

TOWN OF LYMAN

Street Acceptance, Design and Construction Standards Ordinance

Adopted November 5, 2019

Amended through July 14, 2020

Original Copy after amendments to incorporate changes approved at the July 14, 2020 Annual
Town meeting.



Roderick Tetu, Planning Board Chair



Pauline F. Weiss, Town Clerk

Date: 8/19/2020

Town of Lyman

Street Acceptance, Design and Construction Standards Ordinance

Adopted November 5, 2019

1.1 TITLE AND AUTHORITY: This ordinance shall be entitled "Lyman Street Design Ordinance" and is enacted pursuant to the provisions of 30-A M.R.S.A. Sections 3001 to 3003.

1.2 PURPOSE: The purpose of these provisions is to establish appropriate standards for the design and construction of all streets in the Town, and to establish a procedure for the petitioning of streets to the Town for acceptance as Town Ways.

These street standards are designed to promote the following objectives:

- to protect the health, safety, convenience, and welfare of the Town's inhabitants;
- to complement and enhance the goals and policies of the Town Comprehensive Plan;
- to provide for safe and convenient pedestrian circulation;
- to provide for safe and convenient vehicular access and circulation;
- to minimize long term street maintenance and repair costs; and
- to minimize the creation of impervious surface in order to limit the impact of runoff on the Town's water resources.

1.3 DEFINITIONS:

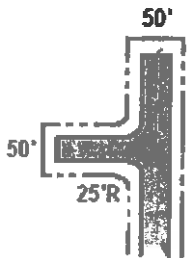
A.D.T: Average Daily Traffic (based upon the latest edition of the I.T.E. Trip Generation Manual).

DRIVEWAY: A Private access from a street to a building or buildings on abutting grounds on a single lot.

DRIVEWAY, COMMON: A driveway shared by up to two residential lots provided all lots have legal street frontage on a public street or an approved Private Way.

COMMERCIAL DRIVEWAY: A driveway serving multi-family residential development or up to three (3) non-residential lots with legal street frontage on a public or private street.

HAMMERHEAD: An alternative terminus to a street in which a 90-degree backup lane is provided to the tangent of the travel lane.



PUBLIC STREET: An existing state, county, or town Way; a Way dedicated for public use and shown upon a subdivision plan approved by the Planning Board and recorded in the York County Registry of Deeds; or a Way dedicated for public use and shown on a plan duly recorded in the York County Registry of Deeds prior to the establishment of the Planning Board and the grant to the Planning Board of its power to approve plans. The term "street" shall not include those Ways that have been discontinued or abandoned, nor shall it include a Private easement or right of Way not dedicated for public use.

PRIVATE STREET: A Privately-owned street providing legal access and lot frontage to commercial and /or more than ten residential lots.

PRIVATE WAY: A Privately-owned street providing legal access and lot frontage to no more than ten (10) residential lots.

- c. A statement of any legal encumbrances on the land upon which the proposed Town Way is located.
- d. An executed warranty deed to the Inhabitants of the Town of Lyman, containing a legal description of the proposed Town Way (and all associated easements), giving complete descriptive data by bearings and distances based upon a standard boundary survey of the parcel, made and certified by a Maine Professional Land Surveyor, along with a copy of the survey plan, and written verification by the P.L.S. that permanent monumentation has been set at all street intersections and points of curvature.
- e. A written certification by a professional engineer, registered in the State of Maine, certifying that the proposed Town Way meets or exceeds the design and construction standards set forth in Table 1.6 of this ordinance.
- f. One mylar and two sets of blue prints of as-built conditions of the proposed Town Way conforming to the plan requirements and standards of Section 1.6. Where underground utilities have been installed, the as-built plans shall show the final, installed location of such lines. In addition, the petitioner shall submit a pdf and an AutoCAD digital file providing the boundaries of the right of the Way of the proposed street that is referenced to the UTM (NAD 1983) and that can be imported into ArcGIS, version 10.4 or later.
- g. Date that street construction was completed, including the dates that the base course and surface course of pavement were installed.

1.5 STREET CLASSIFICATION:

The classification of an existing or proposed street shall be made by the Planning Board per 1.4.1.A. or Staff Review Committee per 1.4.1.B. as applicable, after its consideration of the existing and proposed land use. For an existing street and/or extension of an existing street, the classification shall be based on existing and estimated A.D.T. For a proposed new street, classification shall be based on estimated A.D.T. (one single family home = 10 A.D.T.).

- 1.5.1. Arterial Street:** A major thoroughfare which serves as a major traffic way through Town and between towns, and whose primary function is traffic movement. An Arterial Street shall have a traffic volume at least 10,000 vehicles per day and shall include, but not be limited, to the following arterials:

Route 5 Route 111 Route 202/5 Route 35

- 1.5.2 Collector Street:** A street with average daily traffic of over 250 vehicles per day, or a street serving as a feeder to an arterial and as a collector of traffic from minor streets.

- 1.5.3 . Minor Street:** A street that generally serves to carry the least amount of traffic, at the lowest speeds. It is also intended to provide a safe environment for residential neighborhoods. Minor streets (or street section if it has more than one street connection) have an A.D.T. no greater than 250.

- 1.5.4 . Private Street or Way:** A Privately-owned street or way defined in Section 1.3 of this Ordinance. An unpaved Private Street or Way shall not be eligible for Town services or for acceptance as a Town Way.

- 1.5.5. Commercial Street:** A street servicing commercial and/or industrial land uses.

1.6 STREET DESIGN AND CONSTRUCTION STANDARDS: Except for Private Ways, all proposed streets, street extensions,-and storm drainage systems shall be designed and constructed to meet the design standards of this section.

- 1.6.1 Plans:** The plans and details which are submitted as part of an application shall be prepared, stamped, and signed by a professional engineer. The plans shall include detailed construction drawings, drawn at a scale of no more than 50 feet to the inch, shall show a plan view, profile and typical cross-section of the proposed street(s), and shall include the following information:

New subdivisions connecting directly to existing public street(s) must upgrade the public street(s) to the applicable road construction standards if it is determined by the Planning Board that the subdivision will have a detrimental effect on the condition of the public street(s), the level of service at nearby intersections impacted by the subdivision and the carrying capacity of existing public street(s).

**Table 1.6
Minimum Road Construction Standards**

Standard	Minor	Collector	Arterial	Commercial
ROW Width	50'	50'	50'	50'
Travelway Width	20' paved	24' paved	24' paved	24' paved
Minimum Shoulder width	4' paved sidewalk	3' gravel	5' paved	3' paved
Minimum Gradient	0.5%	0.5%	0.5%	0.5%
Maximum Gradient (1)	8%	8%	8%	8%
Min. Centerline Radius (2)	150'	230'	250'	250-300'
Min. Tangent b/t reverse curves (3)	100'	230'	260'	300'
Minimum Road crown	¼ "/ft	¼ "/ft	¼ "/ft	¼ "/ft
Street Intersection Angle (4)	75° -90°	90°	90°	90°
Max Intersection Grade Within 75'	3%	3%	3%	3%
Curb radii at intersection (5)	20'	25'	30'	20'-30'
Min. Property line radii at intersection	10	10'	20'	20'
Unobstructed vertical clearance	13.6'	13.6'	13.6'	13.6'
Turnaround	Hammerhead	Hammerhead or 2 street connections	2 street connections	Hammerhead

7. The design standards shown on Table 1.6 apply according to the street classification of Section 1.5.

- (1) Maximum grade may be exceeded for a length not to exceed 200 feet.
- (2) Centerline radii may be modified by the Planning Board based upon design speed, topography and alignment.
- (3) Minimum tangents lengths between reverse curves may be determined modified based on design speeds and length of curve tangents.
- (4) Street intersections should be designed as close as possible to 90 degrees, but may be skewed to improve sight distances.
- (5) Minimum curb radii shall be determined by the turning radii of commercial vehicles being served by the commercial road.

10. Curbing

Curbing may be required within and along the public road frontage of all developments located in designated growth areas as specified by the Lyman Comprehensive Plan—Where installed, curbing shall meet the following minimum standards:

1. Type 1 or Type 5 granite curbing shall be installed on a thoroughly compacted gravel base of six inches minimum thickness. The specified pavement width shall be measured between the curbs. All curbs shall be vertical and shall be either granite or slip-form concrete except when Type 5 sloped curbs are specifically requested or allowed by the Board. Granite curbing or slip-form concrete shall be used for traffic islands, intersections, and any section where the curb radius is 50 feet or less.

1.6.3 Construction Standards:

1. Minimum thickness of materials after compaction:

CONSTRUCTION MATERIALS	MINIMUM REQUIREMENTS			
	Minor Street	Collector	Arterial	Industrial/Commercial
Aggregate Sub-base Course (MDOT Type D)	18"	21"	21"	21"
Crushed Aggregate Base Course (MDOT Type A)	3"	3"	3"	3"
Hot Bituminous Pavement (after compaction)				
• Total Thickness	3"	4"	5"	5"
• Surface Course	1"	1 ½"	1 ½"	1 ½"
• Base Course	2"	2 ½"	3 ½"	3 ½"

2. Preparation:

- a. Before any clearing has started on the right-of-way, the center line of the new street shall be identified and offset stakes set at 50-foot intervals. Limits of clearing shall be marked by stakes or flagging.
- b. Before grading is started, the right-of-Way area directly dedicated to the construction of the roadway and shoulders, and utilities shall be cleared of all stumps, roots, brush, and other objectionable material. All ledge, large boulders, and tree stumps shall be removed from this area.
- c. Tree stumps and other organic materials shall be removed to a depth of 2 feet below the subgrade of the roadway. Boulders shall also be removed to a depth of 2 feet below the subgrade of the roadway. On soils which are not suitable for roadways, the subsoil shall be removed from the street site to a depth of two feet below the subgrade and replaced with gravel borrow meeting the

b) Where the storm drainage pipe is to be covered by ten feet or more of fill material, pipe material shall be PVC SDR 35, DR 32.5, or SD 26, or DR 17, or reinforced concrete or HDPE Resin 3408, or HDPE, smooth bore pipe.

c) HDPE Corrugated Smooth Bore Pipe may be acceptable for use in street construction, provided that proper cover and backfill requirements are met for each application. In no instance shall less than 12" of cover be provide for pipes up to 48" in diameter and no less than 24" of cover for pipes greater than 48" in diameter. HDPE corrugated pipe shall be used for gravity applications only and shall be of bell and spigot construction and shall require the use of a watertight connection at manhole and drainage structures. Acceptable connection would be "A-lok Premium Connector" for corrugated pipe, or equal.

2) **Pipe Gauges:** Metallic storm drainage pipe shall meet the following thickness requirements depending on pipe diameter:

Material Inside Diameter	Aluminumized C.M.P.
12" to 24"	14 ga.
30" to -84"	12 ga.

2. Existing or future downstream drainage requirements shall be studied to determine the effect on proposed drainage. The applicant shall demonstrate to the satisfaction of the Board that the storm drainage will not, in any way, overload existing or future storm drainage systems downstream from the proposed street. The drainage requirement for a two, ten and 25-year storm shall be evaluated to determine drainage system needs, in accordance with *Natural Resource Conservation Service Technical Release 55 or Technical Release 20*.
3. For both upstream and downstream drainage, in determining the rate and volume of surface run-off, the following factors must be considered:
 - a. intensity of rainfall: 25-year design storm;
 - b. timing of rainfall (e.g. falling on snow or during the spring snow melt);
 - c. amount of precipitation occurring in the five days preceding the storm in question;
 - e. hydrologic soil group (i.e. the soil's rate of water infiltration and transmission. The rates for soils are described in the *Best Management Practices Handbook*, latest revision);
 - f. hydrologic conditions (soil's moisture content humus/organic content, temperature, and whether or not it is frozen);
 - g. vegetative cover (vegetation helps soil dry out after a rainfall, intercepts some precipitation during the rainfall, and slows down the flow of water over the land);
 - h. area of land covered by impervious surfaces (roads, sidewalks, roofs, driveways, patios, etc.);
 - i. topography (slopes affect the rate of run-off; marshland reduces peak discharge rate by slowing down the rate of run-off);
 - j. size and shape of watershed (peak discharge rates are slower in long, narrow watersheds, and vice versa).

1. **Certified Check** payable to the Town or a savings account naming the Town as owner, for the establishment of an escrow account.
 2. **Conditional (one year) plan approval** stipulating that there shall be no conveyance of lots or issuance of building permits until a performance guarantee covering the total cost of all required improvements and conforming to the format of 1.7.2.1, 2, or 3 above, is submitted to the Reviewing Board and approved. A note shall be placed on the final plans listing this condition.
 3. **Tri-Party Agreement:** A contractual instrument whereby the designated financial institution agrees not to release any portion of escrowed performance assurance monies to the Owner or the Owner's contractor unless so authorized by the Town Treasurer upon written recommendation from the T.P.E..
- 1.7.3. **Phasing of Development:** The Planning Board or Staff Review Committee may approve plans to develop a major development in separate and distinct phases. This may be accomplished by limiting final approval to those lots, commercial or industrial buildings, abutting that section of the proposed road that is covered by a performance guarantee. When development is phased, road construction shall commence from the public Way. Final approval of subsequent phases shall be given only after determining that there has been substantial completion of requirements pertaining to the first and/or previous phase(s) of development.
 - 1.7.4. **Inspection of Required Improvements:** No street construction shall be initiated until the required inspection fee has been submitted to the Town to cover the costs of having each construction stage inspected by the Town's inspection agent (engineer) per the Town's inspection schedule.
 - 1.7.5. **Release of Guarantee:** Prior to the release of any part of the performance guarantee, the Planning Board shall determine to its satisfaction, in part upon the inspection report of the T.P.E. , that the site improvements meet or exceed the design and construction requirements for that portion of the improvements for which the release is requested.
 - 1.7.6. **Default:** If, upon inspection, the Town's Engineer finds that any of the required improvements have not been constructed in accordance with the plans and specifications filed as part of the application, he shall so report in writing to the Code Enforcement Officer, the Municipal Officers, the Planning Board and the developer or builder. The Municipal Officers shall take any steps necessary to preserve the Town's rights.
 - 1.7.7. **Assignment or Transfer -** No assignment or transfer of rights to construct the project is valid without prior approval, by the Planning Board, of a new performance guarantee to ensure that any assignee or transferee has the financial and technical capacity to complete the project. Should a previously approved performance guarantee become invalid for any reason, the plan approval shall be nullified until such time as a new performance guarantee is approved in the same manner as was originally approved.

2.0 PRIVATE WAYS

To provide for the public's safety and access by the town's emergency vehicles, no structures intended for human occupancy or a commercial operation shall be permitted on a lot without frontage on a public street or on a Private Way constructed in conformance with the criteria of Section 2.0 of this Ordinance.

2.1. BACK LOT ACCESS:

Any structure intended for human occupation or commercial purposes may be constructed on a back lot pursuant to the back lot standards found in the Lyman zoning ordinance, provided that all of the following conditions are met:

- 2.1.1: The existing back lot meets all land use and dimensional requirements of the zoning district other than street frontage;
- 2.1.2: Access to the back lot is provided by a legally-executed easement or right-of-Way recorded in the York County Registry of Deeds;
- 2.1.3: Said easement or right-of-Way provides or will provide access and/or frontage exclusively to a single back lot containing only one use or one single-family dwelling unit;
- 2.1.4: The access travel Way within the designated easement or right-of Way is constructed to the standards of a 1-lot Private Way specified in Table 2.3.

A new Private Way may gain access from any other Private Way comprised of less than a 50-foot right of Way and a 16-foot travelway. A Private Way with less than the minimum 16-foot travelway and shoulders may be extended provided the following conditions are met:

- a. The proposed Private Way extension meets all design standards in Section 2.3.1;
- b. The applicant provides the Staff Review Committee with adequate evidence that the existing non-conforming Private Way has sufficient width to accommodate the traffic increase generated by the extension, and
- c. The existing non-conforming travel way is of sufficient bearing capacity to support passage of emergency vehicles.

2.3.4. Parking /Storage in Road Turnarounds Prohibited:

No vehicles, watercraft, structures or materials shall be parked or stored in any portion of a hammerhead, or modified T terminus.

2.3.5. Drainage Standards:

Private Ways shall be designed with surface or subsurface drainage facilities to accommodate runoff generated from the Private Way.

1. **Design Storm:** All shoulder drainage ditching shall be designed at a minimum to accommodate runoff from the road watershed generated during a 10-year storm event. Culverts shall be designed to a minimum standard to accommodate a 25-year storm event. Depending on topography and site conditions the Staff Review Committee reserves the right to adjust the design storm minimums for roadside ditching and culverts.
2. **Zero Peak Runoff:** No runoff shall be discharged from the site or into any watercourse or Resource or Shoreland wetland at a peak runoff level greater than existing conditions.
3. **Culvert Materials:** All culverts within the Private Way right-of-Way shall be no less than fifteen (15) inches in diameter and shall consist of either aluminized corrugated metal pipe, SD 32.5-SD17, or HDPE corrugated plastic pipe with a minimum of one (1) foot of finished top cover, or other material so approved by the Lyman Public Works Department.
4. **Drainage Easements:** Discharge of new concentrated runoff onto an abutting property shall not be permitted unless a drainage easement is granted by the abutter.

2.3.6 Sedimentation & Soil Erosion Control Standards:

All Private Way construction shall be accompanied by proper soil erosion control and sedimentation devices installed and maintained in accordance with the *Maine Erosion & Sediment Control Best Management Practices (BMPs)*, as published by the Maine Department of Environmental Protection.

2.4 APPROVAL REQUIRED

2.4.1. EXEMPT PRIVATE WAYS

All Exempt Private Ways shall be approved by the Staff Review Committee prior to the issuance of any building or road construction permits.

1. Plan Submission:

A plan and centerline profile of the proposed Private Way shall be prepared and sealed by a Professional Land Surveyor licensed to practice in the State of Maine and shall be drawn with permanent ink on Mylar. The plan and profile shall show all existing property lines and existing conditions as well as proposed on-site and off-site improvements, existing and proposed topographic contours at an interval determined by the Staff Review Committee, drainage structures, soil erosion control devices, and typical road crosssection. The plan should also contain the following components:

1. **Approval Block:** The Private Way Plan shall contain an approval block with lines for signatures of the Lyman Staff Review Committee.

Enforcement Officer. The Road Commissioner may mandate that a Consulting Engineer referred to as T.P.E. be contracted by the Town to conduct inspection services on all or portions of the Private Way construction. The applicant shall be responsible for reimbursing the Town for all inspection services.

2.7.2 Private Way Certification: Prior to the issuance of building permits, the Road Commissioner or designee, shall certify that the Private Way has been constructed in accordance with approved plans and design and performance standards in this section.

2.8: COMPLETION DEADLINES:

Except in the case of a phased development plan, all *Exempt Private Way* projects shall commence within eighteen (18) months from the date of the approval and shall be completed within three (3) years from the approval date. The Staff Review Committee may grant one (1) year extensions to completion deadlines when warranted by unusual circumstances. Failure to complete construction of the Private Way within the specified completion period shall render the Private Way approval null and void. Upon determining that a Private Way's approval has expired under this paragraph, the Staff Review Committee shall have a notice placed in the Registry of Deeds to that effect.

3.0 VARIANCES AND WAIVERS:

3.1. WAIVERS OF EXEMPT PRIVATE WAY DESIGN REQUIREMENTS: The Staff Review Committee may, as part of their review and approval of an Exempt Private Way plan, waive or amend certain design and construction standards of Table 2.3 where the Committee makes written findings of fact documenting that special circumstances of the parcels served by the Private Way may warrant a waiver or an amendment to the Standards of Section 2.3 herein, provided the following performance standards are met:

- 3.1.1 The proposed waiver or amendment is not necessitated by the actions of the applicant or prior owners, or due to violations of applicable Town of Lyman Ordinances;
- 3.1.2 The proposed waiver or amendment will not compromise public health, safety, or welfare;
- 3.1.3 The proposed waiver or amendment will not adversely impact surface or groundwater quality, slope stability, or environmental quality,
- 3.1.4 The proposed waiver or amendment will not generate on or off-site traffic impediments or hazards, nor endanger the free access or safety of emergency responders and emergency response apparatus and equipment;
- 3.1.5 The proposed waiver or amendment will not effectively nullify the intent and purpose of this Ordinance, the Land Use Ordinance, the Lyman Subdivision Regulations, the Lyman Comprehensive Plan, or State law.

3.2. WAIVERS OF STREET ACCEPTANCE CRITERIA: Any variance/waiver of the provisions of this ordinance which is part of a petition for acceptance of street as a Town Way shall be decided by the Board of Selectmen and shall conform to the standards of Section 3.2.1 and 3.2.2 below.

3.2.1. Hardship: Where extraordinary and unnecessary hardships would result, or due to the special circumstances of the site, certain requirements of this ordinance may be varied or waived by the Board of Selectmen based upon the following criteria:

- 1. The requested variance/waiver shall have been previously reviewed and approved by the Planning Board . Such approval shall specifically address the impact of the requested variance/waiver upon: the safe functioning of the street, the long-term costs of maintaining the street, and the Town's ability to provide public services along the street;
- 2. The required thickness of pavement shall not be reduced; and
- 3. A report from the T.P.E. concerning the expected performance of the street (per the criteria listed in subsection A.1. above) if the variance/waiver is granted.