



*Retaining Excellence™*

## Gale Ranch Development - Phase One

### San Ramon, California

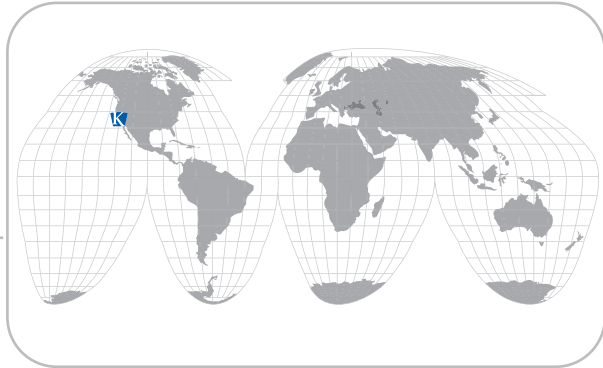
The vast and beautiful Gale Ranch community is located in San Ramon, CA. This new development includes large custom homes, apartments, townhomes, and condos, in addition to a prestigious world-class golf course.

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 segmental retaining walls to withstand the lateral loads impacting the toe of the slope near the clubhouse, and to prevent encroaching on the numerous small creeks throughout the site.

Initial thoughts were to use reinforced masonry walls with veneering to match the clubhouse. However, due to a proven reputation, economic advantages, and previous successes in the area, the Keystone Standard Retaining Wall System was selected by developer Al Balogh, with Shapell Industries.

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

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



<b>Project:</b>	<i>Gale Ranch Development Phase One</i>
<b>Location:</b>	<i>San Ramon, California</i>
<b>Keystone Supplier:</b>	<i>Basalite Concrete Products North Highlands, California</i>
<b>Keystone Product:</b>	<i>Keystone Standard Units Keystone Planter Units</i>
<b>Square Feet:</b>	<i>30,000 sq. ft.</i>
<b>General Contractor:</b>	<i>Independent Construction</i>
<b>Engineering:</b>	<i>Mervell Engineering</i>
<b>Landscape Architect:</b>	<i>Ruggeri-Jenson-Azar &amp; Associates</i>
<b>Developer:</b>	<i>Shapell Industries</i>



CASE STUDY



## Keystone! The right Form & Function for site solutions at Gale Ranch.



*Planter unit and terraces add landscape amenity to structural walls.*

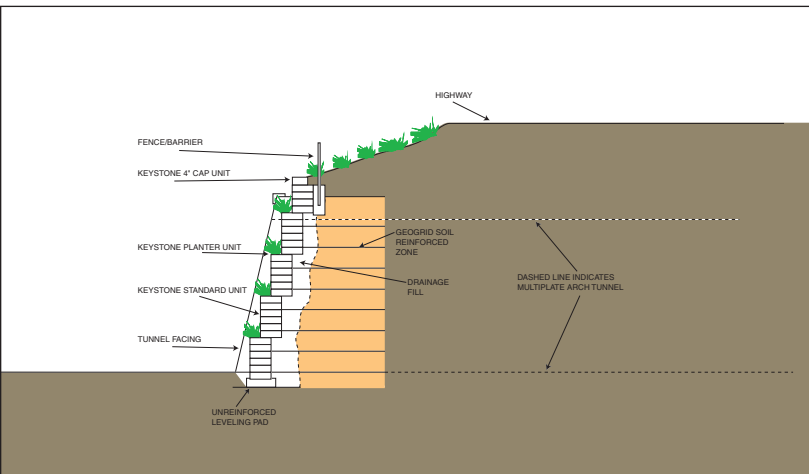


*Combination of reinforced slopes and Keystone walls at clubhouse.*

Basalite Concrete Products, Keystone manufacturer/representative in North Highlands, CA, supplied approximately 30,000 square feet of Standard units to create the walls for Phase one. There will be over 100,000 square feet of Keystone product used on the site when it is complete. Phase one of the project 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.

Additionally, the Keystone Planter units were used to enhance the walls by allowing elaborate landscaping to combine with the natural rockfaced Keystone Standard units.

Phase one 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.



*Typical cross section at tunnel planter wall.*



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