

City of Markham Operations Centre Yard Renewal with ACE XP™

City of Markham embraces the technological advantages of ACE XP Polymer Fibers™

LOCATION:

Ontario, Canada

DETAILS:

Surface Tech provides a technologically advanced asphalt additive to the City of Markham that provides a cost-effective solution to extending the life of its pavements.

PRODUCT:

ACE XP Polymer Fiber™

DATE:

May 2021

CONTRACTOR:

D. Crupi & Sons

CLIENT/OWNER:

City of Markham

The City of Markham in Ontario, Canada, has utilized ACE XP Polymer Fibers™ to reinforce its asphalt mixes since 2019 as an integral part of its annual pavement rehabilitation program. When the time came to rehab its well-worn operations center parking lot, paving with ACE XP-reinforced asphalt was a foregone conclusion.



Challenge

The Markham Operations Yard was due for renewal as part of the city's lifecycle replacement plan. Various surface distresses, localized failures and drainage issues were evident across the 20,000-square-meter pavement.

Since the yard serves as the primary public works facility for the city, it hosts a bevy of fleet vehicles from Roads, Parks, Fleet and Fire services, including many heavy vehicles and equipment that move slowly across the pavement.

Solution

The renewal plan called for a full-depth asphalt removal and replacement using SPI9 64-28 Cat D base and a 50mm surface course mix of SPI2.5 reinforced with ACE XP Polymer Fibers. The reinforced surface course provides improved resistance against thermal cracking and load-associated cracking, as well as reducing rutting potential. By improving crack and rut resistance, ACE XP prolongs the life of pavement and delivers an effective cost benefit gain by lowering maintenance needs and delaying future replacement.



**City of Markham Operations Centre
Yard Renewal with ACE XP™**

Project Scope:

**2,500 tons of PG 64-22 mix base
and SP12.5 ACE XP-reinforced
surface course**

Four-day production

**20,000-square-meter parking
facility**

Installation

The 2,500-ton project was completed in four days. Surface Tech provided dosing services, and the asphalt was produced at the D.Crupi & Sons Plant nearby. The D.Crupi crew has been trained and certified on the use of dosing equipment and have found ACE XP easy to incorporate into any mix design. They also report little or no difference in how the mix goes down compared to any non-reinforced mix.

Results

“The City of Markham is proud to be leveraging materials and technologies that improve the condition of our roadway assets. The integration of ACE XP Polymer Fiber additives has helped strengthen our asphalt pavements and has reduced premature cracking – all with the aim of further prolonging the life of our roadways.”

Zoyeb Vahora, B.Eng., PMP,
Supervisor of Road Operations for
the City of Markham.



The Surface Tech Advantage

Surface Tech is committed to developing the most advanced reinforcement solutions for asphalt, not only adding strength and durability, but improving the sustainability. Our innovative processes, technologies and products make asphalt pavements better, stronger and longer-lasting. Extensive research and development, laboratory testing and field trials have proven the Surface Tech advantage. We're paving the way to a sustainable future.

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