

ROADS & INTERCHANGES

QUICK FACTS

CLIENT: BC MINISTRY OF TRANSPORTATION INFRASTRUCTURE

> TOTAL PROJECT VALUE: \$51,000,000

CONSTRUCTION VALUE: \$24,000,000

AVERAGE ANNUAL DAILY TRAFFIC: 600

PROCUREMENT MODEL: BID-BUILD

LAFARGE'S ROLE: PRIME CONTRACTOR

LANE KILOMETRES CONSTRUCTED: 5 LANE-KILOMETRES

> COMPLETION DATE: 2014

MUFFORD CRESCENT - 64TH AVENUE OVERPASS

LANGLEY, BC

PROJECT OVERVIEW

In 2014, Lafarge completed the construction of the Mufford rail overpass located on Highway 10 in Langley, British Columbia, marking the official completion of all nine Robert Banks Rail Corridor (RBRC) infrastructure improvement projects in the Lower Mainland.

The RBRC Program is a \$307-million dollar partner initiative designed to relieve traffic congestion, improve road reliability and significantly improve the transport of international freight and Canadian exports shipped through Lower Mainland communities.



LAFARGE EFFECTIVE LEADERSHIP

PROJECT SPONSOR/VP



DAVID REDFERN

PROJECT DIRECTOR



LINCOLN KYNE

PROJECT MANAGER



GORD BIRD

MUFFORD CRESCENT - 64TH AVENUE OVERPASS

THE SCOPE

The Mufford Crescent Overpass project consisted of five lane kilometres of highway construction, including a 100 metre, four-lane rail bridge.

The project also involved complex environmental and traffic management, including 24 hour coordination with the Township of Langley, the Ministry of Transportation and Infrastructure, and Canadian Pacific Railway.

Key issues which were successfully managed on the project included:

- pile-driving into challenging soil conditions;
- construction of cast-in-place concrete superstructures; and
- managing multiple subcontractors and trades during construction in a constrained environment.





QUALITY ACROSS SCOPES

- STATE OF THE ART QUALITY ASSURANCE PROCESSES
- COLLABORATIVE SCHEDULING
- POWERFUL RESOURCE ALLOCATION AVAILABILITY
- PROJECT SPECIFIC HEALTH AND SAFETY PLAN
- ONGOING COMMUNICATION WITH EMERGENCY SERVICE STAKEHOLDERS

MUFFORD CRESCENT - 64TH AVENUE OVERPASS

EFFECTIVE PROJECT MANAGEMENT

Lafarge's role as general contractor included assembling a team of construction, aggregates, asphalt and ready-mix concrete experts to bring the depth and expertise needed on this collaborative project.

Lafarge constructed the entire overpass, including cast-in-place bridge girders, the foundation, piers, abutment walls and bridge deck.

We also provided services including; preload removal, earthworks and grading, installation of storm and sewer utilities, and the supply and placement of 12,000 m3 of aggregates, 4,000 m3 ready-mix concrete, 26,800 tonnes of asphaltic concrete and 2,000 tonnes of recycled asphalt.

SUSTAINABLE PROJECT DELIVERY

The highway surface was designed with a class one medium asphalt mix design, leveraging recycled asphalt product from the existing asphalt pavement.

The reuse and re-purposing of this material provided sustainability and budgetary advantages, allowing us to increase the recycled content while maintaining its durability and integrity.

Lafarge coordinated a massive team and over a dozen sub-trades to successfully complete this project on schedule and on budget.



PROJECT IMAGES MUFFORD CRESCENT - 64TH AVENUE **OVERPASS**



