

US-127 BR/M-20 Access Management Plan

Prepared for:

Michigan Department of Transportation
In conjunction with
Union Charter Township &
the City of Mt. Pleasant

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Acknowledgements

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- City of Mt Pleasant
- Union Charter Township
- MDOT – Bay Region
- MDOT – Mt. Pleasant TSC
- Isabella County Road Commission
- Isabella County
- Mt. Pleasant Mission/Pickard DDA

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Executive Summary

The US-127 BR (Mission Street)/M-20 (Pickard Street) Access Management Plan area encompasses three distinct roadway segments. It includes Mission Street from Bluegrass Road north to Corporate Drive, Pickard Street (M-20) from Mission east to Summerton Road, and M-20 (Remus Road) from Lincoln Road west to Meridian Road. The first two of these corridors are experiencing significant congestion and crash issues, due largely to past heavy commercial development with little management of access. The third corridor is emerging and will likely come under increasing development pressure in the coming years as much of the corridor is zoned for commercial.

Both the City of Mt. Pleasant and Union Charter Township recognize that the preparation and implementation of an access management plan will help alleviate a portion of the existing traffic congestion on Mission and Pickard Streets, while allowing for the more effective accommodation of traffic generated by future development on M-20/Remus Road west of Lincoln Road.

Access Management Tools and Benefits

Access management is an effort to maintain efficient traffic flow, preserve the roadway's capacity, and reduce the frequency and severity of crashes while maintaining reasonable access to land uses. This can be accomplished through careful placement (or relocation) of access points to reduce conflicts with traffic using other access points and traffic flowing through intersections. Access management usually involves tools to space access points or restrict certain turning movements. Some of these tools are:

- proper spacing of access points along the same side of the street,
- alignment or spacing from access points on the opposite side of the street,
- placing driveways a sufficient distance from intersections to minimize impact to intersection operations,
- geometric design to restrict certain turning movements (usually left turns),
- location of traffic signals, and
- shared access systems (connections between land uses, shared driveways, frontage roads or rear service drives).

Access management can provide several benefits to motorists, communities and land uses along the US-127 BR/M-20 corridors. Among the benefits, based on experience and studies for similar corridors, are the following:

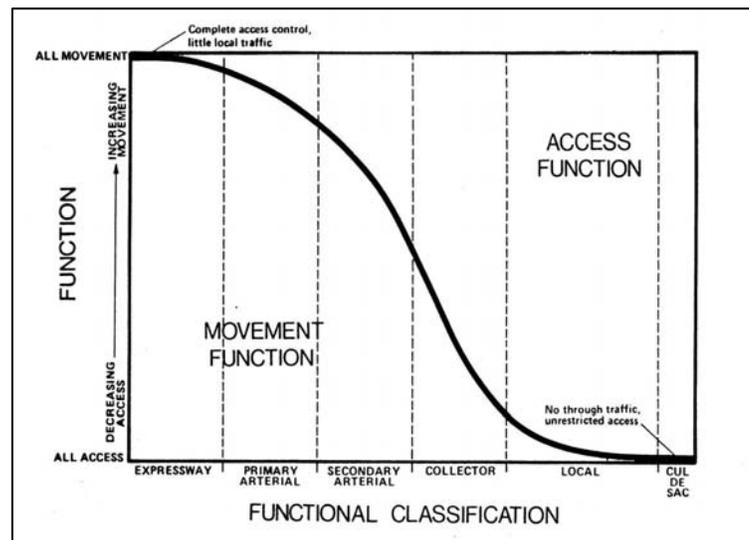
- reduce crashes and crash potential;
- preserve or increase roadway capacity and the useful life of roads;
- decrease travel time and congestion;
- improve access to and from properties;
- ensure reasonable access to properties (though not necessarily direct access nor the number of driveways preferred by the landowner/developer);
- coordinate land use and transportation decisions;
- improve environment for pedestrians and bicyclists (less driveways to cross);
- improve air quality; and
- maintain travel efficiency and related economic prosperity.

Why Access Management?

Successful implementation of the recommendations in the US-127 BR/M-20 Access Management Plan will help the City, Township, and MDOT accommodate planned development along the corridor while reducing the amount of negative impacts on traffic flow by numerous points where turning movements occur that cause traffic conflicts and increase crash potential. Numerous studies nationwide have shown that a proliferation of driveways or an uncontrolled driveway environment increases the number of crashes, can severely reduce capacity of the roadway and may create a need for costly improvements in the future. Areas where access management plans have been adopted and followed by the communities and road agencies have resulted in 25-50 percent reductions in access-related crashes.

The Plan includes specific recommendations for individual properties as well as general recommendations that apply to a number of areas along the corridors. While some of the recommendations can be directly implemented, many are long-term initiatives that will require an on-going partnership and commitment between the City, Township, and MDOT. This requires the two communities' planning commissions, elected bodies, and zoning board of appeals members to be aware of the benefits of access management and their role in the Plan's implementation.

The model US-127 BR/M-20 overlay zoning district is expected to be placed over the existing zoning regulations for all parcels with frontage along the Plan corridors or those within 120 feet of the centerline of those corridor roadways. Many of the existing sites along Mission and Pickard Streets will not be



able to meet all of the access management standards, particularly older sites. In order to address these situations the ordinance provides the authority to modify the standards on a case-by-case basis. The model ordinance provides planning commissions with the authority to modify the standards during site plan review, provided the intent of the standards is being met to the maximum extent practical on the site. The ordinance also requires traffic impact studies to be performed for larger developments that have the potential to generate significant volumes of traffic. These studies would evaluate the impact that a proposed development will have on the road system and identify mitigation to offset the impact.

Plan Development

The US-127 BR/M-20 Access Management Plan and ordinances were prepared under the direction of a Steering Committee comprised of representatives from the City of Mt. Pleasant, Union Charter Township, MDOT, Isabella County (Road Commission and Planning/Development) and the DDA. Public involvement included two public workshops/open houses. Comments and recommendations by the public, local officials and the MDOT staff at the workshops were considered and incorporated into the final plan.

While individual land owners may see the regulations as restricting access to their property, a well-managed access system will improve access to properties and maintain or even improve travel efficiency, thereby enhancing economic prosperity for local businesses. A strong access management program also has the benefit of closely coordinating land use and transportation decisions to improve the overall quality of life in the community.

1. INTRODUCTION

Historically Mission Street, and more recently Pickard Street and M-20 to the west, have served as the key transportation corridors for moving significant traffic and goods through the central part of the Mt. Pleasant area. Mission Street has long served as the main commercial spine within the area, partly due to its current designation as the US-127 Business Route through town. Pickard Street is becoming increasingly developed as the communities grow and development continues to the east outside of the study area. And M-20 to the west is expected to come under increasing commercial development/rezoning pressure and will need to plan for the traffic impacts that always come with that type of development.

Union Charter Township, the City of Mt. Pleasant, and the Michigan Department of Transportation (MDOT) have recognized that there are significant congestion and safety issues on the highly developed Mission Street, and to a slightly lesser extent on Pickard Street, that can be addressed in part by retrofitting the existing poor commercial access system. It's also recognized that those similar conditions need to be avoided in the emerging section of M-20/Remus Road west of Lincoln Road. To that end, access management is recognized as a key tool to improve operating conditions and preserve the public dollars spent in the past on these roadways. The study area is illustrated on Figure 1.



It should be noted that the section of M-20/High Street, which stretches from Mission to Lincoln in the City of Mt. Pleasant and Union Township, was omitted from the study area for a variety of reasons. These reasons include a relatively low occurrence of crashes, a high amount of single family residential uses adjacent to the roadway, an absence of large undeveloped areas that could significantly benefit from access management, and a reasonable low number of existing access points along the corridor.

The primary goal behind this access management plan is to improve traffic operations and reduce crash potential along all three roadway corridors while retaining reasonable access to existing and future developments. Access management will preserve the road's capacity through limiting the number of access points along with careful placement and spacing of new or retrofit access points. The resulting improvements can be significant and at a relatively low cost in comparison to roadway reconstruction.

The questions this access management plan will help address include:

- ***What access-related improvements should be made to existing uses to reduce crash potential and enhance efficiency of the US-127 BR/M-20 corridors?***

- ***How can land use/site plan decisions support the recommendations and enhance the effectiveness of this access management plan?***
- ***What access guidelines should be adopted to help maintain safety and efficiency while still providing reasonable access to adjacent land uses?***

Preparation of this Plan

To assist in the development of this plan a Steering Committee was formed with representatives from the City of Mt. Pleasant, Union Charter Township, MDOT, Isabella County Road Commission, Isabella County Planning/Development, and the Mission/Pickard DDA. The Steering Committee met regularly to review the issues, provide suggestions on draft recommendations and assist in obtaining comments from the public and local officials.

This plan was developed over seven months through a series of meetings with the Steering Committee. The process also included two public workshops/open houses held at Mt Pleasant city hall and Union Township hall – the first held on April 6, 2006 and the latter on June 29, 2006. Both of these open houses provided a presentation on the need for, and benefits of, access management in this study area. Large graphics were on display illustrating the preliminary access management recommendations. Comments and recommendations by the public, local officials and the MDOT staff were considered and incorporated into the final recommendations. A listing of the public comments and responses can be found in the appendix.

Role of Access Management

As noted, the goal behind this access management plan is to improve traffic operations and safety along the existing US-127 BR and M-20 corridors while retaining reasonable access to existing and future development along the roadways. Access management, in this situation, involves improving upon and preservation of the road's capacity through reducing or limiting the number of access points, careful placement and spacing of access points, and small scale road improvements to separate turning movements from through traffic.

The terms "access" and "access point" are used frequently throughout this document. Those terms refer to commercial driveways (ie. retail, office, industrial, etc.) and platted roadways or private roads but do not refer to driveways to individual single family homes, unless otherwise noted.

There are many short and long term benefits to this program, some of which are listed below:

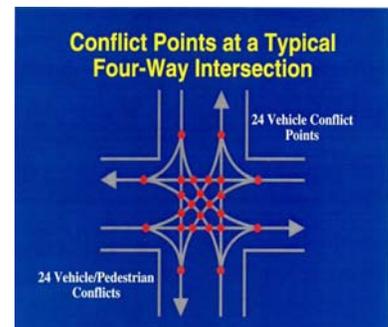
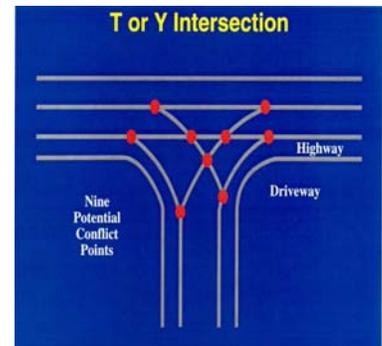
- Gives MDOT, City, and Township the latitude to make future improvements with the least disruption on homeowners, businesses and the anticipated development pattern along the roadway.
- Preserves or improves the capacity of the roadway by locating/relocating access points where they will have the least disruption on through traffic flow.
- Reduces crash potential through careful placement and spacing of access points.
- Provides landowners with reasonable access to their property from Mission,

Pickard, or M-20/Remus Road, though to meet the benefits above, in some cases the number of access points will be fewer or more indirect than previously allowed.

- Improves traffic operations and safety that will benefit everyone. Access management and other improvements along the plan corridors require a partnership between the City, Township, MDOT, and the Isabella County Road Commission. One way to promote this collaborative approach is through improved coordination and communication between the MDOT and the two communities when reviewing development proposals.
- Provides general background and information on the benefits of access management to assist Mt Pleasant and Union Township officials.

Realization of the benefits listed above can be accomplished through a variety of changes, both physical and regulatory. Key recommendations of this access management plan are listed below, and are explained in more detail in the subsequent chapters.

- Identify changes to existing access points to improve safety and efficiency of the roadway corridors. Such improvements, especially along Mission Street, include closure or consolidation of numerous existing access points to improve spacing. Specific recommendations are illustrated on a series of drawings for sections of the corridors.
- Gradual replacement of individual direct access points with access through rear service drives, cross access between parking areas, or shared driveways.
- Access for new development through service drives. The plan illustrates options, since the preferred location and alignment will depend upon the intensity of future development proposals. Generally, the deepest separation from the roadway is desired, but in some cases, a frontage road may be the most practical design.
- Establish access standards to help maintain safety and efficiency while still providing reasonable access to adjacent land uses. These standards should be applied to both retrofit existing sites and to new developments. This can be done through consideration of access issues as the City and Township review development proposals, through improved coordination with MDOT, and through adoption of access management standards into the two zoning ordinances.



Each new driveway adds to the number of conflict points along a roadway at which a traffic crash could occur.

(Source: MDOT "Improving Driveways and Access Management in Michigan," 1996)

Access Management – What is it?

Access management is a process that regulates access to land uses in order to help preserve the flow of traffic on the road system by reducing traffic conflicts created by vehicle turning movements. Numerous studies nationwide have shown that a proliferation

of driveways or an uncontrolled driveway environment increases the number of crashes, severely reduces capacity of the roadway and may create a need for costly improvements in the future. Areas where access management plans have been adopted and implemented by the communities and road agencies have resulted in 25-50 percent reductions in access-related crashes. Further statistical data is available in an MDOT access management publication called “Improving Driveway & Access Management in Michigan.”

Access management can provide several benefits to motorists, communities and land uses along the US-127BR/M-20 corridors. Among the benefits, based on experience along other corridors and numerous studies are the following:

- Preserve roadway capacity and the useful life of roads;
- Reduce crashes and crash potential;
- Coordinate land use and transportation decisions;
- Improve access to properties;
- Decrease travel time and congestion;
- Improve air quality; and
- Maintain travel efficiency and related economic prosperity.



In addition to those measurable benefits, the public also benefits due to the reduction in roadway improvement costs and reduced environmental impacts. Land owners and developers benefit from the long term enhancement of property values and knowing up front that there are established access criteria thereby reducing the need for redesign and the likelihood of a lengthy site approval process.

“Numerous studies nationwide have shown that a proliferation of driveways or an uncontrolled driveway environment increases the number of crashes, can severely reduce capacity of the roadway and may create a need for costly improvements in the future.”

Successful implementation of the plan’s recommendations will require continued coordination between the two communities and MDOT. This document includes a draft corridor overlay zoning district that the City and Township have refined further for adoption.

Perhaps the most important result that comes out of this process will not be the access management plan itself. It may be the further recognition that good, timely communication between the Mt. Pleasant, Union Township, and MDOT is the key to a successful plan that will be implemented.

The following chapters discuss in detail the benefits and background of access management and the specific recommendations for this seven mile study corridor.

2. EXISTING ACCESS and LAND USE CONDITIONS

One of the primary initial tasks when developing an access management plan is to define the current access conditions and land use plans along the study area corridors. This section of the report outlines those current traffic and access conditions and land use issues. A brief description of the US-127BR and M-20 design and traffic characteristics within the study area follows.

Current Roadway and Access Characteristics

There is a wide variety of geometric, traffic, and access conditions along the study area sections of Mission Street, Pickard Street, and M-20 to the west. Typical cross sections range from two to five lanes and there is a fairly wide disparity in daily traffic volumes.

There are typically two or three general development characteristics that need to be taken into account for most access management corridors. In general, there are areas that are currently undeveloped (and may stay that way for some time), areas that are relatively undeveloped but experiencing growth pressures, and areas that are already mostly or fully developed.

Subsequent chapters will outline proposed improvements and standards that the two communities and road agencies can use to improve upon or retain an efficient access system. In order to define those proposed improvements, field surveys were completed to identify existing locations or areas that have poor or substandard access conditions. These are outlined below, along with current roadway characteristics, in three general corridor sections; US-127 BR/Mission Street, M-20/Pickard Street from Mission to Summerton Road, and M-20/Remus Road from Lincoln Road west to Meridian Road. Clearly the first two sections are very developed while the section of M-20 to the west is relatively undeveloped.

Mission Street (US-127 Business Route)

Roadway Characteristics

The Mission Street portion of the study area begins at Bluegrass Road and ends at Corporate Drive at the north end. The typical cross section throughout the corridor is five lanes, not including short right turn lanes provided at a few key intersections.

Recent traffic counts indicate that weekday daily traffic volumes on Mission range from approximately 17,000 vehicles on the north end up to about 32,000 vehicles in the Broomfield Road area. Speed limits range from 30 miles per hour in the central part of the

corridor up to 40 miles per hour towards each end. Mission Street/US-127BR currently has signalized intersections at the following cross streets:

- Bluegrass Road
- Broomfield Road
- Preston Street
- Bellows Street
- High Street (M-20)
- Michigan Street
- Broadway Street
- Pickard Street (M-20)

Mission Street has a relatively high number of crashes – approximately 1,225 in a recent three-year period. The block between Preston Street and Broomfield Street experienced over 150 crashes in the last five years (not including those at the two intersections). Over 30 percent of those were directly related to driveway traffic movements, with that percentage likely higher if crashes at main intersections, that were indirectly access-related, were also taken into account.

Existing Access Conditions

Mission Street is considered a retrofit corridor in terms of access management. It is highly developed, with little or no undeveloped parcels within the study area. The existing access system is similar to many other older high volume/high development corridors around the state where sites were approved and constructed in the past without the current knowledge of the detrimental effects of poor access management. Although there are examples of good recent site plan/access decisions (eg. Walgreen's at Preston), there are many examples of substandard (by today's standards) access/driveway spacing, design, and numbers.

Existing access management deficiencies on Mission Street include the following:

- *Substandard driveway storage*; many of the commercial driveways along Mission have little or no internal storage (distance from Mission to first internal cross aisle or parking) that provides more efficient ingress/egress operations.
- *Poor intersection-to-driveway spacing*; there are examples of poor spacing between an intersection and an adjacent commercial driveway at almost every intersection along the corridor, several of these are gas stations but other sites/uses also have this issue that affects the operational safety of the intersection.
- *Poor driveway spacing and/or unnecessary second drive*; too numerous to mention again – many instances of driveways spaced too close together or sites that have more than one driveway that do not warrant a second (or more) access.





- *No internal cross access/service drive connections*; lack of internal connections between adjacent uses (either large or small businesses) can significantly affect Mission Street – appears in many cases to have been a conscious decision to block cross access in many cases. *(photo previous page)*
- *Substandard driveway offset*; this currently exists at several locations, although it would be difficult in the past to align or offset

driveways properly given that there are so many.

- *Parking/Access deficiencies*. At several spots, most notably on the eastern leg of the Mission/Preston intersection, where on-street, 90-degree parking is allowed well within the functional area of a signalized intersection. *(see photo above)*
- *Substandard driveway width*. Several locations have older very wide driveway openings that can lead to driver confusion, multiple access movements.

Pickard Street (M-20 – Mission Street to Summerton Road)

Roadway Characteristics

Pickard Street generally has a five-lane cross section between Mission and Summerton Road, with separate right turn deceleration lanes or tapers at a few locations. Traffic counts indicate that daily weekday volumes range from approximately 21,000 to 26,000 vehicles on Pickard in this section.

Speed limits in this subarea currently range from 35 miles per hour in the City section near Mission, 45 miles per hour from roughly Russell Street to the interchange, and up to 55 miles per hour out near Summerton. Along with the aforementioned Mission Street signal, Pickard’s intersections with Brown Street, Isabella Road, and the two US-27 interchange ramps are controlled by traffic signals.

Existing Access Conditions

Pickard Street/M-20 is also very developed for much of its frontage. Several of the more recent developed commercial sites have better access controls in place. By in large though, it is still considered predominantly as a retrofit corridor as there are many corrections to the existing access system that will need to be made over the coming years when opportunities arise.

There are several newer developments that the City or Township has approved, along with MDOT, that have better access design or location based upon the guidelines MDOT has now adopted and used on a regular basis. However, there are many examples of older access points with deficient design/location attributes.

- *Substandard driveway to intersection spacing*; numerous examples of poorly located driveways along Pickard at signalized cross roads and/or on those cross roads.
- *Poor driveway spacing*; many examples along the corridor, particularly on the south side across from the Meijer store, on the north side just west of Belmont, and on the southeast quadrant of the US-127/M-20 interchange. (see photo below)
- *Unnecessary second drives*; same locations as those noted above and several other locations.
- *Substandard driveway design/storage*; wide open commercial driveways, like the one on Florence Street on the south side of Pickard, too little driveway storage (distance from roadway to first internal parking/circulation) at numerous locations, typically older small commercial sites.
- *No internal cross access/service drive connections*; lack of internal connections between adjacent commercial uses –for example the two newer restaurants on the northeast quadrant of the Pickard/Brown intersection.
- *Substandard driveway offsets*; this currently exists at several locations, including the driveway to the medical office building that is offset from Betty Lane.



M-20 (Remus Road – Lincoln Road to Meridian Road)

Roadway Characteristics

This section of M-20 has a two-lane cross section with a center left turn lane added at its intersections with Lincoln and Meridian. Recent 24-hour traffic counts indicate that M-20 in this area carries approximately 13,000 vehicles on a weekday.

Currently, the M-20/Lincoln intersection is the only one in this part of the study area that is traffic signal controlled. At this time all other side roads are stop sign controlled. The speed limit is 55 miles per hour throughout this corridor section.

Existing Access Conditions

For the most part the M-20 frontage within the Lincoln-to-Meridian segment is relatively undeveloped, at least in a commercial sense. Small commercial development is focused at the two endpoints, with single family homes and/or residential plats sprinkled along the remainder of the corridor.

The Township has started the development of a service drive system along the north side of M-20 at Lincoln Road that is planned to be extended as sites develop. Existing access management deficiencies are limited to the following:



- *Poor driveway spacing; A couple of locations, including the proximity of the McDonald's and adjacent bank driveways.*
- *Unnecessary second drive/poor driveway offsets; the small commercial site opposite the above uses does not warrant the need for two driveways, especially as one or both help create poor offset issues.*

Existing Land Use Characteristics

Introduction

The US-127 BR/M-20 corridors, located on portions of Pickard, Mission, and Remus Roads, provide access to numerous businesses and residences in the City of Mount Pleasant and Union Charter Township. With access points come access management issues, especially in corridors such as US-127 BR and M-20, which are have already been developed into various uses with many independent land and business owners. When evaluating the impacts that individual land uses have on a corridor, the intensity of the land use generally dictates the amount of traffic, and consequently the amount of traffic impact on a main road, that a use generates. Other impacts to the environment around the roadway include noise and air quality, light, and other physical nuisances that go beyond the limits of the property. Intensive uses, such as commercial and industrial uses, generally produce greater levels of traffic and other off-site impacts. These impacts should be considered by communities when determining not only the future land use along these corridors, but also the degree of access management needed to promote safety and traffic flow.

The US-127 BR/M-20 study area is located in an area that has experienced sustained residential and commercial growth over the past several decades. This growth has contributed to traffic congestion throughout the study area in both the City and the Township. In addition, the areas to the west on Remus Road are experiencing increased development pressure and could experience congestion in the future.

Existing Land Use

Existing land uses along the corridors can be grouped into two main categories. These are built-out commercial corridor, which includes all of Pickard and Mission, and an undeveloped agricultural corridor on Remus Road in the western area of the Township. The following are detailed discussions of these two groups and the areas that lie within.

- **Existing Commercial Corridors: Pickard and Mission**

The first of these two categories includes all of Pickard and Mission in the study area. These connected roads have been developed over the last several decades and include short blocks and narrow, single-business parcels scattered throughout.

The areas close to the interchanges on the east and south ends have seen some larger commercial developments, including strip centers, hotels, and large shopping centers.

Pickard (M-20). Uses along Pickard include manufactured home sales, hotels, gas stations, sit-down restaurants, movie theater, large-scale retail and grocery, fast food, and a wide range of other auto-oriented businesses. There are also several single family homes and vacant lots on the south side of Pickard. The eastern end of Pickard (east of the freeway) has a large home improvement store, but also has vacant acreage near the business school and hotels near the Township line.

Mission (US-127BR/M-20). Uses along Mission vary greatly but are generally retail and office commercial. The north half of Mission has the shortest blocks as well as the narrowest parcels. Many individual businesses have been built along this stretch of roadway, often very close to the right-of-way and with little room for parking. Progressing to the southern end of US-127 BR, there are increasingly larger commercial developments, with multi-tenant commercial centers and chain restaurants. On the east side of Mission from north of Bluegrass to US-127, large retailers including JC Penny, Target, and WalMart are incorporated into disjointed shopping centers. In



Fully developed commercial corridor in the southern area of Mission.



Multiple driveways on Pickard just east of US-127 lead to a variety of commercial uses.



Commercial development along Mission brings pavement right up to a lot line.

this same southern area, the west side of Mission consists of commercial parcels sandwiched between the roadway and the Central Michigan University Main Campus.

- **Undeveloped/Agricultural Corridor: M-20/Remus Road**

The second category refers to M-20/Remus Road, located west of the City limits and in a primarily agricultural area of the Township.



Development adjacent to Mission includes on-street parking for several commercial uses.



Agriculture dominates the landscape on Remus west of Lincoln.

With the exception of small commercial uses at Lincoln and Meridian Roads, the balance of this area is large tracts of agricultural land and larger-lot residential subdivisions. There is pressure near Lincoln Road for expanded commercial on the north and south sides of M-20.

Future Land Use and Influence on Transportation

Planned future land uses vary from one community to another and are driven by development patterns, infrastructure and the desired community character. A composite map of the study area's future land use is illustrated in Figure 2 in the *Study Area Future Land Use Map*. The future land use adjacent to these corridors will have a significant impact on future traffic patterns, flow, and congestion. Examining the configuration of future land use categories can help drive both site-specific and corridor-wide policies for Access Management. The following are detailed discussions of the existing future land use along the various corridors as well as any adjustments recommended to improve traffic safety and flow.

- **Existing Commercial Corridors: Pickard and Mission**

The Pickard and Mission corridors are both planned for commercial land use. This pattern lends itself to a high number of vehicle trips, many access points, and abundant signage. The south end of Mission also abuts the University and its corporate park. Implementation of Access Management recommendations and policies will be critical to making these roadways safe to vehicle and pedestrian traffic while promoting flow and increasing capacity.

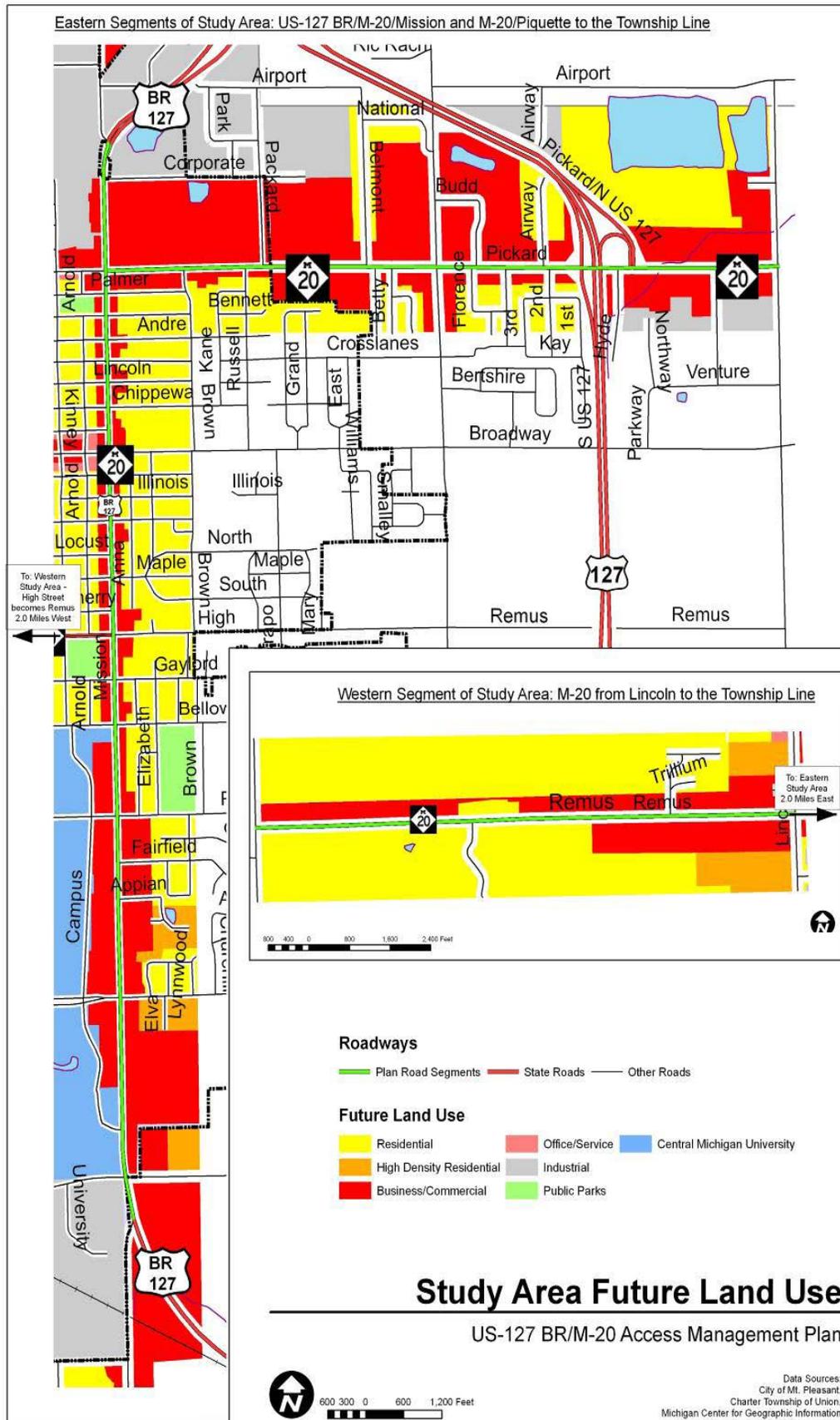


FIGURE 2

The area on the south end of Mission is also experiencing significant commercial and high-density residential development. Managing access and providing easy routes to signalized intersections for left turns will help maintain safety.

- **Undeveloped/Agricultural Corridor: M-20/Remus Road**

The M-20/Remus Road corridor currently has commercial future land use on the north side of the road for its entire length, and a area of planned commercial on the south that goes about 1/3 of the way to the Township's western boundary.

The depth of these planned commercial zones will be a key component to managing access for future development. Currently the planned area on the north side of the road is only about 300 feet deep. With an expansion of the road, front shared access drives, and landscaping, the depth of these areas is too shallow and should be extended to the north by at least 150 feet. If area of planned commercial is a concern, reducing the length of commercial on M-20's north side in favor of a narrower, deeper area would allow for a planned, coordinated development with plenty of room for road expansion, internal access and landscaping.

The planned commercial on the south side of M-20 is closer to 600 feet, and should be able to accommodate an access pattern that limits any development to only one or two access for the entire length of M-20.

Each type of land use creates traffic that adds to the existing through traffic along the highway. For example, a typical single-family home generates about ten vehicle trips per day (5 in, 5 out), where a commercial use located on a similarly sized lot may generate as many as fifty or more trips in an hour.

A unique aspect of land use and zoning decisions is the impact a decision in one community can have on the other communities along the corridor. Traffic and other effects of commercial development are not constrained by community boundaries. Therefore, information on major planning and zoning changes being requested along the corridors should be shared with the other community and appropriate agencies.

“A unique aspect of land use and zoning decisions is the impact a decision in one community can have on the other communities along the corridor. Traffic and other effects of commercial development are not constrained by community boundaries.”

3. ACCESS MANAGEMENT STANDARDS

Based upon the analysis of existing conditions and constraints, and review of MDOT, national, local, and other states access guidelines, the access management plan for the US-127BR/M-20 study area was developed. This chapter summarizes the basic design standards that should be used by the City of Mt. Pleasant and Union Charter Township in future access deliberations along the study area corridors and other corridors where appropriate.

Access Management Standards

Since there is a significant variation in the current and planned future development along the US-127BR/M-20 corridors, it is impractical to impose driveway standards uniformly throughout the study area. Design or spacing criteria applicable to the developed portions of study area on Mission Street and Pickard Street would be less than ideal for the relatively undeveloped M-20/Remus Road subarea. Standards should provide sufficient flexibility to be effective and equitable as well as meet requirements set by MDOT and administered by the City, Township and/or Isabella County Road Commission.

The introduction of this report mentioned several benefits that typically result from consistent use of an access management plan. To achieve those benefits, access standards must recognize the following principles:

- **Design for efficient access.** Identify driveway design criteria that promote safe and efficient ingress and egress at driveways.
- **Separate the conflict areas.** Reduce the number of driveways, increase the spacing between driveways and between driveways and intersections, and reduce the number of poorly aligned driveways.
- **Remove turning vehicles or queues from the through lanes.** Reduce both the frequency and severity of conflicts by providing separate paths and storage areas for turning vehicles and queues.
- **Limit the types of conflicts.** Reduce the frequency of conflicts or reduce the area of conflict at some or all driveways by limiting or preventing certain kinds of maneuvers.
- **Preserve public investment and the integrity of the roadway.** Acknowledge that substantial public funds have been invested to develop the corridor to move traffic safely and efficiently.

“Improved driveway spacing simplifies driving by reducing the amount of information to which a driver must process and react.”

- **Provide reasonable access.** Recognize that property owners have an inherent right to access public roadways, although reasonable access may be indirect in some instances.

Correct driveway spacing simplifies driving by reducing the amount of information to which a driver must process and react. Locating a driveway away from the operational area of a signalized intersection decreases the potential for congestion and accidents for both through traffic and vehicles using that driveway. Adequate spacing between driveways and unsignalized roadways (or other driveways) can reduce confusion that otherwise requires drivers to watch for ingress and egress traffic at several points simultaneously while controlling their vehicle and monitoring other traffic ahead and behind them.

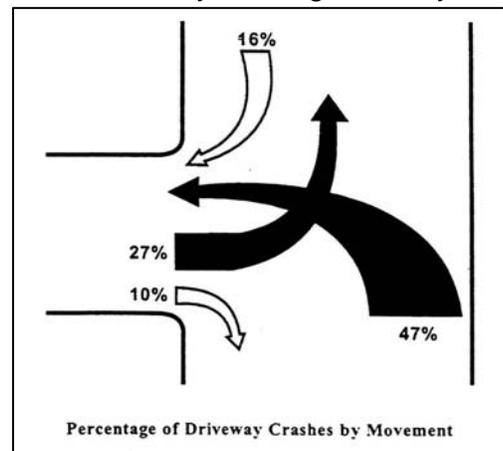
The following sections discuss a few of the basic access design criteria that were used during the analysis of the US-127BR/M-20 study area. The specific way in which these criteria or standards applied to the corridor is then outlined in the following chapter.

Access Design Parameters

Access management involves a series of tools to limit and separate traffic conflict points, separate turning volumes from through movements, locate traffic signals to facilitate traffic movement and limit direct access on higher speed roads and thus preserve capacity and improve safety. The following is a summary of what access management standards would involve.

- **Number of Access Points:** The number of access points to a development should be limited to one where possible. The number of driveways allowed along Mission Street and the two M-20 subareas will affect traffic flow, ease of driving, and crash potential. Every effort should be made to limit the number of driveways; and encourage access off side streets, service drives, frontage roads, and shared driveways. Along the study corridors, driveways should be properly spaced from one another and from intersections with other major streets.

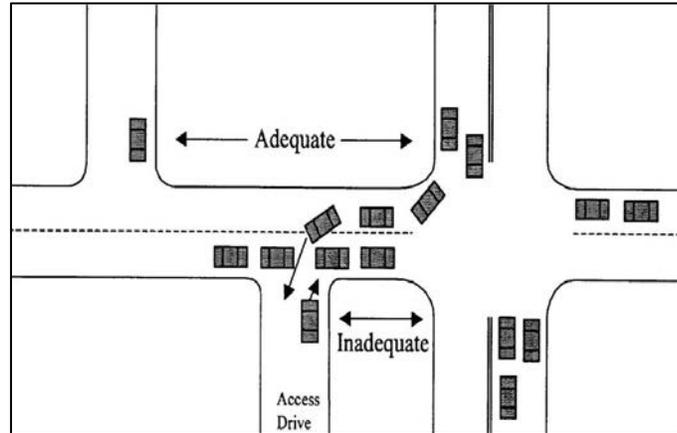
Access to a parcel should generally consist of a single driveway, which should be shared with adjacent parcels wherever possible. Certain developments generate enough traffic to consider allowing more than one driveway and larger parcels with frontages of at least 660 feet may also warrant an additional driveway. An additional driveway should only be considered following a traffic impact study that demonstrates the need for additional access and, where possible, the second access point should be located on a side street or be shared with adjacent uses.



Data from the National Highway Institute indicates that most driveway crashes involve left-turn movements.

- **Driveway Spacing from Intersections:** Driveways need to be placed such that there is adequate spacing from an intersecting street to ensure that traffic entering or exiting a driveway does not conflict with intersection traffic. Spacing between a proposed driveway and an existing public street intersection is an important design element that

must be identified. Typical standards take into account the type of roadways involved (trunkline, arterial, etc.), type of intersection control, and type of access requested. In most cases, there should be no driveways developed within the functional boundary of a given intersection unless the size of that parcel and other constraints do not provide a good alternative.



For a state trunkline roadways such as Mission Street that have speed limits of 30 to 40 mile an hour, full movement driveways onto Mission should typically be a minimum of at least 230 away from a signalized intersection (460 feet in 40 mph zones) and 115 to 230 feet away from unsignalized intersections. Such distances are typically not attainable in highly developed/small parcel roadways such as Mission Street, and to a lesser extent on Pickard Street.

In locations where existing parcel constraints limit that spacing (retrofit areas – most of Mission and Pickard), driveways onto Mission or Pickard should be placed as far as possible away from the intersection. In most areas of the corridor, spacing of driveways on the side roads should be at least 250 feet from the nearest edge of the trunkline pavement.

- **Driveway Spacing from Other Driveways:** Driveways also need to provide adequate spacing from other driveways to ensure that turning movement conflicts are minimized. Generally, the greater the speed along the roadway the greater the driveway spacing should be.

Spacing standards recommended for this study area corridor are based upon MDOT guidelines adopted in 1996 (that are based upon numerous national references) and require the following minimum distances between driveways (centerline to centerline) given a measured average speed:

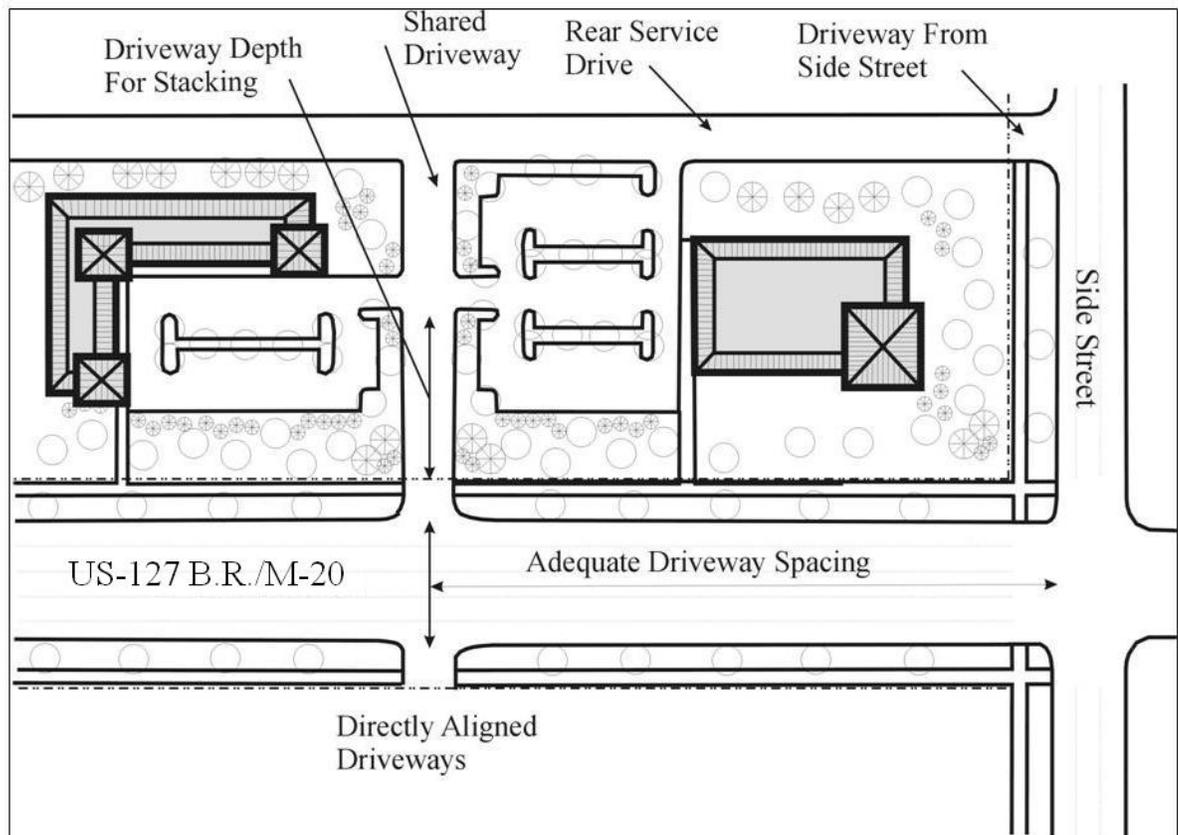
<u>Posted Speed (MPH)</u>	<u>Minimum Driveway Spacing</u>
25	130 feet
30	185 feet
35	245 feet
40	300 feet
45	350 feet
50+	455 feet

Again, it will be difficult for sites along the two retrofit corridor sections to meet these standards, so the primary goal is to close/combine driveways that at least maximize driveway spacing as opportunities arise.

- **Driveway Alignment or Offset:** In order to prevent left turn conflicts, driveways should be aligned with those across the street or offset a sufficient distance to prevent turning

movement conflicts. Minimum offsets on US-127BR and M-20 should be determined by posted speeds and range from 325 feet for a 30-mile per hour zone to 750 feet in a 55-mile per hour zone.

- **Shared Driveways:** Sharing or joint use of a driveway by two or more property owners should be encouraged. This will require a written easement from all affected property owners during the site plan approval process. Where a future shared access is desired, the developer should indicate an easement that will be provided to future adjacent uses.
- **Alternative Access:** Alternative access should be encouraged, such as shared driveways, rear service drives or frontage roads. Where parcels have frontage on Mission Street/Pickard Street/M-20 (west) and a side street, access should be provided off of the side street. Certain turning movements should be limited, especially left turns, where safety hazards may be created or traffic flow may be impeded.
- **Service Drives:** Frontage drives, rear service drives, shared driveways, and connected parking lots should be used to minimize the number of driveways, while preserving the property owner's right to reasonable access. Such facilities provide customers with access to multiple shopping/commercial sites without re-entering the main roadway and experiencing conflicts and higher speeds. In areas within one-quarter mile of existing or future signal locations, access to individual properties should be provided via these alternative access methods rather than by direct connection to a major arterial.



In areas where service drives are proposed or recommended, but adjacent properties have not yet developed, the site should be designed to accommodate a future service

drive, with access easements provided. The City/Township/MDOT/iCRC may temporarily grant individual properties a direct connection to an arterial road until the frontage road or service drive is constructed. The direct access point to the main roadway should be closed when the frontage road or service drive is constructed. In any case, care should be taken to minimize any negative traffic impacts of service drive connections to residential side streets.

The safety and efficiency of these types of facilities (and shared driveways) is only as good as their design allows. An important but often overlooked design aspect of that design is the "storage" provided at the access driveways. This is the distance between the main road and the service drive or the first internal cross access. This storage needs to be deep enough to accommodate expected vehicle queues thereby reducing the chance of blocking internal circulation on the service drive. The correct length is also needed to reduce the possibility of entering vehicles backing up into the main road due to internal congestion. Correct location and maintenance of traffic control signs and pavement markings are essential to a smooth operation of these driveways.

There are several factors that affect the determination of the best alignment and depth of a service drive. Those factors include the existing right-of-way at that location on US-127 BR or M-20, the depth of the adjacent parcels, and the location of existing buildings in developed or partially developed corridor sections. For drives providing access to two small commercial uses, the storage should be at least 40 feet. For drives providing access to more than two small commercial uses, the storage should be at least 60-100 feet and potentially much more than that (100 - 300 feet) depending upon the trip generation characteristics of the existing/ proposed long term land uses to be served.

“Shared access drives, service drives or frontage roads all serve to minimize the number of conflict points along a corridor while still providing reasonable access to the adjacent land uses.”

Rear service drives are often preferred because they do not create issues with driveway depth. They also facilitate placing parking to the rear of buildings and moving the buildings closer to the road. Rear service drives also have the added benefit of facilitating integrated access and circulation with development further to the rear. On larger sites, these rear service drives can be designed to function similar to roads interconnecting uses and sites.

Service drives are usually constructed and maintained by the property owner or an association of adjacent owners. The service drive itself should be constructed to public roadway standards in regard to cross section (ie. 22-30 feet wide) materials, design, and alignment. The design is often predicated upon the type and size of vehicles it will need to accommodate including delivery trucks. However, an easement that defines a service drive does not need to be nearly as wide as a public street right-of-way. Since, by definition, these internal roadways will be serving several uses with numerous driveways, additional uses such as parking along the service drive (temporary or otherwise) should be allowed only under special circumstances.

- **Sight Distance:** There are only a few sight distance limitations in the study area and those are located in the M-20/Remus Road subarea. The minimum sight distance required for a vehicle to enter or exit the traffic stream on an arterial from a side street or driveway is determined by MDOT and/or the iCRC at the time of an application for a

driveway permit. The Township should coordinate with the MDOT at the time of site plan review to ensure that this sight distance requirement can be met. If this distance cannot be met on the site, indirect access through another property should be sought.

Implementation of the above access recommendations will help to preserve the capacity, safety, and useful life of the US-127 BR and M-20 corridors. Travel time and congestion will be decreased and the potential for crashes will be reduced. While individual land owners may see the regulations as restricting access to their property, over the long term a well managed access system will improve access to properties and maintain travel efficiency, thereby enhancing economic prosperity of local businesses. A strong access management program also has the benefit of closely coordinating land use and transportation decisions to improve the overall quality of life in the two communities. The design of the access points can be as important to the overall operation of a corridor as their location. MDOT's driveway design standards can be supplemented by requirements adopted by the City or Township along the study corridors. Design standards usually define geometric requirements regarding driveway widths, corner radii, and taper lengths to name a few.

4. ACCESS MANAGEMENT PLAN

The access management plan developed for the US-127BR/M-20 study area was directly and indirectly based upon both state and nationally recognized standards. Developing standards to be used for future access considerations are only part of the picture. The other key element for any access management plan is to identify improvements to existing access systems that will reduce crash potential and provide better efficiency within each of the corridor sections. These corrections are typically referred to as retrofit access improvements.

As discussed during several of the Steering Committee and public open house meetings, in several areas of the corridor it may be all but impossible to retrofit a corridor section to meet current spacing guidelines for new driveways. On roadways such as Mission and Pickard Streets, however, the goal still is to minimize the number of driveways as much as possible. It should be recognized that many of the retrofit improvements recommended in the plan will only become implementable when an owner or developer approaches MDOT and Union Township or Mt. Pleasant during another approval process. Others, at least in the City, may be implemented through the newly proposed DDA-funded driveway closure process. Incentives from the Township, City, County, and MDOT to assist business with the costs of closing and reconstructing driveways could increase the pace of the plan's implementation.

This plan is a flexible document that is subject to adjustments and improvements as the study area corridors develop or redevelop. Although the basic design parameters should remain in place, exact locations and configurations of driveways and service/frontage roads may shift as development plans come into focus. This is especially true for undeveloped areas within the study corridors.

The recommendations of the access plan are largely based on parcel configurations and future land use plan in existence at the time this plan was prepared. Property combinations and unified development of small parcels is strongly encouraged. In addition, existing parcels should only be divided if a coordinated access system is retained through signed agreements and illustrated on a plan.

The following sections and accompanying figures outline how the recommended access management standards are applied within the overall US-127BR/M-20 study area. As

It should be recognized that many of the retrofit improvements recommended in the plan will only become implementable when an owner or developer approaches Union Township, Mt. Pleasant, or MDOT during another approval process.

discussed in the previous section, the average speed of traffic along a given corridor is one of several design parameters used to develop driveway spacing standards. Other factors that came into play include the roadway design types, intersection traffic control type, sight distance concerns, physical constraints and the type and size of potential traffic generators.

Service drives and/or internal site connections may play an integral part of the future access management system along the study area frontage. These will likely be located in two general areas; where there are significant sections of commercial or developmental areas that have not yet been developed (M-20/Remus Road), or as shorter internal connections in developed areas. The plan illustrates a few locations for these facilities and the variability in alignment that service drives can take.

The Access Management Plan is illustrated in a series of 14 “maps.” These show the final recommendations that resulted from numerous discussions with the Steering Committee members and input from other interested/affected persons obtained at the two public open house meetings (where presentation-size versions of the maps were used). The following discussions regarding the access management plan recommendations are summarized on a map-by-map basis. The discussion and graphics start with Mission Street (at southern end), then Pickard Street/M-20, and conclude with M-20/Remus Road from Lincoln west to Meridian Road.

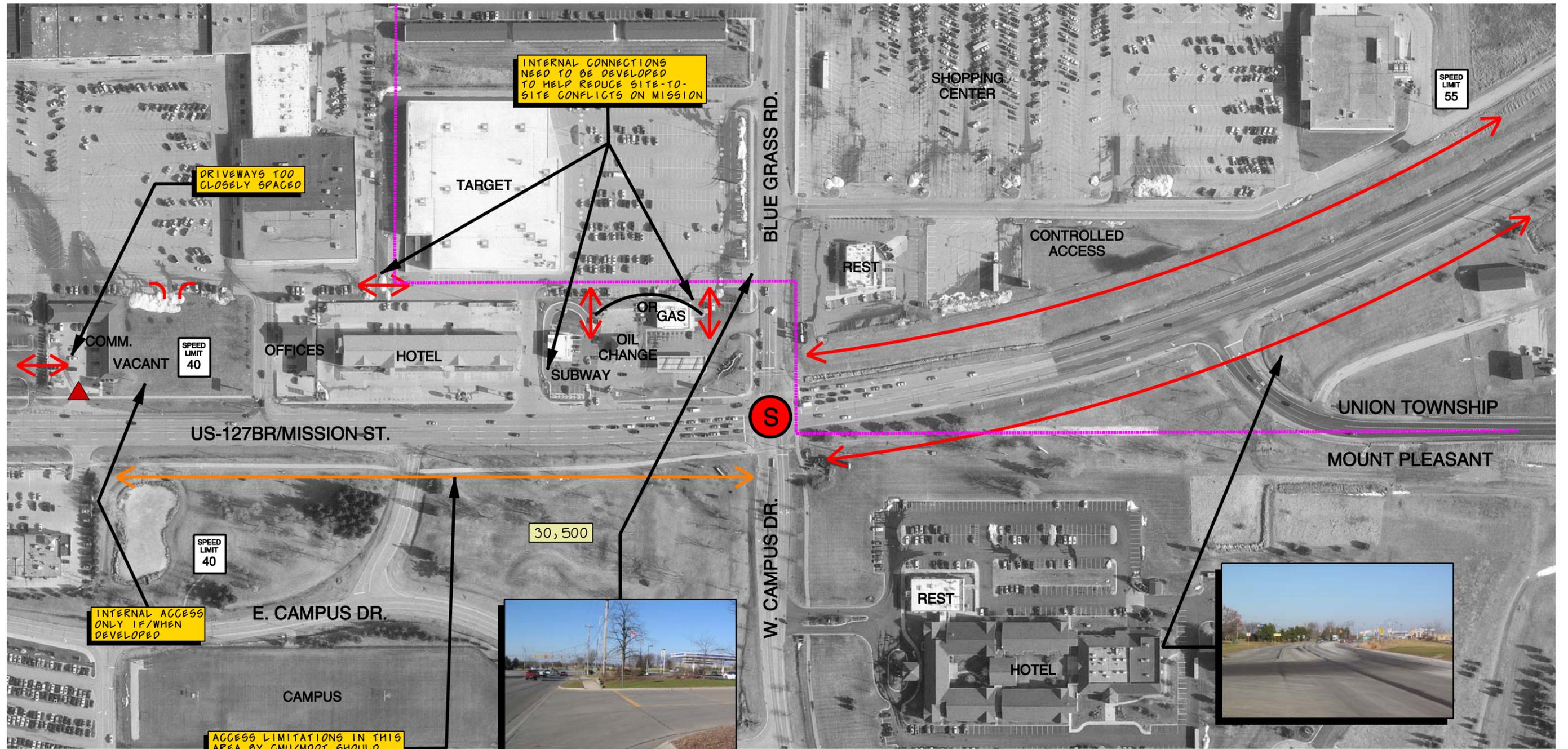
Mission Street (US-127 BR) – Bluegrass Road to just north of Bellows Street

The access management improvements recommended for this section of Mission Street are illustrated on Figures 3, 4, and 5. Given its intensely developed nature, the plan is focused on numerous recommendations for addressing existing driveway/access issues.

Recommended retrofit improvements include many proposed driveway closures of older commercial driveways and related development of shared drives, especially on the block between Broomfield and Preston where excessive and poorly spaced driveways dictates the need to reduce the number of access points from 35 to 26. It’s not a coincidence that this block had the highest number of crashes (150) along Mission Street over the last five years. It should be noted that using a strict application of MDOT’s access management guidelines would result in reducing the number of access points to only 12.



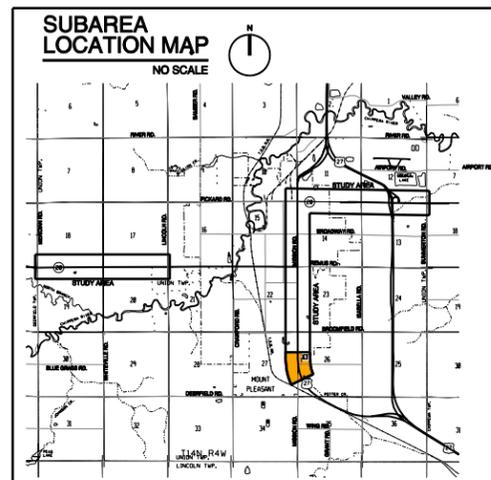
There are several recommendations to develop better internal connections. The existing Target site is a good candidate for such connections, as are several of the restaurants and other businesses that line the west side of Mission Street north of Broomfield. The plan essentially calls for the removal of many or all of the various types of physical constraints (curbs, rails, fencing, etc) that currently block needed connectivity that will help reduce ingress/egress movements on Mission.



US-127 BR/M-20 ACCESS MANAGEMENT PLAN

CITY OF MOUNT PLEASANT SCALE 1"=200'

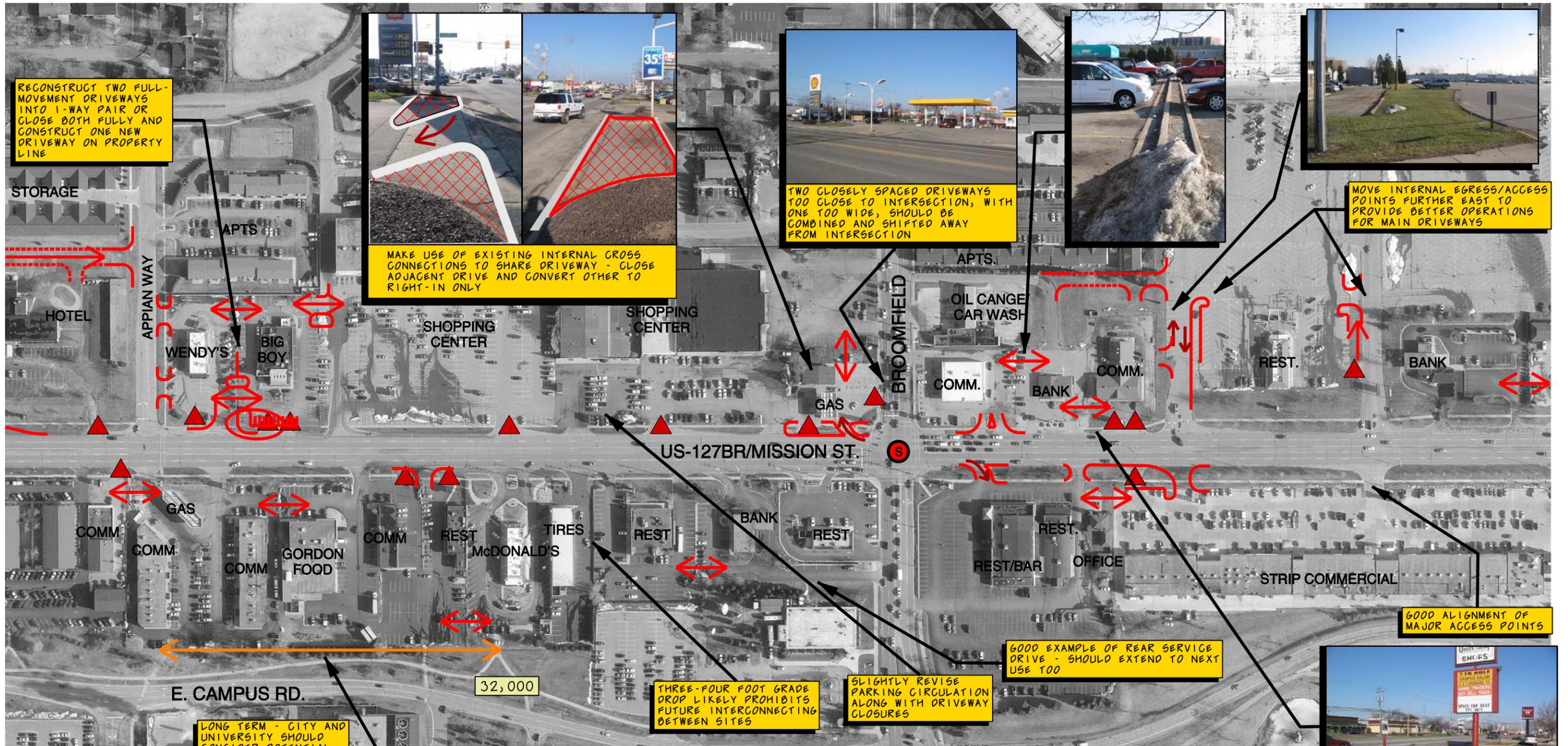
AERIAL PHOTOGRAPHY PROVIDED M.D.O.T.
DATE OF PHOTOGRAPHY: WINTER 2005



GOOD EXAMPLE OF A LARGE SITE SERVED WITHOUT DIRECT ACCESS TO THE HIGHWAY/MISSION

LEGEND	
	CLOSE/ELIMINATE DRIVEWAY
	DEVELOP INTERNAL CONNECTION/CROSS ACCESS
	SPEED LIMIT IN AREA
	SIGNAL OR FLASHING BEACON
	POTENTIAL SERVICE DRIVE ALIGNMENT
	RECOMMENDED DRIVEWAY LOCATION
	POOR DRIVEWAY OFFSET
	24-HOUR VOLUME (APRIL-2005)

FIGURE 3

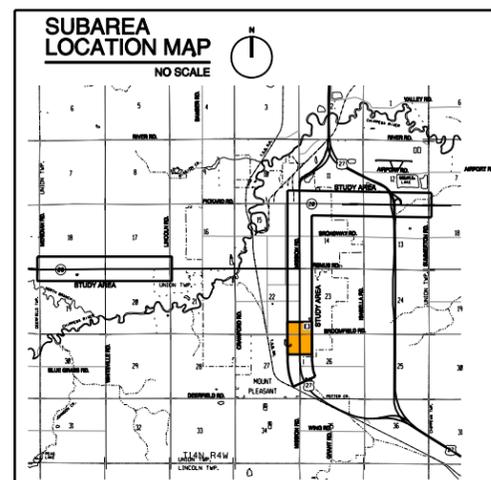


US-127 BR/M-20 ACCESS MANAGEMENT PLAN

CITY OF MOUNT PLEASANT SCALE 1"=200'

AERIAL PHOTOGRAPHY PROVIDED M.D.O.T.
DATE OF PHOTOGRAPHY: WINTER 2005

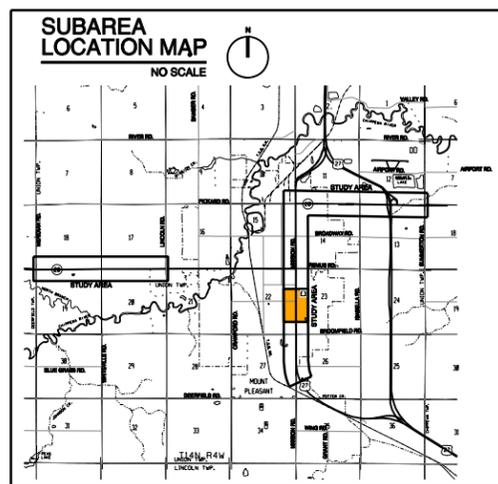
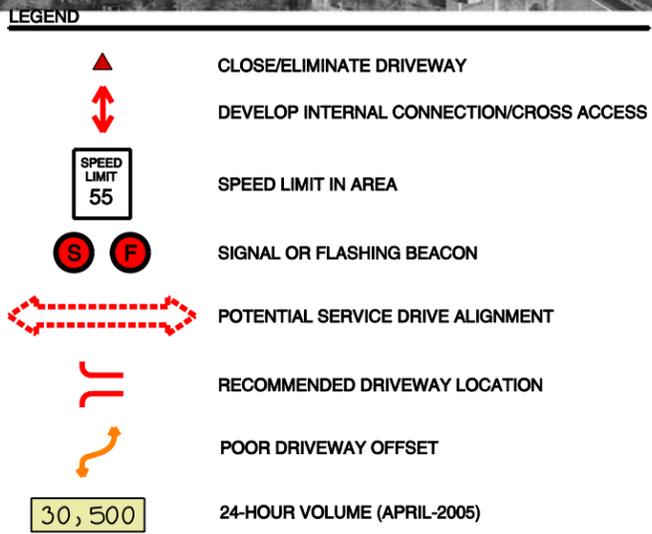
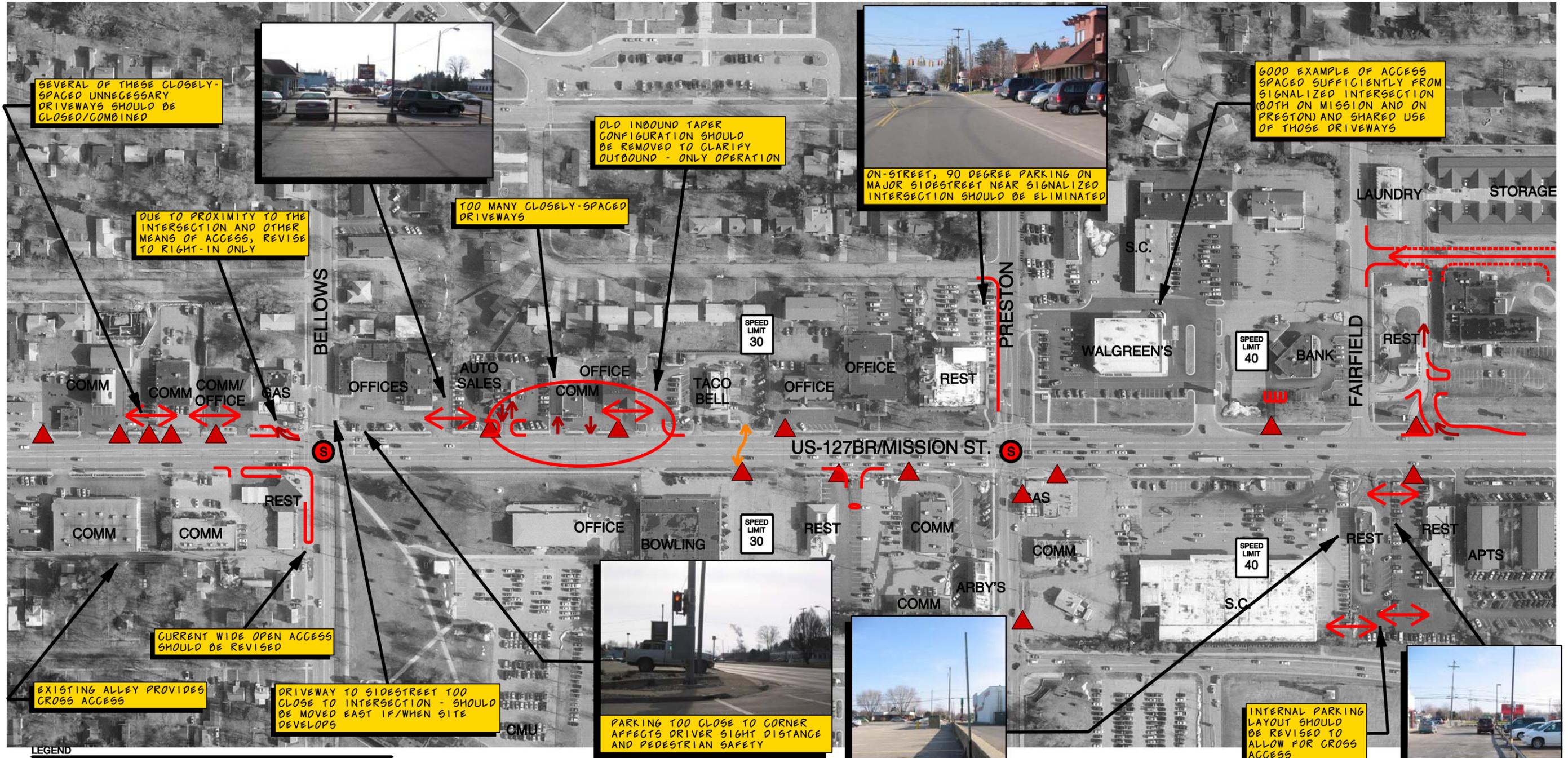
Progressive **AE** **LSL Planning, Inc.**



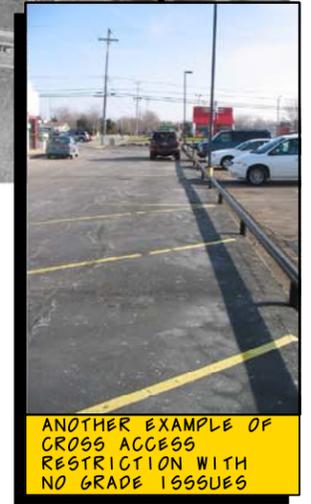
LEGEND

- CLOSE/ELIMINATE DRIVEWAY
- DEVELOP INTERNAL CONNECTION/CROSS ACCESS
- SPEED LIMIT IN AREA
- SIGNAL OR FLASHING BEACON
- POTENTIAL SERVICE DRIVE ALIGNMENT
- RECOMMENDED DRIVEWAY LOCATION
- POOR DRIVEWAY OFFSET
- 24-HOUR VOLUME (APRIL-2005)

FIGURE 4



THE BROOMFIELD-TO-PRESTON SECTION OF MISSION ST. HAD THE HIGHEST NUMBER OF CRASHES OVER THE LAST FIVE YEARS - 150. APPROXIMATELY 30% OF THOSE WERE ACCESS RELATED



US-127 BR/M-20 ACCESS MANAGEMENT PLAN

CITY OF MOUNT PLEASANT SCALE 1"=200'

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The need for better internal connectivity is also shown by the plan's recommendations for short service drive connections. One example within this subarea is on the east side of the short Appian Way-to-Fairfield Street block. If/when the hotel site redevelops, a rear service drive should be constructed to provide access to that site as well as to adjacent sites and the two streets.

Recommended closures include several driveways that are very close to a key intersection and well within its operational area. The gas station located on the northeast quadrant of the Mission/Broomfield intersection is a case of an older 4-access point design that is common in older corridors. The plan calls for closing two driveways that are immediately adjacent to the signalized intersection, revising one to a right-in only, and sharing a driveway with the small commercial use on the north side. Access to the site will still be very good (including tanker circulation) and the changes will benefit the oft-congested adjacent intersection.

Typical Driveway Closure Costs

As noted in the Existing Conditions chapter, on-street parking is also an access/safety issue, especially when it occurs

Closure Type	Estimated Cost*
Close/Remove Existing Commercial Driveway	\$5,000 - \$10,000
Close/Remove Two Driveways and Construct Shared Driveway	\$15,000 - \$25,000

within the functional area of a signalized intersection on

**Costs typically borne by site owner if/when site redevelops/improves, unless planned MDOT roadway improvement project provides funds and/or local incentives are provided*

Mission Street. The plan recommends that all on-street parking currently located on Preston Street just east of Mission be removed.

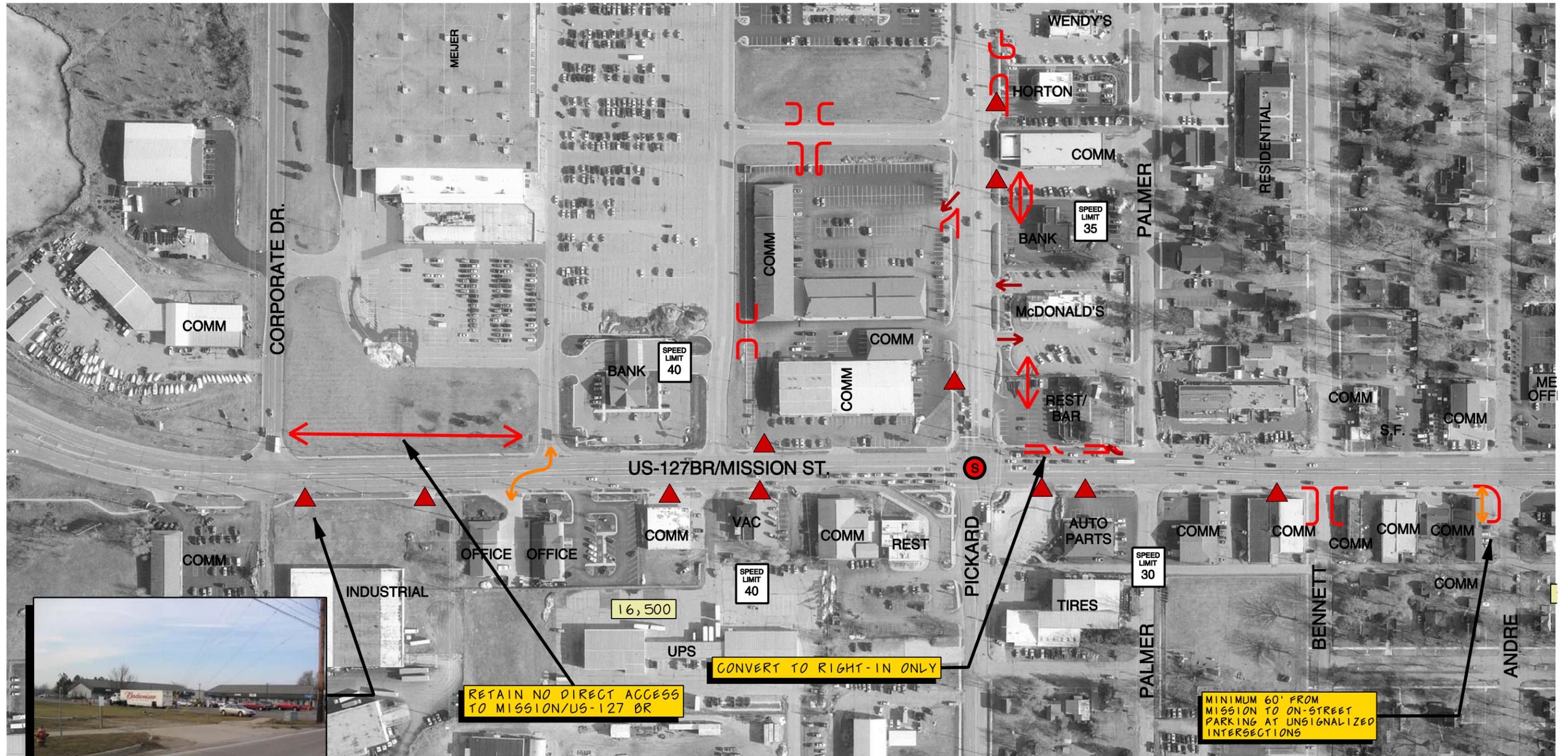
Mission Street (US-127 BR) –Just north of Bellows Street to Corporate Drive

The recommended improvements to the access system for this section of Mission Street are illustrated on Figures 6, 7, and 8. Much like the southern half of this corridor, the recommendations run the whole gamut of potential access solutions for a densely developed corridor.

The plan's recommendations include closing and/or combining a total of 35 existing access points along this subarea. Some of these are just unused curb cuts, but most are unnecessary second driveways or combined driveways that are too close together. Nine of the recommended closures are in the short Gaylord-to-High section. Several closure or driveway revision recommendations also address locations where existing drives are too close to a major intersection.

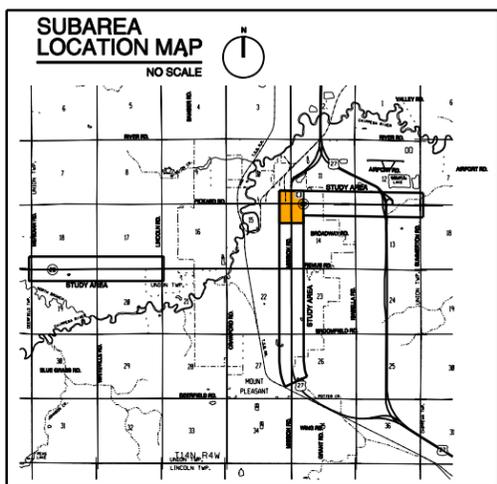
For instance, almost anything that can be done to reduce/eliminate access within the functional area of the Mission/Pickard intersection should be pursued, given the high traffic volumes at that location. That includes pursuing internal access between the commercial sites on the northeast corner of the intersection and the existing Meijer site. One of the two recommended internal connections is being implemented as this plan is being developed.

There are also several locations where the plan addresses side street access that is too close to the intersection (including on-street parking) and in one instance (at Wisconsin Street) where the recommendations include narrowing an existing very wide commercial driveway.



LEGEND

	CLOSE/ELIMINATE DRIVEWAY
	DEVELOP INTERNAL CONNECTION/CROSS ACCESS
	SPEED LIMIT IN AREA
	SIGNAL OR FLASHING BEACON
	POTENTIAL SERVICE DRIVE ALIGNMENT
	RECOMMENDED DRIVEWAY LOCATION
	POOR DRIVEWAY OFFSET
	24-HOUR VOLUME (APRIL-2005)



**US-127 BR/M-20
ACCESS MANAGEMENT PLAN**
CITY OF MOUNT PLEASANT SCALE 1"=200'

AERIAL PHOTOGRAPHY PROVIDED M.D.O.T.
DATE OF PHOTOGRAPHY: WINTER 2005



The commercial parcels along this section tend to have less depth than other areas so service drive recommendations are limited. There are recommendations, however, for internal connections between adjacent commercial parking areas that will help reduce conflicts on Mission Street. Also, continued or expanded use of the alley that runs parallel to Mission along the west side should be promoted – likely tied to potential widening of that alley if the opportunity arises.

Pickard Street (M-20) – Mission Street to Summerton Road

Figures 9 through 12 illustrate the plan’s access management recommendations for this section of the study area. Although there are recommendations for the few undeveloped parcels, they are largely retrofit-type recommendations given the predominantly developed nature of the Pickard Street corridor.

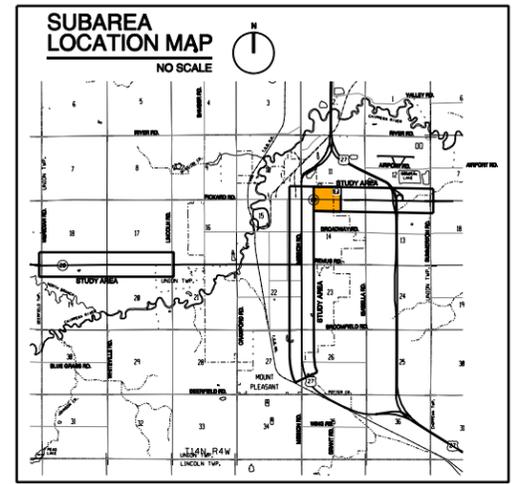
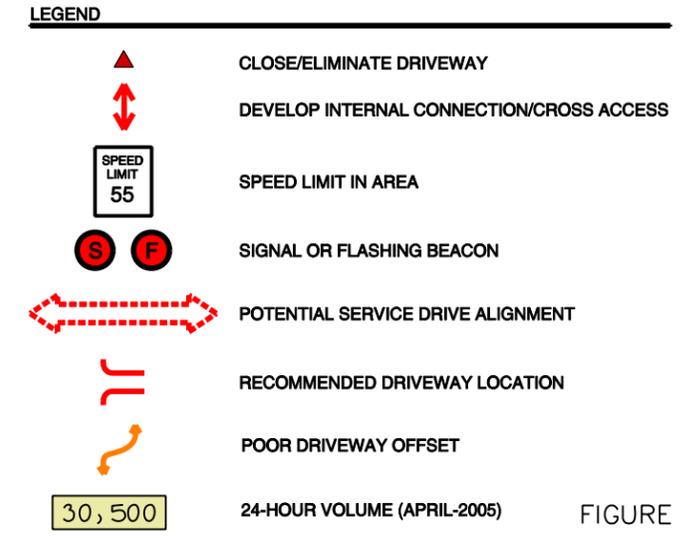
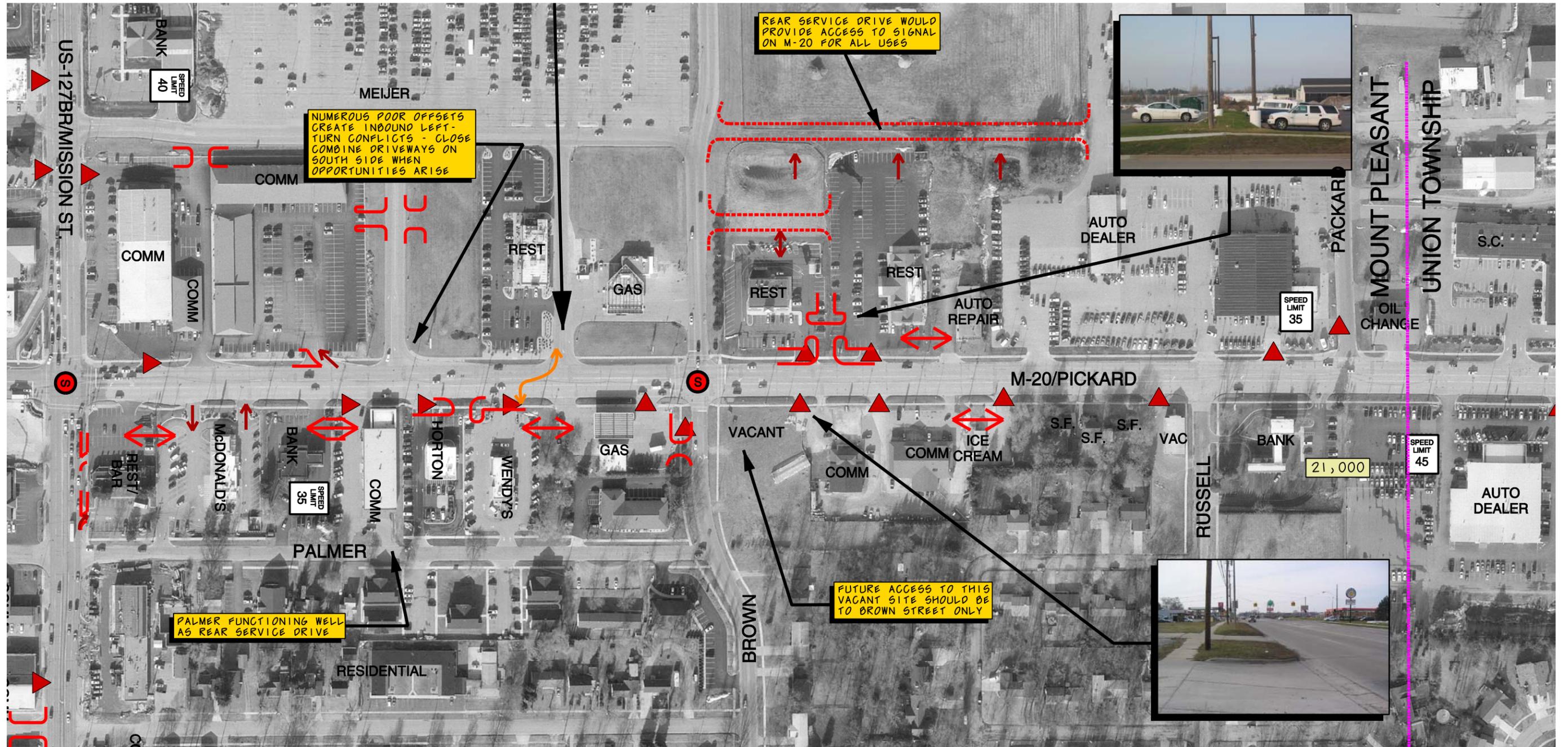
Since this corridor’s development is relatively newer than that of Mission Street, the number of recommended driveway closures per mile due to driveway spacing is somewhat less, although there still are subsections where this is an issue and is addressed. The section just west of Belmont on the north side is recommended for closure/combining of at least 4 of the



eight existing driveways that are located within a 650 foot section. Of particular importance is the area next to the US-127/M-20 interchange. In order to provide a safer and more efficient roadway section at this key hub, recommendations include closing several existing commercial driveways and making better use of existing main access points, specifically the signalized northbound off-ramp/Home Depot intersection.

Recommendations include development of short rear service drive segments at a couple of locations; one behind the sites on the northeast corner of the Pickard/Brown intersection, and one located behind the northwest corner parcels at the Pickard/Isabella intersection. Both of these are designed to provide indirect access to a signalized intersection, thereby providing for safer left-turn movements.

Existing poor driveway offsets are also addressed. Current inbound left-turn conflicts observed in the opposing but offset college and Enterprise Drive “intersections” can be eliminated if the main driveway to the college is relocated to align with Enterprise. Combining restaurant drives in the section immediately east of Mission will also address current driveway offset issues. The plan notes that, in that same area, Palmer Street is functioning as a rear service drive type of facility.

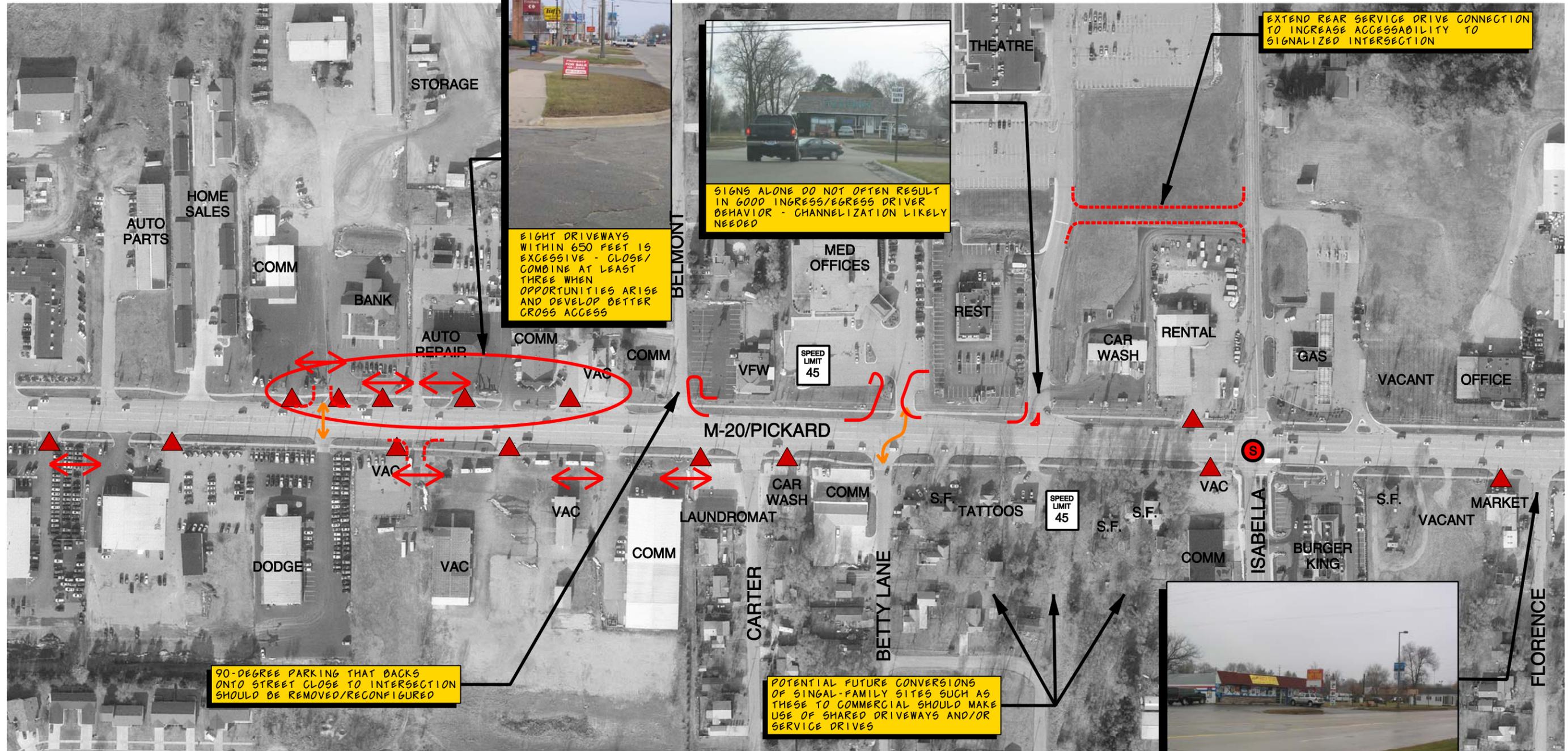


**US-127 BR/M-20
ACCESS MANAGEMENT PLAN**
CITY OF MOUNT PLEASANT SCALE 1"=200'

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FIGURE 9



US-127 BR/M-20 ACCESS MANAGEMENT PLAN

UNION CHARTER TOWNSHIP SCALE 1"=200'

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LEGEND

- CLOSE/ELIMINATE DRIVEWAY
- DEVELOP INTERNAL CONNECTION/CROSS ACCESS
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- POTENTIAL SERVICE DRIVE ALIGNMENT
- RECOMMENDED DRIVEWAY LOCATION
- POOR DRIVEWAY OFFSET
- 24-HOUR VOLUME (APRIL-2005)

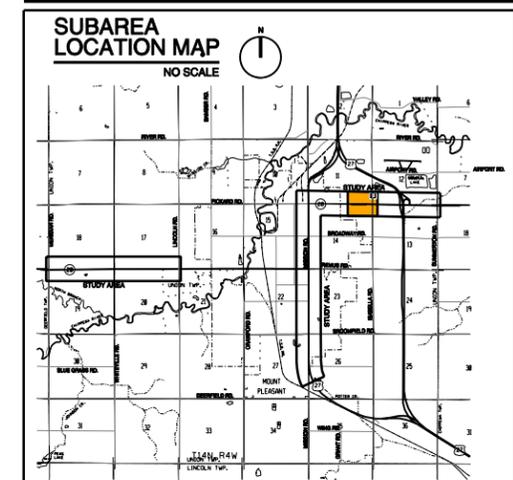
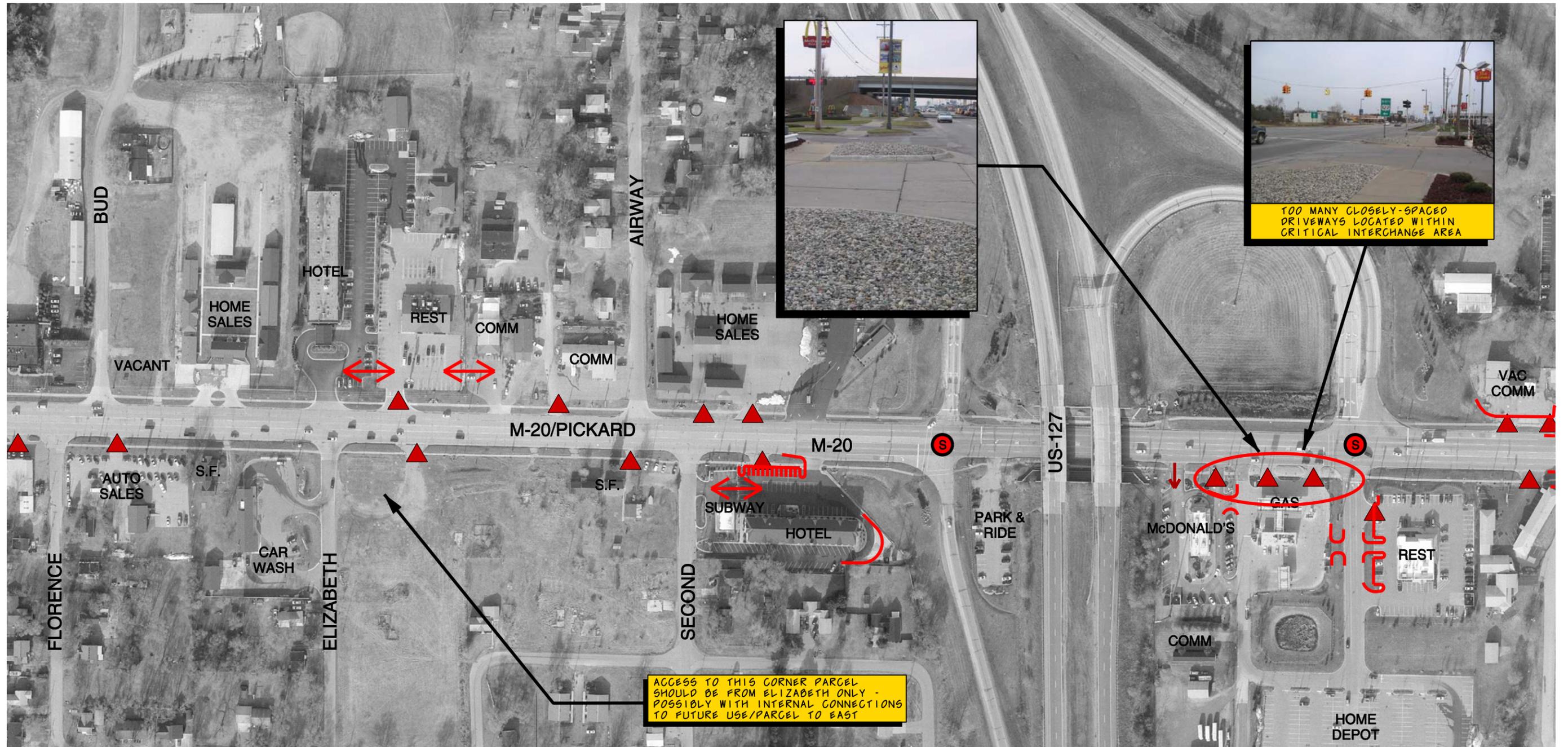


FIGURE 10



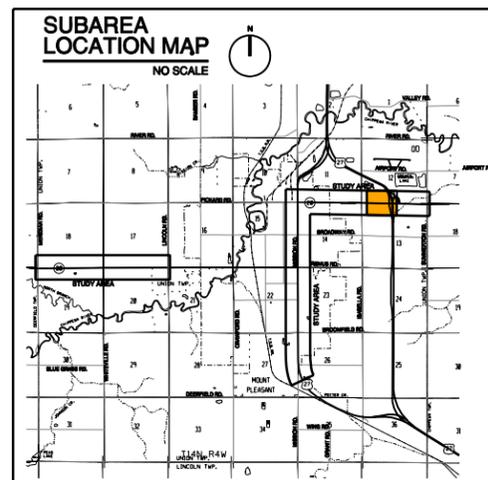
ACCESS TO THIS CORNER PARCEL SHOULD BE FROM ELIZABETH ONLY - POSSIBLY WITH INTERNAL CONNECTIONS TO FUTURE USE/PARCEL TO EAST

TOO MANY CLOSELY-SPACED DRIVEWAYS LOCATED WITHIN CRITICAL INTERCHANGE AREA

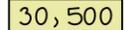
**US-127 BR/M-20
ACCESS MANAGEMENT PLAN**
UNION CHARTER TOWNSHIP SCALE 1"=200'

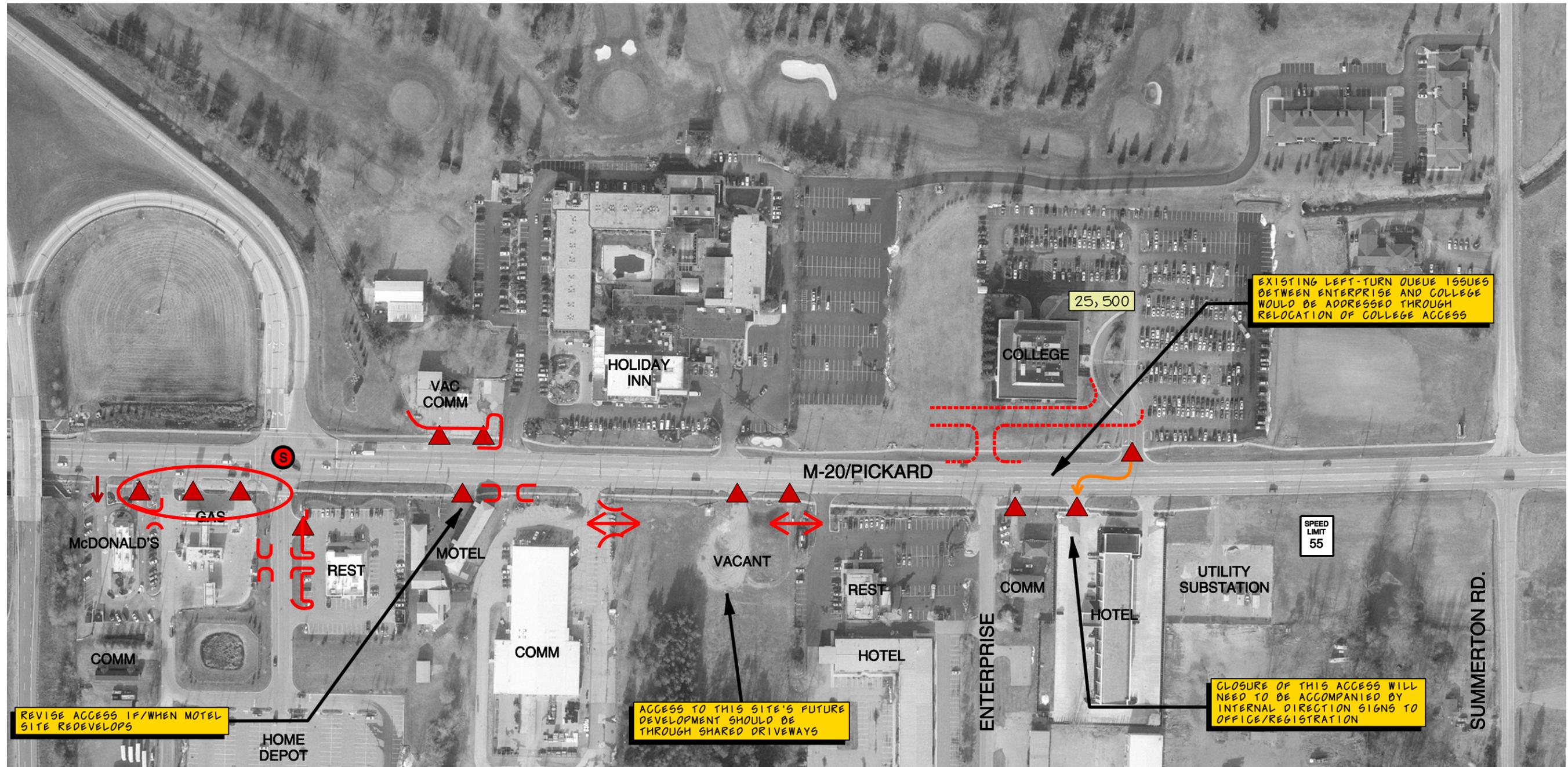
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LEGEND

-  CLOSE/ELIMINATE DRIVEWAY
-  DEVELOP INTERNAL CONNECTION/CROSS ACCESS
-  SPEED LIMIT IN AREA
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-  POTENTIAL SERVICE DRIVE ALIGNMENT
-  RECOMMENDED DRIVEWAY LOCATION
-  POOR DRIVEWAY OFFSET
-  24-HOUR VOLUME (APRIL-2005)



REVISE ACCESS IF/WHEN MOTEL SITE REDEVELOPS

ACCESS TO THIS SITE'S FUTURE DEVELOPMENT SHOULD BE THROUGH SHARED DRIVEWAYS

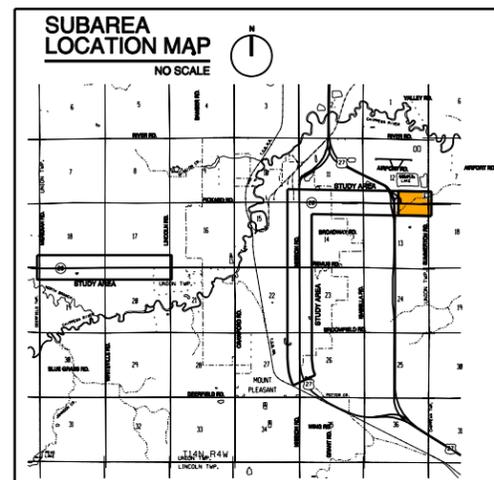
EXISTING LEFT-TURN QUEUE ISSUES BETWEEN ENTERPRISE AND COLLEGE WOULD BE ADDRESSED THROUGH RELOCATION OF COLLEGE ACCESS

CLOSURE OF THIS ACCESS WILL NEED TO BE ACCOMPANIED BY INTERNAL DIRECTION SIGNS TO OFFICE/REGISTRATION

**US-127 BR/M-20
ACCESS MANAGEMENT PLAN**
UNION CHARTER TOWNSHIP SCALE 1"=200'

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LEGEND

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- RECOMMENDED DRIVEWAY LOCATION
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- 24-HOUR VOLUME (APRIL-2005)

M-20 (Remus Road) – Lincoln Road west to Meridian Road

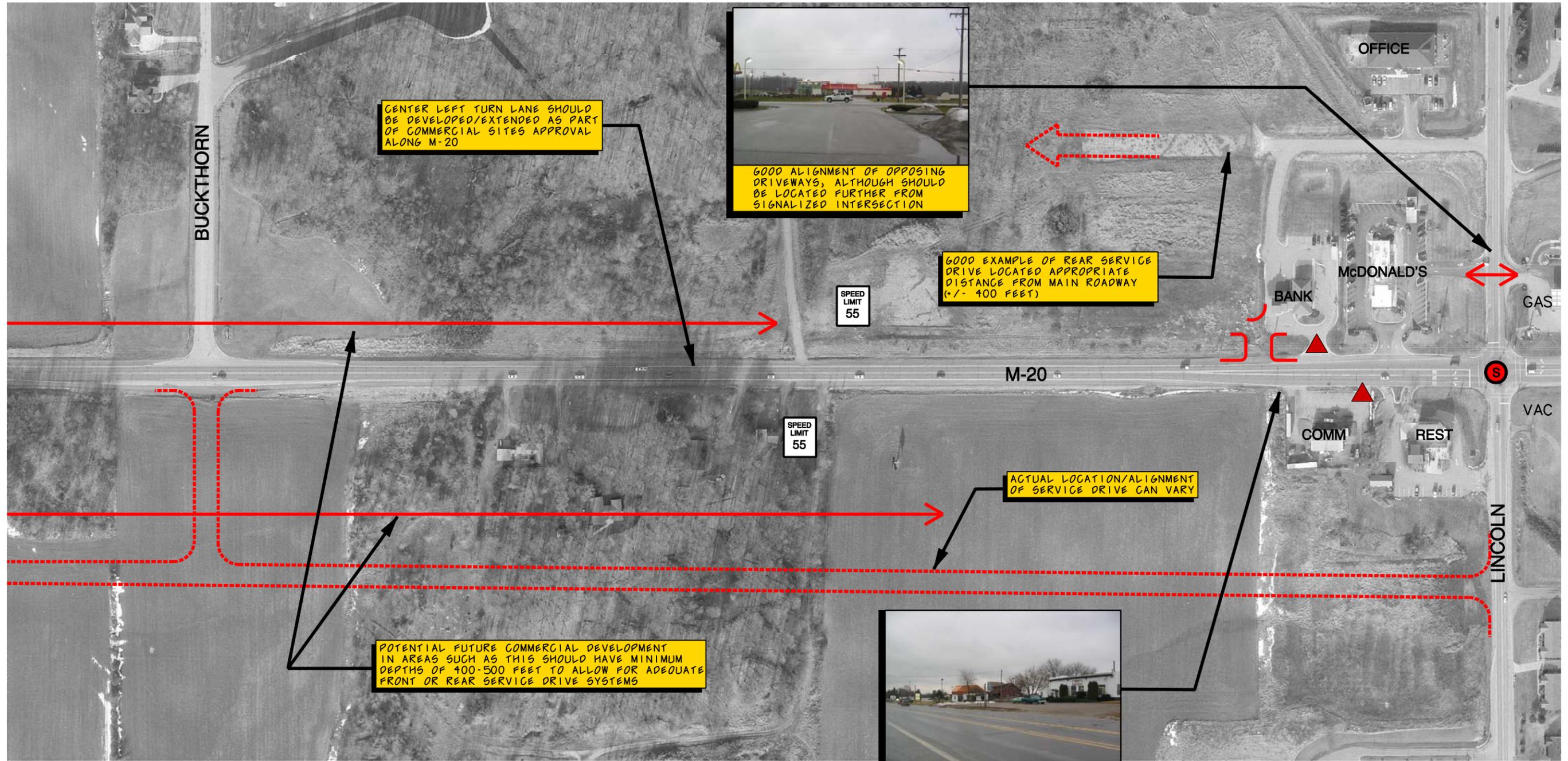
As noted in other chapters, this section of the overall study area is quite different, mostly in terms of the level of development. Therefore, although there are a few retrofit access changes, the recommendations are more oriented towards defining how and where future commercial or residential plat access should occur.

Depicted in the following pages (Figures 13 through 16), retrofit recommendations are limited to several commercial driveway closures or relocations at both ends of this subarea.

In terms of future access to commercially planned areas, recommendations include pursuing a combination of shared access points, good spacing of those access onto M-20, and the continued development of rear or front service drives. Current land use plans provide for good depth of commercial development, or enough so to provide room enough for construction of service drives that can serve multiple sites with fewer drives to the higher speed (55 mph) highway.



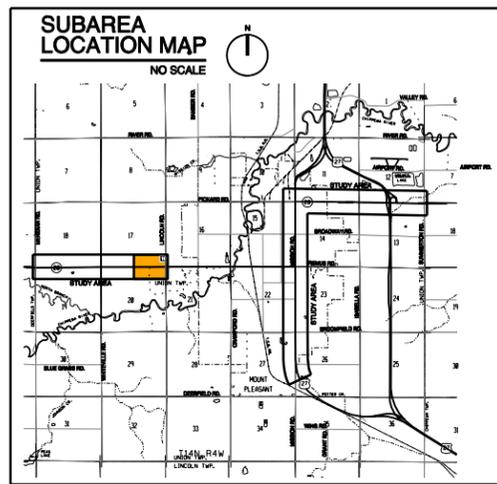
Access spacing recommendations of 660-800 feet also apply to any potential future residential plats that may be pursued towards the western portion of this subarea. As with any such development, individual home access should be from internal plat streets, not directly onto M-20.



US-127 BR/M-20
ACCESS MANAGEMENT PLAN
 UNION CHARTER TOWNSHIP SCALE 1"=200'



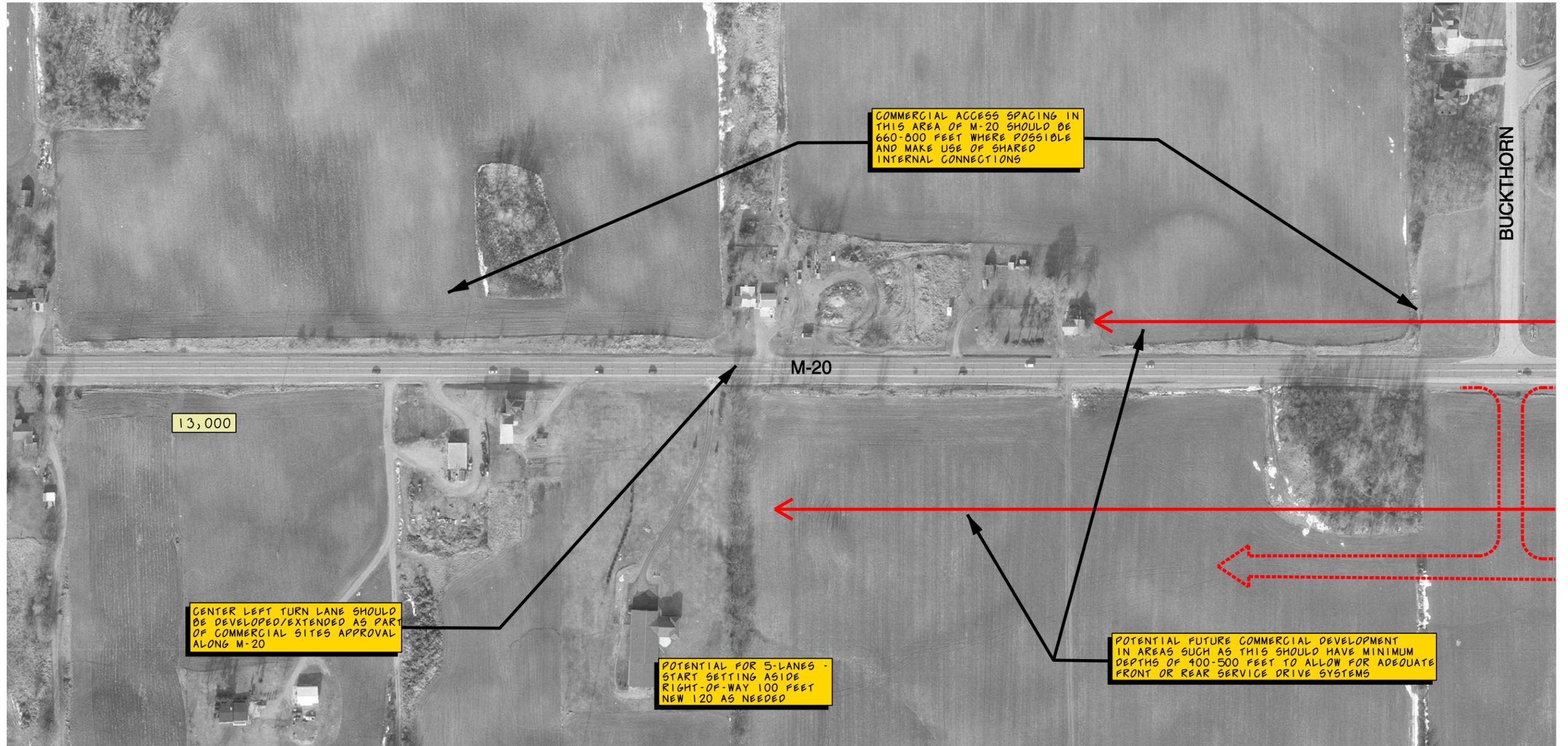
AERIAL PHOTOGRAPHY PROVIDED M.D.O.T.
 DATE OF PHOTOGRAPHY: WINTER 2005



LEGEND

	CLOSE/ELIMINATE DRIVEWAY
	DEVELOP INTERNAL CONNECTION/CROSS ACCESS
	SPEED LIMIT IN AREA
	SIGNAL OR FLASHING BEACON
	POTENTIAL SERVICE DRIVE ALIGNMENT
	RECOMMENDED DRIVEWAY LOCATION
	POOR DRIVEWAY OFFSET
	24-HOUR VOLUME (APRIL-2005)

FIGURE 13

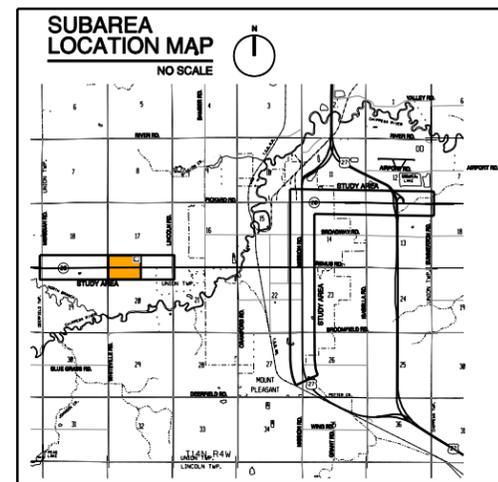


US-127 BR/M-20 ACCESS MANAGEMENT PLAN

UNION CHARTER TOWNSHIP SCALE 1"=200'



AERIAL PHOTOGRAPHY PROVIDED M.D.O.T.
DATE OF PHOTOGRAPHY: WINTER 2005



LEGEND

-  CLOSE/ELIMINATE DRIVEWAY
-  DEVELOP INTERNAL CONNECTION/CROSS ACCESS
-  SPEED LIMIT IN AREA
-  SIGNAL OR FLASHING BEACON
-  POTENTIAL SERVICE DRIVE ALIGNMENT
-  RECOMMENDED DRIVEWAY LOCATION
-  POOR DRIVEWAY OFFSET
-  24-HOUR VOLUME (APRIL-2005)

FIGURE 14



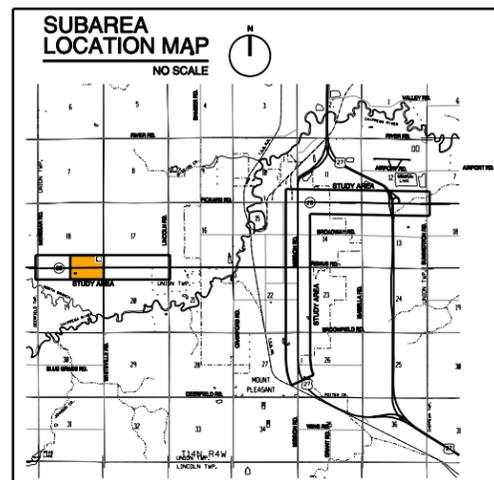
COMMERCIAL OR RESIDENTIAL PLAT ACCESS SPACING IN THIS AREA OF M-20 SHOULD BE 660-800 FEET WHERE POSSIBLE AND MAKE USE OF SHARED INTERNAL CONNECTIONS

**US-127 BR/M-20
ACCESS MANAGEMENT PLAN**
UNION CHARTER TOWNSHIP SCALE 1"=200'

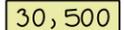


AERIAL PHOTOGRAPHY PROVIDED M.D.O.T.
DATE OF PHOTOGRAPHY: WINTER 2005

ProgressiveAE LSL Planning, Inc.



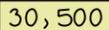
LEGEND

-  CLOSE/ELIMINATE DRIVEWAY
-  DEVELOP INTERNAL CONNECTION/CROSS ACCESS
-  SPEED LIMIT IN AREA
-  SIGNAL OR FLASHING BEACON
-  POTENTIAL SERVICE DRIVE ALIGNMENT
-  RECOMMENDED DRIVEWAY LOCATION
-  POOR DRIVEWAY OFFSET
-  24-HOUR VOLUME (APRIL-2005)



COMMERCIAL OR RESIDENTIAL PLAT ACCESS SPACING IN THIS AREA OF M-20 SHOULD BE 660-800 FEET WHERE POSSIBLE AND MAKE USE OF SHARED INTERNAL CONNECTIONS

LEGEND

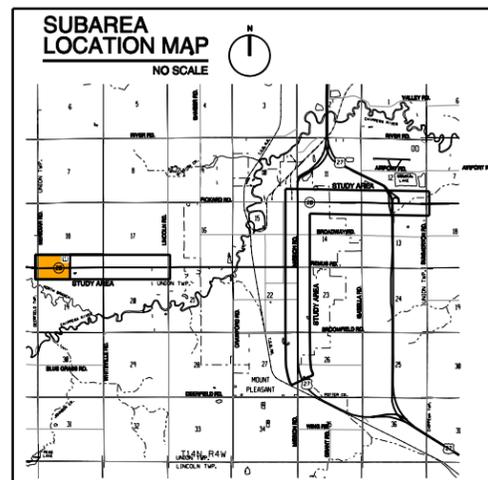
-  CLOSE/ELIMINATE DRIVEWAY
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US-127 BR/M-20 ACCESS MANAGEMENT PLAN

UNION CHARTER TOWNSHIP SCALE 1"=200'



AERIAL PHOTOGRAPHY PROVIDED M.D.O.T.
DATE OF PHOTOGRAPHY: WINTER 2005



General Land Use Recommendations

Although access management is primarily intended to improve motor vehicle traffic flow, it can support transportation demand management by integrating transportation and land use planning, and by improving transportation options. Improved transportation options result in a more diverse and flexible transportation system that can accommodate variable and unpredictable conditions. A goal is to develop plans for US-127 BR and M-20 that will allow rational development while maintaining or improving safety and mobility along an existing roadway. This can be a powerful tool to direct development or redevelopment along the study area corridors. Access management can increase the capacity of a corridor to accommodate development, and can minimize development pressure in areas where development is not planned.

General land use strategies that can be used to accomplish access management strategies on one or more of the study corridor subareas include:

- **Establish future right-of-way needs for the corridor:** Although the existing 100 feet of right-of-way appears to be sufficient at this time on M-20/Remus Road to the west to accommodate recommendations of this plan, it should be determined whether additional right-of-way may be needed in the future to provide for future roadway and access improvements. Future cross sections for the roadway should gain agreement between MDOT and the Township. Specific issues that should be considered in establishing future right-of-way needs (widths) include:
 - Allow for variations in road location, based on existing development and natural elements which the Township may wish to preserve;
 - Accommodate drainage needs and topographical changes;
 - Accommodate operational features such as turn lanes at intersections and potential transit facilities; and
 - Flexibility in road design to allow for bike lanes, sidewalks, buffer strips between the curb and sidewalk, etc.

- **Increase minimum lot frontage along the corridors:** There exist multiple areas along the corridor that are undeveloped, mostly within Union Township on M-20/Remus Road. Minimum lot width requirements should be examined to insure future lot splits are not too narrow to meet frontage requirements based on access spacing standards. In particular, minimum lot widths within the overlay district should be between 400-600 feet in order to meet the desired spacing requirement between access points. This minimum lot frontage can be varied if one or more of the following is provided:
 - Provisions are made to share access between parcels; and/or
 - A determination has been made that topographic conditions preclude the ability to meet the driveway spacing standards.

- **Adjust front yard setback requirements:** Front yard building setbacks within the overlay district should account for future right-of-way needs and access options. One option is to establish setbacks measured from the centerline of the road. In cases where a service drive and/or frontage road is being provided, a minimum of eighty (80) to one hundred (100) feet is needed between the M-20 centerline and the pavement of the service drive/frontage road. In order to minimize disruption and preserve areas for future right-of-way, setback requirements could be increased with no detention/improvements between the existing right-of-way and parking and building.

- **Site Plan requirements:**

While there is no set time for implementing access management standards, the pace of development or redevelopment within the study area often determines the schedule for implementation. Access management standards within the US-127BR/M-20 Overlay District should be implemented by evaluating proposed access for each new or redeveloping property independently to determine its relationship to corridor plans and policies.

5. ADOPTION and USE of the PLAN

Successful implementation of the recommendations in the US-127BR/M-20 Access Management Plan requires a partnership between the City of Mt. Pleasant, Charter Township of Union, and MDOT. This requires that the City and Township Planning Commissions, elected bodies, and members of the zoning boards of appeals be aware of the benefits of access management and their role in its implementation.

A coordinated and comprehensive access management approach is essential if future development and redevelopment in the study area is to be accommodated and traffic safety and flow in the area is to be improved. Development decisions along US-127BR/M-20 are under the purview of several agencies. The City and Township have jurisdiction over land use planning, zoning, site plan and subdivision review outside the US-127BR/M-20 rights-of-way and full jurisdiction on side streets. The City of Mt. Pleasant, the Isabella County Road Commission and MDOT, have control over improvements within the US-127BR/M-20 rights-of-way.

One technique to help implement the Plan is to amend the local zoning ordinance to acknowledge the special standards and review procedures for the US-127BR/M-20 corridors. Part of the Access Management Plan project is to craft a zoning ordinance amendment for the City and Township and assist with having them adopted. This process will continue after the completion of this Plan.

The US-127BR/M-20 overlay zoning districts would be placed over the existing zoning regulations for all parcels with frontage along US-127BR/M-20 and along intersecting roads within three hundred fifty (350) feet of the US-127BR/M-20 rights-of-way. 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.

The focus of the overlay zone is a set of access management standards. Access management is a set of proven techniques that can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, minimize crash frequencies, 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.

Not all sites will be able to meet all of the access management standards, particularly older sites with existing development. In order to address these situations the ordinance provides the authority to modify the standards on a case-by-case basis, with guidance on a site-specific scale coming from the recommendations outlined in this Plan.

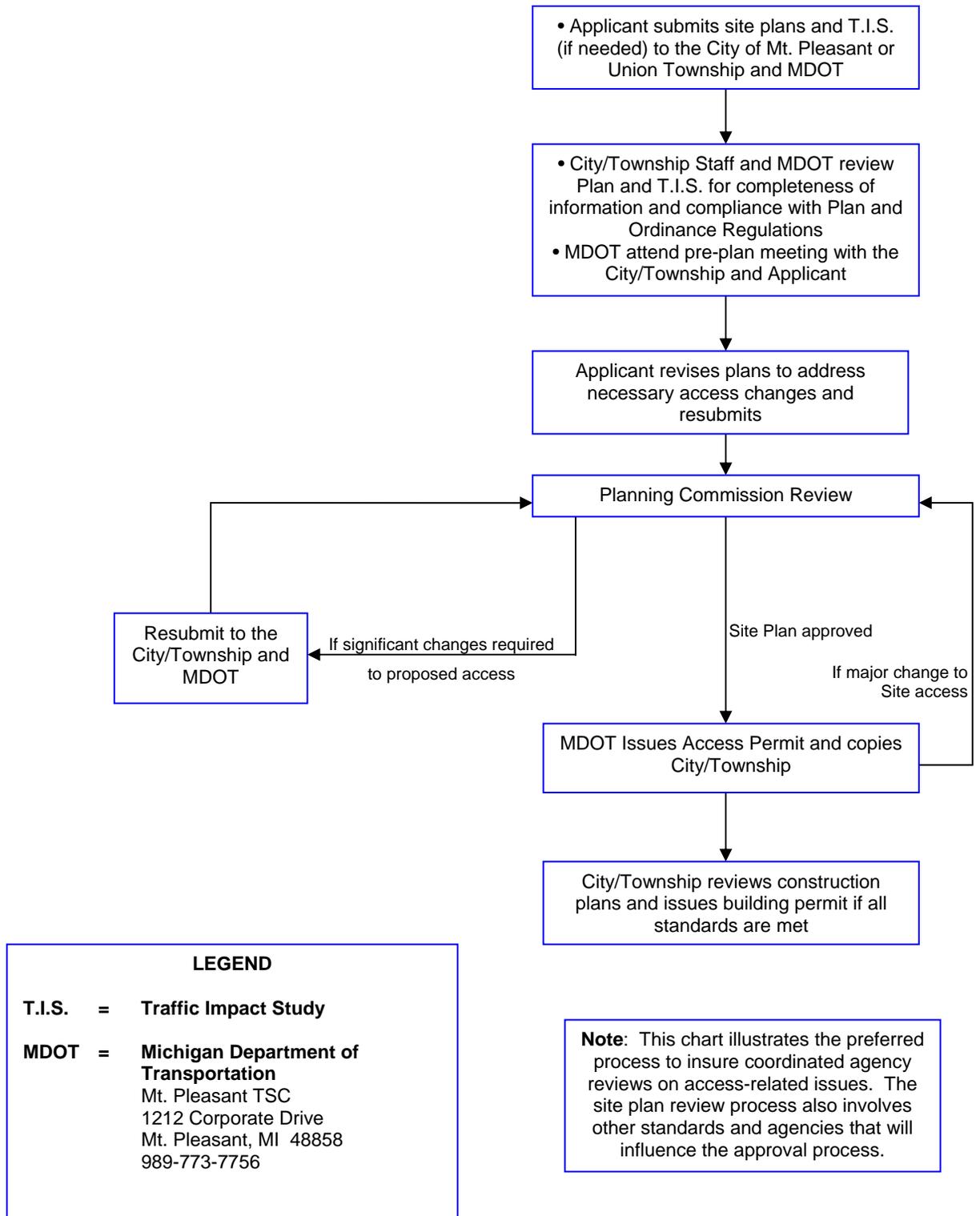
The ordinance also requires traffic impact studies be performed for larger developments that have the potential to generate significant volumes of traffic. These studies would evaluate the impact that a proposed development will have on the road system and identify mitigation to offset the impact. The ordinance makes reference to the handbook “Evaluating Traffic Impact Studies, a Recommended Practice for Michigan,” developed by the MDOT and Tri-County Regional Planning Commission as the required methodology for completing the study.

The flow chart illustrated on Figure 17 on the next page outlines the recommended process to be followed in review of any development proposal along the US-127BR/M-20 corridors. It provides for a coordinated review by the City of Mt. Pleasant, Union Charter Township, and MDOT (could be revised to include the Isabella County Road Commission for instances where side road access is an issue). The intent of the process is to ensure that the local unit’s of government review of the site plan design and MDOT’s access permit process is coordinated to implement the recommendations of this plan. The process provides for a feedback loops between the planning commission and MDOT as modifications are made to access and circulation.

To continue the implementation of the US-127BR/M-20 Access Management Plan, the Steering Committee should continue to meet on a regular basis. This will provide a forum to discuss and coordinate major development proposals, traffic impact studies, access issues, right-of-way preservation and roadway cross-section designs, rezoning proposals, ordinance text amendments, local master plan updates, roadway improvements, non-motorized transportation, streetscape enhancement, and other common issues along the corridors.

It should be noted that the recommendations outlined in this plan can be used on other area corridors with existing or expected future access management issues. The underlying benefits obtained by maintaining good control of the number and location of commercial access points can be realized on all major roads.

FIGURE 17: Recommended Access Approval Procedure
for Site Plans, Special Land Uses,
Subdivisions and Site Condominiums



LEGEND

T.I.S. = **Traffic Impact Study**

MDOT = **Michigan Department of Transportation**
Mt. Pleasant TSC
1212 Corporate Drive
Mt. Pleasant, MI 48858
989-773-7756

Note: This chart illustrates the preferred process to insure coordinated agency reviews on access-related issues. The site plan review process also involves other standards and agencies that will influence the approval process.

APPENDIX

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 Mt. 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/Township 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 Mt. 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 Access Management Plan requires a partnership between Union Township, the City of Mt. Pleasant, MDOT and the Isabella County Road Commission. This requires the planning commissions, Township Board, City Commission, 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 corridors 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. 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 Mt. 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 corridors, 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.

U.S.-127 B.R./M-20 Access Management Overlay Zone

Section _____ Findings

The need for this district is based, in part, on specific studies for Pickard, Remus, and Mission Roads (M-20 and/or U.S.-127 B.R.) that conclude the road's capacity is insufficient to accommodate volumes in the future. Continued development along the corridors 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 U.S.-127 B.R./M-20 Access Management Plan.

The City/Township find that special comprehensive standards are needed along the M-20 and US-127 BR corridors 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 Road Commission, Michigan Department of Transportation and the City of Mt. Pleasant has jurisdiction within the highway's right-of-way, while Union Township and the City of Mt. 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 Charter Township of Union and the City of Mt. Pleasant on access decisions along M-20 and US-127 BR to implement the recommendations of the U.S.-127 B.R./M-20 Access Management Plan and other adopted community plans.

Among the specific purposes of this 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 U.S.-127 B.R./M-20 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 corridors 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 City/Township with the Michigan Department of Transportation and the Isabella 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, U.S.-127 B.R. and/or M-20, illustrated as the U.S.-127 B.R./M-20 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. The Planning Commission, Road Commission, and MDOT shall conduct an evaluation of compliance with the standards of this Overlay Zoning District and the U.S.-127 B.R./M-20 Access Management Plan (*Section _____ Access Management Standards*) and the property shall be brought into compliance prior to issuance of any permits or approvals, if any of the following circumstances exist:

1. Proposed erection or reconstruction of a building or structure and/or expansion of an existing building;
2. Proposed land division, subdivision or site condominium project;
3. Proposed construction or expansion of a parking lot;
4. Any change of use resulting in an increase in peak hour trip generation of at least 20% greater than the peak hour trip generation of the previous use, according to the Institute of Transportation Engineers (ITE) Trip Generation standards;
5. Any other circumstance where site plan review is required by this ordinance;

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 U.S.-127 B.R./M-20 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 U.S.-127 B.R./M-20 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 U.S.-127 B.R./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, and be irrevocable without consent of both the local unit of government and MDOT .
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 is required for any special land use that would be expected to generate 100 or more directional 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 City/Township. 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. In addition, the City/Township shall not approve any permits without an MDOT approved access permit.

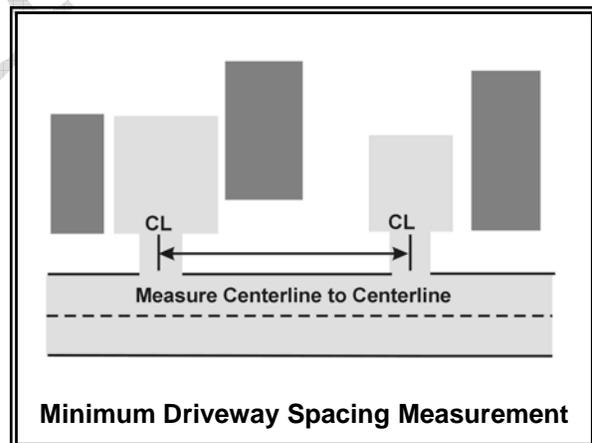
Section _____ Access Management Standards

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 access point may be permitted by the Planning Commission upon finding the conditions A and B, or C and D, below exist. The additional access point 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

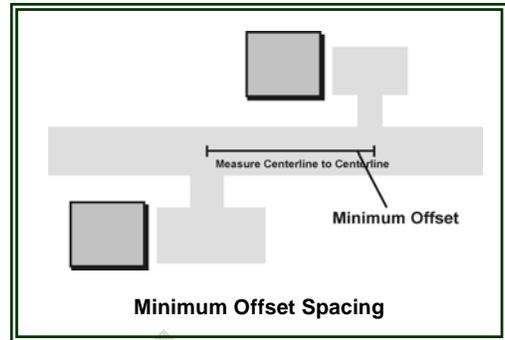
 - C. A traffic impact study, prepared in accordance with accepted practices as described in this chapter, demonstrates the site will generate over 300 trips in a peak hour or 3000 trips daily, or 400 and 4000 respectively if the site has access to a traffic signal, and
 - D. The traffic study demonstrates 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/or 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.



<u>Posted Speed limit</u>	<u>Along M-20/US-127 BR *</u>	<u>Along other Roadways</u>
-------------------------------	-----------------------------------	---------------------------------

* 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/or 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 City/Township 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 along both the State Trunkline (M-20 and/or U.S.-127 B.R.) and intersecting roadways shall be in accordance with the table below (measured from pavement edge to pavement edge as shown on the figure):

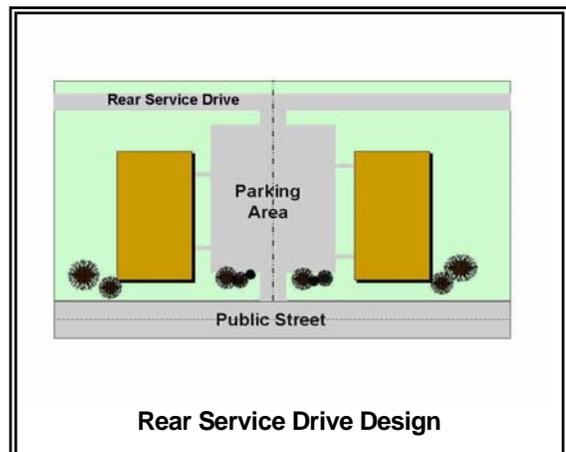
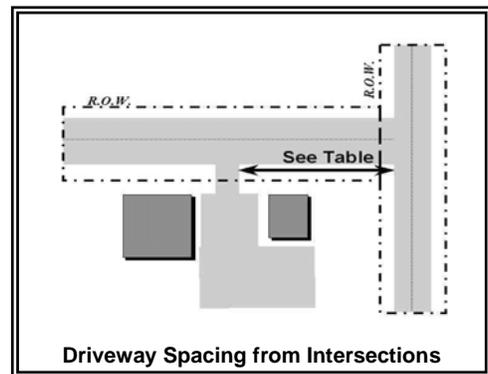
Signalized locations: *

<u>Posted Speed Limit</u>	<u>Minimum Spacing</u>
30 to 35 mph	230 feet
40 to 55 mph	460 feet

Unsignalized locations:

<u>Posted Speed Limit</u>	<u>Minimum Spacing</u>
30 to 35 mph	115 feet
40 to 55 mph	230 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:

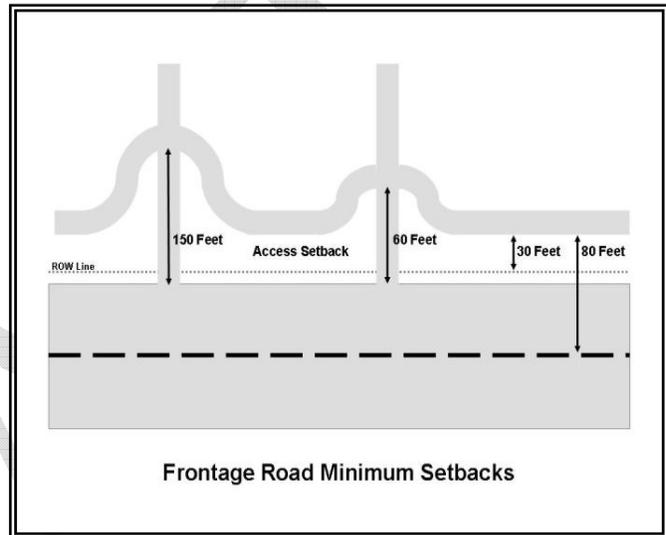
- A. Service drives and frontage roads shall be set back as far as reasonably possible from the intersection of the access driveway with the public street, and maintain the following distance requirements (whichever is greater):

Minimum of thirty (30) feet from the nearest edge of the service drive to the edge of the U.S.-127 B.R. and/or M-20 right-of-way.

or

Minimum of eighty (80) feet from the nearest edge of the service drive to the U.S.-127 B.R. and/or M-20 centerline.

Between a minimum of sixty (60) feet and one-hundred fifty (150) feet of throat depth, depending on the trip generation characteristics of the site, shall be provided at the access point, as measured from exit lane stop bar to service drive.



- 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 U.S.-127 B.R./M-20 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 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 corridors, modifications to the standards in Section _____ above and beyond those recommended in the US-127 BR and M-20 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 U.S.-127 B.R./M-20 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 to the Zoning Board of Appeals that conditions prohibit

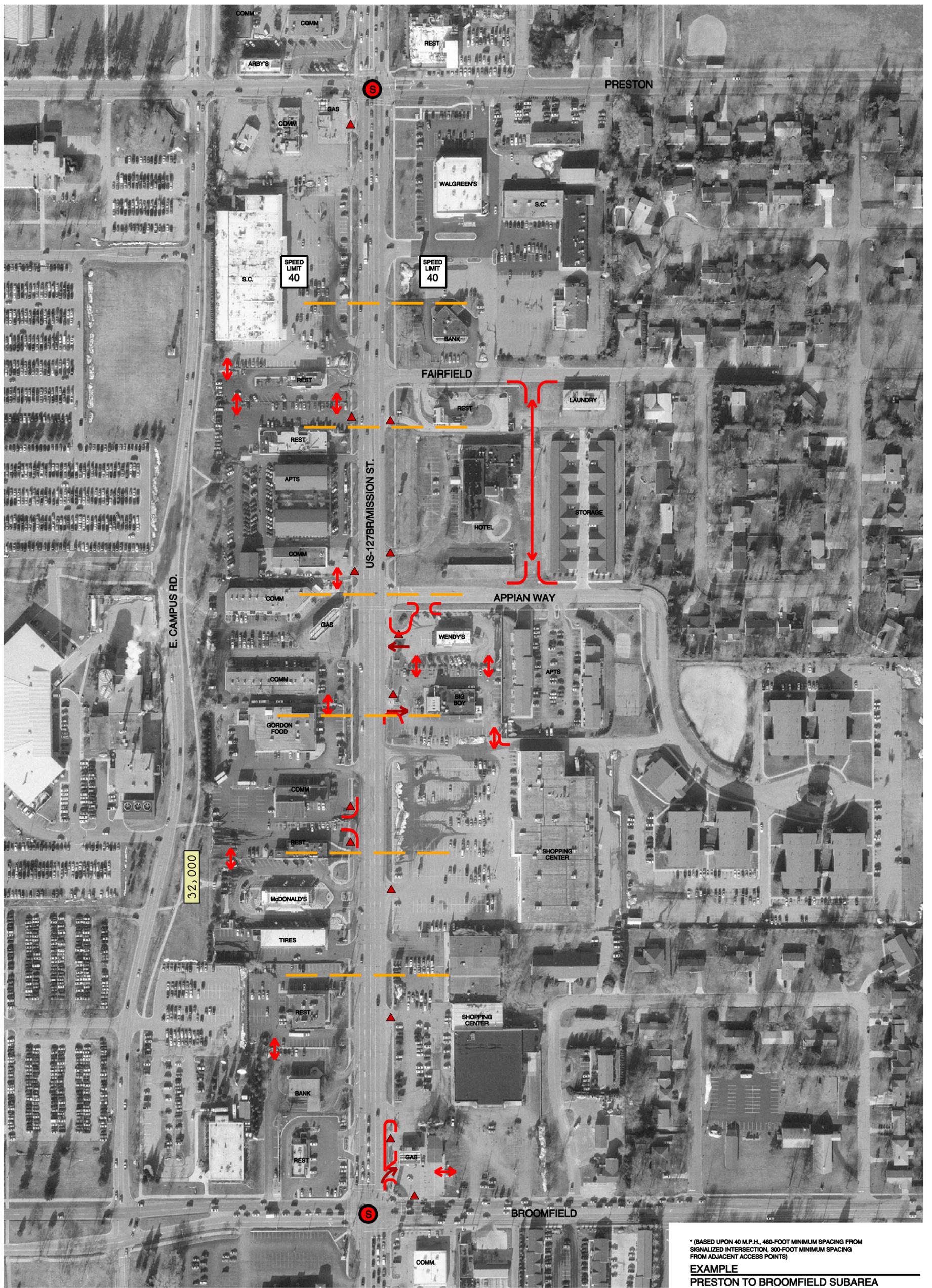
adherence to the access standards of this district, the Zoning Board of Appeals may consider a variance from the standards herein. In such cases, the Board shall make a finding that the applicant meets all of the following criteria

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 MDOIT 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 U.S.-127/M-20 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.

U.S.-127 B.R./M-20 Access Management 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 U.S.-127 B.R./M-20 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 U.S.-127 B.R./M-20 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 corridors 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?



* (BASED UPON 40 M.P.H., 480-FOOT MINIMUM SPACING FROM SIGNALIZED INTERSECTION, 300-FOOT MINIMUM SPACING FROM ADJACENT ACCESS POINTS)

- EXAMPLE**
PRESTON TO BROOMFIELD SUBAREA
- CURRENT NUMBER OF DRIVEWAYS: 35
 - FUTURE NUMBER OF DRIVEWAYS W/PLAN: 26
 - MAXIMUM NUMBER OF DRIVEWAYS IF CURRENT MDOT GUIDELINES WERE STRICTLY APPLIED: 12*

LEGEND

- ▲ RECOMMENDED DRIVEWAY CLOSURE (PRELIMINARY)
- ↕ RECOMMENDED INTERNAL CONNECTION (PRELIMINARY)
- || RECOMMENDED LOCATION FOR RELOCATED/SHARED DRIVEWAY (PRELIMINARY)
- APPROXIMATE LOCATION OF DRIVEWAY IF MDOT GUIDELINES WERE STRICTLY APPLIED



SUBAREA ACCESS COMPARISON

PRESTON TO BROOMFIELD

SCALE 1"=100'

AERIAL PHOTOGRAPHY PROVIDED BY MDOT
 DATE OF PHOTOGRAPHY: WINTER 2006

Progressive

LSL Planning, Inc.

Access Management: U.S. 127 B.R. and M-20

Prepared for the U.S. 127
Business Route / M-20
Access Management Study
June 29, 2006



Project Team

- Michigan Department of Transportation
- Isabella County Road Commission
- City of Mount Pleasant
- Charter Township of Union
- Consultant Team:
 - LSL Planning, Inc.
 - Progressive AE, Inc.



Study Background

- MDOT, City of Mt. Pleasant and Charter Township of Union
- Driven by increase in congestion and crashes created by developments along main corridors
- Land use/access management plan to determine access options to reduce unnecessary access to the study roads ('retrofit' Mission and Pickard)
- Develop plan for M-20 West to prevent problems in the future



Why Access Management?

Commercial development and growth + University growth = increased vehicular and pedestrian traffic along M-20 and 127 BR

- **2000-2004 Data:**
 - As many as one crash/day
 - 85-90 access points/mile (40/mile preferred)
- Many drives with poor offsets!
- Graphic>



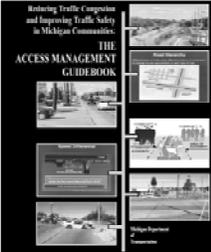
Access Management Study Goals

- Identify ways to improve traffic flow
- Improve safety
- Address pedestrian and transit needs
- Ensure coordination on access decisions
- Public input and comment
- Sustain/increase vitality of businesses



The Access Management Guidebook

- MDOT Access Management Task Force
- Based on numerous studies in other states
- National research and publications
- Experience of many Michigan communities
- MDOT Access Management Plans




Purpose of Public Workshop



- Refresh Access Management concepts
- Review existing conditions
- Present recommendations
- Gain input



Access Management Objective: Safety

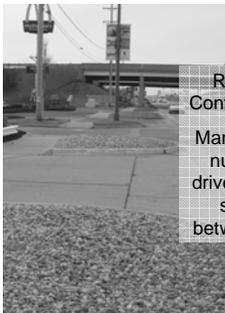
- Access management can help injuries due to crashes including injury, death, and property damage
- Doubling of access density from 10-20 access points per mile often results in about a 40% increase in expected crash rates*



*according to the Michigan Department of Transportation



Key Technique: Reduce Conflicts

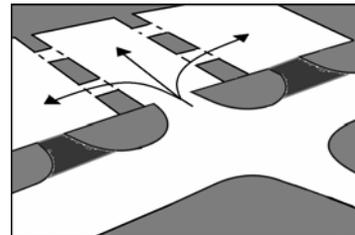


Reducing Conflict Points:
Managing the number of driveways and spacing between them

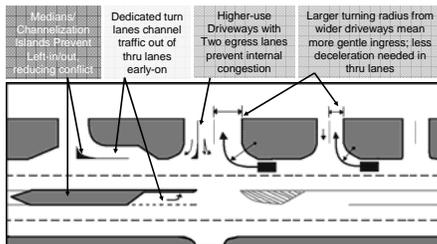


Key Technique: Sharing Access

- Connected parking lots, shared driveways and service drives
- Retrofit
- Driveway closures
- New Development



Key Techniques – Driveway Design and Geometry

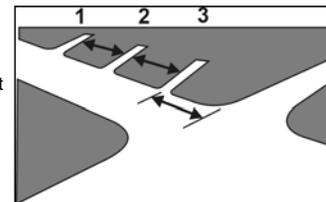


- Helps reduce conflicts between through-vehicles and those turning
- Reduces need to slow down in through-lane to turn



Key Technique: Access Spacing

- Spacing of driveways from intersections
- Spacing from adjacent driveways
- Spacing based on posted speed and other factors



Development of Driveway Design Standards

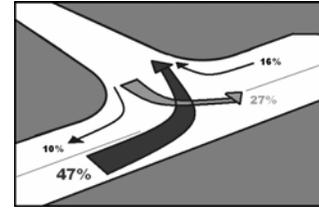
- Decreases traffic flow interruptions
- Decreases conflict points between access points
- Increases flow and efficiency
- Allows for higher % of capacity utilization
- Minimum spacing determined by speed
- Minimum spacing preferred; may be adjusted where narrow lots already exist

Speed on Roadway (mph)	MDOT Spacing Guidelines (ft)
25	130
30	185
35	245
40	300
45	350
50	455
55	455

Guidelines from the Michigan Department of Transportation



Key Technique: Limit Left Turns



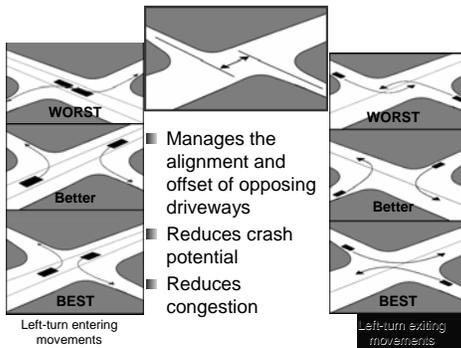
Accident Data:

Nearly 1/2 of all driveway accidents are left-in turns, while almost 3/4 of all accidents are left-turn movements.



Accident Data: From National Highway Institute A.M. Training Course

Key Technique: Offsets



- Manages the alignment and offset of opposing driveways
- Reduces crash potential
- Reduces congestion

Left-turn entering movements

Left-turn exiting movements

Key Technique: Pedestrian Safety & Aesthetics



- Continuous sidewalks safe distance from road
- Additional landscaping area



Key Techniques: Capacity

Access management can help reduce congestion and travel delays, allowing a street to accommodate more traffic safely

Examples:

- Adding dedicated turn lanes
- Closing drives
- Well-spaced access points
- Sharing Access across sites



How Do We Apply the Access Management Ordinance?

Promotion of Adopted Plan and Ordinance:

- Consideration in City, Township, State and County Road Projects
- Consideration in City, Township, State and County Planning Efforts



Implementation “Where” and “When”

Where current spacing is inadequate, close or consolidate access with any of the following (retrofit):

- New development
- Redevelopment
- Infill development
- Change of use (i.e. Residential to commercial)
- Any change of business where trips generated increases (i.e. Medical office to shopping center)
- Expansion of use
- During road reconstruction or improvement projects



Comparing Reality and Recommendations to Standards

Although ‘retrofit’ Access Management corridors recommend driveway closures and consolidations...

Example: Mission (Broomfield to Preston)

Current driveways:	35
Recommended close/consolidate:	9 (26% eliminated)
Remaining driveways:	26

If ideal driveway locations if MDOT guidelines were strictly applied...

Maximum allowed driveways (40 m.p.h.):	12* (64% eliminated)
*Six driveways on each side, aligned across Mission	

Typical Driveway Closure Costs



Closure Type	Estimated Cost*
Close/Remove Existing Commercial Driveway	\$5,000 - \$10,000
Close/Remove Two Driveways and Construct Shared Driveway	\$15,000 - \$25,000

*Costs typically borne by site owner if/when site redevelops/improves, unless planned MDOT roadway improvement project provides funds.



Implementation: Review Standards

Requiring a Review of Access

- Revised requirements for submitting an access plan
 - Tie criteria to trip generation increase instead of land use

Additional Site Plan Requirements:

- Expanded requirements for information
 - Driveway spacing and geometry for surrounding uses
- Expanded design requirements
 - Driveway turning radius, spacing, ingress/egress movements, setbacks, access roads

Traffic Impact Study

- Square footage, parking capacity possible triggers for requiring a TIS

Review Process:

- Coordination needed at all levels
 - Inter-department: planning & engineering
 - Inter-agency: City, Township, County & MDOT
 - Public/Private Partnerships

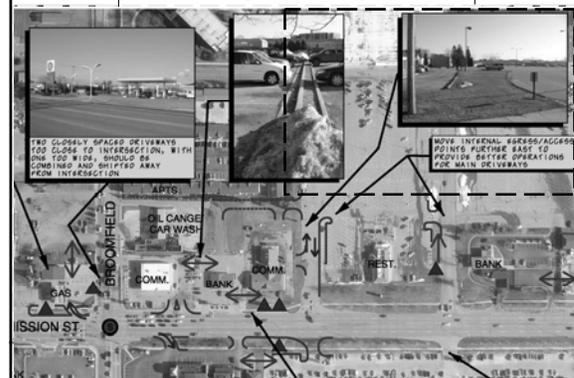


Access Management Study: Progress Update

- ✓ Get funding for plan development
- ✓ Identify steering committee and consultant team
- ✓ Analyze existing problems/issues
- ✓ Develop access management recommendations
- ✓ Develop local ordinance language
- Final public input
- Final report/plan
- Plan and ordinance adoption by City and Township



Sample Graphic





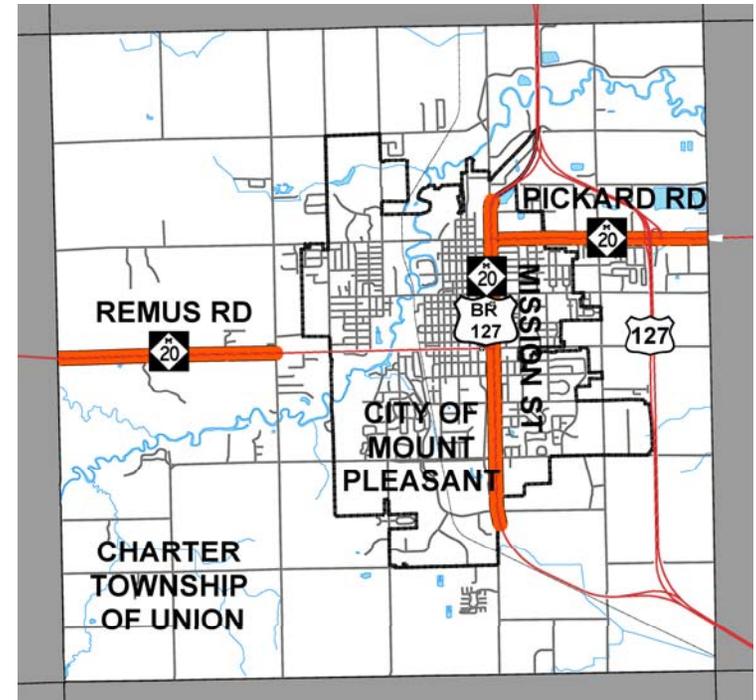
You are Invited to Learn about the Benefits of Access Management & Express Your Opinions on the U.S. 127 Business Route/M-20 Access Management Draft Plan

Problem Due to current and future safety and capacity concerns along US-127 B.R. and portions of M-20 in Mount Pleasant and the Charter Township of Union, the Michigan Department of Transportation (MDOT) is teaming up with these local communities, and a consultant team of Progressive AE and LSL Planning, to prepare an Access Management Plan and Ordinance Amendments for portions of Remus Road, Pickard Road, and Mission Street (highlighted on the map).

Access Management Access Management includes tools used to improve traffic operations and safety. Studies have found that reducing the number and/or improving the location and design of driveways can significantly improve a road's capacity and safety. Access Management works to improve spacing between driveways, improve traffic flow, reduce the likelihood of crashes, and improve aesthetics while providing reasonable access to properties.

The Project The Access Management Plan will include guidelines and site-specific recommendations for access spacing, driveway design, use of shared drives or service drives, and the identification of driveways to close or redesign. The recommendations will be based on research, review of existing conditions, and public input. Zoning ordinance amendments will be prepared for each community to implement the plan.

Public Workshops **These Public Workshops will be informal open houses that will include informational presentations on Access Management as well as opportunities to ask questions of the project team and review and discuss the preliminary recommendations prepared by the project team.**



Thursday, April 6, 3:00 – 4:30 p.m. and 5:15 - 6:30 p.m.
Mount Pleasant City Hall
401 North Main Street, Mount Pleasant, MI
Brief Presentation at 3:30 p.m. & 5:30 p.m.
Come Anytime!

For more information about the US-127 B.R./M-20 Access Management Plan contact the following project representatives:

Dave Geiger
Bay Region – Michigan DOT
(989) 754-7443

Tony Kulick
Director of Planning & Community Development
City of Mount Pleasant
(989) 779-5346

Woody Woodruff
Zoning Administrator
Union Charter Township
(989) 772-4600 x 41

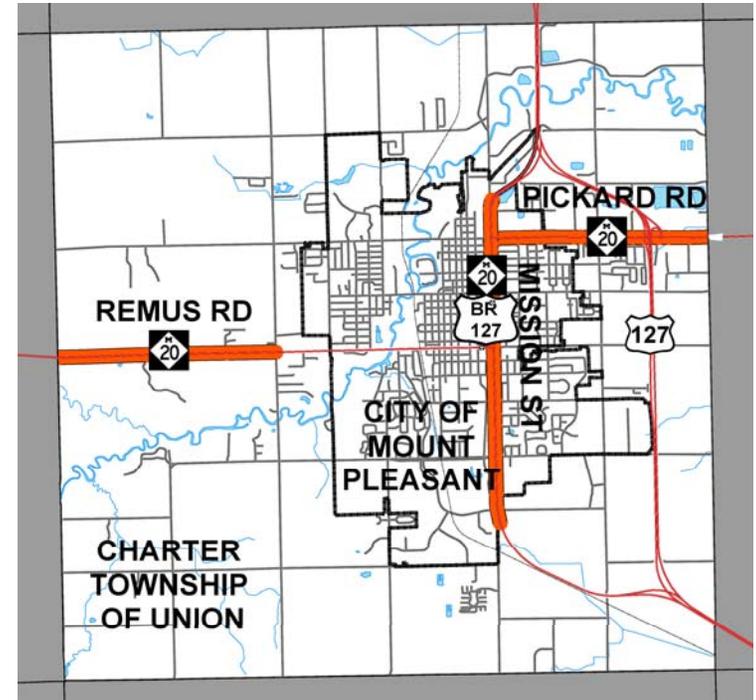
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Public Workshops This is the second of two Public Workshops. This informal open house will include informational presentations on Access Management as well as opportunities to ask questions of the project team and review and discuss the draft plan recommendations prepared by the project team.



Thursday, June 29, 3:30 – 5:00 p.m. and 6:00 – 7:30 p.m.
Charter Township of Union - Township Hall
2010 Lincoln (Southwest Corner of Lincoln and Pickard)
Brief Presentation at 4:00 p.m. & 6:30 p.m.
Come Anytime!

For more information about the US-127 B.R./M-20 Access Management Plan contact the following project representatives:

Dave Geiger
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Zoning Administrator
Union Charter Township
(989) 772-4600 x 41



MEMORANDUM

TO: Downtown Development Authority Members

FROM: Tony Kulick

DATE: October 5, 2006

SUBJECT: Mission/Pickard Access Management Plan

In 2006 the City received a grant from MDOT to work with a consultant, Union Township, the Isabella County Road Commission and the City to do an analysis of the drives (access points) along Mission and Pickard and prepare recommendations on how to eliminate and combine these access points to improve traffic circulation. The first public workshop will be April 6 from 3:00 - 4:30 p.m. and 5:15 - 6:30 p.m. (see attached flyer). All of the DDA members are strongly urged to attend one of these sessions.

Following the public workshop, the consultant and MDOT will begin the preparation of zoning ordinance amendments to implement these changes. As many of you are aware, a change in the zoning ordinance will not mandate any changes for the existing businesses along the strip. Improvement will take place only as new development takes place along Mission or Pickard. Without some sort of incentive program it is likely that it will take decades to see marked improvement in the access along Mission and Pickard.

Drive improvements and closures are considered public area improvements which are eligible for DDA-TIFA funding. When the Mission Street widening from Maple to Pickard took place in 1997, the DDA paid 100% for the drive closures. Currently the DDA is accumulating approximately \$50,000 per year in excess of its bond and maintenance obligations. I would like to propose that the DDA develop a policy to place \$40,000 per year into a pool to implement the recommendations of the Access Management Plan, subject to a formula similar to the following:

1. The DDA will provide up to \$40,000 per year to implement the Access Management Plan on a first come, first served basis.
2. The total fund balance in this account will not exceed \$120,000.
3. The DDA will pay 100% of the cost to *eliminate* driveways except in the case of a total site redevelopment where all existing structures on the site are being removed.

4. The DDA will pay 50% of the cost to *upgrade or construct new driveways* except in the case of a total site redevelopment where the DDA will pay 100% of the cost to *construct new shared drives* that serve more than one property.
5. All costs shall be on a reimbursement basis.
6. All work shall be pre-approved by MDOT.
7. All contractors performing work shall be MDOT approved.
8. All costs to be approved shall be reasonable and customary.

This sort of policy would maximize the DDA's limited financial resources. The policy would most likely benefit local owner-occupied businesses along the strip. The incentives hopefully would encourage property owners to address the access management problem along the strip and improve the traffic flow along Mission and Pickard.

Requested Action:

1. Please plan on attending one of the Assess Management Work Sessions on April 6, 2006 (see flyer for details), and
2. Be prepared to discuss the merits of developing an access management incentive tool at our next meeting on April 13.

TJK:js

PURPOSE OF THE BROCHURE

This brochure serves as a guide to the major benefits of several access management techniques in use across the United States. The purpose of this brochure is to provide a comprehensive and succinct examination of the benefits of access management and address major concerns that are often raised about access management.

The benefits usually identified with access management include improved movement of through traffic, reduced crashes, and fewer vehicle conflicts. Most major concerns about access management relate to potential reductions in revenue to local businesses that depend on pass-by traffic.

This brochure does not describe the precise strategies that transportation departments should follow to implement an access management program, but rather provides an introduction to the key concepts. The brochure may also be a useful tool to distribute at public meetings for both general access management plans and specific applications of access management techniques.

This brochure describes the relevant benefits and issues with three key sets of access management techniques:

1. Access spacing, including spacing between signalized intersections and distance between driveways;
2. Turning lanes, including dedicated left- and right-turn lanes, as well as indirect left turns and U-turns, and roundabouts; and
3. Median treatments, including two-way left-turn lanes and raised medians.

WHAT IS ACCESS MANAGEMENT?

Access management is a set of techniques that state and local governments can use to control access to highways, major arterials, and other roadways. Access management includes several techniques that are designed to increase the capacity of these roads, manage congestion, and reduce crashes.

- Increasing spacing between signals and interchanges;
- Driveway location, spacing, and design;
- Use of exclusive turning lanes;
- Median treatments, including two-way left turn lanes (TWLTL) that allow turn movements in multiple directions from a center lane and raised medians that prevent movements across a roadway;
- Use of service and frontage roads; and
- Land use policies that limit right-of-way access to highways.

State, regional, and local governments across the United States use access management policies to preserve the functionality of their roadway systems. This is often done by designating an appropriate level of access control for each of a variety of facilities. Local residential roads are allowed full access, while major highways and freeways allow very little. In between are a series of road types that require standards to help ensure the free flow of traffic and minimize crashes, while still allowing access to major businesses and other land uses along a road.

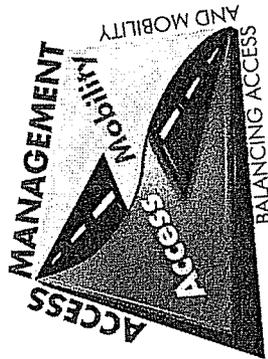
CITATIONS

- [1] Colorado Department of Highways, 1985, Final Report of the Colorado Access Control Demonstration Project, Colorado.
- [2] Eisele, W. E., and W. E. Frawley, 1999, "A Methodology for Determining Economic Impacts of Raised Medians: Data Analysis on Additional Case Studies, Research Report 390A-3, Texas Transportation Institute, College Station, Texas, October.
- [3] Frawley, W. E., and W. E. Eisele, 1998, "A Methodology to Determine Economic Impacts of Raised Medians on Adjacent Businesses, 1998 National Conference on Access Management.
- [4] Gluck, J., H. S. Levinson, and V. Stover, 1999, Impacts of Access Management Techniques, NCHRP Report 420, Transportation Research Board.
- [5] Iowa Department of Transportation, 1997, Access Management Research and Awareness Program: Phase II Report.
- [6] Jacquemart, G., 1998, Synthesis of Highway Practice 264: Modern Roundabout Practice in the United States, National Cooperative Highway Research Program, National Academy Press, Washington, D.C.
- [7] Lall, B. K., D. Huntington, and A. Eghtedari, 1996, Access Management and Traffic Safety, Paper presented at the Second Annual Access Management Conference.
- [8] Long, G. C. T. Gan, and B. S. Morrison, "Impacts of Selected Median and Access Design Features," Florida Department of Transportation Report, Transportation Research Center, University of Florida, May 1993.
- [9] Meyers, E. J., 1999, Accident Reduction with Roundabouts, Paper presented at the 65th Annual ITE Meeting, Las Vegas, Nevada.
- [10] Newirth, R. M., G. E. Weisbrod, and S. D. Decker, 1993, Methodology for Evaluation Economic Impacts of Restricting Left Turns, Paper presented at the First Annual Access Management Conference.
- [11] Pant, P. D., M.D., S. Ula, and Y. Liu, 1998, Methodology for Assessing the Effectiveness of Access Management Techniques, Final Report, prepared for the Ohio Department of Transportation.
- [12] Parsonson, P. S., M. G. Waters III, and J. S. Fincher, 2000, Georgia Study Confirms the Continuing Safety Advantage of Raised Medians Over Two-Way Left-Turn Lanes, presented at the Fourth National Conference on Access Management, Portland, Oregon.
- [13] S/K Transportation Consultants, Inc., 2000, National Highway Institute Course Number 133078: Access Management, Location, and Design, April.
- [14] Texas Transportation Institute, In Progress, An Evaluation of Strategies for Improving Transportation Mobility and Energy Efficiency in Urban Areas, Texas A&M University, Project 60011.

FOR MORE INFORMATION

<http://www.accessmanagement.gov>
FHWA Document Number FHWA-OP-03-066

Benefits of Access Management



U.S. Department of Transportation
Federal Highway Administration

ACCESS SPACING

Signal Spacing

Signals Per Mile	Increase in Travel Time (%)
2	-
3	9
4	16
5	23
6	29
7	34
8	39

Increasing the distance between traffic signals improves the flow of traffic on major arterials, reduces congestion, and improves air quality for heavily traveled corridors. The appropriate spacing between signals for a particular corridor depends greatly upon the speed and flow of traffic, but anything greater than two signals per mile has a significant impact on congestion and safety.

A major synthesis of research on access management found that each additional signal over two per mile (i.e., a one-half mile signal spacing) increased travel time by over six percent. [1] A study of an intersection in Cincinnati where a signal was added found a 20 percent increase in peak travel times. [11] A demonstration project in Colorado revealed that half mile signal spacing and raised medians on a five-mile roadway segment reduced total hours of vehicle travel by 42 percent and total hours of delay by 59 percent, compared to quarter mile signal spacing. [1]

Improved speeds and travel times translate directly into environmental benefits. An ongoing study in Texas found that a ten mile four-lane arterial with one-half mile signal spacing reduced fuel consumption by 240,000 gallons from increased speed and 335,000 gallons from reduced delay, compared to quarter mile signal spacing. [14]

Increasing the distance between signals also reduces the incidence of crashes. A review of crash data from seven states demonstrated that the crash rate increased substantially with additional signals per mile. [4] This is partly related to access spacing, which is presented next.

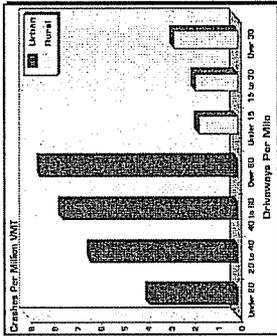
Signals Per Mile	Crashes Per Million VMT
Under 2	3.59
2 to 4	6.89
4 to 6	7.49
6+	9.11

Driveway Spacing

Appropriate driveway spacing presents another major access issue. Large numbers of driveways increase the potential conflicts on the road. Fewer driveways spaced further apart, allow for more orderly merging of traffic and present fewer challenges to drivers.

The congestion impacts of reduced driveways are fairly clear. It is impossible for a major arterial or highway to maintain free flow speeds with numerous access points that add slow moving vehicles. A research synthesis found that roadway speeds were reduced an average of 2.5 miles per hour for every 10 access points per mile, up to a maximum of a 10 miles per hour reduction (at 40 access points per mile). [4] With higher numbers of access points, congestion will increase significantly.

An overabundance of driveways also increases the rate of car crashes. An examination of crash data in seven states indicated found a strong linear relationship between the number of crashes and the number of driveways. Rural areas had a similar, but less strong relationship. [4,7]



RELATED TECHNIQUES

Access management includes more techniques than can be discussed in a single brochure. Some of these techniques are newer and have been researched somewhat less. Frontage roads have been the subject of some debate in the literature, but there is no clear indication of their benefits. Other techniques, such as the relationship between highway interchange spacing and local traffic, are new topics that require more research.

Many cities and states develop access management programs to deal with existing issues of congestion and safety. An active access management program, however, would need to include changes to local land use policies that encourage the rational development of major roads in newly developing areas, land use and zoning controls that limit the number of access points and leave space for medium improvements can save money and effort as these areas develop.

TURNING LANES

Left Turns

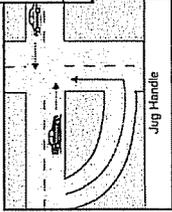
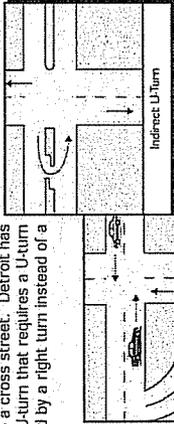
Exclusive turning lanes for vehicles remove stopped vehicles from through traffic. Left-turn lanes at intersections substantially reduce rear-end crashes. A major synthesis of research on left-turn lanes demonstrated that exclusive turn lanes reduce crashes between 18 to 77 percent (50 percent average) and reduce rear-end collisions between 60 and 88 percent. [4]

Left-turn lanes also substantially increase the capacity of many roadways. A shared left-turn and through lane has about 40 to 60 percent the capacity of a standard through lane. [4] A synthesis of research on this topic found a 25 percent increase in capacity on average, for roadways that added a left-turn lane. [13]

Indirect Turns

Some of the biggest issues with managing access come at intersections where vehicles must cross traffic. Some states and cities have adopted indirect turns to reduce these conflicts. In New Jersey, the jug-handle left turn requires a right turn onto a feeder street, followed by a left onto a cross street. Detroit has extensively used an indirect U-turn that requires a U-turn past an intersection, followed by a right turn instead of a regular left turn.

Like dedicated left-turn lanes, indirect turns reduce crashes, improve congestion, and add capacity. Crashes decline by 20 percent on average, and 35 percent if the indirect turn intersection is signalized. Capacity typically shows a 15 to 20 percent gain. [4]



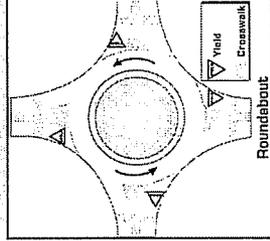
Right Turns

Right-turn lanes typically have a less substantial impact on crashes and roadway capacity than other types of turn strategies, because there are fewer limitations on right turns. Though there are fewer studies of these impacts, there is a clear relationship between the number of vehicles attempting a right turn in a through traffic lane and its delay to through traffic. This relationship is exponential - each additional car that must wait for a right turn will increase the delay more than the previous car. At intersections with substantial right-turn movements, a dedicated right-turn lane segregates these cars from through traffic and increases the capacity of the road.

Right-Turning Vehicles Per Hour	Through Vehicle Impacts (%)
Under 50	2.4
51 to 61	7.5
61 to 90	12.2
90 and up	21.8

Roundabouts

Roundabouts represent a potential solution for intersections with many conflict points. Though not appropriate for all situations, roundabouts reduce vehicle movements across traffic. Only a few studies have examined the safety benefits of roundabouts. One study of four intersections that were replaced with roundabouts in Maryland found a drop in crashes between 18 and 29 percent and a reduction in injury crashes between 63 and 88 percent. The cost of crashes at these locations - one measure of severity - was also reduced by 66 percent. Overall crashes on roundabouts were more minor than those at left turn roundabouts. [9] Another study of roundabouts in several locations found a 51 percent reduction in crashes, including a 73 percent reduction in injury crashes and a 32 percent reduction in property-damage-only crashes for single-lane roundabouts. Multi-lane roundabouts only experienced a 29 percent reduction in crashes. [6]



MEDIAN TREATMENTS

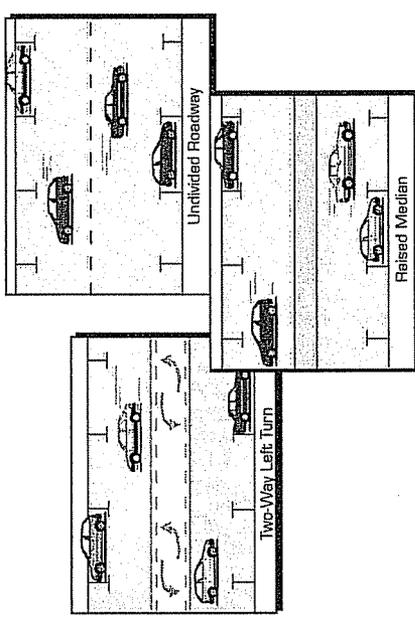
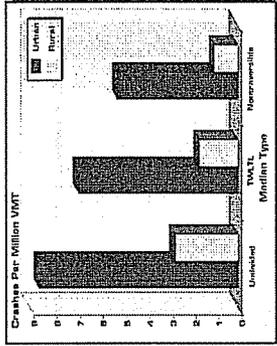
Medians

Median treatments for roadways represent one of the most effective means to regulate access, but are also the most controversial. The two major median treatments include two-way left turn lanes (TWLTL) and raised medians.

The safety benefits of median improvements have been the subject of numerous studies and syntheses. Studies of both particular corridors and comparative research on different types of median treatments indicate the significant safety benefits from access management techniques. According to an analysis of crash data in seven states, raised medians reduce crashes by over 40 percent in urban areas and over 60 percent in rural areas. [4]

A study of corridors in several cities in Iowa found that two-way left-turn lanes reduced crashes by as much as 70 percent, improved level of service by one full grade in some areas, and increased lane capacity by as much as 36 percent. [5]

Raised medians also provide extra protection for pedestrians. A study of median treatments in Georgia found that raised medians reduced pedestrian-involved crashes by 45 percent and fatalities by 78 percent, compared to two-way left-turn lanes. [12]



Business Concerns

Installing raised medians often raises serious concerns by the business community that local businesses that depend upon pass-by traffic (especially gas stations and fast-food restaurants [10]) will be adversely affected by medians. Though there are few studies of the actual impacts of medians on business sales, there are several surveys of business owner opinions. Surveys conducted in multiple corridors in Texas, Iowa, and Florida demonstrate that the vast majority of business owners believe there have been no declines in sales, with some believing there are actually improvements in business sales. [2,5,8] One study in Texas indicated that corridors with access control improvements experienced an 18 percent increase in property values after construction. [2]

Location	Years (2)	Years (3)	Years (4)	Owens Report (No Decline in Business %)
				53
				76 to 84
				67 to 91

Corridor Access Management Plans and Programs

The following are funding eligibility requirements for developing a corridor access management plan or program in your community:

- Official Resolution of support for the development of a plan and local ordinance.
- A 10 percent local funding match. Match funding may be waived if the roadway corridor is already included in MDOT's Five Year Transportation Program.
- A local steering committee to ensure input into the plan is received by all user groups.

Proven Results

A key factor in your communities economic prosperity depends on a safe and efficient transportation system. A well-designed corridor that utilizes access management principles can greatly contribute to a safe and efficient transportation system and a nicer community.

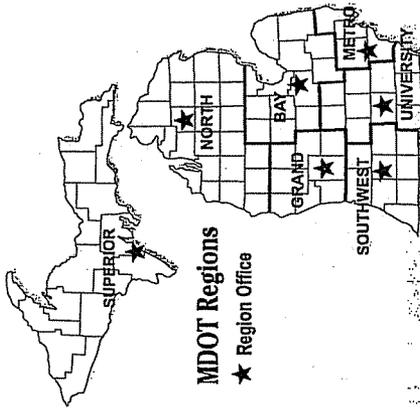
Throughout the 1990's, studies were completed by Department's of Transportation and Universities around the Country to identify the financial impacts associated with implementing access management techniques. Generally speaking, the majority of the customers participating in study-related surveys stated that businesses with safe and easy access were more inviting than those areas with uncontrolled access.

According to a 1996 study conducted in Iowa, 80% of businesses surveyed along access-managed corridors reported sales at least as high after a reconstruction project was completed. Similarly, approximately 80% of businesses reported no customer complaints about access to their business after a corridor was retrofitted with access management elements. In all cases, more than 90% of motorists surveyed had a favorable opinion of improvements made to roadways that involved access management.

(Source: Iowa State University, Iowa Access Management Research and Awareness Project: Executive Summary, 1997.)

For Additional Information

If you are interested in a corridor access management plan or program in your community, please contact the MDOT Region Transportation Planner nearest you.



MDOT Regions
★ Region Office

- ★ Bay Region: (989) 754-7443
- ★ Grand Region: Toll-Free (616) 451-5091
- ★ Metro Region: (248) 483-5100
- ★ North Region: Toll-Free (989) 731-5090
- ★ South West Region: (269) 372-3000
- ★ Superior Region: (616) 766-8100
- ★ University Region: (617) 750-0000

MDOT
Michigan Department of Transportation

This brochure was produced by the Michigan Department of Transportation. Portions of this brochure were taken from the September 2001 MDOT Access Management Guidebook, and the 1996 MDOT Improving Driveway and Access Management in Michigan brochure. 600 copies of this brochure were produced at \$1.26 per copy for a total cost of \$756.00.



HOW it can BENEFIT your COMMUNITY.



Spring 2005

What is Access Management

Access Management uses a variety of proven traffic engineering techniques. These techniques manage the access between a roadway and adjacent land developments to:

- Minimize the potential conflict points in a roadway
- Maximize the safety of the roadway system
- Assure a full return in the roadway investment
- Reduce travel delays associated with congestion and construction

The Land Use Connection

Land uses adjacent to a roadway play a major role in how that roadway functions. As illustrated in Figure 1.0, a cyclical relationship exists between how a transportation facility operates and how land uses are developed. State law requires the Michigan Department of Transportation (MDOT) to provide reasonable access to property abutting a state roadway. As land develops, poorly coordinated access to and from these land uses force more trips onto the state trunkline system which results in increased conflict points and congestion. Ultimately, a transportation improvement must be made which again increases the accessibility to the land uses, and the cycle begins again. This cyclical relationship makes it crucial that local businesses, communities and the road agencies manage access to the roadway network using land use plans and ordinances which include roadway traffic engineering techniques and a coordinated public/private site plan review process. Successfully managing access will preserve the life expectancy of Michigan's roads and in so doing, you help assure the full investment of Michigan's tax dollars and improve access to your business at the same time.

The Transportation/Land Use Cycle

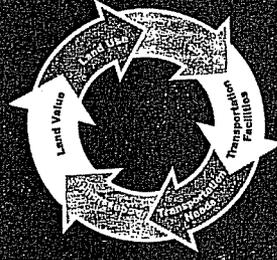
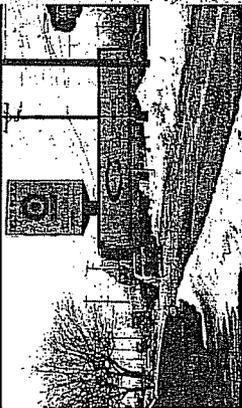


Figure 1.0

How Access Management Can Benefit Your Community

Reduced Business Operating Costs



By implementing access management techniques, such as reducing the number of driveways and utilizing shared driveways, businesses have the opportunity to reduce out-of-pocket maintenance costs for items such as plowing, salting, seal coating, and future reconstruction of driveways.

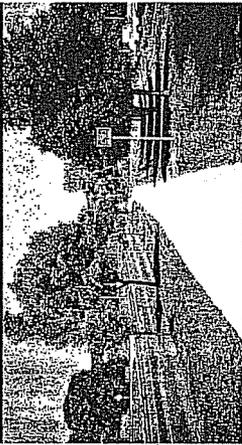
Increased Visibility



Did you know that as speeds increase a driver's visual perception of the roadway narrows? This fact is especially important if your business is located on a commercial corridor that has many access points to a state trunkline.

Multiple entrances make it difficult for a driver to spot the correct driveway to your business, and they increase the possibility of rear-end crashes resulting from drivers slowing down to find the correct driveway. By providing a single entrance that is clearly marked, a driver will be more likely to spot your business' entrance and less likely to be involved in a crash in front of that business.

Improve Your Curb-Side Appeal



Eliminating unnecessary driveways provides increased road frontage which in turn can be used for landscaping and other beautification efforts. These aesthetic treatments tend to enhance the appeal of the corridor, as well as add value to property.

Prior Access Management



It has many closely spaced driveways created by small commercial frontages, lacks setbacks from the roadway and due to multiple vehicular conflicts drivers find it difficult to access the business of their choice.

State and Local Coordination



Traffic growth and subsequent congestion on roadways is often the result of adjacent land use development. Therefore, the responsibility for resolving congestion problems is not just that of the road authorities but rather local government. If local governments approve of development along a road that is not designed to accommodate the traffic, it generates, then unnecessary congestion occurs and the potential for crashes increase.

Following Access Management

This commercial corridor has properly spaced driveways, utilizes service drives for internal access, provides proper corner clearance and landscaped areas in front of the businesses. This result is a corridor that has less vehicular conflict, safer, provides efficient access to all the businesses and is aesthetically pleasing.



Protect Motorists

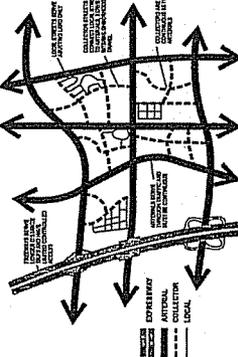


Did you know that 68% of all non-limited access trunkline crashes in Michigan between 1992 and 1994 were related to access movements?

This statistic is even more concerning when you consider a majority of all traffic crashes occur within fifteen miles of a person's home. The people involved in these crashes are your neighbors, and friends.

Implementing proven access management techniques can reduce the number of potential conflicts within a roadway which translates into fewer traffic crashes.

Preserve Roadway Capacity



Communities and local businesses invest many thousands of dollars into infrastructure improvements. Likewise, the Michigan Department of Transportation invests over a billion dollars in the roadway infrastructure throughout the State. The transportation roadway network provides a lifeline to local businesses. By preserving the existing and future capacity of this trunkline, you are working with MDTOT to assure your community has the necessary infrastructure to compete in today's fast-paced economy.

AGENDA

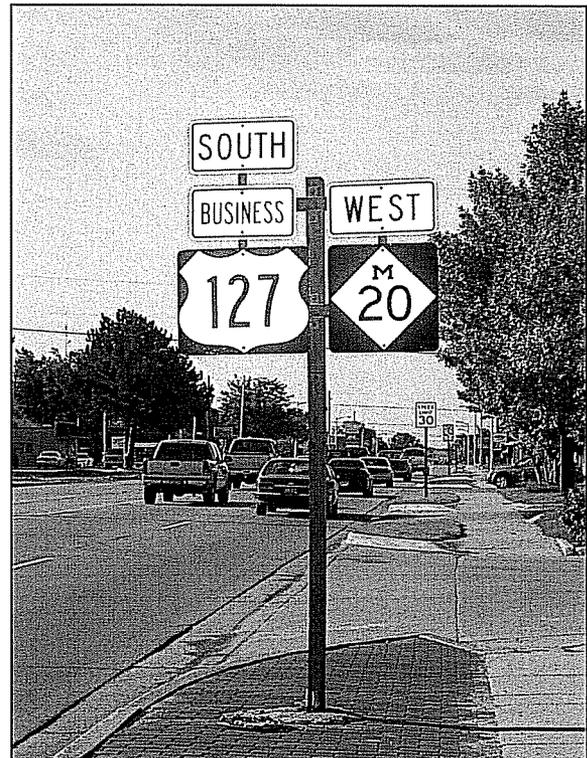
US-127 BR (Mission St.) / M-20 Access Management Plan

Kick-off/Partnering Meeting

Wednesday, January 18, 2:00-3:30 pm

MDOT Mt. Pleasant TSC office

1. Introductions
2. Study Area, Scope, Schedule Review
3. Areas/Issues of Special Concern
4. Data from MDOT, City, Township, County files
5. Study Website, Current Site Plans for Review
6. Scheduling of Training Session/1st Public Meeting
7. Additional Steering Committee (SC) members?
8. Next SC meeting
9. Other Items?
10. Adjourn



Primary Project Contacts:

MDOT Bay Region: Dave Geiger
Progressive AE: Pete LaMourie
LSL Planning: Brad Strader

(989) 574-0878 x228, geigerd@michigan.gov
(616) 361-2664, lamourie@progressiveae.com
(248) 586-0505, strader@lsplanning.com

SAMPLE

US-127 BR/M-20 Access Management Plan
Steering Committee Meeting Sign-In

Date/Time: MARCH 6 1:30

Name	Representing	Phone	Email
Pete LaMouvie	PROGRESSIVE AE	(616) 361-2664	lamouvie@progressiveae.com
ROBERT CRAMER	LSL PLANNING, INC.	(248) 586-0505	cramer@lsiplanning.com
DAVE GEIGER	MDOT-BAY REGION	754-0878 (988) x228	geiger@mdot.michigan.gov
Patrick J. Gaffney	Isabella CRC	989-773-7131	engineer@isabelleroads.com
Ben Burrows	MDOT Mt. Pleasant TSC	989-725-6104 x305	burrows@mdot.michigan.gov
Mike Loynes	MDOT Mt. Pleasant TSC	989-775-6104 x306	loynesm@mdot.michigan.gov
Woody Woodruff	Union Twp	989 772 4600 x41	woodruff@uniontownshipmi.com
Tony Kulick	city Mt Pleasant	989 779 5346	tonyk@mt-pleasant.org
TIMOTHY A. NIAPORTE	ISABELLA Co. Comm, Dev.	989 772-0911 x871	tniaporte@isabellacounty.org
Pete Orlik	MT. PLEASANT PLANNING COM	989-774-3851	OrlikA_p6@cmich.edu

US-127 BR/M-20 Access Management Plan
Public Open House Sign-In

Date/Time: Thursday, June 29 3:30

Name	Address/Business	Phone	Email
PAUL VAN DOESELAN	911 E. PICKARD, SUITE C	772-9449	Paul.vandoeselaaar@Century21.com
Leonard and Louise Plachte	2203 Cornerstone Dr Mt. Pleasant	773-4529	
Teresa Scott	Super 8 Motel 2323 S. Mission	773-8888	
Roger Lubs	Celebration Cinema	616-447-4229	rlubs@celebrationcinema.com
Terry Palmer	MDOT	773-7756	Palmer@Michigan.gov
Mike Rowwell	1000 E Pickard	773-5905	
Sandy Halasz	701 N. Mission St.	773-7370	sandyhalasz@mainstreet-audiovideo.com
Ken Johnson	909 N. Mission	772-2424	
Ken Schaeffer	552 S. Whitville	773-9738	
Rob Cook	611 N. Mission	463-4757	Rob@Roberts.com
Nathan Long	2625 Davison	774-2424	Nathan.Long@cmich.edu
Mark Loren	Pickard	810-733-0700	info@middiv.com
Jack Hofweber	MDOT	775-6104X302	hofweber@emichigan.gov
Brian Atkinson	MDOT	775-6104X316	atkinson@emichigan.gov
Lucinda Clark	5500 E. Pickard	989-772-7777	microlatin@journey.com

CONSENT TO CLOSE DRIVE

*This information required by Act 286, P.A. of 1964, in order to
grant Michigan Department of Transportation access to property.*

For the sum of _____

I/We _____

consent to the closure of a driveway by the Michigan Department of Transportation between Highway
_____ and a parcel of land in the _____ of _____,
County of _____, State of Michigan described as:

This consent includes the right to enter upon said lands for the purpose of removing the existing driveway.

The subject drive is located at station:

PROPERTY TAX CODE:

CONTROL SECTION:	PARCEL:	NAME:
JOB NUMBER:	FEDERAL ITEM NUMBER:	FEDERAL PROJECT NUMBER:

Signed this _____ day of _____, 20____.

Witness

Signature/title

Witness

Signature/title

SAMPLE CROSS ACCESS AGREEMENT

Background: The following is an example of a cross access agreement from the City of Orlando. It is provided as an example only. Local governments should consult their attorney for advice in preparing these agreements.

THIS AGREEMENT is made and entered into on this *(date)* by *(owner's name)*, a corporation authorized to transact business in the State of Florida ("OWNER") and the City of Orlando, a municipal corporation organized under the laws of the State of Florida "CITY".

RECITALS

1. OWNER owns certain real property ("Parcel A") located *(legal description of property)*.
2. As a part of its land use approvals from the CITY, the OWNER has been requested by CITY to provide cross access to adjacent properties to *(location of abutting properties)*, subject to the terms and conditions set forth below.
3. The CITY has a health, safety and welfare interest in providing for the cross access easement.
4. The OWNER acknowledges the CITY's health, safety and welfare interest and agrees to provide said cross access subject to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the obligations contained herein, and in good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the OWNER and the CITY hereby agree as follows:

Section 1. Recitals. The recitals are acknowledged by both parties and incorporated herein and have been relied upon by both parties in the execution of this Agreement.

Section 2. Grant of Easement in Escrow. Subject to the terms set forth in this agreement, the OWNER hereby grants a cross access easement to the CITY to be held in escrow for the benefit of the owner of that parcel located *(location of abutting property #1)*. The cross access easement is described in *(Exhibit #)* attached to and incorporated in this Agreement. Said cross access easement shall be freely assignable to said Owner; provided, however, that the CITY shall not assign said easement until the Owner of *(abutting property #1)* applies for or is issued any of the following land development approvals as defined in the City Code.

- (1) conditional use permit;
- (2) rezoning;
- (3) master plan approval;
- (4) plat approval;
- (5) variance;
- (6) building permit for a substantial enlargement or substantial improvement;

- (7) building permit which generates automobile traffic trips in excess of current improvements;
- (8) driveway permit; or
- (9) paving and/or drainage permit.

Likewise, the OWNER hereby grants a cross access easement to the CITY to be held in escrow for the benefit of the owner of that parcel located (*location of abutting property #2*). This cross access easement area shall be of a size similar to that of the one granted for use by the Owner of (*adjacent property #1*) and said location shall be later determined by the CITY and OWNER. Said cross access easement shall be freely assignable to said Owner. Notwithstanding anything to the contrary contained herein, however, the CITY shall not assign a cross access easement to either Owner unless the land use proposed for that Owner's parcel is consistent and compatible with the land use on the OWNER's property.

Section 3. Conditions of the Use of the Cross Easement Agreement. The use of two cross access easements to be granted to the CITY and held in escrow pursuant to Section 2 hereof is subject to the following terms and conditions:

- (1) The Owner of (*adjacent property #1*) shall equally share with OWNER in the maintenance and repair of the cross access easement area as designated in the attached (*Exhibit #*);
- (2) The Owner of (*adjacent property #2*) shall equally share with OWNER in the maintenance and repair of the cross access easement area to be designated by CITY and OWNER;
- (3) The Owners of (*both adjacent properties*) to receive such cross access agree to pay the cost of two (2) signs placed on their respective parcels at each side of the pavement of the easement area and the common boundary line of their respective parcel with Parcel A (facing those parcels) which signs shall state that the parking in Parcel A is limited to the guests of the OWNER and the vehicles of unauthorized persons (guests, licensees, invitees, patrons, etc. of the other parcel) shall be towed away at the vehicle owner's expense;
- (4) The owners of (*both adjacent properties*) agree to install and maintain on the common boundary line with Parcel A, or other location agreed to by the parties (a) a speed bump and stop sign within the cross access easement leading into (*adjacent property #1*), (b) a speed bump and stop sign within the cross access easement leading into (*adjacent property #2*), and (c) one speed bump each on (*both adjacent properties*);
- (5) The use of the cross access easements shall also be subject to (a) a weight limit on the vehicles which utilize the cross access easement (to be established or modified by the CITY's transportation engineer from time to time), (b) a limit on the number of daily trips of no more than 1,000 trips, and (c) a limit on the time of access;
- (6) The Owners of (*both adjacent properties*) shall pay the cost of installation of said gates and any other improvements to the cross access easement beyond what has been previously constructed by the OWNER;
- (7) Tractor trailer vehicles shall not use the cross access easement for access to or from (*both adjacent properties*);

(8) Buses seating 30 passengers or more may use the cross access easements so long as the buses stack or queue on *(both adjacent properties)* and not in the cross access easement areas;

(9) The Owners of *(both adjacent properties)* shall not use the cross access easement in any manner such as to result in congestion within the cross access easements or the blocking of the cross access easement or driving aisles of Parcel A; and

(10) The cross access easements shall be subject to the joinder and consent of the lender(s) of the OWNER and the Owners of *(both adjacent properties)*.

Section 4. Delegation to CITY Transportation Engineer. The parties agree that the CITY transportation engineer has the power and authority to adjust the conditions set forth in Subsection 3(5) hereof in order to preserve the integrity, character, safety of the *(type of land use on OWNER's property)*.

Section 5. Covenant Running with the Land. All rights and obligations arising or described hereunder are intended to be appurtenances and covenants running with the title of the OWNER's property and shall be binding upon and inure to the benefit of the parties and their respective successors in title.

Section 6. Dedication. Nothing contained herein shall constitute any rights in the general public.

Section 7. Captions, Number and Gender. The captions and headings are for convenience only and are not intended to be used in construing any provision of this easement. The singular and plural shall each include the other were appropriate, or if any genders shall include other genders when the contract so permits.

Section 8. Governing Law and Venue. The laws of the State of Florida shall govern this agreement. Any legal action instituted herein shall be brought in Orange County, Florida.

Section 9. Modification or Termination. The terms and provisions of this Agreement may be modified, supplemented or terminated only by a written instrument executed by the OWNER and CITY, their successors or assigns.

Section 10. Recording. This Agreement shall be recorded by the OWNER at its sole expense in the public records of Orange County, Florida.

Section 11. Joinder and Consent. The OWNER hereby agrees to obtain the Joinder and Consent to this Agreement from any superior interest, right, title, lien, encumbrance to Parcel A. The Joinder and Consent shall subordinate the particular interest to this Agreement.

Section 12. Obligation of the CITY . The CITY agrees that it will condition the issuance of any of the permits listed in Section 2, above, to the Owner of parcel adjacent to

Parcel A upon the condition that said owner enter into the Cross Access Easement Agreement.

Section 13. No Easement Rights or Other Rights. Notwithstanding anything to the contrary herein, *(both adjacent properties)* shall have no rights to, on, in or over the Easement Area until the Cross Access Easement Agreement is agreed upon between the parties, executed by the appropriate entities and recorded in the public records of Orange County, Florida.

Section 14. Severability . If any term, provision, clause, sentence or other portion of this Agreement shall become or be determined to be illegal, null or void for any reason, or shall be held by any court of competent jurisdiction to be so, the remaining portions thereof shall remain in full force and effect.

Section 15. Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes any previous discussions, understandings, and agreements.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the date first stated above.

Reprinted from: Model Land Development & Subdivision Regulations That Support Access Management for Florida Cities and Counties, Center for Urban Transportation Research, Tampa, Florida, January 1994.

Mutual Access Easement Agreement

By and Between:

_____ Development Company, Inc.,
Delta Charter Township,
&

This agreement is made and entered into this ____ day of _____ 200__ by and between _____ Development Company, Inc., henceforth referred to as DEVELOPER ; _____, henceforth referred to as 2ND PARTY; and Delta Charter Township, henceforth referred to as Delta.

WHEREAS, DEVELOPER is the current owner and interest holder of the property legally described as *(insert legal description)*, henceforth referred to as "Parcel A"; and Delta is the current holder and interest holder of the property legally described as *(insert legal description)*, henceforth referred to as "Parcel B"; and 2ND PARTY is the owner and interest holder of the property legally described as *(insert legal description)*, henceforth referred to as Parcel C , and

WHEREAS, Chapter 21 of the 1990 Delta Township Zoning Ordinance, as amended, entitled "Arterial Access Management Regulations" mandates, where possible, the establishment of shared driveways, parking lot connections, and other cross access arrangements for properties along regional arterial roadways such as West Saginaw Highway (M-43), and

WHEREAS, it has been stipulated by the Delta Township Planning Commission, in approving the preliminary site plan for the _____ *(name of development)* at Delta Township shopping that it is necessary to establish a means of cross access between Parcel A, Parcel B, and Parcel C, in order to facilitate efficient traffic operations and improve public safety along regional arterial roadways, now

THEREFORE, in consideration of the foregoing and the terms and conditions contained herein, the above named parties agree as follows:

1. Access Easement
 - a. An easement shall be created which shall allow the above named parties and the general public vehicular and pedestrian access

across Parcel A, Parcel B, and Parcel C. Said easement being illustrated on the attached Exhibit A, and legally described as follows:

(insert legal description)

- b. No physical barrier including, but not limited to, curbs, structures, buildings, signs, parking spaces, and product displays shall be placed across the easement in such a manner as to block access across and/or between Parcel A, Parcel B, and/or Parcel C.
 - c. Details pertaining to the placement of the access drive within the easement shall be illustrated on the final site plans for any future developments on Parcel A, Parcel B, and/or Parcel C, or any portions thereof. Said plans shall be submitted to the Delta Charter Township for review and approval.
 - d. Properties located adjacent to the easement shall be permitted to connect their parking areas, aiseways, driveways, etc. to the access drive within the easement. The easement and corresponding access drive shall be open for use by the general public.
 - e. The easement shall be permanently recorded with the Eaton County Register of Deeds.
2. The owners of Parcel A, Parcel B, and Parcel C hereby covenant and agree that this agreement shall be binding and shall inure to the benefit of the parties hereto, their successors, assigns, tenants, and subtenants, and that the covenants herein contained shall be deemed to be covenants running with the land.
3. DEVELOPER shall be responsible for the payment of any and all costs and expenses incurred and arising out of any use of the easement for any of the purposes described and set forth in this agreement including, but not limited to, any cost and expenses incurred in the construction, maintenance and repair of the pavement within that portion of the easement area located on Parcel A. 2ND PARTY shall be responsible for the payment of any and all costs and expenses incurred and arising out of any use of the easement for any of the purposes described and set forth in this agreement including, but not limited to, any cost and expenses incurred in the construction, maintenance and repair of the pavement within that portion of the easement area located on Parcel C.
4. DEVELOPER and 2ND PARTY shall be responsible for the payment of any and all costs and expenses incurred and arising out of the initial construction of the access drive within that portion of the easement

area located on Parcel B. DEVELOPER and 2ND PARTY shall each pay one-half (1/2) of the costs and expenses of construction of said access drive. DEVELOPER shall construct said access drive within the easement area on Parcel B up to the western property line of said parcel concurrent with the construction of the _____ (*name of development*) at Delta shopping center. 2ND PARTY shall reimburse DEVELOPER for its portion of the costs of construction upon completion of said access drive on Parcel B.

5. Each party shall separately operate the easement area located on their respective parcels and shall maintain the same in good condition and repair at their own cost and expense so long as such easement area shall exist.

This document drafted on _____ by:

Sample provided by Delta Charter Township, Eaton County, Michigan.

IN WITNESS WHEREOF, _____ and _____ the
_____ and _____, respectively, of _____
Development Company, Inc. have hereunto set their hands on the date affixed hereto.

Witnessed by: _____ Development Company, Inc.

Date

Its: _____ Date

Date

Its: _____ Date

STATE OF)ss
)ss

COUNTY OF)ss

On this _____ day of _____, 200__ before me
personally appeared _____ and _____ the
_____, and _____, respectively, of _____ Development
Company, Inc. to me known as the persons who executed the foregoing instrument and
acknowledged the same to be their own free act and deed.

Notary Public, _____ County,
Acting in _____ County,
My Commission Expires:

IN WITNESS WHEREOF, _____ and _____ the
_____ and _____, respectively, of 2ND PARTY have
hereunto set their hands on the date affixed hereto.

Witnessed by: _____ 2ND PARTY

Date

Its: _____ Date

Date

Its: _____ Date

STATE OF)ss
)ss

COUNTY OF)ss

On this _____ day of _____, 200__ before me
personally appeared _____ and _____ the
_____, and _____, respectively, of 2ND PARTY to me known as
the persons who executed the foregoing instrument and acknowledged the same to be
their own free act and deed.

Notary Public, _____ County,
Acting in _____ County,
My Commission Expires:

IN WITNESS WHEREOF, Representatives of the Charter Township of Delta have hereunto set their hands on the dates affixed hereto.

Witnessed by:

DELTA CHARTER TOWNSHIP

Date

Date

Its: Supervisor

Date

Date

Its: Supervisor

STATE OF MICHIGAN)ss
)ss

COUNTY OF EATON)ss

On this _____ day of _____, 200__ before me personally appeared _____ to me known to be respectively the Supervisor and Clerk of Delta Charter Township, who acknowledged that they executed the foregoing instrument of their own free act and deed in behalf of the Charter Township of Delta.

Notary Public, _____ County,
Acting in _____ County,
My Commission Expires:

BUSINESS/PROPERTY OWNERS (PARTIAL LIST)

CHRISTENSEN JAMES M
4129 HOLIDAY DRIVE
FLINT MI 48507

DOREMIRE JACK
9977 W JORDAN ROAD
WEIDMAN MI 48893

SPEEDWAY SUPERAMERICA LLC
PROPERTY TAX DEPARTMENT
539 S MAIN STREET
FINDLAY OH 45840

SHOOK JOHN R & PATRICIA A
3046 S CONCOURSE DR
MT PLEASANT MI 48858

SHOOK JOHN R & PATRICIA
3046 S CONCOURSE DR
MT PLEASANT MI 48858

LABELLE LEASING
405 S MISSION ST
MT PLEASANT MI 48858

KERO PROPERTIES LLC
4701 S CHIPPEWA ROAD
SHEPHERD MI 48883

C & W INVESTMENTS LLC
3385 S CHIPPEWA RD
MT PLEASANT MI 48858

BLODGETT LAND INC
1616 N MISSION ST
P O BOX 39
MT PLEASANT MI 48804-0039

BLODGETT OIL CO INC
1616 N MISSION ST
P O BOX 39
MT PLEASANT MI 48804-0039

FELD LLC
618 S MISSION ST
MT PLEASANT MI 48858

GROSS THOMAS R
P O BOX 545
MT PLEASANT MI 48804-0545

SHARRAR KATHLEEN
622 S MISSION ST
MT PLEASANT MI 48858

GROVE JUDITH A
1020 S LEATON RD
MT PLEASANT MI 48858

GROVE ORVAL & JUDY
1020 S LEATON RD
MT PLEASANT MI 48858

HUNTER REALTY INC
1206 FOREST LANE
MT PLEASANT MI 48858

HUNTER REALTY INC
1206 FOREST LANE
MT PLEASANT MI 48858

OSBECK NEAL TRUST
2008 S MISSION ST
MT PLEASANT MI 48858

LABELLE LEASING (STADIUM MALL)
405 S MISSION ST
MT PLEASANT MI 48858

PIXIE INC
405 S MISSION ST
MT PLEASANT MI 48858

S&L HOLDINGS OF MT PLEASANT LLC
410 N COTTAGE ST
SHEPHERD MI 48883

EMBERS INC THE
C/O JEFFREY & VICKI TUMA
645 W BROOMFIELD RD
MT PLEASANT MI 48858

1205 BUILDING LLC
1205 SOUTH MISSION ST
MT PLEASANT MI 48858

J & M LEASING CO
1203 S MISSION ST
MT PLEASANT MI 48858

ISABELLA BANK & TRUST
200 E BROADWAY ST
MT PLEASANT MI 48858

LABELLE LTD PARTNSHP
405 S MISSION
MT PLEASANT MI 48858

MT PLEASANT SHOPPING CENT LLC
31850 NORTHWESTERN HIGHWAY
FARMINGTON HILLS MI 48334

MT PLEASANT SHOPPING CENT LLC
31850 NORTHWESTERN HWY
FARMINGTON HILLS MI 48334

MT PLEASANT SHOPPING CENT LLC
31850 NORTHWESTERN HWY
FARMINGTON HILLS MI 48334

STAR GROUP INNS LLC
SGI MANAGEMENT GROUP, LLC
PO BOX 80877
ROCHESTER MI 48308-0877

MT PLEASANT MESSENGER LLC
1515 LAKE LANSING RD
LANSING MI 48912

NATIONAL CITY BANK OF THE MIDWEST
ONE NATIONAL CITY PARKWAY
K-A14-1Q
KALAMAZOO MI 49009-8002

NATIONAL CITY BANK OF THE MIDWEST
ONE NATIONAL CITY PARKWAY
K-A14-1Q
KALAMAZOO MI 49009-8002

LANGLOIS MARY LOU
1320 CRESTWOOD DR
MT PLEASANT MI 48858

LANGLOIS MARY LOU
1320 CRESTWOOD DR
MT PLEASANT MI 48858

LIZA REYNOLDS LTD PARTSHP
1022 E ADAMS ST
SPRINGFIELD IL 62703

KFC MT PLEASANT
P O BOX 637
MT PLEASANT MI 48804-0637

RUDONI STEVE
P O BOX 637
MT PLEASANT MI 48804

LAPOE JEFFREY S
1325 CRESTWOOD
MT PLEASANT MI 48858

LAPOE JEFFREY S
1325 CRESTWOOD
MT PLEASANT MI 48858

WEISENBURGER SALLY (TRUST)
525 E BROADWAY ST
MT PLEASANT MI 48858

LUX CHARLES R JR & MINDE B
503 E BROADWAY ST
MT PLEASANT MI 48858

SCHALL DR FRED D & MARIE
1310 E CHIPPEWA
MT PLEASANT MI 48858

JOSLIN CLAUDIA & NEAL CO TRUSTEE
1410 ORCHARD LANE
MT PLEASANT MI 48858

KANE DANIEL T LVG TRUST
611 E BROADWAY ST
MT PLEASANT MI 48858

104 KINNEY LLC
104 N KINNEY
MT PLEASANT MI 48858

K & S LAND MANAGEMENT LLC
709 E BROADWAY
MT PLEASANT MI 48858

AGREE LTD PARTNERSHIP
31850 NORTHWESTERN HWY
FARMINGTON HILLS MI 48334

BONTRAGER JULIE & PRICE KIMBERLY
706 E BROADWAY ST
MT PLEASANT MI 48858

D & P INVESTMENTS LLC
PO BOX 543
MT PLEASANT MI 48804-0543

PLANTEROTH DOROTHY
P O BOX 146
LAKE MI 48632

MORNINGSTAR SCOTT DC
616 E BROADWAY ST
MT PLEASANT MI 48858

BROADWAY REALTY & ASSOC
614 E BROADWAY
MT PLEASANT MI 48858

HENNING JOSH & CAMPBELL STEVE
5069 SILVERBERY
MT PLEASANT MI 48858

HENNING JOSH & CAMPBELL STEVE
5069 SILVERBERY
MT PLEASANT MI 48858

BIGARD PAUL R ET AL
600 E BROADWAY ST
MT PLEASANT MI 48858

CHAMBERLAIN VIRGINIA TRUST
3491 TOTIMO DR
MT PLEASANT MI 48858

DUHAMEL DAVID & BRUCE
512 E BROADWAY ST
MT PLEASANT MI 48858

DUHAMEL DAVID & BRUCE
512 E BROADWAY ST
MT PLEASANT MI 48858

DUHAMEL DAVID & BRUCE
512 E BROADWAY ST
MT PLEASANT MI 48858

ISABELLA COMM CREDIT UNION
2100 E REMUS RD, PO BOX 427
MT PLEASANT MI 48804-0427

MANEY INVESTMENTS LLC
300 S MISSION ST
MT PLEASANT MI 48858

MANEY CABINETS INC
3833 S CHIPPEWA RD
MT PLEASANT MI 48858

PLEASANT PROPERTIES LLC
61 CEDAR DR
MT PLEASANT MI 48858

JARRETT THE JEWELER INC
406 S MISSION ST
MT PLEASANT MI 48858

JARRETT THE JEWELER INC
406 S MISSION ST
MT PLEASANT MI 48858

TDB LLC
PO BOX 750
BAY CITY MI 48707

OLSON FIRESTONE SERVICE INC
704 E PICKARD
MT PLEASANT MI 48858

2005 II LLC
P O BOX 26006
RALEIGH NC 27611

DEYOUNG H PAUL & MARILYN
509 N MISSION ST
MT PLEASANT MI 48858

DNR REAL ESTATE
703 N MISSION ST
MT PLEASANT MI 48858

HALASZ SANDRA L
580 S SHEPHERD RD
MT PLEASANT MI 48858

VANDYKE ELIZABETH
523 MECHANIC
ALMA MI 48801

COOK GEORGE ROBERT
PO BOX 6
ALMA MI 48801

DENMAN STACEY
C/O CENTRAL MICH STAFFING
605 N MISSION ST
MT PLEASANT MI 48858

PFAU DOUGLAS
601 N MISSION ST
MT PLEASANT MI 48858

DEYOUNG H PAUL
893 S DOE TRAIL
MT PLEASANT MI 48858

MT PLEASANT FLOOR COVERING
509 N MISSION ST
MT PLEASANT MI 48858

LABELLE LEASING CO
405 S MISSION ST
MT PLEASANT MI 48858

NATIONAL CITY BANK OF THE MIDWEST
ONE NATIONAL CITY PARKWAY
K-A14-1K
KALAMAZOO MI 49009-8002

CINEMA COURT
2640 GOLDEN GATE PKY #102
NAPLES FL 34105

PRANAM INC
1523 S MISSION ST
MT PLEASANT MI 48858

MOSHER KIRK W
BLAZER FOODS INC
3323 SHATTUCK RD
SAGINAW MI 48603

LABELLE LEASING CO
405 S MISSION
MT PLEASANT MI 48858

MOUITSATSON GEORGE
19 ST TROPEZ
NEWPORT BEACH CA 92660

BURGER BUICK CADILLAC GMC
116 N MISSION ST
MT PLEASANT MI 48858

BURGER DEAN LLC
4172 E WING RD
MT PLEASANT MI 48858

BURGER DEAN LLC
4172 E WING RD
MT PLEASANT MI 48858

OVENS, LLC
405 SOUTH MISSION ST
MT PLEASANT MI 48858

PIXIE INC THE
405 S MISSION ST
MT PLEASANT MI 48858

HEYDENBURG PAUL & CAROLE
805 OAKLAND
MT PLEASANT MI 48858

LABELLE LEASING
405 S MISSION
MT PLEASANT MI 48858

WINN TELEPHONE COMPANY
2766 W BLANCHARD RD
WINN MI 48896

CTD-3B LLC
1348 TOMAH DR
MT PLEASANT MI 48858

ST ANDRE JERRY & MARY
1052 PUEBLO PASS
WEIDMAN MI 48893

KHABIR JEFFREY A
520 N MISSION ST
MT PLEASANT MI 48858

SPENCER-FOX PTRS
702 EAST MICHIGAN ST
MT PLEASANT MI 48858

IMPERIAL OIL COMPANY INC
5115 E PICKARD RD
MT PLEASANT MI 48858

KOB LLC
619 S MISSION ST
MT PLEASANT MI 48858

EMERALD PHYSICAL THERAPY & REHB INC
555 S MISSION ST
MT PLEASANT MI 48858

RCS EQUITIES INC
P O BOX 222
MT PLEASANT MI 48804

HARTUNIAN GORDON & FRIEDA
PO BOX 436001
PONTIAC MI 48343-6001

JOY MISSION LAND LLC
1001 S MISSION ST
MT PLEASANT MI 48858

DAFOE KIRK & JULAINE
1535 LYNNWOOD DR
MT PLEASANT MI 48858

DAFOE KIRK
1019 S MISSION ST
MT PLEASANT MI 48858

ISO GRAND RAPIDS REAL ESTATE VI LLC
13192 MARSH
GOWEN MI 49326

RLS ENTERPRISES LLC
1035 S MISSION ST
MT PLEASANT MI 48858

IMPERIAL COMPANY INC
5115 E PICKARD
MT PLEASANT MI 48858

HOSTUTLER FAMILY LTD PTNRSH
PO BOX 202
MT PLEASANT MI 48804-0202

HOSTUTLER FAMILY PARTNERSHIP
P O BOX 202
MT PLEASANT MI 48804-0202

UNITED INVESTMENTS INC
PO BOX 222
MT PLEASANT MI 48804-0222

MT PLEASANT PUBLIC SCHOOLS
201 S UNIVERSITY
MT PLEASANT MI 48858

B & L UNITED LLC
5802 EVERGREEN ST
MIDLAND MI 48642

TDB LTD
PO BOX 750
BAY CITY MI 48707

ZION LUTHERAN CHURCH OF MT PLEASANT
701 E MAPLE
MT PLEASANT MI 48858

PETROSKEY EUGENE L & MARIE T
512 S MISSION ST
MT PLEASANT MI 48858

STB REALTY LLC
1321 PINE AVE
ALMA MI 48801

RCS EQUITIES INC
P O BOX 222
MT PLEASANT MI 48804

HAFER HARDWARE (G IRWIN)
909 N MISSION ST
MT PLEASANT MI 48858

HARBOR BAY INC
P O BOX 516
HARBOR SPRINGS MI 49740

HAFER HARDWARE (G IRWIN)
909 N MISSION ST
MT PLEASANT MI 48858

MICHIGAN STATE OF (DNR)
LAND DIVISION
MASON BLDG
LANSING MI 48926

MEIJER INC
PROPERTY TAX DEPT
2929 WALKER AVE NW
GRAND RAPIDS MI 49544

RT MICHIGAN FRANCHISE LLC
RUBY TUESDAY
1023 E PICKARD ST
MT PLEASANT MI 48858

FIFTH THIRD BANK
CORP FAC MD10ATA1
38 FOUNTAIN SQUARE PLAZA
CINCINNATI OH 45263

WILTSE WAREHOUSE LLC
1403 WASHINGTON ST
MIDLAND MI 48640

LEE DAVID & LISA (WENDEL'S FURNITUR
904 N MISSION ST
MT PLEASANT MI 48858

LEE MARK DUANE
1720 MOORES RIVER RD
LANSING MI 48910

LEE WENDEL
1720 MOORES RIVER DR
LANSING MI 48910

JP RESTAURANT CORP
2478 HILLER RD
WEST BLOOMFIELD MI 48324

JP RESTAURANT CORP
2478 HILLER RD
WEST BLOOMFIELD MI 48324

HOSPITALITY HOLDINGS LLC
405 S MISSION
MT PLEASANT MI 48858

FILLMORE GERALD & PATRICIA REV TRUS
PO BOX 648
LAKE ORION MI 48361

KRAPOHL REAL ESTATE CO
1415 E PICKARD
MT PLEASANT MI 48858

KRAPOHL REAL ESTATE CO
1415 E PICKARD ST
MT PLEASANT MI 48858

KRAPOHL REAL ESTATE CO
1415 E PICKARD ST
MT PLEASANT MI 48858

KRAPOHL REAL ESTATE CO
1415 E PICKARD ST
MT PLEASANT MI 48858

PITTSLEY'S
1501 E PICKARD ST
MT PLEASANT MI 48858

KERO PROPERTIES
4701 S CHIPPEWA RD
SHEPHERD MI 48883

WALZ WILLIAM & CYNTHIA
804 S FANCHER
MT PLEASANT MI 48858

MTPRE LLC (GRAFF CHEVROLET)
4580 E PICKARD RD
MT PLEASANT MI 48858

MTPRE LLC (GRAFF CHEVROLET)
4580 E PICKARD RD
MT PLEASANT MI 48858

ISABELLA BANK & TRUST
200 E BROADWAY ST
MT PLEASANT MI 48858

ISABELLA BANK & TRUST
200 E BROADWAY ST
MT PLEASANT MI 48858

ISABELLA BANK & TRUST
200 E BROADWAY ST
MT PLEASANT MI 48858

LEVIERE DAN & TONI & LEVIERE TIM
3272 WALTER
COLEMAN MI 48618

LEBRA ENTERPRISES LLC
2479 ROSEWOOD NORTH DR
MT PLEASANT MI 48858

CASE ALBERT
1316 E PICKARD ST
MT PLEASANT MI 48858

DOSENBERRY CLYDE & PAMELA
1005 GLENWOOD
MT PLEASANT MI 48858

DOSENBERRY CLYDE & PAMELA
812 S FANCHER
MT PLEASANT MI 48858

BADER & SONS CO MT PLEASANT PROPERT
VALMA G BADER
1365 E MONROE RD
ST LOUIS MI 48880

DOSENBERRY CLYDE & PAMELA
1005 GLENWOOD
MT PLEASANT MI 48858

REDBIRD OF MT PLEASANT INC
1210 E PICKARD ST
MT PLEASANT MI 48858

REDBIRD OF MT PLEASANT
1210 E PICKARD STREET
MT PLEASANT MI 48858

REDBIRD OF MT PLEASANT
1210 E PICKARD STREET
MT PLEASANT MI 48858

CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
MT PLEASANT MI 48859

SPIRIT MASTER FUNDING II LLC
14631 N SCOTTSDALE RD, STE 200
SCOTTSDALE AZ 85254-2711

SENTRY PROPERTIES LLC
PO BOX 532
MIDLAND MI 48640

TRI-CITY FOODS INC
150 N OLIVER
WICHITA KS 67208

MALISH PROPERTIES INC
1200 S MISSION ST
MT PLEASANT MI 48858

MALISH PROPERTIES INC
1200 S MISSION ST
MT PLEASANT MI 48858

CENTRAL MICHIGAN UNIVERSITY
MT PLEASANT MI 48859

JON'S DRIVE IN
1030 S MISSION ST
MT PLEASANT MI 48858

SPIRIS PLAZA LLC
302 PENINSULA BLVD
GULF SHORES AL 36542-8402

RCS EQUITIES INC
P O BOX 222
MT PLEASANT MI 48804

LA SENORITA MT PLEASANT
C/O R E MCELROY
3609 SMITH BARRY RD
ARLINGTON MI 76013

LA MARGARITA COMPLEX
PO BOX 5162
TRAVERSE CITY MI 49696-5162

BOBENAL INVESTMENTS
784 W LAKE LANSING RD
EAST LANSING MI 48823

IMPERIAL OIL COMPANY INC
5115 E PICKARD RD
MT PLEASANT MI 48858

MACGREGOR INVESTMENTS
701 W PRESTON
MT PLEASANT MI 48858

LABELLE LTD PARTNSHP & JBT LLC
405 S MISSION ST
MT PLEASANT MI 48858

GORDON FOOD SERVICE INC
ATTN: MARKET PLACE ACCOUNTING
PO BOX 1787
GRAND RAPIDS MI 49501-1787

STEELE MT PLEASANT REALTY LLC
7411 JANEL COURT
BRIGHTON MI 48116

STEELE MT PLEASANT REALTY LLC
7411 JANEL COURT
BRIGHTON MI 48116

MCDONALD'S CORP #210520
TAX DEPT:AMF O'HARE AIRPORT
PO BOX 66351
CHICAGO IL 60666

DIVERSIFIED CAPITAL MT PL LLC
P O BOX 26246
LANSING MI 48909

JCKW INC (DBA BW-3 MT PLEAS)
PO BOX 439
WASHINGTON MI 48094

CHEMICAL BANK CLARE
807 MCEWAN ST
CLARE MI 48617

BURGER KING CORP #886
PROPERTY TAX ACCOUNTANT
PO BOX 020783
MIAMI FL 33102-0783

BAUMGARTH R INVESTMENTS LLC
1326 TOMAH DRIVE
MT PLEASANT MI 48858

MCDONALD'S (21-140)
PO BOX 66321 AMF O'HARE AIRPORT
CHICAGO IL 60666

S&L HOLDINGS OF MT PLEASANT LLC
410 N COTTAGE
SHEPHERD MI 48883

GE CAPITAL FRANCHISE FINANCE CORP
17207 N PERIMETER DR
SCOTTSDALE AZ 85255

GE CAPITAL FRANCHISE FINANCE CORP
17207 N PERIMETER DR
SCOTTSDALE AZ 85255

SHORTS
405 S MISSION ST
MT PLEASANT MI 48858

LACCOZ LLC
C/O TIM COSCARELLY
405 S MISSION ST
MT PLEASANT MI 48858

SILVERBERG STEVEN
1105 WENDROW WAY
MT PLEASANT MI 48858

MTP/P LLC
MICHAEL & TERESA PARSHALL
3772 NOSTWICK
THOMPSONVILLE MI 49683

BLODGETT LAND INC
1616 N MISSION ST
P O BOX 39
MT PLEASANT MI 48804-0039

FIRSTBANK
102 S MAIN ST
MT PLEASANT MI 48858

ABRAHAM MISSION ST LLC
431 S CAPITOL AVE
LANSING MI 48933

VOLUME SHOE CORPORATION #2017
PO BOX 3560
TOPEKA KS 66601-3560

MT PLEASANT SHOPPING CENT LLC
31850 NORTHWESTERN HWY
FARMINGTON HILLS MI 48334

SPARTAN PASTABILITIES LLC
841 CORPORATE DR, STE 105
LEXINGTON KY 40503

RYAN'S INVESTMENTS
PO BOX 753
MT PLEASANT MI 48804-0753

GALLAGHER BYRON P JR ET AL
PO BOX 548
MT PLEASANT MI 48804-0548

PITTSLEY'S LLC
PO BOX 363
MT PLEASANT MI 48804-0363

FAULKNER MICHAEL & JOAN
808 N MISSION
MT PLEASANT MI 48858

MCDONALD'S CORP #210300
TAX DEPT:AMF O'HARE AIRPORT
PO BOX 66351
CHICAGO IL 60666

MICHIGAN STATE OF (MDSH)
TAX UNIT
DRAWER K
LANSING MI 48904

CHEMICAL BANK MICHIGAN
807 MCEWAN
CLARE MI 48617

PERFECTION BAKERIES INC
350 PEARL ST
FORT WAYNE IN 46802

TIM DONUT US LTD INC
4150 TULLER RD, STE 236
DUBLIN OH 43017

SPEEDWAY SUPERAMERICA LLC
PROPERTY TAX DEPT
539 SOUTH MAIN ST
FINDLAY OH 45840

712 N MISSION LLC
*
* * *

712 N MISSION LLC
*
* * *

712 N MISSION LLC
694 MICHIGAN AVE
HOLLAND MI 49423

SWITZER MONALEE (REVOCABLE TRUST)
607 N BROWN ST
MT PLEASANT MI 48858

HIGGINS LARRY J & KRISTINE S
612 N MISSION ST
MT PLEASANT MI 48858

MOTZ JAMES & AMY
1370 W DEERFIELD RD
MT PLEASANT MI 48858

BISSETT RAYMOND E & KAY J
111 W MAPLE ST
SHEPHERD MI 48883

WOODRICK ANDREW & REYNOLDS MONICA
903 E HIGH ST
MT PLEASANT MI 48858

GRAY DUANE & BONNIE LVG TRUST
807 S MISSION ST
MT PLEASANT MI 48858

MT PLEASANT BUILDING AUTHORITY
401 N MAIN ST
MT PLEASANT MI 48858-1698

ASSMANN'S RENTAL CO
1500 W BROADWAY
MT PLEASANT MI 48858

CENTRAL PROPERTIES INC
925 S MISSION ST
MT PLEASANT MI 48858

ZAMARRON PATRICIA
925 S MISSION
MT PLEASANT MI 48858

WOODRICK ANDREW & REYNOLDS MONICA
903 E HIGH ST
MT PLEASANT MI 48858

FABIANO PROPERTIES INC
P O BOX 469
MT PLEASANT MI 48804-0469

FABIANO PROPERTIES INC
P O BOX 469
MT PLEASANT MI 48804-0469

L J'S KITCHENS
1105 N MISSION ST
MT PLEASANT MI 48858

PCA OF NORTH CENTRAL MICHIGAN
1019 N MISSION ST
MT PLEASANT MI 48858

TRINKLEIN DONALD L
1035 S MAIN
FRANKENMUTH MI 48734

BT-OH, LLC
PROPERTY TAX DEPT - ANN KEEGAN
P O BOX 28606
ATLANTA GA 30358-0606

PLEASANT PLAZA INC
C/O STEVE BIGARD
950 S CRAWFORD RD
MT PLEASANT MI 48858

FABIANO BROTHERS INC
P O BOX 469
MT PLEASANT MI 48804-0469

FABIANO PROPERTIES INC
1219 N MISSION
MT PLEASANT MI 48804

FABIANO PROPERTIES INC
P O BOX 469
MT PLEASANT MI 48804-0469

LALONE MORVAL INC
1324 N MISSION RD
MT PLEASANT MI 48858

FARM CREDIT SERVICES OF MICH
PO BOX 22067
LANSING MI 48909

BOBENAL INVESTMENTS
BUILDING ON LEASED LAND
784 W LAKE LANSING ROAD
EAST LANSING MI 48823

K-MART CORPORATION
(BLG ON LEASED LAND) BURR WOLFF
P O BOX 4695
HOUSTON TX 77210-4695

BLYSTONE & BAILEY CPA
SUITE 5
619 S MISSION ST
MT PLEASANT MI 48858

H & R BLOCK (MT PLEASANT-S MISSION)
3974 WILDER RD
BAY CITY MI 48706

ERITANO & ASSOCIATES
612 E BROADWAY
MT PLEASANT MI 48858

KERO PROPERTIES LLC
4701 S CHIPPEWA RD
SHEPHERD MI 48883

UNITED APTS-WESTERN ISLANDS
P O BOX 222
MT PLEASANT MI 48804-0222

GRAY, SOWLE & IACCO PC
*
* * *

BURGER DEAN PONTIAC BUICK
116 N MISSION ST
MT PLEASANT MI 48858

BAY VALLEY OIL-#5 WM BOUTELL
P O BOX 750
BAY CITY MI 48707

KRAPOHL REAL ESTATE CO
1415 E PICKARD ST
MT PLEASANT MI 48858

LUBE LAB
301 S MISSION ST
MT PLEASANT MI 48858

MT PLEASANT AUTOMOTIVE INC
703 N MISSION ST
MT PLEASANT MI 48858

MUFFLER MAN OF MT PLEASANT
101 S MISSION ST
MT PLEASANT MI 48858

CARQUEST AUTO PARTS OF MT PLEASANT
C/O DELOITTE TAX LLP
191 PEACHTREE ST, STE 1500
ALTANTA GA 30303

RHYNARD RONALD (RHYNOS CAR WASH)
4701 S CHIPPEWA RD
SHEPHERD MI 48883

SUNOCO INC (R & M)
TAX DEPT
1735 MARKET ST, STE LL
PHILADELPHIA PA 19103-7583

TIRE FACTORY
P O BOX 26246
LANSING MI 48909

VALET AUTO CARE INC
610 N MISSION ST
MT PLEASANT MI 48858

ROBAIRE'S PASTRY SHOP
1903 S MISSION ST
MT PLEASANT MI 48858

SCHAFFER BAKERIES INC
PERFECTION BAKERIES INC
350 PEARL ST
FORT WAYNE IN 46802

CALIFORNIA CONNECTION HAIR CO
1243 N MISSION ST
MT PLEASANT MI 48858

FIESTA HAIR FASHIONS #193
C/O CBIZ, PMB 360
4287 BELTLINE RD
ADDISON TX 75001

SHEAR MAGIC HAIRSTYLING
624 S MISSION ST
MT PLEASANT MI 48858

SIDE DOOR SALON INC
1620 S MISSION ST, SUITE G
MT PLEASANT MI 48858

STUDIO OF MODERN HAIR DESIGN
924 S MISSION ST
MT PLEASANT MI 48858

SWITZER'S BARBER SHOP
616 N MISSION ST
MT PLEASANT MI 48858

JOY MISSION LAND LLC (MILLER'S)
JOY QUALITY CLEANERS
1001 S MISSION ST
MT PLEASANT MI 48858

ECON O WASH
S&L HOLDINGS OF MT PLEASANT LLC
410 N COTTAGE
SHEPHERD MI 48883

MARATHON PETROLEUM CO LLC
C/O PROPERTY TAX DEPT
539 SOUTH MAIN ST
FINDLAY OH 45840

IMPERIAL OIL COMPANY INC (#10)
5115 E PICKARD RD
P O BOX 385
MT PLEASANT MI 48858

SPEEDWAY SUPERAMERICA LLC
PROPERTY TAX DEPT
539 SOUTH MAIN ST
FINDLAY OH 45840

M MURPHY INC
DBA THE STORE
710 E PRESTON
MT PLEASANT MI 48858

COURTRIGHT DENTAL LAB
316 N MISSION ST
MT PLEASANT MI 48858

JOHNSTON DOUGLAS DDS
*
* * *

DAY ELECTRIC
LARRY HIGGINS
612 N MISSION ST
MT PLEASANT MI 48858

ELLIOTT FLORAL & GIFT BASKETS
2005 S MISSION ST
MT PLEASANT MI 48858

JIM & DONNA'S FLOWER SHOP
100 S MISSION ST, SUITE G
MT PLEASANT MI 48858

BLODGETT OIL CO-SHELL SERVICE
1616 N MISSION ST
P O BOX 39
MT PLEASANT MI 48804-0039

BLODGETT OIL CO
1616 N MISSION ST
P O BOX 39
MT PLEASANT MI 48804-0039

SOUDER'S SERVICE CENTER
1035 S MISSION ST
MT PLEASANT MI 48858

RIC'S FOOD CENTER
MT PLEASANT LTD
903 E HIGH ST
MT PLEASANT MI 48858-2864

HAFER HARDWARE
909 N MISSION ST
MT PLEASANT MI 48858

B-TAN (MKL CORP)
P O BOX 955
MT PLEASANT MI 48804-0955

ALLSTATE INSURANCE COMPANY
THREE RESOURCE SQUARE
10815 DAVID TAYLOR DRIVE
CHARLOTTE NC 28262

DENOYELLES MARK
1203 S MISSION ST
MT PLEASANT MI 48858

AAA MICHIGAN - BRANCH #772
ATTN: FINANCIAL REPORTING
1 AUTO CLUB DR
DEARBORN MI 48126

GENERAL AGENCY COMPANY
525 E BROADWAY ST
MT PLEASANT MI 48858

FRED MEYER JEWELERS INC
ATTN: TAX DEPARTMENT
*
* * *

GOLD CREATIONS
1028 S MISSION ST
MT PLEASANT MI 48858

LABELLE LEASING (SWEET ONION)
405 S MISSION ST
MT PLEASANT MI 48858

REYNA FINANCIAL CORPORATION
P O BOX 1005
DAYTON OH 45401

MALISH PROP INC (CHIPPEWA LANES)
1200 S MISSION ST
MT PLEASANT MI 48858

MISSION PHYSICAL THERAPY
555 S MISSION ST
MT PLEASANT MI 48858

LALONE MORVAL INC
1803 N MISSION ST
MT PLEASANT MI 48858

GREENSTONE FARM CREDIT SERVICES
P O BOX 351
MT PLEASANT MI 48804-0351

UNITED PARCEL SERVICE
ATTN: ACCOUNTING OFFICE
2055 ARMY TRAIL RD, STE 128
ADDISON IL 60101

CARPET OUTLET
DEYOUNG, PAUL & MARILYN
509 N MISSION ST
MT PLEASANT MI 48858

LUX FUNERAL HOME
503 E BROADWAY ST
MT PLEASANT MI 48858

MAIN STREET AUDIO/VIDEO
701 N MISSION ST
MT PLEASANT MI 48858

RACKEM BILLIARDS
*
* * *

VIDEO LAND INC
1022 S MISSION ST
MT PLEASANT MI 48858

LABELLE LEASING
405 S MISSION ST
MT PLEASANT MI 48858

LABELLE MANAGEMENT
405 S MISSION ST
MT PLEASANT MI 48858

CENTRAL ANIMAL HOSPITAL
2008 S MISSION ST
MT PLEASANT MI 48858

MT PLEASANT CHIROPRACTIC CLNC
616 E BROADWAY ST
MT PLEASANT MI 48858

MESSENGER G G MD PLLC
1515 LAKE LANSING RD, STE A
LANSING MI 48912

SEALS JAMES & TACIA PETER, PC
1321 N PINE AVE
ALMA MI 48801

YOUNG MARK MD DPM PODIATRIST
405 S MISSION ST, SUITE 2
MT PLEASANT MI 48858

CENTRAL PLUMBING INC
600 N MISSION ST
MT PLEASANT MI 48858

KOPY KORNER
PARAMOUNT PRINTING INC
2210 S MISSION
MT PLEASANT MI 48858

BOWERMAN-PEAKE REALTY INC (C-21)
911 E PICKARD ST SUITE C
MT PLEASANT MI 48858

ERA CENTRAL REAL ESTATE
925 S MISSION ST
MT PLEASANT MI 48858

WATERFIELD FINANCIAL CORP
ATTN: CORP ACCT- PAUL GRIDER
7500 W JEFFERSON BLVD
FORT WAYNE IN 46804-4132

AGNES'S WONDERLAND DINER
*
* * *

SYBRA INC -ARBY'S #785
ATTN: PROP TAX DEPT
1155 PERIMETER CENTER WEST #700
ATLANTA GA 30338

LABELLE LEASING (HENMAR)
*
* * *

BURGER KING #886
1912 S MISSION ST
MT PLEASANT MI 48858

EAT PIZZA LLC (DOMINO'S PIZZA)
7600 N SCOTT RD
ST JOHNS MI 48879-9470

CHINA GARDEN RESTAURANT
2328 S MISSION ST
MT PLEASANT MI 48858

EMBERS THE
C/O JEFFREY & VICKI TUMA
645 W BROOMFIELD RD
MT PLEASANT MI 48858

HARBOR BAY INC (J W FILMORES)
PO BOX 516
HARBOR SPRINGS MI 49740

FOODCRAFT (PIZZA HUT #1-1 TAS)
% SAVAGE, SAVAGE & BROWN
P O BOX 22845
OKLAHOMA CITY OK 73123

ICE CREAM PLACE
812 S FANCHER
MT PLEASANT MI 48858

JON'S DRIVE IN
1030 S MISSION ST
MT PLEASANT MI 48858

KFC-MT PLEASANT INC
P O BOX 637
MT PLEASANT MI 48804-0637

LA SENORITA MT PLEASANT INC
C/O R E MCELROY INC
3609 SMITH BARRY RD
ARLINGTON TX 76013

MCDONALD'S RESTAURANTS OF MI INC
(STATE SITE #210520)
PO BOX 66351, AMF O'HARE AIRPORT
CHICAGO IL 60666

MCDONALD'S RESTAURANTS OF MI INC
(STATE SITE #210300)
P O BOX 66351, AMF O'HARE AIRPORT
CHICAGO IL 60666

MIDSTATE RESTAURANTS INC (BIG BOY)
405 S MISSION ST
MT PLEASANT MI 48858

PIXIE DRIVE IN NORTH
405 S MISSION ST
MT PLEASANT MI 48858

PIZZA KING
HENNING INC
714 E PRESTON
MT PLEASANT MI 48858

SHORTS - BIG BOY
405 S MISSION ST
MT PLEASANT MI 48858

SWEET ONION INC
102 N MISSION ST
MT PLEASANT MI 48858

MARIANE INC (TACO BELL)
TACO BELL #1363
P O BOX 250
HOUGHTON LAKE MI 48629

TONY'S RESTAURANT
804 S MISSION ST
MT PLEASANT MI 48858

BAYWEN INC (WENDY'S)
350 ST ANDREW'S RD STE 130
SAGINAW MI 48603

AARON'S CARPETS & WALLPAPER
601 N MISSION ST
MT PLEASANT MI 48858

ASSMANN'S INC
901 S MISSION ST
MT PLEASANT MI 48858

C & O SPORTSWEAR
1530 S MISSION ST
P O BOX 128
MT PLEASANT MI 48804-0128

C & S ENGRAVING
2015 S MISSION ST
MT PLEASANT MI 48858

COMFORT CENTER #3 INC
512 S MISSION ST
MT PLEASANT MI 48858

COOK CHRISTIAN SUPPLIES
611 N MISSION ST
MT PLEASANT MI 48858

JO-ANN STORES INC
DBA JO-ANN FABRICS & CRAFTS #476
5555 DARROW ROAD
HUDSON OH 44236

FASHION BUG MT PLEASANT #147
CORP TAX 7B-13
3750 STATE RD
BENSALEM PA 19020

FRAMES UNLIMITED OF MT PLEASANT INC
3343 LOUSMA DRIVE
WYOMING MI 49548

PENNEY J C CORP INC
MAIL STOP 1217
P O BOX 10001
DALLAS TX 75301-1217

K-MART OF MICHIGAN, INC.
C/O BURR WOLFF LP
PO BOX 4695
HOUSTON TX 77210-4695

L J'S KITCHENS & INTERIORS
1105 N MISSION ST
MT PLEASANT MI 48858

MAURICE'S #677
105 W SUPERIOR ST
DULUTH MN 55802

MC SPORTING GOODS
3070 SHAFFER AVE SE
GRAND RAPIDS MI 49512

MEIJER INC #69
ATTN: PROPERTY TAX DEPT
2929 WALKER AVE, NW
GRAND RAPIDS MI 49544

MT PLEASANT FLOOR COVERING
509 N MISSION ST
MT PLEASANT MI 48858

PAPERBACK BOOK EXCHANGE
1811 S MISSION ST
MT PLEASANT MI 48858

PAYLESS SHOE SOURCE #2017
PO BOX 3560
TOPEKA KS 66601-3560

RADIOSHACK CORP #6911
MAIL STOP (5024), CF4-340
PO BOX 961090
FORT WORTH TX 76161-5024

SEMPLINER'S BLACK TIE TUXEDO
1017 S MISSION ST
MT PLEASANT MI 48858

SHERWIN-WILLIAMS CO
% TAX DEPT (#1317)
P O BOX 6027
CLEVELAND OH 44101

SHOE HORN THE
2155 S MISSION ST
MT PLEASANT MI 48858

SOFTWARE WORKS THE
600 S MISSION ST
MT PLEASANT MI 48858

SOMEPLACE SPECIAL INC #2
2205 S MISSION
MT PLEASANT MI 48858

STAINED GLASS WORKSHOP THE
1227 N MISSION ST
MT PLEASANT MI 48858

STADIUM BOOK MARK
ROBERT F MURRAY & CO CPA PC
805 N BROWN ST
MT PLEASANT MI 48858

WENDEL'S OF MT PLEASANT INC
904 N MISSION ST
MT PLEASANT MI 48858

GREEN SPOT BAR INC
808 N MISSION ST
MT PLEASANT MI 48858

MAIN THE
807 S MISSION ST
MT PLEASANT MI 48858

HUNTER DAVID C INC
2000 S MISSION ST
MT PLEASANT MI 48858

HOT N NOW
BLAZER FOODS INC
3323 SHATTUCK
SAGINAW MI 48603

INDEPENDENT OFFICE MACHINES
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KANE DANIEL T DDS
611 E BROADWAY ST
MT PLEASANT MI 48858

SOUTHWEST BRAKE & PARTS INC
951 S DIX
DETROIT MI 48217

AUTO LAB DIAGNOSTICS & TUNE-UP
402 N MISSION ST
MT PLEASANT MI 48858

LUBE LAB THE
2389 S MISSION ST
MT PLEASANT MI 48858

BRIGHAM'S AUTOMOTIVE SUPPLY INC
709 E BROADWAY ST
MT PLEASANT MI 48858

BO-RICS HAIRCARE
MINNESOTA REGIS CORP., TAX DEPT
7201 METRO BLVD
MINNEAPOLIS MN 55439

BONDS FREDERICK R DDS PC
1231 N MISSION ST
MT PLEASANT MI 48858

BLOCKBUSTER VIDEO INC #95801
DELOITTE TAX LLP, PROP TAX SERV
6363 N STATE HWY 161, STE 800
IRVING TX 75038-2262

PICKARD SQUARE MANAGEMENT LLC
1720 MOORES RIVER DRIVE
LANSING MI 48910-1002

HUNAN HOUSE
2157 S MISSION ST
MT PLEASANT MI 48858

LABELLE LEASING (PIXIE)
405 S MISSION ST
MT PLEASANT MI 48858

HENMAR FOODS INC (PONDEROSA)
405 S MISSION ST
MT PLEASANT MI 48858

HOLDEN MICHAEL J DDS MS
611 E BROADWAY ST
MT PLEASANT MI 48858

SPEEDWAY SUPERAMERICA LLC
PROPERTY TAX DEPT
539 SOUTH MAIN ST
FINDLAY OH 45840

KILWINS OF MT PLEASANT
C/O ELLIOTT GREENHOUSE INC
800 W BROADWAY
MT PLEASANT MI 48858

GERALD FILLMORE
PO BOX 648
LAKE ORION MI 48361

C & C ENTERPRISE INC
615 N MISSION ST
MT PLEASANT MI 48858

CENTENNIAL MICHIGAN RSA-7 CELL CORP
TAX DEPT-V. GROSS
3349 ROUTE 138, BLDG. A
WALL NJ 07719

MURRAY J & CO
706 E BROADWAY ST
MT PLEASANT MI 48858

MIRAGE TANNING/SWEATSHOP TANNING
KIMBERLY STORM
1401 US-31 NORTH
TRAVERSE CITY MI 49686

DUNHAM'S SPORTING GOODS
2129 S MISSION ST
MT PLEASANT MI 48858

BLODGETT OIL CO INC
P O BOX 39
MT PLEASANT MI 48804-0039

JARRETT THE JEWELER
406 S MISSION ST
MT PLEASANT MI 48858

FAMILY DOLLAR STORES #02206
PO BOX 56018
INDIANAPOLIS IN 46256-0018

FAST TRACK OIL & LUBE
PITTSLEY
1501 E PICKARD ST
MT PLEASANT MI 48858

GUITAR CENTRAL
C/O ED BAIRD
*
* * *

LIL CHEF RESTAURANT
SOUTH MISSION INC
1720 S MISSION ST
MT PLEASANT MI 48858

LOGOS GALORE
MORDICA SALES ASSOCIATES INC
P O BOX 335, 300 S MISSION ST
MT PLEASANT MI 48804-0335

PENDRED OFFICE MACHINES
1233 N MISSION ST
MT PLEASANT MI 48858

POOLE CHIROPRACTIC
CINDY POOLE DC
2207 S MISSION ST
MT PLEASANT MI 48858

REDBIRD FEEDS & PET SUPPLIES
REDBIRD OF MT. PLEASANT
1210 E PICKARD ST
MT PLEASANT MI 48858

STAR GROUP INNS LLC (SUPER 8)
C/O SGI MANAGEMENT GROUP LLC
PO BOX 80877
ROCHESTER MI 48308-0877

TIM'S SMALL ENGINE REPAIR
*
* * *

VISION STUDIO PERFORMING ARTS
1809 S MISSION ST
MT PLEASANT MI 48858

TACO BOY - B & J MEXICAN FOOD INC
ATTN: ROBERT BALTIERREZ
1218 S MISSION ST
MT PLEASANT MI 48858

MARATHON PETROLEUM CO LLC
PROPERTY TAX DEPARTMENT
539 S MAIN STREET
FINDLAY OH 45840

TDL FOODS, INC (HUNGRY HOWIE'S)
DBA HUNGRY HOWIE'S
111 S MISSION ST
MT PLEASANT MI 48858

UPS STORE THE
C/O TRAINOR ENTERPRISES INC
2020 S MISSION ST
MT PLEASANT MI 48858

GARB-KO INC (7-11)
PO BOX 5947
3925 FORTUNE BLVD
SAGINAW MI 48603

ABC WAREHOUSE
P.O. BOX 436001
PONTIAC MI 48343-6001

ETHNIC CREATIONS
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* * *

GEMINI PHOTO
600 S MISSION ST
MT PLEASANT MI 48858

ENTERPRISE RENT-A-CAR
1218 S MISSION
MT PLEASANT MI 48858

PAPA JOHNS
1504 S MISSION
MT PLEASANT MI 48858

GRAFX CENTRAL INC
502 N MISSION ST
MT PLEASANT MI 48858

R & R LAUNDRY
RYRA INC
1705 S MISSION
MT PLEASANT MI 48858

GORDON FOOD SERVICE INC
ATTN: MARKET PLACE ACCTING
P.O. BOX 1787
GRAND RAPIDS MI 49501-1787

ANTIQUES CENTER OF MT PLEASANT
LYNETTE PENDRED
1718 S MISSION
MT PLEASANT MI 48858

NEW MOON RECORDS
MICHAEL AND TERESA PARSHALL
3772 NOSTWICK
THOMPSONVILLE MI 49683

JCKW INC
DBA BUFFALO WILD WINGS BAR & GRILLE
PO BOX 439
WASHINGTON MI 48094

STAPLES THE OFFICE SUPERSTORE EAST
PO BOX 9268
500 STAPLES DR
FRAMINGHAM MA 01702

ITALIAN OVEN THE
LABELLE MANAGEMENT
405 S MISSION ST
MT PLEASANT MI 48858

HERBS ETC
1410 S MISSION ST
MT PLEASANT MI 48858

COOKS MUSIC
C/O JAMES GOWEN
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RITE AID CORPORATION
30 HUNTER LANE
CAMP HILL PA 17011

MASK OIL LLC
*
* * *

MORNING STAR BAKERY
1620 S MISSION, SUITE P
MT PLEASANT MI 48858

BUDGET INN
PRANAM INC
1523 S MISSION
MT PLEASANT MI 48858

SAM GOODY #6148
MUSICLAND GROUP
10400 YELLOW CIRCLE DR
MINNETONKA MN 55343

JEFCO INVESTMENT LIMITED (SUBWAY)
SUBWAY
PO BOX 753
MT PLEASANT MI 48858

JEFCO INVESTMENTS LIMITED
SUBWAY
PO BOX 753
MT PLEASANT MI 48804-0753

COMPUTER CONSIGNMENTS OF MT PL
501 S MISSION ST
MT PLEASANT MI 48858

WINCEL CELLULAR CORP
PO BOX 367
WINN MI 48896

SAVE-A-LOT FOOD STORE
ALLIANCE FOODS, INC.
605 W. CHICAGO - PO BOX 339
COLDWATER MI 49036

SMOKERS CLUB
100 S MISSION ST, SUITE C
MT. PLEASANT MI 48858

FAMILY DENTAL CARE
405 S MISSION ST
MT PLEASANT MI 48858

IMPERIAL COMPANY INC
PO BOX 408
MT. PLEASANT MI 48804-0408

UAW LOCAL 6888
1205 S MISSION ST
MT. PLEASANT MI 48858

MASSAGE THERAPY
1205 S MISSION ST
MT. PLEASANT MI 48858

SPRINGER PROSTHETICS
200 N HOMER
LANSING MI 48912

CEN MICH ELECTROLOGY CLINIC
1205 S MISSION ST
MT. PLEASANT MI 48858

RENT-A-CENTER #01674
PO BOX 22845
OKLAHOMA CITY OK 73123

JONES EDWARD D & CO
ATTN: TAX REPORTING #4898
12555 MANCHESTER RD
ST LOUIS MO 63131

SEARS ROEBUCK AND CO
D/768TAX B2-109A
3333 BEVERLY RD
HOFFMAN ESTATES IL 60179

SILVERBERG JEWELERS
1805 S MISSION ST
MT. PLEASANT MI 48858

BIG APPLE BAGELS
C/O SWEET ONION INC
405 S MISSION ST
MT. PLEASANT MI 48858

L A NAILS
2104 S MISSION ST
MT. PLEASANT MI 48858

SPARTAN PASTABILITIES, LLC
841 CORPPORATE DR, STE 105
LEXINGTON KY 40503

NISCO INC
WAYSIDE
2000 S MISSION
MT. PLEASANT MI 48858

DAIRY QUEEN
100 S MISSION
MT. PLEASANT MI 48858

NAIL PARLOR
100 S MISSION, SUITE B
MT. PLEASANT MI 48858

MOEGGENBORG AGENCY-FARM BUREAU
100 S MISSION, SUITE F
MT. PLEASANT MI 48858

LITTLE CAESAR'S PIZZA
61 CEDAR DR
MT. PLEASANT MI 48858

NORM'S HOBBY
600 S MISSION
MT. PLEASANT MI 48858

MISSION PHARMACY
926 S MISSION ST
MT. PLEASANT MI 48858

RENT-WAY OF MICHIGAN INC #249
ONE RENTWAY PLACE
ERIE PA 16505

BAYWEN INC (WENDY'S)
350 ST ANDREW'S RD STE 130
SAGINAW MI 48603

CTD-3B LLC (GOLDEN CORRAL)
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HPSC INC
TAX DEPT
ONE BEACON ST, 2ND FLOOR
BOSTON MA 02108

MODERN NAIL STUDIO
1015 S MISSION ST
MT PLEASANT MI 48858

ELEGANT BRIDAL
1014 S MISSION ST
MT PLEASANT MI 48858

CENTRAL MICHIGAN STAFFING
605 N MISSION ST
MT PLEASANT MI 48858

FAMILY FOOT CARE OF MID MICH, PC
1205 S MISSION ST SUITE 11
MT PLEASANT MI 48858

CAMPUS SALON
2015 S MISSION ST
MT PLEASANT MI 48858

DOBSON CELLULAR SYSTEM (F/K/A NPI)
C/O AD VALOREM SERVICES COMPANY
PO BOX 211507
BEDFORD TX 76095-8507

ALMA SEWING CENTER
C/O SHIRLEY THOMPSON
2157 S MISSION ST
MT. PLEASANT MI 48858

CAT CLINIC
913 E PICKARD ST, SUITE P
MT PLEASANT MI 48858

SHELDON PHARMACY & MEDICAL SUPPLY
TDS PHARMACY INC
21 W SANILAC AVENUE
SANDUSKY MI 48471

LABOR READY MIDWEST INC #1697
ATTN: PROPERTY TAX DEPT
P O BOX 2910
TACOMA WA 98401-2910

SPARROW REGIONAL MEDICAL SUPPLY
922 S MISSION ST
MT PLEASANT MI 48858

CHAMBERLAIN LYNN R PC
*
* * *

AUTOZONE #2199
P O BOX 2198 DEPT 8088
MEMPHIS TN 38101

GOLDEN COMB THE
501 S MISSION ST
MT PLEASANT MI 48858

MICHIGAN WORKS
1803 S MISSION ST
MT PLEASANT MI 48858

THRIFT SHOP
1225 N MISSION ST
MT PLEASANT MI 48858

PACESETTER FINANCIAL SERVICES
1237 N MISSION ST
MT PLEASANT MI 48858

H & R BLOCK (MT PLEASANT-PICKARD ST
3974 WILDER RD
BAY CITY MI 48706

HOMETOWNE REALTY LLC
1028 S MISSION ST
MT PLEASANT MI 48858

MANEY CABINETS
310 S MISSION ST
MT PLEASANT MI 48858

PASSAGEWAYS TRAVEL
1028 S MISSION ST
MT PLEASANT MI 48858

RIGHTWAY AUTOMOTIVE CREDIT
6200 STATE ST
SAGINAW MI 48603

DOLLAR TREE
C/O MARVIN F POER & CO
P O BOX 802206
DALLAS TX 75380-2206

GREAT LAKES SPECIALTY FINANCE
DBA CHECK N GO
P O BOX 467
MASON OH 45040-0467

FAMILY VIDEO MOVIE CLUB INC
1022 EAST ADAMS ST
SPRINGFIELD IL 62703

WINN TELECOM
402 N MISSION ST, SUITE 1
MT PLEASANT MI 48858

JIMMY JOHN'S SANDWICH SHOP
1901 S MISSION ST, SUITE B
MT PLEASANT MI 48858

URGENT CARE
520 N MISSION ST
MT PLEASANT MI 48858

STATE FARM MUTUAL
AUTOMOBILE INSURANCE COMPANY
ONE STATE FARM PLAZA
BLOOMINGTON IL 61710-001

EDS INFORMATION SERVICES, LLC
5400 LEGACY DR
MAIL STOP H1-4A-66
PLANO TX 75024

LODGENET ENTERTAINMENT CORP
3900 W INNOVATION ST
SIOUX FALLS SD 57107-7002

SUNTRUST LEASING CORP

ST GERMAIN ANTIQUES
319 N MISSION ST
MT PLEASANT MI 48858

STUNER MARY CFNP PC
PO BOX 667
MT PLEASANT MI 48804-0667

ADVANCE EMPLOYMENT SERVICES
2300 S MISSION ST
MT PLEASANT MI 48858

QUICK CHECK CASHING
501 S MISSION ST, SUITE C
MT PLEASANT MI 48858

LOOK INSURANCE - MT PLEASANT
618 S MISSION ST
MT PLEASANT MI 48858

MT PLEASANT HEART STATION
C/O THORACIC & CARDIOVASCULAR INST
405 W GREENLAWN, SUITE 220
LANSING MI 48910

MID MICHIGAN PEDORTHIC CLINIC
1205 S MISSION ST, STE 3
MT PLEASANT MI 48858

GALAXY COMICS
THE STADIUM
1960 HERMAN ST
OWOSSO MI 48867-4046

PC OUTLET
2018 S MISSION ST
MT PLEASANT MI 48858

BASIC COMMUNICATIONS/NEXTELL
2157 S MISSION ST
MT PLEASANT MI 48858

STYLES FOR TOTS
2157 S MISSION ST
MT PLEASANT MI 48858

CURVES FOR WOMEN OF MT PLEASANT
2332 S MISSION ST
MT PLEASANT MI 48858

METRO MIKE INSURANCE AGENCY
*
* * *

LARRY'S AUTOMOTIVE SERVICE CENTER
201 S MISSION ST
MT PLEASANT MI 48858

ACSO OF MI, DBA ADVANCE AMERICA
CASH ADVANCE CENTER #1320
PO BOX 3058, TAX DEPT
SPARTANBURG SC 29304-3058

COOLIDGE GROUP LLC
C/O BURR WOLF
PO BOX 4695
HOUSTON TX 77210-4695

ROSS LEASING AND CONSULTING CORP
5765 LOCHMOOR COURT
ROCHESTER MI 48306-2351

NEXTELL-BASIC COMMUNICATIONS INC
222 N MISSION ST
MT PLEASANT MI 48858

CYBERS' PLACE
316 N MISSION ST
MT PLEASANT MI 48858

SHAMROCK TILE & DESIGN
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* * *

MOUNTAIN TOWN HOBBIES
307 S MISSION ST
MT PLEASANT MI 48858

GREAT WALL BUFFET
1025 S MISSION ST
MT PLEASANT MI 48858

PRETTY PAWS GROOMING
2157 S MISSION ST, SUITE H
MT PLEASANT MI 48858

FLAGSTAR BANK
1222 S MISSION ST
MT PLEASANT MI 48858

WALGREENS PHARMACY (07247-S-PPT)
PO BOX 901
DEERFIELD IL 60015

SOLDANS FEED & PET SUPPLIES
1721 S MISSION ST
MT PLEASANT MI 48858

ZABROS PIZZA BUFFET
C/O RISING CRUST LLC
5225 E PICKARD ST
MT PLEASANT MI 48858

J & J STEVENS INC - QUIZNO'S SUBS
2208 S MISSION ST
MT PLEASANT MI 48858

PITA PIT THE
1620 S MISSION ST, SUITE A
MT PLEASANT MI 48858

KIRBY SALES & SERVICE
1620 S MISSION ST, SUITE C
MT PLEASANT MI 48858

SCHLICHT RYAN-STATE FARM MUTUAL
515 N MISSION ST
MT PLEASANT MI 48858

EMC- EDUCATIONAL MATERIALS CNTR CMU
402 N MISSION ST, SUITE 2
MT PLEASANT MI 48858

IPCS WIRELESS
PO BOX 69
GENESE0 IL 61254

GENTLE FAMILY DENTAL CENTER- DR HOU
*
* * *

JONES EDWARD INVESTMENTS
DAVID MOSCARDELLI
913 E PICKARD ST, SUITE K
MT PLEASANT MI 48858

RT MICHIGAN FRANCHISE LLC-RUBY TUES
C/O MARVIN F POER & COMPANY
PO BOX 802206
DALLAS TX 75380-2206

STEVENS JULIE DO, PC
416 N MISSION ST
MT PLEASANT MI 48858

INTEGRITY SATELITE SERVICES
1235 N MISSION ST
MT PLEASANT MI 48858

ROLY POLY SANDWICHES
100 S MISSION ST, SUITE H
MT PLEASANT MI 48858

MID VALLEY INSURANCE
PO BOX 6370
SAGINAW MI 48608-6370

O-INK
100 RAYCRAFT DR
ITHACA MI 48847

HOPE NETWORK CHILDREN & ADULT REHAB
601 S MISSION ST
MT PLEASANT MI 48858

CENTRAL MICHIGAN FAMILY CHIROPRACTIC
TROY HENRIE DC
1105 S MISSION ST
MT PLEASANT MI 48858

COBB GAYLE LPC NCC
1205 S MISSION ST
MT PLEASANT MI 48858

UNITED METHODIST CHURCH
CENTRAL DISTRICT
1205 S MISSION ST, SUITE 9
MT PLEASANT MI 48858

DANGER ZONE SKATEBOARD SHOP
*
* * *

CHINA ONE BUFFET
S & S CHINA BUFFET INC
1711 S MISSION ST
MT PLEASANT MI 48858

MID MICHIGAN APPLIANCE SERVICE
501 S MISSION ST, SUITE F
MT PLEASANT MI 48858

QUILTED SISTERS
2128 S MISSION ST
MT PLEASANT MI 48858

GLIK'S
2151 S MISSION ST
MT PLEASANT MI 48858

ALLTEL/MT PLEASANT RETAIL
C/O RASH 501-22-0018215864
PO BOX 260888
PLANO TX 75026

PRO NAIL
911 E PICKARD ST
MT PLEASANT MI 48858

MICHDAL ASSOCIATES PLC
116 N KINNEY
MT PLEASANT MI 48858

CHECK AND CASH USA
EXPRESS CASH MANAGMENT
PO BOX 124
BROKAW WI 54417-0124

DOLLAR DAZE
1403 WASHINGTON SE
MIDLAND MI 48640

HOME CITY ICE CO
PO BOX 111116
CINCINNATI OH 45211

TRAVELERS EXPRESS COMPANY INC
TAX DEPT
*
* * *

VERIZON WIRELESS MESSAGING SERVICES
C/O AD VALOREM SERVICES COMPANY
PO BOX 211507
BEDFORD TX 76095-8507

TOMRA
1044 DURANT DR
HOWELL MI 48843

HEWLETT-PACKARD CO
E PROPERTY TAX INC, ERIK PIERSON
15300 N 90TH ST, SUITE 600
SCOTTSDALE AZ 85260

AKAMAI TECHNOLOGIES INC
ATTN KRISTYN SUGRUE
8 CAMBRIDGE CENTER
CAMBRIDGE MA 02142

SENTRY FINANCIAL CORP
ONE UTAH CENTER
201 S MAIN, SUITE 1400
SALT LAKE CITY UT 84111

VFS LEASE RESIDUAL HOLDING LLC
PROPERTY TAX COMPLIANCE
PO BOX 3649
DANBURY CT 06813-9661

VFS RESIDUAL HOLDING LLC
PROPERTY TAX COMPLIANCE
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GENERAL ELECTRIC CAPITAL CORP
PROPERTY TAX COMPLIANCE
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* * *

SIGNAL AGENCY (PLPD INC)
1243 N MISSION ST, SUITE A
MT PLEASANT MI 48858

LINE X
402 N MISSION ST
MT PLEASANT MI 48858

LITTLE UNOS
*
* * *

LET'S DO THE DISHES
100 S MISSION ST, SUITE D
MT PLEASANT MI 48858

SIMMONS PAUL B MD PLLC
1107 S MISSION ST
MT PLEASANT MI 48858

ZALT MOHAMMAD MD (INTERNAL MEDICINE)
1111 S MISSION ST
MT PLEASANT MI 48858

SMILO DEBRA PHD PC
*
* * *

HERITAGE TATTOO
1222 S MISSION ST
MT PLEASANT MI 48858

GIGI NAILS
1218 S MISSION ST
MT PLEASANT MI 48858

PLANNED PARENTHOOD NORTHERN MICH
1325 S MISSION ST
MT PLEASANT MI 48858

GOODFELLAS
1321 S MISSION ST
MT PLEASANT MI 48858

MUDHEN EXPRESSO INC
C/O P & L ENTERPRISE
335 REPUBLIC AVE
ALMA MI 48801

TAX PROS LLC
1807 S MISSION ST
MT PLEASANT MI 48858

GAME TRADERS
2015 S MISSION ST
MT PLEASANT MI 48858

COLD STONE CREAMERY
GREAT LAKES CREAMERY MT PLEASANT
2330 S MISSION ST
MT PLEASANT MI 48858

WEIGHT WATCHERS
OF WESTERN MICHIGAN
9404 MALTBY RD
BRIGHTON MI 48116

TOP DOLLAR
*
* * *

COPPER BEACH TOWNHOME COMMUNITIES
*
* * *

FARM BUREAU INSURANCE
1300 E PICKARD ST
MT PLEASANT MI 48858

LEE'S OFF ROAD LLC
402 N MISSION ST
MT PLEASANT MI 48858

B'S MUSIC SHOP
613 N MISSION ST
MT PLEASANT MI 48858

EXECUTIVE MORTGAGE
405 S MISSION ST, SUITE F
MT PLEASANT MI 48858

SUNLESS TANNING SALON
1028 S MISSION ST
MT PLEASANT MI 48858

BEVER KEITH M JR, DDS
1101 S MISSION ST
MT PLEASANT MI 48858

ELLE'S BEAUTE HAUS
1222 S MISSION ST
MT PLEASANT MI 48858

RUNNERS
2316 S MISSION ST
MT PLEASANT MI 48858

SUBWAY
2359 S MISSION ST
MT PLEASANT MI 48858

SPRINT STORE - DELTA GROUP
1620 S MISSION ST, SUITE N
MT PLEASANT MI 48858

CONTOURS
911 E PICKARD ST
MT PLEASANT MI 48858

TIM HORTON'S RESTAURANT
TIM DONUT U.S. LIMITED INC
PO BOX 256
DUBLIN OH 43017

JP RESTAURANT
DBA CRANKERS CONEY ISLAND
1207 E PICKARD ST
MT PLEASANT MI 48858

BADER & SONS
1300 E PICKARD ST
MT PLEASANT MI 48858

BIGARD PAUL REAL ESTATE LLC
600 E BROADWAY ST
MT PLEASANT MI 48858

BROADWAY REALTY & ASSOC
614 E BROADWAY ST
MT PLEASANT MI 48858

N-COMPASS GRAPHICS
623 E BROADWAY ST
MT PLEASANT MI 48858

HEALTH SHOE SERVICE- SHOE REPAIR
913 E PICKARD ST, SUITE I
MT PLEASANT MI 48858

TENDER LOVING CARE - STAFF BUILDERS
GENESEE HOME HEALTH SERVICES INC
913 E PICKARD ST
MT PLEASANT MI 48858

CULLIGAN STORE SOLUTIONS INC
1030 LONE OAK RD, SUITE 110
EAGAN MN 55121

CENTRAL MICH PROF COUNSELING ASSOC
EMPLOYEE ASSISTANCE PROGRAM
600 E BROADWAY ST, SUITE 200
MT PLEASANT MI 48858

BROADWAY BARBER SHOP
612 1/2 E BROADWAY ST
MT PLEASANT MI 48858

CUPPA JOE'S
1141 S MISSION ST
MT PLEASANT MI 48858

BHARDWAJ VIRINDER K MD
1111 S MISSION ST
MT PLEASANT MI 48858

ABOUDAN MUHAMAD MD
1111 S MISSION ST, STE 2
MT PLEASANT MI 48858

GOODWILL INDUSTRIES
1313 S MISSION ST
MT PLEASANT MI 48858

BLUE CROSS/BLUE SHIELD
1620 S MISSION ST, STE 0
MT PLEASANT MI 48858

US RECRUITING STATION
1600 S MISSION ST
MT PLEASANT MI 48858

CDL MEDICAL TECH INC
6400 BROOKTREE CT, STE 320
WEXFORD PA 15090

CIT TECHNOLOGY FINANCING SERVICES
FEIN: 04-2547678
1 CIT DRIVE
LIVINGSTON NJ 07039

QUALEX INC
3414 N DUKE ST
DURHAM NC 27704

NETBANK BUSINESS FINANCE
PO BOX 527
COLUMBIA SC 29202