TRANS CANADA HIGHWAY PROJECT
BUILDING PROSPERITY THROUGH
PUBLIC PRIVATE PARTNERSHIP

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ABSTRACT

The completion of the four-lane Trans-Canada highway in New Brunswick is a priority for both the provincial and federal government. A modern, four-lane Trans-Canada will make it easier to move people and goods throughout New Brunswick and to move them more efficiently and with greater safety. This will further enhance the already important role of the Trans-Canada Highway as a trade corridor and will make New Brunswick a more attractive destination for visitors.

A two-prong approach was chosen to complete the remaining 130 kilometres of the Trans-Canada highway. Firstly, the 32-kilometre section between Pokiok and Longs Creek was constructed using the *New Brunswick Department of Transportation's* traditional method of calling tenders.

Secondly, the *New Brunswick Highway Corporation* sought a private sector partner to design, build, and finance the construction of 98 kilometres of Trans-Canada highway between Grand Falls and Woodstock. The *New Brunswick Highway Corporation* selected the *Brun-Way Group*, a joint venture owned by SNC-Lavalin and Atcon Construction to carry out this work and signed a $543.8 million agreement in February 2005.

Brun-Way Group, through it's agreement with the *New Brunswick Highway Corporation*, is also be responsible for selected upgrades of 128 kilometres of existing four-lane Trans-Canada highway, as well as the operation, maintenance and rehabilitation of 275 kilometres of highway between Québec border and Longs Creek, as well as Route 95, between Woodstock and the U.S. border, until 2033.

The project to complete the four-lane Trans-Canada highway in New Brunswick has received national recognition for its financing. The Trans-Canada highway project was the first highway infrastructure project in Canada to require its private-sector partner to finance construction of the project with payment only once the highway opened to traffic. The project has since served as a model for other highway infrastructure projects in Canada.

The *Canadian Council for Public-Private Partnerships* presented the *New Brunswick Highway Corporation* and its partner, the *Brun-Way Group*, with an award for the project's financing during the council's 2006 National Awards for Innovation and Excellence in Public-Private Partnerships award ceremony, held each year in Toronto as part of the council's national conference.

1. BACKGROUND

Upgrading the Trans-Canada Highway (TCH) in New Brunswick to four-lanes by November 1, 2007 is the Government of New Brunswick's top infrastructure priority. The completion of the new highway will support economic development, save lives, increase efficiency and improve the environment by reducing vehicle emissions.

The Trans-Canada Highway Project includes the design and construction of 98 kilometres of four-lane Trans-Canada Highway between Grand Falls and Woodstock, as well as the selected upgrade of 128 kilometres of existing four-lane highway for a guaranteed maximum price of $543.8 million, only payable by the Province when the highway is open to traffic. It also includes the operation, maintenance and rehabilitation of 275 kilometres of highway until 2033.

The project agreements were signed February 4, 2005. Brun-Way Group (SNC-Lavalin Inc. and Atcon Construction) is assuming the risks of delivering the highway by November 1, 2007 and for the fixed price offered. They are also bearing risks associated with operation, maintenance and rehabilitation of the highway during the operation, maintenance and rehabilitation period.

The signatories to the Agreements are the New Brunswick Highway Corporation (NBHC) on behalf of the provincial government, its subsidiary the Trans-Canada Highway Project Company Inc. (TCHPC), Brun-Way Construction Inc. (the Developer), Brun-Way Highways Operations Inc. (the Operator) and their guarantors Atcon Construction Inc., SNC-Lavalin Inc. and SNC-Lavalin Group Inc.

The Guaranteed Maximum Price (GMP) for the Design-Build Agreement ($543.8 million) is payable once the highway is opened to traffic, subject to a holdback which is payable upon total completion of the design and construction. Under the Operation, Maintenance and Rehabilitation Agreement, the annual price of $18.8 million (once the entire highway is available to traffic) is paid in monthly installments and is adjusted for inflation.

Reflecting the fact that this is a multi-year agreement extending to June 30, 2033 and that technology and service expectations may change, the agreements also establish procedures for making changes to the requirements.

Certain protection and safeguards for both the Province and Brun-Way Group, such as insurance and bonding requirements are established within the terms of the Project Agreements.

The key deliverable dates are set. The highway must be open to traffic by no later than November 1, 2007, and totally complete by June 30, 2008. An access to the new Upper River Valley Hospital in Waterville, N.B. must be available to traffic by June 1, 2007. Brun-Way Highways Operations is responsible for the operation, maintenance and rehabilitation of the highway until June 30, 2033.

2. PROJECT UNDERTAKEN

The Government of New Brunswick decided to involve a private sector partner in the completion of the four-lane TCH in the province because it is the most cost-effective way to complete the project within the timeframe mandated by government.

The government's chief objective in undertaking this project was to complete the four-lane TCH in the province by November 1, 2007. This fast-tracked construction schedule will save lives and be of benefit to the New Brunswick economy, both in the short- and long-term.

The government also sought to design and build the highway in the most cost-effective way possible within the time allowed (three construction seasons). The private sector partner, Brun-Way Group has offered the Province a guaranteed maximum price of $543.8 million that is payable once the highway is open to a traffic, subject to holdback which is payable upon

total completion.
In addition, more risks have been transferred to Brun-Way Group. By making payment contingent on traffic availability, the government has also been assured of timely completion.

3. WHY CHOOSE A P3 RATHER THAN TRADITIONAL DELIVERY?

When determining how best to meet the commitment to complete the four lane TCH by 2007, the New Brunswick government looked at various options to reach that goal. This included proceeding with the Department of Transportation's traditional method of designing the road in-house and tendering construction contracts, accelerating the traditional process, offering three smaller contracts between Grand Falls and Woodstock, which contractors would both design and build, and creating one large project between Grand Falls and Woodstock that would be designed, built, financed, operated and maintained by a Developer/Operator.

The government carefully considered its own experiences with the traditional method and with the Fredericton-Moncton Highway Project, a P3 project completed in 2001 and currently in operation. In addition, KPMG LLP was retained to prepare an independent review of the potential benefits of a P3 Project. The resulting report indicated the government could realize a cost savings of up to 10 to 15 per cent by involving a Developer.

The results of both the internal review and the KPMG report were clear that using a public-private partnership to construct the highway was the most cost-effective way to complete the four-lane Trans-Canada Highway in the province in the timeframe mandated by government.

The government followed a two-step process to select the P3 partner for the Trans-Canada Highway Project. The first step in the selection of a proponent was the release of a request for qualifications (RFQ). Proponents interested in the project responded to the request by demonstrating their expertise in designing, building, operating, maintaining and rehabilitating a new highway. The proponents were also evaluated on their ability to finance the project. The proponents also had to clearly state their commitment to develop economic and industrial benefits and Aboriginal inclusion in New Brunswick and Canada through the project. A shortlist of the most qualified proponents was established following an evaluation of the responses to the RFQ.

The second step in the selection of a proponent involved issuing a request for proposals (RFP) containing all of the project requirements. The RFP was issued to qualifying proponents by the New Brunswick Highway Corporation.

Proponent submissions were evaluated to ensure the proposals complied with the operational, technical and environmental requirements to design and build, as well as operate, maintain, and rehabilitate the four-lane Trans- Canada Highway. The proposals also had to demonstrate the abilities of the proponents to finance the design and build portion of the project, as well as operate, maintain, and rehabilitate the four-lane highway. The financial submissions were evaluated to ensure they complied with the economic and industrial benefits and Aboriginal inclusion requirements of the RFP in addition to the technical and financial requirements.

A total of 14 teams made up of New Brunswick Department of Transportation employees, as well as other provincial government agencies invested 10,500 person-hours of work to ensure a fair, comprehensive and transparent selection process. The evaluation was conducted in a high-security area with sign-in, sign-out procedures, photo ID requirements for entrance, confidentiality agreements undertaken by all participants and other measure to ensure the security of the proposals.

A committee of deputy ministers supervised the process and final decisions were made by the Executive Council of the Province of New Brunswick. To ensure the integrity of the process, rules regarding conflict of interest and absolute confidentiality have been applied to all participants. A fairness monitor oversaw the process from start to finish to ensure that a fair process had been conducted.

On December 8, 2004, the Province announced Brun-Way Group as the preferred proponent to design, build, finance, operate, maintain, and rehabilitate the four-lane Trans-Canada Highway. The consortium's proposal met all the requirements of the RFP and provided the best value for taxpayers. Contract finalization began immediately and an agreement was signed on February 4, 2005.

The time line of the procurement process is detailed below:

- Announcement of decision to proceed with a public-private partnership: November 13, 2003
- RFQ Issued: December 11, 2003
- RFQ Submissions received: January 29, 2004
- Evaluation of submissions and selection of most qualified proponents: February-March, 2004
- Qualified respondents invited to proceed to Request for Proposals phase: March 26, 2004
- RFP issued: April 21, 2004
- Evaluation of RFP responses: August-October, 2004
- Brun-Way Group announced as preferred proponent: December 8, 2004
- Contract finalization with Brun-Way Group: December 2004-February, 2005
- Agreement signed: February 4, 2005
- Agreement announced: February 7, 2005

4. KEY TERMS OF AGREEMENT

4(a) The Project

On February 4, 2005, NBDOT awarded a contract to the Brun-Way Group, a consortium formed of SNC-Lavalin Inc., and Atcon Construction Inc., for the twinning of the Trans-Canada Highway in New Brunswick by the fall of 2007. The Project incorporates the design, construction, financing, operation, maintenance and rehabilitation of Route 2, between the Quebec border and Longs Creek, and Route 95 in New Brunswick.

The scope of work includes the design and construction of 98 km of highway, the upgrading of 128 km of highway, and the operation, maintenance and rehabilitation of 275 km of highway, and the financing as applicable. The Project consist of three types of highway Sections which are described as follows:

- Design-Build (DB) Sections – Sections to be designed and constructed by Brun-Way Group
- Existing Sections – Sections constructed by NBDOT prior to the execution of Project Agreements with Brun-Way Group that will require upgrading by the Brun-Way Group; and
- Department of Transportation-Built Sections – Sections to be designed and constructed by NBDOT.

4(b) The execution timeline of the Project is as follows :

- Traffic Availability for the DB Sections can be achieved at the earliest on August 1, 2007 but no later than November 1, 2007;
- Total Completion must be achieved no later than June 30, 2008; and
- The operation, maintenance and rehabilitation period started June 1, 2005 for certain sections of the road, and is scheduled to end on June 30, 2033.
- The Two Department of Transportation-Built Sections to be available by November 1, 2006 and November 1, 2007.

4(c) Organizational structure of the Project

Administration and control of Facility lands and highways was turned over by the Lieutenant Governor in Council to the New Brunswick Highway Corporation (NBHC), a Crown Corporation. In turn, NBHC has formed a subsidiary, the Trans-Canada Highway Project Company Ltd., and given it responsibility to manage the Project. The Subsidiary has entered into the DB Agreement and the OMR Agreement with the Brun-Way Group in respect to the Project. The DB Agreement applies to the design, construction and financing responsibilities of Brun-Way Group and the OMR Agreement applies to the operation, maintenance and rehabilitation responsibilities of Brun-Way Group. NBHC is a party to these agreements.

The lands required for the Highway right-of-way were acquired by NBDOT and Brun-Way Group is provided with an access to them. Ownership of the highway lands is retained by NBHC.

The ownership of the DB Work, including the upgrades to the Existing Sections of the Highway, will be retained by Brun-Way Group until Traffic Availability on the DB Sections is achieved and upgrades to the Existing Sections are completed, at which point the relevant Section ownership will be transferred to NBHC.

4(d) Consortium Members Responsibilities

Brun-Way Group is the consortium formed by SNC-Lavalin (70%), and Atcon (30%) at the time of the bid. The legal structure developed for the execution of the Project Agreements required the creation of the following two single purpose companies established solely to undertake this transaction:

- Brun-Way Construction Inc. ("Brun-Way Construction");
- Brun-Way Highways Operations Inc. ("Brun-Way Highways Operations").

As co-venturers of the Brun-Way Group, SNC-Lavalin and Atcon are responsible to carry out the project on a joint and several basis. Brun-Way Group has also hired SNC-Lavalin Capital Inc. (SNC-Lavalin Capital) as sole financial advisor to structure and raise the required financing for the Project.

SNC-Lavalin is lead on Brun-Way Construction and is providing expertise in the fields of engineering, project management, quality assurance, safety and security and environmental management for the Project. **Atcon** is providing expertise in construction management and is involved in the construction of the highway along with other local subcontractors.

4(e) Business Models and Financing Proposals

The RFP requested the presentation of two distinct business models:

(i) the Completion Payment Model and

(ii) the Extended Repayment Model (together « the Business Models »).

In the final instance, the Completion Payment Model was retained by the Province for the Project. A summary of both models is presented below:

(i) Completion Payment Model – The qualified bidders had to provide a Guaranteed Maximum Price (GMP) for the design, construction and financing of the DB Sections and for the upgrading and financing of the Existing Sections, which is to be paid at Traffic Availability and Total Completion of the DB Work (further referred to as the construction financing model).

With this model, a financial proposal was required to finance the construction period with repayment of the loan at completion under the following schedule:

- 29.25% of GMP for Section 3 no later than 30 business days after Traffic Availability Date for Section 3, that is December 13, 2007 at the latest;
- 68.25% of GMP for Sections 5 and 6 no later than 30 business days after Traffic Availability Date for Sections 5 and 6, that is December 13, 2007 at the latest; and
- 2.5% of GMP for Total Completion no later than 30 business days after the Total Completion Date, that is August 11, 2008 at the latest.

(ii) Extended Repayment Model – With this model, a long-term financial proposal was required to finance the required construction period with a repayment of $135 M payable by NBHC upon

Completion (on the same basis as described in (i) above) and the repayment of the balance of the GMP plus applicable financing fees in semi-annual installments over the OMR period further referred to as the long term financing model).
In both models, the payments to be received under the DB agreement were not conditional on the performance of the Operator under the OMR Agreement.

4(f) Contractual Structure

The key Legal Agreements are:

- **The Trans-Canada Highway Agreement**
  The agreement provides the terms and conditions for the Subsidiary of the design, build and finance work required for the Project. The Agreement is made between NBHC and the Subsidiary.

- **The Design-Build Agreement**
  The agreement provides the terms and conditions of the design and construction work required
  for the Project. The Agreement is made between NBHC, the Subsidiary, Brun-Way Construction
  as the Developer and SNC-Lavalin Group Inc, SNC-Lavalin Inc and Atcon Construction Inc as the Guarantors.

- **The Direct Agreement**
  The agreement provides the Purchasers with step-in rights to cure defaults by Brun-Way Construction under the DB Agreement. The Agreement is made between Brun-Way Construction, the Purchasers, NBHC and the Subsidiary.

- **Purchase Agreement**
  The agreement provides the terms and conditions of the DB Debenture purchase transaction between Brun-Way Construction ("the Seller") and the Purchasers; SNC-Lavalin Capital acted as financial advisor, developed the financial structure and negotiated the terms and conditions of the DB Debenture purchase transaction between Brun-Way Construction ("the Seller") and the Purchasers;

Operation, Maintenance and Rehabilitation Agreement
This agreement retains Brun-Way Highways Operations to carry out the operation, maintenance and rehabilitation of 275 kilometres of highway, including the TCH from near the Quebec border to Longs Creek (west of Fredericton) and Route 95 (from Woodstock to the Maine border)

- **Section "O" Maintenance Agreement**
  This agreement retains Brun-Way Highways Operations to carry out the maintenance of the first two kilometres of highway south of the Quebec border (Section "O") until such time as it is reconstructed as a four-lane highway.

A summary of the principal agreements of the Design-Build portion of the Project included in Section 6 – Legal Agreements.

5. COMMUNICATIONS

The project's communications plan is intended to facilitate the successful completion of the project by building a platform of positive public support and positioning throughout the construction and operations phases.

The overall objective is to ensure all stakeholders are informed and consulted at appropriate times. Communication activities have inspired public confidence and support; positioned the Province and Brun-Way as partners working closely together to build strategic infrastructure that will help New Brunswick prosper; and highlighted significant economic and safety benefits the project will contribute to the region. These activities are also building awareness of the project's timeline; addressing issues or concerns raised through various feedback channels; supporting emergency response activities; and celebrating key milestones during the term of the project.

Communication activities implemented jointly by the Province and Brun-Way include a project website (www.brunway.com); proactive local media relations; significant print and radio 'Traffic Advisory' advertising; emergency response communication planning and simulations; community relations activities including a joint Safe Driving campaign; special events including open houses and grand openings of new offices and maintenance depots; and research to measure public awareness of the project.

The next round of public opinion polling is currently in the field. Results of last spring's survey showed 72% of New Brunswickers were aware construction is underway to complete the TCH in New Brunswick.

6. LEGAL AGREEMENTS

The following is a summary of the principal agreements of Design-Build portion of the Project: the Purchase Agreement, the Design-Build Agreement, the Direct Agreement and the Trans-Canada Highway Agreement.

6(a) Purchase Agreement

The Purchase Agreement provides the terms and conditions of the Purchasers' purchase of the DB Debenture from the Seller. The agreement is made between Brun-Way Construction, as Seller, and the Purchasers (Lenders). The principal terms of the Agreement are summarized below :

- Under the terms of the Purchase Agreement, the Seller and the Purchasers have entered into a purchase transaction pursuant to which the Purchasers purchased the debenture issued by NBHC (the "DB Debenture") in payment of the GMP and all rights of the Seller in the termination payment. The GMP represents the amount payable by NBHC to the Seller for the fulfillment of their obligation to complete the Project as indicated in the DB Agreement;

- If the amount of the DB Debenture is adjusted downward pursuant to the DB Agreement, then the purchase price will be automatically reduced accordingly. If the aggregate amount of the installment payments then disbursed exceeds the purchase price, as adjusted, the Seller will reimburse to the Purchasers any overpayment made on account of the purchase price;

- The discounts (i.e., the return yield on the disbursements made by the Purchasers) is calculated based on the expected payment dates of the amounts payable under the DB Debenture. If such amounts become payable at a later date (e.g., as a result of changes in the schedule of the Project), the Seller will pay interest to the Purchasers until actual payment of the related amounts. On the other hand, if any portion of the DB Debenture is paid to the Purchasers earlier than expected, the Purchasers will reimburse to the Seller the unaccrued portion of the discount charged in respect of such portion less breakage and make whole costs; and

- The closing of the purchase transaction and the disbursement of the first installment payment was subject to the fulfillment of the conditions precedents set forth in the term sheet.

6(b) DB Agreement

The DB Agreement provides the terms and conditions of the design and construction work required for the Project. The Agreement is made between NBHC, the Subsidiary, Brun-Way Construction and the Guarantors. The principal terms of the Agreement are summarized below:

- Brun-Way Construction must ensure that (i) certain sections of the Brun-Way Highway (defined as Facility Sections 3, 5 and 6) are available for traffic and certain upgrade work of other sections are totally completed on or before November 1, 2007, and (ii) total completion of the Project occurs on or before June 30, 2008;

- The DB Agreement contains provisions dealing with the failure by Brun-Way Construction to perform the DB Work in conformity with the requirements. The Subsidiary may then deliver a non-conformance notice to Brun-Way Construction requiring them to rectify such non-conformance. The DB Agreement also deals with disputed non-conformance matters;

- The GMP will be paid in three installments as presented in Section 4(e) Business Models and Financing Proposals, Completion Payment Model. Such payments to the Sellers are subject to the receipt by the Subsidiary of a payment request and a certificate by the Project Manager (certifying that the relevant portion of the DB Work has been totally completed and that any non-conformance under the DB Agreement has been rectified) in the manner contemplated in the DB Agreement. The payments are also subject to the fulfillment of certain other conditions precedent to each payment, including the absence of any default under the DB Agreement;

- The GMP may be increased or decreased, as the case may be, under the circumstances contemplated listed in the DB Agreement, which include the following:

The GMP may be adjusted in the case of a change in the scope of the DB Work. In circumstances where a scope change to the DB Work occurs, the appropriate changes will be made to the GMP and/or the relevant portions of the DB plans and project schedules. If the parties are unable to agree, the Subsidiary's determination as to the matter in issue will be final and binding unless the Sellers refer the matter for resolution in accordance with the dispute resolution provisions of the DB Agreement;

The GMP may be decreased as a result of the Sellers' failure to (i) pay to the Subsidiary the costs incurred by it to remedy any non-conformance not rectified by the Sellers further to a non-conformance notice, and (ii) pay to the Subsidiary any amount payable to it under the DB Agreement (e.g., a claim to recover the costs of a deficiency remaining unpaid); and

Any disagreements on the adjustments to the GMP may be resolved in accordance with the resolution provisions set forth in the DB Agreement.

- The DB Agreement also sets forth extensive requirements with respect to the obligation of the Sellers to obtain surety bonds and insurance coverage during the DB Work;

- The DB Agreement provides for representations and warranties as well as negative and affirmative covenants of the Seller;

- The DB Agreement sets forth a list of events of default of the Seller which if not remedied may give rise to the right of the Subsidiary to terminate the DB Agreement (non-performance, monetary default, insolvency, etc.);

- In the event that the Subsidiary exercises its right to terminate the Agreement, the Subsidiary may also complete the DB Work, in which case the Subsidiary will be liable to pay a termination payment to the Seller once the Project has been totally completed;

The DB Agreement provides for dispute resolution mechanisms before a dispute resolution board; and The DB Agreement also contemplates that the Guarantor will guarantee the performance by the Seller of their obligations under the DB Agreement.

6(c) Direct Agreement

The Direct Agreement provides the Purchasers with the right to cure defaults by the Sellers under the DB Agreement. The Agreement is made between the Seller, the Purchasers, NBHC and Subsidiary. The principal terms of the Agreement are summarized below:

- The Subsidiary or NBHC will not exercise their rights and remedies (other than their right to make payment on behalf of the Seller to cure a default under the DB Agreement or adjust the GMP in accordance with the terms of the DB Agreement) against the Seller upon any default under the DB Agreement, unless (i) they first notify the Purchasers, and (ii) in the case of defaults which are capable of being remedied by the Purchasers, only if such defaults have not been remedied within 30 business days or such longer term as may be necessary to cure such defaults;

- In the event that the Subsidiary or NBHC becomes entitled to terminate the DB Agreement on account of any unremedied default under the DB Agreement (including a default not capable of being remedied such as insolvency), they may do so within 30 business days of a termination notice given to the Purchasers;

- However, during the 30 business day period following such termination notice, the Purchasers will have the option (but not the obligation) to replace the Seller as contractor under the DB Agreement by another person designated by the Purchasers, provided the following conditions are fulfilled:

- the new contractor is acceptable to the Subsidiary, acting reasonably;

- the new contractor assumes all obligations of the Seller under the DB Agreement; and

- the Purchasers remedied or are proceeding with due diligence to remedy all defaults under the DB Agreement, except for such defaults that are not capable of being cured such as an assignment in bankruptcy made by one of the Seller.

- Upon the occurrence of a termination event under the Purchase Agreement, the Purchasers will also have to give notice of same to NBHC and the Subsidiary and they will only exercise the rights of the Seller under the DB Agreement as indicated in the Direct Agreement, provided that such requirement does not prevent the Purchasers from exercising and enforcing their payment rights under the DB Debenture;

- The Direct Agreement provides for restrictions on certain assignments of the rights of the Purchasers there under, such as the approval of any assignee (other than a chartered bank) by the Subsidiary, acting reasonably; and

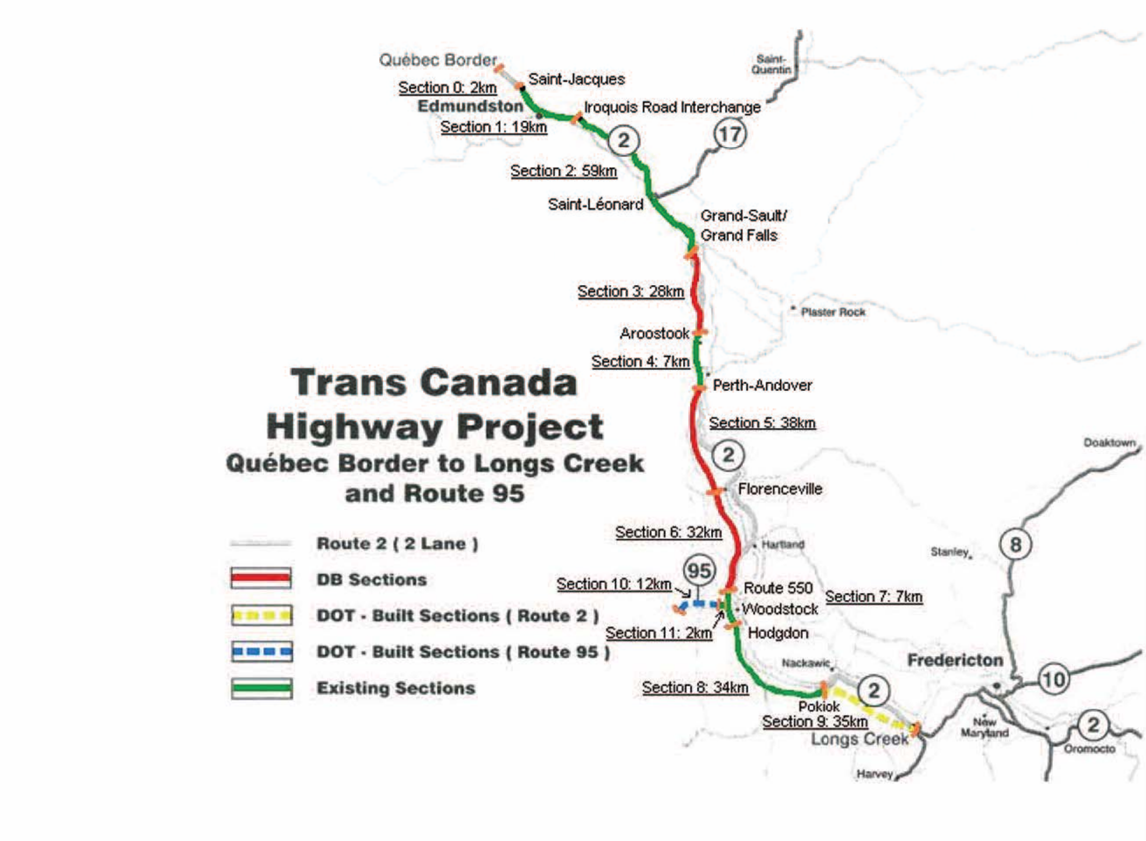
- Disputes as to matters covered by the Direct Agreement must be settled by arbitration under the Arbitration Act (New Brunswick).

6(d) TCH Agreement

The TCH Agreement provides the terms and conditions for the Subsidiary of the design, build and finance work required for the Project. The Agreement is made between the NBHC and the Subsidiary. The principal terms of the Agreement are summarized below:

- The DB Debenture was issued by NBHC to the Subsidiary pursuant to the TCH Agreement to evidence the amounts payable by NBHC to the Subsidiary and assigned by the Subsidiary to the Seller on the date of execution of the TCH Agreement; and

- The DB Debenture provides that the NBHC promises to pay to the holder of the debenture the GMP together with any GST and equivalent tax applicable thereto (including the termination payment, if applicable) and such amount will become due and payable to the Subsidiary. In the event that NBHC defaults in the payment of such amount under the DB Debenture, interest will accrue at a prescribed rate.



7. BENEFITS AND RESULTS OVER TRADITIONAL PROJECT APPLICATION DELIVERY

Several service enhancements have resulted from the involvement of the private sector partner. The financial risk assumed by Brun-Way Group is assuring that the highway is delivered to the Province of New Brunswick's high standards for quality, safety and environmental protection, on time and on budget. A third party engineer has been engaged by Brun-Way Group Purchasers (Canadian institutional investors including Manulife Financial, Sun Life Financial and Caisse de dépôt et placement du Québec) to provide an additional level of scrutiny to the construction process in addition to Brun-Way Group's rigorous quality management process and the Province's auditing rights. This significant investment has also encouraged Brun-Way Group to bring innovation and new technologies to the table such as the use of GPS in its survey controls, both for layout and quality control. GPS is also being used by Brun-Way Highways Operations to manage assets, activities and adherence to Project agreements until 2033. In addition, because Brun-Way Group is responsible for the long-term operation, maintenance and rehabilitation of the facility, it has a strong incentive to design and build a highway of the highest quality.

Another service enhancement is the establishment of a $1.8 million compensation reserve fund for the deterioration, destruction, or disturbance of fish habitat to minimize the environmental impact of the construction. The 98 kilometres of the four-lane Trans-Canada Highway being built by Brun-Way Group between Grand Falls and Woodstock run through and near ecologically sensitive areas. Special attention must be paid to these zones during the design and construction phases and also during the operation, maintenance, and rehabilitation of this section of the Trans-Canada Highway. As part of this effort, 8.4 hectares (20.7 acres) of fish habitat will be improved to compensate for the 2.8 hectares (6.9 acres) of fish habitat that will be damaged or destroyed during the construction of the highway.

The Government engaged KPMG LLP to conduct a value-for-money report on the benefits of entering into a public-private partnership to construct the highway. This report concluded that the Province could realize a savings of both time and cost by using a P3 project as compared to the Department of Transportation's traditional delivery method. Assigning the responsibility for design and construction to a single party allows for the acceleration of the project completion timeline due to parallel design and construction activities, increased co-ordination of construction components, better scheduling of work and the flexibility to deal with unforeseen problems.

Integrating responsibility for design and construction also results in cost savings from the above noted efficiencies. Brun-Way Group is also able to reduce costs as compared to the traditional model through economies of scale arising from efficient integration of resources, higher volume purchases, better price negotiation power, more efficient mobilization and more efficient allocation/absorption of overhead.

By assigning responsibility for the long-term operation, maintenance and rehabilitation of the highway to Brun-Way Group, KPMG concluded that real additional cost-saving opportunities should arise from appropriate capital/operating tradeoff decisions, allocating the risk of future costs in the operating, maintenance and rehabilitation phase to the private party, economies of scale, and private sector management skills in delivering on long-term, performance-based specifications.

In total, cost savings as compared to the Province's traditional method of tendering contracts are expected to be in range of up to 15 per cent.

The Brun-Way Group brings together solid local companies partnered with a global leader in a business model designed to maximize economic benefits to build a better New Brunswick.The consortium of New Brunswick companies are taking a lead role in building a highway of excellent quality in the most cost efficient manner under the strictest environmental requirements in Canadian history.

Brun-Way is committed to achieve more than 75% New Brunswick content for design and construction, and during the life of the project, to provide direct and indirect benefits to New Brunswick, including over a million dollars in benefits to Aboriginal communities.

The project will generate 4000 person years of work during the construction phase, and an additional 4000 person years in spin off benefits.

The first and most important benefit to highway users is that undertaking a P3 project to complete the four-lane Trans-Canada Highway was the most cost-effective way to complete the highway within the time allotted. By completing the highway, the Government of New Brunswick will stimulate economic development and increase safety on the highway through accident reductions.

The financial model has also provided the provincial government with the flexibility to undertake other critical highway infrastructure projects while planning for the payment it will make to Brun-Way Group in 2007.

As well, the Province has agreed to make payments to Brun-Way Group for the operation, maintenance and rehabilitation of the highway according to defined performance measures. Because of these contractual obligations on the part of the Province and Brun-Way Group, highway users will receive a consistent level of service that will governed by performance standards rather than budgetary decisions. In fact, innovation brought forward by Brun-Way Group should serve to provide a better level of service to the road users of New Brunswick.

As well, since Brun-Way Group, as a private company, is not bound by the provincial legislation for the administration of construction projects undertaken by the Crown, it can complete construction, maintenance and rehabilitation work in a more timely way. For example, Brun-Way Group was able to make a significant investment repaving older sections of the existing four-lane Trans-Canada Highway in the Edmundston area in 2006. Brun-Way finished repaving more than 80 kilometres by the end of July, which is several weeks ahead of the Province's typical paving schedule.

A 2002 cost-benefit study by ADI Limited indicates that completion of the four-lane highway in New Brunswick would result in $504.4 million in savings to users including travel time ($35 million), vehicle operations ($281 million), and collision reduction savings ($188 million). The largest of these savings, vehicle operations, will be realized in part because the new four-lane Trans-Canada Highway will be four kilometres shorter. These savings will also be due to reduced frequency of acceleration/deceleration cycles achieved by more unimpeded traffic flows. Improvements in the curvature and grades of the new highway will also add to the savings.

Collision rates on the existing highway are high. From 1997 to 2001 there were 807 collisions. These accidents resulted in 34 fatalities and 432 injuries to vehicle occupants. The projected savings of $188 million are a statement of this high accident rate. A study conducted by the Department of Transportation indicates that fatal accidents on high-speed, two lane highways occur three times more often than on four-lane divided highways.

While the project has tremendous opportunities for job creation and economic benefits to New Brunswick, the expertise brought together for the Brun-Way Group partnership allows for the pursuit of similar opportunities, both in Canada and abroad, thus helping to further the economic development of the province.

Taking part in the Trans-Canada Highway Project provides SNC-Lavalin Group with an important experience in aspects such as: project management, financing, Public-Private Partnership and the transportation sector. In addition, it permitted SNC-Lavalin Capital to apply and to expand its project financing expertise by arranging an innovative financing solution, the essence of which could be applied to other transactions in Canada and abroad.

Currently, SNC-Lavalin Group is actively engage in bids process in the transportation sector in the state of Texas and in Quebec, and in other sectors in Ontario and in Europe and Africa. Furthermore, with more than 45% of SNC-Lavalin Group's revenues generated outside of Canada, experience gained on project such as the Trans-Canada Highway Project is instrumental in helping SNC-Lavalin Group win contracts outside of Canada.

Finally, the participation of SNC-Lavalin Capital to projects such as the Trans-Canada Highway Project permits to retain in-house the critical mass needed to participate in such complex mandates.

8. CONCLUSION

The Trans-Canada Highway Project was the first highway infrastructure project in Canada to require the Developer/Operator to finance the construction of the project with payment once the highway is open to traffic, subject to holdback which is payable upon completion. The project has served as a model for other highway infrastructure projects in Canada since the RFP was released.

Another unique feature is the quantity of highway that has been turned over to Brun-Way Group that had to be accepted "as is where is". In addition, the Province is simultaneously building sections of the highway that Brun-Way Group will accept upon the completion of the facility. As a result, Brun-Way Group has been given audit rights on the sections built by the Province that are equivalent to those held by the Province on the section being built by Brun-Way Group.

The project agreements also require Brun-Way Group to obtain and maintain ISO 9001 Quality Management Certification and ISO 14001 Environmental Management certification. Brun-Way Group has achieved both of these certifications ahead of schedule. By requiring Brun-Way Group to obtain the certifications, the Province is assured that third party monitoring of Brun-Way Group's quality management processes occurs in addition to the Province's own audit. Brun-Way Group was also required to have a Certified Safety Management System in place.

Asset management is also a component of the Project. Brun-Way Group is required to have asset-management plans and key performance indicators for structures, drainage systems and pavements.

In terms of innovative financing, SNC-Lavalin Capital led and arranged an innovative financing solution, never seen in the Canadian financial market, for this $543.8 M short-term construction financing. The financing structure consisted of an investment grade financing, rated by S&P, directly placed with four Canadian institutional investors providing progress disbursements during the construction period.

At the time of writing this paper (Spring '07), Brun-Way has informed the Province of New Brunswick that they expect to deliver a portion of the highway 2 months ahead of schedule and the remainder 1 month ahead of schedule. The GMP has been reduced by approximately $2 million dollars due in large part by innovative measures that Brun-Way has recommended and subsequently approved by NBHC. Furthermore, Brun-Way has also informed NBHC that as of this date, no claims are foreseen at completion of the DB Work and that in itself will be a major accomplishment on a project of this magnitude.