

Access Management Regulations

**WITHIN THE UNINCORPORATED
AREAS OF HAMILTON COUNTY, OHIO**



Office of the Hamilton County Engineer

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FORWARD

The *Hamilton County Access Management Regulations* contained in this document have been prepared in accordance with the requirements of Amended House Bill 366, now Ohio Revised Code Chapter 5552, and represent the consensus of an Advisory Committee appointed and operating in accordance with AM HB 366 and ORC Chapter 5552.

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PERMIT FEE SCHEDULE

1. INTRODUCTION & GENERAL PRINCIPLES

In 2002, the Ohio General Assembly adopted House Bill 366, now Chapter 5552 of the Ohio Revised Code (ORC), to allow counties and townships to develop access management regulations for all county and township roads.

What is access management? Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway. It also involves roadway design applications, such as median treatments and auxiliary lanes, and the appropriate spacing of traffic signals. From Transportation Research Board's *Access Management Manual*.

Why is access management important? Access management protects the public's investment in its road/transportation system and extends the life of roads and streets. It addresses access issues, reduces traffic conflicts, congestion and delay, and it improves public safety. It also lessens turbulence and friction in the traffic stream, thereby also reducing driver tension, and it overcomes the adverse economic impact to an area caused by congestion.

Beneficiaries of access management include:

- Motorists
 - Fewer decision points and traffic conflicts
 - Less congestion; fewer traffic delays; reduced travel time
 - Reduced accidents; improved safety
 - Reduced driver tension
- Pedestrians
 - Fewer access points with vehicle/pedestrian conflicts
 - Clearly defined walking areas & safety islands
- Cyclists
 - Fewer decision points & traffic conflicts
 - More predictable motorist travel patterns
- Transit Riders
 - Reduced delay and reduced travel times
 - Safer, more comfortable walking environment at stops
 - Transit stops more convenient and connected
- Business Persons
 - Served by more efficient roadway system
 - More stable property values due to managed corridor
 - More predictable & consistent development environment
 - Market area increased; greater attraction to customers

- Communities
 - Safer transportation system
 - Less need for road widening & displacement of owners
 - More attractive roadway corridors
 - Investment in transportation facilities preserved
- Government Agencies
 - Transportation investment protected
 - Lower cost of delivering safe & efficient system

1.1 Purpose of Regulations.

The purpose of this document is to define the principles and policies for access management on all county and township roads in Hamilton County. Administration of the regulations considers many variables, such as the functional classification of the public roadway, nature of the access point, volumes of traffic, impact on signal systems, etc.

1.2 Application of Regulations.

A. These regulations **SHALL APPLY** to:

1. New developments on any parcel of property not subject to regulations for major subdivisions adopted under Chapter 711 of the ORC.
2. Significant changes of use of existing development, as defined in Section 2.2, on any parcel of property not subject to regulations for major subdivisions adopted under Chapter 711 of the ORC.
3. Lot splits or minor subdivisions, subject to approval without plat under ORC Section 711.131, where a shared common access drive will serve three or more lots.

B. These regulations **SHALL NOT APPLY** to:

1. Major subdivisions, subject to plat approval under ORC Sections 711.05 or 711.10.
2. State routes.
3. Township roads in Urban Townships that have adopted access management regulations.
4. Streets, highways, or other roadways located in a municipal corporation.

5. Any access point that exists, or on which construction has begun, before the effective date of the regulation or amendment, except when such access point is reconstructed or relocated or when land use is changed in a way that significantly increases the types of traffic or traffic volume on a street or highway as per Section 2.2.
6. Lot splits or minor subdivisions, subject to approval without plat under ORC Section 711.131, without any shared common access drive or with a shared common access drive serving no more than two lots.

It should be noted that, even in situations that do not fall within the realm of these access management regulations, the County Engineer always has the responsibility for insuring that any new access onto a county road meets all safety and capacity requirements that are defined in the HCEO permit documents.

Where a transportation corridor study, either an original corridor study or an updated corridor study, has been completed and approved by the HCEO and accepted by the Board of County Commissioners (BOCC), the recommendations/standards of the corridor study shall take precedence over the Access Management Regulations in areas where such recommendations/standards are in conflict with the Access Management Regulations.

1.3 Urban Townships.

Urban Townships, as defined in Section 5, may adopt their own regulations; if so, those regulations would apply only to township roads and streets. The Hamilton County Access Management Regulation would continue to apply to county roads. Township roads and streets generally appear as Minor Collectors and/or Locals on the Access Management System Map.

1.4 Goal of Access Management.

The over-riding goal of the access management policy, at a minimum, is to allow for development and/or redevelopment of property and at least maintain the existing Level of Service (LOS) on all county and township roads, and to improve the LOS if and when possible. LOS is a qualitative measure of operating conditions in a traffic stream and considers such measures as speed and travel time, ability to maneuver (change lanes, etc.), traffic interruptions and comfort and convenience. LOS may range from A, the best operating conditions, to F, the worst.

1.5 Safety.

Safety issues must receive the highest priority; adequate sight distance is necessary for all intersections and access points. American Association of State Highway and Transportation Officials' (AASHTO) specifications are used in evaluating sight distance, unless otherwise directed by the HCEO.

1.6 Approvals and Permits.

Access approval will be issued by the HCEO on all county and township roads. Within five (5) working days after the submittal of the permit application/information, the HCEO will determine if the information is in sufficient detail and therefore adequate to review for access. Within fifteen (15) working days after the submittal, HCEO will complete the review of the plans/information and will either approve or deny the access plan. If HCEO denies the access, the denial and the reasons for the denial will be sent in writing to the applicant. A failure by HCEO to approve or deny, in whole or in part, any permit within the above period shall constitute a granting of approval for the permit.

When access has been approved, the property owner or developer may apply for a driveway permit.

The Access Management System Map, based on the Hamilton County Functional Classifications/Thoroughfare Plan map, shall serve as reference for identifying roadway classifications relative to the use of these regulations. Appendix B contains a separate chart for each of the six functional classifications.

Access approval is based heavily on the traffic generated by the property. If the traffic-generating characteristics change, and/or the property undergoes any other significant change in use as defined in Section 2, the property owner will be required to submit a new access request for review and approval.

1.7 Fees.

In accordance with ORC Chapter 5552, the BOCC may develop and set a schedule of non-refundable fees that may be charged in connection with the application for an access permit and/or the certification of the compliance with the Access Management Regulations. The fees charged may not exceed the actual cost of administering the permit process and maintaining the program. The schedule of fees shall be adjusted yearly in accordance with the resolution passed by the BOCC. The access permit fees shall be collected by the HCEO as part of the application process for the permit.

See Appendix C for the current permit fee schedule and contact the HCEO for any applicable revisions.

1.8 Hamilton County Road Access Appeals Board.

In accordance with Ohio Revised Code Section 5552.07, these regulations incorporate the establishment of a Hamilton County Road Access Appeals Board (HCRAAB) to hear and decide appeals when it is alleged that there is an error in any order, requirement, decision or determination made by an administrative official in the enforcement of the regulations. These regulations also authorize the HCRAAB to grant variances that are not contrary to the public interest from the terms of the regulations where, owing to special conditions, a literal enforcement of the regulations will result in unnecessary hardship, and so that the spirit of the regulations will be observed and substantial justice done.

In situations where an applicant and the HCEO are unable to resolve an issue, the applicant may request the HCRAAB to review and act upon the issue.

1.9 Relationship to Other Laws and Regulations.

All current rules and regulations of the HCRPC for platting of land shall apply.

All current county and township zoning laws shall also apply and, in any situation where the zoning laws contain provisions relevant to access management but conflicting with these regulations, the zoning laws will supercede these regulations.

All lot splits that create three (3) or more lots with a shared common access drive, known as Minor Subdivisions, shall be required to have access locations pre-approved by the HCEO prior to the submittal of an application for a lot split to the Hamilton County Regional Planning Commission Subdivision Administrator.

These regulations shall apply to all access requests and/or driveway permit applications received on or after the effective date of this document.

Any part of this document that is found to be unlawful by the Court(s) having jurisdiction in these matters shall not invalidate any part of the remaining regulations.

2. EMPLOYMENT OF ACCESS MANAGEMENT PROCEDURES

2.1 When Access Management Regulations Employed.

The access management regulations shall be employed in accordance with Section 1.2.

2.2 Significant Change in Use.

Determination of the significance of a change in use shall be made by the HCEO. Based on this determination, the HCEO shall advise the applicant whether a further evaluation of traffic conditions, as described in Section 2.3, will be required. This determination will be based on the traffic impacts associated with any one or more of the following:

- Increase in size or modification of the existing building
- Change in use of the property
- Increase of parking requirements or number of parking stalls and pavement
- Demolition and redevelopment of the property
- Change in zoning

The traffic impacts of a significant change in use will be reflected by increases in trip generation and changes in trip patterns resulting from the change(s).

It is recommended that applicants, prior to the submittal of plans, meet with the HCEO to determine the access management requirements for the development/proposal. It is also recommended that applicants obtain a Certificate of Compliance with the Access Management Regulations from the HCEO prior to submitting an application for a zoning permit, a building permit or a lot split in order to determine the access management requirements for their proposal and in order to expedite the process for issuance of the zoning and/or building permit(s).

2.3 Evaluation Required.

The key determinants governing the magnitude of the evaluation will be the functional classification of the road(s) serving the proposed development and the magnitude of peak-hour trips expected to be generated.

Based on the factors in Section 2.2, the HCEO may require the developer to prepare a full traffic impact study (TIS). At a minimum, the developer will be required to address the traffic operational and safety aspects of the proposal in a traffic study (TS) that will also respond to specific requirements outlined in the access management regulations.

Using the appropriate chart in Appendix B determined by road functional classification and magnitude of traffic expected to be generated, the HCEO will determine the required minimum signal (if appropriate), road or street, and/or driveway spacings. If the proposed access point(s) meet those requirements, the proposed development plan will then be reviewed and evaluated against all other required plan elements.

If the access point(s) cannot meet the requirements listed in the appropriate chart and/or the other requirements of the access management regulations, the HCEO will consider other alternate access points, restrictions and/or conditions that will meet as closely as possible the applicable requirements.

If the developer is unable to implement the “required” forms of access, the HCEO, in lieu of allowing a full access on the developer’s property, may either require a right-in/right-out access only or may allow a temporary access with agreements from the developer to utilize cross easements or connections to future service roads when neighboring properties develop. Such agreements may include the construction of service or connecting roadways to the property lines where they would be stubbed awaiting extension when the adjoining properties redevelop. Such agreements must also be added to the property deed and will remain with the property even if/when it is transferred to another owner.

2.4 Cross Easements and Drives.

Cross-access service drives shall be used to meet minimum spacing requirements for multiple adjacent properties when individual frontages are insufficient to meet the required spacing standards. A system of joint-use service drives and cross easements, as illustrated in Figure 1, shall be established in such cases where individual properties cannot meet minimum spacing requirements as well as wherever feasible along arterials and collectors.

Rear cross-access service drives shall be utilized wherever possible. If front cross-access drives must be utilized, they shall be designed and constructed as illustrated in Figure 2 so that intersections of cross-access service drives with access drives to public roads shall be located no closer to the public roads than the Lateral Access Restriction requirements contained in the charts in Appendix B.

Other attributes of joint and cross-access service drives shall be as follows:

- Location and alignment of joint and cross-access service drives must insure that, ultimately, continuous service drives or cross-access corridors will extend the entire length of each block and provide connections to the public streets bounding those blocks.

- The locations of the connections with the bounding public streets shall also follow the Lateral Access Restriction requirements of the appropriate charts, as illustrated in Figure 1.
- Service drives shall be designed and constructed sufficiently wide to accommodate two-way travel, on tangents as well as curved sections, by automobiles, service and delivery vehicles.
 - Service drives serving 1 to 2 single-family residential sites shall comply with applicable zoning codes.
 - Service drives serving 3 to 6 single-family residential sites shall have a minimum pavement width of 16 feet.
 - All other uses, including multi-family, retail, commercial, industrial, office, etc. shall have a minimum pavement width of 24 feet, measured from edge of pavement to edge of pavement or from face of curb to face of curb. The pavement shall be widened on curves to facilitate usage by trucks. The pavement geometrics shall be sufficient to support a 15mph design speed.
- Stub streets and other design features shall make it visually obvious that service drives are intended to tie in abutting properties and to provide cross access via a service drive.
- A unified access and circulation system plan including coordinated and/or shared parking spaces shall be the goal wherever possible.

2.5 Legal Documentation of Joint and Cross-Access Drives.

Each property owner affected by the requirements for implementation of joint and cross-access service drives shall:

- Record easements with the deed to provide for cross-access between his/her property and other properties that are or will ultimately be served by joint-use drives, cross-access drives and/or service drives. Easement rights shall be granted to adjoining properties relative to an overall access plan for that area. This could involve several parcels. As neighboring properties undergo changes in use and become affected by the requirements for joint and cross-access service drives, these property owners shall also grant and record easements for joint and cross-access service drives. Nothing in these regulations shall require the owner of a property not undergoing a change to grant and record cross-access easements.

- Record a declaration with his/her deed relinquishing remaining access rights along the public road to the BOCC when all necessary joint and cross-access service drives required for access to the public roadway have been completed. Upon completion of the new access facilities, all pre-existing driveways will be closed and removed by the property owner(s) after all of the access-control features are constructed and approved by the HCEO.
- Record a joint maintenance agreement with the deed defining maintenance responsibilities of the property owners. This document can only be prepared and executed after two or more adjacent property owners have initiated significant changes in use of their properties and have become subject to the requirements for joint and cross-access service drives. The intent to pursue a joint maintenance agreement should be incorporated into the easements providing for (future) cross easements.
- Construct all common joint-use drives, cross-access drives and/or service drives prior to the HCEO certification of compliance with the Access Management Regulations which is required prior to the issuance of the final occupancy permit by the Hamilton County Building Department.

2.6 Temporary Access and Driveways.

- Temporary access, or driveways, except single-family residential properties, may be permitted by the HCEO when other permanent access requirements cannot be met. When permanent access, in accordance with access-management regulations, becomes available, the temporary driveway permits shall be revoked and the temporary driveways shall be removed by the owner(s). The permitting of a temporary driveway and stipulations for its removal shall be recorded as a declaration with the deed to be transferred with the property.
- Temporary driveways, when permitted, shall be constructed as required by the HCEO. The requirements shall meet the minimum requirements of the applicable zoning code for that location. The HCEO will manage the temporary permits through the permit program. The HCEO will also maintain a data base of temporary driveways to assure their removal when no longer permitted.

2.7 Access Connection and Driveways –General Design Criteria

- Driveways and/or service drives shall be located on the lowest functional class of roadway on which the property has frontage or a shared access point unless the HCEO determines that the public safety would be better served by allowing access on the higher functional class roadway. For major residential subdivisions with private roadways and/or private driveways, the locations will be determined during the HCEO review process.
- Driveway design shall conform to the requirements and standards set forth in the current edition of the County Engineer’s *Rules: Regulations of the Office of the County Engineer Governing Driveway Regulations and Pavement and/or Right of Way Opening Provisions for the Unincorporated Area of Hamilton County*. Driveway width and flairs shall be adequate to accommodate the movement of the anticipated volume of traffic onto and off the public highway.
- The length of driveways or “Throat Length” (See Figure 3) shall be designed in accordance with the anticipated required storage length for entering and exiting vehicles in order to prevent vehicles from backing up into the flow of traffic on the public roadway or causing unsafe conflicts with onsite circulation.
- All entrances shall be designed so that vehicles entering and leaving the site will not encroach into opposing lanes of traffic or any portion thereof. All designs will be based on traffic studies submitted to the HCEO for review and approval.
- Driveway approaches must be located and designed to provide an exiting vehicle with an unobstructed view of approaching traffic from both directions. Intersection sight distance (ISD) as defined in the AASHTO Specifications will be used as a basis of evaluation unless otherwise directed by the HCEO.
- Construction of full-access driveways along acceleration and deceleration lanes and tapers is prohibited because of potential weaving conflicts and obstruction of the public roadway. (See Figure 4).

3. ROAD CLASSIFICATION REQUIREMENTS

There are six charts used for defining access management requirements on the county and township roads covered by these regulations. There is one for each functional classification – expressway, major arterial, minor arterial, major collector, minor collector, and local street. The functional classifications are defined in Section 5 of these regulations.

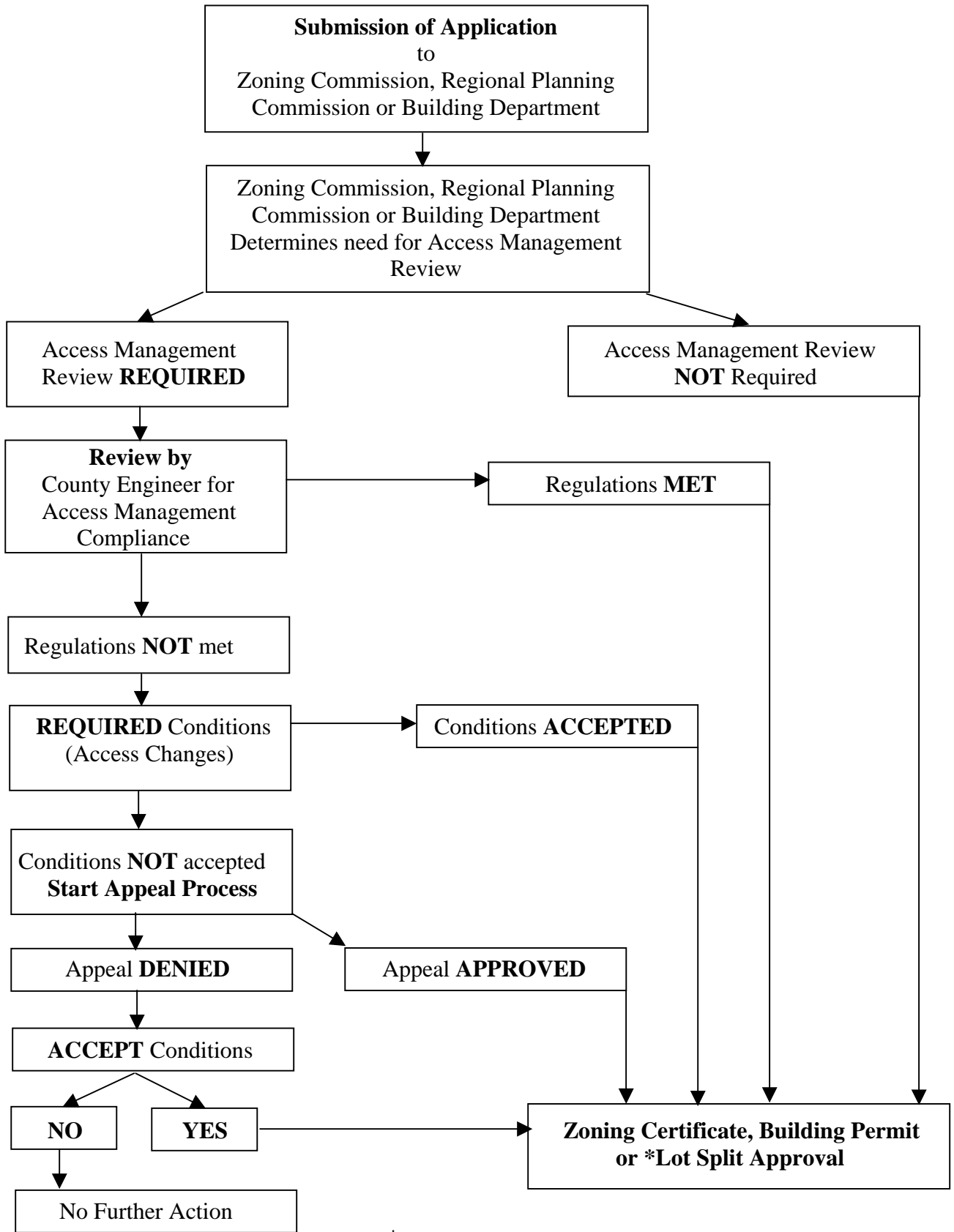
There are no freeways in the access management system because freeways, by their nature, have no direct access. The functional classifications of the county roads are expressway (eg. part of Five Mile Road), major arterials, minor arterials and major collectors. Minor collector and local classifications have been reserved for township roads that become part of the system.

The charts have been set up in matrix form with the access connections, ranging from the highest level (street or road) at the top down to the lowest (temporary access/driveway) on the left side and the access requirements as column headings across the top. Refer to Section 5 for definitions of the terminology.

The charts are as follows:

Chart 1	Road Classification:	Expressway
Chart 2	Road Classification:	Major Arterial
Chart 3	Road Classification:	Minor Arterial
Chart 4	Road Classification:	Major Collector
Chart 5	Road Classification:	Minor Collector
Chart 6	Road Classification:	Local

4. Access Approval & Permit Process Flow Chart



* Minor subdivision applications (all splits) that propose the use of a shared common drive, serving three or more lots, shall include a certificate of compliance with the Access Management Regulations.

Access Approval & Permit Process

Permit Process:

While not a requirement, applicants will be encouraged to come into the office prior to submitting plans and proposals and to discuss their concepts in the context of the zoning, building and access management regulations.

1. Application for a zoning certificate, building permit or lot-split is submitted to the Zoning Commission, Building department or Regional Planning Commission.
2. Application is reviewed by Regional Planning Commission, Rural Zoning Commission plans examiner and/or the Building Department to determine if the application needs to be reviewed by the County Engineer for Access Management regulations.
3. If the application does not need review, the application is processed following normal procedures. If the application requires Access Management review, the application is transmitted to the HCEO for Access Management review.
4. After HCEO reviews the application, it will either approve as submitted, or require conditions/changes. If the application is approved as submitted, the application is transmitted back to the HCRZC/HCRPC for standard approval process. If the application is denied or requires changes made to the application, the HCEO transmits the application back to the applicant.
5. The applicant shall either make the changes or appeal the regulations.
6. If the applicant makes the changes, the application is transmitted back to the HCRZC/HCRPC for standard application procedures.
7. If the applicant refuses to make changes, the applicant may appeal the requirements to the Hamilton County Road Access Appeals Board (HCRAAB).
8. After a hearing and review, the Appeals Board shall sustain or deny the appeal. If the appeal is denied, the applicant shall make the changes or withdraw the application. If the appeal is sustained, the application is transmitted back to the HCRZC/HCRPC for standard application procedures.

5. DEFINITIONS & ACRONYMS

Definitions used in Access Management

Access Classification. A classification system that defines driveways, including paths and trails (non-public access connections), according to their purpose, use and volume of traffic.

a. Minimum Volume (MIV) driveway.

- i. Field drive – provides access to agriculture lands and principally used by farm equipment.
- ii. Utility drive – provides access to public utilities facilities.

b. Very Low Volume (VLV) driveway.

Less than 10 trip ends in the peak hour.

- i. Farm drive – provides access to farm buildings, including single home.
- ii. Single family residence drive.
- iii. Single family common access drive serving six or fewer residential units.
- iv. Multi-family residence drive serving five or fewer residential units.
- v. Some walking, jogging, biking or equestrian trails.

c. Low Volume (LV) driveway.

10 trip ends but less than 100 trip ends in the peak hour.

d. Medium Volume (MEV) driveway.

100 or more up to 200 trip ends in the peak hour.

e. High Volume (HV) driveway.

More than 200 trip ends in the peak hour.

f. Temporary Access/Driveway.

An access or drive that is permitted for use only until the preferred alternate becomes available, at which time the owner will be required to construct the new access point, remove the temporary access, and modify any traffic patterns on his/her property to utilize the new (preferred) location.

Access Connection. Any driveway, street, road, turnout, trail, path or other means of providing for the movement of vehicles, equipment, cars, trucks, buses, motorcycles, bicycles, pedestrians, or horses or other animals to or from the major roadway system for the purpose of accessing, leaving or crossing the major roadway. The “major roadway” is part of the hierarchical system defined these Definitions.

- a. **Street or Road.** A publicly-dedicated roadway providing a physical connection to the major roadway for vehicular as well as pedestrian and bicycle traffic. Streets and roads whose primary role is providing access to the major roadway would be governed by access-management requirements. Connections of roads with arterial and collector functions would be governed more by transportation engineering and planning criteria.
- b. **Non-Public Road (Private Street).** A privately-owned roadway providing a physical connection to a major roadway for vehicular as well as bicycle and pedestrian traffic. This category does not include new subdivision streets that have not yet been dedicated and accepted; they are covered by subdivision regulations. It does include subdivision streets that have never been dedicated and that remain private streets.
- c. **Driveway.** The physical access connection for vehicular traffic between a major roadway and abutting land. A driveway can include a pedestrian and/or bicycle component.
- d. **Path or Trail.** An access connection to a major roadway for pedestrians, bicycles, horses or other animals.
- e. **Temporary Access (Conditional).** Access that is permitted for use until a preferred alternative access becomes available.

Corner Spacing. The minimum required distance along a public road between an intersection and the first access point. The distance is determined by the classification of the public road, and the values are shown in the appropriate matrices.

Intersection Sight Distance (ISD). A cross-corner measurement between a vehicle approaching an intersection on a main road and a vehicle stopped on a side road at the main road. It is the measure of the line of sight, both horizontally and vertically, that allows the drivers of both vehicles at or approaching an intersection to see each other in time for necessary decision-making or avoidance maneuvers. The ISD must be sufficient to allow the driver on the main road approaching the intersection to have not only an unobstructed view of the entire intersection but also a sufficient length along the highway to permit him/her to anticipate and avoid potential collisions. The ISD should also be sufficient so motorists, entering or crossing the main road, have sufficient distance to observe oncoming traffic in order to safely enter or cross the main road. ISD shall be as defined in the current edition of *A Policy on Geometric Design of Highways and Streets*, published by the American Association of State Highway and Transportation Officials. Determination of ISD shall follow the procedures outlined in the AASHTO publication.

Lateral Access Restriction: The minimum required distance along a side road not on the access management system from its intersection with the access-management-system public road to the first access point. If the side road is also on the access management system, the corner spacing requirements shall be in effect. Values are shown in the appropriate matrices.

Level of Service. LOS is a qualitative measure of operating conditions in a traffic stream and considers such measures as speed and travel time, ability to maneuver (change lanes, etc.), traffic interruptions and comfort and convenience. LOS may range from A, the best operating conditions, to F, the worst.

Road Classification. A hierarchical system of roadways, classified by function, used to determine the appropriate level of access management. The functional classification of roadways is a system whereby roads are described in terms of their usage. Generally, roads provide two functions. The first is mobility, providing people the ability to go from one place to another. The second is the provision of access to abutting properties.

Higher-classification roadways, arterial in nature, require more stringent access management methods in order to protect their primary role of providing mobility by carrying traffic. Lower classifications, called locals, have the primary role of providing access to abutting properties. As one road function increases, the other necessarily decreases.

Figure 5 illustrates the relationships between providing mobility and access to abutting properties.

- a. **Freeway.** The highest type arterial highway, always divided, designed for relatively uninterrupted, high-volume mobility between cities and other major areas with full control of abutting land access and utilizing grade separations (interchanges) at limited points for access. Volumes on freeways may range from a low of 25,000 vehicles per day (vpd) up to well over 100,000 vpd. “Access management” for a freeway is related to the number and spacing of interchanges. Proposals for additional interchanges on a freeway are subject to an exhaustive study, termed an interchange justification study, to assure that capacity is not degraded. Currently, the only freeway on the Hamilton County Road system is the Ronald Reagan Highway between U.S. 27 (Colerain Avenue) and I-275 to the west.
- b. **Expressway.** The next-highest arterial highway, normally divided, also designed for relatively uninterrupted, high-volume mobility between areas, with full or partial control of access and a mixture of intersections (at grade) and interchanges (grade-separated). Trip lengths and volumes on expressways are generally less than on freeways. A local example of an expressway with full control of abutting access is U.S.27 from Struble Road to beyond S.R. 128 in Butler County. An expressway on the Hamilton County Road system would be upgraded Five Mile Road.
- c. **Major Arterial.** Arterials are intended to provide a greater degree of mobility rather than land access; consequently, it is important that access points be minimized. Arterials generally convey between 10,000 and 25,000 vpd for distances greater than one mile. A major arterial is a highway that is of regional importance and is intended to serve high volumes of traffic traveling relatively long distances within and even beyond the county. It may connect urban centers with one another and/or with outlying communities and employment or shopping centers. A major arterial is intended primarily to serve through traffic, and access should be controlled. Winton Road and part of Harrison Avenue are examples of this category.
- d. **Minor Arterial.** A roadway, also serving through traffic, that is similar in function to a major arterial, but operates with lower traffic volumes, serves trips of shorter distances (but still greater than one mile), and may provide a higher degree of property access than do major arterials. Examples of this category are Pippin Road and Westwood-Northern Boulevard.

- e. **Major Collector.** A roadway that provides for traffic movement between local roads/streets and arterials or community-wide activity centers and carries moderate traffic volumes (between 1,500 and 10,000 vpd) over moderate distances (generally less than one mile). Major collectors may also provide direct access to abutting properties, such as regional shopping centers, large industrial parks, major subdivisions and community-wide recreational facilities, but typically not individual residences. Most major collectors are also county roads and are therefore through streets. Asbury Road and Werk Road are examples of this category.
- f. **Minor Collector.** A roadway similar in function to a major collector but which carries lower traffic volumes over shorter distances and has a higher degree of property access. Minor collectors may serve as main circulation streets within large, residential neighborhoods. Most minor collectors are also township roads and streets and may, or may not, be through streets.
- g. **Local.** A roadway that is primarily intended to provide access to abutting properties. It tends to accommodate lower traffic volumes, serves short trips (generally within neighborhoods), and provides connections preferably only to collector streets rather than arterials.

Stopping Sight Distance (SSD). The distance required by the driver of a vehicle, traveling at a given speed, to bring the vehicle to a stop after an object in/on the roadway becomes visible. The object height used on the Hamilton County road system is 6 inches. The SSD includes the distance traveled during the driver's perception-and-reaction time as well as the vehicle's braking distance. On the basis of a 6-inch-high object, stopping sight distance shall be as defined in the current edition of *A Policy on Geometric Design of Highways and Streets*, published by the American Association of State Highway and Transportation Officials. SSD is required, at a minimum, in all elements of new and/or reconstructed roads and streets.

Traffic Impact Study (TIS). A study of the traffic impacts of a proposed development on the adjacent and surrounding road system and the transportation improvements/needs required to accommodate it. A TIS identifies not only the traffic volume but also the operational and safety effects of the proposed development as well as the nature and extent of improvements needed to mitigate **all** the impacts to the roadway system.

- a. **Design Traffic.** Traffic volumes used for analysis shall be based on full build-out/ultimate occupancy of the proposed development and a twenty-year projection of traffic on the impacted roadway system.
- b. **Capacity Mitigations.** Actions required to mitigate development-caused volume increases may include revisions and improvements of existing access points, construction of additional through and turn lanes, revision of existing intersections, and intersection and system signalization improvements.
- c. **Access Improvements.** In addition to capacity-related improvements, actions would be required to bring the development's access into conformance with the Access Management Regulations.
- d. **Operational & Safety Improvements.** These actions include any additional geometric, signalization and/or operational improvements deemed necessary. Such actions could include improvements needed to meet sight-distance requirements.

Traffic Study (TS). A study of the traffic impact of a proposed development that will not significantly increase traffic volumes. A TS addresses the operational and safety effects of the development as well as improvements needed to address them.

- a. **Access Improvements.** Actions that would be required to bring the development's access into conformance with the Access Management Regulations.
- b. **Operational & Safety Improvements.** These actions include any geometric, signalization and/or operational improvements deemed necessary. Such actions could include improvements needed to meet sight-distance requirements.

Urban Township. An urban township is a township that has a population in the unincorporated area of the township of at least 15,000 and has adopted a limited home rule government under ORC Section 504.02.

Acronyms Used in Access Management Regulations

- AASHTO.** American Association of State Highway & Transportation Officials. A federation of all 50 state transportation departments charged with developing transportation planning and design policies and standards.
- BOCC.** Board of County Commissioners of Hamilton County.
- HCEO.** Hamilton County Engineer's Office.
- HCRAAB.** Hamilton County Road Access Appeal Board (See Sec. 1.7).
- HCRPC.** Hamilton County Regional Planning Commission.
- HCRZC.** Hamilton County Rural Zoning Commission.
- HV.** High volume driveway.
- ISD.** Intersection sight distance.
- LOS.** Level of service. Explained in *Introduction & General Principles* section.
- LV.** Low volume driveway.
- MEV.** Medium volume driveway.
- MIV.** Minimum volume driveway.
- ORC.** Ohio Revised Code
- SSD.** Stopping sight distance.
- TS.** Traffic study.
- TRB.** Transportation Research Board. A research and public policy-making organization located in Washington, D.C.
- VLV.** Very low volume driveway.

APPENDIX A

FIGURES

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APPENDIX B

CHARTS DEFINING ACCESS MANAGEMENT REQUIREMENTS

Chart 1. Road Classification: Expressway	B-1
Chart 2. Road Classification: Major Arterial	B-2
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APPENDIX C

PERMIT FEE SCHEDULE

The permit fee will be **Fifty Dollars and zero cents (\$ 50.00)**, which will include **one (1) hour** of review time.

Review time in excess of one (1) hour will be billed at the rate of **Thirty-five Dollars and zero cents (\$ 35.00) per hour**.

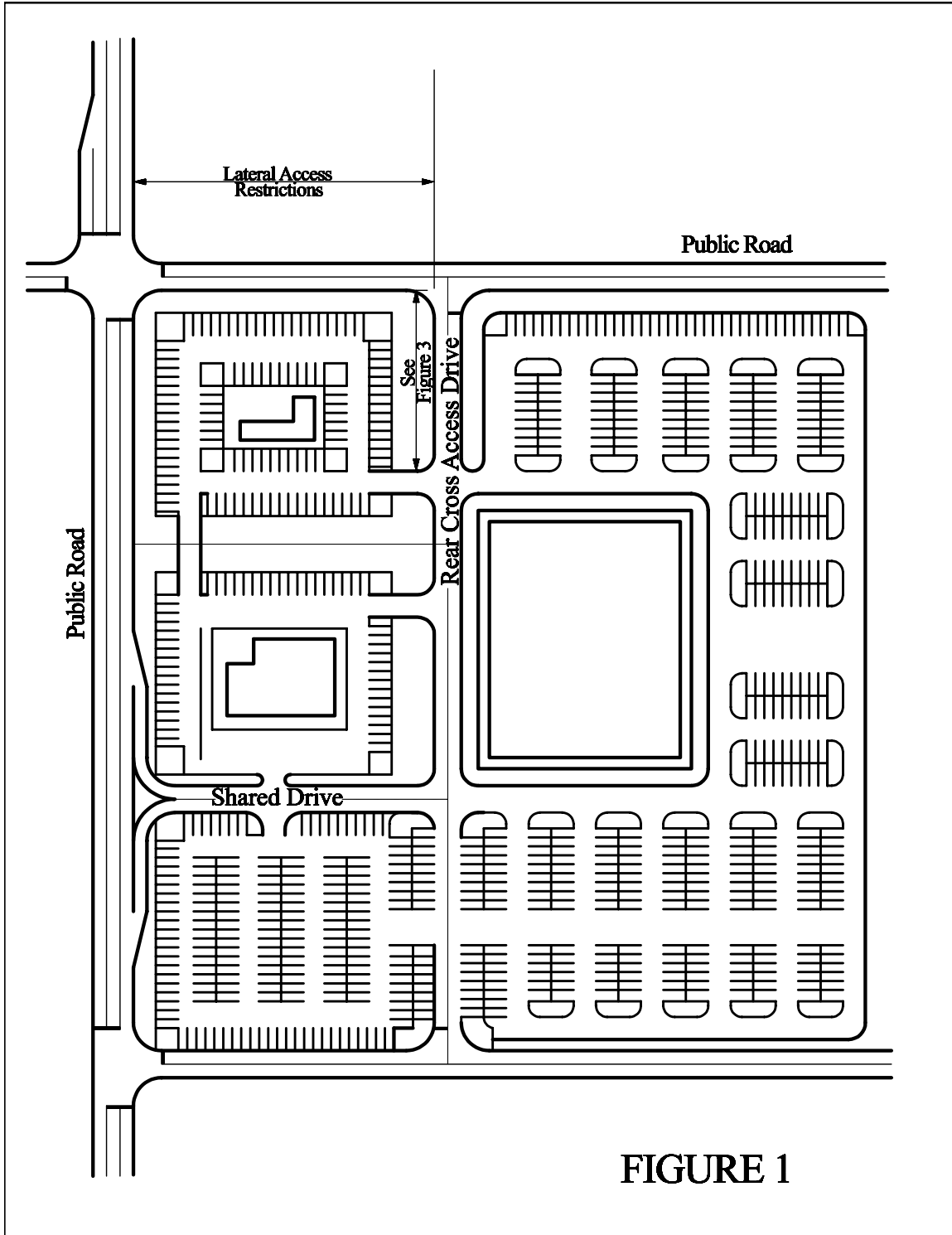
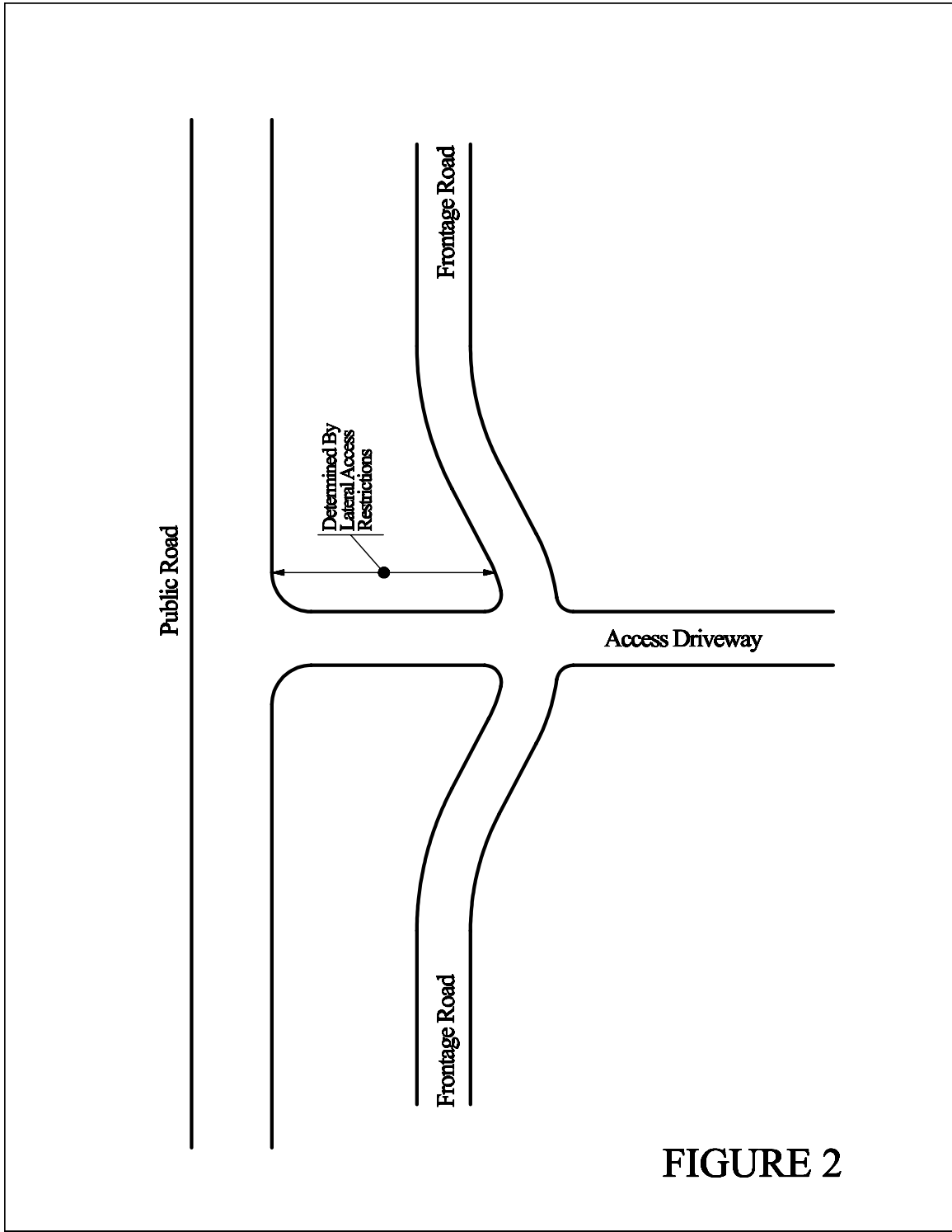


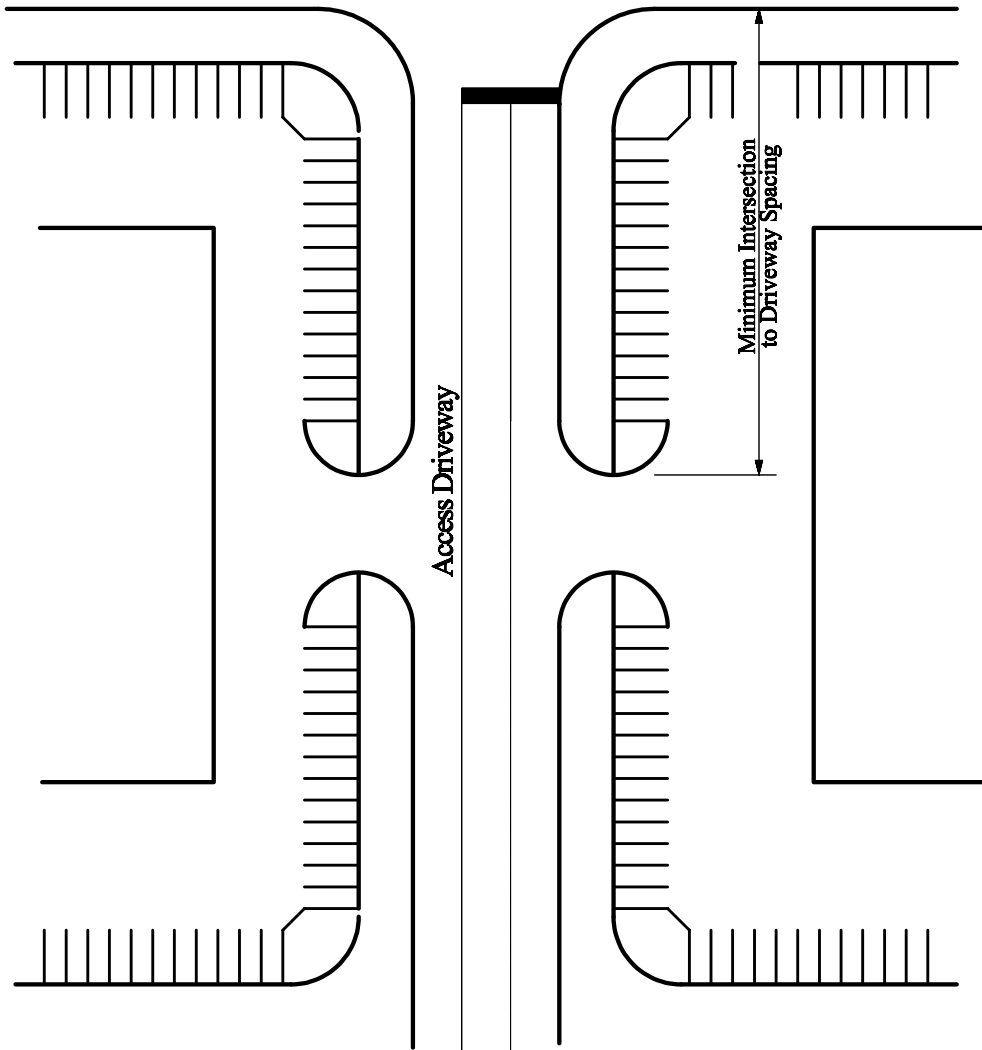
FIGURE 1

**LATERAL ACCESS RESTRICTIONS,
SHARED DRIVES & REAR CROSS-ACCESS DRIVES**

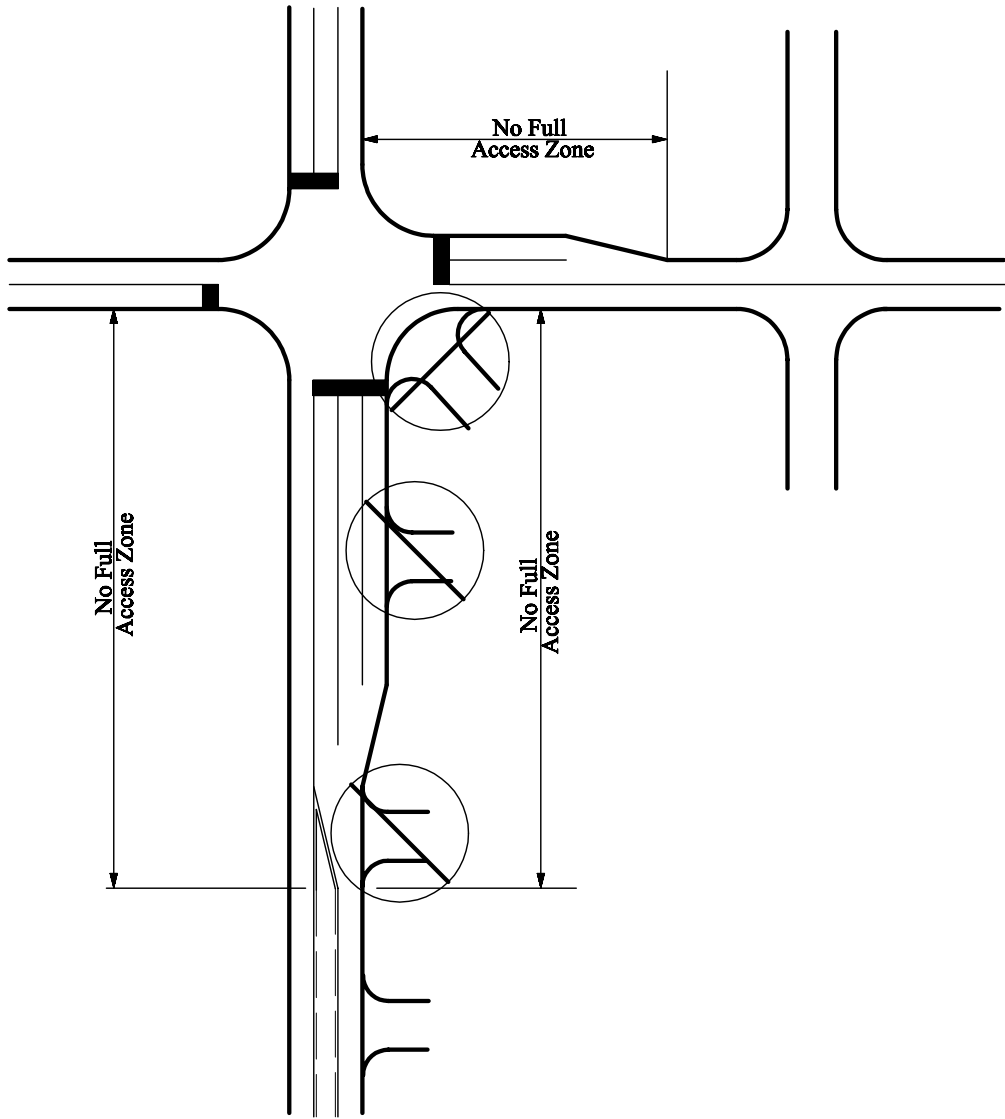


FRONTAGE ROAD AND INTERSECTION DETAIL

Public Road



**FIGURE 3
THROAT LENGTH**



**FIGURE 4
DRIVE GEOMETRY**

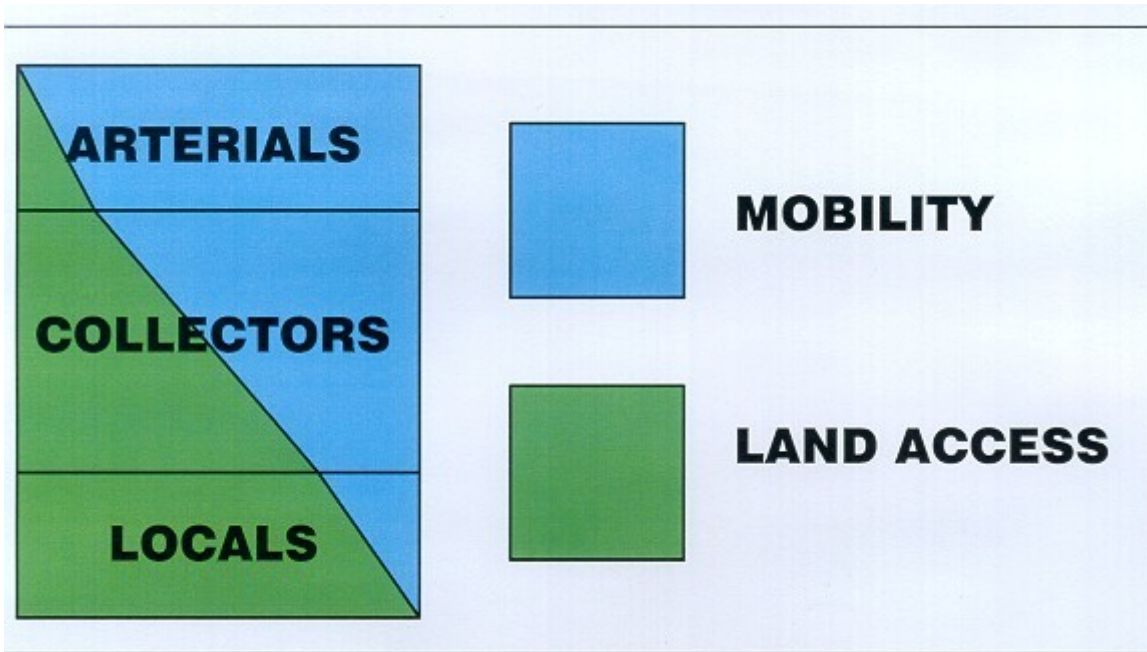


Figure 5.

Relationship of Functionally-Classified Systems in Serving Mobility needs and Providing Land Access

Hamilton County Access Management

Chart 1. Road Classification: Expressway

Access Connections	Minimum Signal Spacing	Minimum Road or Street Spacing	Minimum Full-Access Driveway Spacing	Corner Spacing	Lateral Access Restriction (5)	TIS Required (7)	Right -In/ Right -Out only	Left-turn Lane Right-turn Lane AL Requirements (13)
Street or Road	2640' - 4030' (2)	2640'		N/A	High 245' Med 150' Low 100'	Yes	Streets and roads not meeting minimum spacing requirement	LT Required RT Required AL Required
High Volume (HV) Driveway >200 pk hr Trips	2640' - 4030' (2)		Access indirect only unless relocation of exist temporary drive. (6)	N/A		Yes	None, unless downgrading of prior full-access driveway	Based on Traffic Study
Medium Volume (MEV) Driveway 100-200 pk hr trips	Signal not warranted		Access indirect only unless relocation of exist temporary drive. (6)	N/A		Yes	None, unless downgrading of prior full-access driveway	Based on Traffic Study
Low Volume (LV) Driveway 10-99 pk hr trips	Signal not warranted		Access indirect only unless relocation of exist temporary drive. (6)	N/A		May be required by HCEO	None, unless downgrading of prior full-access driveway	Based on Traffic Study
Very Low Volume (VLV) Driveway <10 pk hr trips	Signal not warranted		Access indirect only unless relocation of exist temporary drive. (6)	N/A			None, unless downgrading of prior full-access driveway	Based on Traffic Study
Minimum Volume (MIV) Driveway field & utility drive	Signal not warranted		Access indirect only unless relocation of exist temporary drive. (6)	N/A			None, unless downgrading of prior full-access driveway	Based on Traffic Study
Temporary Access/Driveway	Signal not warranted		Only if initial condition when expressway constructed	N/A			Initial condition when expressway constructed	N/A

NOTES:

1. All minimum-distance ranges based on prevailing speeds and signal cycles. Each situation evaluated site specifically within the range.
2. TIS with signal system study required to justify distance less than required. No signals considered unless warranted.
5. When side road is not on access management system. If it is on the system, use appropriate corner spacing requirements.
6. Any temporary driveway relocation shall be based on a traffic study, scope of which will be determined by HCEO.
7. Scoped by HCEO, subject to HCEO TIS standards, for approval by HCEO.
13. Acceleration lanes to allow entering vehicles to better merge.

Lateral Access Restrictions
 High >200 Peak Hr Trips
 Medium 50-200 Peak Hr Trips
 Low <50 Peak Hr Trips

Hamilton County Access Management

Chart 2. Road Classification: Major Arterial

Access Connections	Minimum Signal Spacing	Minimum Road or Street Spacing	Minimum Full-Access Driveway Spacing	Corner Spacing	Lateral Access Restriction (5)	TIS Required (7)	Access Restrictions	Left-turn Lane Right-turn Lane AL Requirement (13)
Street or Road	1800' - 2930' (2)	405' - 450' (3)		405'	High 245' Med 150' Low 100'	Yes	Full access if minimum spacing requirement met	LT Required (4) RT Required (4) AL Required (4)
High Volume (HV) Driveway >200 pk hr Trips	1800' - 2930' (2)		405' - 450' (3)	405'		Yes	One full access if min. spacing met &/or notes 8-12 based on TIS	LT Required (4) RT Required (4) AL Required (4)
Medium Volume (MEV) Driveway 100-200 pk hr trips	Signal not warranted		315' - 360'	405'		Yes	May be one full access if min spacing met &/or notes 8-12 based on TIS	LT Required (4) RT Required (4) AL Required (4)
Low Volume (LV) Driveway 10-99 pk hr trips	Signal not warranted		315' - 360'	405'		May be required by HCEO	Notes 8 - 12 based on TIS	LT Required (4)
Very Low Volume (VLV) Driveway <10 pk hr trips	Signal not warranted		180' - 225'	405'			Full access if min. spacing met	
Minimum Volume (MIV) Driveway field & utility drive	Signal not warranted		180' - 225'	405'			Full access if min. spacing met	
Temporary Access/Driveway	None							

NOTES:

1. All minimum-distance ranges based on prevailing speeds and signal cycles. Each situation evaluated site specifically within the range.
2. TIS with signal system study required to justify distance less than required. No signals considered unless warranted.
3. Unless new street or drive is meeting existing.
4. Unless traffic study determines otherwise. Study scope determined by HCEO.
5. When side road is not on access management system. If it is on the system, use appropriate corner spacing requirements.
7. Scoped by HCEO, subject to HCEO TIS standards, for approval by HCEO.
8. Right in/Right-out only
9. Right in/Right-out/Left-in
10. Right-in/Left-in with egress via cross easement or service road.
11. Right-in only with egress via cross easement or service road.
12. Access & egress only by cross easement or service road.
13. Acceleration lanes to allow entering vehicles to better merge.

Lateral Access Restrictions
 High >200 Peak Hr Trips
 Medium 50-200 Peak Hr Trips
 Low <50 Peak Hr Trips

Hamilton County Access Management

Chart 3. Road Classification: Minor Arterial

Access Connections	Minimum Signal Spacing	Minimum Road or Street Spacing	Minimum Full-Access Driveway Spacing	Corner Spacing	Lateral Access Restriction (5)	TIS Required (7)	Access Restrictions	Left-turn Lane Right-turn Lane AL Requirement (13)
Street or Road	1540' - 2310' (2)	405' - 450' (3)		245'	High 245' Med 150' Low 100'	Yes	Full access if min spacing requirement met	LT Required (4) RT Required (4) AL Required (4)
High Volume (HV) Driveway >200 pk hr Trips	1540' - 2310' (2)		245' - 280' (3)	245'		Yes	One full access if min. spacing met &/or notes 8-12 based on TIS	LT Required (4) RT Required (4) AL Required (4)
Medium Volume (MEV) Driveway 100-200 pk hr trips	1540' - 2310' (2)		175' - 210'	245'		Yes	May be one full access if min spacing met &/or notes 8-12 based on TIS	LT Required (4) RT Required (4) AL Required (4)
Low Volume (LV) Driveway 10-99 pk hr trips	Signal not warranted		175' - 210'	245'		May be required by HCEO	Notes 8 - 12 based on TIS	LT Required (4)
Very Low Volume (VLV) Driveway <10 pk hr trips	Signal not warranted		105' - 140'	245'			Full access if min. spacing met	
Minimum Volume (MIV) Driveway field & utility drive	Signal not warranted		105' - 140'	245'			Full access if min. spacing met	
Temporary Access/Driveway	None							

NOTES:

1. All minimum-distance ranges based on prevailing speeds and signal cycles. Each situation evaluated site specifically within the range.
2. TIS with signal system study required to justify distance less than required. No signals considered unless warranted.
3. Unless new street or drive is meeting existing.
4. Unless traffic study determines otherwise. Study scope determined by HCEO.
5. When side road is not on access management system. If it is on the system, use appropriate corner spacing requirements.
7. Scoped by HCEO, subject to HCEO TIS standards, for approval by HCEO.
8. Right in/Right-out only
9. Right in/Right-out/Left-in
10. Right-in/Left-in with egress via cross easement or service road.
11. Right-in only with egress via cross easement or service road.
12. Access & egress only by cross easement or service road.
13. Acceleration lanes to allow entering vehicles to better merge.

Lateral Access Restrictions
 High >200 Peak Hr Trips
 Medium 50-200 Peak Hr Trips
 Low <50 Peak Hr Trips

Hamilton County Access Management

Chart 4. Road Classification: Major Collector

Access Connections	Minimum Signal Spacing	Minimum Road or Street Spacing	Minimum Full-Access Driveway Spacing	Corner Spacing	Lateral Access Restriction (5)	TIS Required (7)	Access Restrictions	Left-turn Lane Right-turn Lane AL Requirement (13)
Street or Road	1320' - 2050' (2)	405' - 450' (3)		175'	High 245' Med 150' Low 100'	Yes	Full access if min spacing requirement met	LT Required (4) RT Required (4) AL Required (4)
High Volume (HV) Driveway >200 pk hr Trips	1320' - 2050' (2)		175' - 210' (3)	175'		Yes	One full access if min. spacing met &/or notes 8-12 based on TIS	LT Required (4) RT Required (4) AL Required (4)
Medium Volume (MEV) Driveway 100-200 pk hr trips	1320' - 2050' (2)		140' - 175'	175'		Yes	May be one full access if min spacing met &/or notes 8-12 based on TIS	LT Required (4) RT Required (4)
Low Volume (LV) Driveway 10-99 pk hr trips	Signal not warranted		140' - 175'	175'		May be required by HCEO	Notes 8 - 12 based on TIS	LT Required (4)
Very Low Volume (VLV) Driveway <10 pk hr trips	Signal not warranted		35' - 70'	175'			Full access if min. spacing met	
Minimum Volume (MIV) Driveway field & utility drive	Signal now warranted		35' - 70'	175'			Full access if min. spacing met	
Temporary Access/Driveway	None		Located for best ISD within other constraints					

NOTES:

1. All minimum-distance ranges based on prevailing speeds and signal cycles. Each situation evaluated site specifically within the range.
2. TIS with signal system study required to justify distance less than required. No signals considered unless warranted.
3. Unless new street or drive is meeting existing.
4. Unless traffic study determines otherwise. Study scope determined by HCEO.
5. When side road is not on access management system. If it is on the system, use appropriate corner spacing requirements.
7. Scoped by HCEO, subject to HCEO TIS standards, for approval by HCEO.
8. Right in/Right-out only
9. Right in/Right-out/Left-in
10. Right-in/Left-in with egress via cross easement or service road.
11. Right-in only with egress via cross easement or service road.
12. Access & egress only by cross easement or service road.
13. Acceleration lanes to allow entering vehicles to better merge.

Lateral Access Restrictions
 High >200 Peak Hr Trips
 Medium 50-200 Peak Hr Trips
 Low <50 Peak Hr Trips

Hamilton County Access Management

Chart 5. Road Classification: Minor Collector

Access Connections	Minimum Signal Spacing	Minimum Road or Street Spacing	Minimum Full-Access Driveway Spacing	Corner Spacing	Lateral Access Restriction (5)	TIS Required (7)	Access Restrictions	Left-turn Lane Right-turn Lane AL Requirement (13)
Street or Road	Signal not warranted	405' - 450' (3)		175'	High 175' Med 150' Low 100'	Yes	Full access if min spacing requirement is met	LT Required (4) AL Required (4)
High Volume (HV) Driveway >200 pk hr Trips	Signal not warranted		175' - 210' (3)	175'		Yes	One full access if min spacing met &/or notes 8-12 based on TIS	LT Required (4)
Medium Volume (MEV) Driveway 100-200 pk hr trips	Signal not warranted		140' - 175'	175'		Yes	One full access if min spacing met &/or notes 8-12 for others	LT Required (4)
Low Volume (LV) Driveway 10-99 pk hr trips	Signal not warranted		140' - 175'	175'			Full access if min min spacing met; otherwise notes 8-12	
Very Low Volume (VLV) Driveway <10 pk hr trips	Signal not warranted		35' - 70'	175'			Full access if min spacing met	
Minimum Volume (MIV) Driveway field & utility drive	Signal not warranted		35' - 70'	175'			Full access if min spacing met	
Temporary Access/Driveway	None		Located for best ISD within other constraints					

NOTES:

3. Unless new street or drive is meeting existing.
4. Unless traffic study determines otherwise. Study scope determined by HCEO.
5. When side road is not on access management system. If it is on the system, use appropriate corner spacing requirements.
7. Scoped by HCEO, subject to HCEO TIS standards, for approval by HCEO.
8. Right in/Right-out only
9. Right in/Right-out/Left-in
10. Right-in/Left-in with egress via cross easement or service road.
11. Right-in only with egress via cross easement or service road.
12. Access & egress only by cross easement or service road.
13. Acceleration lanes to allow entering vehicles to better merge.

Lateral Access Restrictions
 High >200 Peak Hr Trips
 Medium 50-200 Peak Hr Trips
 Low <50 Peak Hr Trips

Hamilton County Access Management

Chart 6. Road Classification: Local

Access Connections	Minimum Signal Spacing	Minimum Road or Street Spacing	Minimum Full-Access Driveway Spacing	Right -In/ Right -Out only	Corner Spacing			
Street or Road	Signal not warranted	N/A Subject to Planning Commission		N/A				
High Volume (HV) Driveway >200 pk hr Trips	Signal not warranted		Limit of one per parcel or one IN and one OUT providing a loop	Any access pts on a parcel above what's permitted for full access				
Medium Volume (MEV) Driveway 100-200 pk hr trips	Signal not warranted		Limit of one per parcel or one IN and one OUT providing a loop	Any access pts on a parcel above what's permitted for full access				
Low Volume (LV) Driveway 10-99 pk hr trips	Signal not warranted		Limit of one per parcel	N/A				
Very Low Volume (VLV) Driveway <10 pk hr trips	Signal not warranted		Limit of one per parcel	N/A				
Minimum Volume (MIV) Driveway field & utility drive	Signal not warranted		Limit of one per parcel	N/A				
Temporary Access/Driveway	Signal not warranted		N/A	N/A				

NOTES: