

Challenge

Part of a larger initiative to create a 6.5-mile linear park connecting multiple neighborhoods and natural areas throughout the city, the City of Mobile faced several obstacles in designing this section of Three Mile Creek Greenway Trail.

Chief among the challenges was the need to protect extensive tree root systems while creating a stable trail path. Additionally, the project required varying trail widths and portions of the trail route passed through flood-prone areas, necessitating a design that could withstand periodic inundation.

The city also needed to minimize environmental impact and limit site disturbance in this sensitive natural area, making traditional construction methods problematic.

Solution

To address these challenges, the City of Mobile opted for PermaTrak's elevated boardwalk system. Working collaboratively with PermaTrak engineers, the designers at Dix Hite & Partners used this innovative solution allowing the trail to "float" above sensitive critical root zones without extensive excavation.

The modular nature of the system easily accommodated the varying trail widths, while its durable precast concrete construction ensured resilience against periodic flooding. By utilizing helical pile foundations and the elevated boardwalk design, the city also significantly reduced site disturbance compared to traditional trail construction methods.

TECHNICAL DESCRIPTION

Boardwalk Length(s): 140ft

Tread Width(s): 12ft

Color: Adelaide Gray

Texture: BeachWood

Installation Date: November 2023

