

Y: GOLF COURSE SITE DEVELOPMENT

Keystone! The right form & function for site solutions at Gale Ranch.



Keystone site solutions include headwalls at tunnels, roadway support, terraces and planter units for landscape amenities.





PROJECT:

Gale Ranch Dev. -

Phase 1

Standard unit

LOCATION: San Ramon, California

PRODUCT: Standard and Planter units

SQUARE FOOTAGE: 30,000 sq. ft.

Independent Construction GENERAL CONTRACTOR:

ENGINEERING CONSULTANT: Mervell Engineering

> ARCHITECT: Ruggeri-Jenson-Azar &

Associates

DEVELOPER: **Shapell Industries**

KEYSTONE REPRESENTATIVE: **Basalite** Corporation

North Highlands, CA

The vast and beautiful Gale Ranch community is located in San Ramon, CA. This new development includes large custom homes, apartments, townhomes and condos, in addition to a prestigious world-class golf course.

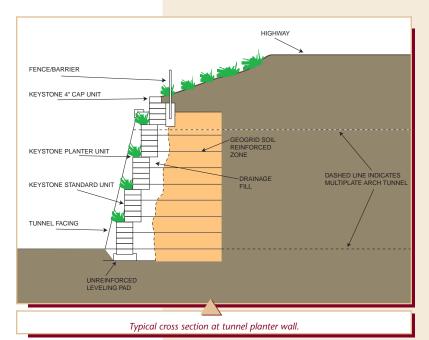
The initial 4-phase development plan included reinforced slopes throughout the site. Mike Taylor, the senior project manager and principal designer with Ruggeri -Jenson - Azar & Associates, suggested using the alternative of retaining walls to prevent encroaching on the numerous small creeks throughout the site, and to withstand the lateral loads impacting the toe of the slope near the clubhouse.

Initial thoughts were to use reinforced masonry walls with

reputation, economic advantages, and previous successes in the area, the **Keystone Retaining Wall System** was selected by developer **Al Balogh**, with **Shapell Industries**.

The retaining structures were designed by Mike Merril of Mervell Engineering. A key feature with the Keystone System is cost effective construction. Independent Construction owner Brian McCosker along with Stuart Campbell provided this essential element, in addition to stunning construction results.

Basalite Corporation, Keystone's manufacturer/representative in North Highlands, CA, supplied approximately 30,000 square feet of units to create the walls for Phase I. There will be over 100,000 square feet of Keystone used on the site when it is complete. Phase I also included seven multiplate arches supplied by Contech Construction Products, Inc. Three of these arches help support Bollinger Canyon Road, the main thoroughfare for the community.





Combination of reinforced slopes and Keystone walls at clubhouse



Planter unit and terraces add landscape amenity to structural walls.

Additionally, the **Keystone Planter Units** were used to enhance the walls by allowing elaborate landscaping to combine with the natural rockface Keystone units.

Phase I required nearly 18 million cubic yards of soil be moved on the site before construction. Over 32 million cubic yards of soil will be excavated before the project is complete, making Gale Ranch the largest site improvement project to date in northern California.

