

Standards for New Roads - Town of Middlesex

Highway Superintendent: Thomas Reifsteck
Town Clerk: Kathryn Pelton

Correspondence Address:
Town of Middlesex
P. O. Box 147
Middlesex, NY 14507

Section 1 – General

1.1. The Town of Middlesex, herein referred to as the Town, has adopted these standards for the design and construction of new public roadways within the Town road system.

NOTE: The Town reserves the right to reject ownership and subsequent maintenance of any privately designed and constructed roadway that is offered via the dedication process, even though all portions of these standards have, or will have, been met during design and construction. It is the responsibility of the private individual or developer to obtain written approval from the Town Board in advance that their proposed roadway will be acceptable for dedication.

1.2. Any new roadway to be considered for ownership and maintenance by the Town shall be certified that the design was in compliance with these standards by a Professional Engineer licensed to practice in New York State, herein referred to as the Project Engineer.

1.3. Before any roadway is taken over by the Town, a set of as-built plans approved by the Project Engineer shall be submitted to the Town Clerk and the Town Highway Department at the address shown on the top of these standards. Approval by the Highway Superintendent that the project meets these standards shall also be required prior to final approval / acceptance by the Town Board.

1.4. All applications for the dedication of a roadway shall be accompanied by a proposed warranty deed conveying said highway to the Town, title search for the property to be dedicated, and with all necessary releases from mortgages or other claimants. All deeds and plans must meet requirements for filing with the Yates County Clerk.

1.5. For a subdivision, the plans must be submitted prior to start of construction. A construction plan, showing all required information as stipulated by the Town of Middlesex Subdivision Ordinance, must be supplied for subdivisions.

1.6. As a minimum, the plans for the roadway shall provide the following:

- a. Design criteria used
- b. The names of all the streets approved by County 911 Coordinator
- c. Location and alignment survey performed by a licensed surveyor that includes:
 1. Original and finished grades
 2. The layout and locations of all roads and streets and their metes and bounds

3. The location of any property lines and their metes and bounds
 4. The location of the Town's right-of-way
 5. The location of any other rights-of-way and easements including a statement of their allowable uses
 6. The location of all drainage structures
 7. The location of any utilities in the right-a-way
 8. The names of adjacent property owners to the roadway
 - d. A maintenance plan for the roadway
 - e. Location of all signs and traffic control devices
 - f. A cross section of a typical tangent section
 - g. Turn around if applicable.
- 1.7. Clarification or exceptions to these standards shall be approved, in advance, by the Town Highway Superintendent in writing. Oral responses by the Town Highway Superintendent will not be considered as approved.

Section 2 – Design and Construction

- 2.1. The roadway shall be certified to meet the requirements of the:
- a. *Manual: Guidelines for Rural Town and County Roads*, Local Roads Research and Coordination Council, December 1992, **AND**
 - b. *Guidelines for Geometric Design of Very Low Volume Local Roads*, AASHTO, 2001
- 2.2. The requirements listed in these specifications are for low volume roads and streets with a maximum Average Daily Traffic (ADT) of 400 vehicles per day.
- a. Any roadway that does not meet the definition of a low volume roadway will require standards that are more stringent than those defined in these specifications. In such a case, the entire design must be approved before construction.
 - b. Where a conflict exists between the two publications, the *Manual: Guidelines for Rural Town and County Roads* shall govern.
 - c. All design criteria shall be listed on the roadway plans and any criteria not listed in the two publications listed above shall be determined using current engineering practice.
 - d. The plans shall designate the source of any design assumptions.

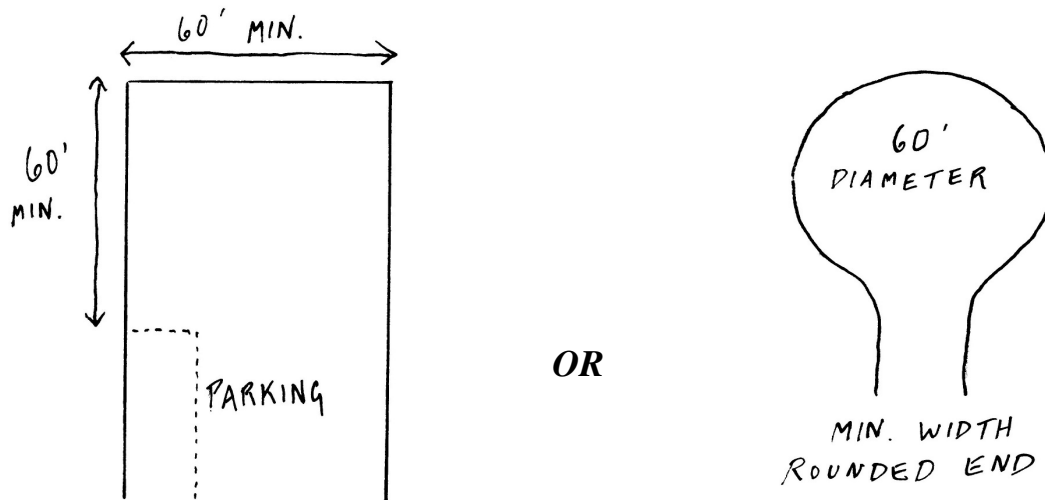
- 2.3. In addition, as a minimum, the road shall meet the following criteria:
- a. A design life of not less than 15 years with routine maintenance
 - b. A right-of-way of not less than 3 Rods (49 ½ feet, 15.1 meters)
 - c. Drainage facilities designed to handle a 50-year storm under the roadway and 25-year storm on all other facilities. The minimum size opening of any pipe is 12 inches [300 mm] in diameter or equivalent
 - d. The combined thickness of the base and the surface courses shall be at least 18 inches [450 mm] thick and in accordance with item 2.5 below
 - e. A minimum design speed of 40 mph [65 k/hr]
 - f. A maximum slope of 10% on any road
 - g. Cul-de-sacs (dead ends) to meet cul-de-sac geometry guidelines (Section 3)
- 2.4. Definitions of design criteria:
- a. **Design life:** the time in years from original construction until the present serviceability index has dropped to 2.0.
 - b. **Present serviceability index-p** (also known as the terminal serviceability index – p): the ability of a roadway to handle traffic as defined by the AASHO (American Association of State Highway Officials- the precursor to AASHTO) road test performed in the 1950s
 - c. **Right-of-way:** the width of land owned or controlled by a highway agency for the purpose of maintaining or constructing roads and streets.
 - d. **A ___ -year storm:** a runoff event with a probability of occurring in a given year equal to the inverse of the value of the year. For example, a 50-year storm would have a 1 in 50 (2%) chance of occurring in a given year.
 - e. **12" diameter equivalent opening:** an area of 113 square inches (70,685 square millimeters).
 - f. **Design speed:** the typical operating speed on a roadway. Also, the speed used in the geometric design of a roadway controlled by terrain, traffic volume, and roadway classification.
- 2.5. All materials and all work shall meet the requirements of the latest revision of the New York State Department of Transportation Standard Specifications for Construction and Materials, including any Engineering Instructions or Bulletins, unless alternatives are approved by the Town Highway Superintendent, in writing, in advance.

Section 3 – Cul-de-sacs and Dead Ends Geometry

Definition: Minimum dimensions for cul-de-sacs and dead end roads, streets, and alleyways.

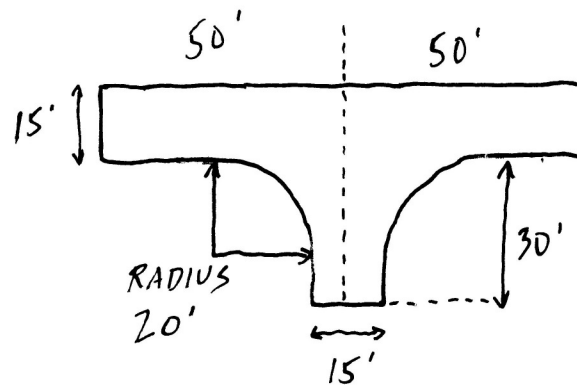
- 3.1. Cul-de-sacs. The end treatment of cul-de-sacs and dead ends must be large enough to allow for vehicles to turn around. The minimum values acceptable for square and circular road ends are given in Figure 3.1. The minimum width or diameter is 60 feet for both treatments.

Figure 3.1



- 3.2. Access Laneways or Alleyways. Access laneways can be provided in hamlet, village, or urban areas to provide access to the rear of a building, facility, or lot. They are usually narrow. The minimum right-of-way width is 24 feet, and minimum pavement width is 15 feet. Figure 3.2 shows minimum geometry for access lanes or alleyways, and end turnarounds.

Figure 3.2



Note: Minimum standards from Figures 1 and 2 must be followed.