**Report - Standing Policy Committee on Public Works - June 10, 2003**

**Item No. 4 Emergency structural repairs to Brady Road Bridge over Lot 16 Drain File SB**

STANDING COMMITTEE RECOMMENDATION:

On June 18, 2003, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Public Works, and submits the following to Council:

1. That a new capital project for structural repair works for the Brady Road Bridge over Lot 16 Drain be approved on an emergency basis at this time.

2. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing, including the execution of any documents related thereto.

For the information of Council, on June 10, 2003, the Standing Committee on Fiscal Issues considered a report from the Director of Public Works dated May 30, 2003 and recommended that the amount of $130,000.00 be approved utilizing any unused/surplus funding in the Public Works Department's existing budget.

**Report - Standing Policy Committee on Public Works - June 10, 2003**

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On June 18, 2003, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On June 10, 2003, the Standing Policy Committee on Public Works concurred in the administrative recommendation and submitted the matter to Executive Policy Committee and Council.

On June 10, 2003, the Standing Committee on Fiscal Issues approved the amount of $130,000.00 for a new emergency capital project at the Brady Road Bridge over Lot 16 Drain subject to the approval of the project by the Standing Policy Committee on Public Works and utilizing any unused/surplus funding in the Public Works Department’s existing budget.

**Re: EMERGENCY STRUCTURAL REPAIRS TO BRADY ROAD BRIDGE OVER LOT 16 DRAIN**

**For Submission To:** STANDING POLICY COMMITTEE ON PUBLIC WORKS

**Original Report Signed By:** Director of Public Works

**Report Date:** May 30, 2003

**Recommendations:**

1. That a new capital project for structural repair works for the Brady Road Bridge over Lot 16 Drain be approved on an emergency basis at this time.

2. That the Standing Committee on Fiscal Issues identify a funding source in the amount of $130,000 for this project.

**REPORT SUMMARY:**

**Key Issues:**

- Recent inspections of the two-span timber bridge on Brady Road revealed that a majority of the timber piles at two of the three support locations are severely rotted. In addition, two timber stringers (beams) that support the deck are severely cracked.

- In order to ensure public safety, structural repairs need to be undertaken immediately or the bridge will have to be closed until structural integrity is restored.

- Future plans for Brady Road are contingent on the proposed Waverley West Subdivision. It is not likely that Brady Road will need to be upgraded within the next ten years at which time replacement of this structure will be required.

- The proposed emergency repairs will extend the service life of the bridge at least ten years until Brady Road is upgraded.

**IMPLICATIONS OF THE RECOMMENDATION(S):**

**General Implications:**

- [ ] None
- [X] For the organization overall and/or other departments
- [X] For the community and/or organizations external to the City
- [ ] Involves a multi-year phase in process

**Comments:** In order to ensure public safety, structural repairs need to be undertaken immediately or the bridge will have to be closed until structural integrity is restored.

**Policy Implications:**

- [X] No
- [ ] Yes

**Comments:**

**Environmental Implications:**

- [X] No
- [ ] Yes

**Comments:**

**Human Resource Implications:**

- [X] No
- [ ] Yes

**Comments:**

**Financial Implications:**

- [ ] Within approved current and/or capital budget
- [X] Current and/or capital budget adjustment needed

**Comment:** Funding source of $130,000 needs to be identified to undertake emergency structural repairs on this bridge**.**

## REPORT

**REASON FOR THE REPORT:**

In accordance with current procedures, new/emergency capital projects require approval of the Standing Policy Committee on Public Works.

**HISTORY AND DISCUSSION:**

The timber bridge on Brady Road over Lot 16 Drain is located on a stretch of gravel road between McGillivray Boulevard and the Perimeter Highway immediately south of the Whyte Ridge Subdivision. Brady Road is the west boundary of the City adjacent to the R. M. of MacDonald. The age of the bridge is unknown.

The two span bridge has three support locations, which are each, composed of a single row of timber piles called bents. Recent inspections by City bridge staff revealed that at two of the bents, four of five piles are severely rotted. Without repair, the bridge is in jeopardy of collapse under heavier truckloads. Steps taken by Public Works staff have included narrowing the road to a single lane in the centre of the bridge and posting the load limit at 3.4 tonnes to eliminate all heavy commercial traffic.

Repair of the bents will involve installation of new steel piles to restore the structural integrity of the bridge for a minimum of ten years.

Additional repairs required include repair of two severely cracked timber stringers. The stringers are the structural beams that support the timber deck and roadway surface. The stringer cracks are likely the result of overloaded vehicles.

The estimated total capital project budget required to undertake these emergency works is $130,000.

In order to ensure public safety, the impact of not undertaking the repairs would necessitate Public Works staff close the bridge indefinitely until repairs are undertaken or the bridge is demolished.

Brady Road is also the west limit of the proposed Waverley West Subdivision. Future plans for Brady Road are contingent upon this subdivision as well as industrial development in the R.M. of MacDonald. It is unlikely that this future development will require the upgrading of Brady road within the next ten years. When the road is upgraded, the Lot 16 Drain crossing will need to be relocated because the road currently has a poor alignment at this location. At that time, the bridge would be relocated and replaced with a concrete box culvert similar to the Lot 16 Drain crossings at Waverley and Kenaston meeting current roadway and structure standards.

Therefore it is recommended that emergency structural repair works be approved for Brady Road Bridge at Lot 16 Drain; and that the Standing Committee on Fiscal Issues identify a funding source of $130,000 for this project.

## Financial Impact Statement

**Date:** June 2, 2003

**Project Name:**

**First Year of Program** 2003

### EMERGENCY STRUCTURAL REPAIRS TO BRADY ROAD BRIDGE OVER LOT 16 DRAIN

| | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|---|
| **Capital** | | | | | |
| Capital Expenditures Required | $ 130,000 | | | | |
| Less: Existing Budgeted Costs | - | | | | |
| Additional Capital Budget Required | $ 130,000 | $ - | $ - | $ - | $ - |
| **Funding Sources:** | | | | | |
| Debt - Internal | | | | | |
| Debt - External | | | | | |
| Grants (Enter Description Here) | | | | | |
| Reserves, Equity, Surplus | | | | | |
| Other - To Be Determined | | | | | |
| Total Funding | $ - | $ - | $ - | $ - | $ - |
| Total Additional Capital Budget Required | $ 130,000 | | | | |
| Total Additional Debt Required | $ - | | | | |
| **Current Expenditures/Revenues** | | | | | |
| Direct Costs | $ - | $ 13,000 | $ 13,000 | $ 13,000 | $ 13,000 |
| Less: Incremental Revenue/Recovery | 7,358 | - | - | - | - |
| Net Cost/(Benefit) | $ (7,358) | $ 13,000 | $ 13,000 | $ 13,000 | $ 13,000 |
| Less: Existing Budget Amounts | - | - | - | - | - |
| Net Budget Adjustment Required | $ (7,358) | $ 13,000 | $ 13,000 | $ 13,000 | $ 13,000 |

**Additional Comments:**

This is an additional capital project (it was not included in the 2003 Capital program for the Public Works Department). Debt and finance charges are dependant on internal debt as the source of financing.

*"Origninal Signed by Darcy Stewart,CA"*
Manager of Finance & Administration

Approved by Divisional Accountant Trainee: ☑

**In preparing this report, there was consultation with and concurrence by: N/A**

**This Report Submitted by:**

| | |
|---|---|
| Department: | Public Works |
| Division: | Bridges |
| Prepared by: | B. A. Neirinck, P. Eng. (986-7950) |
| Processed by: | B. A. Neirinck, P. Eng. |
| File No. | SB-179 |
| File Name: | O:\engineer\Bridges Division 2003\Brady Road Emergency Repairs Report Updated Version.doc |