



MUSCLE WALL IS A PROVEN STORMWATER SOLUTION

MUSCLE WALL SUCCESSFULLY DIVERTS FLOW AND RETAINS SEDIMENT ON THE STEEP HILLSIDES OF YERBA BUENA ISLAND IN THE BAY OF SAN FRANCISCO

Yerba Buena Island is part of the Treasure Island development, an environmentally sensitive redevelopment project currently being constructed in San Francisco Bay. This project will produce up to 8,000 homes, extensive green spaces, three hotels, as well as other restaurant, retail, and entertainment venues.

An issue that arose during the construction process on Yerba Buena Island was the amount of erosion and loss of sediment on the steep hillsides of the island during rainstorms. In order to combat this issue until permanent stormwater mechanisms can be constructed, ENGeo, the Geotechnical Engineer of Record for this project, recommended that Muscle Wall be used. Over 4,000 linear feet of 4-foot Muscle Wall has since been deployed to retain sediment and divert flow as need be.





MUSCLE WALL USED AS THE STORMWATER BMP OF CHOICE FOR A 15,000 ACRE DEVELOPMENT IN SOUTHERN CALIFORNIA

This 15,000 acre development will include more than 20,000 homes, a commercial district, as well as many other features such as regional and community parks, a golf course, a man-made lake, and 50 miles of walking and hiking trails.

Muscle Wall is currently being used to manage stormwater and control erosion all around the project. The largest deployment of Muscle Wall currently on the project is a system of 10 check-dams, stopping the flow of sediment down a central future roadway. 6-inch Muscle Wall is also being used as drive-over washout areas throughout the project.



Series of 10 Check-Dams



Sediment Buildup on Check-Dam



6-inch Drive-Over Washout Area

MUSCLE WALL DEPLOYED IN THREE KEY LOCATIONS IN ORDER TO MANAGE STORMWATER AT THE HERITAGE FIELDS REDEVELOPMENT PROJECT IN IRVINE CALIFORNIA

Heritage Fields is a redevelopment project in which the former Marine Corps Air Station El Toro is being redeveloped as a multi-use development, including residential use, commercial use, as well as the future Orange County Great Park, a public central park/nature preserve with a focus on sports, agriculture, and the arts.

Both 2-foot and 4-foot Muscle Wall was deployed in three key locations: along the border of a construction zone and a historical hanger that was being preserved, along one of the former runways to redirect natural flow away from an active construction site, and around a concrete dump site to trap sediment and debris.



Historical Hanger Location



Former Runway Location



Concrete Dump Site