

Dayton Ave Tree Root Project



Location: **Shoreline, WA**
Owner: **City of Shoreline**
Designer: **Osborn Consulting**
Contractor: **Abbott Construction**
Installer: **SCI Infrastructure**

TECHNICAL DESCRIPTION

Boardwalk Length(s): 743'

Tread Width(s): 24"

Color: Natural Concrete

Texture: Beachwood

Installation Date: 10/2021

Challenge

A key challenge of this project was improving pedestrian safety along Dayton Avenue while preserving the mature evergreen trees that residents wanted to protect. Rather than removing the trees to install a traditional sidewalk, the design team at Osborn Consulting sought a solution that would minimize soil disturbance and protect the existing root systems.

Another challenge was accommodating existing underground utilities located within the proposed pathway. The utilities could not be relocated, and future access needed to be maintained.

The PermaTrak precast concrete boardwalk system provided the ideal solution, allowing for a safe pedestrian pathway while preserving the trees and maintaining utility access beneath the structure.

Solution

The PermaTrak system provided a low-impact solution by utilizing precast piers placed directly on the ground, minimizing disturbance to sensitive tree roots. The design team also worked closely with local arborists to identify and protect critical root zones throughout the project.

PermaTrak's modular design allows the boardwalk to accommodate seasonal ground movement, making it well-suited for the environmental conditions in Shoreline. To address utility access requirements, custom beams were fabricated to span over the utility corridor, while custom access treads were incorporated to provide maintenance personnel with access to the utilities beneath the boardwalk.