TOWN ROAD AND BRIDGE STANDARDS

(June 5, 2019)

MUNICIPALITY OF Strafford, VERMONT

The Legislative Body of the Municipality of Strafford hereby adopts the following Town Road and Bridge Standards which shall apply to the construction, repair, and maintenance of town roads and bridges.

The standards below are considered minimums. Municipalities that have construction standards / specifications in place that meet or exceed the minimum standards: indicate adoption date and include as Appendix C. **Date of Adoption:** 7/10/2019

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

Any new road regulated by and/or to be conveyed to the municipality shall be constructed according to the minimum of these standards.

Circle **YES** or **NO** below to indicate town adoption of that section of the Standards

Road and Bridge Standards Sections	Hydrologically-connected road segments*	Non-hydrologically-connected road segments**
Section 1 – Municipal Road Standards	(YES) (Required by Act 64)	(YES) NO
Section 2 – Class 4 Road Standards	(YES) (Required by Act 64)	YES (NO)
	Town wide	
Section 3 - Perennial stream- bridge and culvert standards	(YES) (Required by DEC Stream Alteration Standard)	
Section 4 – Intermittent stream crossings	(YES) NO	
Section 5 - Roadway construction standards	(YES) NO	
Section 6 - Guardrail standard	(YES) NO	
Section 7 - Driveway access standard	(YES) NO	

Road segments – ANR Resources Atlas includes a map layer of all of Vermont's municipal roads divided into 100-meter (328 foot) segments, each with a unique identification number.

***Hydrologically-connected road segments** - are those municipal road segments and catch basin outlets, Class 1-4, as shown on the ANR Natural Resources Hydrologically-connected municipal road segment layer (http://anrmaps.vermont.gov/websites/anra5/) or the Road Erosion Inventory Scoring (MRGP Implementation Table portal) layer (https://anrweb.vt.gov/DEC/IWIS/MRGPReportViewer.aspx?ViewParms=True&Report=Portal).

****Adoption of standards on non-hydrologically-connected road segments** does not indicate that these road segments are then subject to the Municipal Roads General Permit (MRGP).

Municipalities may also find additional resources in the latest version of the *Vermont Better Roads Manual*.
https://vtrans.vermont.gov/sites/aot/files/highway/documents/ltf/Better%20Roads%20Manual%20Final%202019.pdf

Road and Bridge Standards Sections

Section 1 – Municipal Road Standards - See Appendix A

These standards are required by Act 64 and the DEC Municipal Roads General Permit (MRGP) for hydrologically-connected roads only.

Municipalities may adopt Section 1 Road standards by road type for non-hydrologically-connected roads/segments/catch basins.

Section 2 – Class 4 Road Standards - See Appendix A

Section 3 - Perennial stream - bridge and culvert standards

Bridge and culvert work on perennial stream crossings must conform with the statewide DEC Stream Alteration Standard.

"Perennial stream" means a watercourse or portion, segment, or reach of a watercourse, generally exceeding 0.25 square miles in watershed size, in which surface flows are not frequently or consistently interrupted during normal seasonal low flow periods. Perennial streams that begin flowing subsurface during low flow periods, due to natural geologic conditions, remain defined as perennial. All other streams, or stream segments of significant length, shall be termed intermittent. A perennial stream shall not include the standing waters in wetlands, lakes, and ponds.

Streambank stabilization and other in-stream work must conform with the statewide DEC Stream Alteration Standard.

For River Management Engineer Districts: https://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/RME_districts.pdf

Section 4 – Intermittent stream crossings – See Appendix B for sizing table and graphic. These standards are above and beyond the culvert standards in Section 1.

"Intermittent streams" are defined as streams with beds of bare earthen material that run during seasonal high flows but are disconnected from the annual mean groundwater level.

Section 5 - Roadway construction standards – Sub-base and gravel standards

All new or substantially reconstructed gravel roads shall have 12 inches* thick gravel sub-base, with an additional 3 inches* top course of crushed gravel.

All new or substantially reconstructed paved roads shall have 15 inches* thick gravel sub-base.

*Municipalities shall indicate their own construction criteria.

Section 6 - Guardrail standard

When a roadway, culvert, bridge, or retaining wall construction or reconstruction project results in hazards such as foreslopes, drop offs, or fixed obstacles within the designated clear-zone, the AASHTO Roadside Design Guide will govern the analysis of the hazard and the subsequent treatment of that hazard. For roadway situations, an approved barrier system may be steel beam guardrail with 6-foot posts and approved guardrail end treatment. If there is less than 3 feet from the rail to the hazard, then steel beam guardrail with 8-foot posts shall be used. The G-1D is an example of an approved guardrail end treatment. For bridge rails systems, VTrans bridge rail standards shall be referenced

Section 7 - Driveway access standard

The municipality has 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. Municipality may reference Vtrans Standard *A-76 Standards for Town & Development Roads* and *B-71 Standards for Residential and Commercial Drives*; the Vtrans *Access Management Program Guidelines*; and the latest version of the *Vermont Better Roads Manual* for other design standards and specifications.

Passed and adopted by the Legislative Body of the Municipality of Strafford **, State of Vermont on** July 10 **, 20** 19

Selectboard / City Council / Village Board of Trustees:

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KBS