

ENGINEER'S REPORT

for

THE WENDT RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT  
ALLOWING FOR ANNEXATION ALAMO CREEK AND INTERVENING PROPERTIES  
DEVELOPMENTS  
CONTRA COSTA COUNTY, CALIFORNIA  
MAY 10, 2005  
REVISED AUGUST 26, 2005

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ENGINEER'S REPORT

GEOLOGIC HAZARD ABATEMENT DISTRICT-WENDT RANCH  
(Pursuant to the Public Resources Code of the State of California, Section 26500 et seq.)

CERTIFICATION OF FILING

This report is presented at the direction of the GHAD Board of Directors. The GHAD is intended to provide geologic hazard improvements within the Alamo Creek, Intervening Properties and Wendt Ranch developments and to levy and collect assessments sufficient to pay for those improvements.

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 any improvement; or the issuance and servicing of bonds issued to finance any of the foregoing (Section 26505)

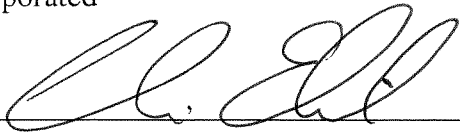
This report consists of seven parts, as follows:

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

4063.1.050.01  
May 10, 2005  
Revised August 26, 2005

The undersigned respectfully submits the enclosed Engineer's Report.

Date: 8/29/05 By: ENGEO Incorporated

  
\_\_\_\_\_, GE

I HEREBY CERTIFY that the enclosed Engineer's Report was filed on the \_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
Clerk of the Board  
Wendt 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 \_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
President of the Board  
Wendt Ranch Geologic Hazard Abatement District  
Contra Costa County, California

APPROVED \_\_\_\_\_

## ENGINEER'S REPORT

for

### THE WENDT RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT ALLOWING FOR ANNEXATION OF THE ALAMO CREEK AND INTERVENING PROPERTIES DEVELOPMENTS

for the

### ESTABLISHMENT OF AN ASSESSMENT LIMIT

#### I. INTRODUCTION

The Wendt Ranch Geologic Hazard Abatement District (GHAD) was formed under the authority of the California Public Resources Code, Division 17, Section 26500 et seq. Annexation of the Alamo Creek and Intervening Properties developments into the existing Wendt Ranch Geologic Hazard Abatement District was completed under the provisions of Section 26581.

#### II. BACKGROUND

The Contra Costa County Board of Supervisors Council formed the Wendt Ranch Geologic Hazard Abatement District ("GHAD" or "District") on February 12, 2002 (Resolution 2002/59). Annexation of areas within the Alamo Creek and Intervening Properties developments as described in Revision 1 to the Wendt Ranch Plan of Control DATED May 10, 2005 (Revised May 24, 2005) and the establishment of an assessment level to fund the GHAD responsibilities are described in this Engineer's Report.

#### III. GEOLOGIC HAZARD ABATEMENT DISTRICT BOUNDARIES

The boundaries for the GHAD are shown in the diagram attached hereto as Figure 1. The Assessor's Parcel Numbers within the plotted area include 206-020-088, 206-020-089, 206-020-090, 206-190-001, 206-190-002, 206-190-005, 206-190-006, 206-220-002, 206-220-003, 206-220-004, 206-030-23, 206-030-025, 206-030-026, 206-030-027, 206-030-028, 206-030-033, 206-030-40 and 206-030-041.

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#### IV. SERVICE LEVELS

The GHAD provides for activity that is 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 activities.
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 GHAD Plan of Control.
4. Performance of GHAD maintenance activities in accordance with the GHAD Plan of Control. These maintenance activities include:
  - Wendt Detention Basin
  - Water Quality-Detention Basin "A"
  - Maintenance roads associated with the detention basin
  - Bioretention Basins "A", "B" and "C"
  - Concrete-lined drainage ditches in open space area
  - Debris benches
  - Subdrains
  - Storm drain inlets, outfalls and pipelines within the open space area
  - Restored and unaltered creek channels including grade control structures
  - Open space maintenance including trails
  - Settlement Instruments
  - Retaining Walls
  - Slopes
5. Slope Reconstruction
6. Preparation of annual GHAD budgets.

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## V. DESCRIPTION OF THE GHAD IMPROVEMENTS

The GHAD Improvements are described in Revision 1 to the Wendt Ranch Plan of Control dated May 10, 2005 and revised May 24, 2005. In general, improvements include water quality facilities; debris benches; drainage systems, including concrete v-ditches in open space and on the hillsides; open-space storm drain inlets and outlets; subdrains in open space and creek corridors; creek channels and reconstructed slopes.

## VI. ASSESSMENT METHOD

The improvements described in Section V are distributed within the GHAD boundaries. Maintenance and protection of these improvements provide a special benefit to all property owners within the GHAD. The District Engineer hereby finds that the properties within the District receive approximately equal special benefit from the work and improvements within the GHAD. As a result, the GHAD assessment is distributed among all property owners within the GHAD.

Single-family residences (attached and detached) will be assessed as one unit. Multi-family attached units consisting of senior units and apartments will be assessed at 25 percent of the rate of single family residences. Non-residential habitable buildings are assessed per square foot of area. The sports fields will be assessed as a unit cost per field. The total number of residential units, non-residential area and other assessed areas within the District is then divided into the annual District budget to develop the annual assessment amount.

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 boundaries. In preparation of the budget, several factors were considered including:

- Site Geology
- Proposed Remedial Grading
- Proximity of Geologic Hazards to Proposed Residences
- Site Access Considerations

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- Elements Requiring Routine Maintenance Including :
  1. Surface Drainage Facilities
  2. Graded Slopes
  3. Detention Basins
  4. Bioretention and other Water Quality Facilities
  5. Trails, Fire Breaks and Fences

#### VII. ASSESSMENT LIMIT - BUDGET

Based on the estimated expenses for on-going operations, and allowing for larger (approximately \$750,000) geologic events at 10-year intervals, a budget was prepared for the purpose of estimating initial assessment levels (Exhibit A). In order to establish a reasonable reserve in the early years following formation of the GHAD, there will be an initial deferral of GHAD expenses as described in Revision 1 to the Plan of Control.

The District Engineer recommends an annual assessment limit, for the Alamo Creek and Intervening Properties developments, that matches the \$422 per residential unit (Fiscal Year 2004/2005 dollars) that was set as an assessment level for the existing Wendt Ranch development portion of the GHAD. The proposed maximum assessment level of \$422 will be adjusted annually to reflect the percentage change in the San Francisco-Oakland-San Jose Consumers Price Index for All Urban Consumers as of June 2005 (201.20). In 2002, the assessment limit was set at \$400 for the Wendt Ranch development. The difference between the original assessment figure of \$400 and the \$422 figure represents the inflation adjustment since 2002. The District Engineer also recommends an annual assessment limit of \$0.10 per square foot of habitable nonresidential space. The residential and nonresidential assessments are to be levied in conjunction with the issuance of building permits. The actual levy for Alamo Creek and Intervening Properties may be set to \$300 per single family unit and the levy for Wendt ranch may be reduced to match this amount. The sports fields will be assessed annually the amount of \$400 (2005 dollars). The levying of the assessment will be as provided as described in the Revision 1 to the Plan of Control. The sports field assessment limits will also adjust annually based on the San Francisco-Oakland-San Jose Consumer Price Index for All Urban Consumers as of June 2005 (201.20).

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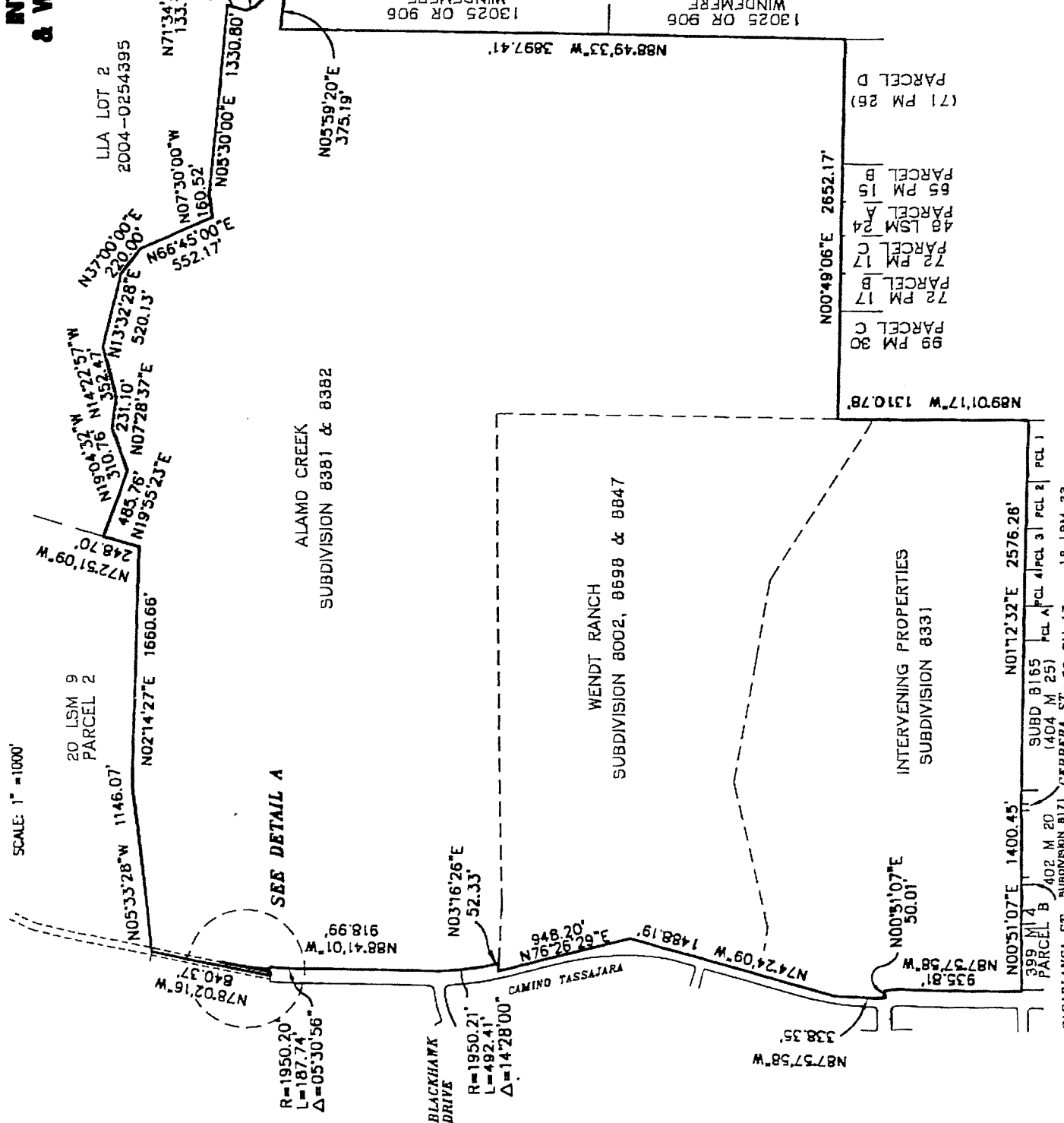
# GHAD BOUNDARY ALAMO CREEK, INTERVENING PROPERTIES & WENDT RANCH PROJECTS

CONTRA COSTA COUNTY CALIFORNIA

**ck ASSOCIATES, Inc.**  
CIVIL ENGINEERING-PLANNING-SURVEYING  
1440 MARIA LANE, SUITE 200  
WALNUT CREEK, CALIFORNIA 94596  
MAY, 2005

SCALE: 1" = 1000'

LLA LOT 2  
2004-0254395



SCALE: 1" = 1000'

20 LSM 9  
PARCEL 2

N05'33'28"W 1146.07'

N02'14'27"E 1660.66'

N72'51'09"W

N16'04'52"W 114'22'57"W

N13'32'28"E 520.13'

N07'28'37"E 520.13'

N19'55'23"E

N07'30'00"W 160.52'

N05'30'00"E 1330.80'

N71'34'36"W 133.16'

N05'59'20"E 375.19'

N67'50'49"E 63.56'

N44'21'38"E 305.22'

N88'49'33"W 3897.41'

N00'49'06"E 2652.17'

N89'01'17"W 1310.78'

N79'28'06"W 129.83'

R=2296.66'  
L=214.43'  
Δ=05'20'58"

N78'02'16"W 347.00'

N01'28'35"E 25.42'

N01'28'35"E 14.90'

R=1950.20'  
L=187.74'  
Δ=05'30'56"

N00'51'07"E 1400.45'

N01'12'32"E 2576.26'

N00'51'07"E 50.01'

N87'57'58"W 338.35'

N74'24'09"W 1488.19'

N03'16'26"E 52.33'

N88'41'01"W 918.99'

N03'16'26"E 52.33'

N00'51'07"E 1400.45'

N01'12'32"E 2576.26'

N00'51'07"E 50.01'

N87'57'58"W 338.35'

N74'24'09"W 1488.19'

N03'16'26"E 52.33'

N88'41'01"W 918.99'

N03'16'26"E 52.33'

N00'51'07"E 1400.45'

N01'12'32"E 2576.26'

N00'51'07"E 50.01'

N87'57'58"W 338.35'

N74'24'09"W 1488.19'

N03'16'26"E 52.33'

N88'41'01"W 918.99'

N03'16'26"E 52.33'

SEE DETAIL A

ALAMO CREEK  
SUBDIVISION 8381 & 8382

WENDT RANCH  
SUBDIVISION 8002, 8698 & 8847

INTERVENING PROPERTIES  
SUBDIVISION 8331

20 LSM 9  
PARCEL 2

399 M 4  
PARCEL B  
402 M 20  
SUBDIVISION 8171

CASABLANCA ST.  
SUBDIVISION 8171

GERBERA ST. 36 PM 17  
18 LSM 23

99 PM 30  
72 PM 17  
72 PM 17  
72 PM 17  
48 LSM 24  
48 LSM 24  
65 PM 15  
PARCEL B  
71 PM 26  
PARCEL D

13025 OR 906  
WINDMERE

13025 OR 906  
WINDMERE

R=1950.20'  
L=187.74'  
Δ=05'30'56"

FIGURE 1  
4063.1.050.01

DETAIL A

N.T.S.

**EXHIBIT A**

Wendt Ranch GHAD Budget

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**EXHIBIT A**  
**Wendt Ranch Geologic Hazard Abatement District**  
Budget – May 10, 2005

**ASSUMPTIONS**

|   |           |
|---|-----------|
| Total No. of Units (nominal)  | 1,362     |
| Annual Assessment per Unit (current \$)                                 | \$300     |
| Sport Fields (Assessed per field)                                       | 2         |
| Annual Assessment for sports fields (current \$)                        | \$400     |
| Approximate Total Habitable Non-Residential Building Area (square feet) | 60,000    |
| Annual Assessment per nonresidential (square feet)                      | \$0.10    |
| Annual Adjustment in Assessment (estimated)                             | 3.0%      |
| Inflation (estimated)   | 3.0%      |
| Investment Earnings (estimated)   | 6.0%      |
| Developer Seed Fund (current \$)  | \$50,000  |
| Frequency of Large-Scale Repair (years)                                 | 10        |
| Cost of Large-Scale Repair (current \$)                                 | \$750,000 |

**ESTIMATED ANNUAL EXPENSES IN 2005 DOLLARS**

|   |                         |
|---|-------------------------|
| Creek Banks & Kawar Spillway  | \$20,000                |
| Detention Basin Maintenance   | \$30,000                |
| Erosion Repairs   | \$10,000                |
| Geotechnical Instrument Monitoring                                    | \$5,000                 |
| Geotechnical Site Monitoring Program                                  | \$25,000                |
| Major Repair (Annualized)   | \$75,000                |
| Revegetation  | \$5,000                 |
| Sediment Removal - Concrete Structures                                | \$10,000                |
| Bioretention & other Water Quality Facilities                         | \$20,000                |
| Stabilization (including slopes & retaining walls adjacent to school) | \$25,000                |
| Subdrain Outfall Maintenance  | \$5,000                 |
| Technical Consultants   | \$25,000                |
| Trail, Fire Break & Fence Maintenance                                 | \$10,000                |
| Administration, Accounting & Open Space Management                    | \$50,000                |
| Miscellaneous & Contingency (10%)                                     | \$31,500                |
| <b>TOTAL</b>  | <b><u>\$346,500</u></b> |

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