

# Case Study



## BC MOTI Trans-Canada Highway #1

**Project:**

BC Ministry of Transportation and Infrastructure - Trans Canada Highway #1

**Location:**

Surrey/Langley Area, Vancouver, BC

**Duration:**

Spring 2021 to Autumn 2021

**Contractor:**

All Roads Construction

**Client/Owner:**

Ministry of Transportation and Infrastructure, British Columbia

**Consultant/Engineer:**

WSP

**Surface Tech Product:**

ACE XP

## What We Did

Surface Tech provided All Roads Construction with the necessary training, technology, and support to implement ACE XP fiber reinforcement. The project involved several key activities:

**Technology Introduction & Training:**

Surface Tech's Regional Sales Director, Alex Snell, initiated the partnership by educating the All-Roads Construction team on the benefits of aramid fiber technology. *This collaboration included comprehensive training on the application and quality control of ACE XP, ensuring the contractor's team was fully certified and confident in the technology.*

**Automated Dosing Integration:**

Surface Tech introduced and installed the Sentinel, an automated dosing machine, at All Roads' new asphalt plant in Coquitlam, BC. *This advanced equipment streamlined the fiber reinforcement process, allowing for precise and efficient integration of ACE XP into the asphalt mix.*

**Quality Control & Assurance:**

Surface Tech worked closely with All Roads and Kontur Geotechnical to implement specialized quality control and assurance protocols. *This included testing asphalt samples in collaboration with Blankenship Asphalt Tech and Training (BATT Lab) to demonstrate the performance enhancements provided by the fiber reinforcement.*

## Project Scope & Objectives

The BC Ministry of Transportation and Infrastructure (MOTI) embarked on a critical project to reinforce 14,000 MT of asphalt along a section of Trans-Canada Highway #1, a major artery in the Vancouver region. *The project aimed to enhance the durability and longevity of the pavement structure by integrating aramid fiber technology through Surface Tech's ACE XP.* The overarching goal was to increase the highway's resilience to the increasing traffic load, while also focusing on sustainability and cost-effectiveness. *durabilité et d'optimisation des coûts à long terme.*

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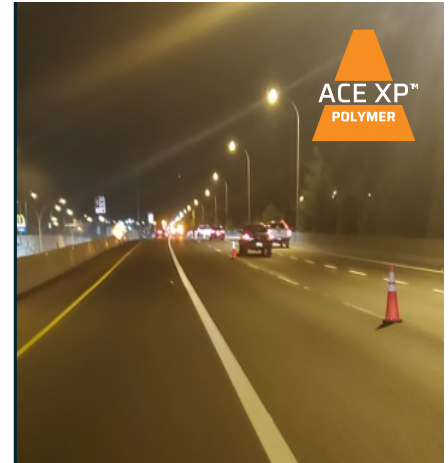


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## Challenges Overcome

The project presented several challenges, including the large scale of the project (14,000 MT of EPS asphalt paving) and the integration of new technology. Surface Tech's support in setting up and optimizing the Sentinel dosing machine was crucial in overcoming these challenges, ensuring the project was completed within the scheduled timeframe.



## Economic & Environmental Advantages

### Economic Advantages:

By using a thinner, fiber-reinforced asphalt layer, the project achieved significant cost savings while maintaining the necessary durability for heavy traffic loads. The reduction in asphalt thickness also led to lower material costs and quicker installation times, further enhancing the economic benefits.

### Environmental Advantages:

The project's approach minimized the use of raw materials, reducing the environmental impact associated with the production and transport of asphalt. The extended lifespan of the reinforced pavement also means fewer repairs and replacements, contributing to long-term sustainability.



ACE XP<sup>™</sup>  
POLYMER



## Client Feedback & Results

Rod Stephens, President of All Roads Construction, praised Surface Tech's technology and support, noting the ease of integration and the substantial benefits it brought to the project. The collaboration has positioned All Roads Construction as a leader in environmentally conscious asphalt production in the region.

For more details on the project and a client testimonial, visit: [All Roads Construction Project Details](#).

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