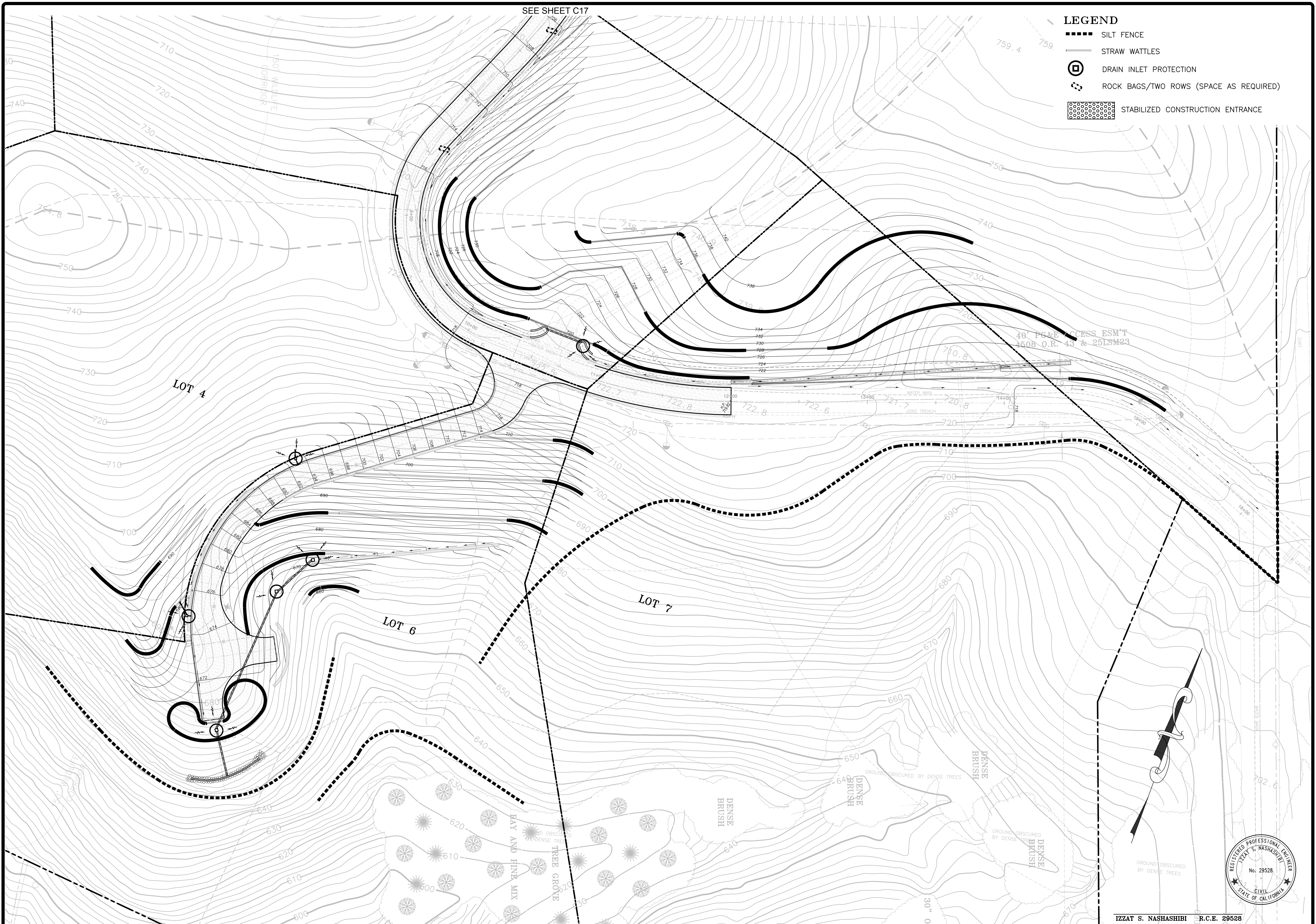


SEE SHEET C17

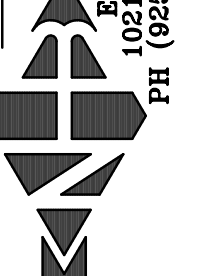
LEGEND

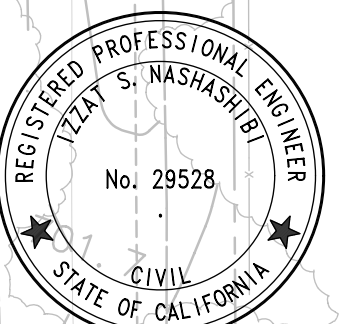
- SILT FENCE
- STRAW WATTLES
- ⊕ DRAIN INLET PROTECTION
- ⊗ ROCK BAGS/TWO ROWS (SPACE AS REQUIRED)
- ▣ STABILIZED CONSTRUCTION ENTRANCE



REVISIONS	
SCALE	1"=30'
DATE	03/11/09
ENGINEER	S.A.
JOB NO.	97122

**IMPROVEMENT PLANS**  
**EROSION CONTROL PLAN**  
 SUBDIVISION 6569 - LUCAS RANCH - APN 238-080-019  
 LAFAYETTE CALIFORNIA

  
**HUMANN COMPANY INC.**  
 ENGINEERING - SURVEYING  
 1021 MONROE AVE. LAFAYETTE, CA 94549  
 PH (925) 288-5000 FAX (925) 288-3878



IZZAT S. NASHASHIBI R.C.E. 29528

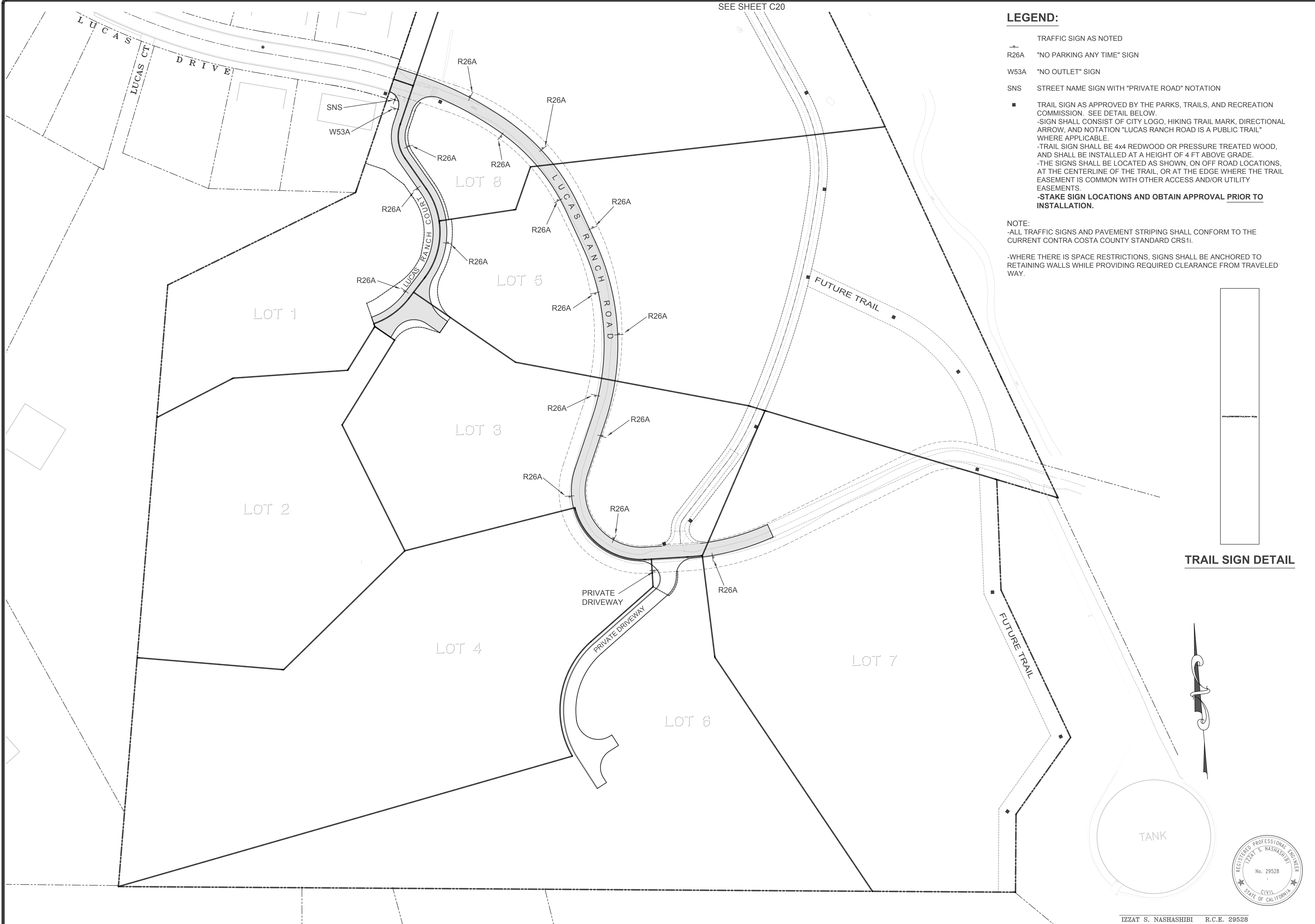
SEE SHEET C20

**LEGEND:**

- TRAFFIC SIGN AS NOTED
- R26A "NO PARKING ANY TIME" SIGN
- W53A "NO OUTLET" SIGN
- SNS STREET NAME SIGN WITH "PRIVATE ROAD" NOTATION
- TRAIL SIGN AS APPROVED BY THE PARKS, TRAILS, AND RECREATION COMMISSION. SEE DETAIL BELOW.
  - SIGN SHALL CONSIST OF CITY LOGO, HIKING TRAIL MARK, DIRECTIONAL ARROW, AND NOTATION "LUCAS RANCH ROAD IS A PUBLIC TRAIL" WHERE APPLICABLE.
  - TRAIL SIGN SHALL BE 4x4 REDWOOD OR PRESSURE TREATED WOOD, AND SHALL BE INSTALLED AT A HEIGHT OF 4 FT ABOVE GRADE.
  - THE SIGNS SHALL BE LOCATED AS SHOWN, ON OFF ROAD LOCATIONS, AT THE CENTERLINE OF THE TRAIL, OR AT THE EDGE WHERE THE TRAIL EASEMENT IS COMMON WITH OTHER ACCESS AND/OR UTILITY EASEMENTS.
  - STAKE SIGN LOCATIONS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.**

**NOTE:**

- ALL TRAFFIC SIGNS AND PAVEMENT STRIPING SHALL CONFORM TO THE CURRENT CONTRA COSTA COUNTY STANDARD CRS11.
- WHERE THERE IS SPACE RESTRICTIONS, SIGNS SHALL BE ANCHORED TO RETAINING WALLS WHILE PROVIDING REQUIRED CLEARANCE FROM TRAVELED WAY.



**TRAIL SIGN DETAIL**



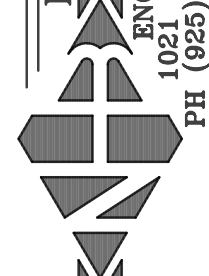
IZZAT S. NASHASHIBI R.C.E. 29528

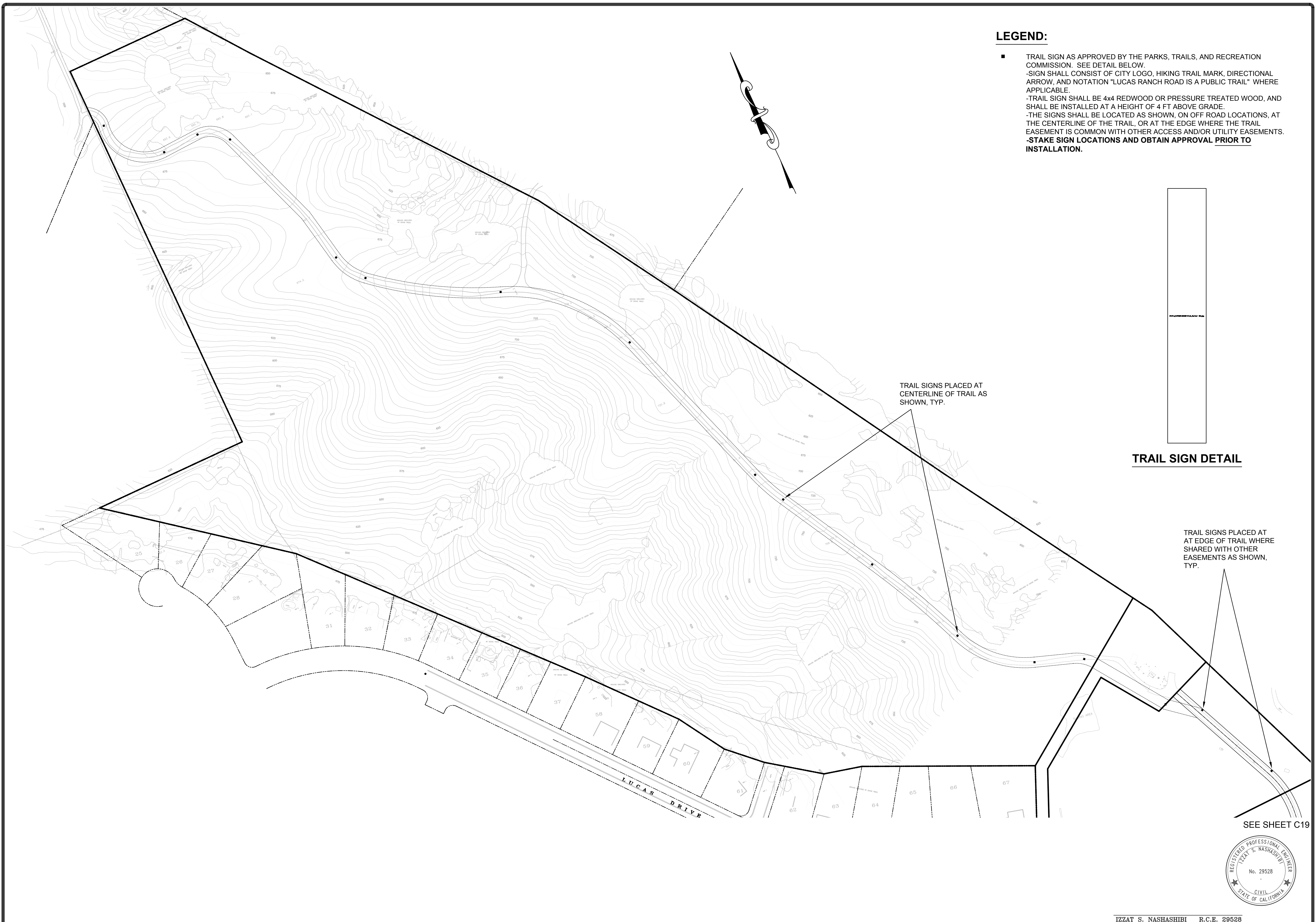
REVISIONS			

SCALE	1"=60'
DATE	03/11/09
ENGINEER	S.A.
JOB NO.	97122

**IMPROVEMENT PLANS**  
SIGNING AND STRIPING PLAN  
SUBDIVISION 6569 - LUCAS RANCH - APN 238-080-019  
CALIFORNIA

**LAFAYETTE**

  
 HUMANN COMPANY INC.  
 ENGINEERING - SURVEYING  
 1021 MONTE AVE. LAFAYETTE, CA 94549  
 PH (925) 288-5000 FAX (925) 288-3878



**LEGEND:**

- TRAIL SIGN AS APPROVED BY THE PARKS, TRAILS, AND RECREATION COMMISSION. SEE DETAIL BELOW.
- SIGN SHALL CONSIST OF CITY LOGO, HIKING TRAIL MARK, DIRECTIONAL ARROW, AND NOTATION "LUCAS RANCH ROAD IS A PUBLIC TRAIL" WHERE APPLICABLE.
- TRAIL SIGN SHALL BE 4x4 REDWOOD OR PRESSURE TREATED WOOD, AND SHALL BE INSTALLED AT A HEIGHT OF 4 FT ABOVE GRADE.
- THE SIGNS SHALL BE LOCATED AS SHOWN, ON OFF ROAD LOCATIONS, AT THE CENTERLINE OF THE TRAIL, OR AT THE EDGE WHERE THE TRAIL EASEMENT IS COMMON WITH OTHER ACCESS AND/OR UTILITY EASEMENTS.
- STAKE SIGN LOCATIONS AND OBTAIN APPROVAL PRIOR TO INSTALLATION.**

TRAIL SIGNS PLACED AT CENTERLINE OF TRAIL AS SHOWN, TYP.



**TRAIL SIGN DETAIL**

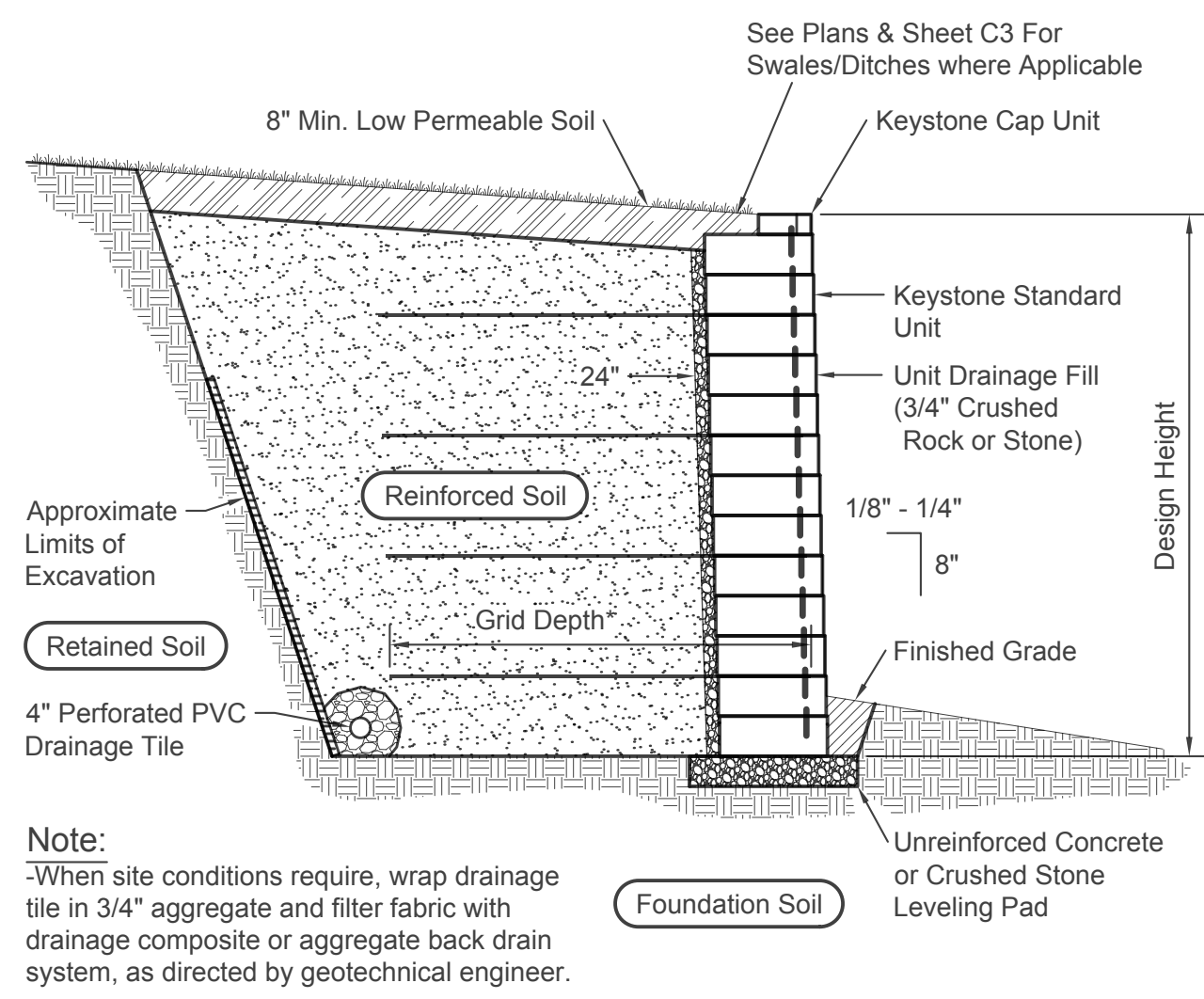
TRAIL SIGNS PLACED AT AT EDGE OF TRAIL WHERE SHARED WITH OTHER EASEMENTS AS SHOWN, TYP.

SEE SHEET C19



IZZAT S. NASHASHIBI R.C.E. 29528

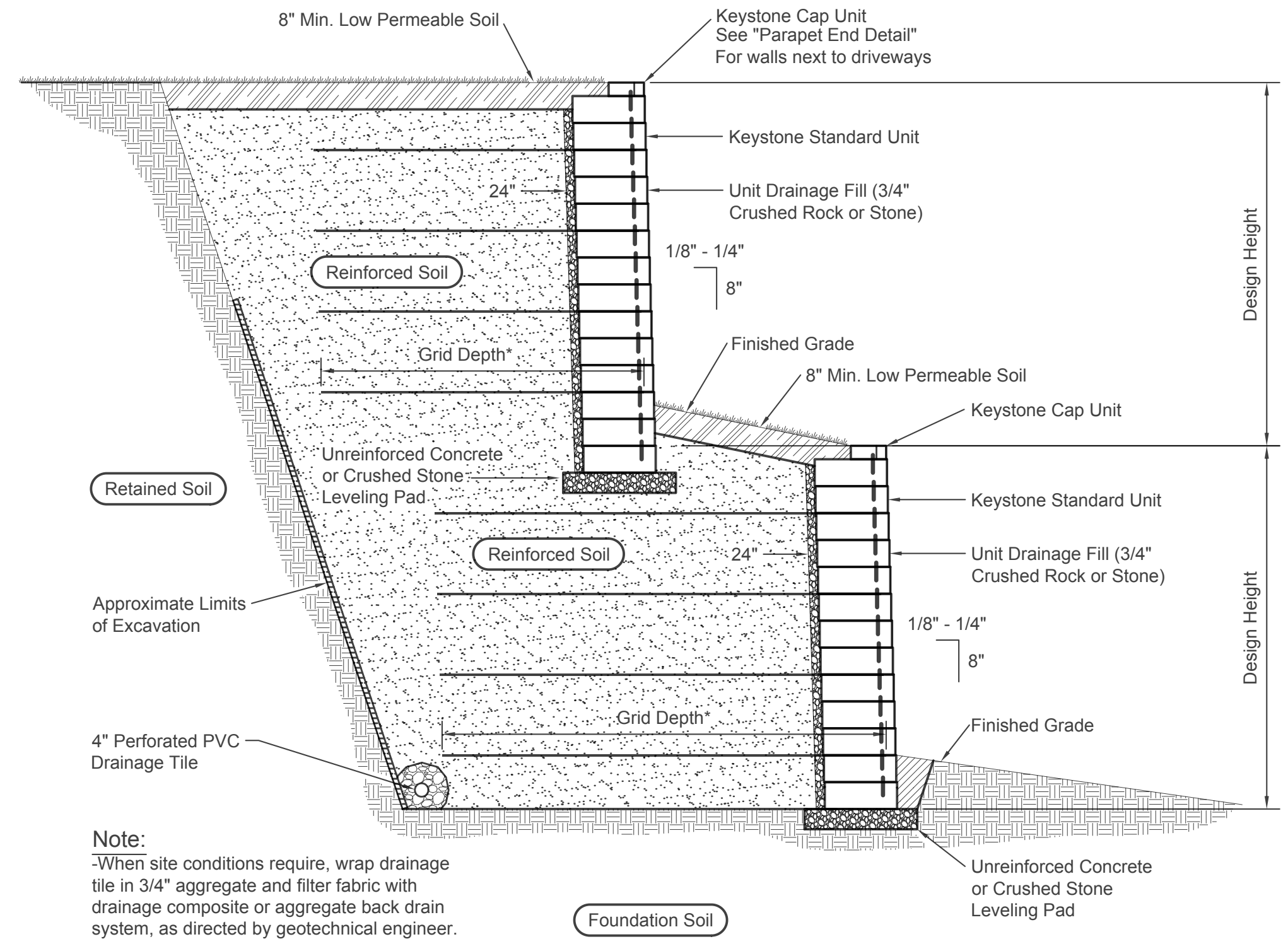
REVISIONS									
SCALE	1"=100'	DATE	03/11/09	ENGINEER	S.A.	JOB NO.	97122		
<b>IMPROVEMENT PLANS</b> SIGNING AND STRIPING PLAN SUBDIVISION 6569 - LUCAS RANCH - APN 238-080-019 <b>LAFAYETTE CALIFORNIA</b>									
HUMANN COMPANY INC. ENGINEERING - SURVEYING 1021 HUNTER AVE. LAFAYETTE, CA 94549 PH (925) 283-5000 FAX (925) 283-3878									
SHEET <b>C20</b> OF 33 SHEETS JOB NO. 97122									



**Typical Reinforced Wall Section (FILL WALLS)**  
Standard Unit - Near Vertical Setback

**Note:**  
-When site conditions require, wrap drainage tile in 3/4" aggregate and filter fabric with drainage composite or aggregate back drain system, as directed by geotechnical engineer.

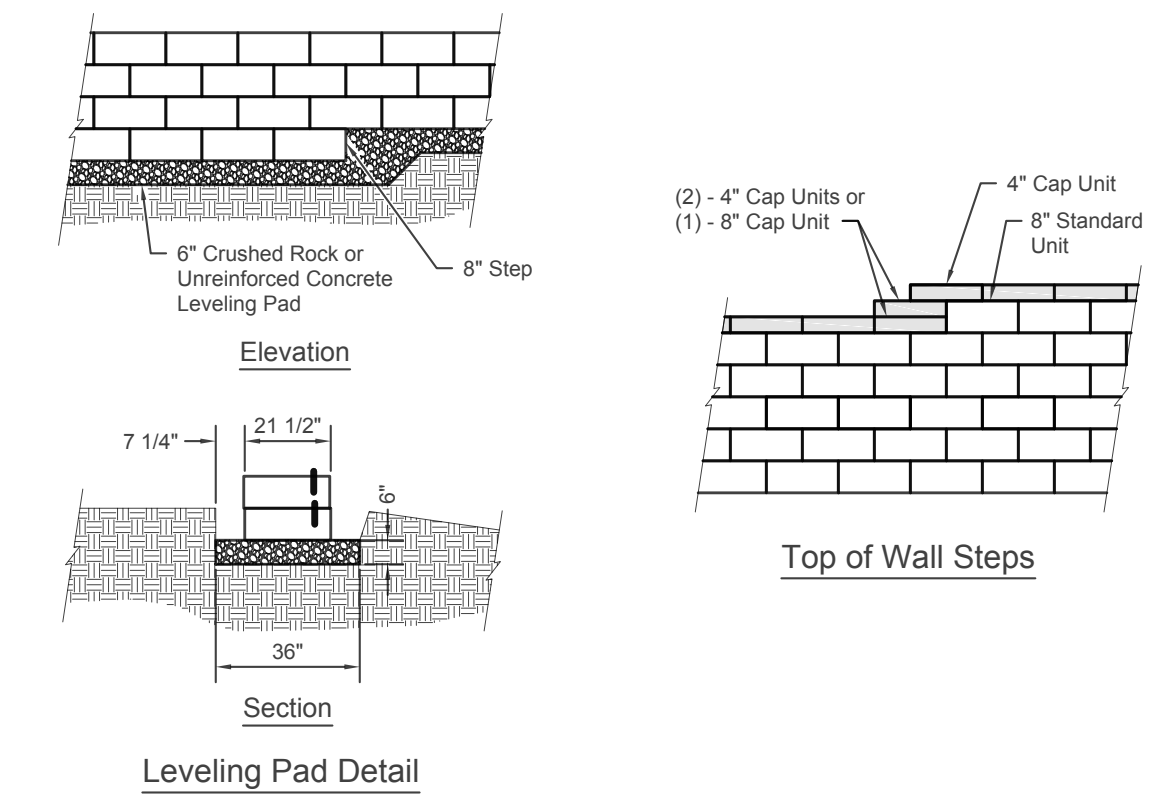
\*Grid depth varies from 7' - 10' depending on Reinforced Soil Condition. Exact design shall be provided prior to obtaining Building Permit.



**Typical Reinforced Tiered Wall Section (FILL WALLS)**  
Standard Unit - Near Vertical Setback

**Note:**  
-When site conditions require, wrap drainage tile in 3/4" aggregate and filter fabric with drainage composite or aggregate back drain system, as directed by geotechnical engineer.

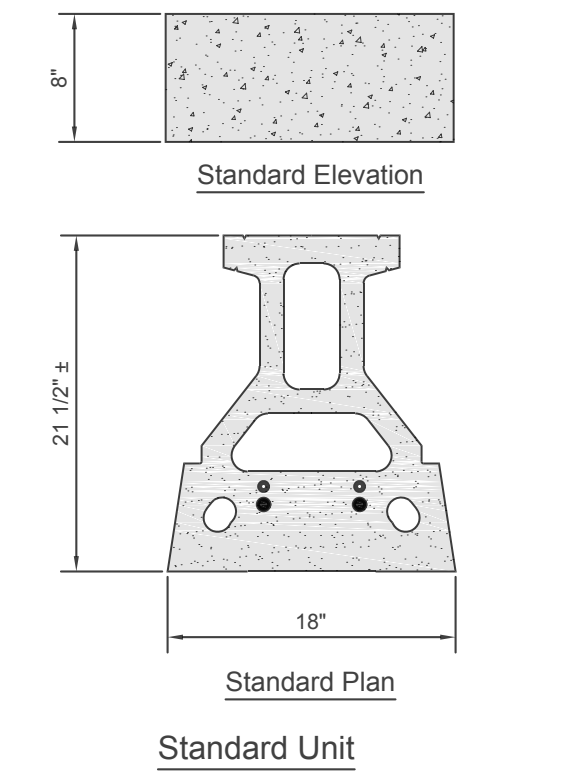
\*Grid depth varies from 7' - 10' depending on Reinforced Soil Condition. Exact design shall be provided prior to obtaining Building Permit.



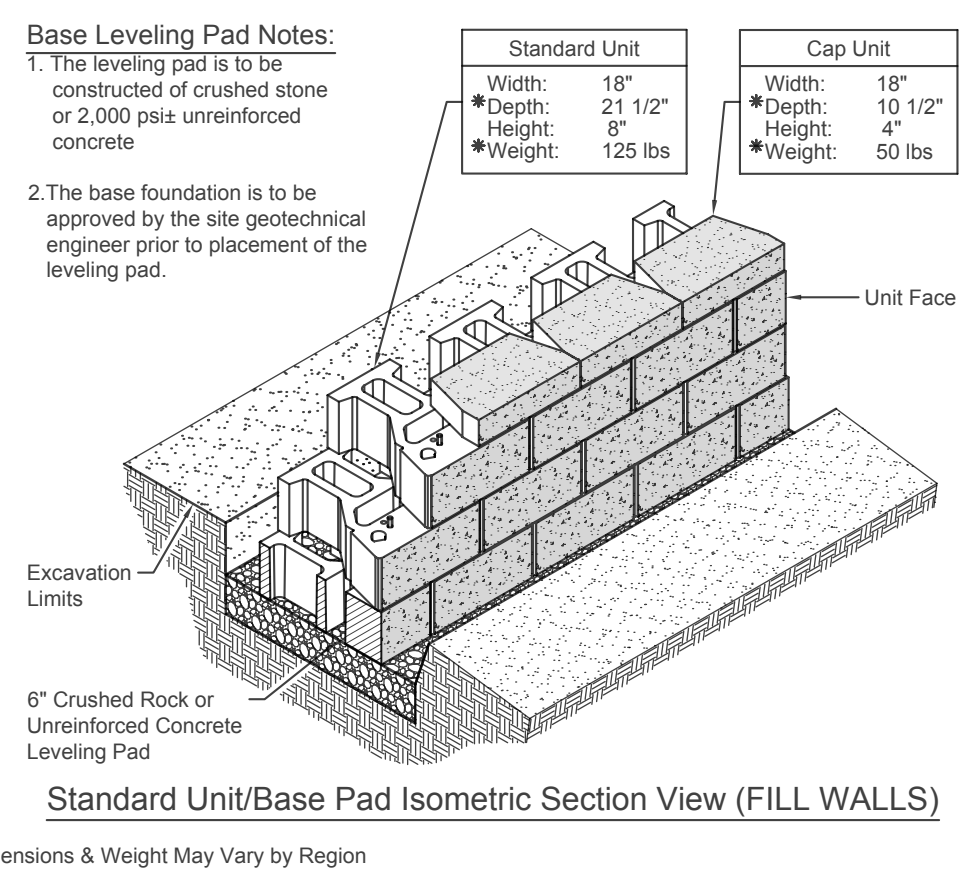
**NOTE:**

- A SEPARATE BUILDING PERMIT FROM CONTRA COSTA COUNTY BUILDING DEPARTMENT SHALL BE REQUIRED FOR THE CONSTRUCTION OF RETAINING WALLS. THIS BUILDING PERMIT IS IN ADDITION TO ANY AND ALL OTHER PERMITS THAT MAY BE REQUIRED FOR THE INSTALLATION OF OTHER SUBDIVISION IMPROVEMENTS.

- DETAILED WALL DESIGN AND CALCULATIONS, INCLUDING BUT NOT LIMITED TO, GRID DEPTH AND REINFORCED SOIL CONDITIONS, FOR DIFFERENT WALL CASES, WILL BE REQUIRED PRIOR TO OBTAINING BUILDING PERMIT

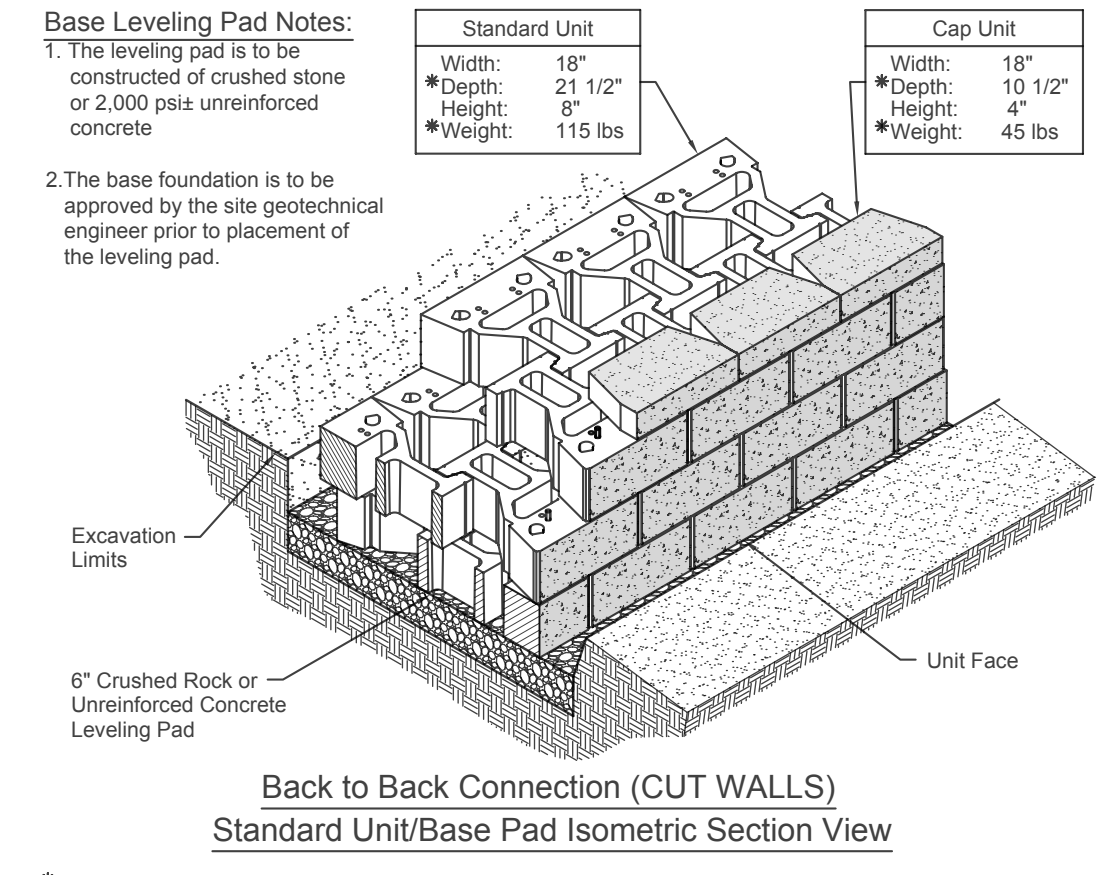


**Standard Unit**  
APPROVED COLORS ARE EITHER TAN/BROWN OR DARK GRAY  
\*Dimensions May Vary by Region



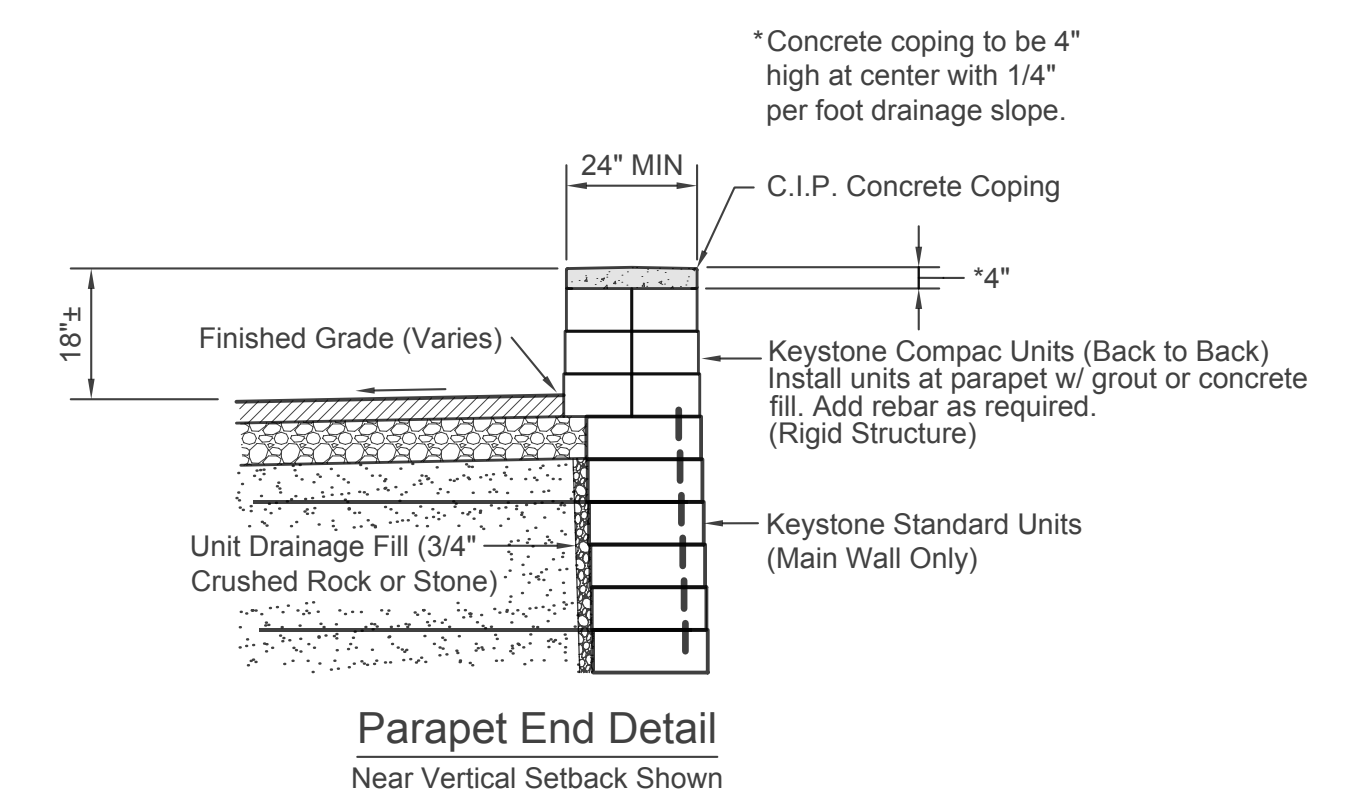
**Base Leveling Pad Notes:**  
1. The leveling pad is to be constructed of crushed stone or 2,000 psi unreinforced concrete.  
2. The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

\*Dimensions & Weight May Vary by Region

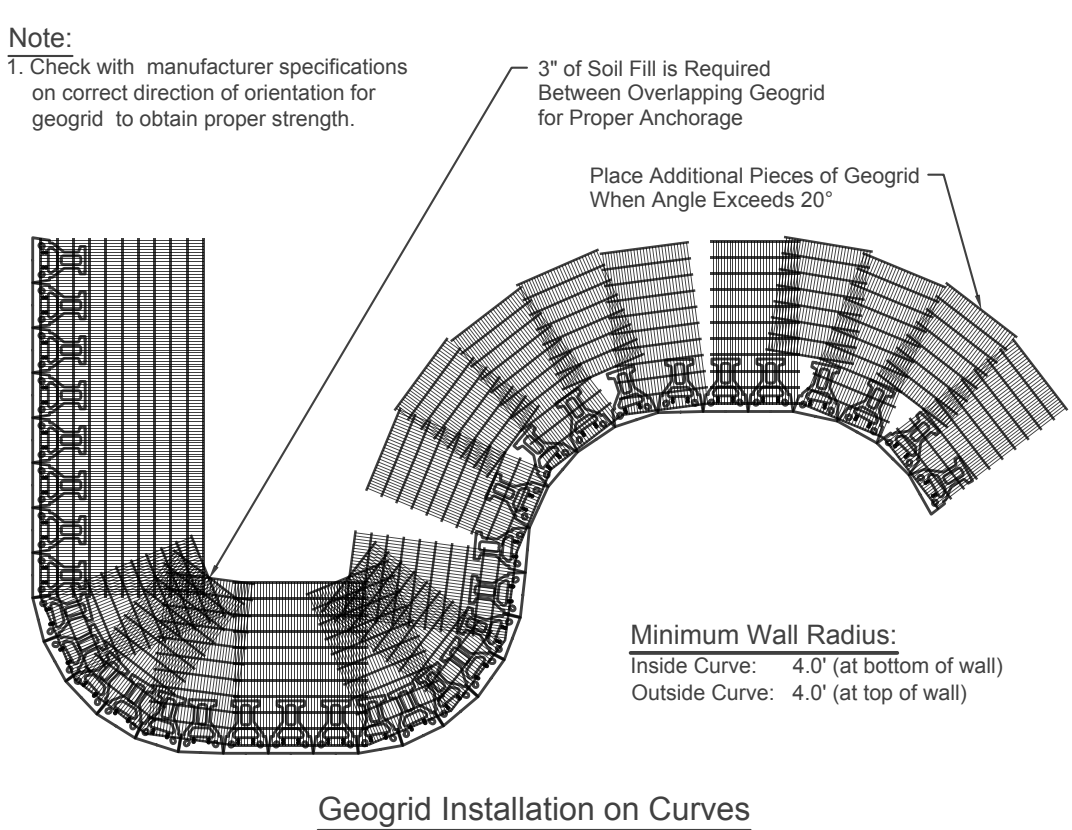


**Base Leveling Pad Notes:**  
1. The leveling pad is to be constructed of crushed stone or 2,000 psi unreinforced concrete.  
2. The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

\*Dimensions & Weight May Vary by Region



\*Concrete coping to be 4" high at center with 1/4" per foot drainage slope.



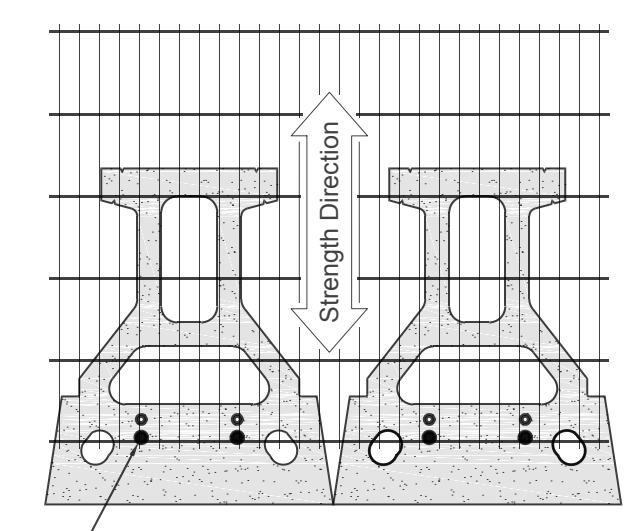
**Geogrid Installation on Curves**

**Note:**  
T. Check with manufacturer specifications on correct direction of orientation for geogrid to obtain proper strength.

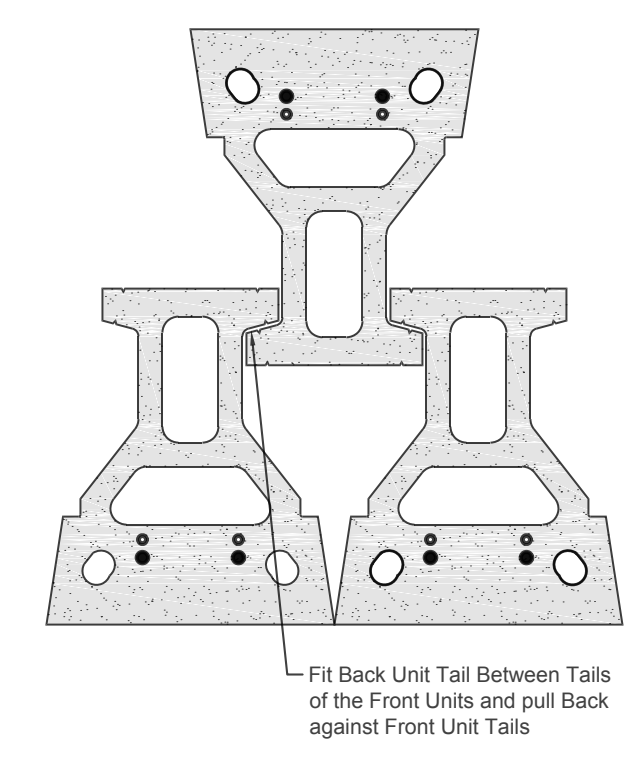
3" of Soil Fill is Required Between Overlapping Geogrid for Proper Anchorage

Place Additional Pieces of Geogrid When Angle Exceeds 20°

Minimum Wall Radius:  
Inside Curve: 4.0' (at bottom of wall)  
Outside Curve: 4.0' (at top of wall)



**Grid & Pin Connection (FILL WALLS)**



**Back to Back Connection (CUT WALLS)**

**WALL COLOR NOTE:**  
"STANDARD UNIT" RETAINING WALL COLOR SHALL BE EITHER TAN/BROWN OR DARK GRAY.



REVISIONS		08/06/2013 STANDARD UNIT RETAINING WALL COLOR	
SCALE	N.T.S.	DATE	03/11/09
ENGINEER	S.A.	JOB NO.	97122
<b>IMPROVEMENT PLANS</b> RETAINING WALL DETAILS SUBDIVISION 6569 - LUCAS RANCH - APN 238-080-019 CALIFORNIA LAFAYETTE			
HUMAN COMPANY, INC. ENGINEERING - SURVEYING 1021 MONROE AVE. LAFAYETTE, CA 94549 PH (925)288-5000 FAX (925)288-3878			
SHEET C21		OF 33 SHEETS	
JOB NO. 97122			