

Audie Murphy Ranch

Menifee, California

Stormwater Treatment

Owner:

Brookfield Residential

Engineer:

Hunsaker and Associates

Contractor:

KEC

Installation:

2018



Audie Murphy Ranch is a new, 450-acre master planned community in Menifee, California, a town centrally located in the heart of Southern California between San Diego County and Los Angeles County. The community has numerous amenities, including a new elementary school, clubhouse, parks/open spaces, and 1,410 private residential properties.

During the initial design and construction stages, project engineers planned for two massive non-proprietary bioretention systems to address the site's drainage and stormwater treatment requirements. These initial Best Management Practices (BMPs) posed immense construction challenges.

Each planned BMP formed two riverbeds or "Paseos" to collect stormwater runoff from the development's 60 acres of streets and 135 acres of roof and driveway areas. Neither the developer nor the contractor realized that the two paseos would not only consume 50 acres of the 450-acre property (11% of the total development), but after breaking ground on the trenches and river rock processing, contractors projected an added two years of construction time at a cost of nearly \$3 million.

After evaluating the project's stormwater management plan, engineers determined the Modular Wetlands Linear (MWL) to be a more efficient solution that would save the developer millions of dollars and over a year of development.

Just 18 weeks after the project's first review and consultation, seven MWLs were delivered and installed. Using the MWL provided a 75% cost savings and unlocked the developer's ability to finalize real estate occupancy permits one year sooner and close on new home sales.

Technical Description:

Modular Wetlands® Linear System



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