

KICKING HORSE CANYON – PHASE 2

PAVEMENT ENGINEERING, QUALITY VERIFICATION & ASSET MANAGEMENT



Project Description

This BC Ministry of Transportation Public-Private Partnership Project consisted of the construction of the new 800 m long Park Bridge spanning the Kicking Horse Canyon and realignment and construction of approximately 8 km of new four-lane divided highway (Trans Canada Highway 1). The Project also requires Trans Park Highway Group to operate and maintain the 26 km long section from Golden easterly to the Yoho National Park West Gate for a 25-year period, at which time the roadway is handed back to the Province.

LVM-JEGEL provided technical input to TPHG on the pavement designs, construction, and materials, and the long-term maintenance and rehabilitation requirements during the 25-year Concession Period. LVM-JEGEL is also conducting the annual pavement performance monitoring (International Roughness Index (IRI), rut depth and Pavement Distress Index) to check that the specified performance levels are being achieved and the asset condition is maintained during the Concession Period. Pavement structural evaluations of the highway pavements, including FWD testing and boreholes are also carried out at least one year prior to each scheduled major rehabilitation activity. LVM-JEGEL prepares comments and reports on the adequacy of the maintenance program to preserve the pavement assets and maximize the time between major maintenance and rehabilitation works.

LOCATION

Trans Canada Highway 1, Golden, British Columbia, Canada

CLIENT

Bilfinger Berger Project Investments
(Trans Park Highway Group)

MANDATE PERIOD

April 2005 – September 2008

PROJECT COST (CAD)

Construction: \$ 135 M

VALUE OF SERVICES PROVIDED (CAD)

\$ 750 K

SERVICES PROVIDED

- ▶ Pavement Engineering and Life-Cycle Costing
- ▶ On-Site Quality Verification
- ▶ Pavement Performance Monitoring and Asset Management Engineering

NUMBER OF PARTICIPANTS – MAN-MONTHS

3 persons; 150 man-months

KEY PERSONNEL

Quality Verification Project Director

John Emery, Ph.D., P.Eng.

Quality Verification Project Manager

Michael MacKay, M Eng., P.Eng.

Senior Quality Verification Supervisor

David Soanes, CET. rcsi.

Quality Verification Technician (EIT)

Ivan Alvarez, B.Sc. (Engineering)