CASE STUDY

KANEOHE STREAM BANK RESTORATION
OAHU, HI

STREAMBANK STABILIZATION

Propex® GEOSOLUTIONS

PROJECT SUMMARY

As part of Hawaii's National Pollutant Discharge Elimination System (NPDES) and Erosion Prone Area Improvements Program, a streambank stabilization project was completed along Kaneohe Stream in Kaneohe, Oahu. Over the past 30 years, high-flow events eroded higher portions of the channel, causing encroachment of several private properties. To prevent additional property loss, the City and County of Honolulu wanted to find a solution that would provide long-term channel stabilization. Historically, a concrete solution has been used, but the City and County wanted a "soft" more natural system that encouraged growth of native vegetation. PYRAWALL®, an engineered wrap-faced vegetated solution, was selected to reinforce 330 feet of Kaneohe Stream. The installation ranged from six to eight feet high and was designed based on geotechnical information available at the site. This included steep 1H:4V slope segments with a mid-slope planting bench. PYRAWALL combines High Performance Turf Reinforcement Mat (HPTRM) with internal braces to reinforce soil mass and resist lateral earth pressures. It is also designed to encourage vegetation and is a vegetated Best Management Practice Solution for NPDES Storm Water Compliance.

PROBLEM Years of erosion was causing property loss along the Kaneohe Stream

SOLUTION PYRAWALL, an engineered wrap-faced vegetated solution

INSTALLATION The 330-ft section of stream bank was reinforced and stabilized with a 8-ft high PYRAWALL

PERFORMANCE Native vegetation quickly established providing an aesthetically pleasing solution

FEATURES & BENEFITS

- Interlaced bracing provides superior material connection and system performance
- Is a Vegetated Best Management Practice Solution for NPDES Storm Water Compliance
- Flexibility of product allows for curves to be incorporated along the wall or slope alignment
- Ideal for coastal climates because the components are environmentally inert and not susceptible to corrosion
- On-site soil can be used for infill eliminating the cost and carbon footprint of importing soil
- System is easily transported making it ideal for sites that are difficult to acces
- Superior UV resistance for up to 75 years of design life

PYRAWALL™ *Engineered Vegetated Wall System*

VISIT OUR WEBSITE FOR MORE INFORMATION, PRODUCT SAMPLES OR OTHER INQUIRIES OR CALL CUSTOMER SERVICE AT 1.800.621.1273

Propex®

P.O. Box 19269
4019 Industry Dr.
Chattanooga, TN 37416 USA
PH: 800 621 1273
FAX: 423 899 5005
www.propexglobal.com