

M-20 and US-127 BR Corridor Adoption and Use of the Plan and Overlay Zoning District

Access management is a set of proven techniques that can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, prevent crashes, preserve existing roadway capacity and preserve investment in roads by managing the location, design and type of access to property. More than one technique is usually required to effectively address existing or anticipated traffic problems.

The Charter Township of Union and the city of Mount Pleasant are located in an area that is experiencing rapid growth. This growth has greatly contributed to the traffic congestion being experienced on M-20 and US-127 BR. Improvements to these roadways are needed to increase the safety for motorists and provide for additional traffic capacity. Access management techniques can be effective in alleviating some of the current congestion, maximizing the road's remaining capacity and providing for increased safety. A coordinated and comprehensive access management approach is essential if future growth in the city and township and city is to be accommodated and its economic benefits are to be realized. Current and future residents are highly dependant on M-20 and US-127 BR providing an efficient and safe route to destinations within the immediate area and beyond.

Development decisions along these roadways are under the purview of several agencies. The Charter Township of Union and the city of Mount Pleasant have jurisdiction over land use planning, zoning, site plan and subdivision review outside the street right-of-way. The road agencies have jurisdiction within the rights-of-way of M-20 and US-127 BR and intersecting streets. The shared authority means that successful implementation of the recommendations in the M-20 and US-127 BR Corridor Access Management Plan requires a partnership between Union Township, the city of Mount Pleasant, MDOT and the Isabella County Road Commission. This requires the planning commissions, Township Board, City Council, Zoning Board of Appeals and road agency be aware of access management standards and their role in its implementation.

Two documents were prepared to help guide access management decisions. The first was an access management plan. This plan provides specific access recommendations along the corridor based on a review of existing conditions and identifying the best practices (through research and application) to address them. The second was an overlay zoning district to implement the plan recommendations.

The M-20 and US-127 BR overlay zoning district would be placed over the existing zoning regulations for all parcels with frontage along M-20 and US-127 BR. For example, if the current zoning is residential, the uses permitted in that zoning district, the dimensional standards (setbacks, height, etc.) and other regulations would still apply, but the access spacing and circulation design standards of the overlay district would also apply. One significant change is the required minimum lot width of 660 feet for new parcels fronting M-20 and US-127 BR. This recommendation is based on the MDOT [Access Management Guidebook](#). Each community may wish to evaluate if this requirement is applicable along its section of the corridor. As an alternative, each zoning district could include a footnote for minimum lot area and width requiring that the parcel must demonstrate an ability to meet the access spacing standards and its depth must be adequate to accommodate a shared access system, where applicable.

While set up as a zoning ordinance regulation, the city of Mount Pleasant could also choose to adopt the standards through a separate police power ordinance rather than through the zoning ordinance. Among the advantages of this approach is the fact that existing sites do not obtain the same nonconforming rights (i.e. existing driveways are not grandfathered) and no changes to the zoning ordinance or map are needed. However, the separate ordinance should still be referenced in the zoning ordinance so that the ordinance is not neglected by applicants or officials.

The communities could also choose to add other elements to the model to promote continuity along the corridor, such as special standards for landscaping, signs, or view protection. The model could be adopted as an additional district, with a notation on the official zoning map, or could be adopted as a general provision.

M-20 and US-127 BR Corridor Overlay Zone

Section _____ Findings

The need for this district is based, in part, on specific studies for M-20 and US-127 BR that conclude the road's capacity is insufficient to accommodate volumes in the future. Continued development along the corridor will increase traffic volumes and introduce additional conflict points which will further erode traffic operations and increase potential for crashes. Numerous published studies and reports document the relationship between systems and traffic operations and safety. Those reports and experiences of other communities demonstrate standards on the number and placement of access points (driveways and side street intersections) that can preserve the capacity of the roadway and reduce the potential for crashes. The standards herein are based on recommendations published by various national and Michigan agencies that were refined during preparation of the M-20 and US-127 BR Corridor Access Management Plan.

The township and city find that special comprehensive standards are needed along the M-20 and US-127 BR corridor based upon the following findings:

1. The combination of roadway design, traffic speeds, current and projected traffic volumes, traffic crashes and other characteristics necessitate special access standards.
2. Studies by transportation organizations in Michigan and nationally have found a direct correlation between the number of access points and the number of crashes.
3. The standards of this district are based upon considerable research and recommendations by the Michigan Department of Transportation ("MDOT").
3. Preservation of roadway capacity through access management protects the substantial public investment in the roadway system and helps avoid the need for costly reconstruction, which disrupts businesses.

Section _____ Purpose

The Isabella County Roads Department and Michigan Department of Transportation has jurisdiction within the highway's right-of-way, while Union Township and the city of Mount Pleasant have authority for land use and site plan decisions within individual parcels along the highways. The standards of this overlay zoning district were created to help ensure a collaborative process between the MDOT, County, and the township and city on access decisions along M-20 and US-127 BR to implement the recommendations of the M-20 and US-127 BR Corridor Access Management Plan and other adopted community plans.

Among the specific purposes of this Corridor Overlay Zoning District are to:

1. Preserve the capacity of M-20 and US-127 BR by limiting and controlling the number, location and design of access points, and requiring alternate means of access through shared driveways, service drives, and access off cross streets in certain locations.

2. Encourage efficient flow of traffic by minimizing the disruption and conflicts between through traffic and turning movements.
3. Improve safety and reduce the potential for crashes.
4. Avoid the proliferation of unnecessary curb cuts and driveways, and eliminate or reconfigure existing access points that do not conform to the standards herein, when the opportunities arise.
5. Implement the recommendations of the M-20 and US-127 BR Corridor Access Management Plan.
6. Require longer frontages or wider minimum lot widths than required in other zoning districts to help achieve access management spacing standards
7. Required coordinated access among adjacent lands where possible.
8. Require demonstration that resultant parcels are accessible through compliance with the access standards herein prior to approval of any land divisions to ensure safe accessibility as required by the Land Division Act.
9. Address situations where existing development within the corridor area does not conform with the standards of this overlay district.
10. Identify additional submittal information and review procedures required for parcels that front along M-20 and US-127 BR.
11. Avoid the need for unnecessary and costly reconstruction which disrupts business operations and traffic flow.
12. Ensure efficient access by emergency vehicles.
13. Improve safety for pedestrians and other non-motorized travelers through reducing the number of conflict points at access crossings.
14. Establish uniform standards to ensure fair and equal application.
15. Provide landowners with reasonable access, though the access may be restricted to a shared driveway or service drive or via a side street, or the number and location of access may not be the arrangement most desired by the landowner or applicant.
16. Promote a more coordinated development review process for the township and city with the Michigan Department of Transportation and the Washtenaw County Road Commission.

Section _____ Applicability

The standards of this Overlay Zoning District shall apply to all lands with frontage that lies along, or within 120 feet of the centerline of, M-20 and/or US-127 BR, illustrated as the M-20 and US-127 BR Corridor Overlay Zone on the Zoning Map. The regulations of this Overlay Zone apply in addition to and simultaneously with the other applicable regulations, including permitted and special land uses, of the underlying zoning district. An evaluation of compliance with the standards of this Overlay Zoning District and the M-20 and US-127 BR Corridor Access Management Plan (*Section _____ Access Management Standards*) by the Planning Commission, Road Commission, and MDOT shall be conducted, and shall comply or be brought into compliance prior to issuance of any permits or approvals, if any of the following circumstances exist:

1. Proposed erection of a new building or structure, or the reconstruction, rehabilitation or expansion of an existing site;
2. Proposed land division, subdivision or site condominium project;
3. Proposed construction or expansion of a parking lot;
4. Any other circumstances where a building permit, other construction permit, or zoning or occupancy certificate is sought for use, site upgrade, or change of use for any land, buildings, or structures;
5. Any other change of use, tenant, or business where there will be an increase in accepted average daily trip generation figures significant enough to move the site to a higher Trip Generation Intensity Category (Low to Medium, Medium to High, or Low to High), according to the thresholds established in Table _____.1;

Table _____.1 Trip Generation Intensity Categories and Examples

Intensity Categories		
Low (Less than 1,500 Daily Trips)	Medium (1,500 – 4,000 Daily Trips)	High (Greater than 4,000 Daily Trips)
150 Unit Apartments (1,050)	Gas Station w/ Convenience (1,950)	200,000 s.f. Shopping Center (10,650)
150 Room Hotel (1,350)	Fast Food w/ Drive-Thru (1,500)	50,000 s.f. Strip Commercial Center (4,300)
Pharmacy w/ Drive-Thru (1,320)	50,000 s.f. Medical/Dental Office (1,835)	
<i>Additional examples to be added</i>		

If any of the circumstances of this section exist on a site that does not meet the access standards of this Overlay Zone District, the owner and/or applicant shall be required to submit a site plan for approval by the Planning Commission and submit information to the County or MDOT to determine if any modifications to the site’s access is required. The standards herein were developed collaboratively between the township, the city and MDOT. Where conflict occurs, the more restrictive regulations shall apply.

Where the opportunity arises to improve access management on a site, the site should be modified to meet the access standards of this ordinance (Section XXX) and the US-127 BR and M-20 Corridors Access Management Plan, with the following priority (high to low):

1. The improved or new access is to meet MDOT standards reflected in this ordinance (Section XXX), where possible, or;
2. The improved access is to meet the site-specific recommendations in the M-20 and US-127 BR Corridor Access Management Plan (Section XXX), with the applicable standards applied with the following priority (high to low):
 - i) spacing from signalized intersections;
 - ii) offset from driveways and access points on the opposite side of the street;
 - iii) spacing of driveways on the same side of the street and the number of driveways on the same side of the street.

Section _____ Additional Submittal Information

In addition to the submittal information required for site plan review in Section _____, the following shall be provided with any application for site plan or special land use review. The information listed in items 1-4 below shall be required with any request for a land division.

1. Existing access points. Existing access points within 500 feet on either side of the M-20 frontage, and along both sides of any adjoining roads, shall be shown on the site plan, aerial photographs or on a plan sheet.
2. The applicant shall submit evidence indicating that the sight distance requirements of the road agency are met.
3. Dimensions between proposed and existing access points (and median cross-overs if applicable in the future).
4. Where shared access is proposed or required, a shared access and maintenance agreement shall be submitted for approval. Once approved, this agreement shall be recorded with the Isabella County Register of Deeds.
5. Dimensions shall be provided for driveways (width, radii, throat length, length of any deceleration lanes or tapers, pavement markings and signs) and all curb radii within the site.
6. The site plan shall illustrate the route and dimensioned turning movements of any expected truck traffic, tankers, delivery vehicles, waste receptacle vehicles and similar vehicles. The plan should confirm that routing the vehicles will not disrupt operations at the access points nor impede maneuvering or parking within the site.
7. Traffic impact study. Submittal of a traffic impact study may be required for any special land use that would be expected to generate 100 or more vehicle trips during any peak hour, or 1000 or more vehicle trips daily, or where modifications from the generally applicable access spacing standards are requested. The traffic impact study shall be prepared by a firm or individual that is a member of the Institute of Transportation Engineers with demonstrated experience in production of such studies. The methodology and analysis of the study shall be in accordance with accepted principles as described in the handbook "Evaluating Traffic Impact Studies, a Recommended Practice for Michigan," developed by the MDOT and other Michigan transportation agencies. The township/city/road agency may require calculations or micro-scale modeling to illustrate future operations at the access points and nearby intersections and/or to evaluate various access alternatives.
8. Review coordination. The applicant shall provide correspondence that the proposal has been submitted to the MDOT or Isabella County Road Commission for their information. Any correspondence from the MDOT and ICRC shall be considered during the site plan review process. The Township/City may request attendance at coordination meetings with representatives of the applicable road agency. An access permit shall not be requested from the road agency until a land division or site plan is approved by the township/city. The approval of a land division or site plan does not negate the responsibility of an applicant to subsequently secure access permits from the road agency.

Section _____ Access Management Standards

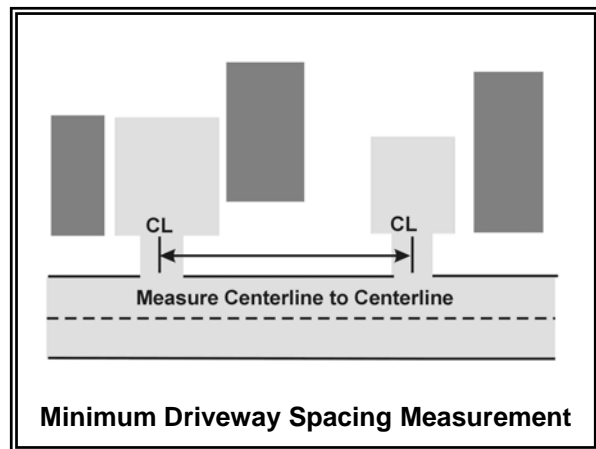
Site design, including access points, driveways, and circulation, (not including driveways that serve a single family home, duplex or essential service facility structure) shall meet the following standards. These standards are based on considerable research in Michigan and nationally, and were prepared concurrent with guidelines promoted by the MDOT.

1. Each lot shall be permitted one access point. This access point may consist of an individual driveway, a shared access with an adjacent use, or access via a service drive or frontage road. As noted above, land divisions shall not be permitted that may prevent compliance with the access location standards of this district.
2. An additional driveway may be permitted by the Planning Commission upon finding the conditions A and B, or C and D, below exist. The additional driveway may be required to be along a side street or a shared access with an adjacent site.
 - A. The site has a frontage of over 660 feet and the spacing standards between access points listed below are met, and
 - B. The additional access will not prevent adjacent lands from complying with the access spacing standards when such lands develop or redevelop in the future.

or

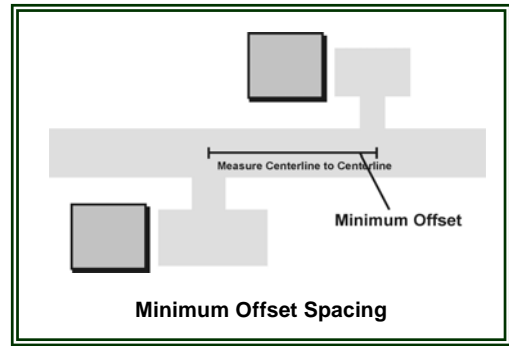
 - C. A traffic impact study, prepared in accordance with accepted practices as described in this chapter, demonstrates the site will generate over 300 trips in a peak hour or 3000 trips daily, or 400 and 4000 respectively if the site has access to a traffic signal, and
 - D. The traffic study demonstrates the additional driveway will provide improved conditions for the motoring public and will not create negative impacts on through traffic flow.

3. Access points shall provide the following spacing from other access points along the same side of the public street (measured from centerline to centerline as shown on the figure), based on the posted speed limit along the public street segment. Required spacing along M-20 and US-127 BR is greater than other roadways to acknowledge MDOT access guidelines and that their primary function is to accommodate through traffic while the function of other roads is more balanced with access to properties.



Posted Speed limit	Along M-20/US-127 BR *	Along other Roadways
* 35 mph or less	245 ft.	150 ft.
40 mph	300 ft.	185 ft.
45 mph	350 ft.	230 ft.
50 mph	455 ft.	275 ft.
55 mph	455 ft.	350 ft.

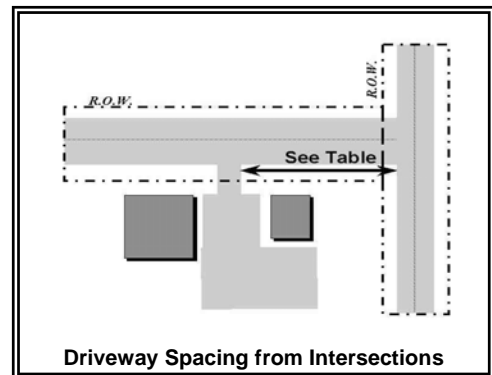
*unless greater spacing is required by MDOT or required to meet other standards herein



Where the subject site adjoins land that may be developed or redeveloped in the future, including adjacent lands or potential outlots, the access shall be located to ensure the adjacent site(s) can also meet the access location standards in the future.

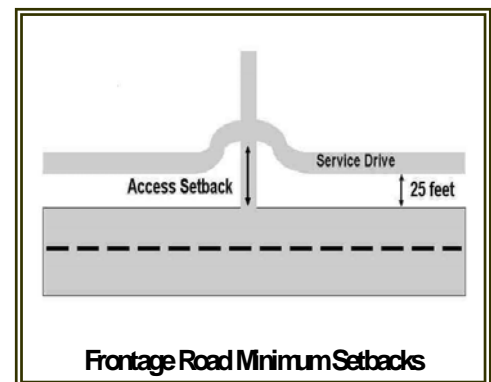
4. Access points along sections of M-20 and US-127 BR with an existing or planned median shall be located in consideration of existing or approved median crossovers. A sufficient length for weaving across travel lanes and storage within the median shall be provided, consistent with MDOT published standards. The township/city support MDOT policies to limit the number of median crossovers to maintain traffic flow and reduce the potential for accidents. In some cases, existing median cuts may need to be redesigned to meet current design standards.

5. Access points shall be aligned with driveways on the opposite side of the street or offset a minimum of 250 feet, centerline to centerline. The Planning Commission may reduce this to not less than 150 feet where each of the opposing access point generates less than 50 trips (inbound and outbound) during the peak hour of the public street or where sight distance limitations exist.



6. Minimum spacing of access points from intersections shall be in accordance with the table below (measured from pavement edge to pavement edge as shown on the figure):

<u>Signalized locations:</u> *	
along M-20 and US-127 BR	300 feet
along other public streets	200 feet
<u>Unsignalized locations:</u>	
along M-20 and US-127 BR	300 feet
intersections with M-20 and US-127 BR	300 feet
other intersections	150 feet

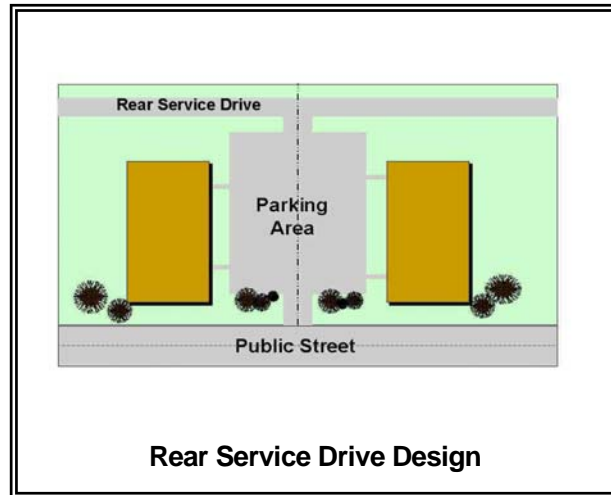


* Spacing shown for signalized intersections shall also be applied at intersections where MDOT indicates spacing and approach volumes may warrant a signal in the future.

7. Where direct access consistent with the various standards above cannot be achieved, access should be via a shared driveway or service drive. In particular, the Planning Commission may require development of frontage roads, or rear service drives where such facilities can provide access to signalized locations, where service drives may minimize the number of driveways, and as a means to ensure that traffic is able to more efficiently and safely ingress and egress.

Frontage roads or service drives shall be constructed in accordance with the following standards:

- A. Service drives and frontage roads shall be set back as far as reasonably possible from the intersection of the access driveway with the public street. A minimum of twenty-five (25) feet shall be maintained between the public street right-of-way and the pavement of the frontage road, with a minimum 60 feet of throat depth provided at the access point.



- B. The alignment of the service drive can be refined to meet the needs of the site and anticipated traffic conditions, provided the resulting terminus allows the drive to be extended through the adjacent site(s). This may require use of aerial photographs, property line maps, topographic information and other supporting documentation
 - C. In cases where a shared access facility is recommended, but is not yet available, temporary direct access may be permitted, provided the plan is designed to accommodate the future service drive, and a written agreement is submitted that the temporary access will be removed by the applicant, when the alternative access system becomes available. This may require posting of a financial performance guarantee.
8. Driveways shall be located to provide safe sight distance, or determined by the applicable road agency.
 9. No driveway shall interfere with municipal facilities such as street light or traffic signal poles, signs, fire hydrants, cross walks, bus loading zones, utility poles, fire alarm supports, drainage structures, or other necessary street structures. The Zoning Administrator is authorized to order and effect the removal or reconstruction of any driveway which is constructed in conflict with street structures. The cost of reconstructing or relocating such driveways shall be at the expense of the abutting property owner.

SECTION _____ Modification of Access Standards

Conformity with the M-55 Access Management Plan. In the event that the proposed access to a site is unable to conform to the above-noted standards, Planning Commission shall require conformity with the site-specific recommendations set out in the US-127 BR and M-20 Corridors Access Management Plan. Conformity with the Access Management Plan shall be preferred over any additional modifications as set out below.

Additional Modifications by Planning Commission. Given the variation in existing physical conditions along the corridor, modifications to the standards in Section _____ above and beyond those recommended in the US-127 BR and M-20 Corridors Access Management Plan may be permitted by the Planning Commission as part of the site plan review process upon a finding that all of the following conditions apply:

1. The proposed modification is generally consistent with the intent of the standards of this overlay district and the recommendations of the M-20 and US-127 BR Corridor Access Management Plan and Study.
2. Practical difficulties exist on the site that make compliance unreasonable (sight distance limitations, topography, wetlands, drain or water body, woodlands that will be preserved, existing development, unique site configuration or shape), or existing off-site access points make it impractical to fully comply with the standards.
3. The use involves an access improvement to an existing site or a new use that will generate less traffic than the previous use.
4. The proposed modification is consistent with MDOT guidelines and MDOT staff support the proposed access design.
5. If deemed necessary by the Planning Commission, a traffic study by a qualified traffic engineer has been provided that certifies the modification will improve traffic operations and safety along M-20, and is not simply for convenience of the development.
6. The applicant shall demonstrate with dimensioned drawings that such modification shall not create non-compliant access to adjacent lands that may develop or redevelop in the future.
7. Roadway improvements will be made to improve overall traffic operations prior to the project completion or occupancy of the first building.
8. Indirect or shared access is not reasonable.
9. Such modification shall be demonstrated to be the minimum necessary.

The decision of the Planning Commission may be appealed to the Zoning Board of Appeals. In consideration of this variance, the Board shall apply the standards above.

OR

In the case where it can be demonstrated that conditions prohibit adherence to the access standards

of this district, the Zoning Board of Appeals may consider a variance from the standards herein. In such cases, the Board shall make a finding that the applicant meets all of the following criteria

1. Practical difficulties exist on the site that make compliance unreasonable (topography, wetlands, drain, unique site configuration or shape, sight distance limitations or a unique traffic operations situation)
2. The practical difficulty can not be resolved by use of a shared access system.
3. The MDO'T has been consulted and supports the need for some type of variance.
4. The variance is consistent with the general intent of this district and the recommendations of the M-20 and US-127 BR Corridor Access Management Plan.
5. A traffic study by a qualified traffic engineer has demonstrated that the variance is in the public interest and supports the proposed access design.
6. Such modification shall be demonstrated to be the minimum necessary.

M-20 and US-127 BR Corridor Plan Review Checklist

The following checklist can be used by each community (staff, zoning administrator or whoever receives applications and discusses procedures with potential applicants).

- ✓ Is the subject site located within the M-20 and US-127 BR Corridor Access Management Plan study area?
- ✓ Has the most recent plan been submitted to the Isabella County Roads Department/MDOT contact person for their review and comments?
- ✓ Has the applicant been made aware of the special requirements and standards?
- ✓ Is the site within an area where specific access recommendations were provided in the M-20 and US-127 BR Corridor Access Management Plan? If so, provide the applicant with a copy.
- ✓ Does the site plan or submittal illustrate all of the additional information on other existing access points and adjacent lot configurations so compliance with the standards can be determined?
- ✓ Can the site meet the spacing standards between access points?
- ✓ Is the number of access points the minimum needed to provide reasonable access to the site?
- ✓ Is there a potential to provide an alternative, shared access, system?
- ✓ Is the access point properly aligned with, or spaced from, existing driveways or the location where driveways can be expected in the future?
- ✓ Has information on sight distance been provided?
- ✓ Is there a need for a traffic impact study to evaluate the impacts and determine if changes to the site design or road system are needed?
- ✓ Should other communities along the M-20 and US-127 BR corridor be informed of the proposal (i.e. is the project large enough that it will have a major impact)?
- ✓ Is there a reason to request a meeting with Isabella County Roads Department and/or MDOT to discuss and address access issues prior to review by the Planning Commission?