

PHILIPS AVENUE OVERPASS



HIGHLIGHTS:

DESCRIPTION:

Bridge, road and utility construction

LOCATION:

North Vancouver, BC

CLIENT:

District of North Vancouver

PROJECT VALUE:

\$32 M

VALUE OF CIVIL WORKS:

\$18 M

PROJECT COMPLETED:

June 2016

MATERIALS SUPPLIED:

Asphalt - 6,500 tonnes

Aggregate - 65,000 tonnes

Concrete - 2,800 m³

THE PROJECT

The Philip Avenue Overpass was upgraded to minimize road and rail conflicts and reduce traffic congestion in the area. This area is a critical export gateway to overseas markets, and a substantial economic generator of employment in the marine, rail and trucking industries. Recently, the area has experienced significant growth and is forecast to continue to do so.

THE SCOPE

The project included the erection of a precast bridge superstructure with girders, and the erection of prefabricated steel bridge components.

LAFARGE PARTICIPATION

Lafarge was the general contractor on this project, managing 10 major subcontractors and six various trades. We were responsible for traffic management throughout the construction process, which included temporary road closures for excavation, installation of structural and utility components, grading, and asphalt paving.



As part of early construction works, Lafarge installed a series of piles and stone columns to strengthen the ground around the piers and abutments of the new overpass. In total, the project required 6,500 tonnes of asphalt, 65,000 tonnes of aggregates and 2,800m³ of concrete.

PROJECT DELIVERY

The key milestone for the project was the safe erection of a prefabricated steel archway over CN and Kinder Morgan rail lines. The bridge's steel components, which weighed approximately 300,000 kilograms, were prefabricated and the archway and deck were assembled on site. The foundations and abutments were constructed immediately following key utility relocations and ground improvements.

During construction, arch ways, decks and prefabricated girders were installed. The construction schedule was accelerated through executing some of the work at night, which allowed for easier excavation related to storm and sewer utilities due to low tide. The project was delivered under budget and on time.



CLIENT REFERENCE:

| | |
|------------|--------------------------------|
| NAME: | Allan Galambos |
| TITLE: | Senior Project Manager, Binnie |
| TELEPHONE: | (604) 679-7450 |
| EMAIL: | agalambos@binnie.com |

CLIENT REFERENCE:

| | |
|------------|--------------------------------------------------------|
| NAME: | Steven Bridger |
| TITLE: | Section Manager, Engineering, Planning and design, DNV |
| TELEPHONE: | (604) 367-6335 |
| EMAIL: | bridgers@dnv.org |

CLIENT REFERENCE:

| | |
|------------|----------------------------|
| NAME: | Ryan Calder, P.Eng, PMP |
| TITLE: | Project Manager, MMM Group |
| TELEPHONE: | (604) 685-9381 |
| EMAIL: | calderr@mmm.ca |



Lafarge Western Canada
CORPORATE OFFICE
 300-115 Quarry Park Road SE
 Calgary, AB T2V 5G9

Lafarge.ca