

Challenge

In 2014, a nearly 1,200-foot long timber pedestrian promenade in Ontario's City of Sarnia was nearing the end of its life. The pressure treated timber lasted less than 20 years in Canada's harsh winters, and had rotted to the point where the substructure was failing and boards could no longer be nailed down – rendering it essentially irreparable.

Adjacent to a rail spur, built over a steep bank, and including physical obstacles like fire hydrants, GPS survey monuments, and light poles, this location required attention to detail by the engineering team. A slab on grade (cast-in-place concrete) was not practical for the elevated portion of the walkway. The city's operations team was adamant that the replacement be more durable, lower maintenance, and have a higher life expectancy than a wood boardwalk.

Solution

Looking into several boardwalk material options, City of Sarnia Construction Manager Rob Williams came across PermaTrak. Working together, the city and PermaTrak were able to design a creative solution to address restrictions and work around obstacles. "The PermaTrak team was really great – working with the model and starting from the initial conversation with Jason," recalls Rob, "The drafting was very high quality. They were all about satisfying us and our needs."

The existing wood boardwalk was removed, PermaTrak foundations and a precast concrete boardwalk were installed, and a metal railing was attached. "Two winters in and it still looks good," notes Rob, "the boardwalk really does look quite sharp. I think it really stands out as a more reasonable replacement to the boardwalk that was there."

TECHNICAL DESCRIPTION

Boardwalk Length: 816 ft. 7 in.

Tread Width: Varies from 6 ft. to 14 ft. 3 in.

Color: Adelaide Gray

Texture: Sandblast

Installation Date: July 2015

