

**Town of Wilmington Town Highway Ordinance**

SECTION		PAGE
Section	1 Purpose	1
Section	2 New Roads – Gravel and Paved Roads with Ditches	1
Section	3 Existing Roadways	6
Section	4 Minimum Standards for Maintenance as Town Highway	6
Section	5 Procedure for Laying-Out or Reclassifying a Town Highway	7
Section	6 Limits in How Many Miles Town Shall Accept in One Year	8
Section	7 Civil Ordinance	8
Section	8 Definitions	9
Section	9 Severability	9
Section	10 Publication and Posting	9
Section	11 Information	9
Section	12 Right to Petition	10
Section	13 Recording	10
Section	14 Effective Date	10

**§1. Purpose:** The purpose of this ordinance is to set forth the consistent policy, practice and standards required for the new construction of roadways, whether Town or private, and to prescribe the procedures and standards for the laying-out or reclassifying a town highway in accordance with 19 V.S.A. Chapter 7. The standards listed here are considered minimum and apply to construction projects and repair and maintenance activities. The standards listed here include management practices and are designed to: ensure the safety of the traveling public, minimize damage to road infrastructure during flood events, and enhance water quality protections by minimizing sediment delivery to surface waters and/or wetlands. The Selectboard reserves the right to modify the standards for a particular project or repair or maintenance activities, where, because of unique physical circumstances or conditions, there is no possibility that the project can be completed in strict conformance with these provisions. Any modifications to the standards must be done in a manner that serves the underlying intent of the management practice, be it public safety, flood hazard avoidance, or water quality protection. Fiscal reasons are not a basis for modification of the standards. Questions about modifications to the standards should be directed to the VTrans District Office.

Municipalities must comply with all applicable state and federal approvals, permits and duly adopted standards when undertaking road and bridge activities and projects.

**§2. New Roads - Gravel and Paved Roads with Ditches:** All new roadways, gravel and paved, constructed whether Town or private, shall be constructed according to the minimums of the following road and bridge construction standards, whether or not such roads are intended to be Town highways maintained by the Town. (Property owner takes responsibility for road being sufficiently passable for fire and/or rescue vehicles and if any damage is done to vehicles due to condition of road, it will be the property owner’s responsibility to pay for vehicle’s repair/replacement.) If any federal and/or state funding is involved in a project, the VTrans district office must be

notified prior to any field changes taking place that would alter the original scope of work.

**A. Roadway Standards:**

1. Road and road-related improvements shall be constructed or installed in accordance with sound engineering practice and this ordinance.
2. The construction guidelines and standards contained as part of this ordinance are considered minimum and may be exceeded to meet traffic or other conditions.
  - a. Any new road or road construction performed on Town roads shall require filter fabric to be installed beneath appropriate levels of bank run, crushed gravel, and pavement, if road is paved.
  - b. The Town of Wilmington shall not take over any private roads unless filter fabric is installed under the appropriate levels of bank run, top dressing, and pavement, if required.
  - c. All new or substantially reconstructed gravel roads shall have at least a 12-inches thick processed gravel sub-base, with an additional 5 inches (minimum) top course of crushed gravel.
  - d. All new or substantially reconstructed paved roads shall have at least a 15 inches thick processed gravel sub-base and nonwoven road fabric.
  - d. All roadways shall be graded so water does not remain on the road surface. For roadways that are not super elevated, this generally means a 2-4% ( $\frac{1}{4}'' - \frac{1}{2}''$  per ft) crown for gravel roads and a 1-2% ( $\frac{1}{8}'' - \frac{1}{4}''$  per ft) crown for paved/ditched roads to promote sheeting of water.
  - e. Proper grading techniques for gravel roadways must be used to avoid creating a ridge or berm between the crown and the ditch.
  - f. Shoulder berms shall be removed to allow precipitation to shed from the travel lane into the road drainage system. Roadway runoff shall flow in a distributed manner to the drainage ditch or filter area and there shall be no shoulder berms or evidence of a "secondary ditch". Shoulder berms may remain in place if the road crown is in-sloped or out-sloped to the opposite side of the road from berm side of road. The shoulder berm standard only applies to gravel roads with drainage ditches.
3. Culverts and Bridges
  - a. All new driveway culverts will have a minimum diameter of 15 inches.
  - b. Replacement of existing roadway culverts and any new roadway culverts must have a minimum culvert diameter of 18 inches.
  - c. Any existing culvert (3 feet diameter or less) that fails due to inadequate capacity and causes road failure shall be replaced with a larger culvert at the discretion of the Road Commissioner.
  - d. Replacement of existing bridges and culverts and any new bridges and culverts must be designed in accordance with the VTrans Hydraulics Manual, and, in the case of perennial streams, conform to the statewide Stream Alteration standards.

- e. When installing or replacing culverts, use appropriate techniques such as headwalls and wingwalls, where there is erosion or undermining or where it is expected to occur.
- f. Install a splash pad or plunge pool at the outlet of new or repaired drainage culverts where there is erosion or where erosion may occur. Splash pads and plunge pools are not appropriate for use in streams supporting aquatic life.
- g. All bridges shall have a minimum two-lane width except the following:
  - Bridge #56 on Town Highway #6 Look Road
  - Bridge #48 on Town Highway #38, Green Road
  - Bridge #51 on Town Highway #54, Howe Drive

4. Ditches and Slopes:

Roadway runoff shall flow in a distributed manner to grass or a forested area by lowering road shoulders or conversely by elevating the travel lane level above the shoulder. Road shoulders shall be lower than travel lane elevation. If distributed flow is not possible, roadway runoff may enter a drainage ditch, stabilized as follows:

- a. For roads with slopes between 0% and 5%: At a minimum, grass-lined ditch, no bare soil. Geotextile and erosion matting may be used instead of seed and mulch. Alternatively, ditches may be stabilized using any of the practices identified for roads with slopes 5% or greater included in subpart B.2 below.

Recommended shape: trapezoidal or parabolic cross section with mild side slopes; 2 foot horizontal per 1 foot vertical or flatter and 2-foot ditch depth.

- b. For roads with slopes 5% or greater but less than 8%:
  1. Stone-lined ditch: minimum 6 to 8-inch minus stone or the equivalent for new practice construction. Recommended 2-foot ditch depth from top of stone-lined bottom,
  2. Grass-lined ditch with stone check dams<sup>1</sup>, or
  3. Grass-lined ditch if installed with disconnection practices such as cross culverts and/or turnouts to reduce road stormwater runoff volume. There shall be at least two cross culverts or turnouts per segment disconnecting road stormwater out of the road drainage network into vegetated areas or spaced every 160 feet.
- c. For roads with slopes of 8% or greater: Stone-lined ditch.
  1. For slopes greater than or equal to 8% but less than 10%:
  2. For slopes greater than 10%: minimum 6 to 8-inch minus stone. Recommended 12-inch minus stone or the equivalent. Recommended 2-foot ditch depth from top of stone-lined bottom.
- d. If appropriate, bioretention areas, level spreaders, armored shoulders, and sub-surface drainage practices may be substituted for the above road drainage standards.

## 5. Drainage Outlets to Waters & Turnouts

Roadway drainage shall be disconnected from waterbodies and defined channels, since the latter can act as a stormwater conveyance, and roadway drainage shall flow in a distributed manner to a grass or forested filter area. Drainage outlets and conveyance areas shall be stabilized as follows:

- a . Turn-outs – all drainage ditches shall be turned out to avoid direct outlet to surface waters.
- b . There must be adequate outlet protection at the end of the turnout, based upon slope ranges below. Turnout slopes shall be measured on the bank where the practice is located and not based on the road slope.
  1. For turnouts with slopes of 0% or greater but less than 5%: stabilize with grass at minimum. Alternatively, stabilize using the practices identified in subpart b – c below, when possible.
  2. For turnouts with slopes 5% or greater: stabilize with stone.
  3. For slopes greater than 5% but less than 10%: minimum 6-inch to 8-inch minus stone or the equivalent for new construction.
  4. For slopes greater than 10%: minimum 6 to 8-inch minus stone or equivalent for new construction. Recommend 12-inch minus stone or the equivalent.

## 6. Guardrail

When roadway, culvert, bridge, or retaining wall construction or reconstruction projects result in hazards such as foreslopes, drop offs, or fixed obstacles within the designated clear-zone, a roadside barrier such as guardrail must be installed. The most current version of the AASHTO Roadside Design Guide will govern the analysis of the hazard and the subsequent treatment of that hazard.

## 7. Access Management

The town must have a process in place, formal or informal, to review all new drive accesses and development roads where they intersect Town roads, as authorized under 19 V.S.A. Section 1111. Towns may reference VTrans A-76 Standards for Town & Development Roads and B-71 Standards for Residential and Commercial Drives; and the VTrans Access Management Program Guidelines for other design standards and specifications.

## 8. Training

Town highway maintenance crews must collectively attend a minimum total of 6 hours of training per year on best road management practices. The town must keep documentation of their attendance for a period of three years.

## 9. The Selectboard hereby adopts the following construction guidelines and/or standards as they may be amended from time to time from the Vermont

Agency of Transportation which are considered integral to this ordinance:  
(for identification purposes only)

- a. A-76 Design Standard for Town and Development Roads
- b. B-71 Design Standard for Residential and Commercial Drives

10. All roads must possess the requisite E-911 signage (initial sign(s) at the owners' expense), along with any other required signage appropriate for the roadway, such as stop, yield, and/or curve signs.

11. The Selectboard or designee shall make final decisions over all questions arising during construction of new roads and shall approve all field changes.

## **B. Drainage and Intermittent Stream Culvert Standards**

The following are the required culvert standards for all gravel and paved roads with ditches where rill or gully erosion is present. These standards also apply to new construction and significant upgrades of stormwater treatment practices.

### 1. Municipal Culverts (Drainage and Intermittent Streams)

- a. Culvert end treatment or headwall required for areas with road slopes 5% or greater if erosion is due to absence of these structures. End treatment or headwall is required for new construction on slopes 5% or greater.
- b. Stabilize outlet such that there will be no scour erosion, if erosion is due to absence or inadequacy of outlet stabilization. Stone aprons or plunge pools required for new construction on road slopes 5% or greater.
- c. Upgrade to 18-inch culvert (minimum), if erosion is due to inadequate size or absence of structure.
- d. A French Drain (also called an Underdrain) or French Mattress (also called a Rock Sandwich) sub-surface drainage practice may be substituted for a cross culvert.

### 2. Driveway Culverts within the municipal ROW

- a. Culvert end treatment or headwall required for areas with road slopes of 5% or greater, if erosion is due to absence of these structures. End treatment or headwall is required for new construction.
- b. Stabilize outlet such that there will be no scour erosion, if erosion is due to absence or inadequacy of outlet stabilization. Stone aprons or plunge pools required for new construction.
- c. Upgrade to minimum 15-inch culvert, 18-inch recommended, if erosion is due to inadequate size or absence of structure.

### **C. Standards for Paved Roads with Catch Basins**

Catch Basin Outlet Stabilization: All catch basin outlets shall be stabilized to eliminate all rill and gully erosion. Catch basin outfall stabilization practices include: stone-lined ditch, stone apron, check dams and culvert header/headwall.

### **D. Stone Check Dam Specification**

- Height: No greater than 2 feet. Center of dam should be 9 inches lower than the side elevation
- Side slopes: 2:1 or flatter
- Stone size: Use a mixture of 2 to 9-inch stone
- Width: Dams should span the width of the channel and extend up the sides of the banks
- Spacing: Space the dams so that the bottom (toe) of the upstream dam is at the elevation of the top (crest) of the downstream dam. This spacing is equal to the height of the check dam divided by the channel slope.

$$\text{Spacing (in feet)} = \frac{\text{Height of check dam (in feet)}}{\text{Slope in channel (ft/ft)}}$$

- Maintenance: Remove sediment accumulated behind the dam as needed to allow channel to drain through the stone check dam and prevent large flows from carrying sediment over the dam. If significant erosion occurs between check dams, a liner of stone should be installed.

### **§3. Existing Roadways:**

- a. Before the Town will take-over and lay-out as a Town highway any private roadway constructed prior to the date hereof, the roadway shall be improved, at the owner's expense, to the standards set forth in Paragraph 2A and shall follow the procedures for said take-over of said improvements as set forth below. Adjacent existing town highways may be required to be improved to the aforementioned standards at the discretion of the Selectboard.
- b. Exception: In the Selectboard's sole discretion, the Town may accept, take-over and lay-out as Town highways existing roadways not meeting all of the standards set forth above, provided that said roadway, by a Town-hired Engineer's certification (paid for by the owners of the road), substantially complies with the above-stated standards, but does not meet all said standards due to unique physical or topographical features, or to meet said standards, other than the State standards, would be unduly expensive in relation to the added benefit derived from the particular road standard

### **§4. Minimum Standards for Possible Acceptance or Reclassification as Town Highway:**

The Town's action to lay out an existing or new private roadway or reclassify a town highway shall, in addition to the standards and procedures set forth herein, be guided by the following criteria:

The Town will consider it in the Town Good and Town Necessity only to accept a road as a town road, or reclassify an existing town highway:

- 1) which is at least .20 miles in length, and
- 2) has at least seven homes on said roadway;

These standards shall NOT apply as standards for whether or not the Town should discontinue a town highway. The statutory criteria of the Town good, necessity and convenience of the inhabitants of the Town shall apply to any determination as to whether or not to discontinue a town highway.

**§5. Procedure for Laying-Out, or Reclassifying Town Highways:**

- a. The provisions of 19 V.S.A. §701 et seq, as said statute may be amended from time to time, from the Vermont Agency of Transportation which are considered integral to this ordinance: (for identification purposes only) shall apply to any laying-out or reclassifying a town highway.
  - a. A-76 Design Standard for Town and Development Roads
  - b. B-71 Design Standard for Residential and Commercial Drives
- b. The following procedures are required in addition to the statutory requirements before a roadway may be laid out or reclassified as a Town highway:
  1. **Notice to Town Manager.** Road owner(s) or petitioners desiring the Town to lay-out or reclassify a road shall first give written notice to the Town Manager with written explanation as to why it is in the Town Good, Town Necessity and the Convenience of the Inhabitants of the Town.
  2. **Meeting with Town Manager and Town Highway Department.** A meeting shall be held with the Town Manager and Town Highway Supervisor to discuss the proposed action.
  3. **Measurement, Number of Homes.** The person proposing the action shall provide certified measurements of the roadway in question and the number of homes per the Grand List. The person proposing the action shall notify abutting property owners along the roadway of the proposed action and shall provide to the Selectboard a certificate of service of said notice.
  4. **Preliminary Review by Selectboard.** The Selectboard shall review the application and shall render a preliminary decision as to whether it believes it likely that the application will meet the standards set forth in Title 19, Chapter 7 (Town Good, Town Necessity and the Convenience of the Inhabitants of the Town) and the above stated standards. If the Selectboard exercises its discretion pursuant to Section 3(B), it shall state its reasons therefore.
  5. **Site Visit.** If the above requirements are satisfied, a site visit shall be scheduled and conducted with the Town Manager, Town-hired Engineer (to be paid for by the applicant), Town Highway Supervisor, the applicant and applicant's engineer.
  6. **Testing and Engineering.** Soil/Gravel test borings and engineering plans in accordance with the above stated standards shall be submitted to the Town for the Town and the Town-hired Engineer to review. The Town shall provide comment and recommendations on the proposed plans.
  7. **Engineering Plans.** Final engineering plans shall be approved by the Town after review (at applicant's expense) by Town-hired Engineer.

8. **Proof of Financial Ability.** Applicant shall provide to the Town proof of the financial ability to perform said work. Performance bonds, Letters of Credit, Escrow Accounts, etc. shall be acceptable to the Town.
9. **Review by Selectboard.** The Selectboard shall review the application and shall render a written decision after consideration of the standards set forth in Title 19, Chapter 7 (Town Good, Town Necessity and the Convenience of the Inhabitants of the Town) and the above-stated standards. If the Selectboard exercises its discretion pursuant to Section 3(B), it shall state its reasons therefore.
10. **Construction.** Upon approval by the Selectboard, construction may begin after obtaining any other necessary state or local permits.
11. **Engineering Review during Construction.** At applicant's expense, the Town-hired Engineer shall periodically inspect and review the construction to ensure compliance with the standards set forth herein.
12. **Final Engineering Certification.** Upon completion of the construction, the applicant's engineer and the Town-hired Engineer shall certify to the Selectboard that the roadway was constructed in accordance with this ordinance and the standards set forth herein.
13. **Proof of Payment.** Applicant shall provide proof that all costs of construction and engineering have been paid in full.
14. **Warranty and Escrow.** Applicant shall warranty in writing approved by the Town the road construction for a period of two years. Upon recommendation from Town-hired Engineer adequate funds shall be placed in escrow for any warranty work or performance bonds issued to the Town for said work.
15. **Formal Action.** Upon completion of the construction and satisfaction of the above steps the Selectboard shall, pursuant to 19 V.S.A, Chapter 7, take formal action to lay-out or reclassify the roadway.

**§6.** The Town shall not be required to accept as Town highway more than a total of one mile of highway in any one year except when the roadway itself that is being accepted is longer than one mile. The Town will accept and formally lay out Town highways in the order that each applicant completes steps 1-13 in paragraph 5.B.

For the purpose of orderly budgeting, between the months of November through June, the Town may defer formal action under Section 5.B.15.

**§7. Civil Ordinance:**

- a. This Ordinance is designated a Civil Ordinance pursuant to 24 V.S.A. § 1971(b)
- b. **Enforcement:** A violation of this ordinance shall be a civil matter enforced in accordance with the provisions of 24 V.S.A. Section 1974a and 1977 et seq.
- c. **Penalties:**
  1. A civil penalty of \$100.00 shall be imposed for the initial violation of this ordinance. The penalty for the second offense within a six-month period shall be \$150.00 and the penalty for subsequent offenses within a six-month period shall be \$200.00.
  2. The waiver fee shall be set at \$50.00 for the first offense, \$75.00 for the second offense within a six-month period, and \$100.00 for subsequent offenses within a six-month period.



3. Each day that the violation continues shall constitute a separate violation of this ordinance.
4. The custodial official of the Town's ticket books shall be the Town Administrative Assistant.
5. The issuing officials shall be the Road Supervisor or Town Manager.
6. The appearing officials shall be The Road Supervisor, Town Manager, or Town's Attorney, or any combination thereof deemed appropriate.

**§8. Definitions:**

Roadway - Street, private way, Town way, - these terms shall have the same meaning as said terms are defined in the Wilmington Zoning Ordinance, as said ordinance may be amended from time to time.

Highway - Means roadways laid out in the manner prescribed by Statute or roadways which have been constructed in accordance with the standards set forth herein and constructed for Town travel over land which has been conveyed to and accepted by the Town by deed or easement or roads which have been dedicated to Town use and accepted by the Town. The term highway includes right of ways, bridges, drainage structures, signs, guardrails, etc. See 19 VSA § 1.

Person - Shall mean any individual, entity (corporate or otherwise), group or association and shall carry the meaning as defined in Vermont Statutes.

Lay-Out - Means the legal procedure establishing the alignment or right of way of a highway.

Take-Over - The acceptance or receipt of a right of way as a completed roadway for Town use as a Town highway.

Reclassify- Means to change the classification of any highway from one classification of highway set forth in 19 VSA section 302 to another classification set forth in 19 VSA section 302. (Example: re-classifying a class four town highway to a class three town highway.)

Engineer - Vermont Licensed Engineer

**§9. Severability:** If any provision within this Ordinance is held to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such action shall not affect the validity of the remaining provisions of this Ordinance.

**§10. Publication and Posting:** This Ordinance shall be entered in the Selectboard minutes, filed with the Town Clerk, and posted in at least five (5) conspicuous places within the Town. A copy of this ordinance shall be published in the Deerfield Valley News, not later than fourteen (14) days following the date specified below when this Ordinance is adopted.

**§11. Information:** The Wilmington Town Manager whose telephone number is 464-8591, and whose address is Box 217, Wilmington, VT 05363, is a person knowledgeable about

the Ordinance and is available to answer questions and provide persons with a full text thereof.

**§12. Right to Petition:** Citizens of the Town of Wilmington are further hereby notified that within forty-four (44) days from the date of adoption they may petition for a vote on the above Ordinance at an annual or special town meeting as provided in 24 V.S.A. 1973.

**§13. Recording:** This Ordinance shall be recorded by the Town Clerk in the Records of the Municipality.

**§14. Effective Date:** This Ordinance shall become effective sixty (60) days from the date of adoption.

**Adopted by the Wilmington Selectboard this twentieth day of August, 2019.**

Thomas Fitzgerald, Chair

John Gannon, Vice Chair

Vincent Rice, Clerk

Sarah Fisher

Ann Manwaring