

PEMBROKE CHANNEL FLOOD CONTROL SAN ANTONIO, TX



Problem



Solution



Result

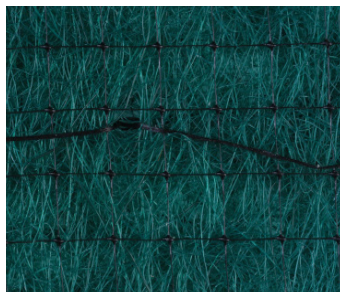
Application: Channel Stabilization
Product: PP5-10 TRM

Site Issues: Flooding • Multi-use Areas • Severe storm event

Problem: The City of San Antonio sought to implement flood control measures that could contain frequent flooding in the Pembroke neighborhood, with the intention of preventing damage and quieting the vocal residents. The Pembroke Channel Project was designed with this in mind, as well as to beautify the area and turn it into an area that would be of use to the residents. The City of San Antonio worked with Maestros engineering on the design. First, erosive forces from sudden, rushing flood water risked impacting existing structures, private properties, and street. Walkways and sidewalks were to be added as well. Additionally, reinforcement was required for the slopes and swales that abutted the road and pathways. Finally, as it was a large area a multi-use approach for the area was devised that could double as a community park and trail during dry times and flood storage during wet times

Solution: The high-strength and durable woven structure of the PP5-10 was a key factor in meeting all of the projects varied needs. This product allowed for significant strength as required by the design as well as ease of vegetation establishment for the aesthetic affect that was desired. Material installation was smooth and completed in short order by the contractor, Avenue 16. On-site training was provided to ensure proper installation. The PP5-10 turf mat was vegetated by seed, and vegetation took hold quickly. The immediate protection provided by this successful system was not achieved a second too soon.

Result: Soon after installation San Antonio, Texas experienced a significant storm event. The rain was intense, but the system worked exactly as it had been designed to do and no repair was required to the unvegetated system after the waters had receded. These systems increase in strength after full vegetation is achieved, so the project is even better protected now. The city, contractor, and neighborhood residents are all thrilled with the speed the project was installed and the successfulness of the new drainage channel and park system.



PRODUCT HIGHLIGHTS

- The PP5 permanent TRMs are comprised of 100% synthetic fibers bound between two UV stabilized heavy-duty synthetic nets.
- Provided both short term erosion protection and long term turf reinforcement for greater than 36 months.
- The PP5-10 provides significant resistance to hydraulic forces and provides increasing levels of performance as vegetation establishes.