 86 & all of Parcels A thru R, and Parcel T as created by that certain map entitled "Subdivision 9009 Elworthy Ranch" and filed on September 11, 2012 and recorded in Book 515 of Maps at pages 19 through 39, Official Records of Contra Costa County.

**End of Description** 

Prepared by: No. 644 Scott Shortlidge, LS 6441 Date



# EXHIBIT B

Wiedemann Ranch GHAD Budget

**Elworthy Ranch Development** 



### EXHIBIT B Wiedemann Ranch Geologic Hazard Abatement District Elworthy Ranch Development

# Budget

# **ASSUMPTIONS**

Total No. of Single Family Residential Units	84
Total No. of Apartment Residential Units	13
Equivalent Residential Units	90.5
Annual Assessment per Unit (FY 2014/2015 \$)	\$1,360
Annual Adjustment in Assessment (estimated)	3.0%
Inflation (estimated)	3.0%
Investment Earnings (estimated)	5.0%
Frequency of Large-Scale Repair (years)	20
Cost of Large-Scale Repair (current \$)	\$1,000,000

### ESTIMATED ANNUAL EXPENSES IN FY 2014/15 DOLLARS

Administration and Accounting		
Technical Consultants	\$	8,000
Retaining Wall Inspection and Maintenance	\$	10,000
Detention Basin Facility Maintenance	\$	10,000
Bioretention Maintenance	\$	2,000
Sediment Removal - Concrete Structures	\$	2,000
Vegetation Control – Open Space	\$	5,000
Parking Lot/Open Space Subdrain and Stormdrain Maintenance		5,000
Slope Stabilization, Erosion, Minor Repairs	\$	5,000
Trail and Fire Break Maintenance	\$	10,000
Site Monitoring Program	\$	5,000
Major Repair (Annualized)	\$	5,000
Misc & Contingency (10%)	\$	50,000
	<u>\$</u>	11,700

## Total

<u>\$ 128,700</u>