

**FALLON VILLAGE
GEOLOGIC HAZARD
ABATEMENT DISTRICT (GHAD)**

**PLAN OF CONTROL
JORDON RANCH DEVELOPMENT ANNEXATION**

**Submitted to
Mission Valley Properties
Pleasanton, California**

**Prepared by
ENGEO Incorporated**

**Project No. 7828.000.000
February 11, 2011**

Project No.
7828.000.000

February 11, 2011

Mr. Ravi Nandwana
Mission Valley Properties
5000 Hopyard Road, Suite 170
Pleasanton, CA 94588

Subject: Jordan Ranch, Tract 8024
Dublin, California

PLAN OF CONTROL

Dear Mr. Nandwana:

Attached is the proposed Plan of Control to support annexation of the Jordan Ranch development into the Fallon Village Geologic Hazard Abatement District (GHAD). The proposed Plan of Control is intended to reflect the annexation of the Jordan Ranch project (Tract 8024) into the Fallon Village GHAD. This annexation satisfies portions of Condition of Approval Number 107 related to GHAD formation.

If you have any questions or would like any additional information, please do not hesitate to contact us.

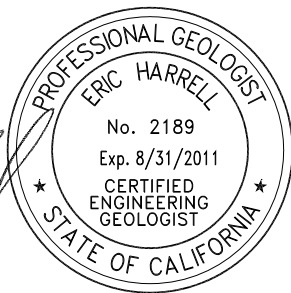
Sincerely,

ENGEO Incorporated

Prepared by:



Eric Harrell, CEG
eh/ue/jf:poc



Uri Eliahu, GE

cc: 1 – Mr. Mark Lander, City of Dublin

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Proposed Development

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1.0 INTRODUCTION

Under the Conditions of Approval for the Jordan Ranch development (Tract 8024), the City of Dublin has required that the Jordan Ranch development be annexed into the Fallon Village GHAD prior to filing of the first final map for the project. To satisfy this requirement, the developer of the Jordan Ranch Development has petitioned the Board of Directors of the Fallon Village GHAD to annex the Jordan Ranch development into the existing Fallon Village GHAD (“GHAD” or “District”).

1.1 PROPERTY IDENTIFICATION, OWNERSHIP AND MAINTENANCE RESPONSIBILITIES

A written description of the properties to be annexed into the existing Fallon Village GHAD is provided in Exhibit A and shown graphically on Exhibit B. The GHAD annexation area includes Assessor’s Parcel Numbers 985-27-7-4 and 985-27-6-4. Ownership and maintenance responsibilities for the individual parcels within the annexation area (Tract 8024) are shown on Figure 1.

2.0 JORDAN RANCH PLAN OF CONTROL

2.1 GEOLOGIC HAZARDS

Geologic hazards identified for the site in the Berlogar Geotechnical Consultants (BGC) Geotechnical Investigation report (Reference 1) dated July 13, 2009, include the following items.

- Slope instability
- Seismically induced ground shaking
- Expansive soils

These geologic hazards are not expected to be eliminated entirely by site grading. Slope instability or potential slope instability is not unique to this project, but is of importance for hillside projects throughout the San Francisco Bay Area, such as Fallon Village. Future stability depends on various factors, including any introduction of natural or artificial groundwater, future grading and earthquake ground shaking.

2.1.1 Slope Instability – Jordan Ranch

While no landslides were mapped on the site, areas of slope instability or landsliding will likely be identified during the life of the development. While we anticipate that most of the landsliding that may occur would involve the movement of shallow materials, the possibility of deeper future landsliding exists.

A landslide is defined as a mass of rock, soil and other debris that has been displaced downslope by sliding, flowing or falling. Landslides include cohesive block slides and disrupted slumps that have formed by displacement along a planar slip surface or rotation (displacement along a curved slip surface). Undercutting and erosion of hillside slopes can trigger slope failures.

Slope failures are also 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 the groundwater table varies with the amount of rainfall for the area. If rainfall is higher than average during the winter season, the water table may be higher than average on a hillside and groundwater pressures may become high. Under these conditions, hillside movement can be activated.

Areas of thickened soil cover on the hillsides are known as colluvium (Qc). Colluvial deposits are typically the result of soil creep and may be in a weak, unconsolidated state, making them susceptible to landsliding if undercut. Colluvium is up to about 12 feet in thickness. Colluvial deposits located within open-space areas are natural landforms that do not require mitigation, except where they affect man-made improvements. Potential mitigation and repair measures for District areas near improvements are discussed in Section 3.

2.1.2 Seismically Induced Ground Shaking

As identified in the geotechnical report, an earthquake of moderate to high magnitude generated within the San Francisco Bay Region could cause considerable ground shaking at the site, similar to that which has occurred in the past. Seismic slope stability has been considered in the geotechnical reports completed for the site; however, seismically generated slope failures could occur outside the grading limits within the Jordan Ranch Development.

2.1.3 Expansive Soils

Near-surface soils, in addition to claystone and siltstone at the site, could exhibit a very high potential for expansion. These potentially expansive soils could impact the planned site development. Expansive soils shrink and swell as a result of moisture change. This can cause heaving and cracking of slabs-on-grade, pavements and structures founded on shallow foundations. The potential for expansive soils has been identified in previous reports for the property. Shrink and swell of expansive soils on slopes is a portion of the mechanism of creep movement, which can result in shallow slope instability.

2.2 SLOPE STABILITY CONSIDERATIONS DURING MASS GRADING

As recommended in the Geotechnical Investigation and Geotechnical Recommendations reports completed by BGC (Reference 1) and ENGEO dated August 17, 2010, (Reference 2) for the Jordan Ranch development, existing non-documented artificial fills within the graded area will be removed prior to engineered fill placement. In addition, unsuitable materials, which could include colluvium and other unsuitable material will be overexcavated to firm undisturbed

materials below the unsuitable material as determined by the project Geotechnical Engineer or Engineering Geologist (ENGEO) at the time of grading. Subdrains will be installed to collect subsurface waters. The configuration of the subdrainage system will be tailored to the subsurface conditions at the time of grading. The planned location and elevation of subdrains and outlets are shown on the Geotechnical Corrective Grading Plan (Figures 2 through 5). Each subexcavation area will be reconstructed to final grade by keying and benching below the landslide plane with compacted, drained engineered fill.

The cuts will be viewed by a geologist during grading to provide mitigation schemes for unsuspected slope conditions, which could decrease the slope stability. Such conditions include unfavorable bedrock attitudes and seepage conditions. Grading reports shall be made available to the GHAD for its use following completion of the project development.

2.3 GHAD-MAINTAINED IMPROVEMENTS AND OPEN SPACE AREAS

The District will have authority and responsibility to manage erosion and other geologic hazards within the boundary shown in Exhibit B subject to the exclusions listed in Section 2.5 – Criteria for GHAD Responsibility. The GHAD shall be responsible for monitoring and maintenance of the following site improvements located within the GHAD-owned parcels that include Parcels A, K, S, and T, as shown on the Open Space Ownership and Maintenance Responsibilities Plan (Figure 1).

- Slopes
- Debris benches
- Maintenance roads
- Developed trails including footbridge
- Fencing
- Concrete-lined drainage ditches
- Storm drain system improvements
- Retaining walls
- Subdrains and subdrain outlets
- Water quality basin

The central open space slopes within Parcels A and S are bisected by a drainage channel. Improvements planned within the limits of Parcel A include a water quality basin and wetlands. A developed trail is planned around the perimeter of Parcel S. In addition, a connector trail will bisect Parcel S and include a footbridge across the drainage channel. As shown on Figure 1, the central open space area will have two activity zones. In general, the Active Zone includes areas around the perimeter of each parcel that will allow maintenance of the trail, water quality basin and vegetation management in the Fire Buffer Zone. The Intermittent Activity Zone includes the core area of Parcels A and S where the GHAD will not have scheduled maintenance activities, but will mitigate landslides, erosion, or the threat thereof, as they occur. While activity zones are shown on Figure 1, this does not imply that GHAD Parcels A, S, or other GHAD-owned parcels

within the Jordan Ranch are subject to interim or ongoing regulatory monitoring or remediation activities. The activity zones are provided to show where the GHAD anticipates different levels of activity within these parcels. As planned, the GHAD-owned parcels within the development would not be included within a conservation easement. As with the remainder of the GHAD-maintained areas, the GHAD will be subject to State and Federal permit requirements within Parcels A and S during mitigation activities.

The GHAD intends to mitigate, prevent, abate or repair landslide or erosion hazards that could directly affect property within the GHAD boundary, as necessary to implement this Plan of Control. The GHAD will also assume open-space management responsibilities that are required for the Jordan Ranch project. These responsibilities will include vegetation management, erosion control, vegetation removal (fire suppression), and selected other maintenance associated with open space.

2.3.1 General Landslide Mitigation

The techniques the District may employ to prevent, mitigate or abate landsliding or adverse erosion damage might include, but are not necessarily limited to:

- 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, rip rap, geotextiles or lined ditches.
- Placement of drained engineered buttress fill.
- Placement of subsurface drainage devices (e.g., underdrains, or horizontal drains).
- Slope correction (e.g., gradient change, biotechnical stabilization, and 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. Maintenance shall be provided for lined surface drainage ditches and drainage terraces.

2.4 BIOTECHNICAL RECOMMENDATIONS FOR PREVENTION AND MITIGATION OF EXISTING OR POTENTIAL EROSION HAZARDS

Fill slopes within the boundaries of the District are expected to be erodible as will cut slopes in bedrock; therefore, the maintenance of vegetative cover is especially important. Vegetation provides a protection on soil and exposed rock. It absorbs the impact of raindrops, reduces the velocity of runoff and retards erosion.

In many instances, adequate erosion protection for slopes can be accomplished with carefully selected and placed biological elements (plants) without the use of structures (e.g., brush layering and willow waddling).

In other areas, biotechnical slope protection may involve the use of mechanical elements or structures in combination with biological elements to provide erosion control and help prevent small-scale slope failures. Locally, walls, welded-wire walls, gabion walls, rock walls, riprap and reinforced earth walls used in combination with carefully selected and planted vegetation can provide high-quality slope protection. The vegetation may be planted on the slope above a low retaining structure or toe wall, or the interstices of the structure can be planted.

2.5 CRITERIA FOR GHAD RESPONSIBILITY

To establish an appropriate GHAD assessment level for the Jordan Ranch portion of the Fallon Village GHAD, it is important to define clearly the limits of the GHAD's responsibilities. The GHAD will accept responsibility for property as described in Exhibit A. However, the intent of this Plan of Control is not to extend the GHAD's responsibilities to every potential situation of slope instability; as such, the following are exclusions from GHAD responsibility.

2.5.1 Isolated or Remote Slope Instability

The GHAD shall not have responsibility to monitor, abate, mitigate or control slope instability that does not involve damage to, or pose a significant threat to damage, site improvements or flood control capacity. As used herein, the term "site improvements" means buildings, roads, sidewalks, utilities, retaining walls, improved trails, swimming pools, geologic stabilization features and drainage features or similar improvements.

2.5.2 Single Property

The GHAD will not prevent, mitigate, abate or control geologic hazards which are limited in area to a single residential parcel of property unless the geologic hazard has damaged, or poses a significant threat of damage to site improvements located on other property within the GHAD boundaries.

2.5.3 Geologic Hazards Resulting From Negligence of Property Owner

The GHAD may, in the general manager's sole discretion, decline to prevent, mitigate, abate or control geologic hazards which occur or result 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.

2.5.4 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 Exhibit E. The GHAD, however, may monitor, abate, mitigate or control slope instability on a parcel of real property which the GHAD has not accepted in accordance with Exhibit E, provided that the GHAD responsibility on such parcel shall be limited to the extent necessary to address damage or a significant threat to damage site improvements on a GHAD-accepted parcel.

2.5.5 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 general 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.

2.5.6 GHAD Funding or Reimbursement for Damaged or Destroyed Structures or Site Improvements

In the event a residence or any other private structure, site improvement or landscape feature is damaged or destroyed as a result of a geologic hazard, the District 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 otherwise authorized by the Board of Directors, the total dollar amount of the District funding or reimbursement paid to all property owners whose property is damaged by a geologic hazard may not exceed ten percent (10%) of the total costs incurred by the District in actually mitigating, abating or controlling the geologic hazard that causes the damage¹. In the event the geologic hazard damages or destroys a structure, site improvement or landscaping which violates any provisions of the City Building Code or City Code at the time of its installation or improvement, the District may decline to provide any funding, or reimbursement to the property owner for repair or replacement of the damaged structure, improvement or landscaping.

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 District \$100,000 to design and install a new retaining wall to abate the slide, the District may only reimburse each property owner \$2,500 of their \$10,000 in structural damage.

2.5.7 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 investigation conducted by the GHAD.

2.6 PRIORITY FOR DISTRICT-FUNDED REPAIRS

Emergency response and scheduled repair expenditures are to be prioritized by the General Manager, utilizing its discretion, based upon available funds, a prudent reserve and the approved operating budget.

Should available funds not be sufficient to undertake all of the identified remedial and preventive stabilization measures, the expenditures shall be prioritized as follows in descending order of priority:

- A. The prevention, mitigation, abatement or control of geologic hazards that have either damaged or pose a significant threat of damage to residences, critical underground utilities or paved streets.
- B. The prevention, mitigation, abatement or control of geologic hazards that have either damaged or pose a significant threat of damage to private recreation facilities (e.g., pools, spas, etc.).
- C. The prevention, mitigation, abatement or control of geologic hazards that have either damaged or pose a significant threat of damage limited to loss of landscaping or other similar non-essential amenities.
- D. The prevention, mitigation, abatement or control of geologic hazards existing entirely on open-space property and which have neither damaged nor pose a significant threat of damage to any site improvements.

2.7 MAINTENANCE AND MONITORING SCHEDULE

Geologic features and District-maintained facilities should be inspected on a regular basis. Budget permitting, inspections should generally be scheduled to occur two times per year in normal years and three or more times per year in years of heavy rainfall. The inspections should be scheduled to take place in the fall, prior to the first significant rainfall; mid-winter as necessary during heavy rainfall years; and in spring at the end of the rainy season. It is anticipated that the monitoring events for the Jordan Ranch development and the Fallon Village development within the Fallon Village GHAD would be completed on the same schedule.

- A District Engineer and/or Geologist should inspect the lined surface of concrete-lined drainage ditches within the District boundaries on a regular schedule. Repairs and maintenance should be performed as needed. Excess silt or sediment in ditches should be removed and cracked or broken ditches should be patched or repaired as required before the beginning of the next rainy season.
- Several types of debris catchment structures are planned. Repairs and maintenance should be performed on a regular schedule. Excess debris should be removed to allow the structures to maintain adequate catchment area.
- Subsurface drain outlets and horizontal drain outlets, if any, should be inspected on a regular schedule. Water flowing from these outlets should be measured and recorded during each inspection. Any suspicious interruption in flow should signal a need to unplug or clean by flushing the affected drain.
- If installed, piezometers used to measure groundwater levels, or other instruments such as inclinometers and tiltmeters, should be monitored on a regular schedule.
- Settlement-monitoring devices, if any, should be monitored on a regular schedule. In the event of anomalous readings or excessive settlement, the monitoring frequency should be increased.
- Inlets, outfalls or trash racks, if used, must be kept free of debris, and spillways must be maintained. Attention should be given to plantings or other obstructions, which may interfere with access by power equipment.
- The water-quality basin facilities should be monitored and maintained in accordance with the Operations and Maintenance Manual for Water Quality Basin at Jordan Ranch.

The District should review its inspection schedule annually and assess the effectiveness of its preventive maintenance program on a regular basis. District staff should prepare an annual report to the Board of Directors with recommendations for maintenance and/or repair projects. Consultants, as necessary, may be retained to undertake the needed studies. The District Engineer and/or Engineering Geologist retained by the District shall prepare an annual inspection report for presentation to the District Board of Directors.

3.0 GLOSSARY

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

Geological Hazard Abatement District (GHAD) Manager – An entity employing a licensed Geotechnical Engineer who will oversee the operations of the GHAD including preparation of GHAD budgets. The GHAD Manager is hired by and reports to the GHAD Board of Directors.

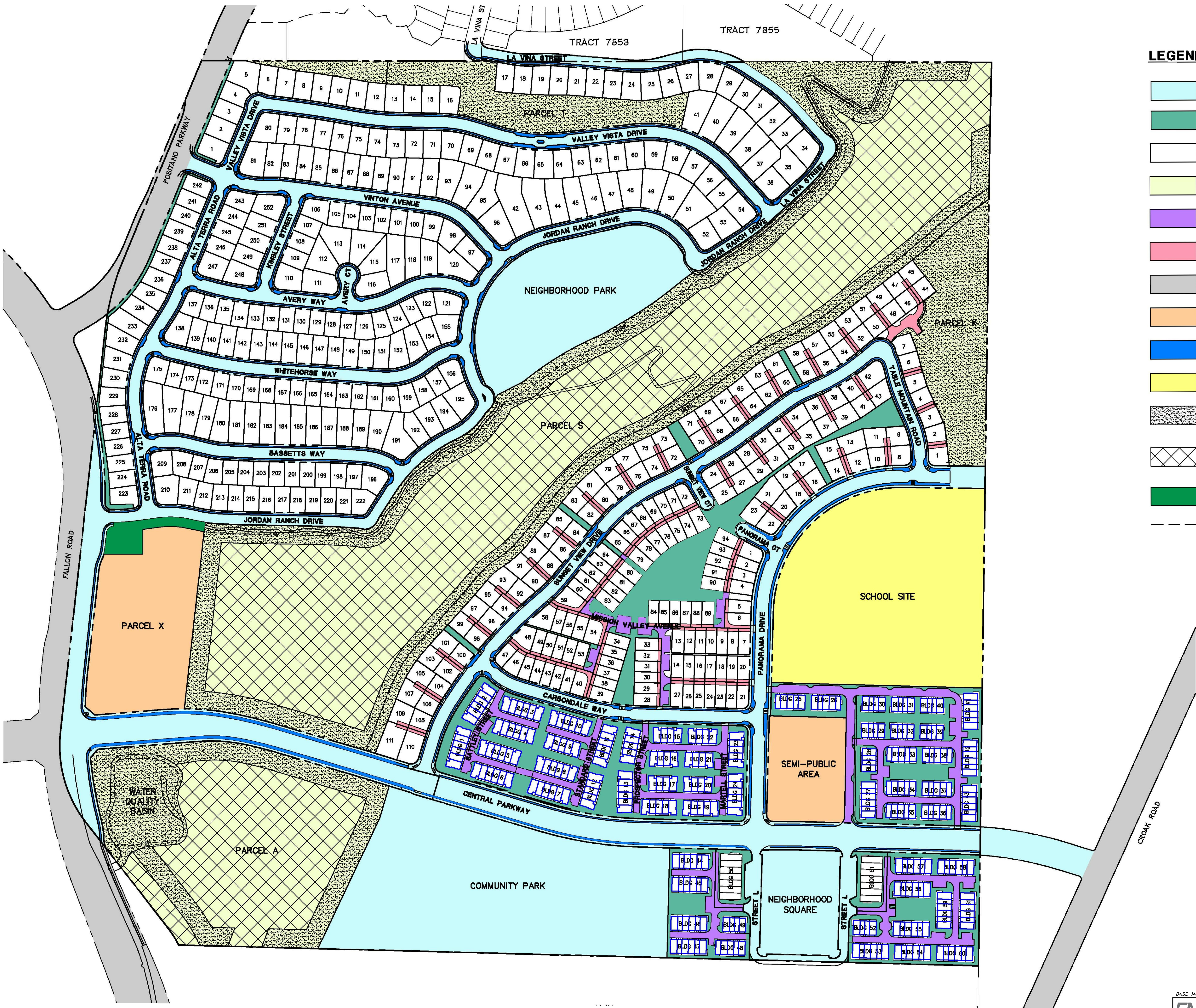
4.0 RIGHT-OF-ENTRY

District officers, employees, consultants, contractors, agents, and representatives shall have the right to enter upon all lands within the District boundary, as shown on Exhibit B, for the purpose of performing the activities described in the Jordan Ranch GHAD Plan of Control. Should the District need to access parcels owned by the Homeowner's Association or private residential lots to fulfill its duties under the Plan of Control, the District 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 District shall inform the landowner and/or resident as soon as reasonably possible.

The owner or owners of property within the Jordan Ranch development shall record a Declaration of Restrictive Covenants, Right of Entry and Disclosures Regarding Geologic Hazard Abatement District ("Declaration") after recordation of the Parcel Map, in the form attached as Appendix F. The Declaration creates covenants that run with the land and will be binding upon all future owners of property within the Jordan Ranch development, their successors and assigns.

REFERENCES

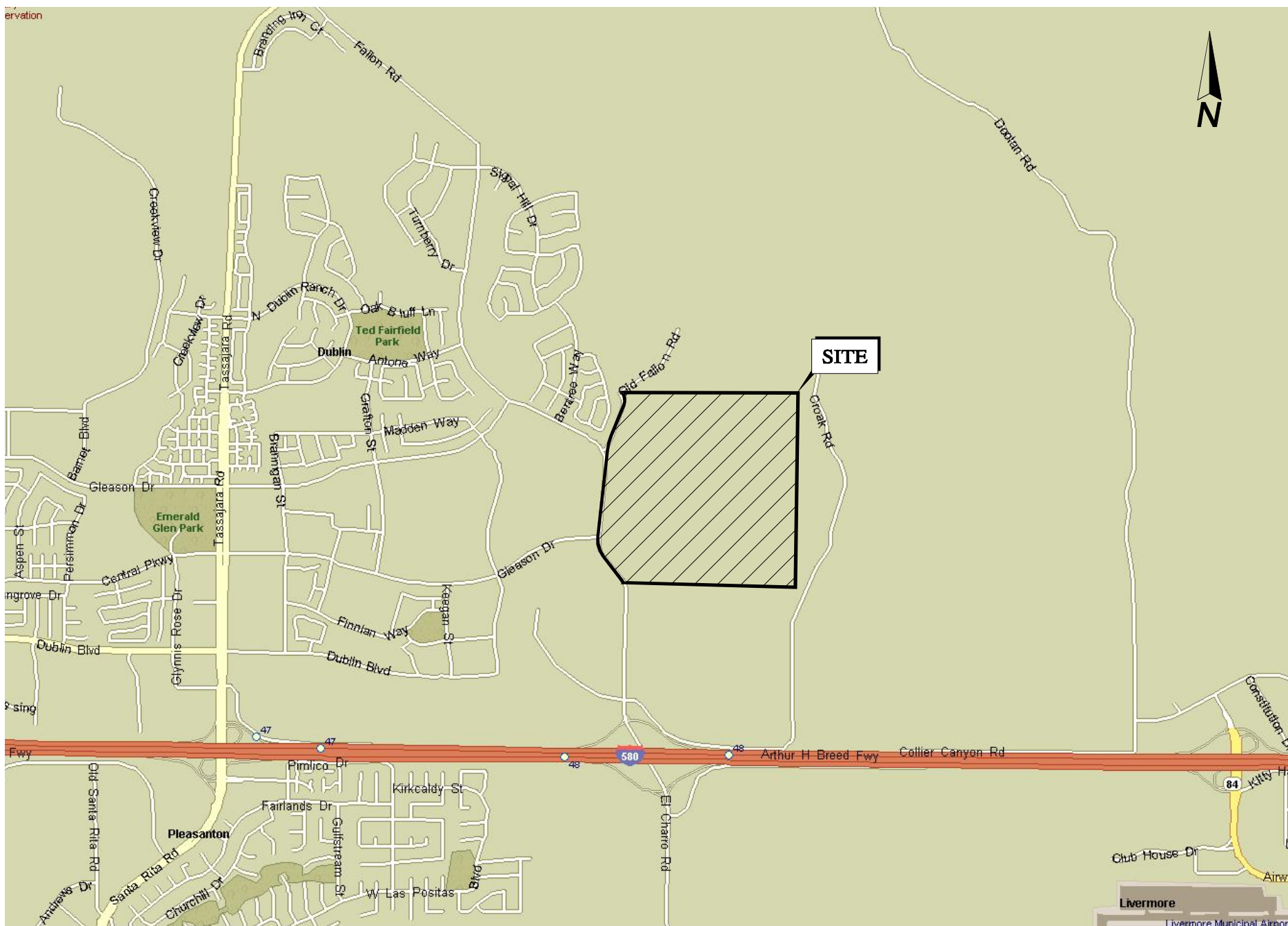
- Reference 1: Berlogar Geotechnical Consultants, Geotechnical Investigation, Jordan Ranch, Dublin California, Job Number 3113.000, July 13, 2009.
- Reference 2: ENGEO; Geotechnical Recommendations Report, Jordan Ranch, Tract 8024, Dublin, California; Project Number 2978.000.000, August 17, 2010.
- Reference 3: Ruggeri-Jensen-Azar Engineers, Vesting Tentative Map, Jordan Ranch, Dublin California, Job Number 081001, June 23, 2010.



LEGEND:

- OWNED AND MAINTAINED BY THE CITY OF DUBLIN
- LANDSCAPING - OWNED AND MAINTAINED BY HOMEOWNER'S ASSOCIATION (HOA)
- PRIVATELY OWNED AND MAINTAINED
- GHAD (GEOLOGICAL HAZARD ABATEMENT DISTRICT)
- PRIVATE DRIVEWAY - OWNED & MAINTAINED BY HOA
- PRIVATE DRIVEWAY - OWNED BY INDIVIDUAL PROPERTY OWNER & MAINTAINED BY HOA
- EXISTING PUBLIC STREET
- RETAINED BY OWNER FOR FUTURE DEVELOPMENT
- LANDSCAPING - OWNED BY CITY, MAINTAINED BY HOA
- OWNED & MAINTAINED BY DUBLIN UNIFIED SCHOOL DISTRICT
- OPEN SPACE-ACTIVE ACTIVITY ZONE-
APPROXIMATE LIMIT OF SCHEDULED GHAD OPEN SPACE
ACTIVITIES THAT MAY INCLUDE TRAIL MAINTENANCE AND/OR FIRE
BUFFER ZONE VEGETATION MANAGEMENT
- OPEN SPACE-INTERMITTENT ACTIVITY ZONE-
APPROXIMATE LIMIT OF INTERMITTENT GHAD OPEN SPACE
ACTIVITIES INCLUDING MITIGATION OF LANDSLIDES,
EROSION OR THREAT THEREOF
- PRIVATELY OWNED AND CITY MAINTAINED
- EASEMENT LINE

GEOTECHNICAL CORRECTIVE GRADING PLANS
PHASE 1, JORDAN RANCH
DUBLIN, CALIFORNIA



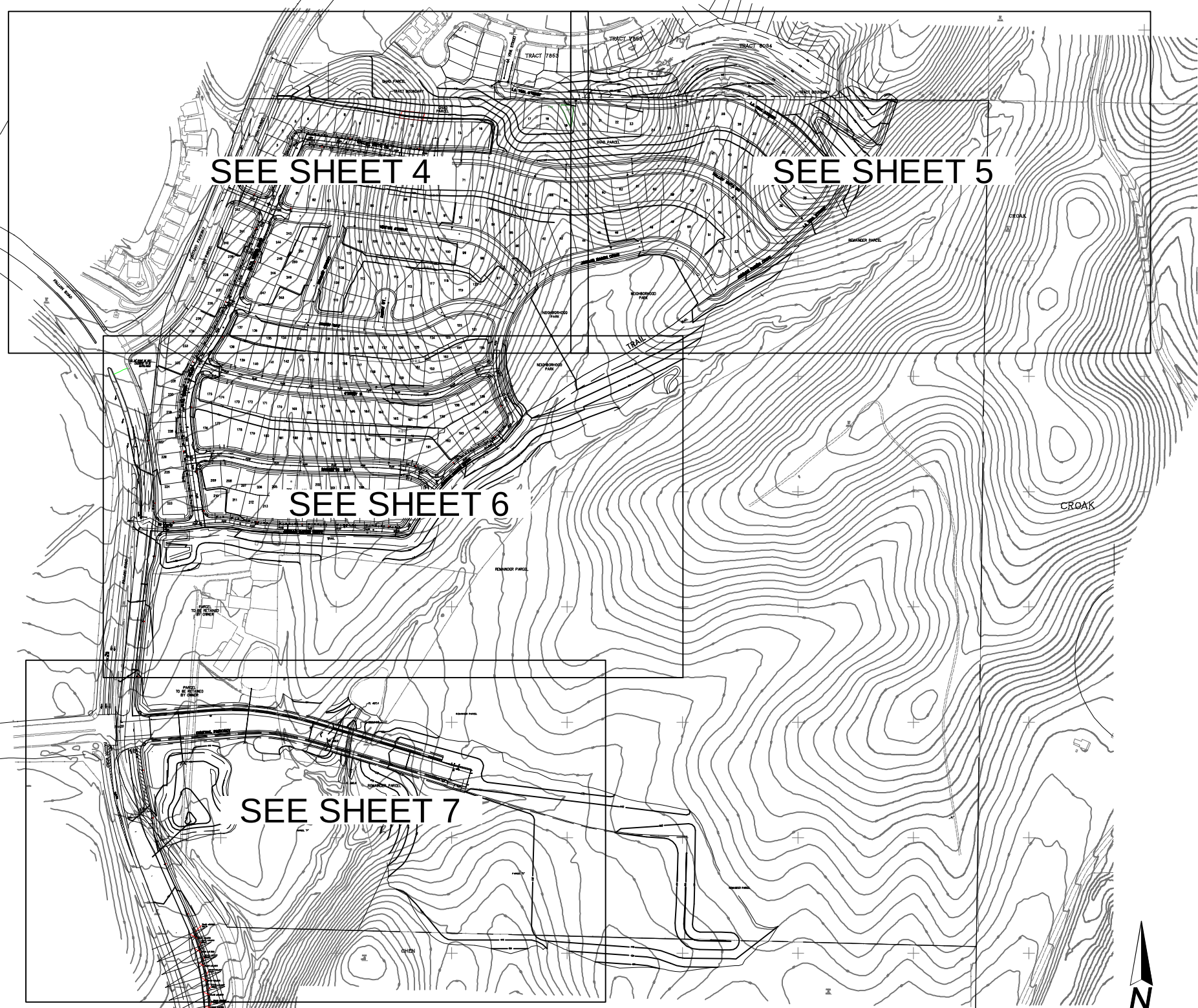
VICINITY MAP
NO SCALE

SHEET INDEX

SHEET NUMBER	TITLE
3	COVER SHEET
4	CORRECTIVE GRADING PLAN
5	CORRECTIVE GRADING PLAN
6	CORRECTIVE GRADING PLAN
7	CORRECTIVE GRADING PLAN
8	DETAILS

EXPLANATION

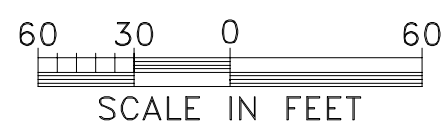
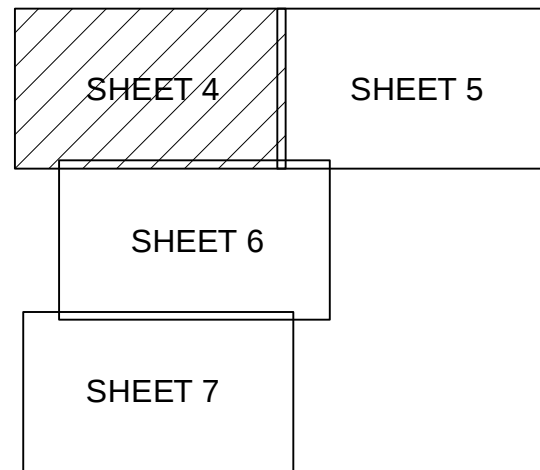
- K-12** APPROXIMATE LOCATION OF PROPOSED KEYWAY
- SK-1** PROPOSED PERFORATED SUBDRAIN PIPE
- SW-1** PROPOSED SOLID SUBDRAIN DISCHARGE PIPE
- PROPOSED SUBDRAIN RISER
- C CUT LOT (OVEREXCAVATE 3 FEET BELOW PAD GRADE AND REPLACE WITH ENGINEERED FILL)
- T CUT/FILL TRANSITION LOT (OVEREXCAVATE AND REWORK UPPER 3 FEET BELOW PAD GRADE AS ENGINEERED FILL)
- 563** LOT SUBEXCAVATION WITH ELEVATION
- APPROXIMATE LOCATION OF POSSIBLE SLOPE REBUILD AREA TO MITIGATE ADVERSE BEDDING, CUT SLOPE TO BE MAPPED BY PROJECT GEOLOGIST
- R-2** APPROXIMATE LOCATION OF PROPOSED COLLUVIUM REMOVAL
- RB-1** APPROXIMATE LOCATION OF PROPOSED SLOPE REBUILD AREA, REBUILD SLOPE WITH SELECT FILL OR GEOGRID REINFORCEMENT AS DESCRIBED IN ENGEO LETTER DATED 08/17/10
- APPROXIMATE LOCATION OF PROPOSED SETTLEMENT MARKER
- U APPROXIMATE CUT/FILL TRANSITION LINE
- B-18 APPROXIMATE LOCATION OF BORING (BGC, 2009)
- APPROXIMATE LOCATION OF BORING (NORTHGATE, 2005)
- B-5 APPROXIMATE LOCATION OF BORING (BGC, 2001)
- B1-31 APPROXIMATE LOCATION OF BORING (BGC, 1999c)
- TP2-122 APPROXIMATE LOCATION OF TEST PIT (BGC, 2009)
- TP-11 APPROXIMATE LOCATION OF TEST PIT (BGC, 1998)
- APPROXIMATE LOCATION OF TEST PIT (BGC, 1999a, b, c)
- — — GEOLOGIC CONTACT, DASHED WHERE APPROXIMATE, QUERIED WHERE UNCERTAIN (BGC, 2009)
- Qaf ARTIFICIAL FILL (NOT ENGINEERED)
- Qaf₁ ARTIFICIAL FILL (ENGINEERED)
- Qc COLLUVIUM, WHERE THICKER THAN 5-1/2 TO 6 FEET
- Qoa OLDER ALLUVIUM
- QTt TASSAJARA FORMATION
- 50 STRIKE AND DIP OF BEDDING
- 880 STRIKE AND DIP OF OVERTURNED BEDDING
- 80 STRIKE AND DIP OF JOINTS
- VERTICAL BEDDING
- 28 DEPTH OF GROUNDWATER IN FEET AT TIME OF SUBSURFACE EXPLORATION



SITE PLAN AND SHEET LAYOUT
NO SCALE

				 2010 CROW CANYON PLACE SUITE 250 SAN RAMON, CALIFORNIA 94583 (925) 866-9000 FAX (888) 279-2698 SAN RAMON • SAN JOSE • SAN FRANCISCO • ROCKLIN • RIPON		DESIGNED BY: RPS DRAWN BY: DLB CHECKED BY: DATE: JULY 2010 SCALE: AS SHOWN		COVER SHEET JORDAN RANCH DUBLIN, CALIFORNIA				SHEET NUMBER 3 OF 8 SHEETS PROJECT NO. 7828.000.000	
2	12-1-2010	UPDATE K-1A, K-7, RB-3,		JMG									
1	10-14-10	UPDATE PER REVISED GRADING PLAN		BB									
REV.	DATE	DESCRIPTION		BY									

NOTE:
GRADING FOR RB-1 SLOPE REBUILD SHOULD PROCEED STARTING AT TOP OF SLOPE, AND EXCAVATION ACTIVITIES SHOULD PAUSE ONCE A MAXIMUM 12-FOOT VERTICAL BACKCUT HAS BEEN EXPOSED. THE GEOLOGIC CONDITIONS OF THIS SLOPE REBUILD BACKCUT WILL BE THEN MAPPED BY AN ENGeo CERTIFIED ENGINEERING GEOLOGIST PRIOR TO EITHER ADDITIONAL STAGED EXCAVATION OR COMPLETION OF THE EXCAVATION.



REV.	DATE	DESCRIPTION	BY
2	12-1-2010	UPDATE K-1A, K-7, RB-3,	JMG
1	10-14-10	UPDATE PER REVISED GRADING PLAN	BB

ENGEO
Expect Excellence

2010 CROW CANYON PLACE
SUITE 250
SAN RAMON, CALIFORNIA 94583
(925) 866-9000
FAX (888) 279-2698

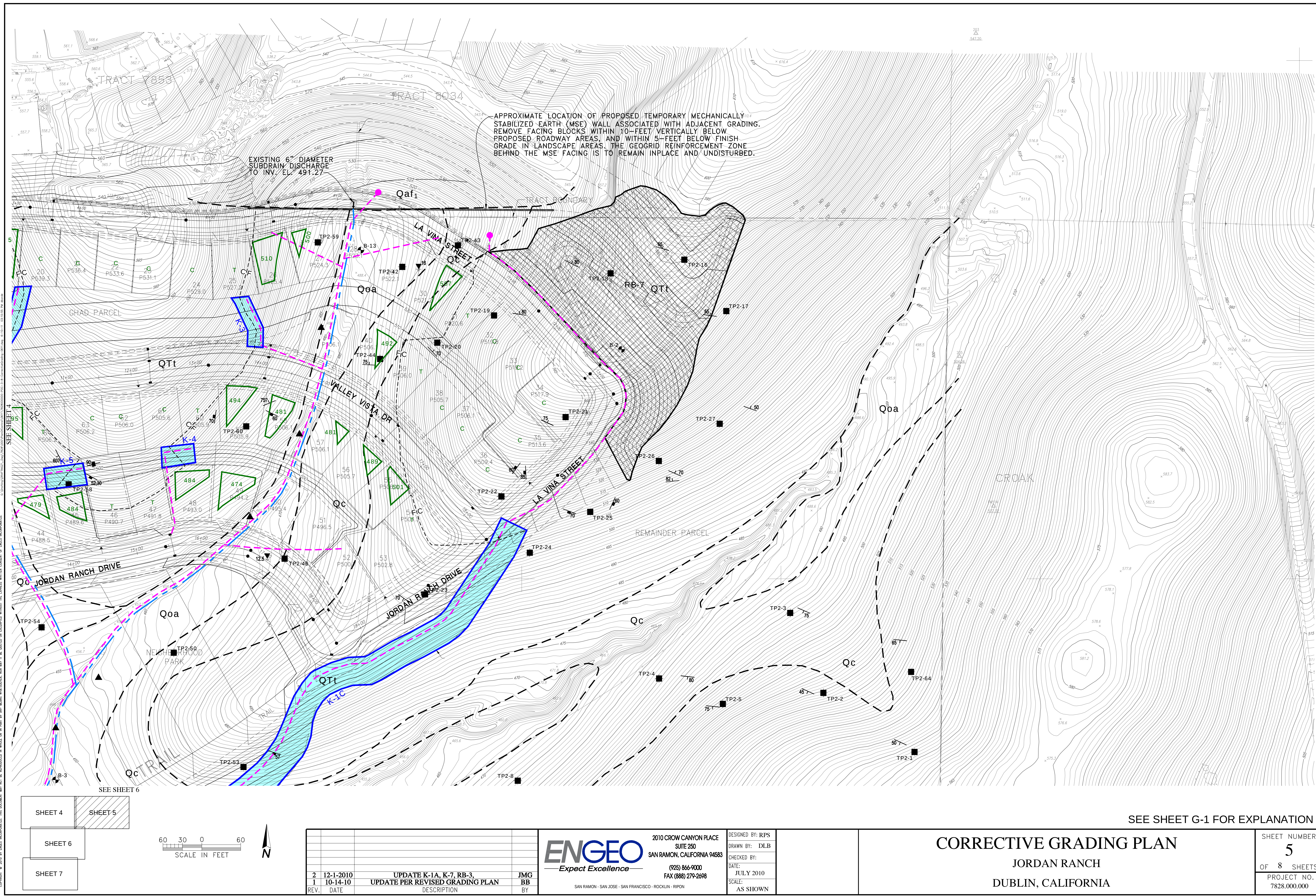
SAN RAMON · SAN JOSE · SAN FRANCISCO · ROCKLIN · RIPON

DESIGNED BY: RPS
DRAWN BY: DLB
CHECKED BY:
DATE: JULY 2010
SCALE: AS SHOWN

CORRECTIVE GRADING PLAN
JORDAN RANCH
DUBLIN, CALIFORNIA

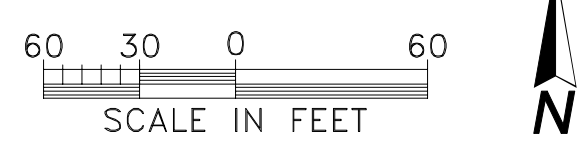
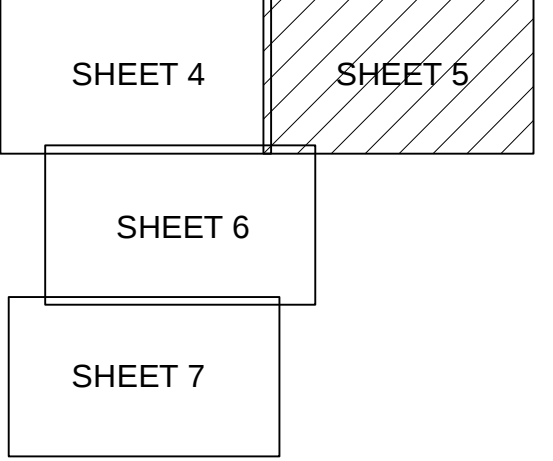
SEE SHEET G-1 FOR EXPLANATION

SHEET NUMBER
4
OF 8 SHEETS
PROJECT NO. 7828.000.000



APPROXIMATE LOCATION OF PROPOSED TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALL ASSOCIATED WITH ADJACENT GRADING. REMOVE FACING BLOCKS WITHIN 10- FEET VERTICALLY BELOW PROPOSED ROADWAY AREAS, AND WITHIN 5- FEET BELOW FINISH GRADE IN LANDSCAPE AREAS. THE GEOGRID REINFORCEMENT ZONE BEHIND THE MSE FACING IS TO REMAIN INPLACE AND UNDISTURBED.

EXISTING 6" DIAMETER SUBDRAIN DISCHARGE TO INV. EL. 491.27



2	12-1-2010	UPDATE K-1A, K-7, RB-3,	JMG
1	10-14-10	UPDATE PER REVISED GRADING PLAN	BB
REV.	DATE	DESCRIPTION	BY

ENGEO
Expect Excellence

2010 CROW CANYON PLACE
SUITE 250
SAN RAMON, CALIFORNIA 94583
(925) 866-9000
FAX (888) 279-2698

SAN RAMON · SAN JOSE · SAN FRANCISCO · ROCKLIN · RIPON

DESIGNED BY: RPS
DRAWN BY: DLB
CHECKED BY:
DATE: JULY 2010
SCALE: AS SHOWN

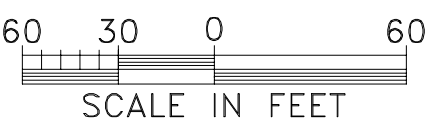
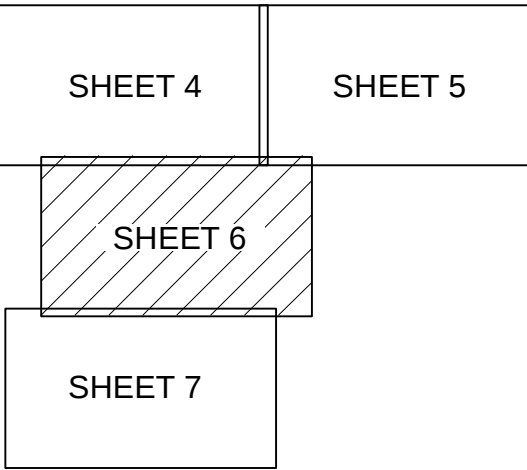
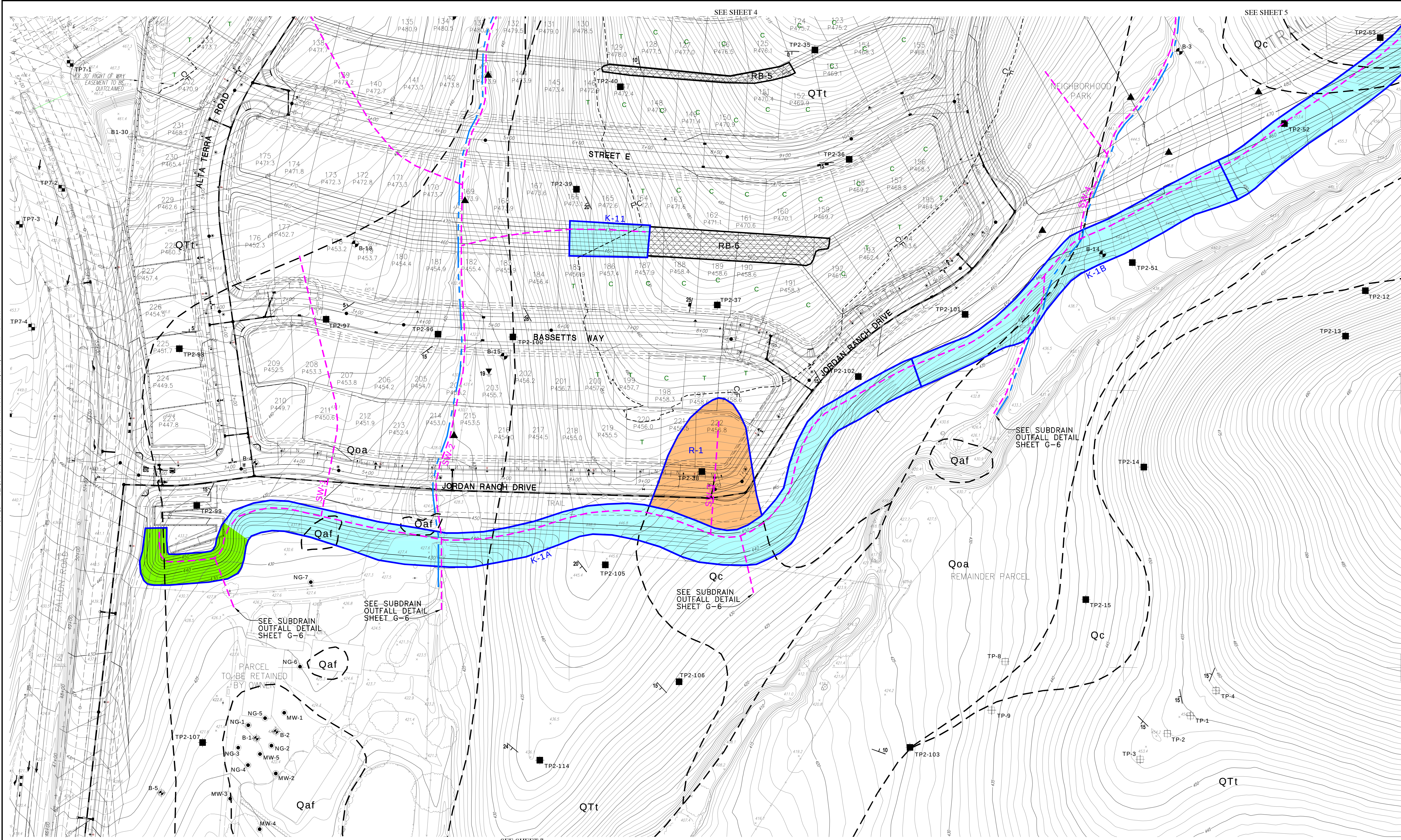
CORRECTIVE GRADING PLAN

JORDAN RANCH

DUBLIN, CALIFORNIA

SEE SHEET G-1 FOR EXPLANATION

SHEET NUMBER
5
OF 8 SHEETS
PROJECT NO.
7828.000.000



REV.	DATE	DESCRIPTION	BY
2	12-1-2010	UPDATE K-1A, K-7, RB-3,	JMG
1	10-14-10	UPDATE PER REVISED GRADING PLAN	BB

2010 CROW CANYON PLACE
SUITE 250
SAN RAMON, CALIFORNIA 94583
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DESIGNED BY: RPS
DRAWN BY: DLB
CHECKED BY:
DATE: JULY 2010
SCALE: AS SHOWN

CORRECTIVE GRADING PLAN

JORDAN RANCH
DUBLIN, CALIFORNIA

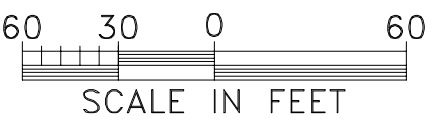
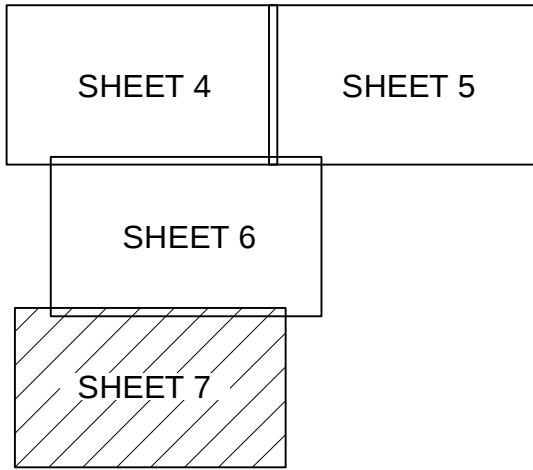
SEE SHEET G-1 FOR EXPLANATION

SHEET NUMBER
6
OF 8 SHEETS
PROJECT NO. 7828.000.000



SEE SHEET 6

SEE SHEET G-1 FOR EXPLANATION



2	12-1-2010	UPDATE K-1A, K-7, RB-3,	JMG
1	10-14-10	UPDATE PER REVISED GRADING PLAN	BB
REV.	DATE	DESCRIPTION	BY



2010 CROW CANYON PLACE
SUITE 250
SAN RAMON, CALIFORNIA 94583
(925) 866-9000
FAX (888) 279-2698

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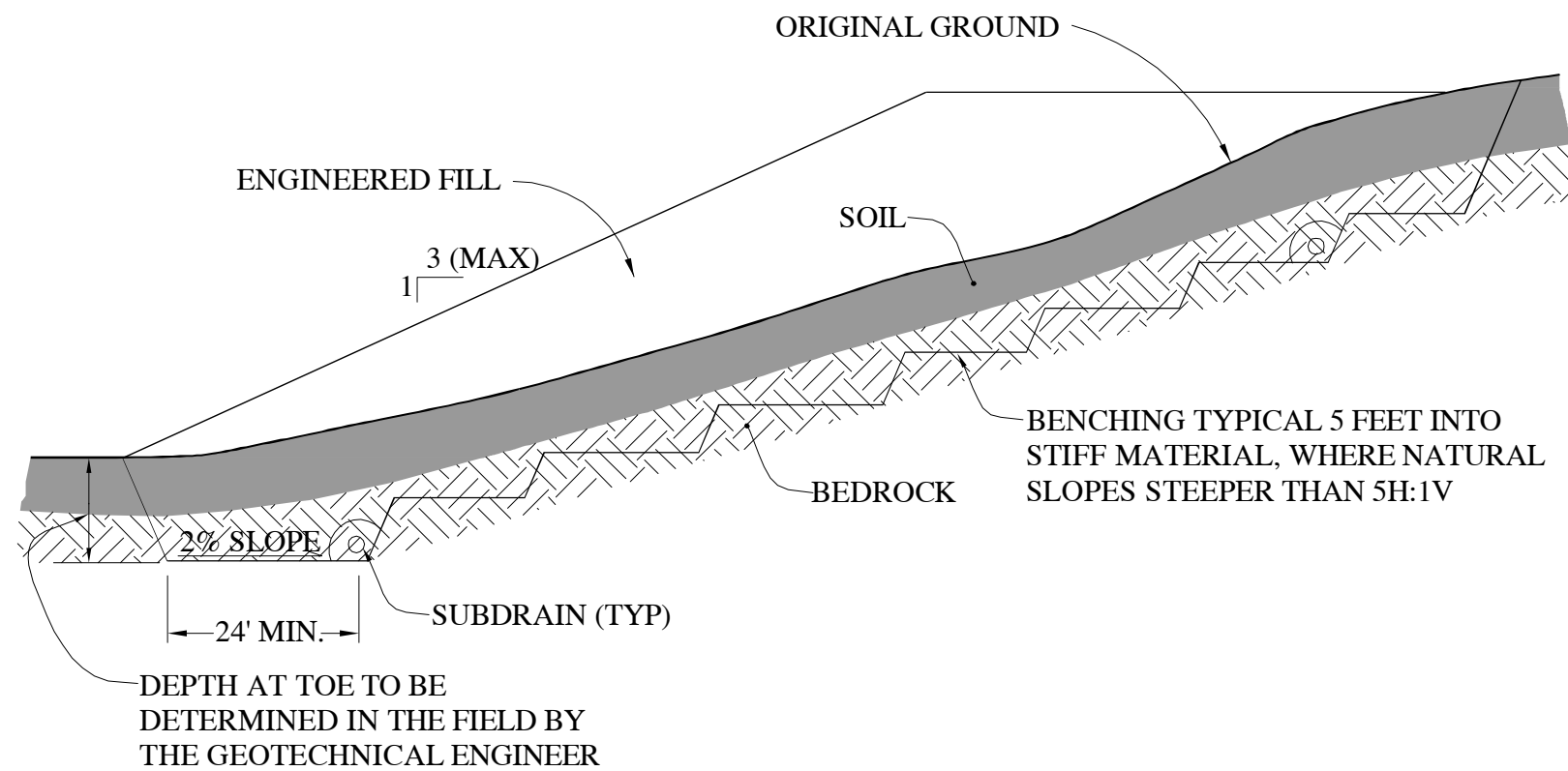
DESIGNED BY: RPS
DRAWN BY: DLB
CHECKED BY:
DATE: JULY 2010
SCALE: AS SHOWN

CORRECTIVE GRADING PLAN
JORDAN RANCH
DUBLIN, CALIFORNIA

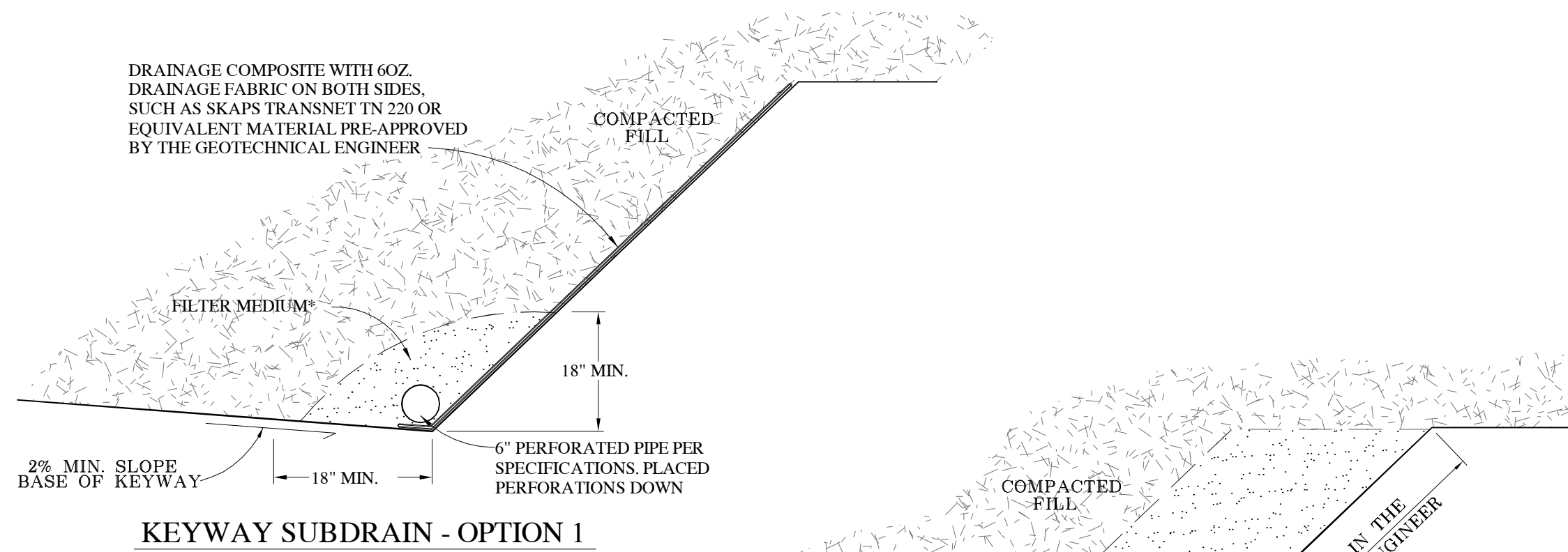
SHEET NUMBER
7
OF 8 SHEETS
PROJECT NO. 7828.000.000

KEYWAY DIMENSIONS		
KEYWAY NO.	MINIMUM BASE WIDTH (FEET)	ESTIMATED MAXIMUM DEPTH (FEET)
K-1A	18	6
K-1B	18	18
K-1C	18	6
K-3 THRU K-11	18	4
K-12	18	10
K-12A	18	30

NOTE:
ALL KEYWAYS TO BE BUILT WITH ENGINEERED FILL CONSISTING OF SILTSTONE AND SANDSTONE BEDROCK DERIVED MATERIAL



TYPICAL KEYWAY DETAIL
NO SCALE



*FILTER MEDIUM

ALTERNATIVE A

CLASS 2 PERMEABLE MATERIAL

MATERIAL SHALL CONSIST OF CLEAN, COARSE SAND AND GRAVEL OR CRUSHED STONE, CONFORMING TO THE FOLLOWING GRADING REQUIREMENTS:

SIEVE SIZE	% PASSING SIEVE
3/4"	100
3/8"	90-100
#4	40-100
#5	25-40
#10	18-33
#20	5-15
#50	0-7
#200	0-3

ALTERNATIVE B

CLEAN CRUSHED ROCK OR GRAVEL WRAPPED IN FILTER FABRIC

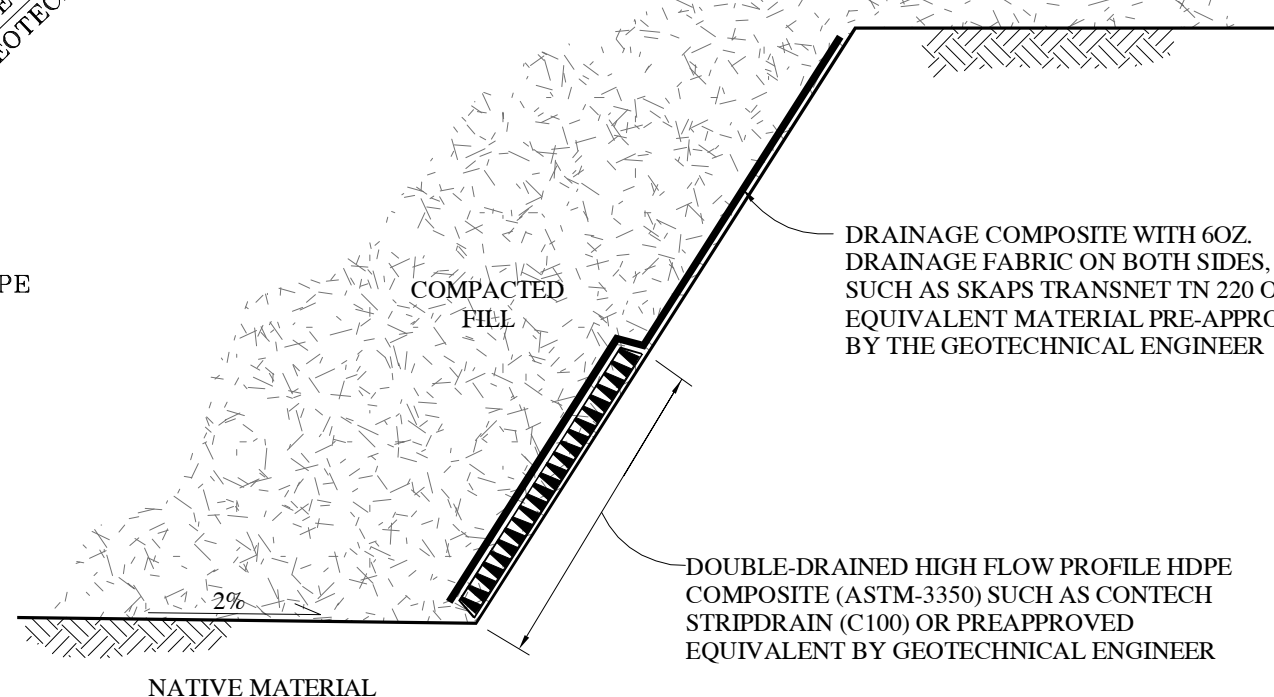
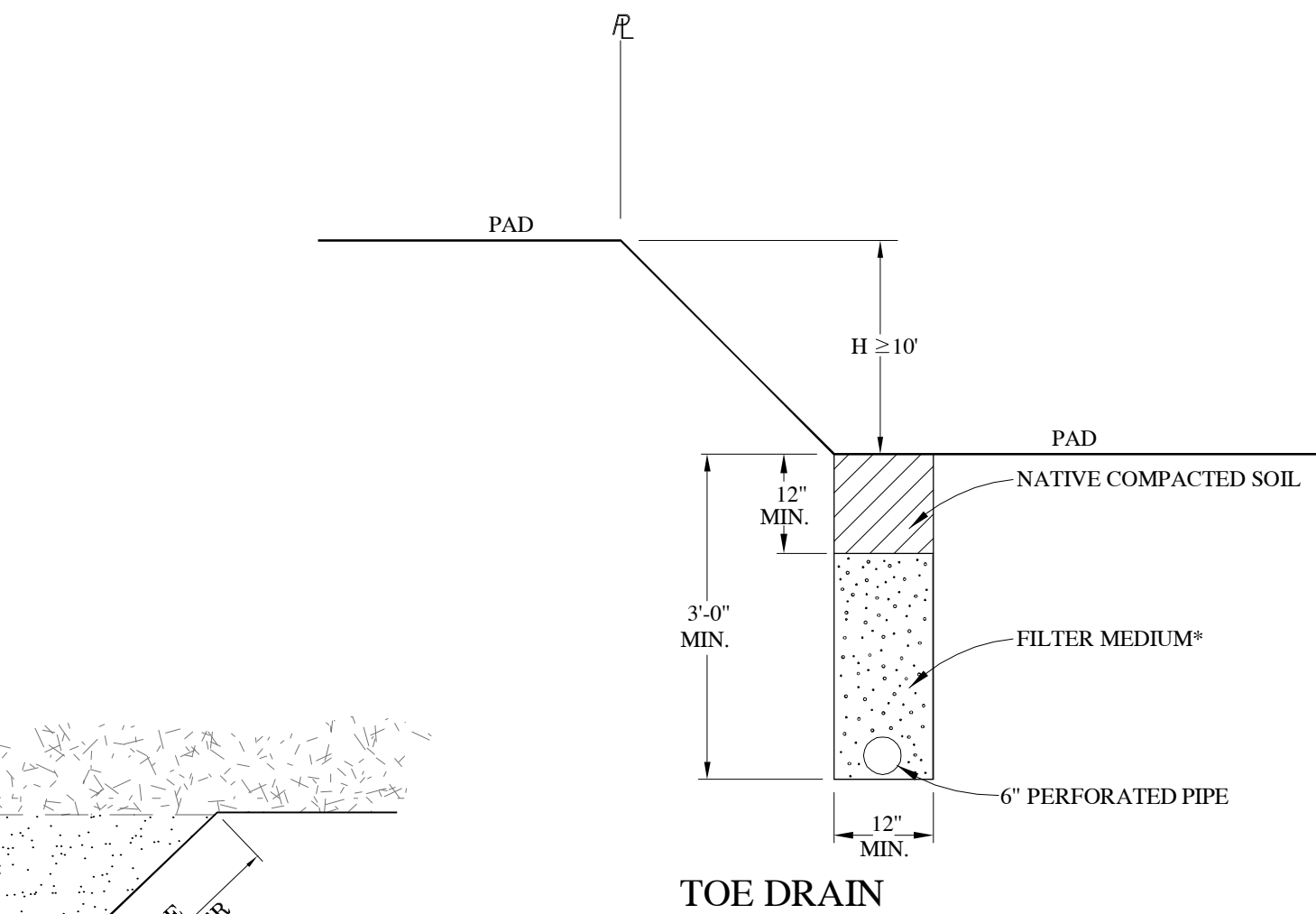
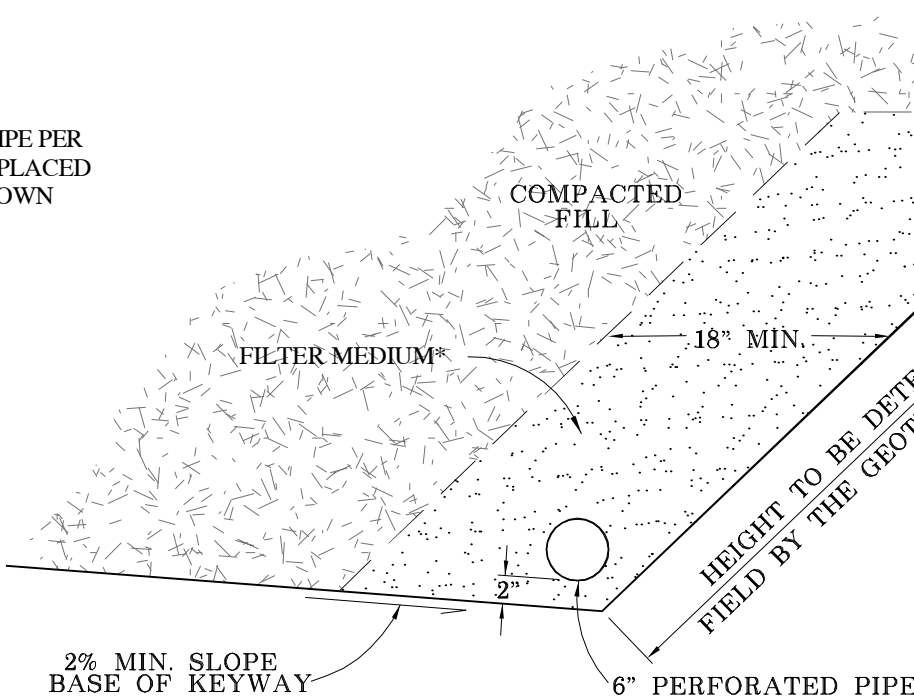
ALL FILTER FABRIC SHALL MEET THE FOLLOWING MINIMUM AVERAGE ROLL VALUES UNLESS OTHERWISE SPECIFIED BY ENGEO:

GRAB STRENGTH (ASTM D-4632)	180 lbs
MASS PER UNIT AREA (ASTM D-4751)	6 oz/yd ²
APPARENT OPENING SIZE (ASTM D-4751)	70-100 U.S. STD. SIEVE
FLOW RATE (ASTM D-4491)	80 gal/min/ft
PUNCTURE STRENGTH (ASTM D-4833)	80 lbs

NOTES:

1. ALL PIPE JOINTS SHALL BE GLUED
2. ALL PERFORATED PIPE PLACED PERFORATIONS DOWN
3. 1% FALL (MINIMUM) ON ALL TRENCHES AND DRAIN LINES

KEYWAY SUBDRAIN - OPTION 2



ALTERNATE KEYWAY SUBDRAIN - OPTION 3
(FOR DEPTHS LESS THAN 30 FEET)

GEOGRID REINFORCED SLOPE RECOMMENDATIONS

1. FOR 2:1 SLOPES USE TENSAR BX1200, 3-FOOT VERTICAL SPACING, GRID LENGTH 13 FEET MINIMUM, START FIRST GRID LAYER 1 FOOT BELOW TOE ELEVATION.

2. WHERE THE GEOGRID REINFORCED SLOPE EXTEND UP TO PAD GRADE OR STREET AREAS, THE UPPERMOST GEOGRID LAYER SHOULD BE PLACED AT LEAST 3 FEET BELOW FINISH PAD GRADE AND SHOULD BE APPROXIMATELY 7 FEET LONG AND THE UPPER SECOND LAYER OF GEOGRID SHOULD BE NO LONGER THAN 13 FEET.

SUBDRAIN PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH ONE OF THE FOLLOWING REQUIREMENTS:

DESIGN DEPTHS LESS THAN 30 FEET

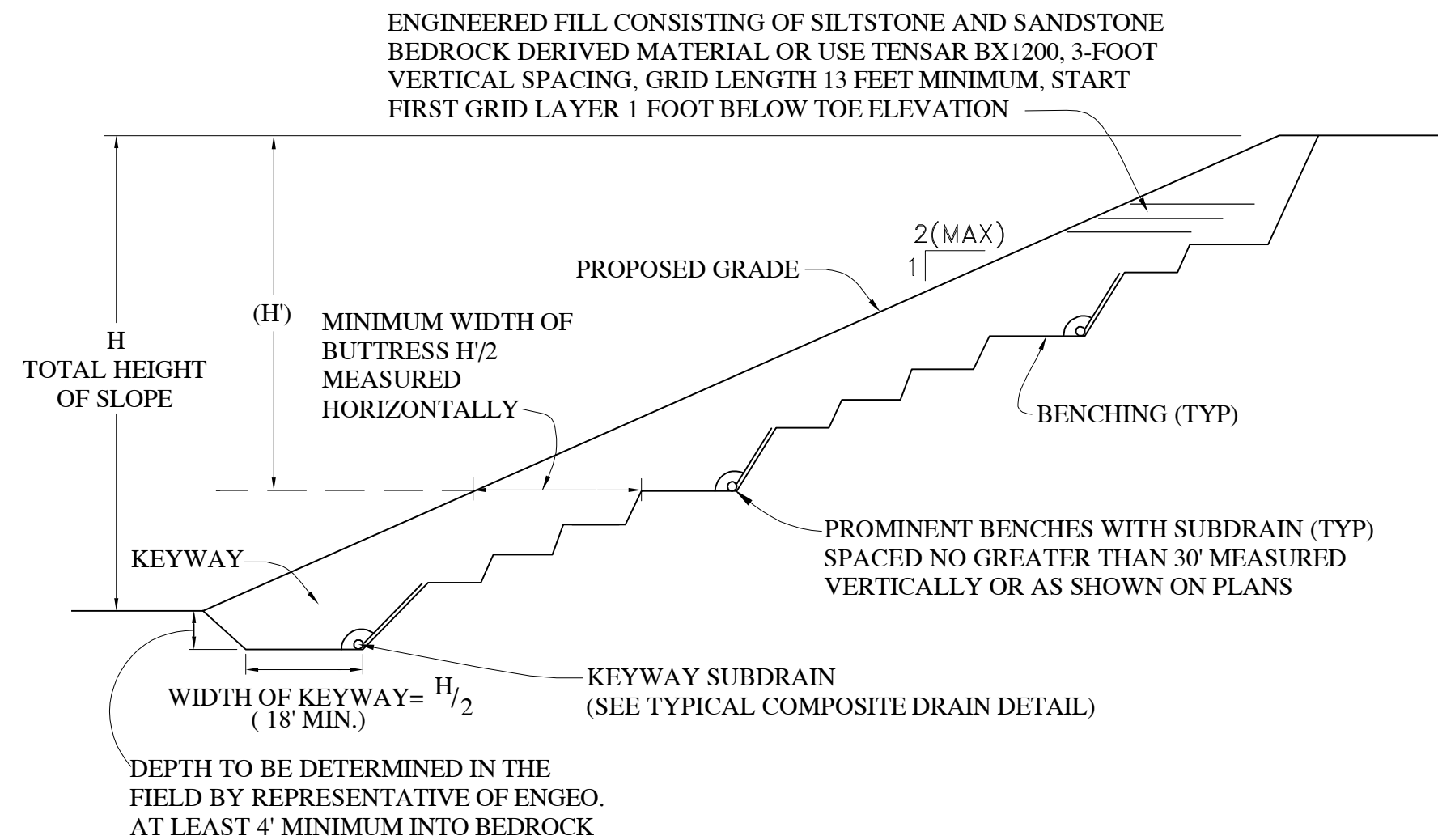
- PERFORATED ABS SOLID WALL SDR 35 (ASTM D-2751)
- PERFORATED PVC SOLID WALL SDR 35 (ASTM D-3034)
- PERFORATED PVC A-2000 (ASTM F949)
- PERFORATED CORRUGATED HDPE DOUBLE-WALL (AASHTO M-252 OR M-294, CALTRANS TYPE S, 50 PSI MINIMUM STIFFNESS)

DESIGN DEPTHS LESS THAN 50 FEET

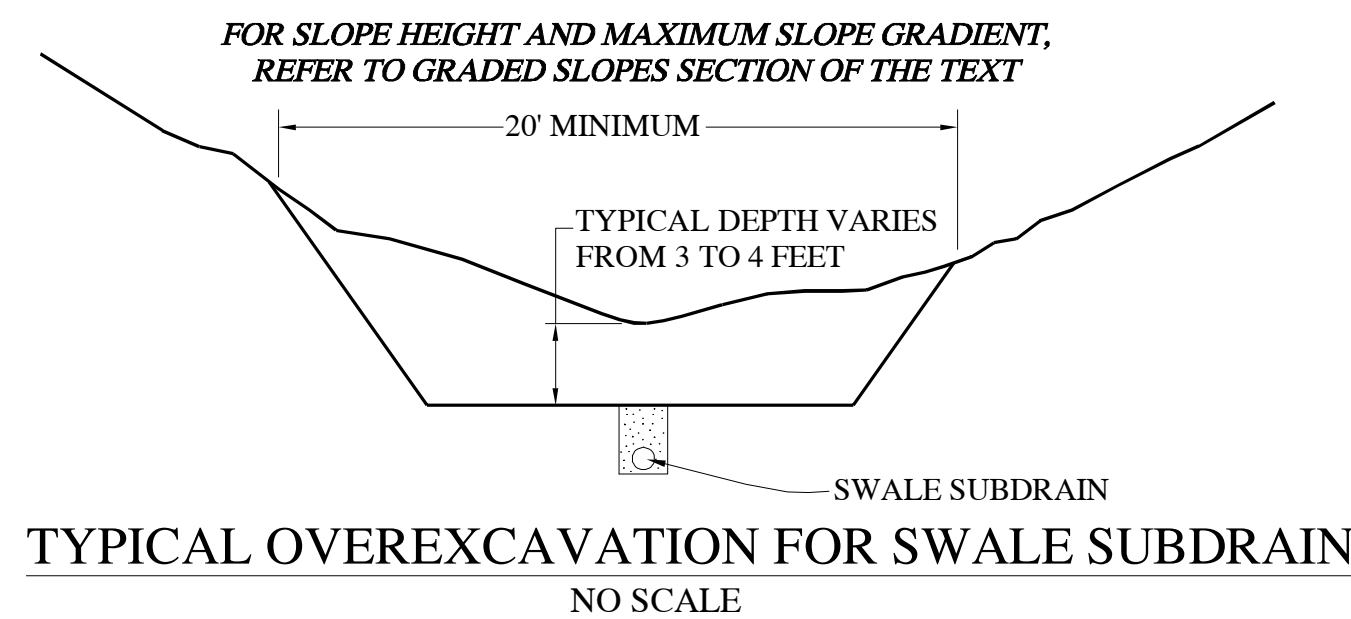
- PERFORATED PVC SDR 23.5 SOLID WALL (ASTM D-3034)
- PERFORATED SCH. 40 PVC SOLID WALL (ASTM-1785)
- PERFORATED ABS SDR 23.5 SOLID WALL (ASTM D-2751)
- PERFORATED ABS DWV/SCH. 40 (ASTM D-2661 AND D-1527)
- PERFORATED CORRUGATED HDPE DOUBLE-WALL (AASHTO M-252 OR M-294, CALTRANS TYPE S, 70 PSI MINIMUM STIFFNESS)

DESIGN DEPTHS LESS THAN 70 FEET

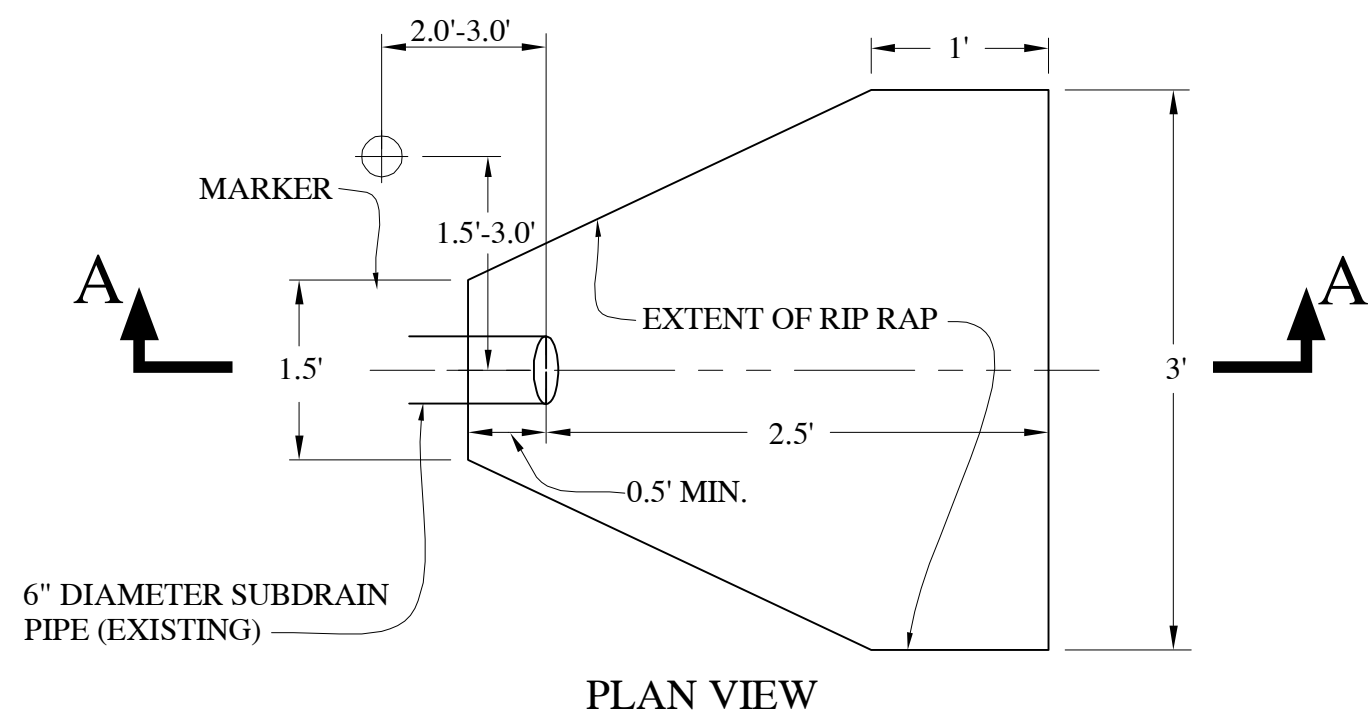
- PERFORATED ABS SOLID WALL SDR 15.3 (ASTM D-2751)
- PERFORATED SCH. 80 PVC (ASTM D-1785)
- PERFORATED CORRUGATED ALUMINUM (ASTM B-745)



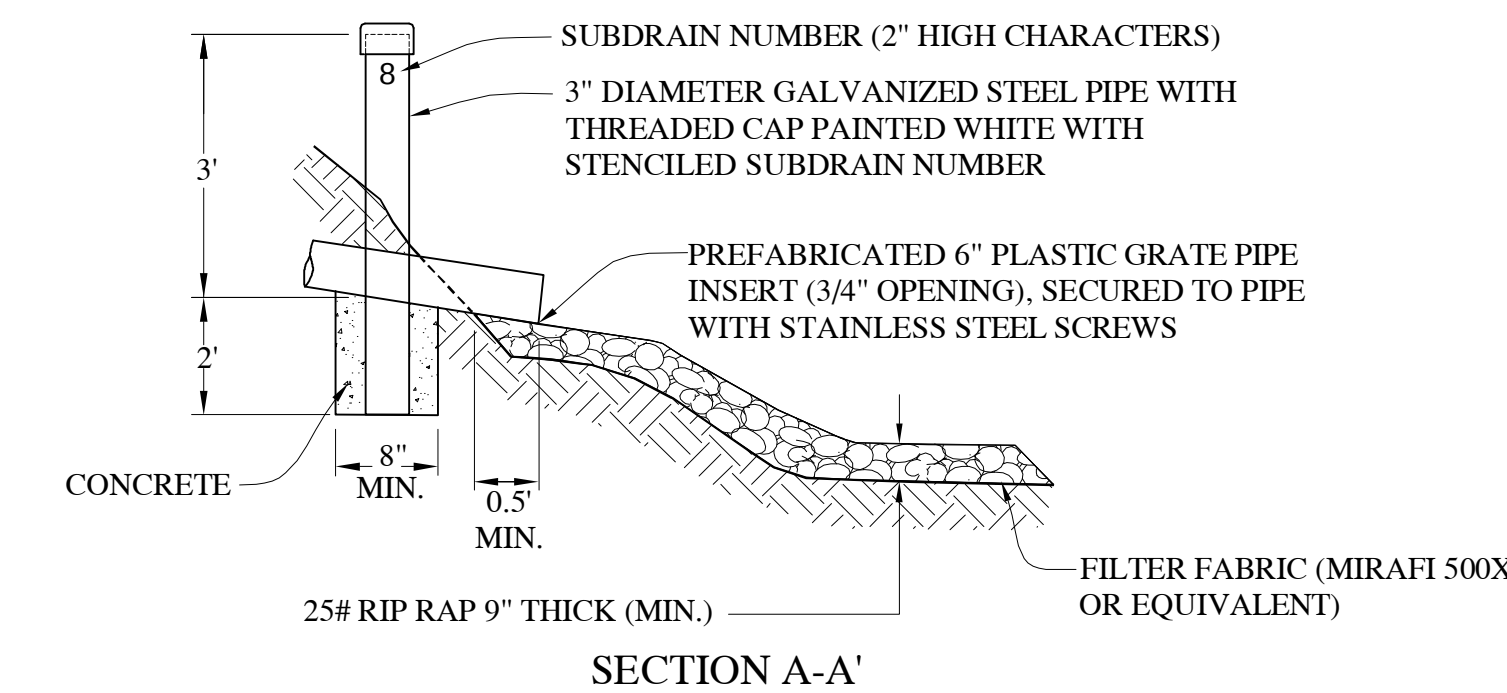
TYPICAL CUT-SLOPE REBUILD DETAIL
NO SCALE



TYPICAL OVEREXCAVATION FOR SWALE SUBDRAIN
NO SCALE



PLAN VIEW



SUBDRAIN OUTFALL DETAILS
NO SCALE

REV.	DATE	DESCRIPTION	BY
2	12-1-2010	UPDATE K-1A, K-7, RB-3,	JMG
1	10-14-10	UPDATE PER REVISED GRADING PLAN	BB

ENGEO
Expect Excellence

SAN RAMON - SAN JOSE - SAN FRANCISCO - ROCKLIN - RIPON

2010 CROW CANYON PLACE
SUITE 250
SAN RAMON, CALIFORNIA 94583
(925) 866-9000
FAX (888) 279-2698

DESIGNED BY: RPS
DRAWN BY: DLB
CHECKED BY:
DATE: JULY 2010
SCALE: AS SHOWN

DETAILS
JORDAN RANCH
DUBLIN, CALIFORNIA

SHEET NUMBER
8
OF 8 SHEETS
PROJECT NO.
7828.000.000

**E
X
H
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B
I
T

A**

EXHIBIT A

Legal Description for Tract 8024



Exhibit "A"
Legal Description

Real property situate in the City of Dublin, County of Alameda, State of California, being a portion of the parcel described in the deed recorded in document 98388140 Official Records of Alameda County, described as follows:

Beginning at the northeastern corner of said parcel, said point being the Quarter Corner of Sections 34 and 35, Township 2 South, Range 1 East, Mount Diablo Base and Meridian; thence along the eastern line of said first parcel, South $01^{\circ}29'39''$ West, 224.44 feet; thence South $00^{\circ}46'42''$ West, 2709.61 feet to the southeastern corner of said parcel; thence leaving said eastern line and along the southern line of said parcel, North $88^{\circ}30'52''$ West, 2597.08 feet to the southwestern corner of said parcel, said point being on a non-tangent curve to the left having a radial which bears North $62^{\circ}31'08''$ East, a radius of 399.94 feet, a delta of $10^{\circ}23'53''$; thence leaving said southern line, northwesterly along the western line of said parcel and said curve an arc length of 72.58 feet; thence North $37^{\circ}52'45''$ West, 324.96 feet to a non-tangent curve to the right, having a radial which bears South $71^{\circ}30'09''$ West, having a radius of 1288.00 feet, a delta of $00^{\circ}06'47''$; thence leaving said western line and northwesterly along said curve an arc length of 2.54 feet; thence North $71^{\circ}36'56''$ East, 1.00 feet to a non-tangent curve to the right, having a radial which bears South $71^{\circ}36'56''$ West, a radius of 1287.00 feet, a delta of $00^{\circ}02'14''$; thence northwesterly along said curve an arc length of 0.84 feet to a compound curve having a radius of 87.00 feet, a delta of $14^{\circ}59'25''$; thence along said curve an arc length of 22.76 feet; thence North $03^{\circ}21'25''$ West, 16.40 feet to a curve to the left having a radius of 238.00 feet, a delta of $11^{\circ}12'15''$; thence along said curve an arc length of 46.54 feet to a reverse curve having a radius of 1275.00 feet, a delta of $06^{\circ}06'50''$; thence along said curve an arc distance of 136.05 feet to a compound curve having a radius of 1317.00 feet, a delta of $03^{\circ}00'09''$; thence along said curve an arc length of 69.02 feet; thence North $05^{\circ}55'52''$ West, 167.36 feet to a non-tangent curve to the right having a radial which bears North $88^{\circ}12'38''$ West, a radius of 1329.00 feet, a delta of $04^{\circ}31'54''$; thence northeasterly along said curve an arc length of 105.11 feet; thence North $06^{\circ}19'16''$ East, 464.02 feet; thence North $03^{\circ}35'25''$ East, 95.16 feet to a non-tangent curve to the left having a radial which bears South $88^{\circ}38'03''$ East, a radius of 1213.00 feet, a delta of $11^{\circ}24'55''$; thence northwesterly along said curve an arc length of 241.67 feet to a non-tangent curve to the left having a radial which bears North $79^{\circ}57'02''$ West having a radius of 1065.00 feet, a delta of $00^{\circ}52'34''$; thence along said curve an arc length of 16.28 feet to a reverse curve having a radius of 212.00 feet, a delta of $09^{\circ}15'24''$; thence along said curve an arc distance of 34.25 feet to a reverse curve having a radius of 238.00 feet, a delta of $03^{\circ}44'38''$; thence along said curve an arc distance of 15.55 feet; thence South $84^{\circ}35'14''$ West, 1.00 feet to a non-tangent curve to the left having a radial which bears North $84^{\circ}35'14''$ East, a radius of 237.00 feet, a delta of $01^{\circ}10'03''$; thence northwesterly along said curve an arc length of 4.83 feet; thence

98388140
City of Dublin
County of Alameda

Exhibit "A"
Legal Description

North $06^{\circ}19'16''$ East, 258.07 feet to a non-tangent curve to the right having a radial which bears South $83^{\circ}40'20''$ East, having a radius of 800.55 feet, a delta of $03^{\circ}30'57''$; thence along said curve an arc length of 49.12 feet to a non-tangent curve to the left having a radial which bears South $38^{\circ}51'59''$ East, a radius of 466.00 feet, a delta of $28^{\circ}46'15''$; thence northeasterly along said curve an arc length of 234.00 feet; thence North $22^{\circ}21'46''$ East, 687.66 feet to the northern line of said parcel; thence along said northern line, South $89^{\circ}51'52''$ East, 2470.35 feet to the **Point of Beginning**.


Charles Sellman L.S. 5186

10-20-2010
Date



Project: 081001

Wed October 20 10:48:01 2010

Parcel Map Check

Parcel name: GHAD PARCEL

North: 445756.2541	East : 612260.8222
Line Course: S 01-29-39 W	Length: 224.44
North: 445531.8904	East : 612254.9699
Line Course: S 00-46-42 W	Length: 2709.61
North: 442822.5304	East : 612218.1624
Line Course: N 88-30-52 W	Length: 2597.08
North: 442889.8595	East : 609621.9553
Curve Length: 72.58	Radius: 399.94
Delta: 10-23-53	Tangent: 36.39
Chord: 72.48	Course: N 32-40-49 W
Course In: S 62-31-08 W	Course Out: N 52-07-15 E
RP North: 442705.3047	East : 609267.1433
End North: 442950.8672	East : 609582.8189
Line Course: N 37-52-45 W	Length: 324.96
North: 443207.3605	East : 609383.2941
Curve Length: 2.54	Radius: 1288.00
Delta: 0-06-47	Tangent: 1.27
Chord: 2.54	Course: N 18-26-28 W
Course In: N 71-30-09 E	Course Out: S 71-36-56 W
RP North: 443615.9956	East : 610604.7528
End North: 443209.7715	East : 609382.4901
Line Course: N 71-36-56 E	Length: 1.00
North: 443210.0869	East : 609383.4391
Curve Length: 0.84	Radius: 1287.00
Delta: 0-02-14	Tangent: 0.42
Chord: 0.84	Course: N 18-21-57 W
Course In: N 71-36-56 E	Course Out: S 71-39-10 W
RP North: 443615.9956	East : 610604.7528
End North: 443210.8804	East : 609383.1756
Curve Length: 22.76	Radius: 87.00
Delta: 14-59-25	Tangent: 11.45
Chord: 22.70	Course: N 10-51-07 W
Course In: N 71-39-10 E	Course Out: S 86-38-35 W
RP North: 443238.2658	East : 609465.7531
End North: 443233.1714	East : 609378.9024
Line Course: N 03-21-25 W	Length: 16.40
North: 443249.5433	East : 609377.9421
Curve Length: 46.54	Radius: 238.00
Delta: 11-12-15	Tangent: 23.35
Chord: 46.47	Course: N 08-57-32 W
Course In: S 86-38-35 W	Course Out: N 75-26-20 E
RP North: 443235.6069	East : 609140.3505
End North: 443295.4431	East : 609370.7059
Curve Length: 136.05	Radius: 1275.00
Delta: 6-06-50	Tangent: 68.09
Chord: 135.99	Course: N 11-30-15 W
Course In: N 75-26-20 E	Course Out: S 81-33-10 W
RP North: 443615.9940	East : 610604.7530

Project: 081001

Wed October 20 10:48:01 2010

Parcel Map Check

End North:	443428.6986	East :	609343.5847
Curve Length:	69.02	Radius:	1317.00
Delta:	3-00-09	Tangent:	34.51
Chord:	69.00	Course:	N 06-56-46 W
Course In:	N 81-33-10 E	Course Out:	S 84-33-19 W
RP North:	443622.1637	East :	610646.2973
End North:	443497.1997	East :	609335.2394
Line Course:	N 05-55-52 W	Length:	167.36
North:	443663.6638	East :	609317.9456
Curve Length:	105.11	Radius:	1329.00
Delta:	4-31-54	Tangent:	52.58
Chord:	105.08	Course:	N 04-03-19 E
Course In:	S 88-12-38 E	Course Out:	N 83-40-44 W
RP North:	443622.1636	East :	610646.2975
End North:	443768.4872	East :	609325.3772
Line Course:	N 06-19-16 E	Length:	464.02
North:	444229.6862	East :	609376.4661
Line Course:	N 03-35-25 E	Length:	95.16
North:	444324.6594	East :	609382.4251
Curve Length:	241.67	Radius:	1213.00
Delta:	11-24-55	Tangent:	121.24
Chord:	241.27	Course:	N 04-20-30 W
Course In:	N 88-38-03 W	Course Out:	N 79-57-02 E
RP North:	444353.5725	East :	608169.7697
End North:	444565.2385	East :	609364.1593
Curve Length:	16.28	Radius:	1065.00
Delta:	0-52-34	Tangent:	8.14
Chord:	16.28	Course:	N 10-29-15 W
Course In:	S 79-57-02 W	Course Out:	N 79-04-28 E
RP North:	444379.3982	East :	608315.4990
End North:	444581.2513	East :	609361.1951
Curve Length:	34.25	Radius:	212.00
Delta:	9-15-24	Tangent:	17.16
Chord:	34.21	Course:	N 06-17-50 W
Course In:	N 79-04-28 E	Course Out:	S 88-19-52 W
RP North:	444621.4324	East :	609569.3525
End North:	444615.2582	East :	609357.4424
Curve Length:	15.55	Radius:	238.00
Delta:	3-44-38	Tangent:	7.78
Chord:	15.55	Course:	N 03-32-27 W
Course In:	S 88-19-52 W	Course Out:	N 84-35-14 E
RP North:	444608.3268	East :	609119.5434
End North:	444630.7774	East :	609356.4821
Line Course:	S 84-35-14 W	Length:	1.00
North:	444630.6831	East :	609355.4866
Curve Length:	4.83	Radius:	237.00
Delta:	1-10-03	Tangent:	2.41
Chord:	4.83	Course:	N 05-59-47 W
Course In:	S 84-35-14 W	Course Out:	N 83-25-11 E
RP North:	444608.3268	East :	609119.5434
End North:	444635.4859	East :	609354.9821
Line Course:	N 06-19-16 E	Length:	258.07
North:	444891.9869	East :	609383.3957

Project: 081001

Wed October 20 10:48:01 2010

Parcel Map Check

Curve Length: 49.12	Radius: 800.55
Delta: 3-30-57	Tangent: 24.57
Chord: 49.12	Course: N 08-05-09 E
Course In: S 83-40-20 E	Course Out: N 80-09-23 W
RP North: 444803.7533	East : 610179.0685
End North: 444940.6150	East : 609390.3041
Curve Length: 234.00	Radius: 466.00
Delta: 28-46-15	Tangent: 119.52
Chord: 231.55	Course: N 36-44-54 E
Course In: N 38-51-59 W	Course Out: S 67-38-14 E
RP North: 445303.4479	East : 609097.8861
End North: 445126.1490	East : 609528.8399
Line Course: N 22-21-46 E	Length: 687.66
North: 445762.0925	East : 609790.4736
Line Course: S 89-51-52 E	Length: 2470.35
North: 445756.2479	East : 612260.8167

Perimeter: 11068.27 Area: 8,095,476 sq.ft. 185.85 acres

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

Error Closure: 0.0083 Course: S 41-38-31 W

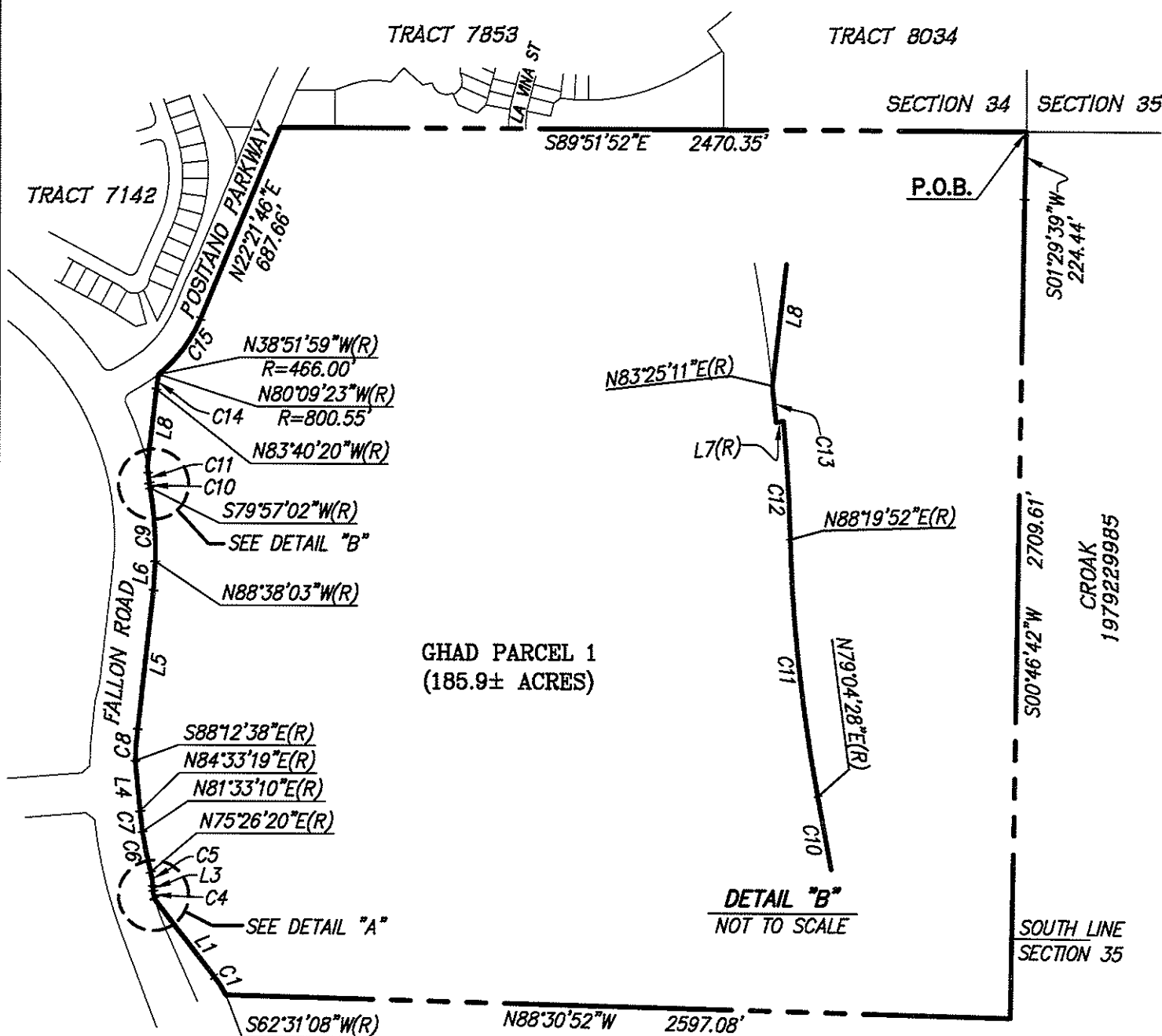
Error North: -0.00619 East : -0.00550

Precision 1: 1,333,524.10

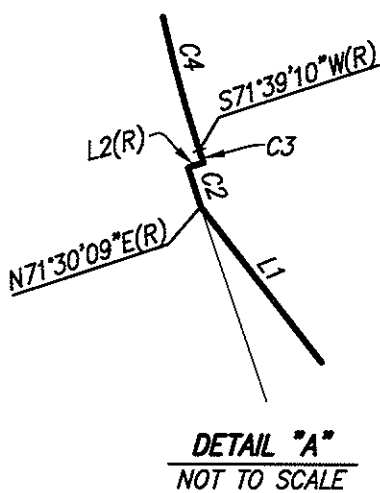
EXHIBIT B

Plat to Accompany Legal Description for Tract 8024, Boundary Exhibit





CHEN
1998265414



LINE TABLE		
LINE	BEARING	DISTANCE
L1	N37°52'45"W	324.96'
L2	N71°36'56"E	1.00'
L3	N03°21'25"W	16.40'
L4	N05°55'52"W	167.36'
L5	N06°19'16"E	464.02'
L6	N03°35'25"E	95.16'
L7	S84°35'14"W	1.00'
L8	N06°19'16"E	258.07'

CURVE TABLE			
CURVE	RADIUS	DELTA	LENGTH
C1	399.94'	10°23'53"	72.58'
C2	1288.00'	00°06'47"	2.54'
C3	1287.00'	00°02'14"	0.84'
C4	87.00'	14°59'25"	22.76'
C5	238.00'	11°12'15"	46.54'
C6	1275.00'	06°06'50"	136.05'
C7	1317.00'	03°00'09"	69.02'
C8	1329.00'	04°31'54"	105.11'
C9	1213.00'	11°24'55"	241.67'
C10	1065.00'	00°52'34"	16.28'
C11	212.00'	09°15'24"	34.25'
C12	238.00'	03°44'38"	15.55'
C13	237.00'	01°10'03"	4.83'
C14	800.55'	03°30'57"	49.12'
C15	466.00'	28°46'15"	234.00'

LEGEND

P.O.B. POINT OF BEGINNING



(IN FEET)
1 inch = 500 ft.

EXHIBIT B
PLAT TO ACCOMPANY LEGAL DESCRIPTION
FOR
GHAD

CITY OF DUBLIN, ALAMEDA COUNTY, CALIFORNIA

G:\Job2008\081001\MAPPING\PLATS\GHAD.dwg 10/20/2010 10:49:14 AM PDT



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

SCALE:
1"=500'

DATE:
10-20-10

JOB NO.:
081001

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EXHIBIT C

JORDAN RANCH ANNEXATION
Background



AUTHORITY

The Dublin City Council formed the Fallon Village Geologic Hazard Abatement District (“GHAD” or “District”) on December 4, 2007, under authority of the California Public Resources Code (Division 17, commencing with Section 26500). Included within the District were 1,043 single-family residences and adjacent open spaces within the Fallon Village development (Subdivision 7586). The Dublin City Council members act as the Board of Directors of the Fallon Village GHAD.

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. An Engineering Geologist, certified pursuant to Section 7822 of the Business and Professions Code, prepared the original Plan of Control for the Fallon Village GHAD. The Business and Professions Code requires a Plan of Control to describe in detail geologic hazards, their location, who is affected by them, and most significantly, a plan for the prevention, mitigation, abatement, or control thereof. In accordance with the requirements of the Public Resources Code, a proposed amendment to the original Fallon Village GHAD Plan of Control is to accompany the petition to annex the Jordan Ranch Property into the Fallon Village GHAD.

BACKGROUND

A geotechnical investigation for the site dated July 13, 2009, was published by Berlogar Geotechnical Consultants (BGC). The BGC report (Reference 1) summarizes a series of geotechnical investigations performed between 1998 and 2005, consisting of solid flight, hollow stem, continuous core and hand auger borings and test pits. The BGC report also contains the boring logs from an environmental subsurface investigation by Northgate Environmental Management in 2005. The locations of these explorations are depicted on the attached Geotechnical Corrective Grading Plans (Figures 2 through 5).

PROPOSED DEVELOPMENT

The approved Vesting Tentative Map for the project was prepared by Ruggeri-Jensen-Azar (RJA) and is dated June 23, 2010. The overall 185-acre site will consist of two neighborhood development phases. The initial 66-acre Phase 1 development area will consist of approximately 252 single-family residential lots, streets, and a neighborhood park. These developments will be located on the northern half of the site. Grading is expected to involve sheet fills approximately 40 feet thick, and cuts up to 60 feet deep. Cut slopes are shown as high as 70 feet, and fill slopes up to about 25 feet in vertical high are planned.

Development of Phase II will involve approximately 528 single- and multi-family residential units, streets, a school site, a community park, a water quality basin, and commercial development. As planned, there will be a total of 780 residential units.

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EXHIBIT D

JORDAN RANCH ANNEXATION
Geology



REGIONAL GEOLOGY AND GEOLOGIC MAPS

The site is located within the Coast Ranges geologic province of California, a series of northwest-trending ridges and valleys. Regional geologic maps were reviewed as part of the Geotechnical Exploration and Recommendations Reports for the Jordan Ranch site. Along with others, regional geologic maps of the area have been prepared recently by Graymer (1994). The regional mapping prepared by Graymer indicates that the site is underlain Tassajara/Green Valley formation. Regional mapping shows that bedrock units are generally trending in a northwest-southeast direction, are gently to moderately dipping in the southern portion of the site, and are moderately to steeply dipping in the northeastern portion of the site. The dip of the bedrock is variable on the site with the predominant direction to the south.

SITE GEOLOGY

The geologic units mapped on the site include bedrock and surficial deposits consisting of fill, alluvium and colluvium. The geologic units described below are adapted from a geotechnical investigation report completed by BGC for the site in 2009.

In general, alluvial and colluvial deposits are located on the lower-lying areas of the site. Undocumented artificial fill overlies the alluvium and colluvium in some locally disturbed areas. On the higher portions of the site, the colluvium tends to be a thinner mantle on the bedrock materials.

GEOLOGIC UNITS

Existing Fill. Artificial fill was identified on the area of the western ranch buildings and for the stock pond embankments. It appears that the fill encountered was derived from onsite excavation during the construction of the cut portions of the existing building pad or minor site grading.

Alluvium. Alluvium underlies the wider portions of valley floors on the subject property. Alluvial soils in the site vicinity typically consist of very stiff silty clay with minor amounts of interbedded gravelly clay. On the southwest portion of the property, alluvium may be as much as 28 feet in depth.

Colluvium. The Quaternary colluvial deposits mapped across the site consist of a clay to silty clay with rock fragments derived from the weathering of onsite materials. The colluvial materials range from a few to 12 feet in thickness. This material generally is moderately to highly expansive. Where colluvium is located on sloping ground, it may be characteristically unstable.

Bedrock. Bedrock was encountered from 0 to 28 feet below the existing ground surface. The bedrock encountered included sandstone, siltstone and claystone. The bedrock was weak to moderately strong, moderately to highly weathered and closely fractured. In general, bedding trends to the northwest and dips to the south.

GROUNDWATER

During the site explorations conducted between 1998 and 2005, groundwater was encountered in several exploratory soil borings and test pits. Groundwater levels ranged between 7½ and 28 feet below the existing ground surface. As noted in the Geotechnical Investigation report, BGC suspects that the groundwater levels represent perched groundwater surfaces. Fluctuations in groundwater levels may occur seasonally and over a period of years because of precipitation, changes in drainage patterns, irrigation and other factors, including the planned installation of subsurface drains in conjunction with the planned remedial grading. Even with the planned subsurface drainage, future irrigation may cause an overall rise in groundwater levels.

SEISMIC SOURCES

No active faults are known to pass through the property, according to published geologic maps (Dibblee, 1980; Crane, 1995; Graymer, et al. 1994). The nearest State-of-California-zoned, active¹ faults are the Calaveras fault located approximately 5 miles to the southwest and the Greenville fault located about 6 miles northeast of the site. As reported by BGC, no active or potentially active surface faulting was observed on the site.

A “blind” thrust fault has been mapped northeast of the property by Dibblee (1980), Crane, (1995) and Graymer, et al., (1996), at the northern edge of the Livermore Valley. This mapped thrust fault is not considered active by the State of California or by local geotechnical consultants. As reported by BGC, no active or potentially active surface faulting was observed on the site. While the probability of ground rupture is considered low, as described in the ENGEO Geotechnical Reports, there is a high probability that the site and any improvements will be subject to strong ground shaking during the lifetime of the project.

¹ An active fault is defined by the State Mining and Geology Board as one that has had surface displacement within Holocene time (about the last 10,000 years) (Hart, 1994). The State of California has prepared maps designating zones for special studies that contain these active earthquake faults.

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EXHIBIT E

JORDAN RANCH ANNEXATION
Funding and Acceptance



FUNDING AND ACCEPTANCE OF RESPONSIBILITY BY THE DISTRICT

An annual assessment is already being levied for properties in the Fallon Village GHAD under the provisions of the existing Plan of Control and Engineer's Report. Ultimately, an annual assessment shall be levied on all annexed residential and nonresidential parcels with habitable building areas within the Jordan Ranch development.

1. Activation of Assessment

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.

2. Responsibility for GHAD Activities

The party that, on the date each Final Map is recorded within the GHAD annexation boundaries owns the developable parcels shown on that Final Map, shall have the responsibility to perform all the activities of the GHAD on property within that Final Map. Such responsibility shall automatically transfer to the GHAD at 9:00 a.m. on the day exactly three years after the first residential building permit within the annexation area is issued by the City of Dublin provided that the items listed under item No. 4 in this section have been completed. This turn-over date may be extended at the sole discretion of the project developer provided that the assessments shall continue to be levied during the extension period and that notice of such extension is delivered to the GHAD Manager at least 30 days prior to the turn-over date. The petitioners for formation of the GHAD intend that the approximately three-year period between the initial levying of the GHAD assessment and the GHAD becoming responsible to perform activities on property within each Final Map will allow the District to accumulate reserve funds without incurring significant expenses.

3. Ownership of the Open Space

Ownership of the open space will pass from the owner/developers to the District on, or approximately on, the date the District commences its activities and becomes responsible for oversight of the actual physical maintenance of the open space as provided in this section.

4. Process for Transferring Responsibility for GHAD Activities

After the Transfer Eligibility Date for parcel(s), the process for transferring responsibility for performing GHAD activities on such parcel(s) shall be as follows:

- (a) In the calendar year of the Transfer Eligibility Date or in any subsequent year, at its discretion, the developer may apply to the GHAD ("Transfer Application") to transfer the responsibility for performing GHAD Activities for parcel(s) to the District.

- (b) Within 45 days of receiving such notice, a representative of the GHAD shall verify that all the facilities for which the GHAD will have maintenance responsibility have been constructed and maintained according to the City-approved plans and specifications for the individual improvements, and that such facilities are operational and in good working order.
- (c) 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.
- (d) The developer may notify the GHAD when it has completed the items identified on the Punch list.
- (e) Within 30 days of receipt of such notice, the GHAD shall verify whether all Punch List items have been completed. If such items have been completed, the GHAD shall notify the developer that the District accepts responsibility for performing all future GHAD Activities on the parcel(s).
- (f) The GHAD shall confirm that the reserve requirement defined in the approved Engineer's Report has been met.

As part of the transfer, the developer of parcel(s) to be transferred will provide the GHAD, for its use, copies of the applicable geotechnical exploration reports, grading plans, corrective grading plans, improvement plans, field-verified geologic maps, as-built subdrain plans or other pertinent documents as requested by the GHAD.

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EXHIBIT F

**FALLON VILLAGE GEOLOGIC HAZARD ABATEMENT DISTRICT
Jordan Ranch Development
GHAD Disclosure and Right of Access**



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

This Declaration of Restrictive Covenants, Right of Entry and Disclosures Regarding Geologic Hazard Abatement District (the "Declaration") is made this ____ day of _____, 2011 (the "Effective Date"), by BJP-ROF Jordan Ranch, LLC, a California limited liability company ("Declarant").

RECITALS

- A. Property. The following "Right of Entry and Disclosures" regarding a Geologic Hazard Abatement District shall be recorded against all land within Tract 8024 as filed on _____ in Book ____ of Maps at Pages _____, Official Records of Alameda County in the City of Dublin, County of Alameda, State of California ("Property").
- B. The City of Dublin has approved a subdivision on the Property. A condition of approval of the tentative map for Tract 8024 was that the Property be annexed into the Fallon Village Geologic Hazard Abatement District ("GHAD") to ensure proactive and effective maintenance of all subdrain facilities.
- C. Under the authority of California Public Resources Code section 26500, et seq., the Dublin City Council on December 4, 2007 formed and established the Fallon Village Geologic Hazard Abatement District ("Fallon Village GHAD" or "District") to prevent, mitigate, abate or control potential geologic hazards within the boundaries of the GHAD. On _____, 2011, the Fallon Village GHAD Board of Directors adopted Resolution _____, upon the application of Declarant, annexing the Property into the Fallon Village 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 Geologic Hazard Abatement District: The Declarant hereby gives notice and discloses that the Property is a part of the Fallon Village GHAD, a Geologic Hazard Abatement District formed pursuant to the laws of the State of California. The Board of Directors of the Fallon Village GHAD are the members of the Dublin City Council. Pursuant to the Plan of Control for Annexation of Jordan Ranch Development to Fallon Village Geologic Hazard Abatement District as it may be amended from time to time (the "Plan of Control"), the Declarant and the Fallon Village 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 Fallon Village GHAD include the power to assess lot owners within the Property for the purposes set out in the Plan of Control.
- 2. Property Access; Right of Entry: The Declarant hereby grants the Fallon Village GHAD, its officials, employees, contractors and agents a non-exclusive, perpetual easement (the "GHAD Easement"), for continuing and perpetual access to and across the Property for the purposes and responsibilities set out in the Plan of Control. The GHAD Easement shall become effective upon the conveyance of the various lots within the subdivision by grant

deeds including the Deed Statement set out in Section 5 below. Until such conveyance and the effectiveness of the GHAD Easement, the Declarant by executing and recording this Declaration, hereby contractually affords the Fallon Village GHAD an irrevocable right of entry over and upon the Property for the purposes of the GHAD Easement as set out above.

3. Binding on Successors and Assigns: The covenants and provisions of this Declaration shall be binding upon any and all owners of the Property, their successors and assigns.
4. Deed Statement: Any conveyance of all or a portion of the Property shall include in the deed conveying such property interest the following statement:
5. "This conveyance is made subject to the Declaration of Restrictive Covenant, Right of Entry and Disclosures regarding a Geologic Hazard Abatement District, recorded in the Official Records of Alameda County as Instrument No. _____ on _____, 2011."
6. Enforcement: The Fallon Village 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 Fallon Village GHAD.

Executed as of the Effective Date.

Declarant:

BJP-ROF Jordan Ranch, LLC, a Delaware
limited liability company

By: _____

Its: _____