# ENGINEER'S REPORT

for

# WILDER GEOLOGIC HAZARD ABATEMENT DISTRICT ORINDA, CALIFORNIA March 12, 2008



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### **ENGINEER'S REPORT**

### WILDER GEOLOGIC HAZARD ABATEMENT DISTRICT

#### **CERTIFICATION OF FILING**

This report is presented at the direction of the Wilder Geologic Hazard Abatement District ("GHAD") Board of Directors. The GHAD is charged with responsibilities related to monitoring and maintenance of drainage facilities and associated improvements within the Wilder GHAD in order to prevent, mitigate, abate and control geologic hazards. The GHAD also levies and collects assessments in order to perform its activities.



The undersigned respectfully submits the enclosed Engineer's Report. Date: 3/12/08 By: ENGEO Incorporated I HEREBY CERTIFY that the enclosed Engineer's Report was filed on the \_\_\_\_\_ day of Clerk of the Board Wilder Geologic Hazard Abatement District Orinda, 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 Wilder Geologic Hazard Abatement District Orinda, California APPROVED \_\_\_\_\_



#### **ENGINEER'S REPORT**

for

#### WILDER GEOLOGIC HAZARD ABATEMENT DISTRICT

for the

#### ESTABLISHMENT OF AN ASSESSMENT LIMIT

### I. INTRODUCTION

The Wilder Geologic Hazard Abatement District ("GHAD") was formed under the authority of the California Public Resources Code, Division 17, Section 26500 et seq. The "Plan of Control" referred to within this Engineer's Report is the approved final Plan of Control on file with the City of Orinda City Clerk. Capitalized terms are defined in the Plan of Control.

### II. BACKGROUND

For the Wilder project, Section 4.10 of the Second Amendment and Restatement of the Development Agreement for Gateway Valley between the City of Orinda and Orinda Gateway, LLC ("OGLLC") and Condition of Approval No. 31 of the 2005 Vesting Tentative Map and Final Development Plan require the formation of a GHAD. The developer of the Wilder residential project has submitted a Plan of Control that describes the GHAD's responsibilities to permanently monitor and maintain GHAD improvements. 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.

The GHAD also will be involved in activities required by the Long-Term Management Plan for the Montanera Project Preserve Areas (dated April 26, 2006, with final conforming changes June 23, 2006, and reproduced in the Plan of Control as Appendix D) ("LTMP"), which are funded by a Developer-established endowment. Accordingly, ENGEO does not include the cost of these activities in calculating the assessment level recommended in this Report. The GHAD's responsibility for endowment-funded activities is described more fully in Sections II and XIII of the Plan of Control.

#### III. GEOLOGIC HAZARD ABATEMENT DISTRICT BOUNDARIES

The boundaries for the GHAD are shown in the diagram attached hereto as Exhibit 1. A written description of the GHAD Boundaries is provided in Exhibit 2.



### IV. <u>SERVICE LEVELS</u>

To establish the appropriate assessment level, ENGEO has assumed the GHAD will undertake the following activities, as described in the Plan of Control, Section VIII:

- 1. Oversight of GHAD operations.
- 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 required monitoring duties as described in the Plan of Control.
- 4. Performance of GHAD maintenance activities in accordance with the GHAD Plan of Control. These maintenance activities include:
  - Perpetual maintenance of the Stormwater System at the level specified in the Stormwater Management Plan and Operation and Maintenance Plan and in accordance with Provision C.3 of the Water Board Order for the issuance of Contra Costa Countywide NPDES Permit.
  - Emergency vehicle access roads located outside of private residential lots.
  - Debris benches and berms.
  - Subdrains.
  - Restored and unaltered creek channels including grade control structures.
  - Settlement instruments.
  - Retaining walls (as shown on Figure 5 of the Plan of Control).
  - Slopes and graded areas for the PG&E Access Roads.
  - Landslide and erosion control of trails and fire roads within the Western Hills Open Space Area.
- 5. The GHAD will also have maintenance, monitoring and repair responsibilities for slopes, which will include natural, reconstructed or partially reconstructed landslides.



- 6. Annual report to the City of Orinda on implementation of the Plan of Control, including the Stormwater Management Plan and Operation and Maintenance Plan.
- 7. Preparation of annual GHAD budgets.

The GHAD Board of Directors is responsible for approving the GHAD's annual budget and Engineer's Report, and levying the annual assessment. In addition, the GHAD Board of Directors may appoint a GHAD Manager or other officers. The GHAD's day-to-day activities, and preparation of the annual budget and Engineer's Report, may be delegated to a GHAD Manager, as specified by the Board of Directors.

### V. DESCRIPTION OF THE IMPROVEMENTS TO BE MAINTAINED BY THE GHAD

The GHAD shall maintain the improvements described in the Plan of Control, Sections VI, VIII, and XII.

### VI. ASSESSMENT METHOD

The GHAD-maintained improvements set forth in the Plan of Control are distributed within the Wilder boundaries. Maintenance and protection of these improvements provide a special benefit to all residential and commercial property owners, and to owners of the public trails and sports fields within the Wilder GHAD. Although the Wilder GHAD contains public elements that will provide general benefits to members of the public, there is no special benefit for specific properties outside of the District. The Engineer hereby finds that the residential properties and nonresidential properties with habitable building areas within the GHAD receive approximately equal special benefit from the work and improvements within the GHAD. As a result, the GHAD assessment is distributed among all owners of parcels which are buildable with habitable space, or that contain improvements or structures that would benefit from the GHAD's activities, such as the community playfields and trails. See Plan of Control, Section VII. Habitable space is defined as the area within a structure that can potentially be used for human occupancy

Single-family residential lots will be assessed as one unit and will all be assessed equally. Non-residential buildings are assessed per square foot of habitable area. Trails are assessed per lineal foot. The sports fields are assessed a fixed sum for each individual field. To develop the annual assessment amount for the Wilder GHAD, a pro forma budget (Exhibit 4) was prepared. The pro forma budget includes estimated income, projected expenses and an appropriate reserve. The assessment level for each of the assessed entities; residential units, non-residential area, trails, and sports fields, was set at a level that provides for the budgeted GHAD expenses.

Based on ENGEO's experience managing and budgeting for over 25 GHADs over a 25-year period and general experience performing geologic monitoring and maintenance activities,



ENGEO performed a financial analysis to establish an operating budget for the on-going abatement, mitigation, prevention and control of geologic hazards within the Wilder GHAD boundaries. In preparation of the budget, ENGEO considered salient factors which can affect GHAD management, including:

- Site Geology
- Proposed Remedial Grading
- Proximity of Geologic Hazards to Proposed Residences, Improvements or Structures
- Site Access Considerations
- Size and Number of Elements Requiring Routine Maintenance, including:
  - 1. Surface Drainage Facilities
  - 2. Graded Slopes
  - 3. Detention Basins
  - 4. Water Quality Facilities
  - 5. Trails, Fire Breaks, Access Roadways and Fences

ENGEO also considered the assessed facilities (residences, community play fields, trails, and nonresidential building area), inflation and investment earnings, the estimated frequency of large-scale repairs and an appropriate reserve amount. The budget also includes a 10 percent add-on for miscellaneous, unanticipated costs (Exhibit 3). Exhibit 4 shows a ten-year pro-forma budget for the Wilder GHAD. The ten-year period shows the estimated period during which new homes will be eligible for levying of the GHAD assessment.

Given the political difficulty of raising assessment levels once they are set, it was assumed that the annual assessment level must be set at a level which will fund the GHAD's activities in perpetuity, and which will only increase each year in accordance with inflation.

#### VII. <u>ASSESSMENT AMOUNT</u>

The purpose of this initial Engineer's Report is to establish the assessment level and the apportionment of the assessment within the GHAD as required under Proposition 218. Although the recommended assessment levels will not change, the annual Engineer's Report in each subsequent fiscal year will apprise the GHAD Board of Directors of the estimated GHAD 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 10-year intervals, ENGEO prepared a budget for the purpose of estimating initial assessment levels (Exhibit 3). In order to establish a reasonable reserve in the early years of the Wilder GHAD, there will be an initial deferral of GHAD expenses to OGLLC, as described in Plan of Control, Section VII.



The Engineer recommends an annual assessment limit for the Wilder development of \$2,390 per detached single residential unit, (Fiscal Year 2007/2008 dollars). The Engineer also recommends an annual assessment limit of \$0.10 per square foot of habitable nonresidential space. The residential and non-residential assessments are to be levied in conjunction with the issuance of the Final Map for the area containing the habitable building to be assessed. Each individual play field will be assessed annually the amount of \$200 (2007/2008 dollars). For the public trails within the GHAD boundary, excluding trail segments on GHAD owned property, the Engineer recommends an annual assessment limit of \$0.05 per lineal foot of trail (2007/2008 dollars).

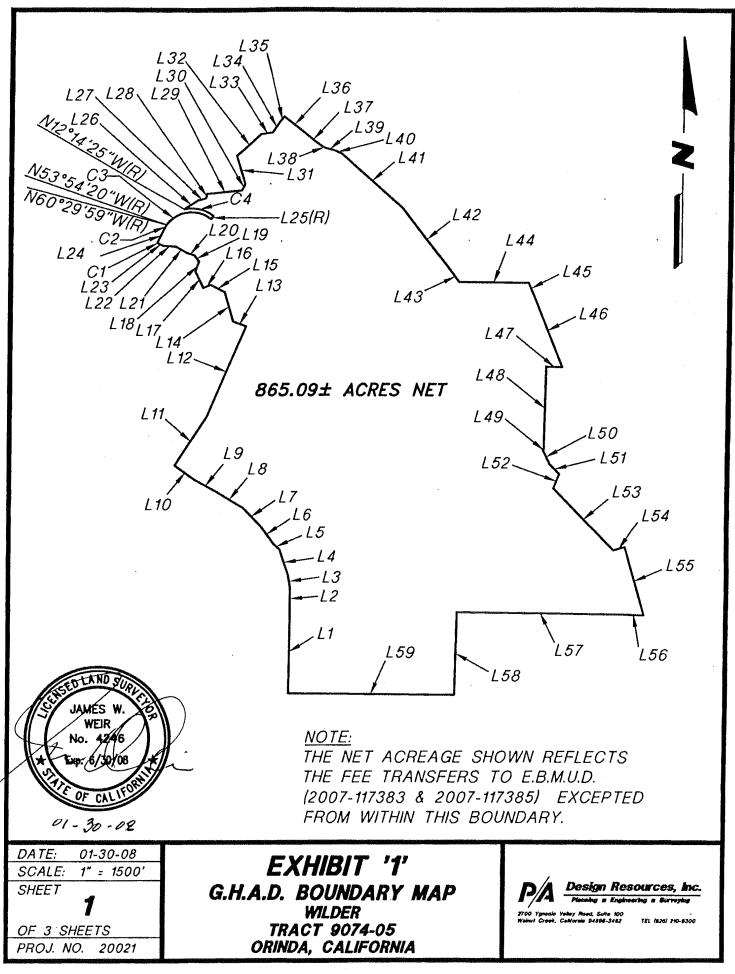
While the assumptions and estimated expenses listed in Exhibit 3 were used to determine the GHAD assessment levels, they do not represent the actual budget for any one year of the GHAD's operation, since assessment of the individual parcels will be based on the issuance of building permits, which will occur over a number of years. In addition, ENGEO 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 City staff has reviewed the assumptions and estimated annual expenses and found that they are reasonable.

The proposed initial assessment level for detached single-family units will be adjusted annually on June 30 to reflect the percentage change in the San Francisco-Oakland-San Jose Consumers Price Index for All Urban Consumers as will the assessments for habitable nonresidential space, the community play fields and the trail assessment.

Pursuant to the schedule set forth in Section VII, paragraph 5 of the Plan of Control, the GHAD reserve at the time of transfer will be, at a minimum, \$200,000. The reserve amount will include cash and receivables from the Contra Costa County Tax Collector.



**GHAD BOUNDARY** 



T			And the second s			
	LINE TABLE	y	LINE TABLE			
LINE	BEARING	LENGTH	LINE	BEARING	LENGTH	
L 1	N00°40′16″E	1315.15	L26	L26 N57°28'17"E		
L2	N00°01'44"W	363.00	L27	N75°19′18″E	123.71	
L3	N09°11′59″W	192.77	L28	N17°28′51″E	77.65	
L4	N18°42'09"W	435.52	L29	N84°23'21"E	529.71	
L5	N47°59′39″W	133.31	L30	N25°48'26"E	107.71	
L6	N35°14'39"W	369.81	L31	N16°23'11"W	456.18	
L7	N43°29'39"W	384.58	L32	N47°36′37″E	500.00	
L'8	N57°42'29"W	478.20	L33	N81°18′00″E	180.28	
L9	N61°12′29″W	374.50	L34	N33°24′11″E	195.57	
L10	N54°08'25"W	395.41	L35	N40°25'44"E	106.84	
L 11	N32°42′11″E	910.20	L36	N52°09'58"W	405.64	
L12	N22°17'29"E	1549.32	L37	N52°19'03"W	349.20	
L 13	N67°42′48″W	214.77	L38	N65°11′09″W	65.88	
L14	N15°42'48"W	478.86	L39	N76°56′22″W	138.94	
L 15	N61°42′48″W	245.01	L40	N66°15′18″W	131.87	
L16	N67°17′12″E	123.79	L41	N48°59'56"W	1287.00	
L 17	N25°42'48"W	288.15	L42	N37°30′28″W	1255.30	
L18	N19°17′12″E	167.72	L43	N36°33'43"W	209.55	
L19	N36°52'48"W	118.80	L44	N89°28'34"W	1087.84	
L20	N70°52'48"W	131.69	L45	N22°58′07″W	189.47	
L21	N60°52'48"W	191.91	L46	N21°51′48″W	1245.62	
L22	N85°49′10″W	196.01	L47	N88°52'30"W	249.33	
L23	N64°40′51″W	88.00	L48	N01°00′53″E	1318.95	
L24	N25°19'09"E	249.52	L49	N89°02'45"W	15.85	
L25(R)	N39°25′18″E	60.00	L50	N26°29'03"W	250.04	
			L51	N43°21′37″W	220.84	



*DATE:* 01-30-08 SCALE:

SHEET

2

OF 3 SHEETS
PROJ. NO. 20021

EXHIBIT '1'
G.H.A.D. BOUNDARY MAP
WILDER
TRACT 9074-05
ORINDA, CALIFORNIA



240.48

1372.20

184.35

1124.20

312.16

2700 Tgnedio Valley Hoed, Sulte 100 Walnut Creek, Colifornia 94598-3462 YE

N22°05'44"E

N43°58'16"W

N15°48'49"W

N87°43'26"W

N74°11'11"E

TEL 1928) 210-8300

L52

L53

L54

L55

L56

	LINE TABLE	
LINE	BEARING	LENGTH
L57	N89°18′33″W	2613.16
L58	N01°08′39″E	1310.06
L59	N89°25′17″W	2624.83

CURVE TABLE							
CURVE	DELTA	RADIUS	LENGTH				
C1	90°00'00"	7.00′	11.00'				
C2	4°10′52″	903.97	65.97'				
C3	93°19'38"	476.00'	775.341				
C4	51°39′43″	536.00'	483.29'				



DATE: 01-30-08

SCALE:

SHEET

OF 3 SHEETS PROJ. NO. 20021

EXHIBIT '1' G.H.A.D. BOUNDARY MAP WILDER TRACT 9074-05 ORINDA, CALIFORNIA





LEGAL DESCRIPTION

### WILDER G.H.A.D. BOUNDARY LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE CITY OF ORINDA, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEING A PORTION OF SECTIONS 3, 4, 9, 10, 11 AND 15, TOWNSHIP 1 SOUTH, RANGE 3 WEST, MOUNT DIABLO BASE AND MERIDIAN ALSO BEING A PORTION OF THE RECORD OF SURVEY, RS 3172, FILED JUNE 22, 2007, IN BOOK 137 OF LICENSED SURVEYOR'S MAPS, AT PAGE 4, SAID COUNTY RECORDERS, ALSO BEING A PORTION OF THE DEED TO OG PROPERTY OWNER, LLC., RECORDED FEBRUARY 2, 2007, SERIES NO. 2007-0033358, SAID COUNTY RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF STATE HIGHWAY 24 AT THE MOST EASTERLY CORNER AS DESCRIBED IN THE DEED TO THE STATE OF CALIFORNIA, RECORDED DECEMBER 16, 1953, IN BOOK 2209, PAGE 340, SAID COUNTY RECORDS, SAID POINT ALSO BEING ON THE SOUTHWESTERLY LINE OF LOT 33 AS SHOWN ON THE MAP OF OAK SPRINGS UNIT NO. 4, FILED IN DECEMBER, 1926, IN BOOK 20 OF MAPS PAGE 540, SAID COUNTY RECORDS: THENCE ALONG SAID SOUTHWESTERLY LINE (20 M 540). SOUTH 52°09'58" EAST, 405.64 FEET TO THE WESTERLY CORNER OF PARCEL "D", AS SHOWN ON THE PARCEL MAP OF M.S. 188-71, FILED DECEMBER 21, 1972, IN BOOK 25 OF PARCEL MAPS, PAGE 45, SAID COUNTY RECORDS; THENCE, ALONG THE SOUTHWESTERLY LINE OF SAID PARCEL MAP (25 PM 45), SOUTH 52°19'03" EAST 349.20 FEET; SOUTH 65°11'09" EAST. 65.88 FEET: SOUTH 76°56'22" EAST, 138.94 FEET; SOUTH 66°15'18" EAST, 131.87 FEET AND SOUTH 48°59'56" EAST, 559.90 FEET TO THE SOUTHERLY CORNER OF PARCEL "A" OF SAID PARCEL MAP (25 PM 45)' THENCE, SOUTH 48°59'56" EAST, 727.10 FEET; THENCE, SOUTH 37°30'28" EAST, 618.60 FEET TO THE WESTERLY CORNER OF LOT 76 AS SHOWN ON THE RECORD OF SURVEY, RS 2740, FILED NOVEMBER 14, 2003, IN BOOK 127 OF LICENSED SURVEYORS MAPS, AT PAGE 25, SAID COUNTY RECORDS; THENCE, ALONG THE SOUTHWESTERLY LINE OF SAID RECORD OF SURVEY (127 LSM 25), SOUTH 37°30'28" EAST. 636.70 FEET AND SOUTH 36°33'43" EAST 209.55 FEET TO THE NORTHERLY CORNER OF PARCEL "B" AS SHOWN ON THE PARCEL MAP, MSO 4-90, FILED JANUARY 16, 1991, IN BOOK 150 OF PARCEL MAPS AT PAGE 32, SAID COUNTY RECORDS; THENCE, ALONG THE NORTHERLY, EASTERLY AND SOUTHERLY LINES OF SAID PARCEL MAP (150 PM 32), SOUTH 89°28'34" EAST, 1087,84 FEET; SOUTH 22°58'07" EAST, 189.47 FEET; SOUTH 21°51'48" EAST, 1245.62 FEET; NORTH 88°52'30" WEST, 249.33 FEET; SOUTH 01°00'53" WEST, 1318.95 FEET; NORTH 89°02'45"WEST, 15.85 FEET; SOUTH 26°29'03" EAST, 250.04 FEET; SOUTH 43°21'37" EAST, 220.84 FEET; SOUTH 22°05'44" WEST, 240.48 FEET; SOUTH 43°58'16" EAST, 1372.20 FEET; NORTH 74°11'11" EAST, 184.35 FEET; SOUTH 15°48'49" EAST, 1124.20 FEET; NORTH 87°43'26" WEST, 312.16 FEET AND NORTH 89°18'33" WEST, 2613.16 FEET TO THE NORTH ONE-QUARTER CORNER OF SAID SECTION 15 (T. 1 S., R. 3 W.); THENCE, ALONG THE EASTERLY, SOUTHERLY AND WESTERLY LINES OF THE NORTHEAST AND NORTHWEST ONE-QUARTERS OF THE NORTHWEST ONE-OUARTER OF SAID SECTION 15 (T. 1 S., R. 3 W.), SOUTH 01°08'39" WEST 1310.06 FEET; NORTH 89°25'17" WEST, 2624.83 FEET AND NORTH 00°40'16" EAST, 1315.15 FEET TO THE NORTHWEST CORNER OF SAID SECTION 15 (T. 1 S., R. 3 W); THENCE; ALONG THE EAST LINE OF SAID SECTION 9 (T. 1 S., R. 3 W.), NORTH 00°01'44" WEST, 363.00 FEET TO A POINT ON AN EASTERLY LINE AS SHOWN ON THE RECORD OF SURVEY FILED FEBRUARY 20, 1968, IN BOOK 50 OF LICENSED SURVEYORS MAPS AT PAGE 45; THENCE, ALONG SAID EASTERLY LINE (50 LSM 45), NORTH 09°11'59" WEST, 192.77 FEET; NORTH 18°42'09" WEST, 435.52 FEET; NORTH 47°59'39" WEST, 133.31 FEET; NORTH 35°14'39" WEST,

369.81 FEET; NORTH 43°29'39" WEST, 384.58 FEET; NORTH 57°42'29" WEST, 478.20 FEET: NORTH 61°12'29" WEST, 374.50 FEET; NORTH 54°08'25" WEST, 395.41 FEET; NORTH 32°42'11" EAST, 910.20 FEET AND NORTH 22°17'29" EAST, 1549.32 FEET; THENCE, LEAVING SAID EASTERLY LINE (50 LSM 45), ALONG THE SOUTHWESTERLY LINE OF THE 27.34 ACRE. PLUS OR MINUS, PARCEL OF LAND TO BE CONVEYED BY THE EAST BAY MUNICIPAL UTILITY DISTRICT TO THE CITY OF ORINDA AS DEPICTED ON THE PLAT AND DESCRIBED IN EXHIBIT "A". LAFCO 05-24, MONTANERA/GATEWAY REORGANIZATION DOCUMENTS SOON TO BE RECORDED, NORTH 67°42'48" WEST, 214.77 FEET; NORTH 15°42'48" WEST, 478.86 FEET: NORTH 61°42'48" WEST, 245.01 FEET; NORTH 67°17'12" EAST, 123.79 FEET: NORTH 25°42'48" WEST, 288.15 FEET; NORTH 19°17'12" EAST, 167.72 FEET; NORTH 36°52'48" WEST, 118.80 FEET; NORTH 70°52'48" WEST, 131.69 FEET; NORTH 60°52'48" WEST, 191.91 FEET AND NORTH 85°49'10" WEST, 196,01 FEET TO A POINT ON THE SOUTHEASTERLY LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED TO THE STATE OF CALIFORNIA, RECORDED SEPTEMBER 6. 1967, IN BOOK 5447, AT PAGE 106 OF SAID COUNTY RECORDS; THENCE ALONG SAID SOUTHEASTERLY LINE (5447 OR 106), NORTH 64°40'51" WEST, 88.00 FEET; NORTHWESTERLY. NORTHERLY AND NORTHEASTERLY ALONG THE ARC OF A TANGENT CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 7.00 FEET, A DELTA OF 90°00'00", A LENGTH OF 11.00 FEET: TANGENT, NORTH 25°19'09" EAST, 249.52 FEET; NORTHEASTERLY, ALONG THE ARC OF A TANGENT CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 903.97 FEET. A DELTA OF 04°10'52", A LENGTH OF 65.97 FEET TO A POINT OF NON-TANGENT CURVATURE: NORTHEASTERLY, EASTERLY AND SOUTHEASTERLY, ALONG THE ARC OF A NON-TANGENT CURVE, THE RADIUS POINT OF WHICH BEARS SOUTH 53°54'20" EAST, CONCAVE SOUTHERLY. HAVING A RADIUS OF 476.00 FEET, A DELTA OF 93°19'38", A LENGTH OF 775.34 FEET: RADIAL, NORTH 39°25'18" EAST, 60.00 FEET; NORTHWESTERLY AND WESTERLY ALONG THE ARC OF A NON-TANGENT CURVE, THE RADIUS POINT OF WHICH BEARS SOUTH 39°25'18" WEST, HAVING A RADIUS OF 536.00 FEET, A DELTA OF 51°39'43", A LENGTH OF 483,29 FEET: NON-TANGENT, NORTH 57°28'17" EAST, 250.53 FEET AND NORTH 75°19'18" EAST, 123.71 FEET TO A POINT ON THE SOUTHEASTERLY LINE AS DESCRIBED IN THE DEED TO THE STATE OF CALIFORNIA, RECORDED SEPTEMBER 24, 1973, IN BOOK 7053, AT PAGE 286, SAID COUNTY RECORDS: THENCE, ALONG SAID SOUTHEASTERLY LINE (7053 OR 286), NORTH 17°28'51" EAST, 77.65 FEET AND NORTH 84°23'21" EAST 111.13 FEET TO A POINT ON THE SOUTHEASTERLY LINE AS DESCRIBED IN THE DEED TO THE STATE OF CALIFORNIA, RECORDED JANUARY 3, 1962, IN BOOK 4027, AT PAGE 90, SAID COUNTY RECORDS; THENCE, ALONG SAID SOUTHEASTERLY LINE, NORTH 84°23'21" EAST, 418.58 FEET; NORTH 25°48'26" EAST. 107.71 FEET: NORTH 16°23'11" WEST. 456.18 FEET: NORTH 47°36'37" EAST. 500.00 FEET: NORTH 81°18'00" EAST, 180.28 FEET AND NORTH 33°24'11" EAST, 195.57 FEET TO A POINT ON THE SOUTHEASTERLY LINE OF SAID STATE OF CALIFORNIA DEED (2209 OR 340); THENCE ALONG, SAID SOUTHEASTERLY LINE (2209 OR 340), NORTH 40°25'44" EAST, 106.84 FEET TO THE POINT OF BEGINNING.

#### EXCEPTING THEREFROM:

THAT PORTION THEREOF AS CONVEYED OT THE EAST BAY MUNICIPAL UTILITIES DISTRICT, BY INSTRUMENT RECORDED APRIL 20, 2007, SERIES NO. 2007-117383, OFFICIAL RECORDS.

#### ALSO EXCEPTING THEREFROM:

THAT PORTION THEREOF AS CONVEYED TO THE EAST BAY MUNICIPAL UTILITIES DISTRICT, BY INSTRUMENT RECORDED APRIL 20, 2007, SERIES NO 2007-117385, OFFICIAL RECORDS.

SAID PARCEL CONTAINS 865.09 ACRES NET, PLUS OR MINUS.

# BEARINGS AND DISTANCES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83. TO OBTAIN GROUND DISTANCES, MULTIPLY DISTANCES SHOWN BY 1.0000708.

### PREPARED UNDER THE DIRECTION OF:

01-30-08

**DATED** 

JAMES W. WEIR, L.S. 4246 EXPIRES 06/03/08

P:\Drawings\20021-20-Montanera\GHAD Bndy desc.doc

East: 6072166.3108

Radius: 903.97

Tangent: 33.00 Page 1

Parcel name: GHAD DIST BNDY North: 2135206.9546 East: 6074135.1875 Course: N 00-40-16 E Length: 1315.15 East: 6074150.5917 North: 2136522.0144 Course: N 00-01-44 W Length: 363.00 Line East: 6074150.4087 North: 2136885.0143 Length: 192.77 Line Course: N 09-11-59 W North: 2137075.3047 East: 6074119.5893 Course: N 18-42-09 W Length: 435.52 Line North: 2137487.8277 East: 6073979.9379 Course: N 47-59-39 W Line Length: 133.31 North: 2137577.0395 East: 6073880.8784 Course: N 35-14-39 W Line Length: 369.81 North: 2137879.0635 East: 6073667.4750 Line Course: N 43-29-39 W Length: 384.58 North: 2138158.0549 East: 6073402.7760 Course: N 57-42-29 W Length: 478.20 Line North: 2138413.5254 East: 6072998.5359 Length: 374.50 Line Course: N 61-12-29 W North: 2138593.8960 East: 6072670.3337 Length: 395.41 Line Course: N 54-08-25 W North: 2138825.5283 East: 6072349.8722 Line Course: N 32-42-11 E Length: 910.20 North: 2139591.4452 East: 6072841.6398 Line Course: N 22-17-29 E Length: 1549.32 East: 6073429.3234 North: 2141024.9794 Course: N 67-42-48 W Line Length: 214.77 North: 2141106.4290 East: 6073230.5971 Course: N 15-42-48 W North: 2141567.3934 Course: N 61-42-48 W North: 2141683.4995 Line Length: 478.86 East: 6073100.9101 Length: 245.01 Line East: 6072885.1573 Length: 123.79 Line Course: S 67-17-12 W North: 2141635.7016 East: 6072770.9675 Course: N 25-42-48 W Length: 288.15 Line North: 2141895.3179 East: 6072645.9482 Line Course: N 19-17-12 E Length: 167.72 North: 2142053.6251 East: 6072701.3452 Line Course: N 36-52-48 W Length: 118.80 North: 2142148.6525 East: 6072630.0485 Course: N 70-52-48 W Length: 131.69 Line North: 2142191.7873 East: 6072505.6232 Length: 191.91 Line Course: N 60-52-48 W East: 6072337.9702 North: 2142285.1784 Length: 196.01 Course: N 85-49-10 W Line North: 2142299.4675 East: 6072142.4817 Line Course: N 64-40-51 W Length: 88.00 North: 2142337.1016 East: 6072062.9350 Curve Length: 11.00 Radius: 7.00 Delta: 90-00-00 Tangent: 7.00 Chord: 9.90 Course: N 19-40-51 W Course In: N 25-19-09 E Course Out: N 64-40-51 W RP North: 2142343.4292 End North: 2142346.4228 East: 6072065.9286 East: 6072059.6011

Line Course: N 25-19-09 E Length: 249.52

North: 2142571.9738

Delta: 4-10-52

Curve Length: 65.97

```
GHAD DISTRICT BOUNDARY.txt
         Chord: 65.95
                                       Course: N 27-24-35 E
     Course In: S 64-40-51 E
                                   Course Out: N 60-29-59 W
     RP
         North: 2142185.3817
                                        East: 6072983.4451
     End North: 2142630.5217
e Length: 775.34
                                              6072196.6718
                                        East:
                                       Radius: 476.00
Curve
                                     Tangent: 504.48
         Delta: 93-19-38
         Chord: 692.42
                                       Course: N 82-45-29 E
    Course In: S 53-54-20 E
                                  Course Out: N 39-25-18 E
        North: 2142350.1015
                                        East: 6072581.3022
    End North: 2142717.8084
                                        East: 6072883.5730
Line Course: N 39-25-18 E
                              Length: 60.00
                                       East: 6072921.6743
         North: 2142764.1580
        Length: 483.29
Curve
                                      Radius:
                                               536.00
         Delta: 51-39-43
                                     Tangent: 259.47
         Chord: 467.09
                                      Course: N 76-24-33 W
    Course In: S 39-25-18 W
                                  Course Out: N 12-14-25 W
        North: 2142350.1015
                                       East: 6072581.3022
    End North: 2142873.9167
                                       East: 6072467.6638
Line
      Course: N 57-28-17 E
                              Length: 250.53
                                       East: 6072678.8914
         North: 2143008.6318
Line
      Course: N 75-19-18 E
                              Length: 123.71
        North: 2143039.9790
                                       East: 6072798.5640
      Course: N 17-28-51 E
                              Length: 77.65
Line
        North: 2143114.0429
                                       East: 6072821.8890
Line
                              Length: 529.71
      Course: N 84-23-21 E
        North: 2143165.8332
                                       East: 6073349.0611
      Course: N 25-48-26 E
Line
                              Length: 107.71
        North: 2143262.8006
                                       East: 6073395.9521
                              Length: 456.18
      Course: N 16-23-11 W
Line
        North: 2143700.4511
                                       East: 6073267.2575
Line
      Course: N 47-36-37 E
                              Length: 500.00
        North: 2144037.5360
                                       East: 6073636.5457
Line
      Course: N 81-18-00 E
                              Length: 180.28
                                       East: 6073814.7514
        North: 2144064.8053
      Course: N 33-24-11 E
North: 2144228.0708
Line
                              Length: 195.57
                                       East : 6073922.4176
Line
      Course: N 40-25-44 E
                              Length: 106.84
        North: 2144309.3986
                                       East: 6073991.7037
                             Length: 405.64
Line
      Course: S 52-09-58 E
        North: 2144060.5895
                                       East: 6074312.0751
      Course: S 52-19-03 E
North: 2143847.1286
Line
                             Length: 349.20
                                       East: 6074588.4356
Line
      Course: S 65-11-09 E
                             Length: 65.88
        North: 2143819.4803
                                           : 6074648.2331
                                       East
                             Length: 138.94
Line
      Course: S 76-56-22 E
        North: 2143788.0826
                                       East: 6074783.5790
      Course: S 66-15-18 E
Line
                             Length: 131.87
        North: 2143734.9829
                                       East: 6074904.2857
      Course: S 48-59-56 E
North: 2142890.6161
Line
                             Length: 1287.00
                                       East : 6075875.5806
      Course: S 37-30-28 E
                             Length: 1255.30
Line
        North: 2141894.8234
                                       East: 6076639.8940
      Course: S 36-33-43 E
                             Length: 209.55
Line
        North: 2141726.5100
                                              6076764.7212
                                       East:
                             Length: 1087.84
Line
      Course: S 89-28-34 E
        North: 2141716.5634
                                       East: 6077852.5157
Line
      Course: S 22-58-07 E
                             Length: 189.47
        North: 2141542.1148
                                       East
                                             6077926.4520
                             Length: 1245.62
Line
      Course: S 21-51-48 E
        North: 2140386.0864
                                      East: 6078390.3133
Line
      Course: N 88-52-30 W
                             Length: 249.33
                                      East: 6078141.0314
        North: 2140390.9816
     Course: S 01-00-53 W
Line
                             Length: 1318.95
                                        Page 2
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GHAD DISTRICT BOUNDARY.txt North: 2139072.2385 East: 6078117.6736 Line Course: N 89-02-45 W Length: 15.85 East: 6078101.8258 North: 2139072.5024 Course: S 26-29-03 E Length: 250.04 Line North: 2138848.7022 East: 6078213.3313 Length: 220.84 Line Course: S 43-21-37 E North: 2138688.1403 East: 6078364.9564 Line Course: S 22-05-44 W North: 2138465.3217 Length: 240.48 East: 6078274.4993 Length: 1372.20 Course: S 43-58-16 E Line East: 6079227.2117 North: 2137477.7631 Length: 184.35 Course: N 74-11-11 E Line East : 6079404.5847. North: 2137528.0001 Length: 1124.20 Line Course: S 15-48-49 E East: 6079710.9391 North: 2136446.3474 Line Course: N 87-43-26 W Length: 312.16 North: 2136458.7449 East: 6079399.0254 Line Course: N 89-18-33 W Length: 2613.16 North: 2136490.2518 East: 6076786.0553 Line Course: S 01-08-39 W Length: 1310.06 East: 6076759.8958 North: 2135180.4530 Line Course: N 89-25-17 W Length: 2624.83 North: 2135206.9599 East: 6074135.1997

Perimeter: 31522.53 Area: 37,782,626 sq. ft. 867.37 acres

Mapcheck Closure - (Uses listed courses, radii, and deltas)

Precision 1: 2,388,071.97

867,37 AC 912038 - 0.11 " EBMUD 867,26 - 2.17 EBMUD 865.09 ± AC, NET



WILDER GHAD BUDGET



# Wilder Geologic Hazard Abatement District Budget

ASSUMPTIONS & REVENUES	
Total No. of Residences	245
Annual Assessment per Residence (current \$)	\$2,390
Sport Fields (Assessed per field)	5
Annual Assessment for sports fields (current \$)	\$1,000
Approximate Total Habitable Non-Residential Building Area, Art and	
Garden Center and Swim Club, and Sales Center/Future Clubhouse (square	14,000
feet)	
Annual Assessment per nonresidential (square feet)	\$0.10
Trails, (lineal feet)	1,000
Annual Assessment for trails (lineal foot)	\$0.05
Annual Adjustment in Assessment (estimated)	2.0%
Inflation (estimated)	2.0%
Investment Earnings (estimated)	4.0%
Frequency of Large-Scale Repair (years)	10
Cost of Large-Scale Repair (current \$)	\$1,000,000
ESTIMATED ANNUAL EXPENSES IN 2007/2008 DOLLARS	
Administration, Accounting	\$50,000
Geotechnical Instrument Monitoring	\$4,000
Geotechnical Site Monitoring Program	\$22,500
Stormwater Management Improvements Monitoring	\$26,500
Technical Consultants	\$10,000
Subdrain Outfall Maintenance	\$5,000
Creek Bank Maintenance	\$10,000
On Site Facilities (Swim Center, Art and Garden, Trailhead and Play Fields)	\$10,000
Erosion Repairs (Including Trails, Fire Roads and PG&E Access Roads)	\$25,000
Slope Stabilization (Including Minor Landsliding)	\$25,000
Revegetation	\$5,000
Stormwater Management Improvements - Maintenance	\$86,700
Stormwater Management Improvements – Replacement	\$121,950
Major Repair (Annualized)	\$100,000
Miscellaneous & Contingency (10%)	\$50,165
TOTAL	<u>\$551,815</u>



Wilder Geologic Hazard Abatement District Pro Forma Budget

# Wilder Geologic Hazard Abatement District

### Pro Forma Budget

<u>2008</u>	2009	<u>2010</u>	<u>2011</u>	2012	<u>2013</u>	2014	<u>2015</u>	<u>2016</u>	2017
0	27	54	82	109	136	163	191	218	245
-	66,096	134,836	208,846	283,164	360,372	440,555	526,558	613,012	702,714
-	25,500	26,010	53,060	54,122	55,204	56,308	57,434	58,583	59,755
-	276	303	331	360	390	421	454	487	521
-	-	-	66,856	68,193	69,557	70,948	72,367	73,815	75,291
-	-	-	52,194	70,767	90,062	110,101	131,595	153,201	175,619
-	-	-	8,879	12,039	15,322	18,731	22,388	26,063	29,877
-	-	-	41,449	56,199	71,523	87,437	104,506	121,664	139,467
-	-	-	-	-	-	-	-	-	-
-	-	-	17,818	24,158	30,745	37,586	44,923	52,299	59,952
-	-	-	-	-	-	-	-	-	-
-	25,776	26,313	240,588	285,839	332,803	381,532	433,666	486,112	540,482
-	40,320	108,523	(31,742)	(2,675)	27,569	59,023	92,891	126,900	162,232
-	-	1,613	6,018	4,989	5,082	6,388	9,004	13,080	18,679
-	40,320	150,456	124,732	127,046	159,697	225,107	327,003	466,983	647,895
	-	0 27  - 66,096  - 25,500 - 276	0 27 54  - 66,096 134,836  - 25,500 26,010 - 276 303 25,776 26,313 - 40,320 108,523 - 1,613	0 27 54 82  - 66,096 134,836 208,846  - 25,500 26,010 53,060 - 276 303 331 66,856 52,194 8,879 41,449 17,818 17,818 - 25,776 26,313 240,588 - 40,320 108,523 (31,742) - 1,613 6,018	0 27 54 82 109  - 66,096 134,836 208,846 283,164  - 25,500 26,010 53,060 54,122 - 276 303 331 360 66,856 68,193 52,194 70,767 8,879 12,039 41,449 56,199 17,818 24,158 17,818 24,158 - 25,776 26,313 240,588 285,839 - 40,320 108,523 (31,742) (2,675) - 1,613 6,018 4,989	0     27     54     82     109     136       -     66,096     134,836     208,846     283,164     360,372       -     25,500     26,010     53,060     54,122     55,204       -     276     303     331     360     390       -     -     -     66,856     68,193     69,557       -     -     -     52,194     70,767     90,062       -     -     -     8,879     12,039     15,322       -     -     -     41,449     56,199     71,523       -     -     -     17,818     24,158     30,745       -     -     -     17,818     24,158     30,745       -     -     -     -     -     -       -     25,776     26,313     240,588     285,839     332,803       -     40,320     108,523     (31,742)     (2,675)     27,569       -     -     1,613     6,018     4,989     5,082	0         27         54         82         109         136         163           -         66,096         134,836         208,846         283,164         360,372         440,555           -         25,500         26,010         53,060         54,122         55,204         56,308           -         276         303         331         360         390         421           -         -         -         66,856         68,193         69,557         70,948           -         -         -         52,194         70,767         90,062         110,101           -         -         -         8,879         12,039         15,322         18,731           -         -         -         41,449         56,199         71,523         87,437           -         -         -         17,818         24,158         30,745         37,586           -         -         -         -         -         -         -           -         25,776         26,313         240,588         285,839         332,803         381,532           -         40,320         108,523         (31,742)         (2,675)         27,569	0         27         54         82         109         136         163         191           -         66,096         134,836         208,846         283,164         360,372         440,555         526,558           -         25,500         26,010         53,060         54,122         55,204         56,308         57,434           -         276         303         331         360         390         421         454           -         -         -         66,856         68,193         69,557         70,948         72,367           -         -         -         52,194         70,767         90,062         110,101         131,595           -         -         -         8,879         12,039         15,322         18,731         22,388           -         -         -         41,449         56,199         71,523         87,437         104,506           -         -         -         17,818         24,158         30,745         37,586         44,923           -         -         -         17,818         24,158         30,745         37,586         44,923           -         -         -         25,	0         27         54         82         109         136         163         191         218           -         66,096         134,836         208,846         283,164         360,372         440,555         526,558         613,012           -         25,500         26,010         53,060         54,122         55,204         56,308         57,434         58,583           -         276         303         331         360         390         421         454         487           -         -         -         66,856         68,193         69,557         70,948         72,367         73,815           -         -         -         52,194         70,767         90,062         110,101         131,595         153,201           -         -         -         8,879         12,039         15,322         18,731         22,388         26,063           -         -         -         41,449         56,199         71,523         87,437         104,506         121,664           -         -         -         17,818         24,158         30,745         37,586         44,923         52,299           -         -         -

ASSI	JMP	TI	<u>ONS</u>
Total	No.	of	Units

ASSUMPTIONS		
Total No. of Units	245	
Absorption Period (yrs)	9	
Annual Assessment per Unit	\$2,390	
Total Non-Residential Public Area	1	
Annual Assessment per non-res area	\$2,450.00	Art & Garden Center, Swim Center, Play Fields, Sales Center/Future Clubhouse, and Trails
Annual Increase in Assessment	2.0%	
Inflation	2.0%	
Investment Earnings	4.0%	
Initial Seed Fund	\$0	
Amount Financed	\$0	
Borrowing Rate	8.0%	
Term of Loan (yrs)	10	
Frequency of Large-Scale Repair (yrs)	10	
Cost of Large-Scale Repair (current \$)	\$1,000,000	
Assessment Cap (per residential unit)	5000	
Expense Deferral Period (Yrs)	3	

ESTIMATED ANNUAL EXPENSES IN 2007/2008 DOLLARS		PRO FORMA CATEGORY
Creek Bank Maintenance	10,000	O&M
On Site facilities (swim center, art and garden, trailhead, play fields)	10,000	O&M
Erosion Repairs (trails, fire and PG&E roads)	25,000	Erosion Protection
Geotechnical Instrument Monitoring	4,000	Consultants
GHAD Monitoring Program (1)	49,000	Consultants
Major Landsliding (Annualized)	100,000	Repair
Revegetation	5,000	Erosion Protection
Sediment Removal - Concrete Structures	10,000	Erosion Protection
Sediment Removal - Water Quality and Detention Basin	76,700	Erosion Protection
Slope Stabilization (including minor landsliding)	25,000	Slope Stabilization
Subdrain Outfall Maintenance	5,000	O&M
Technical Consultants	10,000	Consultants
Stormwater Improvements - Replacement	121,950	O&M
Administration & Accounting	50,000	Administration & Accounting
Misc & Contingency (10%)	50,165	Misc Expenses
TOTAL	551.815	·

1. GHAD Monitoring Program	
GHAD Monitoring Event - April	5,000
GHAD Monitoring Event - October	5,000
Heavy Rainfall Monitoring (Assume 2 per year)	7,000
Detention Basin Monitoring Event - January	1,000
Detention Basin Monitoring Event - April	1,000
Detention Basin Monitoring Event - July	1,000
Detention Basin Monitoring Event - October	1,000
Heavy Rainfall Monitoring (Assume 2 per year)	1,500
Stormwater Management Improvement Monitor	26,500
Total	49,000
1	