

**WIEDEMANN RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT
(GHAD)**

**PLAN OF CONTROL
FOR MAGEE PRESERVE, SUBDIVISION 9291
DANVILLE, CALIFORNIA**

SUBMITTED TO
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PREPARED BY
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PROJECT NO.
8889.200.000

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EXHIBIT B – Plat to Accompany Legal Description

APPENDIX C: Declaration of Disclosures, Right of Entry and Restrictive Covenants Regarding Wiedemann Geologic Hazard Abatement District

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1.0 AUTHORITY AND SCOPE

In Town of Danville Resolution No. 46-2019 under Condition of Approval I.5 for the Magee Preserve development, Subdivision 9291 ("Project"), the Town of Danville has required that the Project establish a Geologic Hazard Abatement District (GHAD) or be annexed into an existing GHAD prior to recordation of the final map, or issuance of a grading permit, or issuance of a building permit for the Project. To satisfy this requirement, the current owner of the Project has petitioned the Wiedemann Ranch GHAD Board of Directors for annexation into the existing Wiedemann Ranch GHAD ("GHAD").

State law allows GHADs to be formed to undertake emergency actions necessary or incidental to the prevention, mitigation, abatement, or control of a geologic hazard (*Public Resources Code § 26500, "GHAD Law"*). GHAD Law gives local agencies the authority to form districts that can speedily address "an actual or threatened landslide, land subsidence, soil erosion, earthquake, or any other natural or unnatural movement of land or earth." (*Public Resources Code § 26507*). Consistent with GHAD Law, on September 1, 1998, the Contra Costa County Board of Supervisors adopted Resolution No. 98/438 approving and forming the Wiedemann Ranch GHAD and thereby putting into place a mechanism to respond to emergencies in preventing and/or responding to geologic hazards. The Contra Costa County Board of Supervisors serve as the Board of Directors of the Wiedemann Ranch GHAD.

GHAD "improvements" (as defined in GHAD Law) and all GHAD activities undertaken in furtherance of, or in connection therewith, are deemed to be specific actions necessary to prevent or mitigate an emergency within Public Resources Code Section 21080(b)(4) (see Pub. Res. Code Sections 26601 and 26505). Consistent therewith, all GHAD Activities (as defined in Section 7 below) are exempt from review under the California Environmental Quality Act. In addition, as a creature of state law necessary to prevent geologic hazard emergencies, GHADs are not subject to local permitting requirements.

Since the GHAD was formed in 1998 to include the Norris Canyon Estates development, formerly known as the Wiedemann Ranch property, in Contra Costa County, three separate developments have been annexed into the GHAD. Henry Ranch in San Ramon was annexed in April 2000, Elworthy Ranch in Danville was annexed in July 2014, and Red Hawk in Danville was annexed in March 2016. All four of these developments have their own Plans of Control.

Section 26509 of the Public Resources Code requires a Plan of Control, prepared by a State-Certified Engineering Geologist, as a prerequisite to formation of a GHAD or annexation into an existing GHAD. Pursuant to Section 26509, this Plan of Control was prepared by an Engineering Geologist certified pursuant to Section 7822 of the Business and Professions Code and describes, in detail, the geologic hazards, their location, and the area affected by them. It also provides a plan for the prevention, mitigation, abatement, or control thereof. This Plan of Control covers the Project only.

As used in this Plan of Control, and as provided in Section 26507, "geologic hazard" means an actual or threatened landslide, land subsidence, soil erosion, earthquake, fault movement, or any other natural or unnatural movement of land or earth.

1.1 PROPERTY IDENTIFICATION

The land within the proposed GHAD annexation boundary ("GHAD Annexation Area") is shown on the GHAD Boundary Plat (Appendix B, Exhibit B). The GHAD Annexation Area includes all areas within the Project. The legal description of the GHAD Annexation Area is included in Appendix B, Exhibit A. Assessor's Parcel Numbers ("APN") within the GHAD Annexation Area as shown on the Vesting Tentative Map, Subdivision 9291 and approved by the Town of Danville ("VTM") include 202-050-071-2, 202-050-073-8, 202-050-074-6, 202-050-078-7, 202-050-079-5, 202-050-080-3, 202-100-017-5, 202-100-019-1, 202-100-038-1, 202-100-040-7, and 215-040-002-2.

2.0 BACKGROUND

2.1 MAGEE PRESERVE PROJECT

The Project includes 69 single-family residential units. Additional improvements and parcels include public streets, open-space parcels, proposed GHAD-owned parcels, landscape parcels, bioretention areas, detention/water quality basins, public trail and bike path, and storm drain system. The GHAD Annexation Area is approximately 410 acres with proposed improvements totaling approximately 22 acres and 363 acres dedicated to open space. Site access to the Project will be via Blackhawk Road along the northeastern portion of the Project. As described in this Plan of Control, the GHAD has responsibilities throughout the entire GHAD Annexation Area and has additional responsibilities within the GHAD-owned Parcels as described in Section 2.2.

2.2 GHAD-MAINTAINED IMPROVEMENTS AND OPEN SPACE

Conditions of Approval ("COA") Numbers B.7, E.4, E.12, and I.5 in Town of Danville Resolution 46-2019 approving the Project address parcel ownership and GHAD maintenance responsibilities. Although the COAs for the Project approved by the Town of Danville are requirements for the developer and not the GHAD, we have included the COAs in Exhibit D to provide background for the GHAD responsibilities listed in Section 10.0 Ownership and Management.

Title for selected parcels within the GHAD Annexation Area (collectively, the "GHAD-owned Parcels") (identified in Figure 1) are proposed to be conveyed to the GHAD as provided in Sections 6.3 and 6.4 below. As the open space within and immediately adjacent to the Project is an amenity that benefits all of the property owners within the Project, the GHAD funding of the maintenance of the open space will be shared by all current and future owners of residential parcels within the GHAD Annexation Area. The majority of the GHAD-owned open space will be subject to two conservation easements held by East Bay Regional Parks District ("EBRPD") and John Muir Land Trust ("JMLT"), as shown in Figure 1. The GHAD is not responsible for any costs, maintenance, implementation, and/or enforcement resulting from these easements. The proposed GHAD-owned parcels are approximately 368 acres in area.

Within the GHAD-owned Parcels, the GHAD will assume responsibilities that relate to its position as a GHAD and duties as a responsible landowner. The GHAD is charged with responsibilities that relate to the prevention, mitigation, abatement, or control of geologic hazards, which include the maintenance of drainage facilities and associated improvements. This will include the monitoring and maintenance of drainage facilities that, if subject to improper care, could result in decreased slope stability, a primary concern of the GHAD. The drainage facilities include concrete-lined drainage ditches and open-space storm drain facilities.

The GHAD will mitigate or abate landslide or erosion hazards that could directly affect improved, developed, and accepted properties (as defined in Section 6) within the GHAD Annexation Area in accordance with Section 5. The GHAD will also perform maintenance of water control and conveyance facilities and assume other peripherally related open-space responsibilities, such as vegetation management for fire suppression and selected other maintenance activities associated with the GHAD-owned parcels. Additionally, the GHAD shall have the right to approve any construction, maintenance, or repair in the GHAD-owned Parcels that the GHAD determines has the potential to impact geologic stability.

3.0 SITE GEOLOGY

3.1 GEOLOGIC SETTING

As described in the geotechnical exploration report completed by ENGEO dated November 26, 2013 (Reference 1) and updated geotechnical exploration report dated July 31, 2017 (Reference 2), the Project is located within the Mount Diablo fold-and-thrust belt on the southern flank of the Mount Diablo uplift. Bedrock formations in the area south of Mount Diablo and north of the Livermore Valley have been folded and cut by thrust faults that typically dip to the north into the uplift, according to geologic mapping by Dibblee (1995), Crane (1995) and Graymer et al. (1996).

3.1.1 Artificial Fill

Relatively minor deposits of fill associated with Site Improvements are present in the project area. It is unlikely that these fill deposits (Qal) were rigorously compacted. The most extensive existing fill deposit is located at the equestrian area, near Lots 13-14 and 16-17.

3.1.2 Surficial Soil and Colluvium

As described in the referenced geotechnical exploration report, the surface soil typically mantling the site is dark grayish brown clay with plasticity indexes ranging from 30 to 58 indicating that the soil is highly to critically expansive. The surface soil accumulating as thicker materials in swales and hollows by downslope is identified on the geologic map as colluvium (Qc).

3.1.3 Alluvium

The floors of the larger valleys on the Project are underlain by alluvium that consists of stiff to very stiff interbedded silty to sandy clay with relatively thin lenses of silty sand and sandy silt. The alluvium is slightly incised along the eastern portion of the creek channel to deeply incised along the central and western portions of the Project.

3.1.4 Landslide Deposits

Figure 2 depicts landslides identified by geologic mapping and subsurface exploration at the Magee Preserve property. Landslides within the proposed development are categorized as relatively shallow surficial earthflows and deeper-seated earthflows and rotational slumps. Earthflows within the proposed development typically occur within deposits of colluvium that have accumulated in swale areas. Deep-seated rotational slumps commonly incorporate portions of bedrock within the site. Exploration borings completed by ENGEO in 2010 and 2013 indicate landslide slip planes at depths ranging from 25 to 80 feet below the ground surface within landslide debris consisting of bedrock or chaotic soil-bedrock mixtures.

3.2 BEDROCK

The bedrock underlying the proposed development at Magee Preserve is the Tassajara-Green Valley Formation.

3.2.1 Tassajara-Green Valley Formation Bedrock

The Tassajara-Green Valley Formation, also referred to as the Orinda Formation, bedrock is composed of Pliocene non-marine sedimentary rock. The bedrock typically consists of weakly indurated sandstone, siltstone, and claystone with thin beds of pebble conglomerate. The bedrock layers generally strike west-northwest and dip steeply south with occasional overturned beds dipping steeply north. The dipping beds on the site form the northern limb of a syncline, with the syncline axis located along the southern portion of the site. Through the northeastern portion of the site, there is Sherburne Tuff, a volcanic ash deposit within the Green Valley Formation.

3.3 GROUNDWATER

As identified in the referenced geotechnical exploration report, groundwater was encountered as shallow as 5 feet below the existing ground surface adjacent to the Green Valley Creek to greater than 40 feet in upstream valleys. Zones of water seepage were encountered at depths ranging from 17 to 58 feet below ground surface within landslides. Groundwater was not encountered in test pits excavated in upland slope areas. It should be expected that groundwater elevations will vary seasonally.

3.4 SEISMIC SOURCES

The geotechnical exploration report referenced geologic studies that suggest there is an active "blind" thrust fault within the core of the Mount Diablo uplift, extending below the east Danville-Diablo area (a "blind" thrust fault does not extend to the surface). Movement on the blind thrust fault system has been responsible for the uplift of Mount Diablo and the folding of the rocks in the site vicinity. Surface effects of the deeply buried blind thrust fault system have typically been distributed flexural movements associated with the growth of fold. They did not identify any active surface faults in the site vicinity.

Figure 3 of the referenced geotechnical exploration report shows the approximate location of active and potentially active faults and significant historic earthquakes mapped within the San Francisco Bay Region. The Mount Diablo blind thrust fault is thought to exist at depths of approximately 5 to 7 kilometers below the proposed development. There is no known historical seismicity that can be directly associated with the postulated blind thrust fault, but there is an estimated maximum moment magnitude (M_w) of 6.25 to 6.75. The location of a possible earthquake on a buried blind thrust cannot easily be predicted but could presumably occur relatively close to the proposed project. The active Calaveras and Greenville faults are located approximately 2.7 miles southwest and 6.3 miles northeast of the site, respectively.

The Uniform California Earthquake Forecast (UCERF, 2007) evaluated the 30-year probability of a M6.7 or greater earthquake occurring on the known active fault systems in the Bay Area, including the Mount Diablo thrust fault. UCERF calculated an overall probability of 63 percent for the Bay Area as a whole, and a probability of 1 for the Mount Diablo thrust fault. Seismic ground motions used to project design are based on UCERF; the design ground motions are controlled by the nearby Mount Diablo thrust fault.

4.0 GEOLOGIC HAZARDS

The following geologic hazards were identified for the Project in the referenced geotechnical exploration and are expected to remain to some extent after site grading has been completed.

- Slope instability
- Fault rupture and creep
- Seismically induced ground shaking
- Expansive near-surface soil
- Existing uncompacted fill
- Shallow groundwater
- Creek bank stability

4.1 SLOPE INSTABILITY

Earth stability is the GHAD's primary geotechnical concern within the GHAD Annexation Area. This is not unique to this Project, but is of importance for hillside projects in the San Francisco Bay Area. This section describes several types of slope instability that are within the GHAD's responsibility, subject to the provisions of Sections 6 and 7.

In the referenced geotechnical exploration, several landslides are mapped throughout the proposed development area. As recommended in the geotechnical exploration report, landslide material will be removed and replaced with subdrained engineered fill as part of the developer-funded corrective grading work. Table 4.1-1 below describes the planned mitigation for the landslide removal areas noted on the corrective grading plan (Figure 2). Landslides that do not threaten or have the potential to affect Site Improvements will be avoided.

TABLE 4.1-1: Removal Areas

REMOVAL AREA	TYPE
R-1	Partial landslide removal and buttressing with subdrained engineered fill
R-2	Partial landslide removal and buttressing with subdrained engineered fill in addition to construction of catchment areas between landslides and proposed improvements
R-3	Landslide removal and replacement with engineered fill.
R-4	Landslide removal and replacement with engineered fill
R-5	Cut slope Buttress
R-6	Partial landslide removal and buttressing with subdrained engineered fill
R-7	Removal and Replacement of Undocumented Fill
R-8	Removal and Replacement of Undocumented Fill
R-9	Landslide removal and buttressing with subdrained engineered fill

Landslides are a common geologic phenomenon and are part of the process of mass wasting. Weathered or fractured bedrock and soil are transported downslope over geologic time as a result of gravitational and hydrostatic forces. A landslide is a deposit of soil and/or bedrock moving downward from its original position under the influence of gravity. Landslides include a variety of morphologies and are further defined by type of materials, wetness, and mode of movement. They can consist of mass movements of earth materials that are primarily intact and occur along discrete shear surfaces. These surfaces (shear or slip planes) can be rotational (conchoidal or

concave), such as for earth slumps, or planar, as for translational earth slide or bedrock block slides. Most landslides are truly "complex landslides," sliding, falling, and flowing with more than one type of movement and/or material.

Falls are an abrupt free-fall of earth materials off cliffs, steep cut, or steep stream banks, while earthflows are mass movements of earth materials in which the type of movement is one of flowing. When composed of soil finer than gravel size, the flowing material is commonly called a mudflow. A debris flow/debris avalanche is composed of natural earth materials, artificial fill, and/or organic debris, which flow downslope with speed. Most of the material is transported away from the area of initial ground failure.

Slope failures are also often triggered by increased pore water pressure due to the infiltration of rainwater. The resulting decrease of shear resistance (internal resistance to deformation by shearing) can cause the slope to move. The level of groundwater table varies with the amount of rainfall for the area. If rainfall is higher than average during the winter season, the water table will become higher than average on a hillslope and groundwater pressures may become sufficiently high to initiate slope movement.

Landslides located within open space areas are natural landforms that do not require mitigation except where they affect man-made improvements. Debris catchment areas are the principal mitigation method used within the GHAD for areas between potentially unstable slopes and improvements. The debris catchment structures include debris benches, debris berms, and runout areas. GHAD maintenance of the areas will be critical to maintain adequate protection for the Site Improvements (as defined in Section 12.0). Maintenance and monitoring of these areas is described in Section 9. Potential mitigation and repair measures for GHAD areas near development are discussed in Section 7.

Soil creep is the slow, often imperceptible, deformation of slope materials under low stress levels, which normally affects the shallow portion of the slopes, but can be deep seated where a weak zone of soil or bedrock exists. It results from gravitational and seepage forces and may be indicative of conditions favorable for landsliding. Creep can be caused by wetting and drying of clays, by solution and crystallization of salts, by the growth of roots, by burrowing animals, and by downslope movement of saturated ground. Colluvium refers to the mantle of loose soil and weathered bedrock debris that progresses down hillsides by creep.

The GHAD shall also be concerned with erosion and sedimentation in open space or affecting developed lots or improvements. Erosion is defined as the process by which earth materials are loosened and removed by running water on the ground surface or in the subsurface. Sedimentation is the depositing or settling of soil or rock particles from a state of suspension in a liquid.

Hilly terrain open space, either in a natural condition or particularly on excavated slopes, can be subject to erosion. Landslide deposits, which are sometimes in a loosened condition, are particularly prone to erosion. Earth-flow-, debris-flow- and mud-flow-type landslides typically have an area of deposition or accumulation (sedimentation area) at their base. Graded slopes in the GHAD, particularly those in excess of 20 feet in vertical height or those not sufficiently vegetated, can be subject to erosion and therefore, a source of transported sediment.

4.1.1 Fault Rupture and Creep

The Project is not located in a State of California Earthquake Fault Zone, and there are no known active faults passing through the property. Therefore, the proposed development is not considered subject to seismic surface rupture hazards.

4.1.2 Seismically Induced Ground Shaking

An earthquake of moderate to high magnitude generate within the San Francisco Bay Region could cause considerable ground shaking within the proposed development area, similar to that which has occurred in the past.

4.1.3 Expansive Near-Surface Soil

Fine-grained near-surface soil at the site could exhibit a moderate to high potential for expansion. The potentially expansive soil could impact the planned site development. Expansive soil shrinks and swells as a result of moisture changes. This can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. The potential for expansive soil has been identified in the geotechnical report for the property. Shrink and swell of expansive soil on slopes are a portion of the mechanism of creep movement, which can result in shallow slope instability. Within the open space area, slope instability caused by expansive soil creep will be addressed by the GHAD subject to the exceptions in Section 5.0.

4.1.4 Existing Uncompacted Fill

As identified in the referenced geotechnical exploration report, uncompacted fill exists from past exploratory excavations and from past on-site grading activities. As recommended, undocumented fill material within the development area will be removed during corrective grading.

4.1.5 Shallow Groundwater

As identified in the referenced geotechnical exploration report, groundwater was encountered as shallow as 5 feet below the existing ground surface adjacent to the Green Valley Creek to greater than 40 feet in upstream valleys.

4.1.6 Creek Bank Stability

Throughout the middle sections of Green Valley Creek, there are deeply incised creek banks and small creek bank failures. These areas are noted in Figure 4 of the mapped landslides for the Project area (Reference 1). Localized undermining of banks and shallow bank sloughing is likely to continue, especially during high flows.

5.0 CRITERIA FOR GHAD RESPONSIBILITY

In forming the GHAD and establishing the assessment levels and budgets for GHAD Activities (as defined in Section 7 below) within the GHAD Annexation Area, it is important to clearly define the limits of the GHAD's responsibilities. The GHAD will accept responsibility for property as described in Section 6 of this Plan of Control; however, the intent of this Plan of Control is not to extend the GHAD's responsibilities to every potential situation of instability; rather, the following are exclusions from GHAD responsibility.

5.1 ISOLATED OR REMOTE FEATURE REQUIRING MITIGATION

The GHAD shall not have responsibility to monitor, abate, mitigate, or control slope instability that does not involve significant damage to or pose a significant threat to damage Site Improvements. As used herein, the term "Site Improvements" means buildings, public and private roads, sidewalks, utilities, improved trails, swimming pools, tennis courts, gazebos, cabanas, geologic stabilization features, or similar improvements.

5.2 SINGLE PROPERTY

The GHAD will not prevent, mitigate, abate, or control geologic hazards which are limited in area to a single parcel of property unless the geologic hazard has significantly damaged or poses a significant threat of damage to Site Improvements located on other property within the GHAD Annexation Area. This exclusion does not apply to geologic hazards existing on (i) open space property owned by any homeowner's associations or (ii) the GHAD-owned Parcels.

5.3 GEOLOGIC HAZARDS RESULTING FROM NEGLIGENCE OF PROPERTY OWNER

The GHAD may, in the GHAD Manager's sole discretion, decline to prevent, mitigate, abate, or control geologic hazards which occurred or resulted from any negligence of the homeowner and/or the homeowner's contractors, agents or employees in developing, investigating, grading, constructing, maintaining, or performing or not performing any post-development work on the subject property as long as the geologic hazard is limited to a single lot, pursuant to the single-property exclusion noted above. If the GHAD bears expense as the result of negligence described in this section, the GHAD may pursue reimbursement from the negligent parties.

5.4 PROPERTY NOT ACCEPTED

The GHAD shall not have responsibility to repair damage, which is situated on a parcel of real property, which the GHAD has not accepted in accordance with Section 6 below. The GHAD; however, may monitor, abate, mitigate or control geologic or hydrogeologic hazards on a parcel of real property which the GHAD has not accepted in accordance with Section 6 and is not excluded from GHAD responsibility by Sections 5.1, 5.2, and 5.3, provided; however, that GHAD responsibility on such parcel shall be limited to the extent necessary to address significant damage to or a significant threat of damage to Site Improvements which are within a parcel of real property which the GHAD has accepted in accordance with Section 6. Should the GHAD be required to respond to a geologic hazard outside the GHAD Annexation Area, the GHAD may take such actions as may be appropriate to recover costs incurred as a result of preventing, mitigating, abating, or controlling such geologic hazard from the responsible party, if any.

5.5 GEOLOGIC HAZARD WHICH REQUIRES EXPENDITURE IN AMOUNT EXCEEDING THE VALUE OF THE THREATENED OR DAMAGED IMPROVEMENT

The GHAD may elect not to prevent, mitigate, abate, or control a geologic hazard where, in the GHAD Manager's sole discretion, the anticipated expenditure required to be funded by the GHAD to prevent, mitigate, abate, or control the geologic hazard will exceed the value of the structure(s) and Site Improvement(s) threatened with damage or loss.

5.6 GHAD FUNDING OR REIMBURSEMENT FOR DAMAGED OR DESTROYED STRUCTURES OR SITE IMPROVEMENTS

In the event a residence or any other structure, Site Improvement, or landscaping is damaged or destroyed due to, or as a result of, a geologic hazard, the GHAD may fund or reimburse the property owner for the expenses necessary to repair or replace the damaged or destroyed structure, Site Improvement or landscaping. Unless authorized by the Board of Directors, the dollar amount of the GHAD funding or reimbursement may not exceed ten percent (10%) of the costs incurred by the GHAD in preventing, mitigating, abating, or controlling the geologic hazard responsible for the damage¹. In the event the geologic hazard damaged or destroyed a structure, Site Improvement, or landscaping which violated any provisions of the City Building Code or City Ordinance Code at the time of its installation or improvement, the GHAD may decline to provide any funding or reimbursement to the property owner for repair or replacement of the damaged structure, Site Improvement, or landscaping.

5.7 NO REIMBURSEMENT OF EXPENSES INCURRED BY PROPERTY OWNERS

The GHAD will not be obligated to reimburse a property owner for expenses incurred for the prevention, mitigation, abatement, or control of a geologic hazard absent a written agreement between the property owner and the GHAD to that effect, which agreement has been executed prior to the property owner incurring said expenses and following an exploration conducted by the GHAD.

5.8 RECONSIDERATION AND APPEAL PROCEDURES

A homeowner directly affected by a decision of the GHAD Manager may request reconsideration of that decision through the following procedures ("GHAD Manager Decision"). The homeowner shall, within thirty (30) days from the date of a written GHAD Manager Decision, file a written request with the GHAD Manager, specifying the grounds for reconsideration, and the relief sought, including the owner's special interest and injury. Within fifteen (15) days of receipt of the homeowner's written request for reconsideration, the GHAD Manager shall reconsider its decision and shall provide a copy of its written decision to the homeowner ("GHAD Manager Reconsideration Decision"). The homeowner may appeal the GHAD Manager Reconsideration Decision to the Board of Directors. This appeal must be filed with the GHAD Manager within fifteen (15) days from the date of the GHAD Manager Reconsideration Decision. The appeal must include the specific grounds for the appeal and the homeowner's requested relief on a form provided by the GHAD Manager. The Board will make the final decision on the appeal. The GHAD Manager will proceed based on the decision of the Board of Directors.

6.0 ACCEPTANCE

6.1 ACTIVATION OF ASSESSMENT

An annual assessment should be authorized on all residential parcels within the Project as shown on Appendix B, Exhibit B, which will generate funding for the GHAD Activities. The assessment shall be levied by the GHAD on each individual parcel beginning the first fiscal year following issuance of a building permit for that parcel.

¹ For example, if a landslide causes \$10,000 in structural damage to each one of four neighboring homes for a total of \$40,000 in structural damage and it costs the GHAD \$100,000 to design and install a new retaining wall to abate the slide, the GHAD may only reimburse each property owner \$2,500 of their \$10,000 in structural damage.

6.2 RESPONSIBILITY FOR GHAD ACTIVITIES

Davidon Homes (also known as "Developer") currently owns all the parcels shown on the VTM and shall have the responsibility to perform all the GHAD Activities on the property within the GHAD Annexation Area. Such responsibility shall be eligible for transfer to the GHAD at 9:00 a.m. on the day exactly three years after the first residential building permit is issued by the Town of Danville ("Transfer Eligibility Date"). The period between the levying of the GHAD assessment and the GHAD accepting maintenance responsibility of the GHAD Activities as defined in Section 7 below will allow time for the GHAD to accumulate reserve funds without incurring significant expenses.

6.3 OWNERSHIP OF THE OPEN SPACE

GHAD Law allows the GHAD to own property. Ownership of the GHAD-owned Parcels (shown on Appendix B, Exhibit B) is proposed to be conveyed by the Developer to the GHAD at the end of the transfer process described in Section 6.4 upon receipt by the GHAD Manager of the recorded grant deed. From that point forward, the GHAD will become responsible for oversight of the actual physical maintenance of the GHAD-owned Parcels as provided in this Section. The Developer shall record a grant deed transferring fee title to the GHAD for the GHAD Parcels and provide a copy of the deed to the GHAD Manager. The grant deed(s) must first be reviewed and approved by the GHAD Manager and GHAD Attorney prior to recordation of the deed. If accepted by the GHAD, the GHAD-owned parcels will be conveyed to the GHAD at no cost to the GHAD.

6.4 PROCESS FOR TRANSFERRING RESPONSIBILITY FOR GHAD ACTIVITIES

After the Transfer Eligibility Date for one or more of the GHAD Annexation Area parcels, the process for transferring responsibility for performing GHAD Activities on such Parcel(s) shall be as follows.

1. Up to 1 year in advance of the Transfer Eligibility Date or in any subsequent year, at its discretion, the Developer may apply to the GHAD to transfer the responsibility for performing GHAD Activities (as such term is defined in Section 7.0 below) for such Parcel(s) to the GHAD ("Transfer Application"). A sample Transfer Application form is included in Appendix E.
2. Within 30 days of receiving such Transfer Application, the GHAD Manager shall verify that all the facilities for which the GHAD will have maintenance responsibility have been approved, constructed, and maintained according to the Town of Danville approved plans and specifications for the individual improvements, and that such improvements are operational and in good working order.
3. Within 15 days of such inspection, the GHAD will send the Developer a list ("Punch list") of all of the items that need to be constructed, repaired, or otherwise modified in order to comply with the Town-approved plans and specifications.
4. The Developer shall notify the GHAD Manager when it has completed the items identified on the Punch list. Within 30 days of receipt of such notice, the GHAD Manager shall verify that all Punch list items have been completed. GHAD staff will then bring a resolution before the Wiedemann Ranch GHAD Board of Directors for their consideration approving GHAD responsibility for performing all future GHAD Activities on the parcel(s).

5. The GHAD Manager shall confirm that the reserve requirement defined in the Engineer's Report approved by the GHAD Board on this Project has been met. The Engineer's Report is the document that establishes the individual property owners' GHAD assessment limit based on the projected expenses (budget) of the GHAD.
6. Prior to the GHAD accepting any responsibility for GHAD Activities, the Developer shall record a Declaration of Restrictive Covenants, Right of Entry and Disclosures Regarding Geologic Hazard Abatement District ("Declaration") as approved by the GHAD Manager and GHAD Attorney and as discussed in Section 12.
7. Prior to GHAD accepting any responsibility for GHAD Activities, GHAD Manager and Attorney shall review and approve any all agreements and restrictions that apply to the proposed GHAD-owned Parcels, including conservation easements, deed restrictions, grazing lease, and any other agreements related to GHAD responsibilities in Table 10.0. Developer shall also provide the GHAD Manager and Attorney with a current title report for the proposed GHAD-owned parcels which shall be subject to the GHAD's review and approval.
8. Any monies owed to the GHAD by the Developer have been paid.

As part of the transfer, the Developer of the GHAD Annexation Area to be transferred will provide the GHAD, for its use, copies of the applicable geotechnical exploration reports, as-built grading plans, as-built corrective grading plans, as-built improvement plans, as-built subdrain plans or other pertinent documents as requested by the GHAD.

The GHAD is not responsible for maintaining the GHAD Parcels or any GHAD Activities as defined in Section 7.0 until it accepts such responsibilities pursuant to this section. The Developer will remain responsible for all GHAD Activities until the GHAD accepts responsibility pursuant to this section.

7.0 GHAD MONITORING, MAINTENANCE AND REPAIR RESPONSIBILITIES

Several entities shall have ownership and maintenance duties of common space within the Project. The GHAD will assume monitoring and maintenance responsibilities for the following site facilities, improvements, and activities ("GHAD Activities").

- General maintenance of the surface drainage improvements within the GHAD Annexation Area. The GHAD is responsible for general monitoring, maintenance, and repair of the concrete-lined drainage ditches, storm drain inlets and outlets in open space, subdrain outlets, and risers.
- Monitoring and maintenance of detention basin/water quality basins within the GHAD Annexation Area.
- Monitoring and maintenance of measurement devices, such as piezometers, inclinometers, and tiltmeters, if any.
- Maintenance of gates, fencing, and signage within the GHAD-owned Parcels, exclusive of the gates, fencing, and signage identified in Table 10.1, section 2(a)(i).
- Maintenance of developer constructed retaining walls.
- Slopes and creek banks for erosion, landslide, and related slope instability.

- Maintenance of debris catchment structures, such as debris benches, debris berms, and runoff areas.
- Vegetation control for fire suppression on GHAD-owned Parcels.
- Required maintenance of GHAD-owned Parcels.

7.1 GEOTECHNICAL TECHNIQUES FOR MITIGATION OF LANDSLIDE AND EROSION HAZARDS

The techniques that may be employed by the GHAD to prevent, mitigate, abate, or control geologic hazards include, but are not limited to, the following.

- Removal of the unstable earth mass
- Stabilization (either partial or total) of the landslide by removal and replacement with compacted, drained fill
- Construction of structures to retain or divert landslide material or sediment
- Construction of erosion control devices such as gabions, riprap, geotextiles, or lined ditches
- Placement of drained engineered buttress fill
- Placement of subsurface drainage devices (e.g., underdrains or horizontal drilled drains)
- Slope correction (e.g., gradient change, biotechnical stabilization, slope trimming or contouring)
- Construction of additional surface ditches and/or detention basins, silt fences, sediment traps, or backfill or erosion channels

Potential landslide and erosion hazards can often best be mitigated by controlling soil saturation and water runoff and by maintaining the surface and subsurface drainage system.

8.0 PRIORITY OF GHAD EXPENDITURES

The GHAD is responsible for responding to emergencies and completing scheduled repairs. The GHAD's ability to respond, and the extent of the responsiveness, depends on the amount of the available funds and the parameters set forth in the GHAD Board approved operating budget. The GHAD is financed through a real property assessment and this assessment cannot be increased without a favorable vote of the residents within the GHAD boundaries. When available funds are not sufficient to undertake all emergency and/or the identified remedial and preventive stabilization measures, the expenditures are to be prioritized as follows in descending order of priority.

- (A) Prevention, mitigation, abatement, or control of geologic hazards that have either significantly damaged or pose a significant threat of damage to residences, critical underground utilities, or paved streets.
- (B) Prevention, mitigation, abatement, or control of geologic hazards which have either significantly damaged or pose a significant threat of damage to ancillary structures, including but not limited to water quality facilities, pools, cabanas, or restroom buildings.
- (C) Prevention, mitigation, abatement, or control of geologic hazards which have either significantly damaged or pose a significant threat of damage to open space amenities.

- (D) Prevention, mitigation, abatement, or control of geologic hazards which have either significantly damaged or pose a significant threat of damage limited to loss of landscaping or other similar non-essential amenities.
- (E) Prevention, mitigation, abatement, or control of geologic hazards existing entirely on open-space property and which have neither significantly damaged nor pose a significant threat of damage to any Site Improvements.

In performing its duties as described above, the GHAD may seek funding or reimbursements from public and private entities or agencies including, but not limited to, FEMA, city and county agencies, insurance companies, etc.

9.0 MAINTENANCE AND MONITORING SCHEDULE

Geologic features and GHAD-maintained improvements defined in Section 7.0 shall be inspected by GHAD Manager or GHAD-assigned consultants as presented below. The site inspections shall be undertaken at appropriate intervals as determined by the GHAD Manager using supporting documents prepared for the Project and the Site Improvements. The GHAD budget should provide for three or more inspections in years of heavy rainfall. Generally, the inspections should take place in October, prior to the first significant rainfall; mid-winter as necessary during heavy rainfall years; and in early April at the end of the rainy season. The frequency of the inspections should increase, depending upon the intensity and recurrence of rainfall.

The Developer shall provide to the GHAD copies of geologic or geotechnical exploration reports related to site development and the GHAD shall retain these reports in the records of the GHAD. In addition, copies of any earthwork-related testing and observation reports that will be finalized at the completion of grading, when as-built drawings are available, shall be provided to the GHAD by the Developer and maintained as part of the GHAD records.

Following are guidelines for a monitoring plan. The actual timing, scope, frequency and other details regarding such maintenance, inspection, and similar activities shall be at the discretion of the GHAD Manager.

- A state-licensed professional engineer and/or professional geologist should carry out a geologic reconnaissance of the slopes for indications of erosion or slope failures. Open space slope area monitoring would include observation of debris benches. The removal of accumulated debris from the bench, including rockfall material, should be undertaken in a manner that maintains the capacity of the bench to protect Site Improvements.
- A state-licensed professional engineer and/or professional geologist should carry out an inspection of lined surface ditches. Repairs and maintenance, as needed, should be undertaken including removal of excess silt or sediment in ditches and patching or replacement of cracked or broken ditches, prior to the beginning of the next rainy season.
- Subsurface drain outlets and horizontal drilled drain outlets, if any, should be checked. Water flowing from these outlets should be measured and recorded during each inspection.
- Piezometers to measure groundwater levels, or instruments such as inclinometers or tiltmeters measuring potential slope instability should be monitored as recommended, if installed.

- Settlement monitoring devices, if any, should be measured periodically and tracked. In the event of anomalous readings or excessive settlement, the monitoring frequency should be increased.
- The water-quality pond and bioretention improvements shall be monitored and maintained in accordance with the Stormwater Facilities Operation and Maintenance Plan for Magee Preserve (Exhibit F).
- Inlets, outfalls, or trash racks, if used, must be kept free of debris and spillways maintained. Additionally, water detention facilities and water quality facilities should be inspected and maintained. It is anticipated that initially, at least once every two (2) years, cleanup of vegetation and removal of silt would be in order. Attention should be given to plantings or other obstructions which may interfere with access by power equipment.
- Developer constructed retaining walls should be inspected for evidence of distress, such as tilting and/or structural failure. Repairs and maintenance would be undertaken only in the event that the structural integrity of the wall has been compromised or if the wall distress poses a threat to the integrity of adjacent structures.
- An annual inspection shall be made by a state-licensed professional engineer and/or certified engineering geologist to assess the effectiveness of the preventive maintenance program and to make recommendations as to which landslide or erosion measures should be undertaken in the next fiscal year. Any appropriate site-specific study of landslide or erosion conditions shall be determined at that time. Consultants, if necessary, will be retained to undertake the needed studies. An annual inspection report to the GHAD shall be prepared by the professional engineer and/or certified engineering geologist.

10.0 OWNERSHIP AND MANAGEMENT

Ownership, funding sources and maintenance responsibilities shall be as shown on the following Table 10.0-1. Parcel designations are derived from the final subdivision map (Reference 5).

**TABLE 10.0-1: Magee Preserve
Long-Term Ownership and Management Matrix**

FACILITY/FUNCTION	PARCEL OWNERSHIP	IMPROVEMENT MAINTENANCE ENTITY	FUNDING	ACREAGE/ COMMENTS
1. Development Area				
a. Single-Family Detached Residential Parcels (69 units)	Private	Private	Private	21.7 Acres (Includes Public Streets)
b. Parking Lot (on Parcel "B") and Private Streets	Homeowners' Association (HOA)	HOA	HOA	0.12 Acre
c. Development Entrance (Parcels "C", "D", and "E")	Geologic Hazard Abatement District (GHAD)	HOA	HOA	5.8 Acres (Development Entrance) (Trail and Detention Basin acreage included in Item 1a.) (HOA Landscape Easement over parcels in item 1c.)

FACILITY/FUNCTION		PARCEL OWNERSHIP	IMPROVEMENT MAINTENANCE ENTITY	FUNDING	ACREAGE/ COMMENTS
d.	Public Trails and Associated Improvements (Parcel "A")	HOA	HOA	HOA	
e. Public Roads					
i.	Right-of-Way (ROW) Pavements, Street Lighting, and Traffic Signage	Town of Danville	Town of Danville	Town of Danville	
ii.	ROW Street Trees, Street Planters, Irrigation, Decorative Signage, and Ornamental Plantings	Town of Danville	HOA	HOA	
iii.	Public Sidewalk	Town of Danville	Town of Danville	Town of Danville	
f.	Storm Drain System	Town of Danville/ Contra Costa Flood Control District (CCCFCD)	Town of Danville/ CCCFCD	Town of Danville/ CCCFCD	Storm drain lines within the public road ROWs.
g.	Storm Drain System	Private	GHAD	GHAD Assessment	Storm drain lines from GHAD-owned parcels listed in Item 2 below to the public ROW.
h. Bioretention Areas A and F (Basins)					
i.	Ornamental Landscape Maintenance and Replacement including irrigation ¹	GHAD	HOA	HOA	
ii.	Functional Maintenance, Repair, and Replacement including replacement of plants integral to function	GHAD	GHAD	GHAD Assessment	
i. Bioretention Areas B1, B2, B3, C, D, and E (Planters)					
i.	Ornamental Landscape Maintenance and Replacement including, but not limited to irrigation and litter removal ¹	HOA	HOA	HOA	
ii.	Functional Maintenance, Repair, and Replacement including replacement of plants integral to function	HOA	GHAD	GHAD Assessment	
j.	Slope Instability	Varies	GHAD	GHAD Assessment	
2. Open Space Parcels					
a.	Parcels "B", "F", "H", and Lower and Western Unsurveyed Remainder (with Conservation Easement ("CE") and Deed Restriction)				256.9 Acres
i.	Gates, Fencing, and Signage	GHAD	GHAD	GHAD Assessment	Excludes gates and fences included in grazing lease agreement
ii.	Trail Signage	GHAD	EBRPD	CFD	

FACILITY/FUNCTION		PARCEL OWNERSHIP	IMPROVEMENT MAINTENANCE ENTITY	FUNDING	ACREAGE/ COMMENTS
iii.	Vegetation Management for Fire Suppression	GHAD	GHAD	GHAD Assessment	7.9 Acres. San Ramon Valley Fire Protection District (SRVFPD) provides vegetation management for fire suppression on Dual-Use Trails.
iv.	Storm Drain System	GHAD	GHAD	GHAD Assessment	Storm drain lines within GHAD-owned open space and easements across private property.
v.	Surface Drainage Ditches	GHAD	GHAD	GHAD Assessment	
vi.	Retaining Walls	GHAD	GHAD	GHAD Assessment	
vii.	Subdrain Outlets	GHAD	GHAD	GHAD Assessment	
viii.	Instrumentation	GHAD	GHAD	GHAD Assessment	
ix.	Slope Instability	GHAD	GHAD	GHAD Assessment	
x.	Conservation Easement Activities	GHAD	East Bay Regional Parks District (EBRPD)	Community Facility District (CFD)	
xi.	Grazing Activities ¹	GHAD	Magee Investment Company, Teardrop Partners, L.P., and Jerome Magee, Jr. or assignee ("Tenant")	Tenant	Grazed in conjunction with other open space parcels
xii.	Multi-Use Trails	GHAD	EBRPD/ SRVFPD/ GHAD ²	CFD/SRVFPD/ GHAD Assessment	Trails where emergency vehicle access is available.
xiii.	Pedestrian-Only Trails	GHAD	EBRPD	CFD	
xiv.	Single-Track Public Trail Easement	GHAD	TBD	TBD	
xv.	Vehicle Access Road	GHAD	EBMUD/ SRVFPD/ GHAD	EBMUD/SRVFPV/GHAD Assessment	
b.	Parcel "A" (including Creek)				6.9 Acres
i.	Gates, Fencing, and Signage	GHAD	GHAD	GHAD Assessment	
ii.	Vegetation Management for Fire Suppression	GHAD	GHAD	GHAD Assessment	
iii.	Conservation Easement Activities	GHAD	John Muir Land Trust	Endowment	
iv.	Pedestrian-Only Trails	GHAD	HOA	HOA	

FACILITY/FUNCTION	PARCEL OWNERSHIP	IMPROVEMENT MAINTENANCE ENTITY	FUNDING	ACREAGE/ COMMENTS
c. Upper Unserved Remainder (with CE)				98.7 Acres
i. Gates, Fencing, and Signage	GHAD	GHAD	GHAD Assessment	Excludes gates and fences included in grazing lease agreement
ii. Trail Signage	GHAD	EBRPD	CFD	
iii. Vegetation Management for Fire Suppression	GHAD	GHAD/ Tenant/ SRVFPD	GHAD Assessment/ Tenant/SRVF PD	
iv. Conservation Easement Activities	GHAD	John Muir Land Trust	Endowment	
v. Grazing Activities ¹	GHAD	Tenant	Tenant	Grazed in conjunction with other open space parcels
vi. Pedestrian-Only Trails	GHAD	EBRPD	CFD	
vii. Multi-Use Trails	GHAD	EBRPD/ SRVFPD/ GHAD	CFD/SRVFP D/GHAD Assessment	Trails where emergency vehicle access is available.
viii. Parcels "B", "F", "H", and Lower and Western Unserved Remainder (with Conservation Easement ("CE") and Deed Restriction)				256.9 Acres
3. Plan of Control - Geologic Hazard Abatement Responsibilities (Post Transfer Period)				
i. Landslides, Slope Stability, and Erosion Control	GHAD	GHAD	GHAD Assessment	
ii. Storm Drain System	GHAD	GHAD	GHAD Assessment	
iii. Surface Drainage Improvements	GHAD	GHAD	GHAD Assessment	
iv. Subdrains and Subdrain Outfalls	GHAD	GHAD	GHAD Assessment	
v. Geotechnical Monitoring Instruments	GHAD	GHAD	GHAD Assessment	
vi. Retaining Walls	GHAD	GHAD	GHAD Assessment	

¹ The GHAD shall not assume and shall not be responsible for any grazing activities on the proposed GHAD-owned parcels. Before the GHAD can accept such property, the leaseholder or operator (or other applicable party or entity) shall indemnify and hold harmless the GHAD for any and all grazing activities.

² GHAD is only responsible for geologic hazard mitigation on multi-use trails. GHAD shall not be responsible or assume any liabilities for the public use of the multi-use trails.

11.0 RIGHT-OF-ACCESS

The GHAD Board of Directors, officers, employees, consultants, contractors, agents, and representatives shall have the right to enter upon all lands within the GHAD Annexation Area as shown on Appendix B for the purpose of performing the GHAD Activities defined in this Plan of Control. Such GHAD Activities include, but are not limited to the inspection, maintenance and monitoring of those improvements listed in Section 7.0. Should the GHAD need to access private residential lots to fulfill its duties under the Plan of Control, the GHAD shall provide the affected landowner and/or resident with 72 hours advanced notice unless, in the reasonable judgment of the GHAD Manager, an emergency situation exists which makes immediate access necessary to protect the public health and safety, in which case no advanced notice is required, but the GHAD Manager shall inform the landowner and/or resident as soon as reasonably possible.

The foregoing right-of-entry provision shall be recorded in the chain of title for all Project residential parcels and common area lots, and it shall be included in all Covenants, Conditions and Restrictions (CC&Rs) and homebuyer disclosure statements prepared for parcels within the GHAD Annexation Area.

12.0 GLOSSARY

Development Area – General area of residences and associated improvements shown on Figure 1.

Engineer's Report – The document that establishes the individual property owners' GHAD assessment limit based on the projected expenses (budget) of the GHAD.

Geologic Hazard – An actual or threatened landslide, land subsidence, soil erosion, earthquake, fault movement, or any other natural or unnatural movement of land or earth as defined in GHAD Law (Public Resource Code Section 26507).

Geologic Hazard Abatement District (GHAD) Manager – An entity with a licensed geotechnical engineer who will oversee the operations of the GHAD, including preparation of GHAD budgets. The GHAD Manager is appointed by and reports to the GHAD Board of Directors.

GHAD Annexation Area – The parcels included within the limits of the plat and legal description, which is coterminous with the boundaries of Subdivision 9291.

GHAD Activities – Improvements and responsibilities listed in Section 7.0 of this Plan of Control including transfer and maintenance of GHAD-owned Parcels.

GHAD Law- California law beginning with Section 26500 of Division 17 of the Public Resource Code that governs GHADs.

GHAD-owned Parcels – Assessor's parcels totaling 368.3 acres shown on Figure 1.

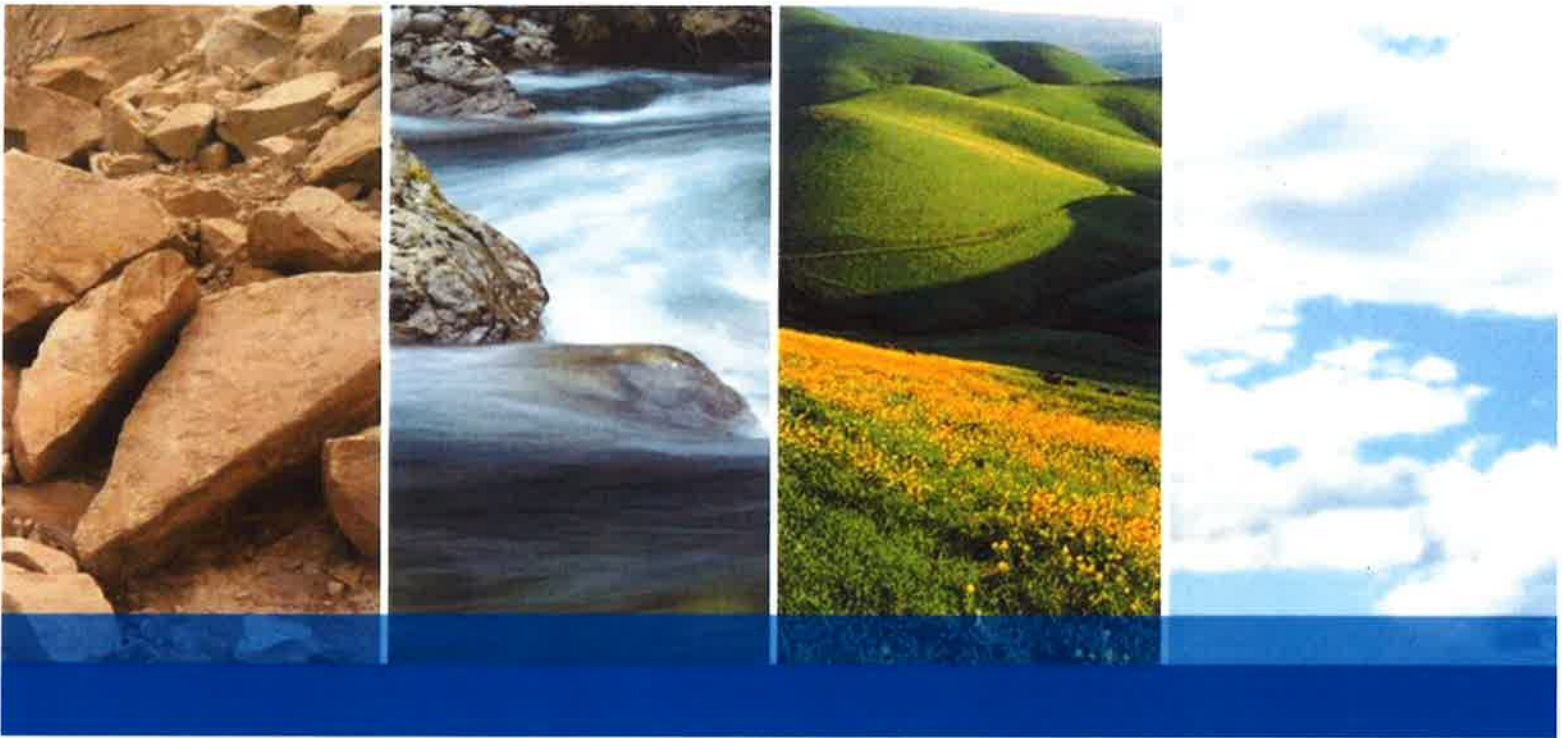
Site Improvements – Buildings, public and private roads, sidewalks, utilities, improved trails, gazebos, cabanas, geologic stabilization features, or similar improvements.

Transfer Application – A document completed by the developer and submitted to the GHAD Manager to initiate the GHAD transfer process.

Transfer Eligibility Date – A date specified in the Plan of Control where the developer is responsible for all GHAD Plan of Control defined activities to allow for the accumulation of reserves prior to acceptance of GHAD-maintained responsibilities.

SELECTED REFERENCES

1. ENGEO. 2013. Geotechnical Exploration, Magee Ranch Project, Danville, California. November 26, 2013. Project No. 8889.000.000.
2. ENGEO. 2017. Geotechnical Exploration Update, Magee Ranch, Danville, California. July 21, 2017; Revised July 31, 2017. Project No. 8889.200.000.
3. ENGEO. 2017. Corrective Grading Plan, Magee Ranch, Danville, California. July 21, 2017. Project No. 8889.200.000.
4. Ruggeri, Jensen, Azar, Vesting Tentative Map, Subdivision 9291 - Magee Preserve, Town of Danville, Contra Costa County, California, January 22, 2019. Job No. 091015.
5. Danville, Town of, Resolution 46-2019, Certifying a Final Revised Environmental Impact Report, Adopting Findings and a Statement of Overriding Considerations, Mitigation Measures and a Mitigation Monitoring, and Reporting Program, and Approving Major Subdivision Request, Final Development Plan Request and Tree Removal Request (Magee Preserve - Davidon Homes). July 2, 2019.
6. United States Department of the Interior, Fish and Wildlife Service, Formal Consultation on the Magee Preserve Project in the Town of Danville, Contra Costa County, California (U.S. Army Corps of Engineers (Corps) File Number: 2011-00044S), Reference No 08ESMF00-2020-F-2063; March 22, 2021.
7. Live Oak Associates, Inc. 2021. Conservation Management Plan (Draft), Magee Preserve Conservation Easement Areas, Town of Danville, California. Project Number: 2098-03. February 23, 2021.
8. John Muir Land Trust. 2015. Magee, Property Analysis Record Summaries One and Two. January 28, 2015.
9. Ruggeri Jensen Azar. 2021. Stormwater Facilities Operation and Maintenance Plan for Magee Preserve, Subdivision 9291. Project No. 091015IP. March 2021.
10. Vollmar Natural Lands Consulting. 2023. Memorandum. Draft Property Analysis Record (PAR), Magee Preserve 90.7-acre Upland CEA, Danville, CA. June 14, 2023.



APPENDIX A

FIGURE 1: Ownership Exhibit

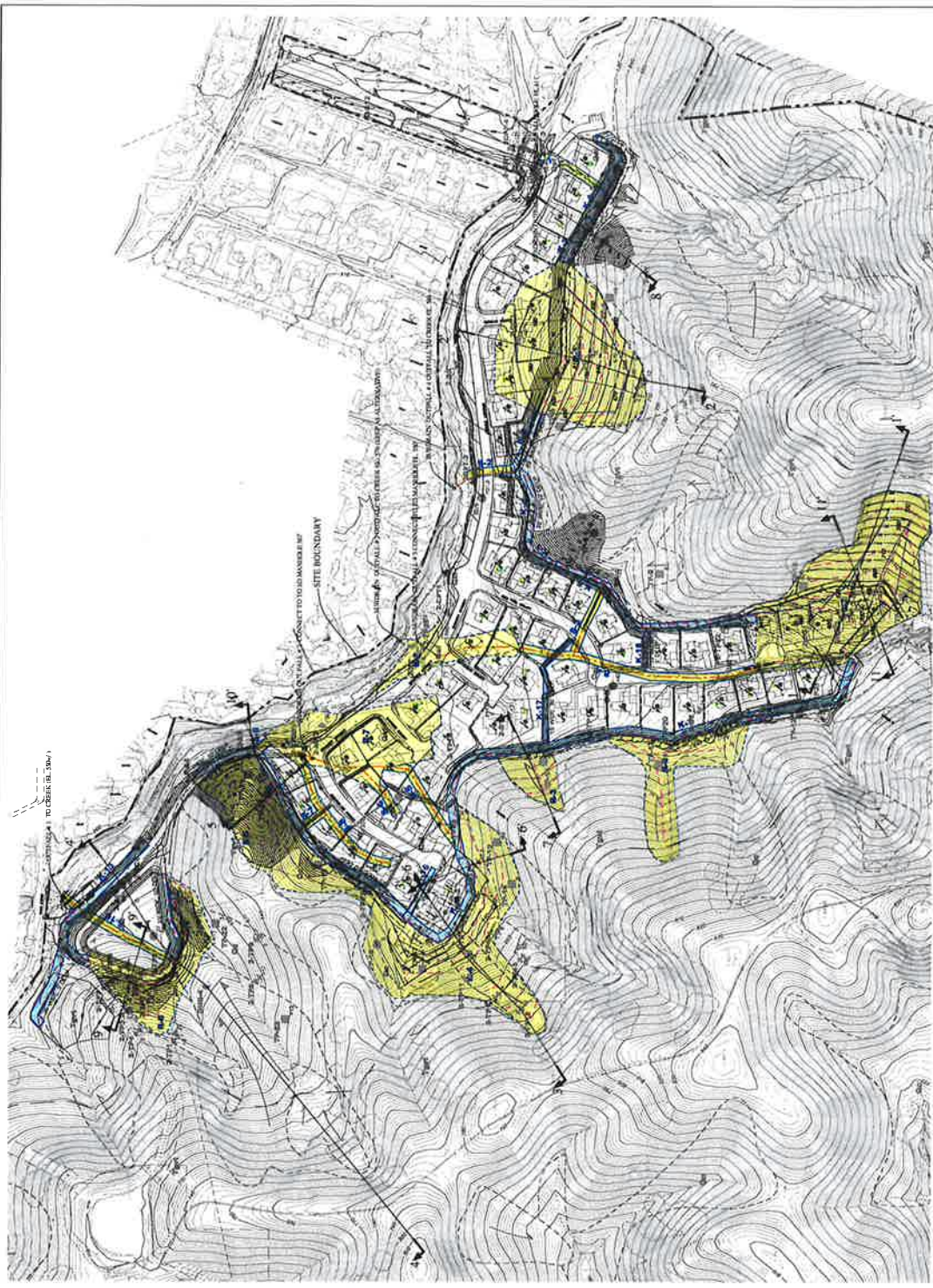
FIGURE 2: Corrective Grading Plan



EXPLANATION OF SYMBOLS

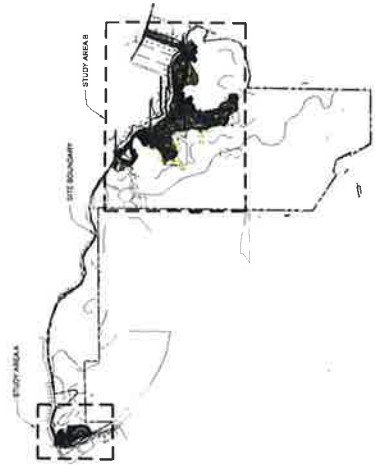
	GHAD-OWNED PARCEL WITH CONSERVATION EASEMENT (283.8 ACRES)
	GHAD-OWNED PARCEL WITH CONSERVATION EASEMENT UNDER JOHN MUIR LAND TRUST (98.7 ACRES)
	GHAD-OWNED PARCEL WITH HOA LANDSCAPE EASEMENT (8.8 ACRES)
	TOWN OF DANVILLE EASEMENT (6.2 ACRES)
	VEGETATION MANAGEMENT ZONE-GHAD MAINTAINED (7.9 ACRES)
	HOA-OWNED AND MAINTAINED PARCEL (0.12 ACRES)
	PRIVATE LOTS (PRIVATELY MAINTAINED) (16 ACRES)
	PUBLIC STREETS (TOWN OF DANVILLE MAINTAINED) (6.7 ACRES)
	GHAD BOUNDARY
	PARCEL BOUNDARY
	PUBLIC MULTI-USE TRAIL - EBRPD/SRVFPD/GHAD MAINTAINED
	VEHICLE ACCESS ROAD- EBMUD/SRVFPD/GHAD MAINTAINED
	PUBLIC PEDESTRIAN ONLY TRAIL - EBRPD/GHAD MAINTAINED
	PUBLIC TRAIL EASEMENT - MAINTAINED BY OTHERS
	PUBLIC PATH-HOA MAINTAINED
	PUBLIC SIDEWALK-TOWN MAINTAINED
	FUTURE TOWN BIKE PATH-TOWN MAINTAINED
	BIKRETENTION BASIN
	DETENTION BASIN
	STORM DRAIN LINES WITHIN OPEN SPACE - GHAD MAINTAINED
	STORM DRAIN LINES WITHIN DEVELOPMENT-TOWN MAINTAINED
	CONCRETE-LINED DRAINAGE DITCH- GHAD-MAINTAINED
	RETAINING WALLS- GHAD-MAINTAINED





STUDY AREA B

EXPLANATION	SYMBOL	DESCRIPTION
Full (uncontaminated)	White	Full (uncontaminated)
Colluvium	Diagonal lines	Colluvium
Alluvium	Horizontal lines	Alluvium
Older Alluvium	Vertical lines	Older Alluvium
Tasmanian Group Bedrock	Stippled	Tasmanian Group Bedrock
Geologic Contact	Dashed line	Geologic Contact
Earthflow	Wavy lines	Earthflow
Deep-seated Landslide	Stippled	Deep-seated Landslide
Area of Significant Recent Creek Incision	Thick blue line	Area of Significant Recent Creek Incision
Geologic Cross Section Location	Thin blue line	Geologic Cross Section Location
Strike and Dip of Bedrock-Shear Plane	Arrow with text	Strike and Dip of Bedrock-Shear Plane
2.813	Circle with 'x'	Auger Boring (ENG0 2019)
2.813	Circle with 'x'	Auger Boring (ENG0 2009)
2.813	Circle with 'x'	Core Boring (ENG0 2019)
2.813	Circle with 'x'	M.D. No. 1017 Boring (ENG0 2019)
2.813	Circle with 'x'	Downhole Boring (ENG0 2009)
2.7P9	Circle with 'x'	Test Pit (ENG0 2019)
1.3	Yellow shaded area	Proposed Remedial Area
1.3	Yellow shaded area	Elevation of Removal in Feet
1.3	Yellow shaded area	Cut 10'
1.3	Yellow shaded area	Fill 10' (10' Min)
1.3	Yellow shaded area	Proposed Keyway Showing Width and Depth
1.3	Yellow shaded area	Proposed Buried Manway
1.3	Yellow shaded area	Proposed Shallow Cleanout
1.3	Yellow shaded area	Proposed Swale Cleanout with Buried Man



SITE LAYOUT PLAN
NO SCALE



APPENDIX B

**EXHIBIT A
LEGAL DESCRIPTION
Geologic Hazard Abatement District, Magee Preserve -
Subdivision 9291**

**EXHIBIT B
Plat to Accompany Legal Description**

Exhibit A – Legal Description

Magee Preserve

Real property situate in the Town of Danville, County of Costa, State of California, and being all of New Lots 1, 2, and 3 as described in the Grant Deed to Teardrop Partners, LP, a California Limited Partnership, filed for record on January 30, 2014, under document number 2014-015148, Contra Costa County Records; and Parcel A as shown upon the Parcel Map of Subdivision MS 152-77, filed on September 26th, 1980 in Book 89 of Parcel Maps at Page 45, Contra Costa County Records; and Lot 2 as described in the Lot Line Adjustment 98-19 filed for record on October 22, 1998, under document number 98-0262058, Contra Costa County Records; and Lot 3 as described in the Grant Deed to Magee Investment Company, A California Corporation, filed for record on October 22, 1998, under document number 98-0262061, Contra Costa County Records; and Parcel 5 as described in the Grant Deed to Teardrop Partners, LP, filed for record on September 24, 1998, under document number 98-0231704, Contra Costa County Records.

Containing 410.37 acres, more or less.

See Exhibit B – Plat to Accompany Legal Description which is attached hereto and made a part hereof

End of description.

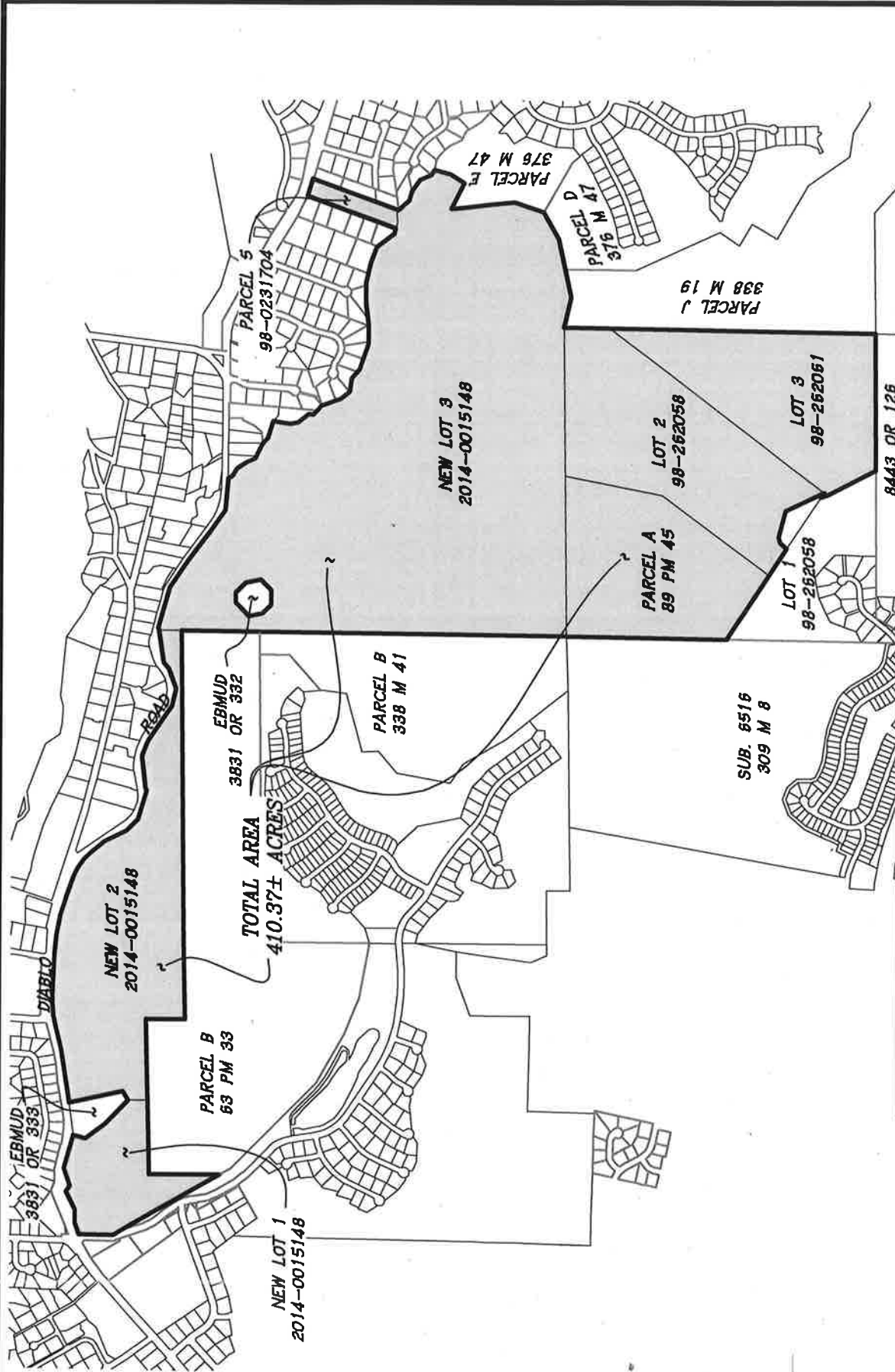


EXHIBIT B
PLAT TO ACCOMPANY LEGAL DESCRIPTION
FOR
MAGEE PRESERVE

TOWN OF DANVILLE, CONTRA COSTA COUNTY, CALIFORNIA



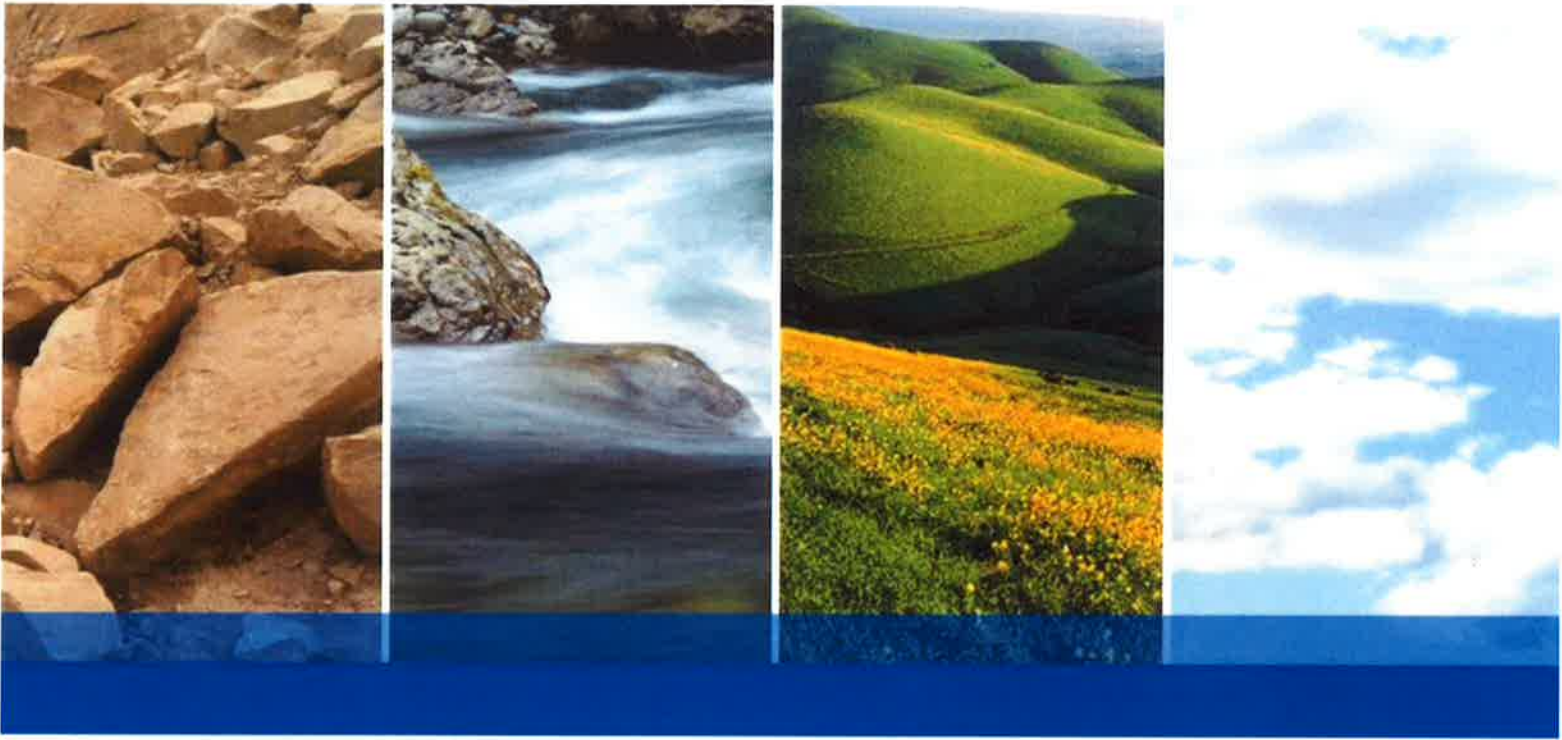
RUGGERI-JENSEN-AZAR

ENGINEERS ■ PLANNERS ■ SURVEYORS
 4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
 PHONE: (925) 227-9100 FAX: (925) 227-9300

SCALE: 1" = 1200'

DATE: 3/29/2021

JOB NO.: 0910151P



APPENDIX C

**DECLARATION OF DISCLOSURES, RIGHT OF ENTRY AND
RESTRICTIVE COVENANTS REGARDING WIEDEMANN
GEOLOGIC HAZARD ABATEMENT DISTRICT**

RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO:
Wiedemann Ranch Geologic Hazard Abatement District

Attn:

**DECLARATION OF DISCLOSURES, RIGHT OF ENTRY AND RESTRICTIVE COVENANTS
REGARDING WIEDEMANN RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT**

This Declaration of Disclosures, Right of Entry, and Restrictive Covenants Regarding Wiedemann Ranch Geologic Hazard Abatement District (the "Declaration") is made this _____ day of _____, 2021 (the "Effective Date"), by, Davidon Homes, a California limited liability company ("Declarant").

RECITALS

- A. Declarant is the owner of that certain real property located in the Town of Danville, County of Contra Costa, State of California, more particularly described as Subdivision 9291, filed on _____, 20____ in Book of Parcel Maps, at pages _____, all in the Official Records of Contra Costa County, California (the "Property").
- B. The Town of Danville approved a 69-lot residential subdivision on the Property. A condition of approval for Subdivision 9291 was that the Property be included within a GHAD, and to fulfil this condition, the property has been annexed into the Wiedemann Ranch Geologic Hazard Abatement District ("Wiedemann Ranch GHAD").
- C. Under the authority of California Public Resources Code section 26500, et seq., the Contra Costa County Board of Supervisors on September 1, 1998, adopted Resolution No. 98/438 forming and establishing the Wiedemann Ranch GHAD to prevent, mitigate, abate or control potential geologic hazards within the boundaries of the GHAD. On _____, 2021, the Wiedemann Ranch GHAD adopted Resolution No. 20-____, approving annexation of the Property into the Wiedemann Ranch GHAD.

NOW, THEREFORE, Declarant, as the owner of the Property, for itself, its successors and assigns does hereby declare as follows.

1. Notification and Disclosure of Wiedemann Ranch GHAD: The Declarant hereby gives notice and discloses that the Property is a part of the Wiedemann Ranch GHAD. The Board of Directors of the Wiedemann Ranch GHAD are the members of the Contra Costa County Board of Supervisors. Pursuant to the Plan of Control for Annexation of the Property to Wiedemann Ranch GHAD as it may be amended from time to time (the "Plan of Control"), the Declarant and the Wiedemann Ranch GHAD are afforded certain responsibilities and rights relating to the prevention, mitigation, abatement, and control of potential geologic hazards on the Property. The powers of the Wiedemann Ranch GHAD include the power to assess lot owners within the Property for the purposes set out in the Plan of Control. An assessment was authorized by the Wiedemann Ranch GHAD to be imposed on the Property pursuant to adopted Resolution 20-_____.
2. Right of Entry: The Declarant by executing and recording this Declaration hereby contractually affords Wiedemann Ranch GHAD, its officials, employees, contractors and agents an irrevocable right of entry with continuing and perpetual access to and across the Property for the purposes and responsibilities set out in the Plan of Control ("Access Rights"). Should the

Wiedemann Ranch GHAD need to access private residential lots to fulfill its duties under the Plan of Control, the Wiedemann Ranch GHAD shall provide the affected landowner and/or resident with 72 hours advanced notice unless, in the reasonable judgment of the GHAD Manager, an emergency situation exists which makes immediate access necessary to protect the public health and safety, in which case no advanced notice is required, but the Wiedemann Ranch GHAD shall inform the landowner and/or resident as soon as reasonably possible. The Declarant hereby gives notice that the GHAD will acquire Access Rights immediately upon the execution of this Declaration. The GHAD, in its sole discretion, may elect not to exercise Access Rights until it accepts its maintenance responsibilities consistent with the Plan of Control.

3. GHAD Easement: For those properties within the GHAD Annexation Area that are not GHAD-owned Parcels, the Declarant hereby grants the Wiedemann Ranch GHAD a perpetual easement for the purposes and responsibilities set out in the Plan of Control and for maintaining certain Site Improvements as depicted in Exhibit B, and legally described in Exhibit A attached hereto, (the "GHAD Easement"). Such activities include, but are not limited to: (a) the inspection, maintenance, monitoring, and replacement of Site Improvements including, drainage ditches, storm drains, outfalls, and pipelines; (b) the monitoring, maintenance, and repair of slopes, including repaired or partially repaired landslides; and (c) the management of erosion and geologic hazards within the open space areas shown in the Plan of Control. The GHAD Easement shall become effective upon acceptance by the Wiedemann Ranch GHAD of its responsibilities and rights, the process by which is articulated in the Plan of Control. The Wiedemann Ranch GHAD has no maintenance responsibilities whatsoever to the Declarant or Property until and unless the Wiedemann Ranch GHAD accepts such responsibilities consistent with the Plan of Control.
4. Covenants Running with the Land: The Property shall be held, conveyed, hypothecated, encumbered, sold, leased, used, improved, and maintained subject to the limitations, covenants, conditions, restrictions, easements, rights of entry, and equitable servitude set forth in this Declaration, which are in furtherance of Declarant's plan for the uniform improvement and operation of the Property. All of the limitations, covenants, conditions, restrictions, easements, rights of entry, and equitable servitudes set out in this Declaration shall both benefit and burden the Property and shall run with and be binding upon and inure to the benefit of the Property and each parcel therein, and shall be binding upon and inure to the benefit of each owner, and every person having or acquiring any right, title or interest in and to all or any portion of the Property and their successors and assigns. Upon Declarant's conveyance of fee title to the Property, or any portion thereof, Declarant shall be released from any further liability or obligation hereunder related to the portion of the Property so conveyed, and the grantee of such conveyance shall be deemed to be the "Declarant," with all rights and obligations related thereto, with respect to that portion of the Property conveyed.
5. Hold Harmless: Declarant, or its successors and assigns, shall hold harmless, protect, and indemnify Wiedemann Ranch GHAD and its directors, officers, employees, agents, contractors, and representatives and the heirs, personal representatives, successors and assigns of each of them (collectively, "Wiedemann Ranch GHAD Indemnified Parties") from and against any and all liabilities, penalties, costs, losses, damages, expenses (including, without limitation, reasonable attorneys' fees and experts' fees), causes of action, claims, demands, orders, liens, or judgments (each a "Claim" and, collectively, "Claims"): (1) for injury to or the death of any person, or physical damage to any property, related to or occurring on or about the GHAD Easement to the extent arising from the negligence or intentional

misconduct of Declarant, its employees, agents or contractors; or (2) related the existence of the GHAD Easement, exclusive of any Claims brought by Declarant.

6. Enforcement: The Wiedemann Ranch GHAD shall have the right but not the obligation to enforce the provisions of this Declaration.
7. Modification or Termination: This Declaration shall not be modified, amended, or terminated without the written consent of the Wiedemann Ranch GHAD.

Executed as of the Effective Date.
Declarant:

Davidon Homes

By: _____

Its: _____

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed to the Wiedemann Ranch Geologic Hazard Abatement District by the foregoing document titled "Declaration of Disclosures, Right of Entry and Restrictive Covenants", which is dated _____, 20____ and executed by _____, is hereby accepted by the undersigned pursuant to authority conferred by Resolution No. ____-____, dated _____, 20____. The Town of Danville, as grantee, consents to recordation of said "Declaration of Disclosures, Right of Entry and Restrictive Covenants".

ENGEO
Wiedemann Ranch GHAD Manager

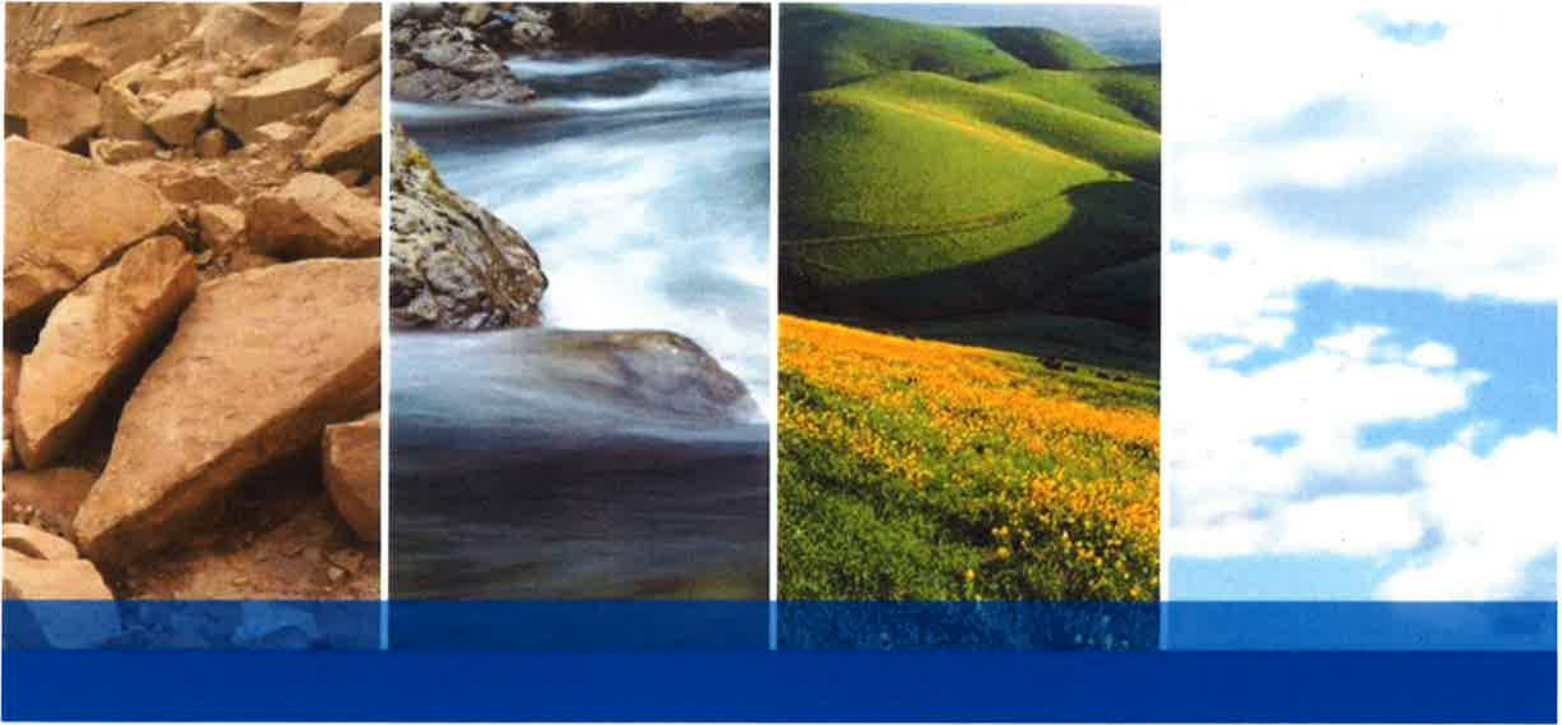
Date:

Attest:

ENGEO
Wiedemann Ranch GHAD Clerk

Approved as to form:

Fennemore Wendel
Wiedemann Ranch GHAD Attorney



APPENDIX D

**CONDITIONS OF APPROVAL (COA) NUMBERS B.7, E.4,
E.12, AND I.5
IN TOWN OF DANVILLE RESOLUTION 46-2019**

COA No. B.7

The applicant shall construct a public trail from Blackhawk Road near Street "A" to a point where the EVA connects to Diablo Road, as part of subdivision improvements. The trail design standard shall be that of a "Paved Trail" as described in the Townwide Trails Master Plan dated January 1989 and the Town's adopted Parks, Recreation, and Arts Strategic Plan dated July 2017. The trail shall be separate and distinct from any internal sidewalks within the subdivision. Signage, trash/recycling receptacles, doggy-bag dispensers, entry gates, and benches shall be provided as required by the Town according to current design standards. Maintenance of the trail improvements shall be provided by the project Homeowner's Association and/or the GHAD. The Town will have the responsibility for the future construction of the extension of the public trail from the EVA west along the south side of Diablo Road, as part of a future Capital Improvement Project. The exact design/alignment of the trail and construction timing will be determined by the Town at a future date.

COA No. E.4

The project proposes to preserve approximately 381 acres of the project site as open space. Areas to be preserved would be placed under a conservation easement or deed restriction to prohibit construction and preserve conservation value. The project proposes to create a geologic hazard abatement district (GHAD) to provide suitable funding for management and long-term maintenance of the site. Upland habitats shall be managed via a long-term management plan to maintain the quality of the habitat for the movement and dispersal of CRLF. Prior to construction, the project proponent shall retain a qualified biologist to prepare an open space management plan for the explicit purpose of managing and monitoring the proposed open space area. This plan shall be submitted to the Town of Danville for review and approval prior to issuance of grading permits. At a minimum this plan shall include the following components: ...

- f. Define and identify the GHAD maintenance and management activities to manage the open space habitats to meet the stated goals of support habitat characteristics suitable for the CLRF. This would include suitable fencing so as to control access, limited cattle grazing or other procedures to manage grass height and forage production at levels that benefit the CRLF, and removal of trash.*
- g. Define the financial mechanism for the GHAD to manage the open space in perpetuity.*

COA No. E.12

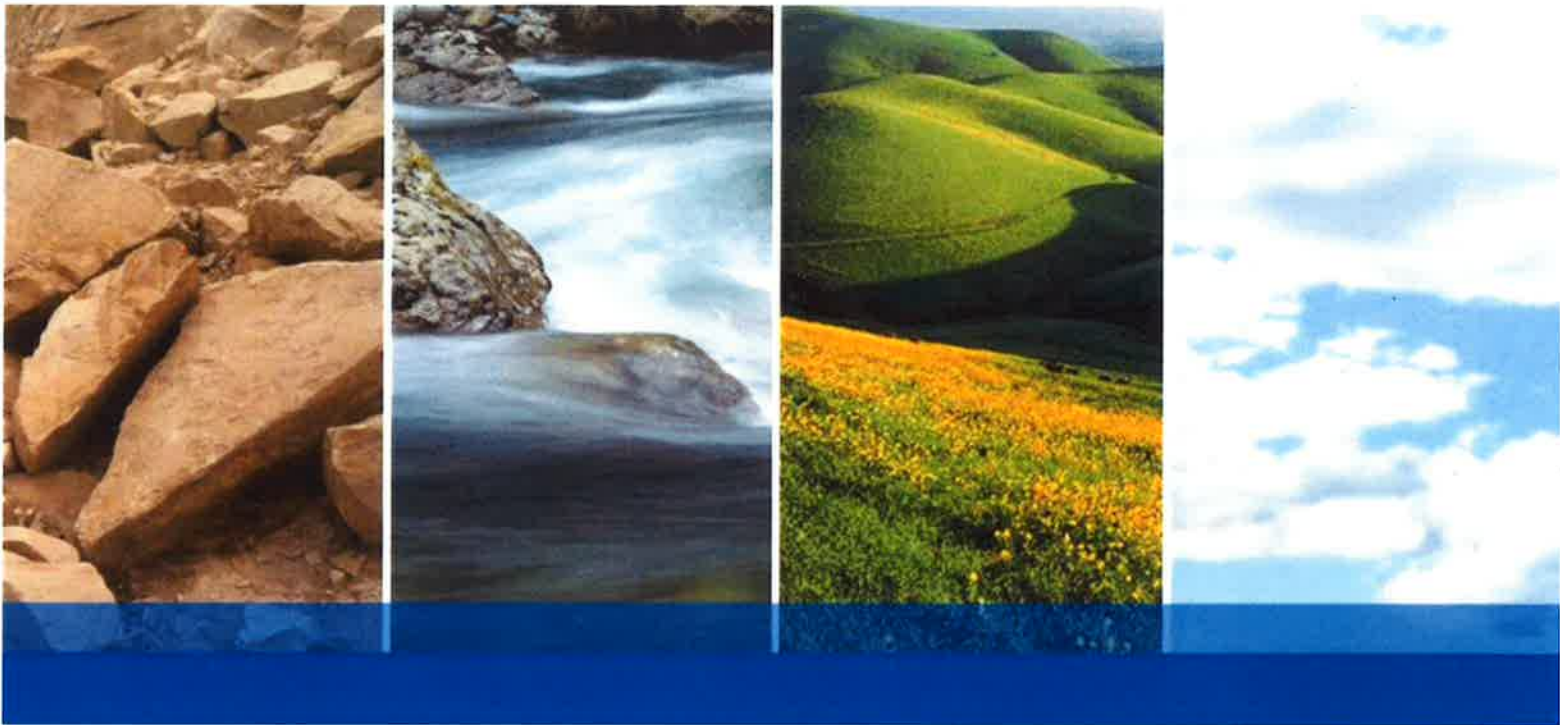
The project proponent shall replace wetland and riparian habitat at a 1:1 replacement-to loss ratio. It is expected that all compensation measures can be accommodated within the 381 acres of the site proposed as open space. Prior to issuance of a grading permit, the project proponent shall retain a qualified biologist to prepare an onsite habitat mitigation and monitoring plan (HMMP) that includes both an aquatic habitat restoration plan and a riparian habitat restoration plan. The HMMP would specifically address the wetland and riparian habitats and is separate from the Open Space Management Plan identified in Mitigation 4.4-4, although there may be some overlap. The HMMP shall include the following components, at a minimum: ...

- g. Define management and maintenance activities (weeding of invasives, providing for supplemental water, repair of water delivery systems) of proposed GHAD; and*

- h. Provide for assurance in funding the monitoring and ensuring that the created wetland and riparian habitats fall within lands to be preserved and managed into perpetuity. Confirm that the proposed GHAD will meet these responsibilities.*

COA No. 1.5

A Geologic Hazard Abatement District (GHAD) shall be established or annexed into. The GHAD shall consider implementing measures to prevent, mitigate, abate, or control geologic hazards and also mitigate or abate structural hazards that are caused by geologic hazards. Said GHAD shall be established or the property annexed into a GHAD according to Public Resources Code §26500 et seq. The GHAD should consider owning or maintaining the approximately 381 acres of permanent open space. The GHAD should consider assuming responsibility for maintenance and upkeep of the detention basin, other stormwater pollution control and hydromodification facilities constructed as part of the project, and the future public trail to be constructed by the Town between the western EVA terminus and the western terminus of the trail near the Diablo Road/Alameda Diablo intersection. The GHAD should consider establishing a comprehensive plan to maintain the restored creek and bridge and provide corrective measures as needed. If any duties listed above are unable to be included as part of the GHAD's responsibilities, they shall be included as the responsibility of the project's Homeowner's Associations (HOA). An annual report regarding GHAD funding and activities shall be prepared for the first five years after the GHAD assumes responsibilities under the Plan of Control and submitted for review by the Town and made available for review by other watershed stakeholders.



APPENDIX E

SAMPLE TRANSFER APPLICATION FORM

TRANSFER APPLICATION, WIEDEMANN RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT (GHAD) MAGEE PRESERVE DEVELOPMENT

Wiedemann Ranch Geologic Hazard Abatement District Board of Directors
c/o Wiedemann Ranch GHAD Manager
ENGEO Incorporated
2010 Crow Canyon Place, Suite 250
San Ramon, CA 94583

As of _____, 20__, _____ is submitting an application for transfer of GHAD activities as provided in Section 6.0 of the Magee Preserve Plan of Control dated May 5, 2021. As specified in Section 6.0, _____ is submitting this Transfer Application to transfer the responsibility for performing GHAD activities for the listed parcels to the District. Within 30 days of the submittal of the Transmittal Application, the GHAD will monitor the listed parcels and verify that the facilities that the GHAD will have maintenance responsibility have been constructed and maintained in accordance with the conditions of Section 6.4 of the Plan of Control. Within 15 days of inspection, the GHAD will send _____ a punch list of all items that need to be constructed, repaired, or otherwise modified in compliance with the Town of Danville approved plans and specifications. _____ will notify the GHAD upon completion of the punch list items. Within 30 days of receipt of such notice, the GHAD shall verify that all punch list items have been completed and notify _____. GHAD staff will then bring a resolution before the Wiedemann Ranch GHAD Board of Directors for their consideration approving GHAD responsibility for performing all future GHAD activities on the parcel(s).

We submit the following parcels for the transfer of GHAD activities as provided in the Magee Preserve Plan of Control to the Wiedemann Ranch GHAD:

Lot Number	Address	Assessor's Parcel Number

Each party is to submit a copy of this application to the other party upon completion of the steps listed below.

GHAD receipt of Transfer Application: Initial of GHAD representative: _____ Date: _____
 _____ receipt of punch list from GHAD: Initial of _____ representative: _____ Date: _____
 GHAD receipt of notice of completion of punch list items: Initial of GHAD representative: _____ Date: _____



APPENDIX F

**STORMWATER FACILITIES OPERATION AND
MAINTENANCE PLAN
FOR MAGEE PRESERVE, SUBDIVISION 9291**

**STORMWATER FACILITIES OPERATION AND
MAINTENANCE PLAN**

for

**Magee Preserve
Subdivision 9291**

March 2021

Project 091015IP

prepared for:

Davidon Homes

1600 South Main Street, Suite 150

Walnut Creek, CA 94596

(925) 945-8000

Contact: Steve Abbs

prepared by:

Ruggeri Jensen Azar

4690 Chabot Drive, Suite 200

Pleasanton, CA 94588

(925)227-9100

Contact: Kirk Myers

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Attachments

1. Stormwater Control Plan for Magee Preserve (Includes Plan)
2. Record drawings
3. Service agreements

Abbreviations

C.3	Provision C.3 in the Municipal Regional Stormwater Permit issued by the California Regional Water Quality Control Board for the San Francisco Bay Region
IMP	Integrated Management Practice
O&M Plan	Operations and Maintenance Plan
AD	Area Drain
BMP	Best Management Practices
CO	Cleanout
DMA	Drainage Management Area
DI	Drainage Inlet
INV	Invert Elevation
PERF	Perforated Pipe
SD	Storm Drain
SF	Square Feet

This Stormwater Facilities Operation and Maintenance Plan was prepared using the template dated 4/2/2019.

I. INSPECTION AND MAINTENANCE LOG

Facility Name	
Address	
Begin Date	End Date

Date	BMP ID#	BMP Description	Inspected by:	Cause for Inspection	Exceptions Noted	Comments and Actions Taken

Instructions: Record all inspections and maintenance for all treatment BMPs on this form. Use additional log sheets and/or attach extended comments or documentation as necessary.

- o BMP ID# — Always use ID# from the Operation and Maintenance Manual.
- o Inspected by — Note all inspections and maintenance on this form.
- o Cause for inspection — Note if the inspection is routine, pre-rainy-season, post-storm, annual, or in response to a noted problem or complaint.
- o Exceptions noted — Note any condition that requires correction or indicates a need for maintenance.
- o Comments and actions taken — Describe any maintenance done and need for follow-up.

II. UPDATE TO DESIGNATION OF RESPONSIBLE INDIVIDUALS

**** Use this form to update the plan when responsible individuals change. ****

Date Completed	
Facility Name	
Facility Address	
Designated Contact for Operation and Maintenance	
Name:	Title or Position:
Telephone:	Alternate Telephone:
Email:	
Off-Hours or Emergency Contact	
Name:	Title or Position:
Telephone:	Alternate Telephone:
Email:	
Corporate Officer (authorized to execute contracts with the City, Town, or County)	
Name:	Title or Position:
Address:	
Telephone:	Alternate Telephone:
Email:	

III. UPDATES, REVISIONS, AND ERRATA

Date	Num.	Updates, Revisions, or Errata Title	Description/Purpose	By (full name):

IV. INTRODUCTION

This plan addresses operation and maintenance of facilities constructed as part of the following development project:

Subdivision 9291 – Magee Preserve.

The final, approved Stormwater Control Plan for this project is in Attachment 1.

IV.A. Background

This Stormwater Facilities Operation and Maintenance Plan (O&M Plan) is for facilities constructed as part of the development project referenced above. Construction of these facilities was required by Provision C.3 in the Municipal Regional Stormwater Permit issued by the California Regional Water Quality Control Board for the San Francisco Bay Region. Provision C.3 also requires the County/Town to verify ongoing operation and maintenance of stormwater treatment and hydromodification management facilities, and certain pervious pavement installations.

IV.B. Associated Agreements

This O&M Plan is referenced in an O&M Agreement between the property owner and the Town. The agreement, between Davidon Homes and the Town of Danville, grants the Town access to the property to conduct inspections and, if needed, to perform maintenance on the facilities at the owner's expense. The agreement also grants access for inspections to the Contra Costa Mosquito and Vector Control District (CCMVCD).

The property has been annexed into a Geologic Hazard Abatement District (GHAD), which provides funding for inspections and, if necessary, maintenance or replacement of the facilities.

As provided in the O&M Agreement, this O&M Plan may be modified, but only with the review and consent of the Town of Danville City Engineer. The official O&M Plan is the version which is on file at the Town of Danville Development Services Department at 510 La Gonda Way, Danville, CA. Any modifications made to the O&M Plan under the consent of the City Engineer must be filed at the Development Services Department.

IV.C. Funding for and Organization of Facility Operation and Maintenance

Funding and maintenance of stormwater treatment facilities and private storm drain infrastructure is by and for the homeowner's association for subdivision 9291 & 9320-Magee Preserve.

IV.D. Site Description

The Magee Preserve project (Project) is a planned residential development in the Town of Danville, Contra Costa County, California. The property encompasses roughly 410 acres located south of Diablo Road in Danville, California. The Magee Ranches is a portion of a historically larger ranch that was subdivided in the early 1980's. Currently, the property is used for cattle ranching activities.

Magee Preserve is one of the last remaining open areas available for development along the edges of the Town's development boundary; situated along the south side of Diablo Road between McCauley Road to the west and the older Magee Ranch (Subdivision 7669) to the east. The project is split into two development areas; the larger eastern area will develop the flat area along Green Valley Creek with 66 single family homes and supporting infrastructure, while preserving the adjacent upland areas

as permanent open space. The smaller western portion will develop three single family residential lots with supporting infrastructure off of McCauley Road near the intersection with Diablo Road.

Stormwater from the majority of the eastern subdivision is treated in the stormwater basin adjacent to the Emergency Vehicle Access (EVA)/Trail adjacent to Diablo Road. Smaller bio-retention planters along the project entry on Appaloosa treat stormwater runoff from the entry drive. Additional smaller bio-retention planters along the EVA treat stormwater from the EVA.

Stormwater from the smaller western subdivision is treated in a stormwater basin near the intersection of McCauley and Diablo Roads. Upland drainage from both subdivisions bypass the treatment facilities via underground pipes.

V. DESIGNATION AND TRAINING OF RESPONSIBLE INDIVIDUALS

V.A. Designated Contact for Operation and Maintenance

Davidon Homes
TBD

V.B. Off-Hours or Emergency Contact

TBD

V.C. Corporate Officer (authorized to execute agreements with the County)

Steve Abbs
Davidon Homes
1600 South Main Street
Walnut Creek, CA 94596
(925)945-8000
Sabbs@davidonhomes.com

V.D. Initial Training of Responsible Individuals

Following completion of construction, the bioretention facilities will be maintained by the contractor during the warranty period (typically 1 year), except for routine policing for trash, which will be done by the owner's/ HOA/GHAD personnel. During this warranty period, the HOA/GHAD landscape maintenance crew will coordinate to meet with the contractor's personnel on-site during maintenance. At these times, the contractor's personnel will demonstrate proper maintenance procedures.

V.E. Ongoing Training of Responsible Individuals

Within the homeowner's maintenance group, there will be one person designated to oversee maintenance of the site's BMPs. This person will keep copies of all project stormwater documents, including recorded agreements and stormwater management plans. This person will be familiar with all stormwater facilities and will be responsible for overseeing their maintenance and inspection.

VI. FACILITIES TO BE MAINTAINED

VI.A. Facility Descriptions

The site is treated by 6 bio-retention planters designated on the project plans and stormwater management plan as IMPs A-F. These facilities are passive, in-ground stormwater treatment facilities. Stormwater enters on the surface via overland flow or bubble-up drains where it percolates through an 18-inch layer of imported sandy loam material which is underlain by 12-33 inches of drain rock with perforated sub-drains which convey the treated stormwater to the underground storm system. Run-off in excess of

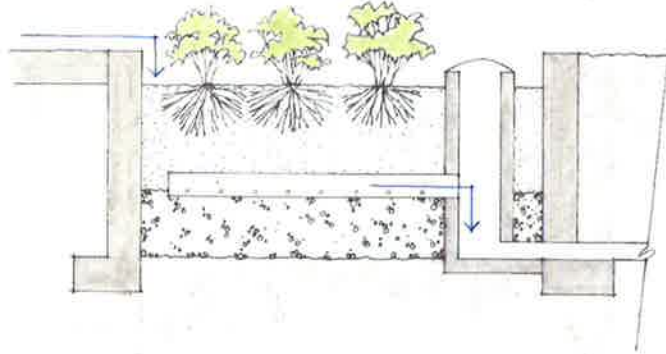


Figure [A]. Bioretention Cross-Section (schematic)

the volume requiring treatment drains directly to the underground system via overflow drains within the bio-retention area. These drains are purposefully set a minimum of 6 inches above finished grade. Bio-retention areas are landscaped with specific planting listed in the county stormwater guidelines.

The site also includes one self-retaining area. This area predominately impervious and retains the first inch of rainfall without generating runoff.

For a more detailed view of the bio-retention IMPs, see the Stormwater Control Plan exhibit in the attachments of the attached Stormwater Control Plan report for Magee Preserve.

VI.A.1. [Bio-retention Area A]

Bio-retention Area A is a large bio-retention basin (approximately 44,650 SF) treating runoff from DMA 1 which is comprised of approximately 253,200 SF of roofs, 242,482 SF of various pavements, and 634,264 SF of landscaping and other pervious surfaces. Runoff is collected and conveyed via an underground storm drain system and discharges directly to the basin.

VI.A.2. [Bio-retention Area B-1]

Bio-retention Area B-1 is a linear bio-retention area (approximately 800 SF) along Appaloosa Street treating runoff from DMA B-1 which is comprised of approximately 11,939 SF of asphalt and concrete, and 14,600 SF of landscaping and other pervious surfaces. Runoff drains overland and enters the IMP via curb openings.

VI.A.3. [Bio-retention Area B-2]

Bio-retention Area B-2 is a linear bio-retention area (approximately 500 SF) along Appaloosa Street treating runoff from DMA B-2 which is comprised of approximately 5,705 SF of asphalt and concrete, and 6,903 SF of landscaping and other pervious surfaces. Runoff drains overland and enters the IMP via curb openings.

VI.A.4. [Bio-retention Area B-3]

Bio-retention Area B-3 is a linear bio-retention area (approximately 300 SF) along Appaloosa Street treating runoff from DMA B-3 which is comprised of approximately 3,950 SF of asphalt and concrete, and 6,217 SF of landscaping and other pervious surfaces. Runoff drains overland and enters the IMP via through-curb drains.

VI.A.5. [Self-Retaining Area C]

Self-retaining Area C is the impervious area along the east side of Appaloosa Street that is graded to retain the first inch of runoff from approximately 19,445 SF of streets and 54,291 SF of landscaping and other pervious surfaces. Runoff drains overland and enters via through-curb drains.

VI.A.6. [Bio-retention Area D]

Bio-retention Area D is a linear bio-retention area (approximately 800 SF) along the EVA Street treating runoff from DMA 4 which is comprised of approximately 14,690 SF of asphalt and concrete, and 7,729 SF of landscaping and other pervious surfaces. Runoff drains overland and enters the IMP via through-curb drains.

VI.A.7. [Bio-retention Area E]

Bio-retention Area E is a linear bio-retention area (approximately 200 SF) along the EVA Street treating runoff from DMA 5 which is comprised of approximately 2,030 SF of asphalt and concrete, and 2,410 SF of landscaping and other pervious surfaces. Runoff drains overland and enters the IMP via through-curb drains.

VI.A.8. [Bio-retention Area F]

Bio-retention Area F is a large bio-retention basin (approximately 3,178 SF) treating runoff from DMA 6 which is comprised of approximately 15,000 SF of roofs, 12,117 SF of various pavements, and 37,376 SF of landscaping and other pervious surfaces. Runoff is collected and conveyed via an underground storm drain system and discharges directly to the basin.

VII. MAINTENANCE ACTIVITIES

VII.A. General Maintenance Rules

At no time will synthetic pesticides or fertilizers be applied, nor will any soil amendments, other than aged compost mulch or sand/compost mix, be introduced. The top of soil surface will be maintained at or near the design elevation throughout. Irrigation systems will be maintained to conserve water while maintaining plant health.

Although it is unlikely to be needed, if plants are not thriving compost tea may be applied at a recommended rate of 5 gallons mixed with 15 gallons of water per acre, up to once per year between March and June. Compost tea will not be applied when temperatures are below 50°F or above 90°F or when rain is forecast within the next 48 hours.

The following may be applied for pest control if needed:

- Beneficial nematodes

- Safer® products
- Neem oil

Plants may need to be replaced with the following mix as specified by the landscape architect [list species] or with similar plantings appropriate for the unique conditions.

VII.B. Maintenance Schedule

Routine inspection and maintenance shall be continuously ongoing. Detailed inspections should occur as follows:

- Visual inspections shall be conducted monthly, particularly after heavy runoff, to ensure normal functioning. (i.e., no pooling, or blockage).
- Detailed inspections shall be conducted at least twice annually with inspections occurring (1) at the end of the wet season to schedule summer maintenance, (2) before major fall runoff in preparation for winter, and (3) after periods of heavy runoff. The objective of detailed inspections is to identify erosion, damage to vegetation, grass or plant height, debris, litter, areas of sediment accumulation, and pools/standing water

VII.B.1. Routine Activities

The facilities will be examined routinely for visible trash, and trash will be removed. Any graffiti, vandalism, or other damage should be noted and addressed within 48 hours.

The planted areas will be weeded by hand approximately monthly. At this time, plants will be inspected for health and the irrigation system will be turned on manually and checked for any leaks or broken lines, misdirected spray patterns etc. Any dead plants will be replaced.

Other typical routine maintenance performed will consist of the following:

- Inspect bio-retention areas for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment. Soils and plantings must be maintained.
- Inspect bio-retention areas regularly and after storms for damage.
- Observe soil at the bottom of the bio-retention areas for uniform percolation throughout. If portions do not drain within 48 hours after the end of a storm, the soil should be tilled and replanted. Remove any debris or accumulations of sediment.
- Examine the vegetation to insure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees and mow turf areas. Confirm that irrigation is adequate and not excessive. Replace dead plants and remove invasive vegetation.
- Abate any potential vectors by filling holes in the ground in and around the bio-retention areas and by insuring that there are no areas where water stands longer than 48 hours following the storm. If mosquito larvae are present and persistent, contact the Contra Costa County Vector Control District for information and advice. Only a licensed individual or contractor should apply Mosquito larvicides only when absolutely necessary and then only sparingly.
- Inspect storm drain pipes at inlets, cleanouts, or any other openings for debris or other obstructions. Remove as necessary.

- Inspect pervious asphalt for deposits of sediments. Clean pervious asphalt with commercial vacuum sweeper twice per year.
- Inspect and repair damaged pavers. Refer to the project record drawings for pervious paver installation.

VII.B.2. Following Significant Rain Events

A significant rain event will be considered to be one that produces approximately a half-inch or more rainfall in a 24-hour period. Within 24 hours after each such event, the following will be conducted:

- The surface of the facility will be observed to confirm there is no ponding.
- Inlets will be inspected, and any accumulations of trash or debris will be removed. Any erosion at inlets should be restored to grade.
- The surface of the mulch layer will be inspected for movement of material. Mulch will be replaced and raked smooth if needed.
- Outlet structure will be inspected for any obstructions to assure that mulch is not washed out.

VII.B.3. Prior to the Start of the Rainy Season

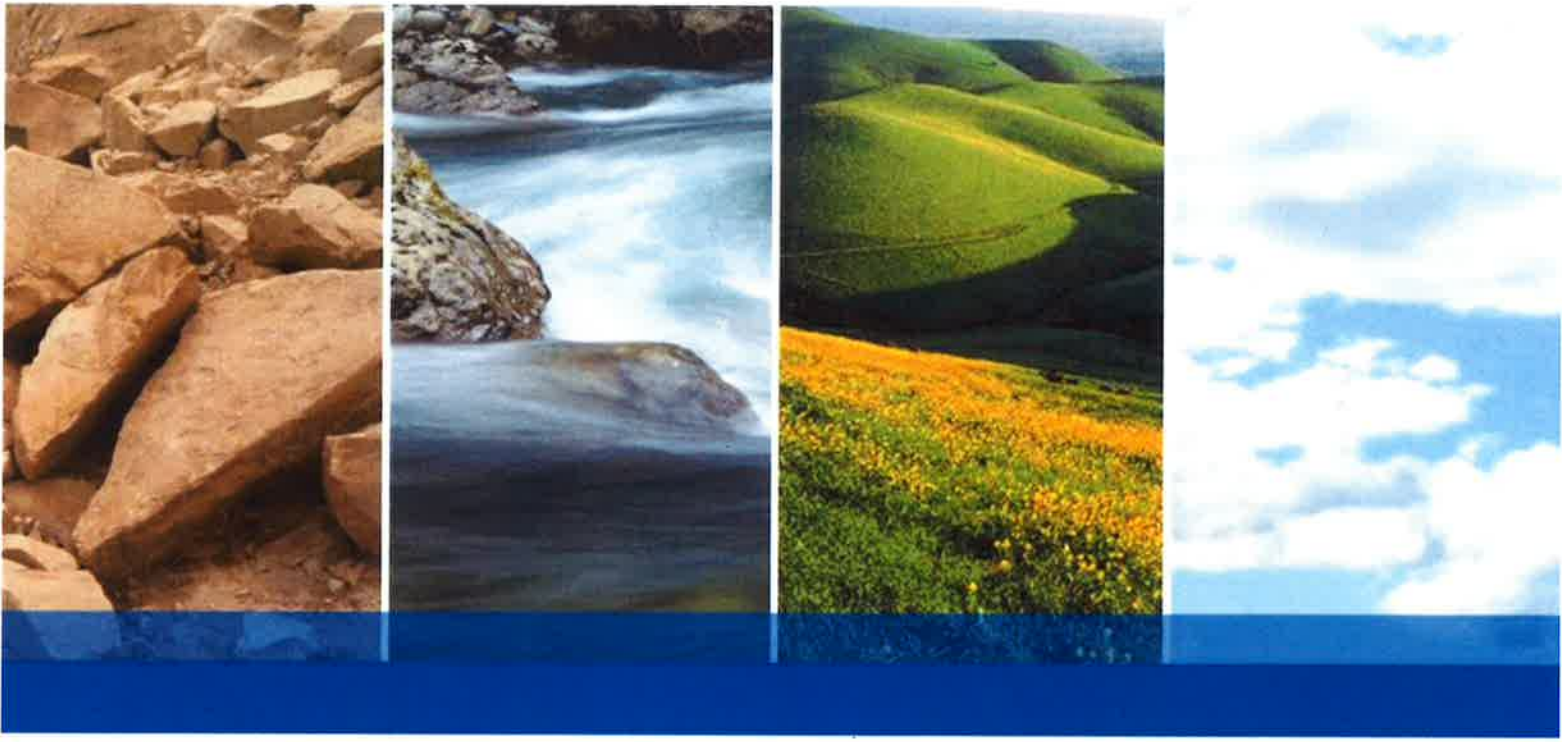
In September of each year, facility inlets and outlets will be inspected to confirm there is no accumulation of debris that would block flow. Stormwater should drain freely into the bioretention facilities. If not previously addressed during monthly maintenance, any growth and spread of plantings that blocks inlets or the movement of runoff across the surface of the facility will be cut back or removed.

If the facilities are not completely drained within 48 hours, the underdrain may be clogged. Check the overflow outlet to determine if the underdrain is performing properly. There should be no filter fabric or geotextile in the horizontal layers or wrapped at the underdrain. If the underdrain is working, the bioretention media may contain fines. Replace material with mixture of 30-40% aged compost and 60-70% washed granular sand, no fines.

VII.B.4. Annually During Winter

Once, in December – February of each year, vegetation will be cut back as needed, debris removed, and plants and mulch replaced as needed. The concrete work will be inspected for damage. The elevation of the top of soil and mulch layer will be confirmed to be consistent with the 6-inch reservoir depth.

Attachments



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