

# MUNICIPALITY OF BIFROST-RIVERTON

## POLICY & PROCEDURES MANUAL

### CULVERTS

Reference/Title:	Culverts
Policy Number:	2017-01
DATE ADOPTED:	January 11, 2017
ADOPTED BY:	Resolution of Council #
PAGES:	5
Manual Index:	2017-01

#### **PURPOSE**

The Council of the Municipality of Bifrost-Riverton wishes to establish guidelines and conditions for the supply and installation of culverts within the Municipal Road Allowance. The culverts shall meet drainage needs (i.e. of adequate size so as not to impede water flow) and be installed to municipal standards. It is not the Municipality's mandate to provide access for vacant land where there is minimal taxable benefit to the Municipality.

Any culvert that is installed within a right of way of a Provincial Road or Waterway is under the jurisdiction of Manitoba Infrastructure. This policy does not apply to such instances and an application must be made to the Province.

#### **POLICY**

Property owners must apply to the Municipality for permission to:

- a) install a new driveway to access property;
- b) widen an existing driveway;
- c) install a temporary driveway to provide access during construction projects; and
- d) relocate an existing approach.

Once an application form (see Schedule A of this policy) has been filed with the Municipal Office and the fee paid, the Public Works Department will conduct an initial inspection of the property. No work shall begin until a permit has been issued by the Municipality with Sustainable Development approval.

Manitoba Sustainable Development requires that for installation of new approaches:

- a) Not to alter water flow rates, volumes or directions of flow as compared to pre-construction conditions; and
- b) Have culvert crossings sized equal to the culvert through the next immediate crossing downstream.

## **Rural Residential / Field Properties**

- 1.** Minimum culvert capacity to be 450mm (18") (unless a block crossing is warranted and no culvert is necessary). In the case of a new residential development, minimum culvert capacity can be 300mm (12") if approved by Council.
- 2.** Only new culvert pipes constructed of galvanized steel or HDPE are authorized for installation in municipal ditches.
- 3.** When drains are being constructed or reconstructed by the Municipality, existing culverts will be replaced by the Municipality if necessary.
- 4.** When drains are being constructed or reconstructed by the landowner, existing culverts will be supplied at the expense of the Municipality if necessary.
- 5.** The Municipality cost sharing on culverts over 900mm (36") will apply to only one (1) crossing per property. Second or any additional crossing to be the landowner's responsibility. The cost sharing will apply to a maximum crossing width of 12m (40'). Any cost above and beyond will be the landowners cost.
- 6.** Residential access - Maximum top width is 9m (30') with a minimum side slope of 3:1.  
Field access - Maximum top width is 12m (40') with a minimum side slope of 3:1.  
If a landowner would like to widen the approach greater than the above, it will be at the expense of the landowner. If the access was wider than the above, the Municipality will keep the current width for the new access.
- 7.** When work is being conducted by the Municipality and a landowner would like an approach relocated within that work area, the Municipality can relocate it at no extra cost. When there is not any work being conducted by the Municipality and a landowner would like to relocate an approach, it will be at the expense of the landowner.
- 8.** Whenever an updated survey is available from the Municipality, culverts shall be installed at the new proposed grade line.
- 9.** The Municipality accepts no responsibility for any decorative additions, concreted ends or other materials on the access approach.
- 10.** The landowner or contractor must apply for clearances from utilities (eg. MTS, Manitoba Hydro & Gas) prior to commencing work.
- 11.** When a crossing is to be placed at the corner of a section and can be placed either on the east-west ditch or the north-south ditch, the crossing shall preferably be placed over the ditch requiring the smallest diameter culvert possible.
- 12.** In new developments the developer is responsible for provide culverts for new lots, installed to Municipal standards.

13. Where a culvert that was installed after the date of this policy has to be replaced due to collapse, plugging or other impairment of function, the landowner shall be responsible for the total cost of said replacement. If the damage causes an upstream issue, the Municipality has the right to fix or replace the culvert at the expense of the landowner.
14. When a culvert installed by the Municipality or agents of the Municipality fails, the Municipality shall replace the culvert at no expense to the landowner. If a culvert that was installed by anyone other than the Municipality or agents of the Municipality fails, the Municipality holds no responsibility for expense.
15. Culverts shall not be tampered with. If a landowner damages the culvert, they will be charged for the repairs/replacement.
16. Failure to comply with the above conditions shall result in the removal of the culvert at the landowner's expense.

#### **Village of Riverton Properties**

1. Minimum culvert capacity to be 300mm (12") (unless a block crossing is warranted and no culvert is necessary).
2. One access per property is allowed.
3. Only new culvert pipes constructed of galvanized steel or HDPE are authorized for installation in municipal ditches.
4. When drains are being constructed or reconstructed by the Municipality, existing culverts will be replaced by the Municipality if necessary. Any increase in length at the request of the landowner shall be at the landowner's expense.
5. Maximum top width is 6m (20') with a minimum side slope of 3:1. Any extension to this would require approval from Council, and shall be done at the landowner's expense.
6. Whenever an updated survey is available from the Municipality, the culvert is to be installed at the new proposed grade line.
7. The Municipality accepts no responsibility for any decorative additions, concreted ends or other materials on the access approach.
8. In new developments the developer is responsible for providing culverts for new lots, installed to Municipal standards.
9. Where a culvert that was installed after the date of this policy has to be replaced due to collapse, plugging or other impairment of function, the landowner shall be responsible for the total cost of said replacement. If the damage causes an upstream issue, the Municipality has the right to fix or replace the culvert at the expense of the landowner.

10. When a culvert installed by the Municipality or agents of the Municipality fails, the Municipality shall replace the culvert at no expense to the landowner. If a culvert that was installed by anyone other than the Municipality or agents of the Municipality fails, the Municipality holds no responsibility for expense.
11. Culverts shall not be tampered with. If a landowner damages the culvert, they will be charged for the repairs/replacement.
12. Failure to comply with the above conditions shall result in the removal of the culvert at the landowner's expense.

### **Culvert Installation Standards**

1. Unless otherwise stated, culverts are to be installed with inverts at elevations specified on the profile. The landowner or contractor is responsible for ensuring these elevations using laser, GPS, or other desired survey means.
2. Sustainable Development requires:
  - Culverts that are 900mm and greater in size are to be end-wrapped in filter cloth during installation.
  - Culverts are to be installed on a compacted/tamped base of granular fill free of organic material, sticks or stones.
  - There is to be no standing water or excess moisture present during installation and backfilling.
  - Lifts should not exceed 300mm in depth and are to be compacted.
  - The culvert shall also be capped by a final compacted 300mm lift of clay and top dressed with granular fill.

If required by Water Stewardship, erosion control (rock rip-rap) of size ~300mm shall be placed at the inverts of culverts as well as on the side slopes of crossings. Aprons shall be sub-cut and lined with filter cloth 0.5m under each invert and extended for 2m on the up and downstream sides.

3. Couplers are to be installed and tighten by electric impact gun or hand wrench to ensure a secure joint.
4. Culverts are to be moved by fabric sling whenever possible. The landowner or contractor will be held responsible for any damage caused during handling and installation, including but not limited to the replacement cost of the culvert.

**Culvert Policy**  
Schedule "A"

Name: \_\_\_\_\_

Legal Description: \_\_\_\_\_ Roll No: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Type of Installation:

- New
- Relocation
- Replacement / Upgrade

Culvert Type:

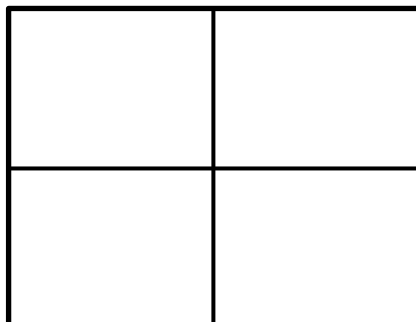
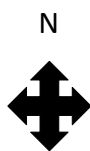
- Galvanized Steel
- HDPE (Plastic)

Size and length of Existing or Proposed Pipe Installation (if applicable):

Size: \_\_\_\_\_ x Length: \_\_\_\_\_

GPS Coordinates (in UTM): \_\_\_\_\_

Include Diagram



\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Public Works Manager:

Inspected on (date): \_\_\_\_\_  Approved  Denied

Reason for being denied: \_\_\_\_\_

Approved Culvert Size: \_\_\_\_\_ Length: \_\_\_\_\_

- Galvanized Steel  HDPE Plastic

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date