

Town Policy

(March 28, 2006)

Piping/Filling in of Roadside Ditches

The Town owns its road right of way, not the abutting landowner.

Purpose of Town roadside ditches:

Town roadside ditches perform three primary functions:

1. They serve to drain the road base and sub grade of water

The sub grade (original ground under a road) is shaped with a 3% slope to drain water across and under the granular base materials. (Note: Clean granular material drains at a rate of approximately 10ft. per day. With 10% dirt this rate drops to 10ft. per 4 days.)

2. They carry collected water to a sufficient outfall.
3. They assist in winter snow clearing operations by providing snow storage below the elevation of the road surface.

Snow banks do not build up as fast permitting wind to blow over the road and not cause snowdrifts.

Snow is stored in the ditch minimizing the need to lift and carry the snow or to blow the snow to make room for the plowing from additional storms.

In addition:

Roadside ditches also stop the uncollected sheet of surface water coming from outside the road right of way from getting on the road. The Town has locations where this sheet of water causes icing of the road during winter freeze thaws.

Road design philosophy:

1. The design philosophy for rural roads is to raise them above the surrounding land and drain them with ditches.

Water gets into roads through the shoulders and weeps out through the ditches.

2. The design philosophy for urban roads and streets is to lower them below the surrounding land and collect the water on the road, direct it to catch basins and a properly sized storm sewer.

Policy: Piping/Filling in of Roadside Ditches

1. Rural Town roadside drainage is by open ditches.
2. These ditches may only be piped/filled in exceptional cases with express approval of the Public Works Department. Based on this policy.
 - a) No ditch that is mow able can be a candidate for piping/filling. (Note: Mowable is hand mowable by a fit person, the fact that a riding lawnmower may not be able to mow a Town Roadside ditch easily is not reason to fill/pipe.)
 - b) No ditch shall be piped where the provision of a snow storage swale cannot be achieved.
 - c) No ditch shall be piped where the invert of the pipe does not have at least 4ft. of cover.
 - d) No ditch shall be piped where the water in the pipe cannot reach the cleaning velocity of 2ft./sec.
 - e) No ditch shall be piped where the condition that is the basis of the request is a result of actions of the landowner (current or past) i.e.:
 - the landowner landscapes the property and wishes the roadside ditch piped to suit the landscaping.
 - A house lot is created on former farmland and the new owner does not like the ditch.
 - f) Any piping is only at the approval of the Public Works Department. The landowner gains no ownership of the roadside nor any rights to continuation of the work should for any reason the Town require the drainage system to be returned to an open ditch condition.
3. No cost of design or filling/piping a Town roadside ditch will be borne by the Towns Public Works Department.
4. Piping/filling shall be done only to Town Public Works Department specifications which shall be based on the following:
 - a. There must be adequate provision of a snow storage swale.
 - b. The pipe must be placed with the invert below the normal frost line and in no case will this cover be less than 4ft.

- c. The slope of the pipe shall be such that the water achieve a velocity that will self clean the pipe (min. 2ft./sec.)
- d. Subsurface drainage of the roadbed must be accommodated.
- e. Sufficient outlet must already be available.
- f. In rural developed areas all owners must agree to the project and commit to pay for the work.

In areas of rural development, or where the requested piping will extend 250ft., the section shall be “urbanized” incorporating the following:

- I. A properly designed storm sewer.
- II. Curbing.
- III. A paved widening of the road (As determined by the Town Engineer).

Landowners wishing to “urbanize” a rural developed section of Town road shall retain a qualified professional engineer acceptable to the Town to prepare the design and estimate the cost of the construction.

The Town must approve the design.

After approval of the design and prior to proceeding with approved work, the Town must receive a cash deposit equal to 110% of the estimated cost. The Town will preform the work or a contractor selected by the Town and completed to the Towns’ satisfaction and standards. Upon completion the Town will account for the total cost of the project and refund any surplus remaining from the deposit.

Upon completion of such “urbanization” of a section of rural developed road, the Town will assume full responsibility for maintenance as if the work was a Town project.

5. Should for any reason routine or emergency maintenance be required, the Town will perform that maintenance. If, in the opinion of the Public Works Department, the maintenance will require removal, partial removal or replacement of the pipe, the pipe will be removed and the drainage system returned to an open ditch condition. (This clause does not apply to “urbanized” sections performed under Clause4.)

Any request for reinstatement of the pipe shall be treated as a new application.

6. All work performed without prior written permission shall be considered trespassing. The Town shall remove the pipe/fill and reinstate the open ditch. The cost of this work will be invoiced to the abutting landowner

7. Every application to pipe a portion of roadside ditch beyond the limits of an entrance shall be accompanied by a non-refundable payment sufficient to cover Public Works and Town Engineer's time (**see Town Fee Schedule**) to defray the cost of considering the application and plans.

The Town Board may, in unique cases, make exceptions to this policy without affecting the general application of its provisions.

Policy: Drain Tile in Roadside Ditches

1. Rural Town roadside drainage is by open ditches.
2. These ditches may only be drain tiled in exceptional cases with express approval of the Public Works Department. Based on this policy.
 - a) Ditches that sit wet from the sump pump running all the time may be a candidate for drain tiling a ditch.
 - b) No ditch shall be drain tiled where the provision of a snow storage swale cannot be achieved.
 - c) No ditch shall be drain tiled where the condition that is the basis of the request is a result of actions of the landowner (current or past) i.e.:
 - a. The landowner landscapes the property and wishes the roadside ditch drain tiled to suit the landscaping.
 - b. A house lot is created on former farmland and the new owner does not like the ditch.
 - d) Any drain tiling is only at the approval of the Public Works Department. The landowner gains no ownership of the roadside nor any rights to continuation of the work should for any reason the Town require the drainage system to be returned to an open ditch condition.
3. No cost of drain tiling a Town roadside ditch will be borne by the Town's Public Works Department.
4. Drain tiling shall be done only to Town Public Works Department specifications which shall be based on the following:
 - a. There must be adequate provision of a snow storage swale.

b. Subsurface drainage of the roadbed must be accommodated.

c. Sufficient outlet must already be available.

5. Should for any reason routine or emergency maintenance be required, the Town will perform that maintenance. If, in the opinion of the Public Works Department, the maintenance will require removal, partial removal or replacement of the drain tile, the drain tile will be removed and the drainage system returned to an open ditch condition.

Any request for reinstatement of the drain tile shall be treated as a new application.

6. All work performed without prior written permission shall be considered trespassing. The Town shall remove the drain tile and reinstate the open ditch. The cost of this work will be invoiced to the abutting landowner

7. Every application to pipe a portion of roadside ditch beyond the limits of an entrance shall be accompanied by a non-refundable payment sufficient to cover Public Works and Town Engineer's time (**see Town Fee Schedule**) to defray the cost of considering the application and plans.

The Town Board may, in unique cases, make exceptions to this policy without affecting the general application of its provisions.

I have read through and understand the Town's Policy on Piping/Filling in of Roadside Ditches and agree to the terms set forth in this Policy.

Applicants Name

Date

Checklist for Piping/Filling ditches

A. Does the ditch meet the criteria for installing storm sewer pipe?

- Is ditch mowable?
- Are there provisions for a snow storage swale?
- Will pipe have 4' of cover?
- Will pipe have a cleaning velocity of 2ft./sec.?

B. Must meet the following criteria for installing storm sewer pipe.

- Must have adequate provisions for snow storage swale.
- Pipe must have four feet of cover.
- Pipe shall achieve self cleaning velocity (min. 2ft./sec.)
- Must accommodate drainage of roadbed.
- Must have sufficient outlet already available.
- Must have an agreement from owners to pay for the work.
- Must meet all Town standards for Storm Sewer Pipe installation.
- Must meet any other requirements the town may have.

Checklist for drain tiling ditches

A. Does the ditch meet the criteria for installing drain tile?

- Does ditch sit wet from sump pump water?
- Are there provisions for a snow storage swale?

B. Must meet the following criteria for installing drain tile?

- Must have adequate provisions for snow storage swale.
- Must accommodate drainage of roadbed.
- Must have a sufficient outlet already available.
- Must meet all Town standards for drain tile installation.
- Must meet any other requirements the town may have.