Interprovincial Bridge

See also Maniwaki file

Files seen
RG 12 vol 2506 file 3534-50
RG 46 vol 1476 file 12992 (Mainly on Maniwaki file)

RG 12 vol 2506 file 3534-50

27 January 1890 Petition from J.R. Booth, F. Clemow, Charles Magee, P.H. Chabot and F. McDougall
petitioners desirous of obtaining an Act of Parliament incorporating them as the Interprovincial Bridge Company to construct and maintain a bridge across the Ottawa River from some point in the City of Ottawa between Metcalfe Square and the ferry landing at the foot of St. Patrick Street to some point in Hull for railway carriage foot and passenger traffic. Power to amalgamate with or enter into arrangements with railways.

Plan by PPJ, undated, 1899, shows land required for the approaches from Chateau Laurier (sic) to Interprovincial Bridge (looks as if this is out of sequence)

May 1894 Letter from the Ottawa Trades and Labour Council
Add their voice to the appeal in support of the promoters of the Interprovincial Bridge. Would be of incalculable benefit to the workingmen, its construction will prove a boon, providing an immense amount of labour during construction, after construction will provide a means of access to work.

17 May 1894 Petition from H.J. Beemer and others
Whereas the Interprovincial Bridge will cost $765,000 and it is impossible for the Interprovincial Bridge Co to undertake obligations of so large a character without guarantee of substantial aid from Parliament, ask for aid. It will be a free highway bridge forever to the public and will be open to the traffic of all railways.

13 June 1894 Petition from Municipal Council of County of Ottawa
Supports a subsidy.

21 May 1894 Petition from the Ottawa and Gatineau Valley Railway
Company has constructed 55 miles of road over which distances two trains are running daily each way from Ottawa to Pickanock. Company is a bona fide colonization road. Requests an additional subsidy for 40 miles northward in addition to the 62 miles already granted.

17 May 1894 Petition from Pontiac and Pacific Junction
Authorized to construct a combined railway and highway bridge across the Ottawa River at Nepean Point and the approaches thereto continuing the same along the Canal Bank to a proposed Central Depot on the Canal bank and has amalgamated with the O&GVR for the purposed thereof.

The bridge will cost $765,000 and it is impossible for the PPJ to undertake obligations of such large a character without a guarantee of substantial aid from Parliament. Asks that $250,000 be voted at the present session. It will be a free highway bridge.
Signed by H.J. Beemer president
H. Robillard, George Cox, Mayor of Ottawa, J.A. Grant M.D., J.R. Booth, Wm Scott, President of Ottawa Board of Trade, W.C. Edwards, J.W. McRae, President of Ottawa Electric Street Railway.

20 May 1894 Letter from H.J. Beemer to Sir MacKenzie Bowell, Premier of Canada
On 21 June 1893 a formal application was made to your predecessor, the late Sir John Thompson for a substantial grant towards the construction of a bridge connecting the Ontario and Quebec sides of the Ottawa River at Nepean Point.
Preliminary plans and estimates were files with the Department of Railways.
The cost will be about $750,000 and applies for aid.
City of Ottawa has voted a subsidy of $150,000.
Government of Ontario has voted $50,000 subject to the Quebec government granting the same and the Federal government not less than double the amount.

15 March 1895 Petition from the City of Ottawa

28 April 1895 Letter from John Bryson to Premier and President of the Council
Policy of Quebec government to build a line from Quebec City to the mouth of Deep River, Pontiac County. This was subsequently completed from Quebec City to Aylmer. In 1878 the Quebec Government undertook the construction of the Interprovincial Railway Bridge across the Ottawa River as a provincial work. A considerable portion of the money borrowed in England for the building of the railway through the County of Pontiac was used in the construction of this bridge without any contribution from the federal or Ontario governments.

In 1880 the Quebec government undertook the construction of the railway from Aylmer to Ferguson's Point at Deep River by granting a subsidy of $6,000 per mile for 85 miles to PPJ. In 1881, the ratepayers of Pontiac County approved a by law granting to the PPJ to carry out their undertaking debentures to the amount of $100,000 at 6% for 25 years. The railway was not completed to Ferguson's Point as contemplated and Pontiac Municipality resisted the payment of the debentures through the courts with the result that the County was found liable for the debentures with accrued interest and costs in 1893 in the sum of $214,000.

In 1884, and subsequently, the Dominion government voted $313,000 in aid of the PPJ of which $174,828 has been expended leaving $138,172 unearned, the company having abandoned the construction of the line west of Black River, 70 miles from Aylmer. The balance ($172,000) has lapsed under a resolution of the Quebec legislature of 12 Jan 1895 and the balance of the federal subsidy ($138,172) will consequently lapse in a short period of time leaving the townships of Waltham, Chichester, Alumette Island and Sheen without railway facilities although contributing to the payment of the bonus granted.

In 1884 the federal government recouped the province of Quebec for its outlay on the work to the extent of $6,000 per mile from Quebec to Montreal and $12,000 per mile from Montreal to Ottawa.

In view of the importance of the Prince of Wales Bridge and its large cost borne entirely by the Province of Quebec asks that a special appropriation of $125,000 be granted the province of Quebec so that relief may be afforded the ratepayers of Pontiac who are deprived of needed railway service for which they are taxing themselves.

I beg strongly for favourable consideration of a grant of $12,000 per mile for the line between Hull and Aylmer (8 miles) for which nothing has been recouped.

17 May 1895 Further petition from PPJ
20 May 1895 Further petition from O&GV
9 December 1895 Further petition from O&GV with a complete list of signatures

17 January 1896 Letter from O&GV Beemer
Applies for an additional subsidy of $1961 per mile from 62nd mile to Maniwaki, 20 miles or $39,220.10.
Past subsidies are $5161 per mile from Hull for 62 miles and $3,200 was granted by Parliament for mile 62 to Maniwaki.
Railway has run through difficult country and is presently built and in operation to the 58th mile. It has found itself unable to continue the works with the subsidy of $3,200 per mile between the 62nd mile to Maniwaki.

Plans of Maniwaki sub. see data base for details.
Filed by O&GV dated 18 Jan 1896.

24 Jan 1896 Memo from Colingwood Schreiber to Secretary of Department
I have examined the plans and profiles and checked the estimates and find them reasonable:
- branch to Hull East - $90,580
- 54 mile to Maniwaki - $373,000
- rolling stock for above two sections $75,420 (2 locomotives, 2 1st class, 2 2nd class, 1 combination car, 1 baggage car, 5 stock cars, 20 box cars, 30 platform cars)

Total - $539,000
Interprovincial Bridge - $750,000
Grand total - $1,289,000

There is a detailed set of calculations for the quantities and cost of the bridge.

1 April 1896 Correspondence, papers and documents relating to the construction of a bridge at Nepean Point to be laid before the House.

8 March 1897 Letter from O&GV

Hands plan and profile showing land required for the Nepean Point railway and highway bridge.

7 August 1897 Letter from O&GV/PPJ to Sir Wilfred Laurier Premier
Encloses copies of previous applications for subsidy. Unless $50,000 is expended on construction of bridge before 1 Jan 1897 the City bonus of $150,000 and Ontario bonus of $50,000 will expire.

14 Aug 1896 Printed letter from O&GV to all members of parliament
was sent on 25 Jan 1896.

January 1896 Letter from City of Ottawa setting out details of deputation to meet at City Hall.

28 June 1897 Order in Council PC 1548. See data base for details.

25 November 1897 Letter from PPJ to Collingwood Schreiber
Attaches cross section of proposed plan of superstructure of Interprovincial Bridge also memo of suggested loads from Dominion Bridge Company. Please approve.

24 Jan 1898 Letter from PPJ & O&GV to Collingwood Schreiber
Forwards plans, profiles and books of reference, Please examine under clause 125 of the Railway Act. Books of reference are on this file.

21 February 1898 Letter from Montreal, Ottawa and Georgian Bay Canal Co.
The bridge the PPJ is proposing to build at Nepean Point is not a swing bridge neither is it intended to be placed at sufficiently high level to allow large vessels or Gun boats to pass under as contemplated by the Georgian Bay Canal Company. Government should not permit the bridge to be built in its proposed form or at its proposed height as the interests of commerce and the defence of the country will be thereby injured.

8 March 1898 Letter from Ottawa River Navigation
The bridge will interfere with the free navigation by ordinary river craft it is placed at a less height than 45 or 50 feet from high water. Our steamer EMPRESS could not pass under a bridge which was lower than 43 feet.

23 June 1898 Letter from PPJ to Collingwood Schreiber
Forwarding detailed plans for piers Nos. 1, 2, 3, 4 and 5. Kindly examine and approve.

24 June 1898 Letter from W.J. Fielding Minister of Finance to Collingwood Schreiber.

The manner in which the cliff at Nepean Point is being cut down is the subject of unfavourable comment. I am informed that the cutting is not confined to the limits set down in the plan. Would like to know whether the right of way given to the company be given to them by some more satisfactory line.

If you would gather up the plans and Orders-In-Council relating to the work and come over to my office tomorrow morning I would accompany you to the ground.

28 June 1898 Letter from Dunn, Chief Engineer of PPJ to Collingwood Schreiber
Sends plans and cross sections .

The first idea was to have a wagon road on top of the structure directly over the steam rails. The design was changed to a structure giving a wagon road and electric car track, also a foot passenger way on each side of the steam railway track. This design was approved by you on 1 December 1897. With this design we require additional right of way on each side of the centre line as soon as we leave the bridge.

The first plan submitted included only one track but after careful consideration Mr. Beemer came to the conclusion that with the growth of Ottawa and the entrance of other roads we would require three tracks between the bridge and Central station. To do this very little right of way will be required inside the fence of Major's Hill park. Although the plan shows a considerable cutting inside the fence between stations 90 and 93 + 30, except for siding room this would not all be necessary. Between stations 87 and 92 we could, by not asking for the extra siding leave the park wall entirely undisturbed and a very slight cutting at station 98 would be required.

10 Sep 1898 Letter from Interprovincial Bridge to Collingwood Schreiber
The caisson for pier No. 2, the deepest water pier of the Interprovincial Bridge is now being constructed and will shortly be placed in position for receiving the concrete. The saw dust has been to a great extent removed and the balance will be taken out from the inside of the caisson. After it is placed the Company would be very much pleased if you would examine thoroughly into the manner in which the construction is being done.

22 Sep 1898 Letter from A. Rousseau, Imperial Bridge and Iron Works, Montreal to Collingwood Schreiber

Should you want any diving done either at Cornwall or at Nepean bridge I am in a position to give you as good a diver as you can get on this continent. I had him in my employ since 1891 and he is sober & very trustworthy. He can go in 100 feet deep of water. He is a strong man and understand well bridge foundation. My price is $10.00 a day and board and travelling expenses besides.

24 September 1898 Letter from PPJ to Secretary of Department
The company wishes to enter into a contract with your Department for the construction of a railway and general traffic bridge over the Ottawa River in order to entitle it to the subsidy authorized for such purpose by chap 4 sect 3 Vicotria 60-1.

The company at present owns and operates 70 6/10 miles of railway between Aylmer and Waltham and has made preparations for and is about to extend its railway into the City of Hull so as to connect with the said bridge and pass over into the City of Ottawa.

The authorized capital stock of the company is $3 million divided into 30,000 shares of $100 each of which 3,000 shares have been subscribed and issued and fully paid up.

Besides the federal subsidy above mentioned of $112,500 the company will also be entitled to the subsidy provided for in subsection 5 of section 1 chapter 36 of statutes of Ontario, 58 Victoria and the municipal subsidy of $150,000.

Shareholders	Shares	
H.J. Beemer, Montreal	2523	
Ess. L.R. Church, Montreal	297	
Joseph Rielle, Montreal	20	Vice President and Director
Samuel Finley, Montreal	20	
Hon. J.S.C. Wurtele, Montreal	50	Director
E.A. Hoare, Quebec	50	Director
H.G. Beemer, Montreal	20	President and Director
W. Dale Harris, Ottawa	20	Director

H. Lassey Maltby - Secretary Treasurer.

12 November 1898 Letter from Maltby to Collingwood Schreiber
I am informed that you object to the construction of No. 2 pier being carried out in a manner similar to the system adopted in piers nos. 3, 4 and 5. This is not the same as the plan mentioned in the specification, since the plans have been drawn up I consider this a superior method inasmuch as all risk to damage of concrete by pumping is eliminated. I am anxious that there should be no possible source of danger from failure in foundations and as you are well aware that within the last few years concrete has proved its superiority for foundation work and the method of depositing under water has been the same as that used on the present occasion.

The concrete we purpose (sic) using in pier no. 2 will be composed of 1 of cement, 1 of sand and 4 of broken stone. The cement is to be of highest grade of either English,

German or Portland. Test buckets of cement will be allowed to sink to the bottom and then drawn to the surface again (which is an extremely severe test) to prove that there is no wash of the concrete work while passing through water. After the concrete has had a sufficient set we will be pleased if the government will make a final test with a diamond drill.

30 Dec 1898 letter from Interprovincial Bridge to Collingwood Schreiber
Forward under separate cover tracings of:
Plan and profile of concrete pedestals between Ottawa River and Laurier Avenue
Detail plan of bridges over highway under crossings between Ottawa River and Laurier Avenue.
Details of bridge over Laurier Avenue and over the Hull Electric Railway track.
Pier No. 6.
Please approve and return.

2 March 1899 Order in Council 341 approves the plans - see data base.

13 March 1899 Letter from Denis Mullarkey, Aylmer to Blair, Minister of Railways and Canals
I have the honour to make application for the position of Inspector of the Nepean Point Bridge and beg to say that if you appoint me I shall faithfully discharge my duties.

Below is a note "I recommend the appointment of Mr. Mullarkey". On the side is "Appoint AGB"

7 February 1899 Letter from Interprovincial Bridge to Collingwood Schreiber
Under separate cover I am handing detailed plans of pedestals and abutment to support the span between pier No. 1 and the shore embankment. We are now ready to commence work on these structures and I would be pleased to have the matter put through at your earliest convenience.

27 March 1899 Letter from PPJ Beemer to Collingwood Schreiber

I beg to return your letter of agreement relative to filling in pier no. 2 with concrete in the same manner as piers already constructed.

Request consent to filling in with concrete in the same manner and height as in the case of piers already constructed the caisson for pier no. 2 (being the second pier from the south shore of the river); it being distinctly understood that after the said concrete has had sufficient time to set, and before the commencement of the erection of the superstructure thereon, the said companies will cause a boring, or borings to be made through the said concrete at points indicated by the government engineer and cores to be taken therefrom and at once handed over to the government officer in charge for examination by the Department.

It is further understood that the full responsibility for satisfying the department, by means of the said cores, that the foundation structure so to be formed is in a safe condition to support the superstructure and load that it will be required to carry shall rest with the companies and that in the event of the said cores failing to afford satisfactory evidence of such condition the said concrete work shall, if deemed expedient by the government engineer be entirely or partly removes and the work be entirely or partly re-constructed without giving rise to any claim against the government by reason of such action.

26 April 1899 Dunn Chief Engineer to Collingwood Schreiber
Forwarding complete set of strain and material sheets. Please examine, check and approve.

4 May 1899 from Hanson to Blair, Minister
As representatives of syndicate who have already supplied funds to the extent of nearly quarter of a million dollars towards the construction of the Interprovincial Bridge we must strenuously protest against the proposed bill for the construction of another bridge across the Ottawa. The speedy completion of the present structure renders this totally unnecessary. Need to protect our interests etc.

11 May 1899 from Dunn to Secretary Department
Received approved plans of the superstructure on 10 May, also set of strain and material sheets.

Pontiac Pacific Junction Railway plan of Interprovincial Bridge approach showing right of way required Nepean Point to Central Station.

List of plans and profiles files in room 191 1 March 1899
1,2,3,4 Proposed street highway Interprovincial Bridge at Nepean Point.
Filed 17 May 1894

5. Right of way from Nepean Point to Central Station
Approved 28 June 1897.

6. under cover of 70,392 shewing the location of the proposed railway and highway bridge across the Ottawa River.
Approved 28 June 1897

7. Plan and profile showing right of way from Nepean Point to Central Station
Filed 18 August 1897.

8. Amended plan and profile of right of way from Aylmer to Hull
Examined and certified 23 Nov 1897

9. Plan of Interprovincial Bridge showing position of piers and headway
Approved by Railway Committee 21 Feb 1898.
This plan is missing

10. Plans of Nepean Point Bridge
Approved 22 July 1898, specification under cover No. 61410

11. Proposed line to connect the Interprovincial Bridge with Central station, cross sections attached
Prepared by Mr. McLeod 11 Sept 1898

12. Plan and profile showing right of way required from Nepean Point to Central Station.
Filed 19 Sept 1898.

13. Plan of approach Nepean Point with Canada Atlantic Railway at Central Station connections shewing excavations and embankment.
Filed 19 Sept 1898

14. Sketch St. Patrick Street
19 Sept 1898

15 Plan of bridge, Hull approach over highway under crossing
Approved 2 March 1899

16. Plan and profiles shewing details of concrete pedestals between Ottawa River and Laurier Avenue Hull.
Approved 2 March 1899

17. Plan of Hull approach over Laurier Avenue
Approved 2 March 1899

18. General Plan of Pier No. 6
Approved 2 March 1899.

10 June 1899 Letter from Beemer to Blair, Minister
All applications in the past have been for $250,000 subsidy on the assumption that the bridge would cost about $750,000. The cost of the bridge and approaches has now increased largely on account of changes in the plan which have been considered advisable in order to give increased facilities to the public, an increase in the cost of labour and materials including steel and by delays caused by the refusal of the government so far to allow us the necessary rights of way to bring our tracks into the Central Station. We are now much more fully entitled to the subsidy of $250,000 promised not only by the late government but by the present than we were when the promises were made. At the present time the foundations for all piers and abutments have been successfully placed and all the heavy masonry, with the exception of one pier and one half of another, also completed.

On behalf of the PPJ I am authorized to make application to the Dominion Government for the balance of the subsidy of $250,000, the sum of $112,500 having been voted

during the session of 1897 leaving a balance of $137,500 which I respectfully request may be placed in the estimates at the present session.

29 November 1897 From Jones, Secretary
Approves loads for the superstructure. Attached is a note dated November 17 1897 signed by Phelps Johns:

Railway	two engines class 1 & 3000 ? train
Electric	trains of 4 cars each, 30,000# each car on 7' base coupling 120' long
Teams	40# per square foot on two 8' roadways. Beams and stringers for 13 tons road rollers
Walks	Beams and stringers for 70# per square foot load from truss 20# per square foot = 200# per ? of bridge.
Use	Dom. Gov. standard specifications. Takes railway unit strains for all loading
Note	The electric cars. Roadway loads and walks loads as above are taken small because railway strains are suggested.

11 Jul 1899 Interprovincial Bridge to Collingwood Schreiber
Attaches a copy of specifications in the contract with Dominion Bridge. Strain and material sheets also attached (not on file)
General specifications for steel and iron bridges and viaducts from the Department is also enclosed.

14 Sept 1899 PPJ to Collingwood Schreiber
Encloses blueprint of fence details. Approved by Schreiber on 19/9/99.

21 Sep 1899 PPJ to Collingwood Schreiber
Sends Right of Way Plan, profile and book of reference from Nepean Point to Central Station. Requests they be examined and certified under clause 125 of the Railway Act.

21 Sept 1899 Order in Council 1921 and contract attached, including specifications.

27 Sept 1899 O&GV & PPJ letter to Collingwood Schreiber
Enclosed plan and sections in detail for substructure of trestle south approach also plans of superstructure for same.

27 Sept 1899 O&GV & PPJ letter to Collingwood Schreiber
Encloses plan and sections of proposed highway undercrossings of steam tracks at station 72, south approach Interprovincial Bridge, also plans for same.

7 November 1899 Beemer to Blair, Minister
Letter asking for additional subsidy.
Original plan was costed at $750,000 and applied for a subsidy of $250,000. Encouraged to believe that this would be granted us.
Details submitted and estimate verified by the Department.
In 1897 parliament granted a subsidy of 15%, not to exceed $112,000.

Since then plans have had to be revised bringing all traffic to the same level, doing away with the overhead highway bridge, also supplanting the heavy earth embankment through the City of Hull with steel trestle, and we have proceeded with the construction of the bridge under the new design having the superstructure now almost completed and we find that the original estimate of cost will be largely exceeded for the following reasons:
1st the change abovementioned in the design of the bridge bringing all traffic on the same level necessitated a higher grade for the approach through Hull which required a steel trestle instead of the originally proposed earth embankment.
2nd a further change in the general plan for the purposes of increasing facilities for the travelling public, increasing the width of the highway portion of the bridge so as to give more room for pedestrian and wagon traffic necessitating an additional expenditure of $75,000 to $100,000.
3rd a delay of 18 months in getting the right of way along Majors Hill Park and a change in the original OIC involving a complete change in the plan of construction of the south approaches from Nepean Point to Central station, the new form of embankment which we are obliged to adopt costing over and above the original estimate at least $10,000.
4th a further delay in the progress of the work owing to the stoppage of work on our deep water pier by orders of the Department of Railways and Canals. This delay of five months, and the exhaustive tests of the said pier made during that time, while of great value to the department in satisfying them as to the stability of our work of which they wished to be assured in view of a disastrous accident to another structure of the same nature, was of great hardship to us, and, as subsequently appeared, was totally unnecessary and together with the delay in acquiring right of way along Majors Hill Park prevented the closing of the contract for the steel superstructure until a large increase in the price of material had occurred. This increase in costs amounts to about $100,000
6th the above mentioned delays also affected all our other work and adds fully 30% to the cost of all labour and material and machinery amounting to about $60,000.

In view of these enormous increases, a great part of which is of direct benefit to the public and the balance of which caused by delays on the part of the government and by changes in plans to meet their views I would urge upon your government the justice of our claim on the full amount of the original subsidy asked for.

12 Jan 1900 From Gormully and Order, solicitors for Dominion Bridge to Minister
By an agreement dated 26 April 1899 PPJ and O&GV assigned to Dominion Bridge their interest in the Dominion bonus amounting to $112,500 and also in other subsidies or bonuses that might thereafter be granted. We have power of attorney to receive the monies directly from the Receiver General.

25 Jan 1900 From Dominion Bridge to Secretary of Department.
Have received permission today from the Dept of Militia and Defense to set up a derrick on the bluff at Nepean Point. Thank you for your kindness in arranging this for us.

30 April 1900 Letter from Beemer to Minister
Another begging letter asking for the originally requested subsidy of $250,000.

2 May 1900 Letter from T.G. Brigham Coals to Minister
Draw your attention to the manner in which the Interprovincial Bridge Co are excavating rock at the end of St. Patrick Street. While driving down the hill in a buggy to the ferry which is the only navigation at present between Hull and Ottawa at present, were struck by a large rock which was rolled down the embankment smashing the buggy to atoms, throwing the horse in the river and cutting and wounding the men to such an extent that one is now laid up. It would be reasonable that the Interprovincial Bridge should have off excavating at this point until such time as the bridges across the Chaudiere have been rebuilt. The Relief Committee have sent down a lot of stuff to the ferry which I am carrying free of charge but the Interprovincial Bridge Company have blocked up the roadway and refused to allow the stuff to come down.

There is a great want of sympathy on their part as they could just as well turn their energies to other portions of the site and allow passengers access to the ferry without endangering their lives.

10 May 1900 Department to PPJ
Have received a complaint that excavation is being done in a manner which is dangerous to life and property. Please take greater care.

11 May 1900 PPJ to Department
We are taking all precautions possible to protect the public. Warning notices are pasted all over the street and the adjoining properties, warning horns are blown long before any blasts are fired and two watchmen are employed all the time, one at the top and one at the foot of St. Patrick Street Hill to warn the public in case of necessity.

17 May 1900 Department to T.G. Brigham
The matter was referred to the company who have replied to the effect (see previous letter).

18 May 1900 T.G. Brigham to Department
The two watchmen were placed on this work after two people were very nearly killed and my buggy all smashed to pieces and horse very badly damaged in fact there was only one man placed to watch after this accident and he was on top of the hill and my Mr. Battle insisted upon them placing another man at the bottom of the hill as passengers coming off the ferry were not aware of the danger until they saw the man at the top of the hill.

It seems rather unfair that I should be compelled to pay the government for the privilege of the ferry and still be cut off from the use of it. The road is now so blocked up that we cannot get down on this side of the river with fuel for the boats and as a consequence have to draw round to the Hull dock.

22 May 1900 Secretary to Interprovincial Bridge
Further complaint that the road leading to the ferry between Ottawa and Hull is now so blocked that fuel for the boats cannot be taken down to the landing at that point and as a consequence it has to be drawn round to the Hull dock.

Please furnish the Department with such explanations as will place it in a position to reply.

28 May 1900 PPJ (Dunn) to Department
With respect to the complaint - such is not the case, that our own teams are going over this road daily and I will be only too glad if you will allow an officer of the Department to go over the work with me and report to you on same.

4 June 1900 report from E. Johnson
I examined the road on 2nd June. This is a steep hill - there is evidence of work but the roadway is not blocked. Required some large stones to be removed but they were not encroaching upon the roadway. Mr. Dunn tells me that two men are always on hand, one at the top of the hill and one at the bottom of the hill when blasting is taking place.

5 June 1900 Letter from Secretary to Brigham
The road has been examined by an officer of the Department and, that, from the tenor of his report, you do not appear to have a good or sufficient ground for complaint in this matter.

6 June 1900 Brigham to Department
Since your department has raised the question with the Interprovincial Bridge Company I have not experienced the same amount of trouble. Don't wish to prolong the discussion but I have personally been prevented from going down the hill, that three of my carters could swear positively that they were prevented from taking fuel to the boats, that my book-keeper, Mr. Hayes and driver John Visseau can both swear positively that the buggy was smashed to pieces while they were driving to the ferry and I can also say that the cap pieces are being placed on the top of the concrete piers in such a position that it requires considerable piloting to go between them, however so long as they adhere to the manner in which they are now working I will be able to get fuel to the boats but had your Department not interfered this road would have been entirely blocked.

14 July 1900 Engineering Contract Company, New York, to Minister
Some 2 ½ years ago, Mr. Charles H. Deans, President of our company, took a contract from H.J. Beemer and the Interprovincial Bridge Company for the erection of the piers and foundations of the above mentioned bridge.

The work was carried out with expedition and despatch until the time when one of the piers of the Cornwall Bridge built by Sooysmith & Co. went down with a portion of the steel work of the superstructure - that causes of which have not yet been decided. As the manner of construction of the piers of the Interprovincial bridge was, in large measure, similar to that adopted by Sooysmith & Co. for the Cornwall Bridge, Mr. Deans was stopped from further work until certain investigations were made, causing us serious delay and damage.

However, after investigations and tests were made under the direction of the Chief Engineer of your Department, we were permitted to resume the work understanding at that time that the tests had proved the construction of the piers to be satisfactory in every respect. The piers were completed about 1 Nov 1899. Under Mr. Deans's contract he was entitled to receive the balance due being the retained percentage at the expiration of a specified time after the completion of the contract. This however, has been witheld though there is no dispute between Mr. Deansm Mr. Beemer and the Interprovincial Bridge Company as to the amount of the balance due.

After numerous interviews Mr. Deans' representative was informed that if the Department of Railways and Canals would give a letter stating that the investigation and tests were satisfactory to the department they would pay Mr. Deans the balance due.

The Honourable Mr. Fitzpatrick drew the attention of the Chief Engineer to this matter and received an letter in reply stating that the giving of such a letter by the Department would be assuming a responsibility they were not called upon to do. Since then I understand that you were kind enough to state that the tests of the said piers had proven satisfactory.

Will you therefore have the kindness to instruct the Chief Engineer to write to Mr. Deans saying that the tests of the said piers as conducted under the supervision of the Department have proven satisfactory. By so doing you will enable Mr. Deans to secure the balance due him for retained percentage amounting to something over $11,000.

10 July 1900 Letter from Maltby, PPJ to Jones, Department
Our subsidy contract gives us until 1 August 1900 to enable us to finish our works. I would like to know what more, if any, we should make re extension of said contract time. Parliament has granted us a further sum this session and I suppose Act will be so worded as to pay us "en bloc" on completion and the date of completion will likely be embraced in this session's Act, but would like to know if it is necessary before 1st August to ask officially for an extension or new contract.

25 July 1900 Letter from Collingwood Schreiber to Charles Deans
"In compliance with a verbal request made on your behalf, I may state, for your information, that the tests conducted last year of the foundations of the Piers and Abutments of the Interprovincial Bridge now I course of construction over the River Ottawa in this city, and also the boring tests of the concrete in those works gave results which were perfectly satisfactory."

26 July 1900 Order in Council PC 1900-1875 is issued extending time for completion to 1 November 1900.

13 September 1900 PPJ/O&GV to Collingwood Schreiber
Forwards 7 blue prints showing elevation and section of proposed round timber trestle north approach of Interprovincial Bridge. A revised set was forwarded on 4 October.

Specification for timber approaches
The approaches to the bridge may be of round timber. The timber must be of good sound pine or tamarac, batter posts being not less than 10" at small end. All framing must be made to fit closely and must be done in a thoroughly workmanlike manner, Long ties and guard rails must be of good sound white pine free from all black knots, worm holes, dead or decayed wood and shakes, also free from all sap knots or other defects. Must be sawn square and out of wind and shall come under the General Specifications of the Department of Railways and Canals for 1899.

13 October 1900 PPJ/O&GV to Department
Requests a revised contract which would be drawn up with PPJ and O&GV as the present one only deals with the Interprovincial Bridge Company. Also the date for completion of 1 November is altogether too early a date for completion. Suggests an extension be made to read "1 August 1901".

20 October 1900 Department to Interprovincial Bridge
Encloses executed copies of Guarantee Agreement dated 12 October 1900 guaranteeing the removal of the temporary round timber trestle approaches to the Interprovincial Bridge now in course of construction across the Ottawa River and replacing the same with a permanent structure.

2 November 1900 Order in Council PC 1900-2484 is issued which grants an additional $100,000 subsidy and extends date for completion to 1 August 1901.
A copy of the contract is attached to which is attached a blue print plan of Round Timber Trestle Interprovincial Bridge Approach. North of Laurier Avenue.

13 February 1901 Letter from Dunn, PPJ/O&G to Collingwood Schreiber
The Interprovincial Bridge Works will be completed by this evening and I would respectfully request that we might have an inspection made by your Department for subsidy purposes and if convenient I should suggest that the same might be made on Thursday afternoon or Friday.

Written across this is "Inspecting Engineer and Bridge Engineer instructed 13/2/01"

February 1901 From Robert C. Douglas to Collingwood Schreiber
In conformity with your instructions of 13th instant an inspection of the Interprovincial Bridge was made; I can attest it ready and safe for public traffic and that it has been completed according to the subsidy contract.
On account of certain data not being available a technical report will be forwarded later.

18 February 1901 From E.V. Johnson to Collingwood Schreiber
"On the 16th inst., pursuant to your instructions, I inspected, on subsidy account, the Interprovincial Bridge of the P.P.J. and O&G Rys - including its approaches.

I was accompanied by Mr. Guy Dunn, Chief Engineer, Mr. McCallum, Ontario, Govt Engineer, Mr. R.C. Douglas, Bridge Engineer and Mr. Campbell, Superintendent of Roads for Ontario.

The south approach starts from a junction with the Canada Atlantic Ry at the Central Station, immediately south of the Sappers Bridge - thence through, or under the Sappers and Dufferin Bridges.

The old masonry of the Sappers Bridge has been removed for a width of 35 feet, the space being spanned by 10 24in I beams to carry the bridge floor, which is composed of concrete and sevia(?) black.

This work is done in accord with the approach plan except that an extra I beam has been placed, making 10 instead of 9 as shown.

Dufferin bridge has not been disturbed. There is a clear headway under Sappers bridge over the rails, of 22 feet, and under Dufferin bridge of 21ft 6ins.

The line continues to St. Patrick Street, a distance of about 1700 ft. on a rock cut embankment of sufficient width for three tracks. This bank is protected by a very substantial, well built dry masonry retaining wall.

At the foot of St. Patrick Street, and over the Government road leading to the River and Canal there is a steel trestle for three tracks, 270 ft in length, composed of 9 spans of 30 ft each, resting on concrete pedestals, with stone caps.

This structure is well built, and completed in conformity with the approved plans.

Beyond this structure the rock bank continues for about 200 feet where an opening access for the new highway from the Main Bridge - over this road the three tracks cross on a half through plate girder bridge. Four 48in girders on first class masonry abutments, allowing a clear height of 14'-6" over the highway. The ties on this bridge, as well as on the preceding trestle are 8"x11" 4" apart. There are two guard rails on either side of each track - outer 8"x9" and inner 5"x8" with angle irons on inner side.

The rock bank continues from this bridge to the Main bridge over the Ottawa River. Between the Main bridge and the foot of St. Patrick Street two roads have been constructed for highway traffic, one leading to the bridge, for all traffic to Hull, skirts the foot of the cliff and continues over the east roadway of the bridge - the other for traffic <u>from</u> Hull is on the west side of the railway, passing under the track at the bridge last described, and connecting with the east roadway near St. Patrick Street. These are well built roads, on either solid rock or rock bank finished with broken stones, properly rounded off and drained - a sidewalk of plank protected by a neat and substantial railing of iron pipes and cedar posts skirts each roadway to the bridge.

The embankment forming the south approach, is fully ballasted with broken stone, laid with 75 lb rails with angle plate joints, well lined and surfaced. The ties are 2640 per mile.

Ottawa River Bridge
The bridge consists of 60ft of steel trestle on first class masonry abutment and pier - a cantilever bridge composed of 2 anchor arms of 247 ft each, 2 cantilever arms and suspension span forming the main span of the bridge 555ft-9ins, centre to centre of piers - three through truss of 247ft - and one of 140 ft span. *Check this.*

The substructure consists of six (6) piers. These are formed of concrete on solid rock foundation, to a height of 2 feet below the lowest water mark - then first class cement masonry.

The total width of the bridge floor is 60 ft, comprising 12 ft space for single railway track, a foot walk on either side of 4'-2", inside of the truss members - a space outside the truss members of 16 ft for roadway and electric ry tracks, on each side of bridge - the whole protected by a substantial iron railing.

A board fence has been placed on each side of the railway track, 3 ft high. The floor for the railway track comprises 8"x11" 4" apart, the latter having angle iron protection.

The ties under the footway are 4"x8" 3 ft centres - those under Electric ry tracks and roadway are 8"x8" - 2 ft centres, the whole covered with 3 in plank.

North Approach
The north approach comprises the following structures beginning at the most northerly pier (No. 6)
390 ft steel trestle on concrete pedestals with stone caps (13 spans of 30')
1 60ft ½ through plate girder over the highway. The roads from the bridge descend by a grade of 5 per 100. (illegible)
274 feet of steel trestle on concrete pedestals with stone caps - 8 spans of 30 ft and one span of 34 ft, to Laurier Avenue.
At Laurier Avenue, there is a plate girder bridge of 67' span over the highway and electric railway - this and the preceding highway bridge are on substantial and smartly finished concrete abutments.
North of Laurier Avenue the line crosses over six (6) struts about 200 ft apart. These struts are spanned by deck plate girders, of approved design, on concrete abutments - having a clear roadway of 50 ft and headway of not less than 14 ft.
Between three struts trestle has been built, in accordance with the plan and specification with Contract No. 14018. The bents and bracing are of a temporary character being composed of round timbers though well framed and of ample strength.
The flooring s of an excellent character and approved design for permanent trestles.
Ties are 14 ft long 8"x8" - 4" apart.
Stringers are 7"x14" 3 under each rail.

Jack stringers are 9"x14" on corbels 9"x12" by 6' long. The middle stringer under each rail has an under stringer 7"x12' from bent to bent. The outer stringers are on corbels 9"x12" by 6' in length - all thoroughly bolted and notched on to caps.
There are inner and outer guards, the former 5"x8" with angle irons, the latter 8"x9", all guard rails bolted every 4th tie.

All the works connected with the bridge and approaches are built according to approved plans and are will finished. The electric tracks are laid on the bridge.

I have to report that the bridge and approaches are completed in accordance with the contracts dated respectively 21st Sept 1899 (No 136957) and 26th Nov 1900 (No 14018)

I have to honour to be

Sir

Your obedient servant

(signed) E.V. Johnson

22 February 1901 Collingwood Schreiber to Minister
I have had the approaches to the Bridge on the Pontiac and Pacific Junction and Ottawa and Gatineau Railways over the Ottawa River at Nepean Point and also the bridge itself inspected by Mr. E.V. Johnson, Inspecting Engineer, and Mr. R.C. Douglas, Bridge Engineer of the Department, and they report to me that the works have been constructed in a substantial manner according to contract and that they are in a condition to be safely opened for public traffic. I suggest that authority be given for the Company to operate the bridge and road.

22 February 1901 Secretary to G.C. Dunn Acting Chief Engineer PPJ/O&G
By direction, I have to inform you that an inspection has been made of the Interprovincial Bridge across the Ottawa River at Nepean Point, in this City, together with the Approaches to the Bridge in question, with a view to opening the same for Public Traffic.

As a result of such inspection, I have to state that there does not appear to be any reason why the said Bridge, &c., should not be opened for such traffic.

I am, Sir,

Your obedient servant

26 February 1901 Newton J. Kerr, Ottawa City Engineer to Collingwood Schreiber
The agreement entered into between the City and the Interprovincial Bridge states that an bonus shall be paid the railway when the City Engineer issues a certificate that the bridge, highway as well as railway, including carriage and footway with proper approaches has

been completed to his satisfaction and in accordance with plans, specification and designs.

I have written the Railway Company that I cannot issue said certificate until a fence 15 ft in height from the rail level has been built, enclosing and separating the steam railway portion of the bridge from the roadway to prevent runaways and accidents. In reply the company state that they are not bound in any way to construct such a fence and suggest that the matter be referred to you for your opinion.

The agreement (page 5) states "That should any difference arise between the City Engineer and the Company as to the details of such plans and specifications, the point at issue shall be referred to the Deputy Minister of Railways and Canals for Canada and his decision shall be final and binding.

I would request your decision upon the matter.

1 March 1901 Collingwood Schreiber to City of Ottawa and PPJ/O&G
"I have this day personally examined the Interprovincial Bridge, erected over the Ottawa River at Nepean Point, with reference to the request of the City of Ottawa to have a fence, fifteen feet in height, erected on each side of the track from end to end of the structure.

After a thorough examination and full consideration of the matter, I have reached the conclusion that trains crossing the bridge, as at present fenced, would be less liable to frighten horses, or other animals on the bridge, than if the high fences were erected on each side of the track. Those who are accustomed to the handling of horses are aware that if the animal is able to see the object causing the noise and vibration it is less likely to be frightened that in cases where the object is hidden from view; as City Engineer Galt signed his approval upon the plans of the bridge as constructed, he, no doubt, must have shared my view of the case.

I therefore decide that the proposed fifteen foot fence on each side of the track is unnecessary; but I am strongly of opinion that there should be a rule in force, which should be strictly observed, that no engine driver should be permitted to blow off steam, to whistle, or to open the cylinder cocks, while his train is upon or crossing the bridge.

I am, Sirs

Yours faithfully.

6 March 1901 Robert C. Douglas, Hydraulic and Bridge Engineer to Collingwood Schreiber
More detailed report.
Substructure - the approaches are principally steel trestles upon concrete pedestals with stone caps. Do not call for particular attention except that the pedestals are founded on solid material.

Previous to location of the river piers extensive borings and soundings were made through the sawdust; limestone cores were obtained without indication of shale or seamed rock.
Pier no. 1 South shore - founded upon bed rock levelled off with concrete and calls for slight remarks.
Pier no. 2 This pier was the most important of the structure. It consists of a bottomless caisson some 68 feet in height filled with concrete with a masonry top some 31 feet in height the top of the pier being some 31 feet above the bed of the river. The caisson was sunk through sawdust 15 feet to the bed rock which was found smooth and sloping. Holes were bored with a diamond drill and the bottom levelled and roughed by blasting. The bottom was inspected by the diver, employed by Mr. Dunn and found satisfactory. 24 feet in depth of concrete (proportions 1 cement, 1 sand 4 broken stone) was deposited through the water in the caisson, when under a clause in the Specification requiring, if ordered by the Engineer, that two thirds of the depth should be deposited dry by unwatering the caisson, the concreting was stopped by your instructions. Work was suspended from 17th October until March the following year and then permitted to proceed provided borings through the concrete proved it of good character. Endeavours were made to bore through the 24 feet of concrete which had been deposited but from the great depth of water, some 50 feet, the vibrations of the drill prevented satisfactory results. Arrangements were made whereby the caisson should be filled conditional upon a diamond drill boring, through the whole mass of concrete to the bed rock, demonstrated it to be of a satisfactory character.

The filling of the caisson was completed by concrete of the proportions of one cement, one of sand and three and one half of broken stone, which was exceptionally rich. The concrete was allowed to set from 1st April to 19th August.

The first boring with the diamond drill was stopped at a depth of 48 feet when it was stopped on account of the difficulty of clearing out the hole.

The second boring reached a depth of 70 feet and the drill cored some 12 inches into the bed rock.

Both holes demonstrated the concrete to be good, notwithstanding some feet in depth had been deposited through a great depth of water. The boxes of cores and samples of concrete are in the possession of this Department and attest to its excellence.

A general statement may be made with reference to the character of concrete deposited through water by experience with this and the Cornwall bridge. The concrete was deposited in ordinary dumping buckets covered with canvas. In depositing, the principle wash would be to the first few feet of the descent of the bucket, also from the character of some of the cores that in dumping the concrete, after the bucket reached to bottom, the mortar would wash from the stones but not to an extent to destroy the character of the mass. For experiment, a bucket was lowered some 50 feet and raised to surface without dumping it, the wash of the mortar from the stone was less than might have been expected and did not deteriorate the concrete to an appreciable degree.

The Interprovincial Bridge is the only one where borings have been made through concrete deposited under water. There was some 119 feet of drilling nearly 1/3 cored with good samples, the remainder brought up was stone encrusted with mortar and the usual wash, The cost of drilling was about $1,000.

The results of the boring are most satisfactory considering the difficulties met with through vibration especially at a great depth of drilling, the various pipes and tools knocking off the wall stones rendering it necessary to repeatedly clean out the hole, a tedious and long operation.

This pier, if its height were visible some 100 feet would present a very different appearance to that now observed, as to its stability, it has been subject to a stress which can never occur again, One half of the main span, some 277' from centre of the pier, was erected and remained cantilevered with a free end for three months during which time the wind was, at periods, so heavy that men were unable to work on the bridge. The wind pressure with the leverage of the free half span would induce the greatest lateral stress upon the pier that can occur.

Pier 3 - The caisson of pier No. 3 was sunk to solid rock through 20 feet of saw dust and slabs &c. by a clam shell dredge, the Company's diver reported the bottom satisfactory. The caisson was filled with concrete in proportion of one sand, one cement and five stone.

Pier 4 - The caisson was sunk through 10 feet of saw dust to bed rock and filled with cement of the same proportions as Pier No. 3. The Contractor having a diamond drill on hand, bored down 12 feet and obtained cores. It is probable that a core could not have been obtained in concrete of this proportion used at the depths what were drilled upon Pier No. 2.

Pier No. 5 - The caisson was sunk through 8 feet of saw dust to bed rock and filled with concrete of the same proportions as Piers 3 & 4.

Pier No. 6 - The foundation was bed rock. The pit on account of the water flowing into it and the pumping to keep it unwatered, washing out the cement and sand, it was considered preferable to allow the pit to fill and deposit the concrete through the water, the proportion of which were one cement, two sand and four stone.

During the construction of the piers Inspectors appointed by this department were upon the work, Mr. Chas MacDougall and Mr. D.L Mullarkey, both very reliable and competent men.

SUPERSTRUCTURE

The superstructure has in cantilever part of bridge 2 anchor spans of 247 feet C to C. Piers and one main span of 555 3/4 feet C. to C. piers. The ordinary spans are of 274 feet and 120 respectively C. to C. piers.

The width of the Bridge is 24 feet C. to C. chords which are one railway track and two foot ways. Outside of trusses are cantilevered two highway tracks of some 15 feet clear roadway. The steel work is proportioned for a live load of two class I engines followed by 3000 pounds per lineal foot (spec'n. 1896) on railway track. On roadways, four electric cars, 30000 lbs each, 7 feet wheel base and 40 lbs per square foot on two eight feet roadways. Beams and stringers were positioned for a 13 ton road roller. For sidewalks the Beams and stringers are proportioned 70 lbs per square foot or 200 lbs per 1 in ft of Bridge.

The contractors were Dominion Bridge

During the entire erection the Railway Company had an inspector from the Pittsburgh testing Laboratory inspecting the field work.

Attached are diagrams showing the test borings on pier No 2. And isometric plans of the six piers.
No. 1 Masonry (Eganville stone)
No. 2 and 3 Eganville Stone, coping Cookston
No. 4 and 5 Rockland stone, coping Cookston
No. 6 Terrebonne stone

27 March 1901 Order in Council PC 1901-653 authorizes payment - see data base.

3 April 1901 from Dominion Bridge
Thanks for the cheque for $212,500 (it had been assigned to Dominion Bridge)

19 Feb 1909 Department to Hemming Manufacturing Co (enamelled jewelry, silver deposit ware, electro plate or nickel silver)
Had asked the name of the bridge
What is commonly known as the Interprovincial Bridge, over which the CPR runs is sometimes called the "Alexandra" bridge.

BRC 50841 - by laws of the ON&W
BRC 51416

End of file

Ottawa Citizen February 25 1901
CPR is considering using the Interprovincial Bridge. All that would be required would be a short spur to connect it to the Beemer system in Hull.

Ottawa Citizen Monday April 22
As of Monday April 22 O&NW trains passenger trains will leave the Central CAR station instead of from Union Station CPR.
#1 Dep Ottawa 17:00 Gracefield arr 20:15

#2 Dep Gracefield 06:35 Ottawa arr 09:30

As of May 13 1901

#1	a	dep	17:00	a - SuX
#2	a	arr	08:45	b - SSuX
#3	b	dep	08:00	c - SO
#4	b	arr	06:15	d - SuO
#5	c	dep	13:30	
#6	c	arr	20:10	
#7	d	dep	09:30	
#8	d	arr	19:45	

In the fall of 1901 the O&NW returned to two trains daily (one each way).

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2 November 1900 Agreement between HM the Queen and PPJ and O&G (14018)

1897 $112,500 subsidy granted

3. facilities for vehicular and foot traffic shall be in accordance with the directions and subject to the approval of the Minister of Railways and Canals.
4. Approaches on the Quebec side to be according to plan attached
6. Company shall keep and maintain the bridge safe for foot traffic and safe for proper passage.
7. General public to have full and free access
8. Time for completion 1 August 1901.

12 June 1907 Subsidy agreement between ON&W and HM (16627)

From Aylmer to a point of junction with the Interprovincial Bridge Approach in Hull, except that portion beginning at a point of junction with the Hull Electric in Hull and terminating at a point on the main line of the CPR at the east end of its Hull station yard, not exceeding 9 miles.

21 September 1899 PPJ/ON&W (13695)

Completion by 1 August 1900.
Sum not to exceed $125,000.

25 January 1902 Subsidy agreement with ON&W (14427)

For their line of railway in and through the City of Hull not exceeding 4 miles.

14 December 1893 Agreement between PPJ and City of Ottawa

Bonus of $150,000.
Bridge to be begun and at least $50,000 spent within 1 year from 1 January 1894 and shall be completed by 9 July 1897.

Shall comprise suitable approaches on both sides for vehicle and foot traffic and for the accommodation of electric or tramway cars should any company desire to lay their tracks across it.
Submit plans etc.
Shall be free for vehicles. Street railway or tramway cars and foot passengers free forever, all railway companies shall have the right to have their cars cross the Bridge by payment of one uniform toll, no discrimination between different railway companies.
To be kept in good repair.