

EXHIBIT "A"

Legal Description

(1) Lots 1-92, PARCELS A, B, C, D, E, AND REMAINDER  
PARCELS F, G, H, I, K, AND L, SUBDIVISION 7058; TOWN OF DANVILLE;  
CONTRA COSTA COUNTY; AND

(2) A PORTION OF THAT PARCEL OF LAND DESCRIBED IN THE  
DEED TO EAST BAY MUNICIPAL UTILITY DISTRICT RECORDED MAY 22, 1987  
IN BOOK 13661 AT PAGE 639 OF OFFICIAL RECORDS IN THE OFFICE OF  
THE COUNTY RECORDER OF THE COUNTY OF CONTRA COSTA, STATE OF  
CALIFORNIA, DESCRIBED AS FOLLOWS:

THE MOST EASTERLY 20.00 FEET OF SAID DEED (13661 OR 639), SAID  
20.00 FEET BEING MEASURED AT RIGHT ANGLES FROM THE MOST EASTERLY  
LINE OF SAID DEED (13661 OR 639).

OWNERS: DIABLO RANCH DEVELOPMENT COMPANY  
A California Limited Partnership

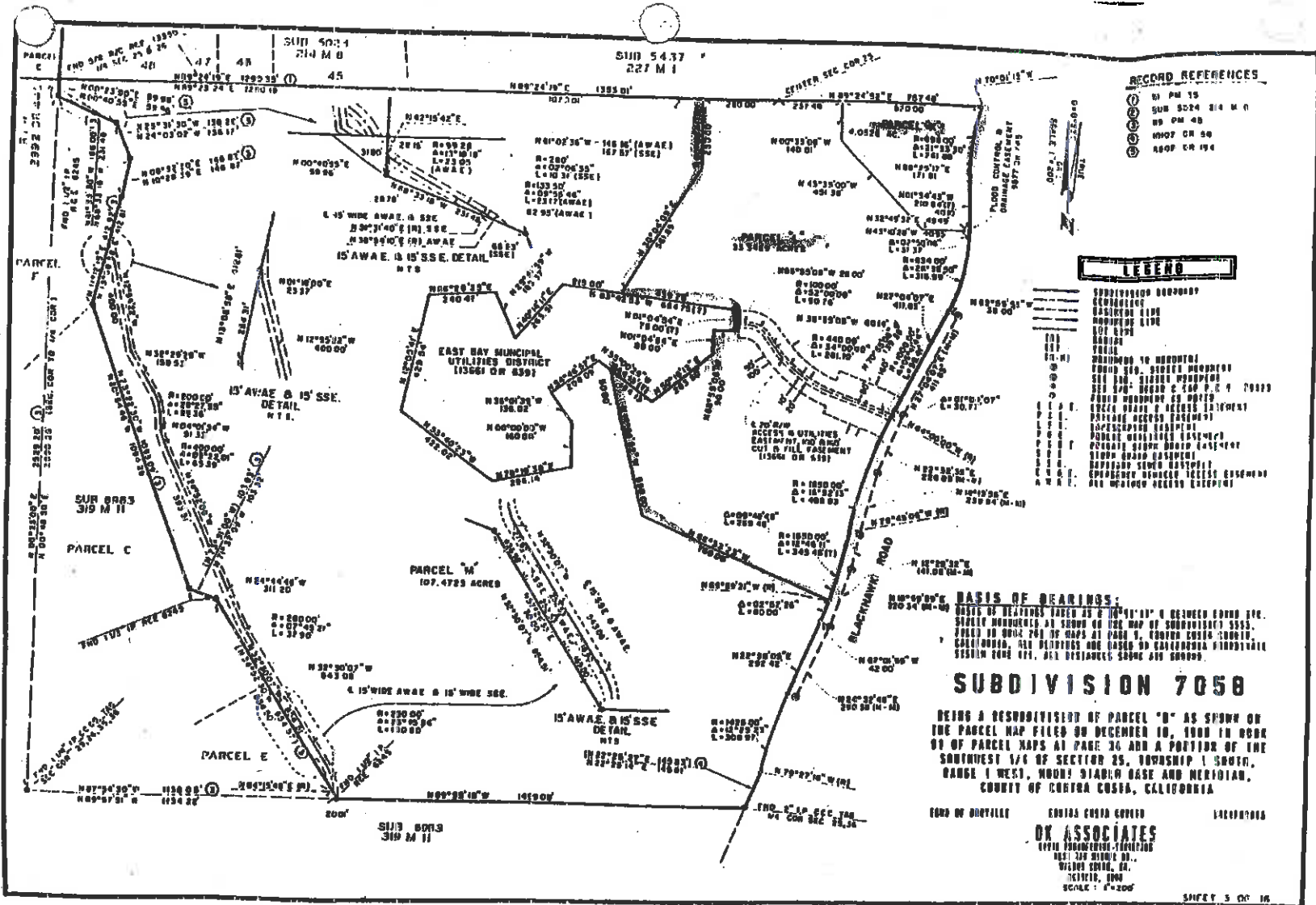
by BROADMORE PROPERTIES, INC.  
its general partner

By:

  
KENNETH K. W. MA  
President

**EXHIBIT "B"**

**(See Exhibit "B" maps attached.)**



**RECORD REFERENCES**

51 PM 15  
 SUR 5024 214 M 0  
 88 PM 48  
 1907 CR 50  
 1807 CR 194

**LEGEND**

- SUBDIVISION BOUNDARY
- EXISTING LOT BOUNDARY
- EXISTING LOT
- PROPOSED LOT
- EASEMENT
- ENCUMBRANCE
- EAS. TO ADJACENT
- 20' WIDE STREET EASEMENT
- 66' WIDE STREET EASEMENT
- 33' WIDE STREET EASEMENT
- 33' WIDE EASEMENT TO HIGHWAY
- EASEMENT TO ADJACENT
- 60' WIDE EASEMENT TO HIGHWAY
- PUBLIC UTILITY EASEMENT
- 20' WIDE EASEMENT
- EASEMENT TO ADJACENT
- 100' WIDE EASEMENT
- 150' WIDE EASEMENT
- 200' WIDE EASEMENT
- 300' WIDE EASEMENT
- 400' WIDE EASEMENT
- 500' WIDE EASEMENT
- 600' WIDE EASEMENT
- 700' WIDE EASEMENT
- 800' WIDE EASEMENT
- 900' WIDE EASEMENT
- 1000' WIDE EASEMENT
- 1200' WIDE EASEMENT
- 1400' WIDE EASEMENT
- 1600' WIDE EASEMENT
- 1800' WIDE EASEMENT
- 2000' WIDE EASEMENT
- 2200' WIDE EASEMENT
- 2400' WIDE EASEMENT
- 2600' WIDE EASEMENT
- 2800' WIDE EASEMENT
- 3000' WIDE EASEMENT
- 3200' WIDE EASEMENT
- 3400' WIDE EASEMENT
- 3600' WIDE EASEMENT
- 3800' WIDE EASEMENT
- 4000' WIDE EASEMENT
- 4200' WIDE EASEMENT
- 4400' WIDE EASEMENT
- 4600' WIDE EASEMENT
- 4800' WIDE EASEMENT
- 5000' WIDE EASEMENT

**BASIS OF BEARINGS:**  
 BASIS OF BEARINGS TAKEN AS BEING THE 10' N. OF BEARING FROM THE  
 STATE MONUMENTAL SURVEY OF THE MAP OF SUBDIVISION 5555.  
 TAKEN AS BEING THE BEARING AT PAGE 34 AND A PORTION OF THE  
 SOUTHWEST 1/4 OF SECTION 25, TOWNSHIP 1 SOUTH,  
 RANGE 1 WEST, MOUNT DIABLO BASE AND MERIDIAN,  
 COUNTY OF CONTRA COSTA, CALIFORNIA.

**SUBDIVISION 7058**

BEING A RESUBDIVISION OF PARCEL "N" AS SHOWN ON  
 THE PARCEL MAP FILED ON DECEMBER 10, 1900 IN BOOK  
 99 OF PARCEL MAPS AT PAGE 24 AND A PORTION OF THE  
 SOUTHWEST 1/4 OF SECTION 25, TOWNSHIP 1 SOUTH,  
 RANGE 1 WEST, MOUNT DIABLO BASE AND MERIDIAN,  
 COUNTY OF CONTRA COSTA, CALIFORNIA.

**D.K. ASSOCIATES**  
 CIVIL ENGINEERING - SURVEYING  
 1001 17th STREET, S.F.  
 WILSON, CALIF. 94093  
 1979  
 SCALE: 1" = 200'

8/25/87  
 SHEET 5 OF 10

338 M 21



**EXHIBIT "C"**

**(See Plan of Control attached.)**

PLAN OF CONTROL  
GEOLOGIC HAZARD ABATEMENT DISTRICT  
MAGEE RANCH, DANVILLE

1. INTRODUCTION

Background

This Plan of Control is prepared in accordance with Section 26509 of the California Public Resources Code, as part of the initiation of formation of a Geologic Hazard Abatement District (District). This District is being established in order to provide a mechanism for maintenance and repair of future problems related to landslide, mudflows, or erosion within the boundaries of the District. This Plan of Control is a general guide for monitoring and abatement of potential geologic hazards. Because future hazards cannot be fully foreseen, it provides guidelines for their detection and for making decisions regarding repairs.

The District's first Board of Directors will be appointed by the Town Council. The Town Council will provide for either the Council itself, or property owner representatives to be the Board of Directors. The Board of Directors will be responsible for the management of the funds and maintenance duties of the District.

Division of Responsibilities Between Town and GHAD

The Town of Danville shall maintain all facilities, other than those of other public agencies, within the public right-of-way or easements as shown on final maps for Subdivisions 7058, 7355, 7668,

and 7669. This District shall be responsible for all subdrains and private storm drain facilities (as designated in approved improvement plans), to the point of their connection with a public facility.

2. GEOLOGIC CONDITIONS

Geologic conditions of the Magee Ranch are detailed in the soils and geologic study and report "Geotechnical Investigation for Magee Ranch, Danville, CA, dated July 1988" and "Supplemental Report Recommendations, dated August 26 & October 14, 1988" prepared by Geo/Resource Consultants, Inc. for the design and construction of the Magee Ranch development and is incorporated hereby. In addition to that report, detailed "as-built" geologic mapping conducted during the grading of the project will serve as historical record for future management. A brief overview of relevant geological conditions follows.

The areas of active landsliding within the subdivision were repaired as part of project construction. All landslides with a potential for impact on planned improvements were mitigated based on recommendations contained in the soil and geologic report. The original geotechnical investigation provides recommendations for removal of the slides and their replacement by engineered fill, including proper subdrainage. As with all landslide repairs, maintenance of subdrains and surface drainage will improve the long-term performance of the repaired slopes. In addition, there

is always the possibility of renewed movement should drainage systems not function properly during a heavy rainstorm.

Surface and subsurface investigations by Geo/Resources indicate that the primary types of slope instability are shallow rotational slumps, earth-flows and accelerated downhill creep. The areas of instability appear to have developed within the expansive surface soils. It is also noted in the report that seismically-induced landsliding could occur at the site. A summary of the various types of repairs which were completed during grading of the Magee Ranch development is shown on the following table. Also shown is an estimate of areas which may require additional work by the District.

During the grading of Magee Ranch the following landslide repairs were completed under the direction of Geo/Resource Consultants:

<u>TYPE OF REPAIR</u>	<u>NUMBER</u>
Remove unstable material and replace with select fill and subdrains	18
Landslide removed by mass grading	17
Remove unstable material with no replacement of fill	2
Remove unstable material and construct gabion below	3
Rework existing material	1
Rework existing material and construct gabion below	1
Place gabion below landslide with no grading of slide	6
Remove unstable material and replace only the lower part of landslide with fill	1



Construct buttress fill at the toe of landslide	1
No repair - monitor for movement	<u>7</u>
TOTAL	57

Of the 57 landslides repaired 37 are not considered likely to need any additional repair work in the future. Of the remaining 20, 11 may require periodic cleaning of gabion structures or debris benches and 9 may require additional grading, if they are reactivated by excessive rainfall.

Surface ravelling of cut and fill slopes will continue to be an on-going process, particularly in the early years of the subdivision, before vegetation is well-established. If sediment blocks drainage devices, localized flooding could result. Blockage of surface drainage ditches on hillsides could redirect runoff onto slopes and cause locally accelerated erosion. It will be important to (a) monitor slope erosion, (b) keep drainage ditches and inlets free of debris, and (c) revegetate any slopes that pose continuing problems.

In general, drainage swales will need to be properly managed in order to reduce the possibility of future bank erosion problems. The more immediate problem of erosion or slope failures in the steep banks can be addressed relatively easily. The two most important factors are vegetation and control of surface runoff. Prevention of uncontrolled surface runoff flowing over the banks reduces the chances of sloughing and gully erosion. Once such erosion processes initiate, they are difficult to stop.

The two most important guidelines of drainage swale management are: do not remove vegetation, and do not allow any uncontrolled runoff to flow over the slopes. It will be important to monitor the condition of the drainage swales, identify problem areas and their causative factors, and provide prompt repairs before costly damages can occur. This can be accomplished within the framework of the proposed District.

3. PLAN OF CONTROL

One of the main purposes of a Geologic Hazard Abatement District is to engage in preventive measures. As such, the Plan of Control contains significant monitoring and preventive maintenance procedures.

Summary of Plan Elements

This Plan of Control consists of five elements:

- a. Management of District. The Board of Directors will appoint a Manager of the District, who will hire technical staff and retain consultants as necessary for the functions of the District.
  
- b. Proper Design and Construction. The Magee Ranch development was designed and built so as to minimize the potential for future problems. It is generally most cost-effective to address potential geologic hazards in

the project development stage. Responsibility for implementation lies with the project civil engineer, project geotechnical engineer and geologist, and the Town of Danville in its review capacity. The Town had engaged a third-party geotechnical expert to review and approve the design of the development. The grading completed had also been performed under the supervision of the project civil engineer, geotechnical engineer and geologist, under the inspection of the town.

- c. Monitoring. All identified potential hazards will be monitored on a regular basis by the District staff or certified engineering geologist retained by the District. Visual inspection of potential hazard areas will be an important means of detecting incipient failures so that remedial measures can be undertaken before they damage property.
- d. Maintenance. Regularly scheduled maintenance of slopes and drainage facilities will reduce the potential for localized erosion, flooding, or landsliding.
- e. Repair. Based on the observations of the monitoring program, the District staff will recommend repairs as appropriate, considering the magnitude of the problem, its possible effects, potential for future enlargement

of the problem, potential to affect off-site property, probability of damage occurrence, and the estimated cost of repair. The District will then retain a contractor to perform the work.

4. MANAGEMENT OF DISTRICT

The District is established as a separate, independent district, a political subdivision of the State of California. The District will be established with its own Board of Directors, which will consist of either the Town Council or representatives of the property owners. The Board of Directors will initially appoint a manager of the District, who will hire technical staff and retain consultants as necessary for the functions of the District. The District manager should be knowledgeable with the management of such a district and with the management of technical experts as well as construction contractors. It is important to have experienced, well-qualified engineers and geologists as part of the District staff and a ready list of similarly qualified geologists to act as consultants to the District when necessary. The District Manager will also establish a list of construction contractors who are experienced and available to serve the District in constructing emergency repairs as well as periodic maintenance projects. The District should keep adequate accounting records and submit an annual report to its Board of Directors. The purpose of the annual report is to provide the District board with a financial review of the management and operations of the District and a review of a comparison with the annual budget.

5. DESIGN AND CONSTRUCTION

This plan assumes that the development will be designed and constructed so as to minimize the probability of future damages. The approved grading plan and geotechnical reports are incorporated into this Plan of Control by reference. The plans for the construction of the development's facilities were reviewed and approved by the Town Engineer and the Town's independent geotechnical consultant. The construction of these facilities were done under the constant inspection of the Town engineering staff.

6. MONITORING

The District will utilize the services of the District Staff Geologist or an outside geotechnical consultant to provide regular monitoring services. The consultant will be a licensed professional in the field of engineering geology, since many of the situations and conditions being monitored require the judgment and experience of an engineering geologist, preferably one who is experienced with Geologic Hazard Abatement Districts and one who can respond quickly and efficiently as such need arises.

Monitoring will consist of visual inspection of all hazard areas on an annual basis, as specified below, and following major storms as requested by the District. Inspections will be documented by summary notes and sufficient quantity of photographs to provide a basis for comparisons in subsequent inspections.

Specifically, the following areas are identified for monitoring:

- 1.) Identify possible slide areas not to be repaired or graded.
- 2.) Identify drainageways.
- 3.) Identify detention basin.
- 4.) Identify areas of erosion and sedimentation.
- 5.) Identify gabion retention structures.

Monitoring will include the following:

Retention basin embankment. Visual inspection of the embankment for any signs of incipient failure, cracks, erosion, slumping, or any other modification of the surface of the embankment.

Overflow structure. Inspection of the structure for signs of erosion, siltation, or cracking.

Landslides. Inspection of repaired slopes for any signs of reactivation. Inspection of subdrain outlets for evidence of outflow. All hillslopes should be inspected for any evidence of new instability features.

Hillslope Erosion. Inspection of all hillslopes, particularly cut and fill slopes that have been revegetated. They should be inspected for signs of accelerated erosion or incipient gullyng. Health of revegetation should be assessed.

Drainage Devices. All drainage ditches, inlets, outlets, subdrains and horizontal subdrains should systematically be inspected. Observations should include condition of the devices themselves, undercutting by erosion, accumulations of sediment or other debris, and evidence of any overflows.

Drainageways. Inspection of repaired and natural drainage ways. This inspection should be documented by photographs. Observations should include signs of accelerated erosion or bank undercutting, debris blockages, and excessive accumulations of tree branches or other organic debris. Inspection of repaired drainage ways should be similar to inspection of landslide repairs.

Gabion retention structures. All gabion retention structures should be systematically inspected for collection of erosion sediment and debris materials.

Aerial Photographs. Annual acquisition of aerial photographs to assess variations in surface moisture, vegetation, erosion and mud-flows. An aerial survey company will be contracted to fly color-infrared or color aerial photographs during the period from April to July. The type of photographs, scale and the exact date of the flight are determined based on the amount of rainfall during the previous winter. The color-

infrared photographs are most beneficial following a very wet winter when spring activity continues into the early summer months. As a general rule, the photographs are flown shortly after the color change of the natural grasses from green to brown exceeds 50%, this varies from year to year as a function of the amount and pattern of rainfall. For cost efficiency, this survey will best be coordinated with flights for neighboring Geologic Hazard Abatement Districts.

Monitoring may be assisted by the use of a checklist of the above items (a sample of such a checklist follows). The checklist, summary notes, and photographs could be kept in a looseleaf notebook to facilitate comparisons from year to year. For each of the above items, recommendations will be made as necessary for repairs or changes in maintenance procedures.



**MONITORING CHECKLIST**

**Retention Basin Embankment**

Incipient Failure

Cracks

Erosion

Slumping

Other Modifications

**Overflow Structure**

Erosion

Siltation

Cracking

**Landslides**

Reactivation

Outflow from Subdrains

New Instability Features

**Hillslope Erosion**

Accelerated Erosion

Incipient Gullyng

\_\_\_\_\_ Health of Revegetation \_\_\_\_\_

**Drainage Devices (Ditches, Inlets & Outlets)**

\_\_\_\_\_ Condition \_\_\_\_\_

\_\_\_\_\_ Undercutting by Erosion \_\_\_\_\_

\_\_\_\_\_ Accumulation of Sediment/Debris \_\_\_\_\_

\_\_\_\_\_ Evidence of Overflow \_\_\_\_\_

**Drainageways**

\_\_\_\_\_ Accelerated Erosion \_\_\_\_\_

\_\_\_\_\_ Bank Undercutting \_\_\_\_\_

\_\_\_\_\_ Debris Blockage \_\_\_\_\_

7. MAINTENANCE

Regularly scheduled maintenance will focus on keeping drainage devices clear of debris and maintaining vegetation growth in revegetated areas. In addition, over the years the monitoring program will identify other periodic maintenance needs, such as repair of segments of concrete ditches that are cracked or undermined by erosion.

Initially, maintenance should be provided at the frequencies suggested below. Based on actual experiences, and on observations of the monitoring program, some maintenance items may be performed more or less frequently.

Regular maintenance tasks could include the following:

Storm retention basin (10 +/- acre ft.). The basin and embankment should be kept clear of debris. This should be done once per year prior to the winter rains and as required after monitoring as a result of major storms.

Drainage Facilities. All concrete drainage ditches, inlets, and outlets should be kept cleared of sediment and debris. Storm drains should be flushed as necessary. Cleaning and maintenance of existing surface and subsurface drainage systems, including concrete (B-58) ditches, drop inlet structures connected to the B-58 system, subdrains and

horizontal drains. The inspection, cleaning and repair of ditches and drop inlet structures is conducted during the period from June to September. In addition, periodic inspections following heavy rainfall and clean-up in response to homeowner observations, if applicable, are conducted throughout the year. The cleaning of subdrains and horizontal drains is conducted in response to the monitoring program.

**Revegetated Slopes.** Graded slopes should be revegetated with natural grasses, shrubs or trees. Reseeding with natural grasses necessary following any grading activity to decrease infiltration of rainfall, increase evapotranspiration and reduce erosion, thereby reducing the saturation of soils and reducing the potential for shallow mud-flows. In addition, planting of native shrubs and trees is a long-term program designed to improve the stability of slopes. Planting typically occurs from October through March. Revegetation may require the need for drip-irrigation systems for the first two or three summers until roots are established. These systems will be on timers during the summer months and should be periodically inspected for leaks. After vegetation is established, any relatively slow-growing drought-tolerant species will require very little, if any, maintenance.

**Drainageways.** All dead branches and any other large organic debris should be cleared from drainage ways once per year.

Gabion retention structures. Gabion retention structures should be periodically cleaned of erosion sediment and debris materials.

Access Road. Maintenance of the access road to the sanitary sewer main serving area C of Subdivision 7058 is included in the District work program. The road will be checked for erosion and stability.

Maintenance will be provided by the District staff or private contractors paid for through District funds. Their work will be specified and reviewed by the District Geologist.

#### 8. REPAIRS

Repairs will be provided as necessary, based on the monitoring program. Contour grading of open space slopes and repair of mudflows, as needed, will improve the drainage and appearance of the areas and reduce erosion resulting from concentrations of runoff. Areas of intense erosion or mudflow activity are identified by field inspection and analysis of the aerial photographs. Grading is scheduled for the period from May to October, however, this will vary considerably from year to year. Other repairs that may occur during the lifetime of this subdivision include the following:

- Maintenance of retention basin embankment.
- Replacement of subdrains or reconstruction of slope repair.
- Stabilization of drainage ways, which may consist of slope reconstruction, toe stabilization, erosion control techniques, or drainage improvements.
- Construction of additional structures, if necessary, such as retaining walls, debris walls or drainage systems to protect roads or pathways.
- Repair of shallow slides on cut, fill, or natural slopes.
- Repair of erosion gullies.
- Replacement of individual drainage devices or sections of drainage ditches.
- Additional revegetation of graded slopes.

The Manager of the District will prepare a list of emergency contractors qualified to perform emergency repairs as listed above. Based on the experience of nearby GHADs, the contracting procedures are best predicated on a "time and materials" basis, with a maximum budgetary cost, with the contractor performing all work as directed by the District Geologist.

The District will not be responsible for repairs of any problems that are wholly within individual private parcels. Its primary responsibility will be for common open spaces and subdivision-wide drainage improvements. In addition, the District will pay for

repairs to private lots that occur as a result of problems that emanate from devices or open spaces under the District's authority, such as drainage facilities or hillslopes.

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