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The Regional Municipality of Durham Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-W-14
Date: April 3, 2024

Subject:

Beaver River Bridge Closure and Replacement, Regional Road 15, Township of Brock

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That the Ministry of Transportation be advised that the Regional Municipality of Durham strongly disagrees with their recently stated position and decision to transfer ownership of the closed Beaver River Bridge, located on Regional Road 15 over Beaver River immediately west of Highway 12, prior to the design and construction of the replacement bridge by the Ministry;
- B) That the Ministry of Transportation be requested to provide an immediate commitment to seek Treasury Board approval to provide the Regional Municipality of Durham the necessary funding for all project costs related to the replacement of the Beaver River Bridge, including a temporary bridge for a period of up to three years. This includes design, tendering, construction, temporary bridge rental, staff time, consultant costs, and associated expenditures;
- C) That Regional staff be authorized to continue the assignment with the current consultant, WSP, to advance the design of the permanent bridge replacement, upon receipt of the commitment in Recommendation B;
- D) That Regional staff be authorized to tender and construct a temporary and permanent bridge replacement, upon receipt of notification by the Ministry of Transportation that they have received Treasury Board approval for the funding;

- E) That authority be granted to the Commissioner of Works to execute all documents, including management of liabilities, associated with the potential transfer and the works described above; and,
 - F) That a copy of this report be provided to Laurie Scott, MPP-Haliburton-Kawartha Lakes-Brock, and Prabmeet Sarkaria, Minister of Transportation, the Ministry of Transportation, and the Township of Brock.
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Report:**1. Purpose**

- 1.1 The Beaver River Bridge is a three-span post-tensioned concrete continuous solid slab bridge located in the Township of Brock. The structure carries Regional Road 15 over the Beaver River, approximately 100 metres west of Highway 12 near Beaverton (Attachment #1). On November 16, 2023, the Ministry of Transportation (MTO) closed the bridge. The purpose of this report is to provide background on what led to this, outline discussions to date with the MTO and their position, explain the option of a temporary bridge and provide recommendations on the next steps for the permanent replacement.

2. Background

- 2.1 The Beaver River bridge was built in 1965 by MTO as part of the Highway 12 and Regional Road 15 intersection reconstruction. Since the Regional Municipality of Durham (Region) was formed in 1974, the Region has been operating on the understanding that this bridge was under the ownership of the Region. To determine the structural integrity, safety and condition of every bridge within the Region, at least one inspection in every second calendar year is carried out under the direction of a Professional Engineer in accordance with the Ontario Structure Inspection Manual (O. Reg. 472/10). Due to the level of visible deterioration evident on this bridge, structural inspections have been carried out annually since 2016 by consultants with the most recent being July 2023. The recommendation from that inspection was to replace the bridge with a priority of “1-5 years” and no immediate action needed.
- 2.2 As a result of the significant visual deterioration observed in inspections prior to 2020, and in support of the planned rehabilitation work, more intrusive and intensive investigations were carried out including: a Deck Condition Survey; completion of a Structural Evaluation Report; and a Post-Tension investigation. These investigations identified the need for the following gross vehicle weight

restrictions: Single unit vehicle - 9 tonnes; Truck/trailer or truck/semitrailer combination vehicles - 10 tonnes; Tractor and more than one trailer - 13 tonnes. These weight restrictions were implemented in March 2020.

- 2.3 Given their minimum unladen gross vehicle weight of 16.5 tonnes, the Region's winter maintenance vehicles would have been restricted from crossing the bridge. It is also important to note that weight restrictions are challenging to enforce, without constant Police presence, and can severely impact local businesses. Therefore, it was necessary to complete interim accelerated repairs of the bridge to eliminate the weight restrictions and keep the structure in service until replacement. This strengthening consisted of a structural concrete deck overlay which was completed by the Region in December of 2020. The weight restriction was removed upon completion of the work. Prior to this, there was only minor repair work completed and no history of rehabilitation.
- 2.4 The 2023 Regional Road Budget and Nine Year Forecast included funding in 2024 for the replacement with an 'in-kind' bridge at an estimated construction cost of \$7 million, with the plan to tender in late 2024 for construction in 2025. This is a pre-engineering estimate and would now be higher due to a larger planned width and span, along with inflation increases. The design commenced in August 2022 (with previously approved funding in 2021), and has progressed to approximately 20% completion, primarily with pre-engineering activities completed including geotechnical investigations, environmental field work, archaeological assessment, and hydraulic analysis. A proposed span arrangement has been developed and is subject to further review by the Lake Simcoe Region Conservation Authority (LSRCA) before the bridge structural design can commence.
- 2.5 On March 6, 2023, as part of the bridge replacement design by the Region there was a meeting with MTO related to the need for any improvements at the Regional Road 15 and Highway 12 intersection which may impact the bridge geometry. Preliminary drawings were subsequently provided in April for their review and comment. On August 22, 2023, MTO first informed the Region that the bridge may be owned by MTO. It was discovered that the bridge was within the Highway 12 MTO Controlled Access Highway (CAH) limits and located on MTO property.
- 2.6 At the time of the bridge construction in 1965, the Highway 12 and Regional Road 15 intersection had a right turn channelization for vehicles travelling from the west to the south. The taper for this channelization extended across the bridge which is presumed to be the reason that the CAH limits set by MTO included the bridge.

In 2006/2007 this channelization was changed to a standard right turn lane. However, MTO has stated that it was an “administrative error” that the bridge was not transferred to the County of Ontario, who they said understood the intent to assume care and control of the new bridge upon completion. As a result and similar to other provincial highway intersections, MTO advised they plan to redefine the CAH limits closer to Highway 12, excluding the bridge, and transfer the additional Regional Road 15 right-of-way, including the bridge, to the Region.

- 2.7 Discussions between MTO and the Region continued throughout the Fall to discuss the responsibility for the bridge and the replacement. Despite MTO not having it in their inventory listing and therefore not regularly inspecting it, it was agreed that this bridge is an MTO asset.
- 2.8 In late October 2023, MTO’s consultant completed an inspection and it was subsequently determined that until further testing and evaluation could be completed to independently confirm the capacity of the structure it was determined that bridge should be closed. On November 16, 2023, the MTO closed the bridge.
- 2.9 Regional staff worked with MTO to provide support for the closure. With the Region’s closure of Simcoe Street/Regional Road 15 between Osbourne Street (Regional Road 23) and Thorah Concession Road 5 for watermain construction, the Region placed Portable Variable Message Signs (PVMS) at the approaches to Concession Road 5 on Osbourne Street (Regional Road 23) noting there is no access to Highway 12 via Concession Road 5. The Region also changed messaging on the PVMS signs that were in place at Highway 12 and Regional Road 15. MTO implemented a detour utilizing Highway 12 to Regional Road 23, north of the closure.
- 2.10 After a meeting with MTO, on November 27, 2023, Regional staff wrote a letter (Attachment #2) to MTO advising that given the MTO bridge ownership and closure, the Region is expecting MTO to take over and complete the design and construction of the replacement.
- 2.11 In December 2023, MTO completed load testing which indicated that the bridge’s load carrying capacity was reduced by 70 per cent and that only loads up to seven tonnes maximum would be permitted to use the bridge if it were to open to traffic again.
- 2.12 In January 2024, discussions among MTO, the Region and Brock Township continued to see if there was an opportunity to complete winter maintenance with

equipment in compliance with the load restriction. Although there was a potential opportunity, enforcement of the load restriction remained the outstanding challenge.

- 2.13 MTO determined that enforcing compliance of a seven-tonne load restriction is not feasible. As a result, on March 9, 2024, for public safety reasons, MTO advised Regional staff that it is not possible or practical to re-open the bridge and therefore the bridge must remain closed until it can be replaced.

3. Impacts of the Closure

- 3.1 Regional Road 15 is part of the main traffic route from Highway 12 into and out of the downtown area of Beaverton. The Average Annual Daily Traffic (AADT) across the bridge was 5,049 vehicles in 2023 prior to the closure. The signed detour for the closure results in an additional 6 kilometres (km) of travel over using Regional Road 15 to get between the Highway 12 and Regional Road 15 intersection and downtown Beaverton. Many drivers are using Main Street which reduces the extra travel distance to 1 km, but it is a busy collector road, has several speed humps and a lower speed limit compared to Regional Road 15 outside of the Town of Beaverton. It is also noted that as we approach the Spring/Summer months, Highway 12 will become very busy with increased traffic flow of travelers making their trips north and south to and from cottage country. The impacts of the closure will result in a significant inconvenience, along with an economic impact, to the residents and businesses of Beaverton and surrounding areas.
- 3.2 The Brock Township Fire Department advised that the closure has a large negative impact on their response times to the area surrounding the location of the bridge. Response times to the area south, east, a portion north of the bridge have increased as they now must travel to these areas via Main Street. In addition to being a busy street, and more so with the closure of the bridge, the speed humps add to the increased response times. To compensate for the increase in response times due to the closure of the bridge, consideration is being given to changing their response protocol to include a two-station response to certain calls. The two-station response will have a financial impact on the fire department budget, but the Fire Chief advises they must consider this to ensure the fire department is doing their due diligence to ensure public safety.
- 3.3 Region of Durham Paramedic Services generally shared the concerns expressed by the Brock Township Fire Department as their emergency services would also

experience delays for any calls they need to respond to immediately east of the bridge.

4. Bridge Replacement Design and Construction

- 4.1 Since the November 27, 2023, letter to MTO, Regional staff have maintained that as an MTO asset the bridge replacement should be completed by MTO on a priority and operational emergency basis. However, in a letter provided on March 26, 2024 (Attachment #3), MTO has taken the position that they feel the Region is in the best position to replace the bridge in a timely manner by continuing design work under the current engineering consultant assignment. In addition, they plan to begin the process to immediately transfer ownership of the bridge to the Region and seek approvals to provide funding to the Region for the completion of the design and construction of the new bridge. They noted that the situation does not meet the criteria for an Emergency Procurement approval by the province to expedite the work.
- 4.2 The MTO position is disappointing. The Region and Brock Township view this closure as an operational emergency. Without knowing the full details of their processes and timelines, it is difficult to confirm if the Region could complete the work in a more expedited manner.
- 4.3 The Region completing the design and construction would require a reallocation of resources, with the expectation that other bridge project schedules would be impacted. The details of these impacts are difficult to quantify at this time, but it is not anticipated that it would result in any critical situations or load postings of other bridges.
- 4.4 If the transfer of the bridge to the Region did not occur prior to construction, there would be a requirement to manage liabilities between the parties.

5. Temporary Bridge

Temporary Bridge Concept

- 5.1 A temporary bridge concept has been reviewed for the site, which would consist of a pre-engineered modular bridge system. These portable, prefabricated, truss bridges are commonly used for permanent or temporary applications such as staging during bridge replacements, or as emergency rental bridges. Various types of prefabricated abutments are also available to support these temporary

structures, such as wire mat Mechanically Stabilized Earth (MSE), metal bin, or bank seat foundations.

Removal of Existing Bridge Components

- 5.2 The existing bridge deck, as well as the tops of the piers and abutments, would be removed to accommodate the temporary bridge. These components are not salvageable and must eventually be removed for replacement of the bridge. Temporary protection or hoarding systems would be required to prevent the entry of debris into the watercourse during removal of the existing bridge components, as is typical for bridge removal or replacement projects over sensitive watercourses. If the temporary bridge was installed during the restricted activity timing windows for the protection of fish and fish habitat (March 15-July 15 of any year at the Beaver River Bridge site), removal of the remaining sections of the piers and foundations would be carried out later, through the bridge replacement contract. Consultation with the Lake Simcoe Region Conservation Authority (LSRCA) would be required, for expedited permit approvals.

Installation of Temporary Bridge

- 5.3 The existing structure is on a skewed alignment in relation to the roadway, however the temporary bridge and abutments will be constructed perpendicular to the roadway due to the use of modular components. The temporary bridge would be a longer single-span structure, supported on temporary prefabricated abutments beyond the existing bridge abutments. After the modular components are assembled, the assembled bridge can be cantilever launched from one side or crane lifted into place.

Procurement

- 5.4 Regional staff have contacted local prefabricated modular bridge suppliers to confirm the feasibility of a temporary bridge installation at the Beaver River Bridge site. There are two local suppliers, however only one supplier (Algonquin Bridge, part of the Atlantic Industries Limited group of companies) fabricates both temporary bridge and abutment components. Furthermore, Regional staff were unable to reach the Emergency Contacts at the second supplier, after multiple attempts. Due to the urgency of procuring the temporary bridge, the design services for the prefabricated bridge and abutments could be procured through Algonquin Bridge (Algonquin), considering this company to be a sole provider of the combined services. Atlantic Industries Limited is one of the prominent Canadian manufacturers of corrugated structural plate bridges, tunnels, corrugated steel pipes, MSE walls, prefabricated bridges & noise barriers. They

have delivered these products across Canada for the past 50 years, including within the Region. Working closely with the supplier may also provide the option to design the modular bridge to be coordinated with staged construction of the new permanent Beaver River Bridge, to maintain traffic during construction. As the modular bridge will be easy to assemble on site and is readily available from Algonquin, a public tender could be advertised for the construction contract. Although the design would be specific to Algonquin's pre-engineered bridge, contractors could source the modular bridge and foundation components from equivalent suppliers, however no additional design fees would be paid for a substitution.

Timing and Cost

- 5.5 Algonquin has provided the Region with a letter (Attachment #4) outlining that a temporary bridge is feasible at this site, along with a sample project. If commenced immediately, it is anticipated that a temporary bridge could be installed this summer or latest before the start of the fall/winter season. Based on the input from Algonquin and excluding the existing bridge removals, the cost is estimated to be in the order of \$1.4 M for supply and installation, plus a monthly rental cost of \$40,000 (\$480,000 annually) beyond the first year. The existing bridge removals would be required even if there is no temporary bridge, but if only part of the removals were completed before a temporary bridge was installed then there would be a premium to completely remove the existing bridge.

6. Next Steps

- 6.1 Although Regional staff disagree with the position the MTO are taking, to avoid further delay work will begin on the design of a temporary bridge. Algonquin will be retained to complete the design, which is anticipated to be less than \$40,000. The Region would assume the risk for the design cost as a result of proceeding without confirmation from MTO that a temporary bridge would be funded. If needed due to the complexity, our current consultant for the permanent bridge replacement, WSP, could design the foundations for the temporary bridge.
- 6.2 Simultaneous with the temporary bridge design, work could advance on the permanent bridge replacement with WSP.
- 6.3 Our goal would be to design the temporary bridge and staging of the new bridge to keep a crossing open to traffic through construction. However, there is a high possibility that this may not be technically and economically feasible. If this was feasible, it is anticipated that construction would take up to 18 months and be

completed by the Summer of 2027. If this was not feasible and the temporary bridge had to be removed during construction, the construction is anticipated to be 9-12 months and be completed by the end of 2026.

- 6.4 Although the MTO advised they would seek approvals to provide funding to the Region for the completion of the design and construction of the new bridge, it is Regional staff's position that MTO should cover all the project costs. This would include the temporary bridge design, construction, rental for up to three years, and removal. In addition, staff time and consultant costs for managing the designs, tendering and construction contract administration and supervision, along with associated expenditures.
- 6.5 The MTO has advised that the earliest they could get Treasury Board approval for the funding is this Summer. As a result, proceeding without Board approval would be at the Region's financial risk. Agreement in principle from MTO staff to cover all projects costs and a commitment to request the funding from the Treasury Board should be obtained from MTO.

7. Relationship to Strategic Plan

- 7.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal 2: Community Vitality
 - 2.2 Enhance community safety and well-being.
 - b. Goal 3: Economic Prosperity
 - 3.3 Enhance communication and transportation networks to better connect people and move goods more effectively.
 - c. Goal 5: Service Excellence
 - 5.1 Optimize resources and partnerships to deliver exceptional quality services and value.

8. Conclusion

- 8.1 It is recommended that the Ministry of Transportation be advised that the Regional Municipality of Durham strongly disagrees with their decision to transfer the closed Beaver River Bridge, located on Regional Road 15 over Beaver River immediately west of Highway 12, prior to the design and construction of the

replacement bridge. However, to avoid further delays it is recommended that the Regional Municipality of Durham proceed with the design and construction of a temporary and permanent bridge replacement, subject to appropriate commitments from the Ministry of Transportation to fund all project costs.

- 8.2 This report has been reviewed by the Finance Department and Legal Services – Office of the CAO.
- 8.3 For additional information, contact: Paul Gee, Manager, Transportation Infrastructure, at 905-668-7711, extension 3441, or Megan Duhig, Project Manager, Transportation Infrastructure, at 905-668-7711, extension 3276.

9. Attachments

Attachment #1: Location Map – Showing the Beaver River Bridge location and the MTO Controlled Access Highway Limits

Attachment #2: Letter to Rina Kulathinal, Manager, Engineering Program Delivery, MTO, from Ramesh Jagannathan, Acting Commissioner of Works, Durham Region, regarding the Beaver River Bridge Ownership and Replacement, dated November 27, 2023

Attachment #3: Letter to Ramesh Jagannathan, Acting Commissioner of Works, Durham Region, from Alain Beaulieu, Chief Engineer, MTO regarding the next steps for the replacement of the Beaver River Bridge, dated March 26, 2024

Attachment #4: Letter to Megan Duhig, Project Manager, Durham Region, from Algonquin Bridge, confirming the feasibility of a temporary bridge to replace the Beaver River Bridge, dated March 28, 2024

Respectfully submitted,

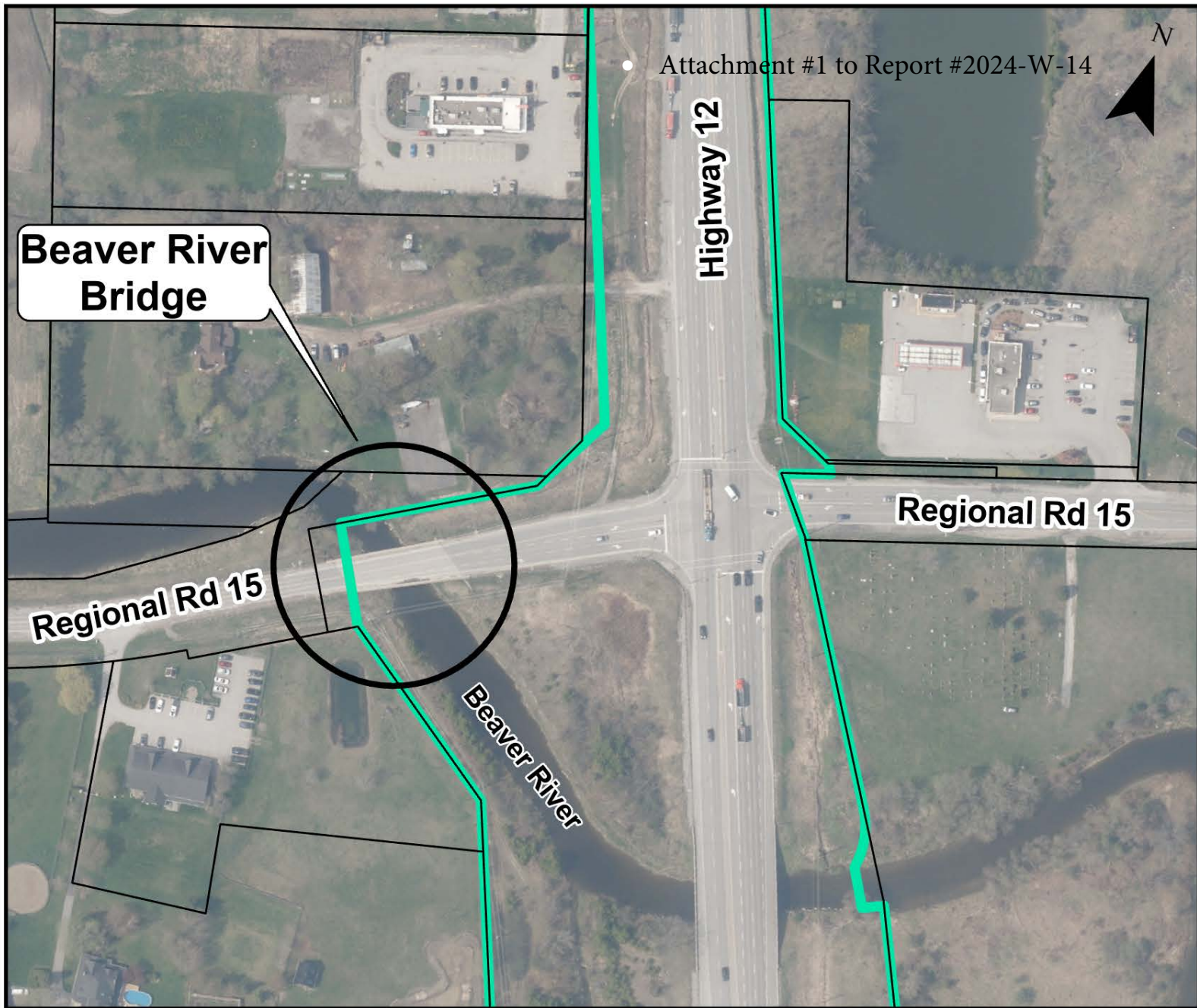
Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



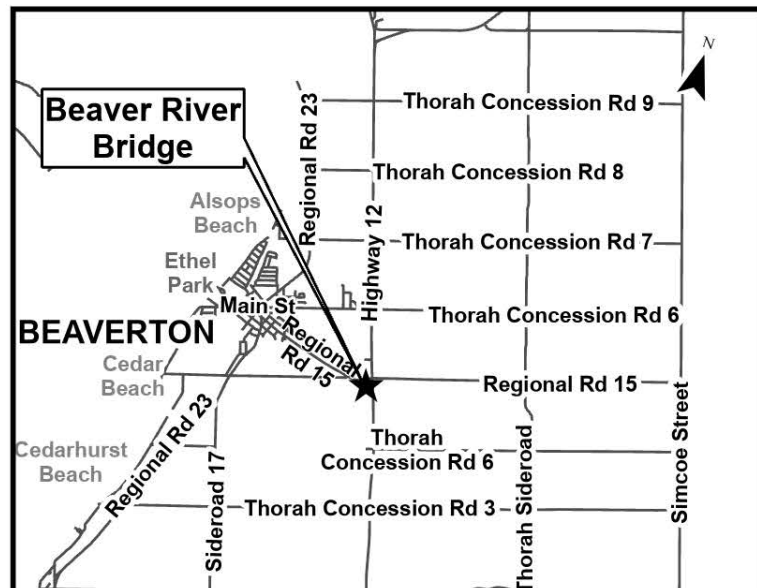
Location Map Beaver River Bridge Township of Brock

 Ministry of Transportation
Controlled Access Highway

 Ownership Parcel



GIS Data: Produced by Durham Region, 2024.
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Date: 2024-03-27

2024-032



Sent via email (rina.kulathinal@ontario.ca)

November 27, 2023

**The Regional
Municipality of
Durham**

Works Department

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Ramesh Jagannathan
MBA, M.Eng., P.Eng.,
PTOE
Acting Commissioner
of Works

Rina Kulathinal
Manager, Engineering Program Delivery
Ministry of Transportation
159 Sir William Hearst Avenue
Toronto, ON
M3M 0B7

Dear Rina Kulathinal:

Re: Beaver River Bridge Ownership and Replacement

Further to recent discussions between the Ministry of Transportation (MTO) and Regional Municipality of Durham (Region) staff regarding the ownership and replacement of the Beaver River Bridge, located 100 m west of Highway 12 on Simcoe Street (Regional Road 15), the Region is hereby seeking confirmation of our understanding and expectations as outlined below.

It is our understanding that the Beaver River bridge was built in 1965 by MTO as part of the Highway 12 and Simcoe Street intersection reconstruction. Since the Region was formed in 1974, the Region has been operating on the understanding that this bridge was under the ownership of the Region. This understanding resulted in the Region completing regular structural inspections, minor repairs, and due to the deterioration evident on this bridge more intrusive and intensive investigations that resulted in a weight restriction being implemented in March 2020. In December 2020, interim accelerated repairs of the bridge were completed in order to eliminate the weight restrictions and keep the structure in service until replacement. The weight restriction was removed upon completion of the repairs. The current recommendation from our most recent July 2023 inspection is to replace the bridge in 1-5 years with no immediate action needed.

Rina Kulathinal, MTO
Beaver River Bridge Ownership and Replacement
November 27, 2023
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In March of this year, as part of the bridge replacement design being completed by the Region there was consultation with MTO related to the need for any improvements at the Simcoe Street and Highway 12 intersection which may impact the bridge geometry. In August, MTO advised that the bridge may be owned by MTO, having discovered that the bridge was within the Highway 12 MTO Controlled Access Highway (CAH) limits and located on MTO property. Despite MTO not having it in their inventory listing and therefore not regularly inspecting it, it has since been agreed that this bridge is an MTO asset.

As a result of this revelation, in late October MTO's consultant completed an inspection. Based on this inspection, MTO concluded that until further testing and evaluation can be completed to independently confirm the capacity of the structure, the prior weight restriction had to be reinstated. MTO installed the weight restriction signs on November 15. A day later, MTO decided to close the bridge on November 16 due to concerns with enforcement of the weight restriction. As of the date of this letter, the bridge remains closed.

We understand MTO's evaluation could determine that the weight restriction can be removed or that the weight restriction or closure needs to remain in place until the bridge is replaced. With the ownership revelation, the replacement will be subject to completion of design and availability of MTO funding, which MTO advised is expected in 2025.

The Region's ongoing bridge replacement design project by WSP (consultant) is estimated to be approximately 20 per cent complete, primarily with pre-engineering activities completed including geotechnical investigations, environmental field work, archaeological assessment, and hydraulic analysis. A proposed span arrangement has been developed and is subject to further review by the Lake Simcoe Region Conservation Authority (LSRCA) before the bridge structural design can commence. To streamline (e.g. communications, approvals, etc.) the design completion, we expect that MTO will now take over and complete the design and construction of the replacement.

We fully respect MTO's decision to close the bridge and undertake necessary evaluations and due diligence activities based on their inspection findings. We however wish to reiterate to MTO the importance of providing clear and frequent communications to the Region and Brock Township staff, given the impacts of any restrictions on this bridge to the Beaverton residents and beyond. It is also important that MTO update the detour and other signage plans in a timely manner as the status of bridge operations evolve.

Given our knowledge history with the bridge, the Region is committed to supporting MTO during this transition of responsibilities. Please acknowledge and confirm next steps as outlined above by December 1 so that we can keep Regional and Brock Township Councils informed on the matter.

Rina Kulathinal, MTO
Beaver River Bridge Ownership and Replacement
November 27, 2023
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Please feel free to contact myself or Paul Gee, Manager of Transportation Infrastructure, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ramesh Jagannathan', with a stylized flourish at the end.

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Copy: Lukasz Grobel, Head, Project Delivery, MTO

Miao Zhou, Area Manager, Transportation, MTO

Paul Gee, Manager, Transportation Infrastructure, Works, Region of Durham

Ministry of Transportation
Office of the Chief Engineer
Transportation Infrastructure
Management Division

4th Floor, Garden City Tower
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Ministère des Transports
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March 26, 2024

Ramesh Jagannathan, Commissioner of Works
Regional Municipality of Durham
605 Rossland Road East
Whitby, Ontario L1N 6A3

Dear Ramesh,

This letter is to confirm discussions that took place on March 20, 2024, regarding next steps associated with the Beaver River Bridge, located on Regional Road 15/Simcoe Street (RR15) west of Highway 12, in the Township of Brock, east of Beaverton.

On November 16, 2023 at 4:00 pm, following a structural assessment, the Beaver River Bridge, which carries Durham Region's Regional Road 15 over the Beaver River was closed to traffic by the Ministry of Transportation (MTO). Further testing indicated that the bridge's load carrying capacity was reduced by 70% and that only loads up to 7 tonnes maximum would be permitted to use the bridge if it were to open to traffic again. After consultation with experts, it was determined that enforcing compliance of a 7-tonne load restriction is not feasible. For public safety reasons, MTO recommends that the bridge remain closed until it can be replaced.

As background, the Beaver River Bridge was constructed by MTO in the 1960s, when the Beaverton Bypass was constructed. Based on historical documentation, there was an intent for the section of road containing the bridge to be assumed by the Ministry for construction purposes and reverted again to the County of Ontario (prior to the existence of Durham Region) once the new bridge was constructed. The County understood the intent and assumed care and control of the new bridge once construction was complete, and the bridge opened to the public in 1966. Durham Region has been managing the Beaver River Bridge as a municipal asset since 1974 and the bridge is not included in MTO's existing structural inventory. Although no formal transfer of ownership was completed, both the Region and MTO operated under the assumption that Durham Region, which has been performing maintenance and conducting bi-annual inspections and minor rehabilitations on the structure, owned the bridge.

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The ministry understands that the Region was planning to replace the bridge in 2025. Detail design work was underway by the Region and was approaching the 30% design milestone when it was discovered that the transfer of ownership did not occur as originally intended and that the Ministry still owned the structure.

While detours are available while the bridge is closed, both the Region and MTO have received correspondence from Beaverton community members, the Fire Chief and local politicians requesting bridge be open to traffic as soon as possible due to impacts to the community and local businesses.

Given the community's interest in having the bridge reopened as soon as possible, the Region is in the best position to replace the bridge in a timely manner by continuing design work under the current engineering consultant assignment. As discussed, the ministry intends to transfer ownership of the bridge to Durham Region, so that the Region can continue the design using an established engineering assignment, and ultimately construct and reopen a new bridge.

While MTO understands there is significant pressure from the community to re-open the bridge as soon as possible, the situation does not meet the criteria for an Emergency Procurement approval by the province to expedite the work. As a result, we encourage you to complete the bridge design using the established design assignment as quickly as you can to ensure that the bridge replacement is completed and the bridge open to traffic as soon as possible.

The ministry will immediately begin the process to transfer the bridge to the Region and seek approvals to provide funding to Durham Region for the completion of the design and construction of the new bridge. Discussion between the Region and the province about roles and responsibilities during the period of ownership transition will continue.

I appreciate the frank and open discussion we shared and trust you are in agreement that resuming an already started design project is the most expeditious strategy to complete this work and reinstate this vital link for your community.

Thank you again for your time and for your efforts to work with the province to resolve this matter in a timely way.

Sincerely,

Alain Beaulieu, P.Eng.

Chief Engineer



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Thorndale, Ontario
Canada N0M 2P0
T 226 213 4707

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Alexi Menjivar

Amenjivar@Algonquinbridge.com

(905)870-7067

March 28th, 2024

Megan Duhig

Project Manager Works Department – Transportation Infrastructure

The Regional Municipality of Durham

Dear, Megan Duhig

Having reviewed the documents for the Beaver River Bridge project, Algonquin Bridge believes a 2-lane (180' TDHR2H++ 7.35m) Modular Panel Bridge with 1- 1.5m Pedestrian walkway is a feasible solution. Our extensive experience, including successful completion of projects like the (*skewed*) Scott Street Detour in Ottawa as part of the OLRT Phase 2 (see attached story), reinforces our confidence in this recommendation. We are keen to collaborate further and offer any necessary assistance to advance the project. Upon receipt of additional geotechnical information, we can proceed with the design and supply of two Bolt-A-Bin Abutments as part of a comprehensive packaged solution.

Thank you for your consideration.

Sincerely,

Technical Sales Representative

Algonquin Bridge



Project Profile



February 4, 2022

Algonquin Temporary Modular Bridge maintains bus route during Ottawa's Stage 2 Light Rail Transit Project

Algonquin Bridge is pleased to have been selected to design and supply a 67 m Temporary Modular Bridge as part of the multi-billion-dollar Stage 2 Light Rail Transit (LRT) Project for the City of Ottawa. The bridge will maintain the Scott Street dedicated bus route while the LRT system is being constructed in the corridor below.



Project at a glance:

Project Name: OLRT - Scott Street Temporary Bridge

Location: Ottawa, Ontario

Contractor: Kiewit Eurovia Vinci, Ottawa Partnership

Sector: Public Works, Urban

Application: Detour Bridges

Product: Algonquin Modular Bridge

Dimensions: Span 67 m, width 10.5 m

Installation Time: Three weeks



Project Profile

Installation is a challenge when working in a tight urban area with restricted access. We worked closely with the contractor (Kiewit Eurovia Vinci, Ottawa Partnership) on installation plans, assembly details and crane positioning. The bridge went in very successfully with support from our on-site representative, Pierre-Charles Marceau. Everyone at Kiewit was pleased.

Algonquin also providing seven pedestrian bridges for this project

Algonquin Bridge appreciates having a strong relationship with Kiewit on this overall LRT project. We are also designing and supplying seven pedestrian bridges for the Woodroffe Avenue, Roosevelt, Green's Creek, Place d'Orleans, Queensview, Trim Road and Baseline stations.

Economical Algonquin Modular Bridges are easy to install

The Algonquin Modular Bridge System uses 3 m pinned panels to achieve clear spans of more than 82 m. They are easy to assemble with local crews and equipment. Designs can be configured for a wide range of roadway widths up to three lanes. Driving surfaces can be either steel decks with asphalt pavement or anti-skid, epoxy-aggregate coating. Timber decking is also available.

See all Project Profiles on algonquinbridge.com



Take a 360° video tour of
this project