

**Article 4: Development Standards**  
**Division 2: Access Management**

## City of Munising Zoning Ordinance

### **Section 410 Statement of Purpose**

The purpose of this Article is to provide access standards which will facilitate through traffic operations, ensure public safety along roadways, and protect the public investment in the street system; while providing property owners with reasonable, though not always direct, access. The standards are specifically designed for streets whose primary function is the movement of through traffic, as opposed to local streets whose primary function is access to adjacent properties.

### **Section 411 Application of Standards**

The standards of this Article shall be applied to the following major traffic routes (arterials) in the City of Munising Master Plan:

- a. The access standards contained herein shall be required in addition to, and where permissible shall supersede and the Michigan Department of Transportation (MDOT).
- b. The standards contained in this Article shall apply to all uses, except permitted single-family and two-family dwelling units.
- c. For expansion and/or redevelopment of existing sites where the Planning Commission determines that compliance with all the standards of this Article is unreasonable, the standards shall be applied to the maximum extent possible. In such situations, suitable alternatives which substantially achieve the purpose of this Article may be accepted by the Planning Commission, provided that the applicant demonstrates all of the following apply:
  1. Size of the parcel is insufficient to meet the dimensional standards.
  2. The spacing of existing, adjacent driveways or environmental constraints prohibit adherence to the access standards at a reasonable cost.
  3. The use will generate fewer than five hundred (500) total vehicle trips per day or fewer than seventy- five (75) total vehicle trips in the peak hour of travel on the adjacent street, based on the most recent rates developed by the Institute of Transportation Engineers (ITE).
  4. There are no other reasonable means of access.

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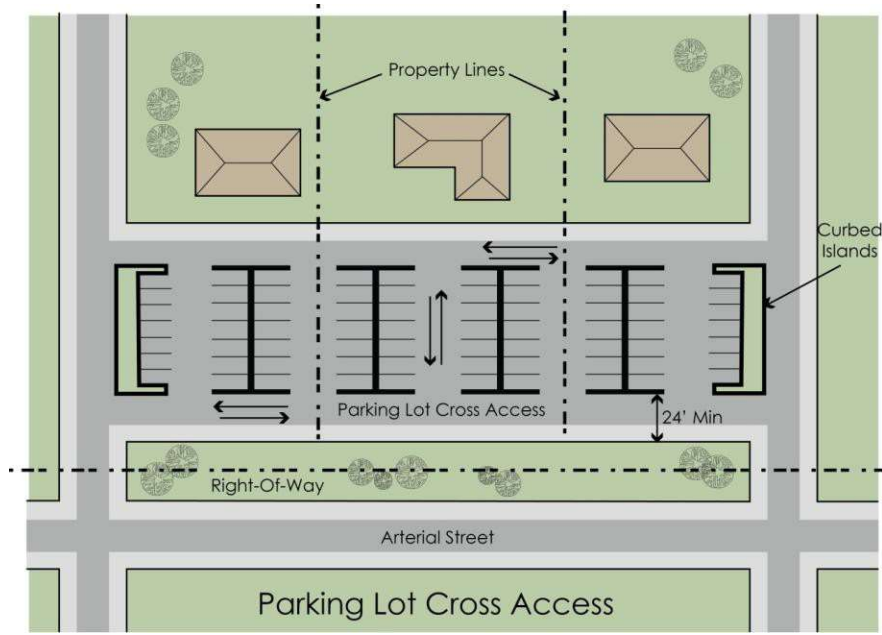
### **Section 412 Number of Driveways**

- a. Access to a parcel shall consist of either a single, two-way driveway or a pair of one-way driveways wherein one (1) driveway is designed and appropriately signed to accommodate ingress movements and the other egress movements.
- b. Where parcel frontage is insufficient to provide a driveway meeting the minimum driveway width and radii, a shared driveway or other means of access may be required.
- c. Where parcels of at least two (2) acres in area, have frontage along two (2) streets, access should be provided only along the street with the lower average daily traffic volume, unless the Planning Commission determines this would negatively affect traffic operations or surrounding land uses.
- d. Where the property has continuous frontage of over three hundred (300) feet and the applicant can demonstrate, using the Institute of Transportation Engineers Trip Generation Manual or another accepted reference, that a second access is warranted, the Planning Commission may allow an additional access point. Where possible, this access should be spaced accordingly to the standards contained herein, located on a side street, shared with an adjacent property, and/or be constructed to restrict one (1) or both left turn movements.
- e. Where the property has continuous frontage of over six hundred (600) feet, a maximum of three (3) driveways may be allowed, with at least one (1) such driveway being constructed and signed for right-turns-in, right-turns-out only.

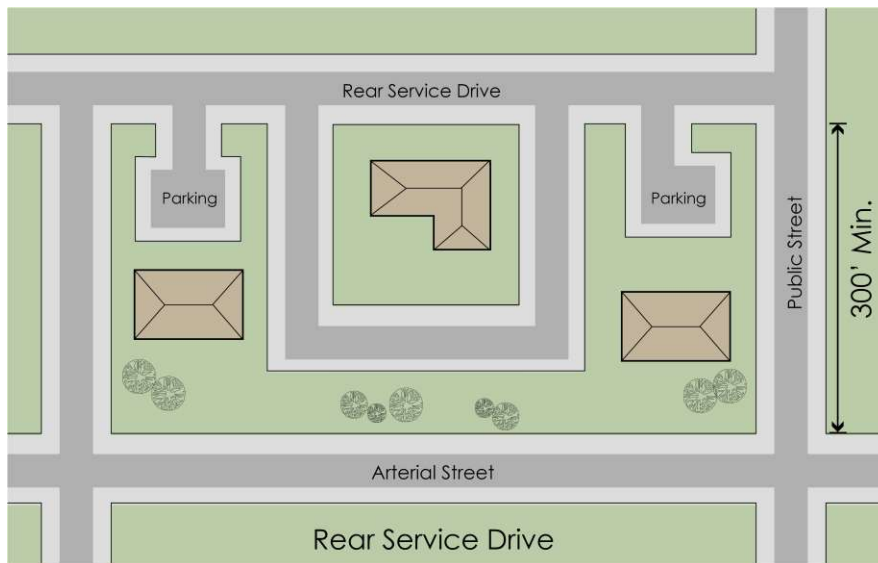
### **Section 413 Shared Access-Joint Driveways, Frontage Roads, Parking Lot Connections, and Rear Service Drives**

- a. Shared use of access between two (2) or more property owners should be encouraged through use of driveways constructed along property lines, connecting parking lots and construction on-site of frontage roads and rear service drives; particularly within one-quarter mile of major intersections, for sites having frontage on two (2) or more streets, where frontage dimensions are less than three hundred (300) feet, at locations with sight distance problems, and/or along roadway segments experiencing congestion or accidents. In such cases, shared access of some type may be the only access design allowed.

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- b. In cases where a site is adjacent to an existing frontage road, parking lot of a compatible use, or rear service drive, a connection to the adjacent facility may be required by the Planning Commission.



- c. In cases where a site is adjacent to undeveloped property, the site should be designed to accommodate a future frontage road, parking lot connection or rear service drive.
- d. The applicant shall provide the City with letters of agreement or access easements from all affected property owners.

#### **Section 414 Adequate Sight Distance**

- a. Requirements for minimum intersection or corner sight distance for driveways shall be in accordance with the American Association of State Highway and Transportation Officials (AASHTO) guidelines defined in Chapter 9 of A Policy on Geometric Design of Highways and Streets, 1994.
- b. The Planning Commission may adjust driveway location where there is inadequate sight distance.

#### **Section 415 Driveway Spacing from Intersections**

- a. Driveway spacing from intersections shall be measured from the centerline of the driveway to the extended edge of the intersecting street's right-of-way line.
- b. In order to preserve intersection operations and safety, the minimum distance between a driveway and an intersecting street right-of-way shall be based on the following:
  1. For locations in the vicinity of intersections experiencing congestion (peak hour operations below level of service 'C' for one (1) or more movements) and/or a significant number of traffic accidents (five or more annually), the Planning Commission may require that access be constructed along the property line furthest from the intersection.
  2. For locations within two hundred (200) feet of any signalized or four-way stop intersection, driveways shall be spaced a minimum of one hundred fifty (150) feet from the intersection. Where this spacing cannot be provided, driveways designed for "right-turn in, right-turn out only" movements may be allowed, with a minimum spacing of seventy-five (75) feet from the intersecting street right-of-way.
  3. For locations not addressed by section (b)(2) above, not including single-family parcels, driveways shall be spaced one hundred (100) feet from the intersection.

#### **Section 416 Driveway Spacing from Other Driveways**

- a. Driveway spacing from other driveways shall be measured from the centerline of each driveway at the point where it crosses the street right-of-way line.
- b. Minimum driveway spacing from other driveways along the same side of the street shall be determined based on posted speed limits along the parcel for each particular frontage, as follows:

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<b>Driveway Spacing From Other Driveways</b>	
<b>Posted Speed (mph)</b>	<b>Minimum Driveway Spacing</b>
25 mph	100 feet
30 mph	125 feet
35 mph	150 feet
40 mph	185 feet
45 mph	230 feet
50 mph	275 feet
55 mph	350 feet

- c. Driveways shall be directly aligned with those across the street or, where offset, the minimum driveway spacing from driveways across the street shall be a minimum of one hundred fifty (150) feet, as determined by the Planning Commission, excluding when one (1) or both driveways are designed and signed for right-turn-in, right-turn-out only.

**Section 417 Driveway Design, Channelized Driveways, Deceleration Lanes and Tapers, and Bypass Lanes**

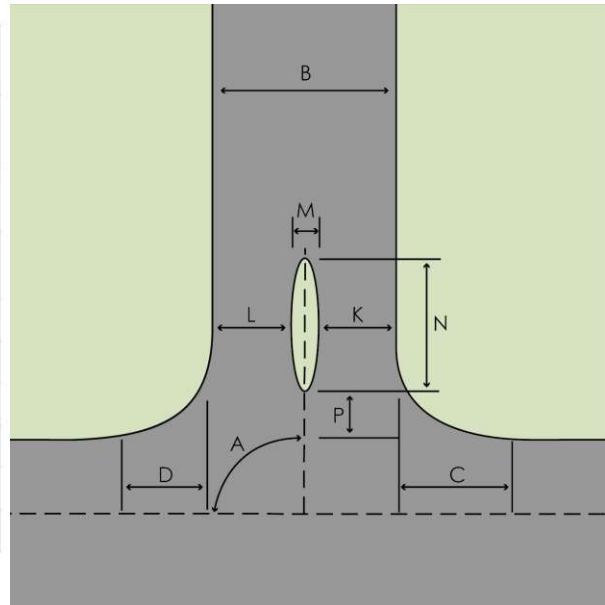
- a. Standards. Driveways shall be designed to the standards of MDOT, except where stricter standards are included herein.
- b. Driveway Width and Radii:
  - 1. The typical driveway design shall include one (1) ingress and one (1) egress lane, with a combined maximum throat width of thirty (30) feet, measured from face to face of curb
  - 2. Wherever the Planning Commission determines that traffic volumes or conditions may cause significant delays for traffic exiting left, two (2) exit lanes may be required.
  - 3. For one-way paired driveway systems, each driveway shall be sixteen (16) feet wide, measured perpendicularly.
  - 4. In areas with pedestrian traffic, the exit and enter lanes may be separated by a median with a maximum width of ten (10) feet.
  - 5. Driveways shall be designed with a twenty-five (25) foot radii; thirty-foot radii where daily semi truck traffic is expected.

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- c. Driveway Storage. Driveway storage shall be determined by the Planning Commission based on traffic volumes and conditions. A minimum of forty (40) feet of driveway storage shall be provided for less intense developments and a minimum of one-hundred and twenty (120) feet of driveway storage shall be required for larger developments. Driveway storage shall be measured from the right-of-way line.
- d. Directional Driveways, Divided Driveways, and Deceleration Tapers and/or By-pass Lanes. Directional driveways, divided driveways, and deceleration tapers and/or by-pass lanes may be required by the Planning Commission where they are necessary to reduce congestion and accident potential for vehicles accessing the proposed use or site. Right-turn tapers shall be a minimum of seventy-five (75) feet in length and at least eleven (11) feet wide. Design of direction and divided driveways shall be in accordance with the designs in Figures Directional Driveway Standards and Divided Commercial Driveway Standards.

Figure Divided Commercial Driveway Standards

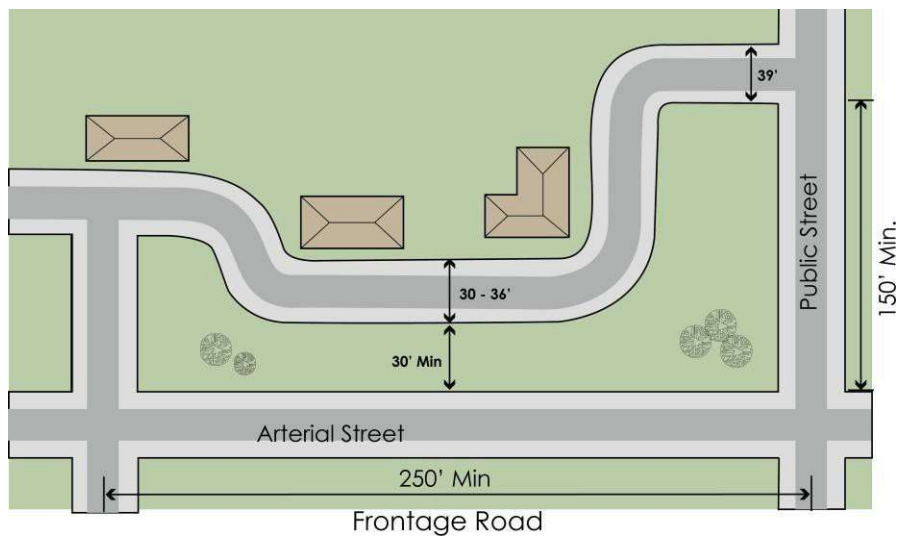
Divided Commercial Driveway			
Design Features		Required (feet)	Range* (feet)
Intersecting Angle	A	90	-
Driveway Width	B	48	46 to 78
Entering Radius	C	30	25 to 40
Existing Radius	D	25	20 to 35
Entrance Drive Width	K	16	16 to 27
Exit Driveway Width	L	22	20 to 27
Island Width	M	10	6 to 24
Island Length	N	12	6 to 18
Nose Offset	P	35	30 to 100



\*The "required" dimension shall be used unless the City specifies, or the applicant demonstrates technical justification for a different value. The range in dimensions indicate the working values for each design feature.

## Section 418 Design of Frontage Roads, Rear Service Drives and Parking Lot Connections

- a. Frontage roads, rear service drives and drives connecting two (2) or more parking lots shall be constructed in accordance with the following requirements:
  1. Pavement width shall be a maximum of thirty (30) feet, measured face of curb to face of curb; intersection approaches may be widened to thirty-nine (39) feet for a left turn lane.
  2. Frontage road access to public streets shall be spaced according to the standards of Section 415: Driveway Spacing from Intersections and Section 416: Driveway Spacing from Other Driveways.
  3. Frontage roads shall have a minimum setback of thirty (30) feet between the outer edge of pavement and the right-of-way line, with a minimum sixty (60) feet of uninterrupted queuing (stacking) space at the intersections.
  4. Parking along or which backs into a frontage road shall be prohibited.



- b. For properties which are currently developed or adjacent to developed uses which the Planning Commission, determines to be too restrictive, frontage roads can be defined through parking lots by a raised curb and/or painted islands, as shown, provided that at least every third island at the end of the parking row is a raised curbed island.