



## CASE STUDY THE BRIDGES AT MURRIETA

*Channel Stabilization  
Murrieta, CA*

### PROJECT SUMMARY

The Bridges at Murrieta is a large luxury apartment development in the heart of Murrieta, CA. During development of the greenfield site, several existing channels required drainage improvements and erosion and scour protection to accommodate increased storm water runoff.

The design engineer had used PYRAMAT® 75 High Performance Turf Reinforcement Mat (HPTRM) on previous projects, and was pleased with the system's performance. Approximately 20,000 square yards of PYRAMAT 75 was selected to stabilize and protect the sides of the channels. In addition to erosion control, channel scour was also a concern. A five foot deep by five foot wide scour curtain was designed using rock riprap encased with PYRAMAT 75.

The use of this technology for channel stabilization is cost effective and environmentally friendly. PYRAMAT 75 protects slopes adjacent to water, and has been proven to greatly improve hydraulic resistance limits by reinforcing the vegetative root structure and providing greater stability during and beyond vegetation establishment.

To reduce material costs, Propex engineers worked with the contractor and design engineers to relocate the top of the trench to two feet above the high water mark on the channel side slopes. Once installed, the PYRAMAT 75 was soil filled and hydroseeded. Lastly, 3,000 trees and bushes were planted into the HPTRM to meet requirements of the project's environmental permit.



### PROBLEM

A luxury apartment development needed to improve drainage capabilities of existing channels in anticipation of increased runoff.



### SOLUTION

PYRAMAT 75 was selected to stabilize the channel slopes and provide scour protection.

 **PYRAMAT**<sup>®</sup>  
[PropexGlobal.com/Pyramat-75](http://PropexGlobal.com/Pyramat-75)

## FEATURES & BENEFITS

- Superior UV resistance for up to 75 year design life
- Recognized by the Environmental Protection Agency (EPA) as a Best Management Practice (BMP) to improve water quality
- Patented trilobal X3® Fiber Technology helps lock in seeds and promote rapid root mass development
- Promotes infiltration of surface water
- Resistant to both hydraulic and non-hydraulic stresses
- Environmentally-friendly solution for improving groundwater quality and protecting wildlife
- Easy installation equals reduced time and costs



## PERFORMANCE

PYRAMAT 75 successfully reinforced vegetation to provide channel stabilization and erosion control for up to 75 years. Currently vegetation is thriving and the channels have not experienced erosion or scour during precipitation events.



## INNOVATION TO BUILD ON™

Visit our website for more information, Product Samples, or other inquiries, or call Customer Service at 800 624 1273

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PGS-1679E-001 (05/2021)