

Bridge Maintenance and Inspection Responsibilities

BRIDGE MAINTENANCE & INSPECTION RESPONSIBILITIES




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Bridge Maintenance and Inspection Responsibilities

Need for Inspection and Maintenance

- Safety
- Protection of investment
- maximize functional life



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Bridge Maintenance and Inspection Responsibilities

Legislation

- **Municipal Government Act**
 - Definitions
 - (z) road... includes a bridge forming part of a public road
 - 16 (1) The title to all roads in a municipality, other than a city is vested in the Crown in right of Alberta



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Municipal Government Act (Continued)

- 18 (1) ...a municipality has the direction, control and management of all roads within the municipality
- 532 (1) Every road... must be kept in a reasonable state of repair by the municipality having regard to
 - (a) character of road...
 - (b) the area it is located
- 532 (2) The municipality is liable for damage caused by... failing to perform its duty...
- 532 (4) A municipality is not liable... unless... loss or damage beyond what is suffered by... all other persons affected by the state of repair.



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Municipal Government Act (Continued)

- 532 (6) A municipality is liable... only if “it” should have known of the state of repair
- 532 (7) A municipality is not liable... if “it” proves that it took reasonable steps to prevent the disrepair...
- 533 A municipality is not liable for damages caused if it took reasonable steps to prevent...
 - (a) by the presence, absence or type of any wall, fence, guard rail... traffic control device... adjacent... in... on a road.



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Public Highways Development Act

- (4) All provincial highways are subject to direction, control and management of the Minister
- (8) The Minister may make regulations... for
 - (a) design and standards for construction for secondary roads
 - (b) standards for maintenance for secondary roads




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Public Highways Development Act

- (2) ...each highway authority is responsible for costs of construction and maintenance of all highways subject to its control and management
- 19) The Minister has the direction, control and management of
 - (a) roads in improvement districts
 - (b) highways through Indian Reserves...
 - (c) highways in cities if title vested in Crown.
 - (forestry roads & secondary highways by agreement...)




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Public Highways Development Act (Continued)

- 21 (1) The Minister may enter into an agreement with any... municipality... “to” contribute to the cost of construction and maintenance of any street or road...
- 52 (1) ...the Minister may direct construction or maintenance of a bridge... or enter into an agreement... for
 - (a) paid by Crown
 - (b) Paid by municipality... or other person
 - (c) apportioned between Crown and... other
 - whichever the Minister directs.




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Traffic Safety Act

- 15 (1) ...municipality may authorize... placing of traffic control devices
- 16 (1) ...municipality may make by-laws
 - (a) ...restricting weights of vehicles...
 - (p) ...closing or restricting... highway... bridge...




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Department Policies

- Outline methods of operation
- How legislation is implemented




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Legal Liability

- responsibilities defined by
 - legislation
 - policies and procedures
- cannot guarantee accidents will not happen or damage will not occur
- liable - exposed or open to something undesirable such as loss arising from injury or damage to another person or property




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Due Diligence

- Not liable for damages or loss if:
 - work is in keeping with legislation, policies or procedures
 - work in keeping with accepted / prevailing standards
 - actions are “reasonable”




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Bridge Maintenance and Inspection Responsibilities

Current Maintenance Delivery Process - LRA

- LRA's complete required maintenance activities using either in-house work forces or contracted forces.
- The LRA relies heavily on the accuracy and completeness of the BIM inspection report.
- Quantities shown in the maintenance section of the BIM report form the basis of the scope of work.
- A quality BIM report is expected, and greatly assists the LRA in the delivery of their maintenance program.




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Current Maintenance Delivery Process - AT

- AT Regional bridge offices currently utilize their respective Highway Maintenance Contractor (HMC) to complete required maintenance activities.
- Maintenance and Rehabilitation work is also delivered through the provincial tender process.
- If utilizing the HMC, a Bridge Maintenance Authorization is generated which details the scope of work and the quantities. This document also forms a part of the contractual agreement between AT and the HMC.
- In either case, contractors submit quotes based on the scope of work and quantities, among other things.




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Bridge Maintenance and Inspection Responsibilities

Current Maintenance Delivery Process - AT

- Similar to the LRA, AT bridge staff also rely heavily on the accuracy and completeness of the BIM inspection report.
- Quantities shown in the maintenance section of the BIM report form the basis of the scope of work for either the HMC BMA or provincial tender.
- A quality BIM report is expected, and greatly assists AT bridge staff in the delivery of their maintenance program.
- A second trip to the field by AT staff to gather or confirm quantities is not desirable.



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Current Maintenance Delivery Process - AT

Government of Alberta **BRIDGE MAINTENANCE AUTHORIZATION**

File No: 7475
Date: May 11, 2015
Auth No: BMA2015-036
District: 6

Attention: John Doe Construction Superintendent
Contractor: Anywhere Contractors Ltd. Program: 50090
Job No: 0006482 Contract: 0715806

Highway: 20/06 Legal Land Location: SW SEC 12 TWP 44 R02E 3 W5M
Stream: Blindman River Nearest Town: Bluffton


Existing Structure: 2 Span RB (15.20-15.2m)

Quote Date:	Completion Date:	CNCL 15th, 2015	Warranty:	As Contract			
Prepared by:	Name & Title:	Bridge Technologist					
Item No.	Description	Units	Estimated Quantity	Unit Cost	Total Cost	Actual Quantity	Actual Cost
1	Remove and Replace Existing Deck Slabs	L/S	1				
2	Full Depth Repair of Abutment and Pier Diaphragm	sqf	20				
3	Partial Depth Repair of Pier Shaft, Deck Soffit and Fascia	sqf	2.5				
4	Partial Depth Repair of Approach Slab	sqf	20				
5	Approach Road Milling and Paving	L/S	1				
6	Blot Clean and Reveal Steel	sqds	175				
7	Clean and Seal Concrete	sqf	110				
8	Minor Miscellaneous Repairs	L/S	1				
				Total Quote:			Total Cost \$:

Quote Submitted By: _____ Name & Title: _____ Date: _____

Conditions: _____

Department Acceptance of Quote		Completion Details	
Approved by:	Date:	Date Started:	Date Completed:
Name & Title: <u>Donald Stenlund, Bridge Manager</u>		HMC Final inspection by:	Date:
		AT Final inspection by:	Date:
Approved by:	Date:		
Name & Title: <u>Russell Wynn, Active Regional Director</u>			



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