



## **SOMERSET ANNEXATION CONTRA COSTA COUNTY, CALIFORNIA**

### **ENGINEER'S REPORT**

**SUBMITTED TO**  
Wendt Ranch Geologic Hazard Abatement District

**PREPARED BY**  
ENGEO Incorporated

April 18, 2023  
Revised September 7, 2023

**PROJECT NO.**  
16098.000.000

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## ENGINEER'S REPORT

### WENDT RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT SOMERSET ANNEXATION

(Pursuant to the Public Resources Code of the State of California, Section 26500 et seq.)

## CERTIFICATION OF FILING

The Wendt Ranch Geologic Hazard Abatement District (GHAD) provides monitoring and maintenance of improvements related to geologic hazard management within the Somerset residential development portion of the GHAD. The GHAD also 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 (Pub. Resources Code § 26505).

This report consists of eight parts, as follows.

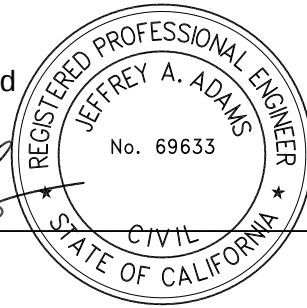
- I. INTRODUCTION
- II. BACKGROUND
- III. GEOLOGIC HAZARD ABATEMENT DISTRICT BOUNDARIES
- IV. SERVICE LEVELS
- V. DESCRIPTION OF GHAD-MAINTAINED IMPROVEMENTS
- VI. ASSESSMENT METHOD
- VII. ASSESSMENT - BUDGET
- VIII. HOMEOWNERS ASSOCIATION (HOA) RESPONSIBILITIES

The undersigned respectfully submits the enclosed Engineer's Report.

Date: September 7, 2023

By: ENGEO Incorporated

  
Jeffrey A. Adams, PE



## **ENGINEER'S REPORT**

WENDT RANCH  
GEOLOGIC HAZARD ABATEMENT DISTRICT  
SOMERSET ANNEXATION  
CONTRA COSTA COUNTY, CALIFORNIA  
for the  
ESTABLISHMENT OF AN ASSESSMENT LIMIT

### **I. INTRODUCTION**

The Contra Costa County Board of Supervisors formed the Wendt Ranch Geologic Hazard Abatement District (GHAD or District) on February 12, 2002 (Resolution No. 2002/59), under the authority of the California Public Resources Code, Division 17, Section 26500 et seq. (GHAD Law). The GHAD Board of Directors approved the annexation of the Somerset development into the GHAD on August 3, 2021, with the approval of Resolution No. 2021/03 (GHAD Annexation Area). The GHAD Annexation Area consists of 17.8 acres with 150 residences. The members of the Contra Costa County Board of Supervisors act as the Board of Directors of the GHAD (Board of Directors).

### **II. BACKGROUND**

The Wendt Ranch GHAD Board of Directors approved the Plan of Control for Somerset with the approval of Resolution No. 2021/03 on August 3, 2021. The Plan of Control describes the GHAD's responsibilities to permanently monitor and maintain GHAD improvements within the GHAD Annexation Area. The establishment of a real property related assessment to fund the GHAD's responsibilities is described in this Engineer's Report.

During previous monitoring activities, not related to the GHAD, ENGEO identified shallow, intermediate, and deep slope movement in multiple locations of the GHAD Annexation Area. The deep deflections were interpreted as movement within a portion of a deep-seated landslide mass within the bedrock. Slope improvements to mitigate instability near Conejo Court were constructed in 2016. These mitigation measures consisted of a shear pin and tie-back retention system. The shear pins consist of 19 cast-in-drilled-hole (CIDH) piles, connected at the top with a reinforced concrete tie beam.

To further mitigate intermediate and deep slope movement, waler beam and tie-back systems, embedded in engineered fill slopes, were installed in multiple locations within the GHAD Annexation Area. Construction of these improvements was completed in 2022. As observed during monitoring activities by a geotechnical engineer, the improvements constructed in 2016 and 2022 have stabilized the slope movement.

### **III. GEOLOGIC HAZARD ABATEMENT DISTRICT BOUNDARIES**

The boundaries for the GHAD Annexation Area are shown in the legal description and plat attached hereto as Exhibits A and B and consists of 17.8 acres.

## **IV. SERVICE LEVELS**

The GHAD's activities are set forth in the Plan of Control and include certain activities necessary or incidental to the prevention, mitigation, abatement, or control of geologic hazards, including construction, retention, repair and operation of any improvement, and the issuance and servicing of debt or bonds issued to finance any of the improvements.

The GHAD provides for the administration and review of improvements within budgeted limits established by the Board of Directors, including the following services.

1. Oversight of GHAD operations.
2. In conjunction with the Contra Costa County Assessor's Office, setting the annual levying of assessments on the property tax roll.
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, but are not limited to, the following.
  - Maintenance and repair of slopes
  - Maintenance, repair, and replacement of the concrete-lined drainage ditches
  - Monitoring, maintenance, and repair of the subdrain outlets and subdrain outfalls.
  - Monitoring and maintenance of measurement devices, such as piezometers, inclinometers, and tiltmeters.
5. Preparation of annual GHAD budgets for consideration by the Board of Directors.

## **V. DESCRIPTION OF GHAD-MAINTAINED IMPROVEMENTS**

The GHAD-maintained improvements are described in the Plan of Control. In general, these improvements include existing drainage systems, including concrete-lined ditches, subdrains and outlets; and measurement devices, such as piezometers, inclinometers, and tiltmeters.

## **VI. ASSESSMENT METHOD**

The improvements and GHAD responsibilities described in Sections IV and 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. Mitigation and abatement of slope instability
2. Mitigation and abatement of erosion due to uncontrolled surface water
3. Protection of water quality

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

The GHAD Annexation Area consists of 150 existing residential townhome residences. Townhome units are assessed as one unit and are assessed equally. The total number of residential units within the GHAD Annexation Area was considered during the development of the annual GHAD Annexation Area budget and the annual assessment amount.

The engineer hereby finds that the residential properties within the GHAD Annexation Area receive equal special benefit from the work and improvements within the GHAD. As a result, the GHAD assessment for the GHAD Annexation Area is distributed equally among all owners of parcels.

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

1. Site geology
2. Remedial grading
3. Proximity of geologic hazards to the residences
4. Improvements and residential structures
5. Site access considerations
6. Elements requiring routine maintenance, including the following.
  - Surface drainage facilities and subdrain outlets
  - Piezometers and inclinometers
  - Graded slopes

## 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 ongoing operations, allowing for larger (approximately \$500,000) geologic events at 20-year intervals, and accumulation of a reserve of approximately (\$672,000 by 2062 in FY 2022/2023 dollars), a budget was prepared for the purpose of estimating initial assessment levels (Exhibit C).

The engineer recommends an annual assessment limit for the GHAD Annexation Area of \$615.00 per single-residential unit (Fiscal Year 2022/2023 dollars). The proposed initial assessment level will be automatically adjusted annually on April 30 of each year to reflect the percentage change in the San Francisco-Oakland-Hayward Consumers Price Index for All Urban Consumers.

The assumptions and estimated expenses listed in Exhibit C were used to determine the assessment levels for the GHAD Annexation Area and represents the estimate of revenues and expenses in the first year following GHAD annexation. In addition, the engineer anticipates that the projected revenues and expenses will increase over time, and the automatic adjustments will assist in covering these costs.

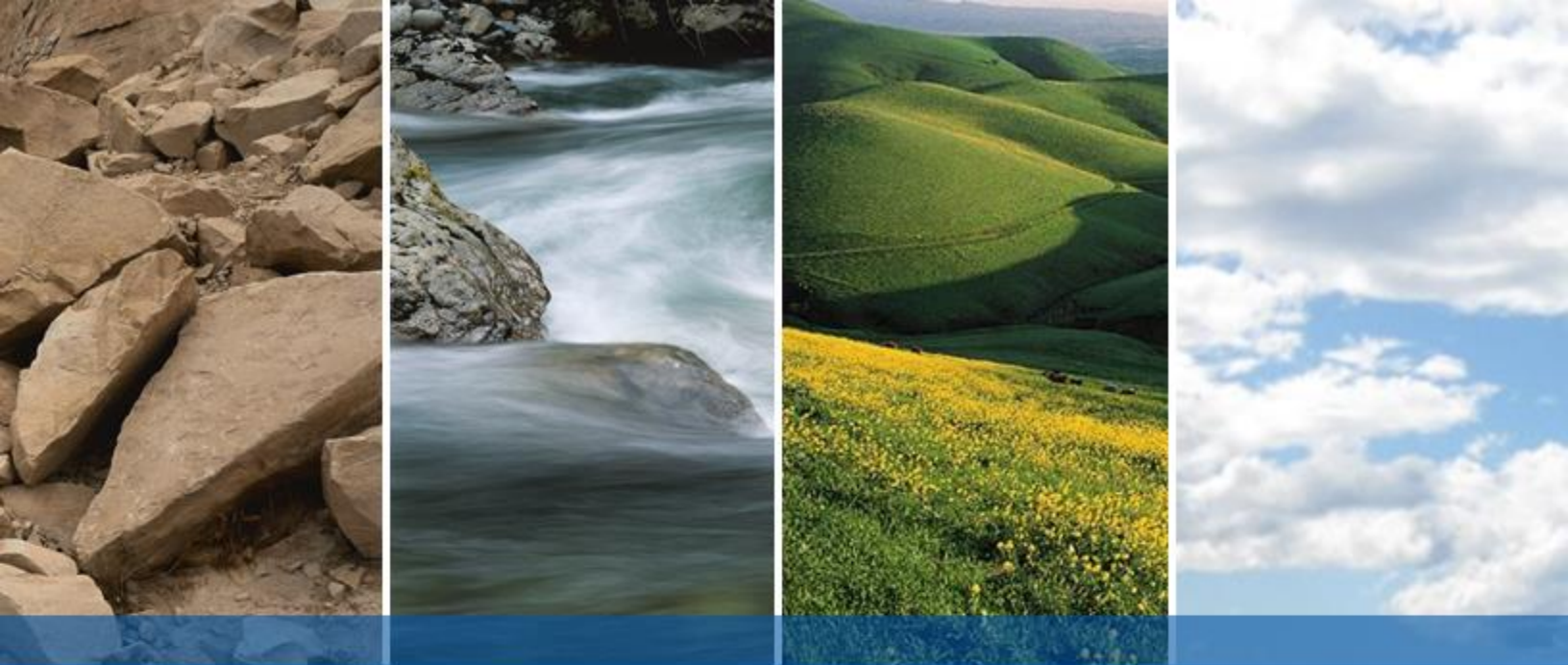
Pursuant to the schedule set forth in Section 6 and Appendix D of the Plan of Control for Somerset, within 45 days of submittal of a Transmittal Application, the GHAD will observe the listed parcels and verify that the improvements over which the GHAD will have maintenance

responsibility have been constructed and maintained in accordance with the conditions of the Plan of Control. Documentation of these observation activities will be reviewed and accepted by a third-party reviewer/geotechnical engineer. All 150 residential units shall be subject to the levy of the GHAD assessment.

## **VIII. HOMEOWNERS ASSOCIATION (HOA) RESPONSIBILITIES**

The Danville Somerset HOA 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 and in this Engineer's Report. In addition, the HOA 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 HOA fails to fund all or a portion of these costs, the costs shall be covered by the funds generated by and for the GHAD Annexation Area (i.e., through the assessment), and the HOA 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**

JUNE 17, 2021  
JOB NO.: 3237-00

**LEGAL DESCRIPTION  
SOMERSET - SUBDIVISION 7763  
SAN RAMON, CALIFORNIA**

REAL PROPERTY, SITUATE IN THE INCORPORATED TERRITORY OF THE CITY OF  
SAN RAMON, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, DESCRIBED AS  
FOLLOWS:

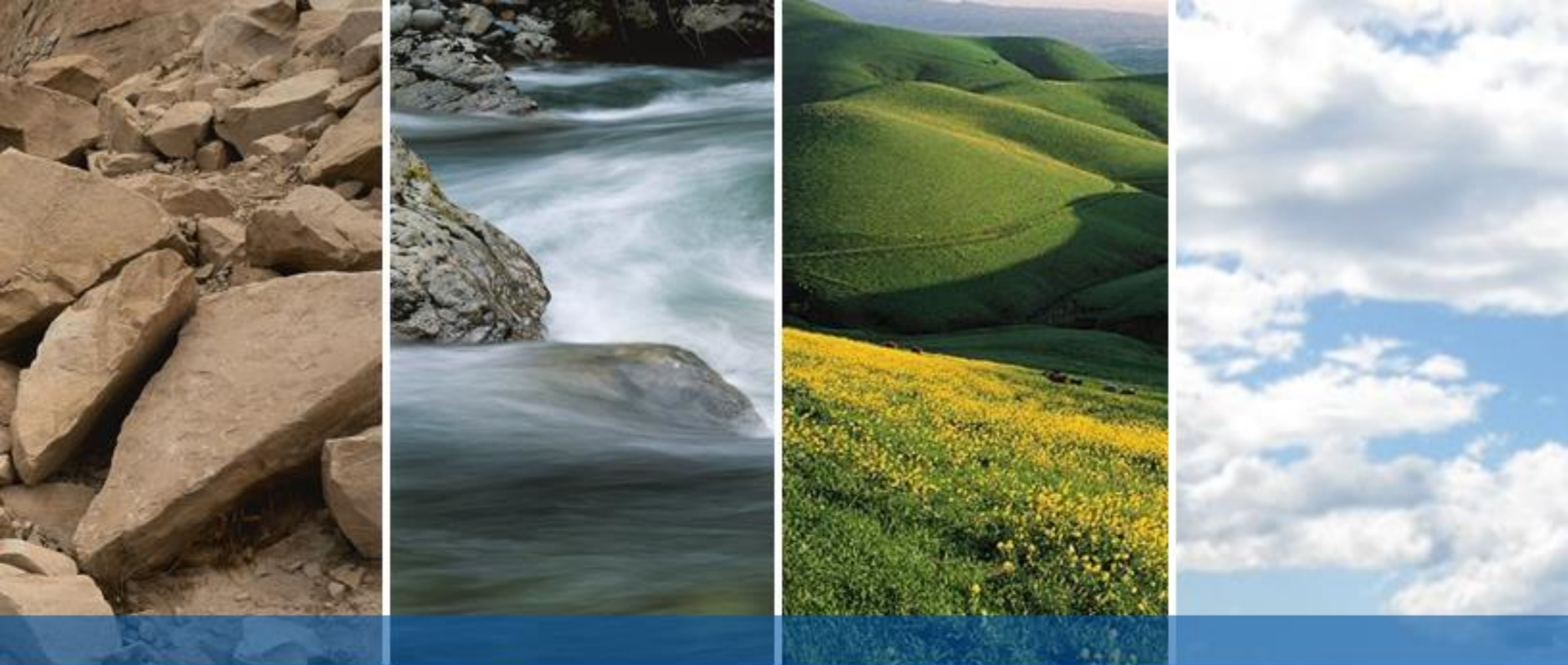
BEING ALL OF PARCELS A THRU G AND LOTS 1 THRU 150 AS SAID PARCELS AND  
LOTS ARE SHOWN AND DESIGNATED ON THAT CERTAIN FINAL MAP ENTITLED  
"SUBDIVISION 7763 - SOMERSET", FILED ON JUNE 3, 1993, IN BOOK 366 OF  
MAPS AT PAGES 4 THROUGH 14, OF OFFICIAL RECORDS, IN THE OFFICE OF THE  
COUNTY RECORDER OF CONTRA COSTA COUNTY.

**END OF DESCRIPTION**



A handwritten signature in blue ink, appearing to read "M. H. Wehber", written over a horizontal line.

MARK H. WEHBER, P.L.S.  
L.S. NO. 7960



## **EXHIBIT B**

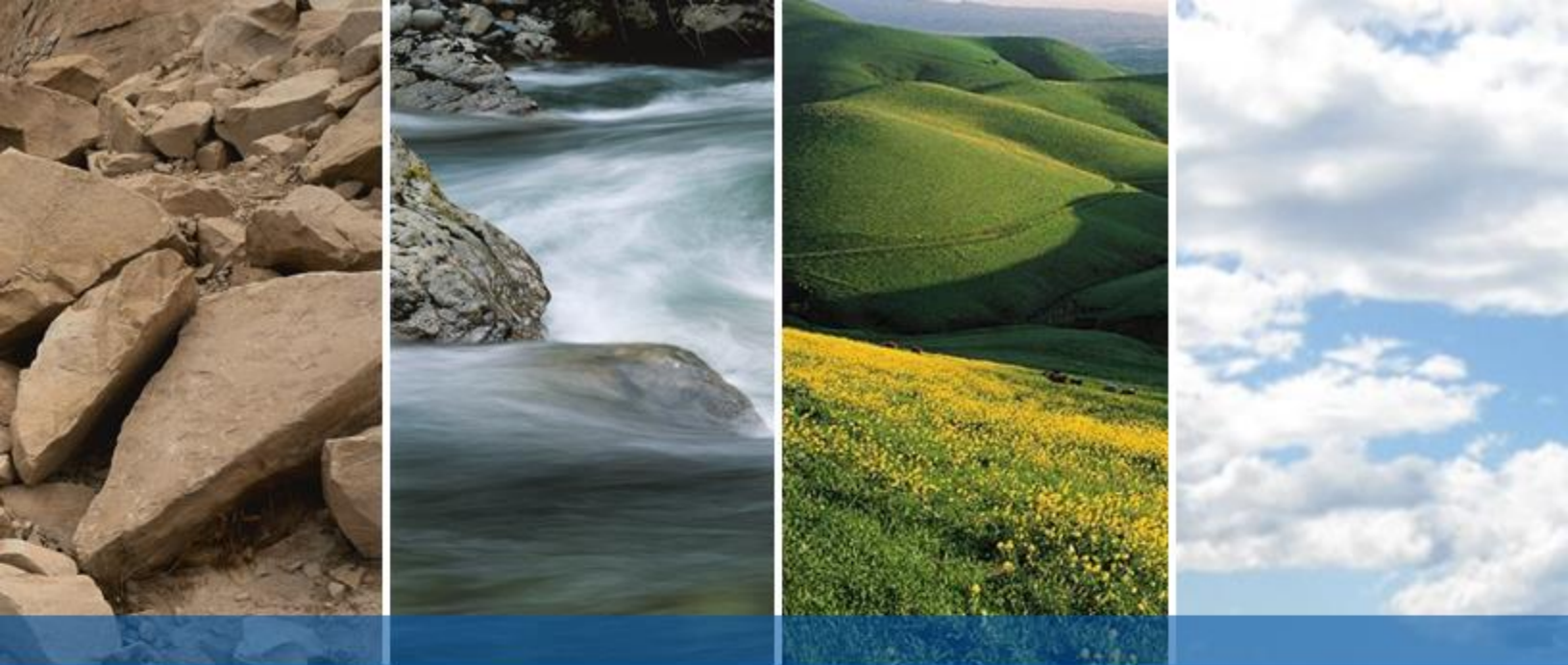
**PLAT TO ACCOMPANY LEGAL DESCRIPTION**



|                            |             |
|----------------------------|-------------|
| PROJECT NO.: 16098.000.000 |             |
| SCALE: AS SHOWN            |             |
| DRAWN BY: JV               | CHECKED BY: |

**EXHIBIT**  
**B**

ORIGINAL FIGURE PRINTED IN COLOR



## **EXHIBIT C**

**BUDGET – February 10, 2023**

**Wendt Ranch Geologic Hazard Abatement District  
Somerset Annexation**

**Budget – February 10, 2023**

**ASSUMPTIONS**

|                                              |           |
|----------------------------------------------|-----------|
| Total No. of Single-Family Residential Units | 150       |
| Annual Assessment per Unit (FY 2022/2023)    | \$615     |
| Annual Adjustment in Assessment (estimated)  | 2.6%      |
| Inflation (estimated)                        | 2.6%      |
| Investment Earnings (estimated)              | 5.0%      |
| Frequency of Large-Scale Repair (years)      | 20        |
| Cost of Large-Scale Repair (2022/2023 \$)    | \$500,000 |

**ESTIMATED ANNUAL EXPENSES IN 2022/2023 DOLLARS**

|                                                               |                 |
|---------------------------------------------------------------|-----------------|
| Administration (Manager, Treasurer, Clerk, and Legal Counsel) | \$ 7,803        |
| Outside Administration Services, Membership, and Insurance    | \$ 1,685        |
| Monitoring Activities                                         | \$ 42,000       |
| Maintenance and Operation                                     | \$ 6,350        |
| Capital Improvements (Storm Drain, Ditch, and Fence)          | \$ 1,133        |
| Major Repair (Annualized)                                     | \$ 25,000       |
| Miscellaneous & Contingency (5%)                              | <u>\$ 2,949</u> |

**TOTAL                      \$86,920**

