



ACCESS MANAGEMENT MANUAL

OF ERIE COUNTY, OHIO

EFFECTIVE
AUGUST 9, 2018

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100 PURPOSE; JURISDICTION; DEFINITIONS

101 TITLE

These regulations, rules, procedures, and standards shall officially be known as the “Access Management Manual of Erie County, Ohio” and shall be referred to hereafter as “this Manual.”

102 AUTHORITY

This Manual derives authority from the powers granted Erie County, Ohio, by Ohio Revised Code §5552.

103 POLICY

103.1 It is declared to be the policy of Erie County to consider the management of access to County and Township roadways subject to the control of the County and Township in order to ensure preservation and promotion of the safety, capacity, efficiency, and proper flow of traffic.

103.2 Access connections to County and Township roadways should not attempt to cause a decrease in traffic efficiency, safety, capacity, or otherwise be detrimental to the continued, safe operations of roadway facilities.

104 PURPOSE

104.1 This Manual establishes procedures and standards to promote traffic safety, efficiency, and capacity, and maintain proper traffic flow of both County and Township roadway systems. These roadway systems form an integral part of the local and intraregional transportation network, interconnecting all areas of Erie County and providing access to state and interstate routes. The governing agencies of Erie County have a public-trust responsibility to preserve, maintain, and protect these roadways and the public investment in them.

104.2 The failure to effectively manage access is a leading cause of accidents, decline in operating speed, and reduction in traffic-carrying capacity. The uncontrolled proliferation of poorly located, inadequately designed, and closely spaced driveways, intersections, and traffic signals can adversely affect a roadway’s ability to accommodate traffic and provide convenient access. Ineffective access management may also result in unsightly commercial strip development, degradation of scenic landscapes,

increases in cut-through traffic in residential areas, and increased vehicle fuel consumption and emissions.

104.3 Correcting the problems that may result from ineffective access management practice often requires significant expenditure of public funds to widen roadways, reconstruct intersections, and provide additional safety and capacity improvements. These remedial measures are increasingly prohibitive in terms of environmental, social, and economic costs. Moreover, without effective access management, benefits are often short-term and temporary.

104.4 County-wide implementation of access management ensures equitable, uniform, consistent, and systematic application of standards. It prolongs the service life of County and Township roadway facilities, thereby reducing public costs to maintain an effective local roadway system. Access management maintains and improves accessibility to business, commercial, and residential development, while discouraging undesirable, congested development that diminishes property values and degrades the character and quality of life of the community. Access management preserves and protects the traffic mobility essential to economic and social well being of the County while providing access as necessary in the interest of public and private transportation needs and as compatible with public health and safety.

104.5 Except in cases of purchases or appropriation of access rights, nothing in this Manual shall deny a property owner the right to reasonable access to the general, public street system.

105 APPLICABILITY

This Manual shall apply only to those access connections under the jurisdiction of **Section 106** and constructed on or after the effective date of adoption of this Manual, except as provided for in **Section 210**.

106 JURISDICTION

106.1 This Manual shall be applicable to all access connections in the unincorporated areas of the County on the system of County roadways as set forth in Ohio Revised Code §5541 and the system of Township roadways as set forth in Ohio Revised Code §5571.

106.2 This Manual shall be applicable to all subdivisions of land subject to approval without plat per Ohio Revised Code §711.131, and to any parcels of property not subject to the regulations of Ohio Revised Code §711.

106.3 This Manual shall not be applicable to subdivisions subject to plat approval under Ohio Revised Code §711.05 or §711.10, except as specifically provided for in the current edition of the *Subdivision Regulations of Erie County, Ohio*.

106.4 This Manual shall not be construed as waiving, annulling, or abrogating the rights of Erie County or the respective Townships to restrict, alter, eliminate, and/or modify turning movements and traffic patterns at intersections under their jurisdiction, as necessary to improve, preserve, and maintain the safety and efficiency of traffic flows, and the capacity of the roadway network.

106.5 This Manual shall not be construed as waiving, annulling, or abrogating the rights of the Ohio Department of Transportation to regulate and manage access to the system of state highways established by Ohio Revised Code §5511.

107 SEVERABILITY

If for any reason any clause, provision, section, or portion of this Manual shall be held invalid or unconstitutional by a court of competent jurisdiction, such decision shall affect neither the validity of this Manual nor any part thereof, other than the part so held to be invalid.

108 PREVAILING UNITS

The units of measure for use with this Manual shall be inch-pound (U.S. Customary) units.

109 AMENDMENT

This Manual shall be amended as necessary so that the regulations and standards contained herein retain their relevance, practicality, and applicability. This Manual may also be amended as necessary to provide special or additional regulations for corridors, congested areas, high-accident areas, or other areas of traffic safety concern. Amendments shall not conflict with the policy and purpose of this Manual as specified in **Sections 103 and 104**.

109.1 Request for Amendment. All requests for amendment shall be submitted in writing to the County Engineer or the Erie Regional Planning Commission (ERPC). The request shall indicate the proposed section(s) of this Manual to be amended, the proposed text of the amendment, and the reason(s) for the proposed amendment.

109.2 Requests Received by the County Engineer. The County Engineer shall review the request for amendment and make

recommendations regarding its adoption. Such recommendations shall consider the potential traffic, safety, and other effects of said amendment. Within 60 calendar days after receiving a request to amend this Manual, the County Engineer shall forward said request, along with his or her recommendations, to the Erie County Commissioners for action specified in **Section 109.4**.

109.3 Requests Received by ERPC. Upon receipt of the request for amendment, ERPC shall forward the request to the Technical Advisory Committee (TAC). The TAC shall review and make recommendations regarding the request. ERPC shall, at a regularly scheduled or special meeting, consider the request and the TAC recommendations. Upon the adoption of a resolution supporting the request for amendment, ERPC shall forward the request, resolution, and all recommendations to the County Engineer. The County Engineer shall treat the request in accordance with **Section 109.2**.

109.4 Procedure for Adoption. Upon receipt of both the request for amendment and the County Engineer's recommendations, the County Commissioners shall proceed in accordance with the requirements of Ohio Revised Code §5552.06. However, if in the opinion of the County Engineer or the County Commissioners, the request for amendment will result in major, significant, or substantial changes to this Manual, the County Commissioners shall initiate proceedings to re-adopt this entire Manual, with proposed amendments, in accordance with Ohio Revised Code §5552.04.

110 ENACTMENT

This Manual shall become effective on April 30, 2006; this date shall be thenceforth known as the effective date of adoption of this Manual. This Manual shall in no way affect access points in which construction has begun prior to this date, except as specifically provided for in this Manual.

111 REFERENCES AND RESOURCES

The standards and specifications applied in this Manual are based in part on the following standard, engineering references. The citation of standard, engineering reference works always refers to the latest publication or edition of the work.

A Policy on Geometric Design of Highways and Streets,
American Association of State Highway and Transportation
Officials, Washington, D.C.

Traffic Engineering Handbook, Institute of Transportation Engineers, Washington D.C.

Ohio Manual of Uniform Traffic Control Devices, (MUTCD), Ohio Department of Transportation, Columbus, Ohio.

Location and Design Manual, Ohio Department of Transportation, Columbus, Ohio.

Construction and Material Specifications, Ohio Department of Transportation, Columbus, Ohio.

Standard Construction Drawings, Ohio Department of Transportation, Columbus, Ohio.

Pavement Design and Rehabilitation Manual, Ohio Department of Transportation, Columbus, Ohio.

State Highway Access Management Manual, Ohio Department of Transportation, Columbus, Ohio.

Trip Generation, Institute of Transportation Engineers, Washington, D.C.

Roadside Design Guide, American Association of State Highway and Transportation Officials, Washington, D.C.

Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT \leq 400) American Association of State Highway and Transportation Officials, Washington, D.C.

Highway Capacity Manual, Transportation Research Board, Washington, D.C.

Subdivision Regulations of Erie County, Ohio, Erie Regional Planning Commission, Sandusky, Ohio.

Erie County Storm Water and Erosion Control Manual, Erie County Engineer's Office, Sandusky, Ohio.

112

DEFINITIONS

112.1 Meaning of “Shall,” “Should,” and “May”

Shall indicates a mandatory requirement. Procedures and items described with “shall” indicate the requirement *must* be met.

Should indicates a recommended requirement. Procedures and

items described with “should” indicate the requirement is recommended and advisable, but not mandatory.

May indicates a permissive requirement. Procedures and items described with “may” indicate that no requirement is intended.

112.2 Other Definitions

These definitions are provided and adopted to explain technical words, phrases, and abbreviations used in this Manual.

Access and **access connection** mean any driveway or other point of entry and/or exit such as a street, road or roadway that connects to the general street system. Where two public roadways intersect, the roadway with the lesser access category shall be considered the access.

Access category means any of the six categories described in **Section 300** of this Manual.

Access management plan means any plan that designates access locations and their design for the purpose of improving those portions of roadway included in the access management plan to ensure its conformance to the standards established for its respective access category.

Access operation means the utilization of an access for its intended purpose, and includes all consequences or characteristics of that process, including access volumes, type of access traffic, access safety, time of the access activity, and the effect of such access on the state roadway system.

ADT means the annual average two-way daily traffic volume. It represents the total traffic for the year, divided by 365.25. For purposes of this Manual, references to “AADT” in other resources and publications shall be considered synonymous with “ADT”.

Applicant means any person, corporation, entity or agency applying for an access permit.

Application means an application, including all documentation required by this Manual, for an access permit.

Auxiliary lane means any additional special purpose lane such as a turn lane.

Business day means Monday through Friday, inclusive, but excluding weekends and legal holidays.

Capacity means the ability of the roadway to provide service to the volume of vehicles seeking to use the roadway. Capacity is generally considered the maximum traffic volume that can be accommodated by a roadway during a specified time.

Channelizing island means a defined area between traffic lanes for the physical separation and control of vehicle movements.

Clear zone means the total roadside border area, bounded by the edge of the traveled way, available for safe use by errant vehicles. The desired width depends upon roadway traffic volumes, vehicle speeds, and roadside geometry.

County means Erie County, Ohio.

County Commissioners means the duly elected county commissioners of Erie County, Ohio.

County Engineer means the duly elected county engineer of Erie County, Ohio, or his/her authorized representative.

Deceleration lane means a speed-change lane, including tapered areas, enabling a vehicle to leave the main stream of faster moving traffic and slow to a safe turning speed prior to exiting roadway.

Design hour traffic volume, design hour volume, and DHV mean the hourly traffic volume used in the geometric design of roadways. The DHV is the 30th highest hour vehicular volume experienced in a one-year period.

Design speed means the posted roadway speed limit plus 5 MPH.

Divided roadway means a roadway with physically separated lanes for traffic traveling in opposite directions, such separation being indicated by depressed dividing strips, raised curbing, traffic islands, or other physical barriers preventing or discouraging vehicular crossover traffic.

Driveway and **private road** mean every access connection in private ownership used for vehicular travel by the owner and those having the express or implied permission from the owner, but not by other persons.

Driveway spacing and **access connection spacing** mean the desired distance between adjacent driveways on the side of the roadway, as measured from centerline to centerline, considered necessary for the safe ingress and egress of vehicles and the safe operation of the roadway at its posted speed.

Erie Regional Planning Commission (ERPC) means the legislative body created under Ohio Revised Code §713.21, including all committees and subcommittees established by ERPC, and responsible for administering the planning and development processes of Erie County.

Frontage road means a public roadway auxiliary to and normally alongside and parallel to the main roadway, constructed for the purposes of maintaining local road continuity and controlling of direct access to the main roadway.

Functional classification means a classification system that defines a public roadway according to its purposes and hierarchy in the local or statewide roadway system. The Federal-Aid Roadway Act of 1973 required the use of functional classification to update and modify Federal-aid roadway systems. This legislative requirement is still in effect today. Functional classification is the grouping of roadways into integrated systems; each ranked by their importance to the general welfare, the motorist, and adjacent land-use structure. The access categories used in this Manual are identical to the functional classification categories, but with modified definitions.

Gradient and **grade** mean the rate or percent change in slope, either ascending or descending from or along the roadway. It is measured along the centerline of the roadway or access.

Intersection means **(1)** the area embraced within the prolongation or connection of the lateral curb lines, or, if none, then the lateral boundary lines of two roadways which join one another at, or approximately at, right angles, or the area within which vehicles traveling upon different roadways joining at any other angle may come in conflict; **(2)** where a divided roadway includes lanes for directional travel thirty feet or more apart, then every crossing of the directional lanes of such divided roadway by another intersecting roadway shall be regarded as a separate intersection. If the intersecting roadway is also a divided roadway with lanes for directional travel thirty feet or more apart, then every crossing of the directional lanes of such roadways shall be regarded as a separate intersection.

Intersection sight distance (ISD) mean the distance at which a motorist attempting to enter or cross a roadway should be able to observe traffic in order to safely make his/her desired movement.

Lane means the portion of a roadway intended for the movement of a single line of vehicles. It does not include the gutter or shoulder of the roadway.

Level of service (LOS) means the qualitative measure describing a range of traffic operating conditions as defined and described in the Highway Capacity Manual. LOS typically describes operating conditions in terms of speed, travel time, traffic interruptions, and maneuvering freedom, through the use of a letter grading system (similar to school report cards) ranging from A (ideal operating conditions) to F (poor operating conditions).

Median means that portion of a roadway separating opposing traffic flows.

Median island means a curbed island within a driveway or access connection that physically separates egress traffic from ingress traffic.

MPH means a rate of speed measured in statute miles per hour.

MPO means the Metropolitan Planning Organization administered by the Erie Regional Planning Commission of Erie County, Ohio.

OMUTCD means the Ohio Manual of Uniform Traffic Control Devices.

Peak hour volume (PHV) means the highest traffic volume in 60 consecutive minutes in one (or both) of the two traditional peak periods of traffic, generally the morning period from 7 AM to 9 AM and/or the evening period from 4 PM to 6 PM. This volume is generally based on 60-minute, 30-minute, or 15-minute periods.

Peak hour means the specific interval of time in which the peak hour volume occurs.

Permit means an approved access permit issued by the County Engineer.

Permit issue date and **date of issue** mean the date when the County Engineer signs the permit.

Permittee means any person, unit of government, public agency or any other entity that can own property, to whom an approved access permit is issued. The permittee, normally the property owner served by the access connection, is responsible for fulfilling all the terms and conditions of the permit.

Person means every person, firm, co-partnership, association, or corporation.

Potential for signalization means an access connection that has

the potential to meet any of the traffic signal warrants as defined by the OMUTCD.

Reasonable access means the minimum number of access connections necessary to minimize delay, provide adequate level of service, capacity, and preserve roadway safety, in accordance with the requirements of this Manual.

Relocate means to remove and establish in a new place, and may include the elimination of or the merging of non-conforming access with other existing access connections to ensure such access conforms to the provisions of this Manual.

Right-of-way means land, property, or the interest therein, usually as a strip acquired for or devoted to transportation purposes. When used in this context, right-of-way includes the roadway, shoulders, ditches, and slopes extending to and within the right-of-way limits under the control of the state, county, or township.

Roadside means the area between the outside shoulder edge and the right-of-way limits.

Roadway, road, and street mean **(1)** the entire width between the boundary lines of every way open to the use of the public as a thoroughfare for purposes of vehicular travel; **(2)** that portion of a right-of-way improved, designed, or ordinarily used for vehicular travel, excluding the shoulder, curb, and gutter.

Roadway network means the interconnecting network of city streets, county roadways, township roadways, and state roadways in an area.

Signal and traffic signal mean a traffic control signal.

Signalization means installing or modifying a traffic control signal.

Signal progression means the progressive movement of traffic platoons through adjacent signalized locations within a traffic control system at a planned rate of speed and without stopping.

Slope means the relative steepness of the terrain expressed as a ratio or percentage. Slopes may be categorized as positive or negative and as parallel (longitudinal) or cross (transverse) in relation to the direction of traffic.

State means the State of Ohio.

Stopping sight distance (SSD) means the distance required by a vehicle driver, traveling at a given speed, to bring the vehicle safely

to a stop after an object on the roadway becomes visible. It includes the distance traveled during the driver's PIEV (perception, identification, emotion, volition) time and the actual vehicle braking distance.

Storage length means additional length added to a deceleration lane to store the maximum number of vehicles likely to accumulate in the lane during the peak hour, and to prevent stored vehicles from interfering with the function of the deceleration lane or the adjacent through travel lanes.

Taper means a transitional area of decreasing or increasing usable pavement width to permit the formation or elimination of an auxiliary lane.

Township Trustees and **Trustees** mean the elected board of trustees, or the board's authorized agent, of the township in which the access connection under consideration is located.

Traffic impact study (TIS) means a study that is used to determine more precisely the impacts of a proposed access usage and proposes measures to mitigate those impacts and to ensure the continued functional and operational integrity of the roadway.

Traveled way means the same as **roadway (2)**.

Trip end and **trip** mean a single or one-direction vehicle movement with either the origin or the destination inside an analysis area. For example, a vehicle leaving the roadway and entering a property is one trip end; the same vehicle later leaving the property and re-entering the roadway is another trip end.

Variance means a granting of permission to depart from the standards and requirements of this Manual due to unique conditions or circumstances when a literal enforcement of this Manual would result in unnecessary hardship and when such a variance is not contrary to the public interest.

Warrant(s) means the criteria by which the need for an improvement is determined.

200 ADMINISTRATION

201 ADMINISTRATING AUTHORITY

201.1 The County Engineer shall be responsible for the implementation and administration of this Manual for County roadways.

201.2 The Township Trustees shall be responsible for the implementation and administration of this Manual for Township roadways.

201.3 Except where otherwise noted in this Manual, the term “County Engineer” shall be understood to mean and be synonymous with “Township Trustees” in matters of access and applications for access to Township Roads.

202 ACCESS PERMIT REQUIRED

202.1 An access permit shall be required for all access connections under the jurisdiction of **Section 106** and/or subject to the requirements of **Section 210**.

203 ACCESS PERMIT APPLICATION

203.1 Applications for permits for direct access to County roadways shall be submitted to the County Engineer.

203.2 Applications for permits for direct access connections to Township roadways shall be submitted to the Township Trustees.

203.3.1 The County Engineer shall have the final responsibility for

- accepting access permit applications;
- reviewing the access permit applications to ensure conformance with this Manual;
- issuing access permits;
- inspecting construction to ensure compliance with all terms and conditions of the permit;
- maintaining records of all applications and permits.

203.3.2 The Township Trustees may request the assistance and recommendations of the County Engineer for any application for access to Township Roads.

203.4 Applications shall include a completed **Form 125**, or applicable Township form, and any additional attachments necessary for the County Engineer to accurately and thoroughly

review and assess the application. Applications shall bear the complete name, address, telephone number, and signature of the property owner or his or her authorized agent. Applications by anyone other than the property owner or his or her authorized agent will not be accepted.

203.5 Two complete copies of the application, with original signatures, and any attachments shall be submitted.

203.6 The information and level of detail required to review an application will vary according to the type and usage of proposed access. Material not relevant to the evaluation of the proposed access will neither be required nor requested of the applicant. At a minimum, the application should include the information requested on Form 125, or applicable Township form. However, prior to submitting an application, the applicant should contact the County Engineer for information about the application process and the type of information which may be required for inclusion with the submission.

203.7 A preliminary meeting with the County Engineer is recommended for all large traffic generators, regardless of development type, and for those requiring a traffic impact study. The preliminary meeting provides the opportunity to discuss the access proposal, consider its feasibility, define the scope of further study that may be necessary, and expedite the review of the application.

203.8 In order to accurately and thoroughly review and assess the application, the County Engineer may require the applicant to submit additional attachments to the application. These attachments may include—but are not limited to—the following:

- Property ownership maps showing the location of the property.
- Existing access connections on both sides of the roadway within 1000 feet of the centerline of any and all proposed access connection(s).
- Land use to be served by the proposed connection(s) (residential, commercial, industrial, with the type of business(es) to be served or the appropriate land use category from *Trip Generation*).
- Site plans or drawings showing the location of the proposed access connection(s) with reference to the roadway, rights-of-way, property lines, existing buildings and structures, parking locations, existing access connections, existing property usage, including existing easements.
- Extent of proposed construction work, including the type,

location, and geometric design of any proposed access connections; the type, location, and dimensional data of existing and proposed drainage structures, and all hydraulic data pertaining thereto.

- A traffic impact study, per **Section 500**.
- Construction plans of all improvements to the County and Township roadway network necessary to minimize and mitigate any impacts, including increases in delay or degradation of levels of service due to traffic generated by the proposed development.

203.9 An application will not be accepted if necessary and essential information is missing. The applicant will be notified within **30calendar days** of any omissions in the application submittal that need correction.

203.10 When the County Engineer determines that an application is complete and acceptable, the application and all copies shall be marked with the date of acceptance. The date of acceptance marked by the County Engineer shall be used in calculating the time frame for the review and approval of the application.

204

ACCESS PERMIT APPLICATION REVIEW

204.1 Except as provided for in **Section 203.2**, the County Engineer shall review all applications. The County Engineer has the legal authority to approve all applications for the use and occupancy of rights-of-way on County roadways for the purposes of constructing and using driveways and access connections.

204.2 The County Engineer shall review all applications for completeness and conformance with this Manual.

204.3.1 The review and final action on an application for an access connection that does not require a traffic impact study or variance application shall be completed within **30 calendar days** of the date of acceptance of the access permit application. If the County Engineer takes no action on such an application within 30 calendar days, the application shall be considered approved.

204.3.2 The review and final action on an application for an access connection accompanying a lot split/minor subdivision application shall be completed within **7 business days** of submission of an acceptable access permit application, otherwise said application shall be deemed approved. If the application includes a variance application, the review and final action shall be governed by **Section 204.3.3**.

204.3.3 The review and final action on an application with a variance application shall be completed within **30 calendar days** of the County Engineer's receipt of the written decision regarding such variance application by the Board of Appeals. If no action on such an application is taken within 30 calendar days following receipt of said decision, the application shall be considered approved.

204.3.4 The review and final action for all applications requiring traffic impact studies shall be as specified in **Section 500**. All applications for developments that the County Engineer determines will generate, or has the potential to generate, traffic volumes at full build-out and occupancy exceeding the threshold values of **Section 501.2** shall require completion of a traffic impact study and shall be reviewed and processed in accordance with the requirements of **Section 500**.

204.4 The review of the application shall consider the proposed method and duration of construction and the effect upon roadway traffic. Traffic control to protect traffic from unnecessary delays and to preserve traffic safety shall be required as specified by the *Ohio Manual of Uniform Traffic Control Devices*.

205

ACCESS PERMIT APPLICATION APPROVALS

205.1 An access permit shall be issued only in compliance with the requirements of this Manual, and may include terms and conditions necessary to protect traffic safety, efficiency, and capacity, and maintain proper traffic flow. The County Engineer may impose such reasonable terms and conditions as necessary to meet the requirements of this Manual.

205.2 After reviewing the application, and after all studies, agreements, construction plans, and other applicable requirements of this Manual are completed, the County Engineer shall

- approve the access request as proposed,
- require modifications as appropriate and necessary, or
- deny the access request.

Such actions shall be consistent with the standards of this Manual.

205.3 A permit for an approved access connection shall be issued on an executed **Form 125**, or applicable Township form, and shall include all terms and conditions that apply to the permit. The County Engineer shall sign the permit and a copy of the permit package shall be given to the permittee. Except for permits granted under Section 203.3, and approved by the Township, a permit shall not be valid unless it is signed by the County Engineer.

205.4 No changes, modifications, or revisions shall be made to the

location or design of the approved access proposal, or to the terms and conditions as contained in the permit. If the permittee wishes to modify or revise the location, design, terms, or conditions of the approved access proposal, (s)he shall apply for a new permit to supercede the approved permit.

205.5 When a request for proposed access is denied, the applicant shall be notified by the County Engineer, in writing, of the reason(s) for denial. Appeals of decisions made by the County Engineer may be made in accordance with this Manual.

206

GENERAL CONDITIONS AND PROVISIONS APPLYING TO ALL ACCESS PERMITS

206.1 The granting of a permit does not convey to either the permittee or to the property served any rights, title, or interest in County or Township rights-of-way, or in any way abridge the rights of the County or Township to exercise jurisdiction over County and Township roadways.

206.2 The County Engineer or the Township may reconstruct, relocate, modify, repair, or remove any access connection, or any features or fixtures thereof, if it is necessary for the improved safety and operation of the roadway.

206.3 The County Engineer or the Township may redesign the roadway for the improved safety and operation of the roadway. Such improvements may include—but are not limited to—the construction of auxiliary lanes and the modification of allowable turning movements. Any such changes in the roadway design shall not require a permit modification for an access point because the permit confers no private rights to the permittee over the control of the roadway design.

206.4 Acceptance of the permit by the permittee constitutes a legal agreement to comply with all terms and conditions of the permit.

206.5 Failure of the permittee to fully comply with the terms and conditions of the permit shall be cause for the revocation and annulment of the permit, thereby rendering the access connection illegal and subject to action by the County Engineer or the Township per **Section 212**.

206.6 The permittee shall save harmless the County, Township, and all their representatives from all suits, actions, or claims of any character, brought on account of any injuries or damages sustained by any person or property in consequence of any negligence or on account of any act or omission as a result of the issuance of this permit.

207 TERM OF PERMIT

207.1 A permit for a proposed access connection shall be valid for 12 months, commencing with the date of permit approval. If construction of the proposed access connection is not completed within the term of the permit, the permit shall be revoked and a new permit required.

207.2 A permit for a change in use of an existing access connection shall be valid for 12 months, commencing with the date of permit approval. If the proposed change in use fails to occur within the term of the permit, the permit shall be revoked and a new permit required.

207.3 The permittee may request, in writing, that the County Engineer grant an extension of the term of the permit. Such request shall explain the necessity for an extension and when the permittee expects to complete the operations described in the permit. No permit shall be extended by more than 12 months.

208 CONSTRUCTION OF ACCESS; COMPLIANCE WITH ACCESS PERMITS

208.1 All work authorized under the conditions of the permit shall be performed in accordance with the conditions of the approved permit. All work shall be performed solely at the expense of the permittee.

208.2 The permittee shall contact the County Engineer and receive instructions **2 business days** before commencing any work authorized by the permit. No work authorized by the permit shall be performed before the permittee contacts the County Engineer.

208.3 The County Engineer shall inspect all work authorized by the permit to ensure that such work is in compliance with the permit and all terms and conditions attached. If the work is not being performed as specified, the work shall be stopped and the circumstances reported to the County Engineer. The permittee shall be notified of the County Engineer's action, its causes, and be given a reasonable opportunity to correct the problem.

208.4 All work authorized by the permit shall be completed within the timeframe specified on the permit, in accordance with **Section 207**. A permit shall be considered void if the work authorized is not completed within the specified time frame, thereby rendering the access connection illegal and subject to action under **Section 212**. The permittee may request a time extension in accordance with **Section 207.3**.

208.5 If the permittee performs any work contrary to that authorized by the permit, or contrary to the orders of the County Engineer, and after due notice of the violation fails to correct such work within 30 calendar days, the County Engineer shall notify the permittee that the permit is void, thereby rendering the access connection illegal and subject to action under **Section 212**.

208.6 Work authorized by the permit that involves construction encroaching upon the roadway or shoulders shall include a plan for maintaining traffic in accordance with the *Ohio Manual of Uniform Traffic Control Devices*. Lane or shoulder hazards that exist for a period of time longer than necessary may be cause for the County Engineer to order the revocation of the permit and immediate closure of work areas, removal of all hazards, and removal of all equipment.

208.7 Upon completion of work authorized by the permit, the permittee shall leave the roadway clean and free of all rubbish, excess material, and equipment. The roadway shall be left in a condition acceptable to the County Engineer.

208.8 Upon satisfactory completion of work authorized by the permit, the County Engineer's representative shall complete **Permit Inspection Certificate, Form 125-INSP**, certifying that the permittee has complied with the terms of the permit.

209 USE OF ACCESS

209.1 Responsibility of Property Owner It shall be the responsibility of the property owner to ensure that the use of access to the property is not in violation of the permit terms and conditions. The terms and conditions of the permit are binding upon all heirs, successors-in-interest, occupants, and assigns of the property owner.

210 CHANGE IN USE

210.1 Change in Use If significant changes are made or will be made in the use of the property that will affect access operation, traffic volume, or vehicle type, the property owner shall contact the County Engineer to determine if a new permit and/or modifications to the access are required. The property owner may be required by the County Engineer to reconstruct, relocate, redesign, or otherwise modify an existing access connection in order to conform to the standards and design specifications of this Manual when a change in use of the property results in a change in type or nature of access operation meeting or exceeding the criteria specified in Section 210.2. A change in use may include—but is not limited to—zoning change, change in type of business conducted,

expansion of an existing business, and/or division of property creating new parcels. Modifications such as landscaping, advertising, general maintenance, and other aesthetic changes that do not affect traffic operation and safety are not classified as changes in use.

210.2 Criteria for Evaluating Change in Use Change in use includes—but is not limited to—the following:

- Traffic volume using an access connection increases by 20 percent or more per day, or by 10 or more trip ends in the peak hour
- The traffic volume of a particular directional characteristic (e.g., left turns) using an access connection increases by 20 percent or more per day, or by 5 or more trip ends in the peak hour
- The traffic volume of vehicles exceeding 30,000 pounds gross vehicle weight using an access connection increases by 20 percent or more per day, or by 10 or more trip ends in the peak hour
- Traffic volumes using an access connection increase from a level not exceeding warrants and standards of Section 500 to a level exceeding the warrants and standards of Section 500
- The historical use of the access connection was not for daily use, and the new use of the access connection would be for daily use
- The free flow of vehicles entering the property is restricted such that vehicles queue on the roadway, creating a roadway hazard
- The property owner voluntarily and independently obtains alternative or additional access via an adjacent property.

210.3 A change in use which results in a change in the type or nature of access operation is presumptively established when, following the change in use, any of the events of **Section 210.1 or 210.2** occur, or are reasonably expected to occur by proper application of *Trip Generation*.

210.4 A change in use as established by this Section shall require the property owner to obtain a new permit from the County Engineer.

EXISTING AND NON-CONFORMING ACCESS CONNECTIONS

211.1 Any access connection in existence, or upon which construction has commenced, prior to the effective date of this Manual is considered to be grandfathered.

211.2 When a change in use in a property is established per the requirements of **Section 210**, the property owner(s) shall eliminate all non-conforming access connections upon completion of the access connection permitted under **Section 210.4**.

212 ACCESS PERMIT VIOLATIONS

212.1 Any access connection providing direct access to a County or Township roadway that is constructed or established after the effective date of this Manual without an approved access permit issued in accordance with the requirements of this Manual shall be considered an illegal obstruction within the roadway right-of-way.

212.2 Upon determination that an access connection is illegal under the terms of this Manual, the property owner shall be subject to action under Ohio Revised Code §5552.99, and/or other appropriate action under §5547.03 and §5589.10, or as otherwise authorized by the Ohio Revised Code, including any legal action(s) initiated by Erie County or the respective Township in a court of competent jurisdiction.

213 FEES

213.1 The County Engineer may charge fees to defray the costs of administering the permit. Such fees may include fees for administering the application and permit. A schedule of fees is provided in Appendix B.

213.2 The fee necessary to defray the cost of administering permits shall be listed on the appropriate application or permit forms.

213.3 All fees for permits for County roads shall be made payable to the Board County Commissioners. All fees for permits for Township roads shall be made payable to the respective Board of Township Trustees.

300 ACCESS CATEGORIES

301 PURPOSE AND USE

This section describes the access categories to which all sections of County and Township roadways have been assigned. Each category describes the function of the roadways included in the category and the operational standards that are applied to maintain the roadway's capacity, traffic flow, and safety.

302 ACCESS CATEGORIES

302.1 The access categories described in this Manual shall directly correspond to the functional classifications assigned to each roadway by the Federal Highway Administration and the Ohio Department of Transportation, with modifications and operational descriptions as prescribed by this Manual.

302.2 Because the jurisdiction of this Manual is limited to County and Township roads, not all functional classification categories are used in this Manual. Certain functional classifications are not presently assigned to any roadways under the jurisdiction of this Manual. Functional classifications not used include:

Rural System

- Interstate
- Principle Arterial

Urban System

- Interstate
- Freeway/Expressway
- Other Principle (non-Interstate) Arterial

302.3 Appendix C includes a map and a list of the access categories for roads in the unincorporated parts of Erie County.

303 RURAL SYSTEM

303.1 Rural Minor Arterial (Functional Classification 06)

303.1.1 Links cities, larger towns, and other traffic generators (such as major resort areas) that are capable of attracting intercounty and intrastate travel.

303.1.2 Provides service to corridors with trip lengths and travel density greater than those served by rural collectors or local systems.

303.1.3 Provides for relatively high overall travel speeds, with minimum interference to through traffic movement.

303.2 Rural Collector (Functional Classifications 07 and 08)

303.2.1 This classification includes the functional classifications of both Rural Major Collector and Rural Minor Collector.

303.2.2 Provides service to towns not directly served by arterial systems and to other traffic generators of equivalent intracounty importance, such as consolidated schools, parks, and important agricultural, commercial, or industrial areas.

303.2.3 Links these places with nearby larger towns or cities, or with roadways of higher classification; brings developed areas within reasonable distance of arterials.

303.2.4 Generally serves the more important intracounty travel corridors, and links locally important traffic generators with other rural areas.

303.3 Rural Local (Functional Classification 09)

303.3.1 Primarily provides access to adjacent land.

303.3.2 Provides service to travel over relatively short distances as compared to collectors or other higher systems.

304 URBAN SYSTEM

304.1 Urban Minor Arterial (Functional Classification 16)

304.1.1 Interconnects with and augments the urban principle arterial system and provides service to trips of moderate length at a somewhat lower level of mobility than principle arterials. This system also distributes travel to geographic areas smaller than those identified with the higher system.

304.1.2 Includes all facilities not classified as principle and contains facilities that place more emphasis on land access than the higher system and offer a lower level of mobility. Such facilities provide intracommunity continuity, but ideally do not penetrate identifiable neighborhoods. The system includes urban connections to rural collector roads where such connections have not been classified as urban principle arterials.

304.2 Urban Collector (Functional Classification 17)

304.2.1 Provides both land access service and traffic circulation within residential, commercial, and industrial areas.

304.2.2 Distributes trips from the arterial system through the area to the ultimate destination. Also collects traffic from local roadways and channels trips to the arterial system.

304.3 Urban Local (Functional Classification 19)

304.3.1 Provides primarily direct access to adjacent land and access to higher order systems.

304.3.2 Provides the lowest level of mobility. Service to through traffic is deliberately discouraged.

400 DESIGN STANDARDS AND SPECIFICATIONS

401 PURPOSE

Section 400 defines the design standards and specifications the County Engineer will use to ensure the functional and operational integrity of County and Township roadways will be maintained, to provide reasonable and necessary access, and to protect the health and safety of the public.

402 USE OF THIS SECTION

When an application meets the requirements of **Section 200**, the standards and specifications of this section shall be used to locate, design, and construct the access connection. An application that meets the criteria of **Section 200** but is not able to meet the requirements of this section shall not be approved, unless a variance is authorized in accordance with **Section 600**.

403 DATA REQUIREMENTS

403.1 The most recent editions of the references listed in **Section 111** shall be used. The citation of a reference or standard in **Section 111** always refers to the most current edition or revision of the reference.

403.2 For the purposes of conducting analysis under the standards of this section, design traffic volumes shall be determined as specified in **Section 500**.

403.3 When the methods of **Section 500** indicate the land use for the access connection will generate traffic in excess of the threshold values specified in **Section 501.2**, a traffic impact study shall be required.

404 ACCESS CONNECTION CLASSIFICATION

The following volumes shall be used to define access connection classifications as used in this section.

404.1 Minimum Use Driveway An access connection with 5 trip ends or less in the peak hour and 10 trip ends or less per day. Examples include field driveways and single-family residence driveways.

404.2 Low Volume Driveway An access connection with more than 5 but less than 100 trip ends in the peak hour. Examples

include small office buildings and day care centers.

404.3 Medium Volume Driveway An access connection with at least 100 but less than 200 trip ends in the peak hour. Examples include drive through banks, gasoline filling stations.

404.4 High Volume Driveway An access connection with 200 or more trip ends in the peak hour. Examples include fast-food restaurants, large discount stores, and large office buildings.

404.5 Intersection An access connection to be constructed within dedicated right-of-way, whether public or private, and intended to serve trip ends generated by more than one adjacent property, or intended to serve trip ends generated by a multiple use, single property (for example, a mall); or any access connection, regardless of trip ends generated, to be constructed in such a way as to resemble a roadway or street intended for public use.

405 ACCESS CONNECTION REQUIREMENTS AND SPACING

405.1 The requirements of **Section 405** shall govern the spacing, number, and allowable vehicle movements of each access connection.

405.2 Access Connection Chart All access connections shall be governed by the standards, requirements, and specifications listed in **Chart 405-1**.

405.3 Sight Distance Access connections shall be located such that sight distance criteria of Section 200 of the *Location and Design Manual, Volume 1*, are satisfied, according to the following requirements

- Intersection sight distance (ISD): intersections, high volume driveways, and medium volume driveways.
- Stopping sight distance (SSD): low volume driveways, minimum use driveways.

Any proposed access connection that does not meet the applicable sight distance criteria shall not be approved.

405.4 When access is requested for a proposed development abutting roadways assigned to different access categories, access should only be given to the roadway with the lesser access category, unless otherwise determined by the County Engineer.

Chart 405-1

RURAL MINOR ARTERIAL (FC 06)					
Access Feature	Intersection (A)	High Volume Driveway	Medium Volume Driveway	Low Volume Driveway	Minimum Use Driveway
Spacing (B)	(E)	(E)	ISD	ISD (F)	N/U
Traffic Control	Signal (C)	Signal (C)	Stop	Stop	Stop
Traffic Movement (H)	(G)	(G)	(G)	(G)	Full
Right Turn Lane	(D)	(D)	(D)	N/U	N/U
Left Turn Lane	(D)	(D)	(D)	(D)	N/U

Key

Full = full vehicle movements
 ISD = intersection sight distance
 N/U = not used
 SSD = stopping sight distance

NOTE: Direct access connections other than intersections are discouraged on rural minor arterials. Alternative access to the existing roadway system should be sought.

- (A) When access to a proposed development will be via a roadway, placed in public or private right-of-way and dedicated in conjunction with or as an adjunct to the development, no other direct access to the pre-existing public road network shall be permitted. All access shall be through the dedicated roadway.
- (B) An access connection classified as an intersection, high volume driveway, or medium volume driveway, shall be spaced so it will not create an offset intersection opposite an existing roadway, high volume driveway, or medium volume driveway. Such access connections shall be offset no less than 150 feet, or shall be located so that access connection ingress and egress travel lanes are appropriately aligned.
- (C) The need for a signal shall be determined by a warrant analysis using the Ohio Manual of Uniform Traffic Control Devices. High volume driveways that do not meet the signal warrants shall be subject to the same restrictions as medium volume driveways.
- (D) The need for auxiliary lanes shall be determined by an analysis using the auxiliary lane graphs of Appendix 1. The design of all auxiliary lanes shall conform to the standards of the Location and Design Manual.
- (E) Signalized access connections shall be located no closer than one mile to the nearest intersection or signalized access connection, and no closer than intersection sight distance to the nearest access connection.. Unsignalized access connections shall be located no closer than one-half mile to the nearest intersection or signalized access connection, and no closer than intersection sight distance to the nearest access connection. When, on the basis of a traffic impact study submitted by the applicant, the County Engineer determines that the access connection will not be detrimental to the operations and safety of the roadway, the one-mile and one-half-mile spacing requirement may be reduced by 50 percent.
- (F) When no reasonable alternative access exists, the County Engineer may reduce this distance by up to 33 percent, but in no case shall the spacing be less than the current allowable minimum frontage required based on the zoning of the subject property at the time of application.
- (G) Vehicle movements at unsignalized intersections may be restricted by the County Engineer if full vehicle movements will detrimentally affect traffic safety and operations, unless otherwise shown by a traffic impact study submitted by the applicant.
- (H) Restrictions on vehicle movements may apply in order to meet the requirements of Section 406, even for access connections where "Full" is indicated.

Chart 405-1

RURAL COLLECTOR (FC 07 & 08)					
Access Feature	Intersection (A)	High Volume Driveway	Medium Volume Driveway	Low Volume Driveway	Minimum Use Driveway
Spacing (B)	(E)	(E)	ISD	ISD (F)	N/U
Traffic Control	Signal (C)	Signal (C)	Stop	Stop	Stop
Traffic Movement (H)	(G)	(G)	(G)	Full	Full
Right Turn Lane	(D)	(D)	(D)	N/U	N/U
Left Turn Lane	(D)	(D)	(D)	(D)	N/U

Key

Full = full vehicle movements
 ISD = intersection sight distance
 N/U = not used
 SSD = stopping sight distance

- (A) When access to a proposed development will be via a roadway, placed in public or private right-of-way and dedicated in conjunction with or as an adjunct to the development, no other direct access to the pre-existing public road network shall be permitted. All access shall be through the dedicated roadway.
- (B) An access connection classified as an intersection, high volume driveway, or medium volume driveway, shall be spaced so it will not create an offset intersection opposite an existing roadway, high volume driveway, or medium volume driveway. Such access connections shall be offset no less than 150 feet, or shall be located so that access connection ingress and egress travel lanes are appropriately aligned.
- (C) The need for a signal shall be determined by a warrant analysis using the Ohio Manual of Uniform Traffic Control Devices. High volume driveways that do not meet the signal warrants shall be subject to the same restrictions as medium volume driveways.
- (D) The need for auxiliary lanes shall be determined by an analysis using the auxiliary lane graphs of Appendix 1. The design of all auxiliary lanes shall conform to the standards of the Location and Design Manual.
- (E) Signalized access connections shall be located no closer than one mile to the nearest intersection or signalized access connection, and no closer than intersection sight distance to the nearest unsignalized access connection. Unsignalized access connections shall be located no closer than one-half mile to the nearest intersection, and no closer than intersection sight distance to the nearest access connection.. When, on the basis of a traffic impact study submitted by the applicant, the County Engineer determines that the access connection will not be detrimental to the operations and safety of the roadway, the one-mile and one-half-mile spacing requirement may be reduced by 50 percent.
- (F) When no reasonable alternative access exists, the County Engineer may reduce this distance by up to 33, but in no case shall the spacing be less than the current allowable minimum frontage required based on the zoning of the subject property at the time of application.
- (G) Vehicle movements at unsignalized intersections may be restricted by the County Engineer if full vehicle movements will detrimentally affect traffic safety and operations, unless otherwise shown by a traffic impact study submitted by the applicant.
- (H) Restrictions on vehicle movements may apply in order to meet the requirements of Section 406, even for access connections where "Full" is indicated.

Chart 405-1

RURAL LOCAL (FC 09)					
Access Feature	Intersection (A)	High Volume Driveway	Medium Volume Driveway	Low Volume Driveway	Minimum Use Driveway
Spacing (B)	1/4 mile (E)	1/4 mile (E)	SSD (F)	Zoning (Z)	N/U
Traffic Control	Signal (C)	Signal (C)	Stop	Stop	Stop
Traffic Movement (H)	Full	Full	Full	Full	Full
Right Turn Lane	(D)	(D)	N/U	N/U	N/U
Left Turn Lane	(D)	(D)	(D)	N/U	N/U

Key

Full = full vehicle movements

N/U = not used

SSD = stopping sight distance

- (A) When access to a proposed development will be via a roadway, placed in public or private right-of-way and dedicated in conjunction with or as an adjunct to the development, no other direct access to the pre-existing public road network shall be permitted. All access shall be through the dedicated roadway.
- (B) An access connection classified as an intersection, high volume driveway, or medium volume driveway, shall be spaced so it will not create an offset intersection opposite an existing roadway, high volume driveway, or medium volume driveway. Such access connections shall be offset no less than 150 feet, or shall be located so that access connection ingress and egress travel lanes are appropriately aligned.
- (C) The need for a signal shall be determined by a warrant analysis using the Ohio Manual of Uniform Traffic Control Devices. High volume driveways that do not meet the signal warrants shall be subject to the same restrictions as medium volume driveways.
- (D) The need for auxiliary lanes shall be determined by an analysis using the auxiliary lane graphs of Appendix 1. The design of all auxiliary lanes shall conform to the standards of the Location and Design Manual.
- (E) Signalized and unsignalized access connections shall be located no closer than one-quarter mile to the nearest intersection and no closer than stopping sight distance to the nearest access connection. When no reasonable alternative access exists, and when, on the basis of a traffic impact study submitted by the applicant, the County Engineer determines that the access connection will not be detrimental to the operations and safety of the roadway, the intersection spacing requirement may be reduced to no less than the intersection sight distance.
- (F) When no reasonable alternative access exists, the County Engineer may reduce this distance by up to 50 percent, but in no case shall the spacing be less than the current allowable minimum frontage required based on the zoning of the subject property at the time of application.
- (H) Restrictions on vehicle movements may apply in order to meet the requirements of Section 406, even for access connections where "Full" is indicated.
- (Z) Driveway spacing shall be equivalent to the current minimum frontage allowed based on the zoning of the subject property at the time of application.

Chart 405-1

URBAN MINOR ARTERIAL (FC 16)					
Access Feature	Intersection (A)	High Volume Driveway	Medium Volume Driveway	Low Volume Driveway	Minimum Use Driveway
Spacing (B)	(E)	(E)	(E)	ISD (F)	N/U
Traffic Control	Signal (C)	Signal (C)	Stop	Stop	Stop
Traffic Movement (H)	(G)	(G)	(G)	(G)	Full
Right Turn Lane	(D)	(D)	(D)	N/U	N/U
Left Turn Lane	(D)	(D)	(D)	(D)	N/U

Key

Full = full vehicle movements
 ISD = intersection sight distance
 N/U = not used
 SSD = stopping sight distance

NOTE: Direct high-volume and medium volume driveway access connections are discouraged on urban minor arterials.

- (A) When access to a proposed development will be via a roadway, placed in public or private right-of-way and dedicated in conjunction with or as an adjunct to the development, no other direct access to the pre-existing public road network shall be permitted. All access shall be through the dedicated roadway.
- (B) An access connection classified as an intersection, high volume driveway, or medium volume driveway, shall be spaced so it will not create an offset intersection opposite an existing roadway, high volume driveway, or medium volume driveway. Such access connections shall be offset no less than 150 feet, or shall be located so that access connection ingress and egress travel lanes are appropriately aligned.
- (C) The need for a signal shall be determined by a warrant analysis using the Ohio Manual of Uniform Traffic Control Devices. High volume driveways that do not meet the signal warrants shall be subject to the same restrictions as medium volume driveways.
- (D) The need for auxiliary lanes shall be determined by an analysis using the auxiliary lane graphs of Appendix 1. The design of all auxiliary lanes shall conform to the standards of the Location and Design Manual.
- (E) Signalized access connections shall be located no closer than one-half mile to the nearest intersection or signalized access connection, and no closer than intersection sight distance to the nearest unsignalized access connection. Unsignalized access connections shall be located no closer than one-quarter mile to the nearest intersection, and no closer than intersection sight distance to the nearest access connection. When, on the basis of a traffic impact study submitted by the applicant, the County Engineer determines that the access connection will not be detrimental to the operations and safety of the roadway, the one-half mile and one-quarter mile spacing requirements may be reduced by 50 percent.
- (F) When no reasonable alternative access exists, the County Engineer may reduce this distance by up to 33 percent, but in no case shall the spacing be less than the current allowable minimum frontage required based on the zoning of the subject property at the time of application.
- (G) Vehicle movements at unsignalized intersections may be restricted by the County Engineer if full vehicle movements will detrimentally affect traffic safety and operations, unless otherwise shown by a traffic impact study submitted by the applicant.
- (H) Restrictions on vehicle movements may apply in order to meet the requirements of Section 406, even for access connections where "Full" is indicated.

Chart 405-1

URBAN COLLECTOR (FC 17)					
Access Feature	Intersection (A)	High Volume Driveway	Medium Volume Driveway	Low Volume Driveway	Minimum Use Driveway
Spacing (B)	(E)	(E)	ISD (F)	SSD (F)	N/U
Traffic Control	Signal (C)	Signal (C)	Stop	Stop	Stop
Traffic Movement (H)	(G)	(G)	(G)	Full	Full
Right Turn Lane	(D)	(D)	(D)	N/U	N/U
Left Turn Lane	(D)	(D)	(D)	(D)	N/U

Key

Full = full vehicle movements
 ISD = intersection sight distance
 N/U = not used
 SSD = stopping sight distance

- (A) When access to a proposed development will be via a roadway, placed in public or private right-of-way and dedicated in conjunction with or as an adjunct to the development, no other direct access to the pre-existing public road network shall be permitted. All access shall be through the dedicated roadway.
- (B) An access connection classified as an intersection, high volume driveway, or medium volume driveway, shall be spaced so it will not create an offset intersection opposite an existing roadway, high volume driveway, or medium volume driveway. Such access connections shall be offset no less than 150 feet, or shall be located so that access connection ingress and egress travel lanes are appropriately aligned.
- (C) The need for a signal shall be determined by a warrant analysis using the Ohio Manual of Uniform Traffic Control Devices. High volume driveways that do not meet the signal warrants shall be subject to the same restrictions as medium volume driveways.
- (D) The need for auxiliary lanes shall be determined by an analysis using the auxiliary lane graphs of Appendix 1. The design of all auxiliary lanes shall conform to the standards of the Location and Design Manual.
- (E) Signalized access connections shall be located no closer than one-half mile to the nearest intersection or signalized access connection, and no closer than intersection sight distance to the nearest unsignalized access connection. Unsignalized access connections shall be located no closer than one-quarter mile to the nearest intersection, and no closer than intersection sight distance to the nearest access connection. When, on the basis of a traffic impact study submitted by the applicant, the County Engineer determines that the access connection will not be detrimental to the operations and safety of the roadway, the one-half mile and one-quarter mile spacing requirements may be reduced by 50 percent.
- (F) When no reasonable alternative access exists, the County Engineer may reduce this distance by up to 33 percent, but in no case shall the spacing be less than the current allowable minimum frontage required based on the zoning of the subject property at the time of application.
- (G) Vehicle movements at unsignalized intersections may be restricted by the County Engineer if full vehicle movements will detrimentally affect traffic safety and operations, unless otherwise shown by a traffic impact study submitted by the applicant.
- (H) Restrictions on vehicle movements may apply in order to meet the requirements of Section 406, even for access connections where "Full" is indicated.

Chart 405-1

URBAN LOCAL (FC 19)					
Access Feature	Intersection (A)	High Volume Driveway	Medium Volume Driveway	Low Volume Driveway	Minimum Use Driveway
Spacing (B)	1/4 mile (E)	1/4 mile (E)	Zoning (Z)	Zoning (Z)	N/U
Traffic Control	Signal (C)	Signal (C)	Stop	Stop	Stop
Traffic Movement (H)	Full	Full	Full	Full	Full
Right Turn Lane	(D)	(D)	N/U	N/U	N/U
Left Turn Lane	(D)	(D)	N/U	N/U	N/U

Key

Full = full vehicle movements

N/U = not used

SSD = stopping sight distance

- (A) When access to a proposed development will be via a roadway, placed in public or private right-of-way and dedicated in conjunction with or as an adjunct to the development, no other direct access to the pre-existing public road network shall be permitted. All access shall be through the dedicated roadway.
- (B) An access connection classified as an intersection, high volume driveway, or medium volume driveway, shall be spaced so it will not create an offset intersection opposite an existing roadway, high volume driveway, or medium volume driveway. Such access connections shall be offset no less than 150 feet, or shall be located so that access connection ingress and egress travel lanes are appropriately aligned.
- (C) The need for a signal shall be determined by a warrant analysis using the Ohio Manual of Uniform Traffic Control Devices. High volume driveways that do not meet the signal warrants shall be subject to the same restrictions as medium volume driveways.
- (D) The need for auxiliary lanes shall be determined by an analysis using the auxiliary lane graphs of Appendix 1. The design of all auxiliary lanes shall conform to the standards of the Location and Design Manual.
- (E) Signalized and unsignalized access connections shall be located no closer than one-quarter mile to the nearest intersection and no closer than stopping sight distance to the nearest access connection. When no reasonable alternative access exists, and when, on the basis of a traffic impact study submitted by the applicant, the County Engineer determines that the access connection will not be detrimental to the operations and safety of the roadway, the intersection spacing requirement may be reduced to no less than the intersection sight distance.
- (F) When no reasonable alternative access exists, the County Engineer may reduce this distance by up to 50 percent, but in no case shall the spacing be less than the current allowable minimum frontage required based on the zoning of the subject property at the time of application.
- (H) Restrictions on vehicle movements may apply in order to meet the requirements of Section 406, even for access connections where "Full" is indicated.
- (Z) Driveway spacing shall be equivalent to the current minimum frontage allowed based on the zoning of the subject property at the time of application.

The following charts show stopping sight distance and intersection sight distance. The data are taken from the Location and Design Manual, Volume 1. For purposes of access design and spacing, the Location and Design Manual, Volume 1, should be consulted for the definitive tables of stopping sight distance and intersection sight distance.

Figure 405-1. Stopping Sight Distance

Speed Limit (MPH)	Stopping Sight Distance (Feet)
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570

Figure 405-2. Intersection Sight Distance

Speed Limit (MPH)	Intersection Sight Distance (Feet)
25	280
30	335
35	390
40	445
45	500
50	555
55	610
60	665

406

CORNER CLEARANCE

406.1 Intersection Functional Area

The functional area of an intersection shall be defined as shown in **Figure 406-1**.

406.2 Intersection Transition Zone

The transition zone shall be defined as shown in **Figure 406-1**.

406.3 Requirements for Corner Clearance

406.3.1 No access connection shall be permitted within the functional area, except as allowed by **Section 406.3.4**.

406.3.2 An access connection outside of the functional area shall meet or exceed the minimum access connection spacing requirements of **Section 405**.

406.3.3 An access connection within the transition zone shall be limited to right-in, right-out vehicle movements.

406.3.4 An access connection shall be permitted within the functional area when all of the following conditions are satisfied:

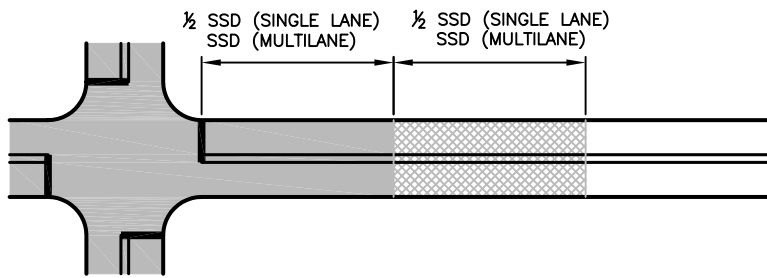
1. No other reasonable access to the property is available;
2. The applicant provides written evidence that (s)he has made a good faith but unsuccessful effort to obtain indirect access via adjacent properties;
3. A study of the proposed access connection, prepared by a registered engineer and submitted by the applicant, determines that the access connection will not create a safety or operational problem.

406.3.5 Any access connection permitted within the functional area shall be located along the property line furthest from the intersection, and shall be limited to right-in, right-out vehicle movements.

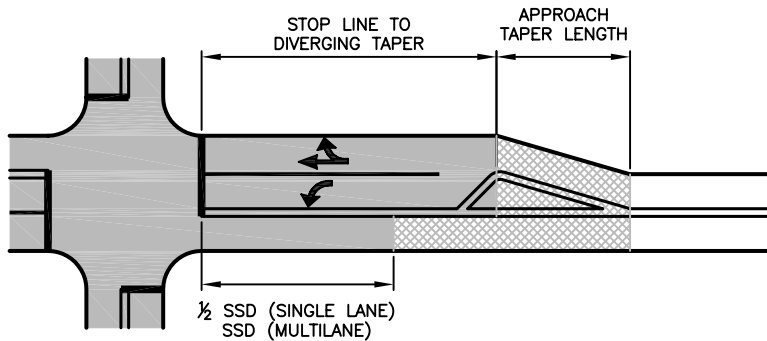
407

JOINT AND CROSS ACCESS

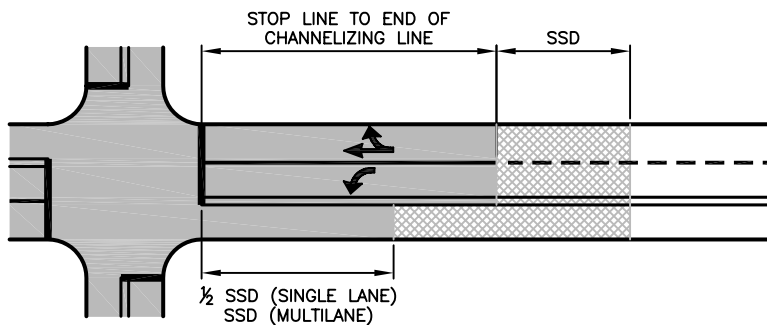
407.1 Adjacent properties zoned for commercial, office, or industrial purposes, and abutting a roadway with an access classification of rural minor arterial, rural collector, urban minor arterial, or urban collector, shall provide a system of joint access connections and cross access easements as specified in this section.



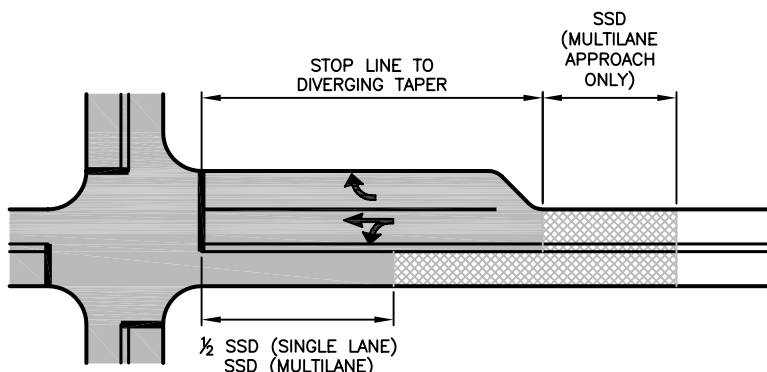
406-1.1 SINGLE OR MULTILANE APPROACH, NO AUXILIARY LANES OR APPROACH TAPERS



406-1.2 SINGLE OR MULTILANE APPROACH WITH AUXILIARY LANES AND APPROACH TAPER

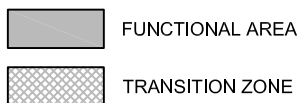


406-1.3 MULTILANE APPROACH WITH AUXILIARY LANES, NO APPROACH TAPER



406-1.4 APPROACH WITH AUXILIARY LANES, DIVERGING TAPER ONLY

KEY



SSD = STOPPING SIGHT DISTANCE

407.2 Cross Access Corridor General Design Requirements

407.2.1 General A system of cross access corridors and easements allows vehicular and pedestrian travel to adjacent sites without the need to re-enter the roadway network. Cross access corridors allow for continuous travel generally parallel to the adjacent roadway.

407.2.2 One cross access corridor shall be provided for each 1320 feet of property depth. Each cross access corridor shall allow continuous, unobstructed travel across the entire width of the property.

407.2.3 The geometric design of the cross access corridor shall be governed by a design speed of no less than 15 MPH.

407.2.4 The cross access corridor shall be of sufficient width to safely accommodate two-way vehicular travel, and shall be capable of safely providing for non-roadway pedestrian access, and automobile, service vehicle, and delivery vehicle circulation.

407.2.5 The design of the cross access corridor shall make it visually evident to the average driver and pedestrian that adjacent properties are accessible via said corridor.

407.2.6 Upon approval of the application, the permittee shall file and record with the deed an easement allowing access to and from adjacent properties connected by said cross access corridor.

407.3 Joint Access Connections

407.3.1 Joint access connections shall be provided for the joint use of adjacent properties where feasible. All joint use access connections shall meet the design standards specified in **Section 410**.

407.3.2 Joint access connections shall be provided when individual, non-joint access connections for adjacent properties not under common ownership or control do not or cannot meet the spacing requirements of **Section 405**.

407.3.3 When adjacent property is undeveloped, or where a joint use driveway cannot be constructed until the adjacent property is brought into conformance with the requirements of this Manual, the applicant may apply for a permit to construct a temporary, non-joint access connection. All temporary, non-joint access connections constructed under **Section 407.3.3** shall be subject to the following requirements:

1. The temporary access connection shall meet the design

standards specified in **Section 410**;

2. The permittee shall record an agreement with the deed that the temporary access connection and any other pre-existing access connections shall be closed and eliminated after construction of each side of the joint use driveway;
3. The permittee shall comply with all other applicable requirements of **Section 407.3**.

407.3.4 Upon approval of an access permit application for a joint access connection, the permittee shall:

1. Record an easement with the deed allowing cross access to and from adjacent properties served by the permitted joint access connections; and
2. Record an agreement with the deed to close and eliminate all access connections other than the joint use access connection; and
3. Record with the deed a joint maintenance agreement for the joint access connection defining the maintenance responsibilities of the respective owners of the adjacent properties.

407.3.5 In cases where a proposed joint access connection cannot meet the spacing requirements of **Section 405**, the County Engineer may reduce the minimum access connection spacing where such spacing proves impractical, provided:

1. Joint access connections and cross access connections are provided wherever feasible in accordance with this section; and
2. The site plan incorporates a unified access and circulation system in accordance with this section.

408

PARCELS UNDER COMMON OWNERSHIP

408.1 In the interest of promoting unified access and circulation systems, the following requirements shall apply.

408.2 Parcels Under Common Ownership

408.2.1 For the purposes of this Manual, adjacent parcels under common ownership or control, or consolidated for the purposes of development, or parcels comprised of more than one site for development, shall not be considered separate properties, but shall be considered one parcel. Separate phases of a single development shall not be considered separate parcels.

408.2.2 The number of access connections permitted for parcels in **Section 408.2.1** shall be the minimum necessary for reasonable

access to these properties, not the maximum available or allowed for said properties frontage.

408.2.3 All requirements of **Section 407** shall be met.

409 ACCESS CONNECTIONS NEAR BRIDGES, GUARDRAIL

409.1 No access connection shall be permitted within 150 feet of a bridge abutment, except as provided for in **Section 409.2**.

409.2 When no reasonable alternative access is available and a proposed access connection is permitted within 150 feet of a bridge abutment, such access shall be located along the property line furthest from the abutment.

409.3 All plans and designs for the modification and/or installation of guardrail shall be prepared by a professional engineer, and shall be subject to the review and approval of the County Engineer.

409.4 The installation and/or modification of guardrail shall be done in accordance with the applicable design and construction standards of the Ohio Department of Transportation, or as otherwise required by the County Engineer.

409.5 The cost of any work for the modification or installation of guardrail in conjunction with the construction of the proposed access connection shall be borne by the permittee.

410 DRIVEWAY DESIGN STANDARDS

410.1 General A driveway connects adjacent property to a public roadway. Driveway design is dependent upon several factors. Driveway purpose will determine what vehicle types must be considered in the design, which affects the driveway width, radius, and flare dimensions. The traffic volume using the drive will determine the number of lanes required, whether or not dedicated turn lanes are required, and the pavement materials. Restrictions on turning movements will also affect the design.

410.2 Review by County Engineer The design of the driveway types specified in **Sections 410.3.2, 410.3.3, and 410.3.5** shall be subject to the review and approval of the County Engineer. The design of driveway types specified in **Sections 410.3.1 and 410.3.4** may be reviewed by the County Engineer at his or her discretion.

410.2 Applicability

410.2.1 Access connections that are to be placed in public or private right-of-way and dedicated in conjunction with or as an

adjunct to a proposed development shall be governed by the design criteria of the Subdivision Regulations of Erie County.

410.2.2 Access connections not intended to be platted, dedicated, or placed in right-of-way, but constructed in such a way as to resemble a roadway or street intended for public use, shall be governed by the design criteria of the Subdivision Regulations of Erie County.

410.2.3 Access connections that are not platted, dedicated, or placed in right-of-way or easements, and do not otherwise resemble roadways for public use, shall be subject to the design requirements specified in **Section 410**.

410.3 Driveway Types

The driveway types listed in this Section are used for technical design only, and shall not be used for the evaluation of access connection spacing or trip generation.

410.3.1 Residential A driveway providing access to one duplex or single-family residence.

410.3.2 Multiple Residential A driveway providing common access to more than one single-family residence or duplex, or to an apartment building, or condominium, but in all cases not serving more than four single-family dwellings.

410.3.3 Commercial A driveway providing access to an office, business, commercial, or institutional building, or residential facility having five or more single-family dwelling. These establishments are customarily served by trucks as an incidental rather than principal driveway use. Industrial plant driveways whose primary function is to serve administrative or employee parking lots are considered commercial driveways.

410.3.4 Farm/Field A driveway providing access to an agricultural tract of land.

410.3.5 Industrial/Retail A driveway directly serving substantial numbers of trucks (equal to or greater than 20 trip ends per day) to and from industrial facility loading docks; warehouse; or truck terminal; or a specially designed, located, and designated driveway providing access to trucks for a centralized retail development.

410.4 Driveway Dimensions

410.4.1 Driveway width and turning radii are determined by the number of lanes on the driveway and the design vehicle chosen for

the driveway. The width and radii of the driveway shall permit vehicles to enter and exit with minimal interference to through traffic on County and Township roadways, yet be restrictive enough to discourage erratic maneuvers.

410.4.2 Driveway Dimension Chart The geometric design of driveways shall be governed by the requirements of **Chart 410-1**.

410.5 Islands

Where it is necessary to physically control or prohibit certain movements, median islands and/or channelizing islands shall be used.

The maintenance of islands installed as part of private drives shall be the responsibility of the permittee.

410.5.1 Median Islands

410.5.1.1 A median island is a curbed island that prevents cross movement of internal traffic near the driveway approach. It is necessary to ensure that ingress and egress traffic has the necessary maneuvering space for turns at the intersection.

410.5.1.2 Median islands shall conform to the requirements specified in Section 800 of the *Location and Design Manual, Volume 1*.

410.5.2 Channelizing Islands

410.5.2.1 Channelizing islands are used to control and direct traffic movements on an intersection approach. A properly designed channelizing island designates the correct turning path, defines the merge area, and reduces conflicting movements.

410.5.2.2 Channelizing islands shall be used on all driveways where either the County Engineer or applicant has restricted specific vehicle turning movements.

410.5.2.3 A channelizing island shall be designed to accommodate the design vehicle specified for the driveway in **Chart 410-1**.

410.5.2.4 The design of a channelizing island shall physically define, control, and direct the permitted movements and ensure the physical blocking of prohibited movements.

410.5.2.5 The surface area of each channelizing island shall be no less than 50 square feet. The surface area of a channelizing island should be at least 100 square feet.

Chart 410-1
Driveway Dimensions
 (All units are in feet)

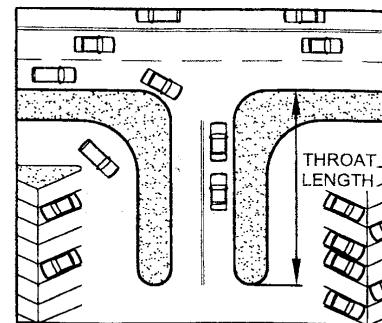
	Farm/Field		Residential		Multiple Residential		Commercial		Industrial/Retail	
Design Vehicle (J)	SU		P		P		SU-30		WB-50	
Nominal Width (E)	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
One-way (F)	-	-	-	-	12	14	14	20	14	26
Two-way (F)	14	20	12	24	12	24	26	32 (A)	26	38 (A)
Right-turn radius (B)	25	35	15	25	20	30	25	50	35	75
Throat Length (G)	-	-	-	-	-	-	(I)	(I)	(I)	(I)

- (A) This chart assumes one lane for ingress and one lane for egress. Additional lanes will increase width requirements. The number of lanes at signalized driveways shall be determined by a commonly accepted method of capacity analysis.
- (B) In applying the turning radius values from the chart, it should be noted that the radius used at a given driveway is meaningful only when related to the width of the throat. When choosing a radius, the designer must take into consideration the turning limitations of the design vehicle and the driveway width. To reduce turning conflicts and encroachments on traveled lanes and the opposing driveway lanes, the methods of *A Policy on the Geometric Design of Highways* shall be used to evaluate all turning movements and to ensure adequate radius-throat width combinations.
- Driveway radii may be reduced on any roadway with on street parking. The turning radius would be measured from the edge of the through lane.
- Radii drive return treatments (Standard Construction Drawing BP-4.1, Type 1) are preferred; however, flared drive treatments (Standard Construction Drawing BP-4.1, Type 2) are acceptable for residential and light commercial driveways.
- (E) Driveway width shall be measured exclusive of radii, flare sections, or transitions. The distance shall be measured perpendicular to the centerline of the driveway at the throat.
- (F) The centerline of a two-way driveway shall intersect the public roadway at an angle not less than 70 degrees and no more than 90 degrees. The centerline of a one-way driveway (right in only or right out only) shall not intersect the public roadway at an angle less than 45 degrees.
- (G) Any access with a gate shall be designed so that the longest vehicle can completely clear the traveled way when the gate is closed and as it is opened. A gate may not be constructed and/or located within the right-of-way of the roadway.
- (I) The throat length of commercial and industrial/retail driveways shall be designed with adequate capacity and storage length to prevent both ingress and egress design hourly volume queues from extending into the flow of traffic on the public roadway and from causing unsafe conflicts with on-site circulation. No on-site access, drives, or service roads (either to adjacent businesses or parking lots) shall have access to the driveway entrance within the specified throat length. The following driveway throat lengths shall be used, unless an engineering study submitted by the applicant demonstrates an otherwise adequate length based on projected traffic volumes at full build-out.

Chart 410-2
Generally Adequate Throat Lengths

Trip ends using driveway (ADT)	Throat Length (feet)
> 1000	200
500 to 999	100
< 500	50

Figure 410-1
Driveway Throat Length



- (J) The design vehicles specified are from *A Policy on the Geometric Design of Highways*.

410.5.2.6 The channelizing island face of curb shall be offset at least 10 feet from the edge of the traveled lane, or by the width of the paved shoulder, whichever is greater.

410.5.2.7 The overall design of a channelizing island shall be subject to the approval of the County Engineer.

410.5.2.8 Figures 410-2 to 410-5 are intended to provide examples for the design of channelizing islands for access connections on County and Township roadways. Not every possible case is shown here. These figures are intended as guidelines only and do not show all details required for the proper layout and construction of the islands shown, nor do they absolve the permittee of responsibility for ensuring the proper design of such islands. They do, however, illustrate the proper relation of road width and curve radius to maximize turning speed while minimizing the overall width of the driveway approach.

- **Figure 410-2** is intended for use when truck usage is unlikely or prohibited.
- **Figure 410-3** is intended for normal or general usage where occasional trucks may enter or exit.
- **Figure 410-4** is intended for predominant or exclusive truck use.
- **Figure 410-5** is intended to show modifications to enable certain left turn movements.

410.5.2.9 Island Maintenance The permittee shall be responsible for the maintenance and repair of the channelizing island.

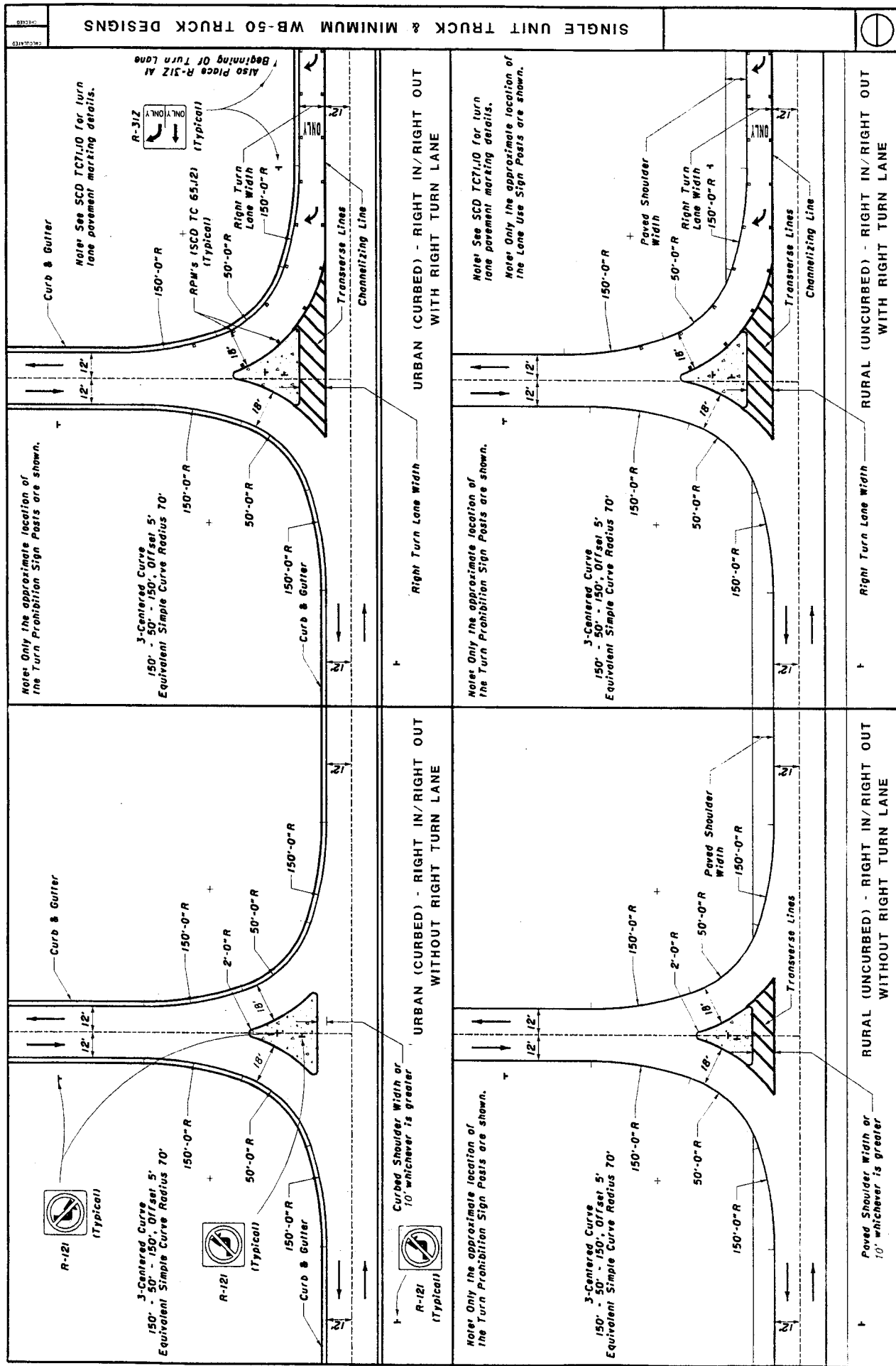
410.6 Driveway Profile

The profile of a driveway can greatly affect the operation of a driveway. It shall be designed to provide a smooth and safe transition for its users, and shall not unnecessarily impede or slow the travel of vehicles and pedestrians.

410.6.1 Commercial and Industrial/Retail Driveways The maximum allowable grade shall be 8 percent.

410.6.2 Residential and Farm/Field Driveways The maximum allowable grade shall be 10 percent.

410.6.3 Vertical Alignment at Uncurbed Roads Within 10 feet of the edge of the pavement, the grade of the driveway shall be identical to the cross slope of the adjacent roadway. In no case shall the alignment of the driveway allow onsite storm water drainage onto the roadway.

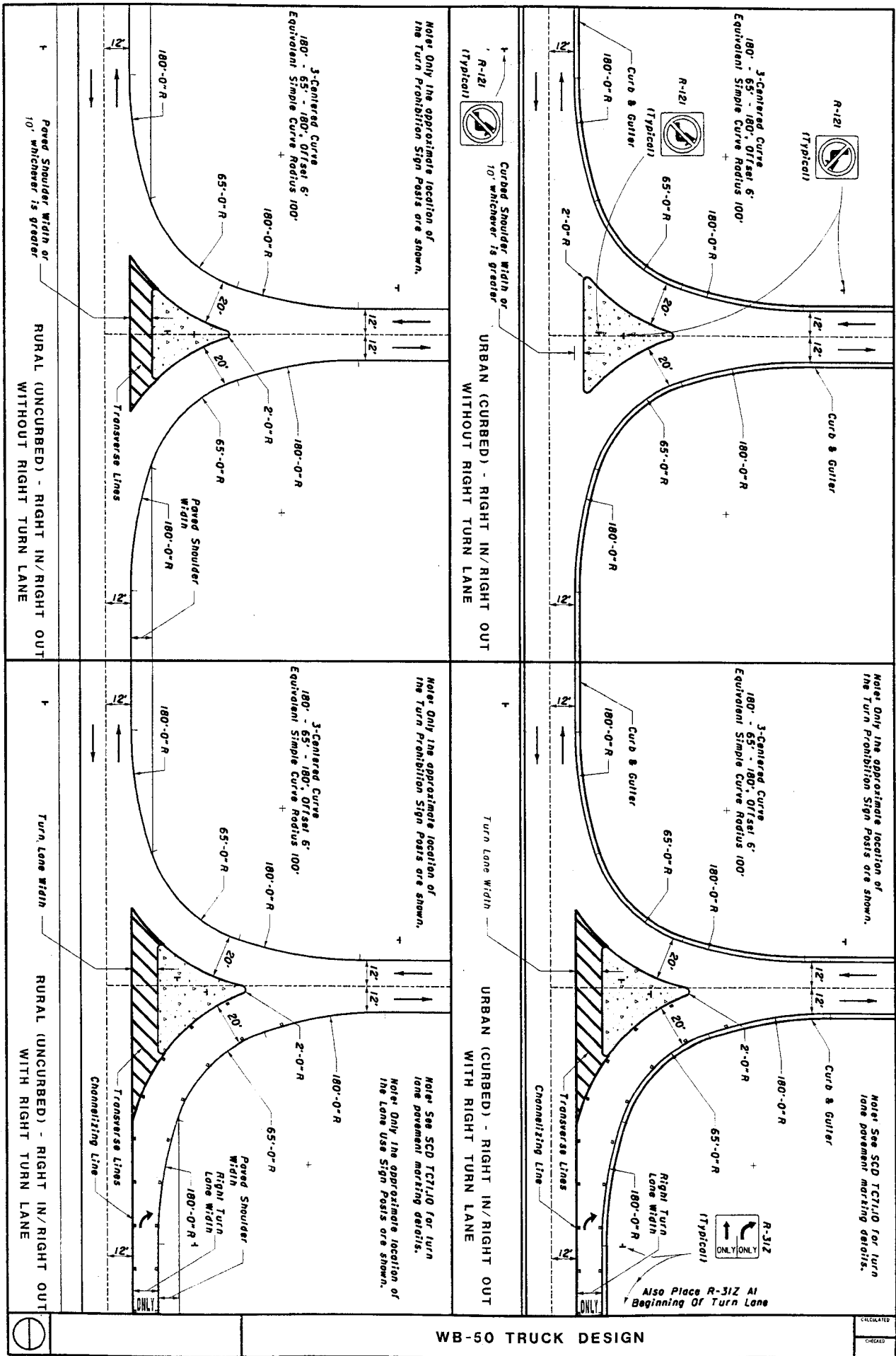


REFERENCE SECTION
410.5.2.8

CHANNELIZING ISLANDS

Not to scale.

FIGURE 410-3



REFERENCE SECTION
410.5.2.8

CHANNELIZING ISLANDS

Not to scale.

FIGURE 410-4

410.6.4 Vertical Alignment at Curbed Roads The grade of the driveway may allow only that portion of the driveway within the adjacent roadway right-of-way to drain onto the roadway.

410.6.5 Changes in Vertical Alignment All changes in vertical alignment shall be designed to accommodate the appropriate design vehicle expected to use the driveway. However, the minimum length of vertical curve allowed shall be 25 feet.

410.6.6 Other Standards Except as provided for in this Manual, Section 804 of the *Location and Design Manual, Volume 1* shall govern the profile design of all driveways.

410.7 Driveway Cross Slope

410.7.1 Driveway Surface Cross Slope Driveway cross slope shall be adequate to facilitate storm water drainage and prevent water from ponding on the driveway surface.

410.7.2 Cross Slope at Roadside Ditches and Swales Where a proposed driveway crosses an existing roadside ditch or swale, the driveway banks shall be sloped at no less than 25 percent. Where a proposed driveway will cross a roadside ditch or swale to be constructed or modified as part of a development, the driveway banks shall be sloped at no less than 10 percent.

410.7.3 Driveway Culverts Where a proposed driveway crosses a roadside ditch or swale, where feasible a culvert shall be used to conduct drainage under the driveway. The design of the culvert shall be in accordance with the *Erie County Storm Water and Erosion Control Manual* and shall meet the requirements of the Erie County Drainage Superintendent.

410.8 Driveway Geometry

410.8.1 Except as otherwise specified in this Manual, driveway geometry shall be in accordance with both Section 803 of the *Location and Design Manual, Volume 1*, and Standard Construction Drawing BP-4.1. In cases where Section 803 and BP-4.1 conflict, BP-4.1 shall govern.

410.8.2 Nothing in Section 803 of the *Location and Design Manual, Volume 1*, shall be construed or interpreted as voiding or annulling spacing, location, or other requirements for access connections as set forth in this Manual.

410.9 Materials

410.9.1 All materials and construction methods shall conform to the *Construction and Material Specifications* of the State of Ohio Department of Transportation.

410.9.2 Applicability Driveways subject to **Section 410.2.1** and **Section 410.2.2** shall conform to the material requirements and specifications of the *Subdivision Regulations of Erie County, Ohio*. Driveways subject to **Section 410.2.3** shall conform to the requirements of **Section 410.9.3** within the boundaries of roadway rights-of-way and highway easements.

410.9.3 Driveway Materials Within Roadway Rights-of-Way

410.9.3.1 Roadway With No Curb Driveways connecting to roadways with no curbs shall have surface materials of either asphalt concrete or crushed aggregate within 10 feet of the roadway edge of pavement. Portland cement concrete shall not be used within 10 feet of the roadway edge of pavement.

If the reconstruction of a roadway will result in driveway concrete within 10 feet of the roadway edge of pavement, the driveway may be reconstructed as necessary to maintain the 10-foot material requirements of this section, subject to right-of-way constraints.

410.9.3.2 Roadway With Curb Driveways connecting to roadways with curbs shall have surface materials of asphalt concrete or portland cement concrete. Crushed aggregate shall not be used.

410.9.3.3 Material Cross Section Driveway material cross section design shall be in accordance with the procedures of the *Pavement Design and Rehabilitation* Manual. Material course thickness and type shall be of adequate structural number to withstand projected design vehicle axle loads for the service life of the driveway.

500 TRAFFIC IMPACT STUDY (TIS)

501 NEED FOR TRAFFIC IMPACT STUDY

501.1 The need for a traffic impact study (TIS) is determined during the initial review of an access request, based on the criteria of **Section 500**, or during a preliminary meeting with the applicant as discussed in **Section 203.8** or during the review of the permit application in **Section 204**. The applicant shall be notified in writing of the need for a TIS.

501.2 A TIS shall be required for any access to a proposed development that will generate or have the potential to generate the following traffic volumes at the projected full development build-out:

For **rural** access categories:

1. At least 700 trip-ends per day; or,
2. At least 70 trip-ends during the highest peak hour.

For **urban** access categories:

1. At least 1000 trip-ends per day; or,
2. At least 100 trip-ends during the highest peak hour.

501.3 For developments that do not generate the traffic volumes specified in **Section 501.2**, a turn-lane warrant analysis shall be required as specified in **Section 503.4.4.5** when **Chart 405-1** indicates that turn lanes shall be used when the need is indicated by an analysis, unless waived by the County Engineer after a preliminary meeting with the applicant.

501.4 A TIS shall be required for any proposed low volume, medium volume, high volume, or intersection access connection, regardless of projected traffic, within a location identified by the MPO as a safety problem area, high accident location, or congested traffic area.

501.5 The County Engineer's request for a TIS does not presume the subsequent approval of an application or issuance of an access permit by the County Engineer. Issuance of a permit is based on the results of the TIS showing, in conformance with the requirements of this Manual, that the access proposal will not degrade the traffic operation and function of County and Township roadways, that the improvements required by the proposal are consistent with this Manual, and that they are feasible and able to be implemented.

502

PURPOSE OF THE TIS

502.1 The purpose of the TIS is to:

- Determine whether an access proposal can meet the standards of this Manual.
- Determine the need for any improvements to the adjacent roadway network to maintain a satisfactory level of service and safety, and to preserve and protect the function of the roadway system, while providing reasonable access to the proposed development.
- Determine the appropriate location spacing, and design of all access connections and other improvements necessary to mitigate the traffic and operational impacts on County and Township roadways.
- Assure that internal development circulation for the development is designed to provide safe and efficient access to and from the adjacent roadway system in accordance with the purpose of this Manual.

503

TIS REQUIREMENTS

503.1 A minimum of two copies of the TIS shall be submitted to the County Engineer.

503.2 The TIS shall be prepared under the supervision of a professional engineer. The TIS shall be considered an engineering report and be in accordance with Ohio Revised Code §4733.14.

503.3 Design Traffic

503.3.1 The design year shall be the year of the development's opening at full build-out ("opening day") plus 20 years. However, the design year analyzed need not be more than 25 years from the year of TIS submittal.

503.3.2 Estimates of peak traffic volumes shall be based on weekday traffic for developments at which weekday employment, business, and/or activity predominates. Estimates of peak traffic volumes shall be based on weekend traffic for developments at which weekend employment, business, and/or activity predominates.

503.3.3 The design hour traffic volume of the adjacent roadway network shall be determined by multiplying the adjacent roadway's peak hour volume by the appropriate factor listed in **Chart 503-1**.

Chart 503-1
Adjacent Roadway Design Hour Factors

	Minor Arterial	Collector	Local
Rural	1.25	1.24	1.23
Urban	1.25	1.21	1.19

503.3.4 The peak hour of the proposed development shall be the peak hour traffic volume of the development at full-build out. Traffic volumes for the proposed development shall be calculated using *Trip Generation*.

503.3.5 Traffic growth rates for the adjacent roadway network shall be subject to the review and approval of the County Engineer, and may be obtained from or established by the County Engineer. It is recommended that the applicant obtain approved growth rates before proceeding with the TIS.

503.4 Analysis

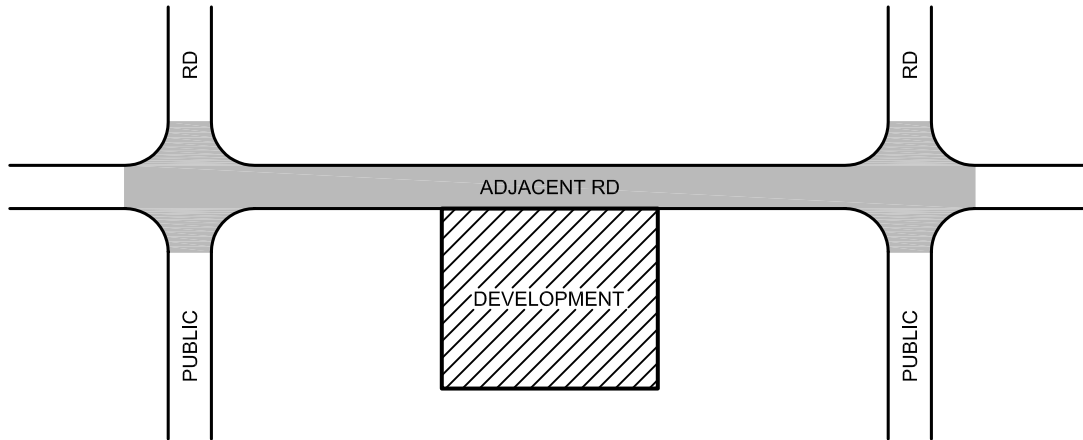
503.4.1 Methods All traffic capacity, level of service, and delay analyses shall be conducted by acceptable engineering methods and in general conformance with the methods specified by the Highway Capacity Manual. Analyses shall be conducted with acceptable computer software such as Synchro, HCS, Transyt-7F, NETSIM, Passer II-90, or other software acceptable to the County Engineer.

503.4.2 Other Methods All other analyses shall be conducted by acceptable engineering practices, and shall be in accordance with the applicable manuals, requirements, methods, and specifications of the Ohio Department of Transportation.

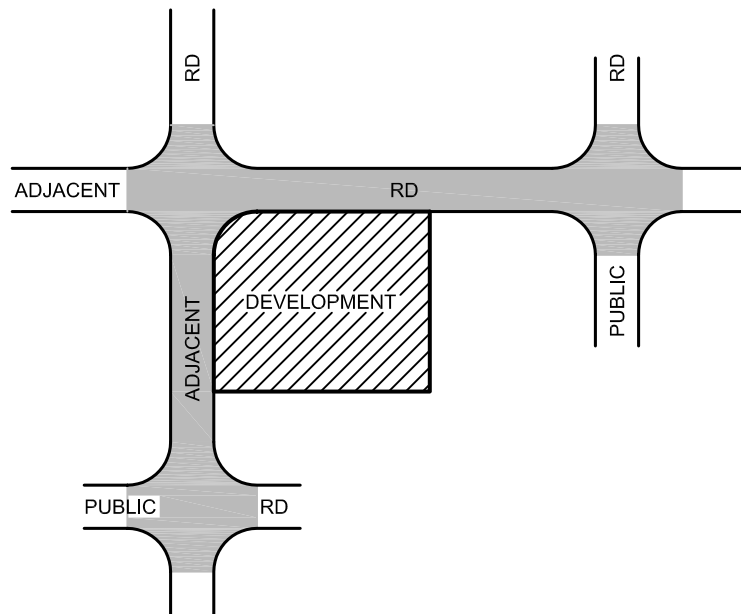
503.4.3 Analysis Area The TIS shall examine and analyze the following geographic area:

- all access connections to the proposed development, including any facilities to be dedicated in conjunction with the proposed development;
- all roadways adjacent to the development, to the first existing intersection with a numbered public roadway in each direction, both downstream and upstream from the proposed development.

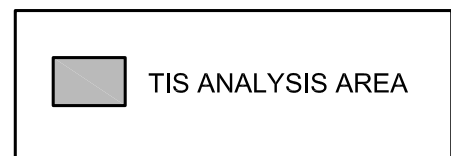
The County Engineer may adjust this area as appropriate, depending on the development size or specific site conditions. An example analysis area is shown in **Figure 503-1**.



Example analysis area for a development abutting a single road.



Example analysis area for a development abutting two roads.



503.4.4 Analysis Requirements

503.4.4.1 The TIS shall determine the existing and projected serviceability of the adjacent roadway network, including all intersections within the study area defined in **Section 503.4.3**.

503.4.4.2 The TIS shall examine “before” and “after” conditions of the proposed development and shall evaluate the traffic impacts of all access alternatives on roadway capacity, level of service, and delay associated with the proposed development. As a minimum, the TIS shall examine the following specific scenarios:

1. Opening Day No Build: existing adjacent roadway network at opening day, without the proposed development.
2. Opening Day Build: existing adjacent roadway network at opening day, with the proposed development.
3. Design Year No Build: projected adjacent roadway network, at the design year, without the proposed development.
4. Design Year Build: projected adjacent roadway network, at the design year, with the proposed development.

503.4.4.3 The TIS shall evaluate the proposed development’s impacts on the adjacent roadway network as defined by the analysis area. The study shall document the safety and capacity impacts on all roadway facilities within the study area for each access alternative, both for opening day and design year traffic. For access connections in high accident locations designated by the MPO, the study shall evaluate the expected impact of the access alternative on the accident patterns at those locations.

503.4.4.4 Signal warrant analyses shall be conducted for all multi-movement access connections considered for each access alternative, and for all unsignalized intersections within the analysis area. An access connection that meets or exceeds the signal warrant thresholds but does not meet the spacing criteria and other standards of **Section 400** may be required to be redesigned and/or relocated by the County Engineer. The study shall evaluate and make recommendations on the feasibility of coordinating any proposed signals with existing signals within the analysis area to achieve desired traffic progression. Signal warrant analyses shall incorporate all volume reductions applicable where major street speeds exceeds 40 MPH or in an isolated built-up community with a population of less than 10,000.

503.4.4.5 Turn lane warrant analysis for all access connections considered for each access alternative shall be conducted using the **Auxiliary Lane Graphs** included in **Appendix D** of this Manual. Turn lane analysis for existing intersections within the study area

shall be conducted according to the criteria specified in Section 400 of the *Location and Design Manual, Volume 1*.

503.4.4.6 The study shall recommend the adoption of the access alternative that provides the safest and most efficient level of service consistent with the intent of this Manual. The recommended access alternative shall not aggravate an existing safety problem, increase the delay, or degrade the existing level of service established for the access category of the adjacent roadway facilities below the values of **Chart 503-2**.

Chart 503-2
Level of Service Table

Rural		Urban	
Access Category	Level of Service	Access Category	Level of Service
Minor Arterial	B	Minor Arterial	C
Collector	C	Collector	C
Local	C	Local	D

Where the adjacent roadway's no-build level of service is lower than that of **Chart 503-2**, the recommended access alternative shall neither degrade the level of service nor increase the delay beyond that projected to be present for the design year no-build condition.

503.4.4.7 The study shall analyze and recommend the improvements necessary (if any) to maintain the level of service and delay of the roadway in accordance with **Section 503.4.4.6**, and shall discuss the nature, extent, technical details, and approximate design and geometry of such improvements. The design of all improvements shall be in accordance with the operational design criteria established by the Ohio Department of Transportation and the County Engineer.

503.4.5 General TIS Contents

503.4.5.1 The TIS shall contain an executive summary or abstract, briefly discussing the nature of the development, any possible adverse traffic impacts, possible solutions, as well as recommended solutions.

503.4.5.2 The TIS shall contain a table of contents.

503.4.5.3 The TIS shall contain a full and complete discussion describing the nature of the proposed development, potential adverse traffic effects, methods of analysis used, possible solutions, and the recommended courses of action.

503.4.5.4 Results of evaluations and analysis of existing and proposed roadway facilities shall be presented in a quantitative format. Analyses results shall report both levels of service and quantitative delays.

503.4.5.5 The TIS shall contain plan views of the geometry of existing, major topographic features in the vicinity of the proposed development, and proposed improvements to existing roadway facilities. All plan views shall be approximately to scale and may be scaled from aerial photographs of suitable resolution.

503.4.5.6 The TIS shall include all relevant data used in the analysis, including trip generation data, traffic counts, signal timing plans, survey data, software reports, inputs, and calculations.

503.4.5.7 All information used in the report taken from other sources shall be properly cited and referenced.

504 REVIEW PROCEDURES

504.1 The County Engineer shall review the TIS and determine if the recommended access proposal is permissible with the roadway's functional classification and consistent with the requirements, standards, and purpose of this Manual.

504.2 The County Engineer shall complete the review and take action on the TIS within **45 calendar days** of the date of receipt of the TIS, provided the TIS is in accordance with this Section and that the following conditions are met:

1. The cost of construction of the recommended improvements is funded in conformance with **Section 505.4**.
2. The documents, plans, reports, access schemes, traffic studies, or other materials relating to the proposed access or any modifications thereto are deemed adequate, in accordance with the requirements of this Manual, to allow a complete and thorough assessment of the proposed development's impact on the roadway network and complies with all design criteria of the Ohio Department of Transportation, the Subdivision Regulations, and as specified in this Manual.

504.3 If any of the materials described in **Section 503** are determined to be deficient, the applicant shall be notified of the problem and the criteria that are not satisfied. The applicant shall have an opportunity to correct the deficiencies and to resubmit the material. Upon receipt of the resubmittal, the County Engineer shall review the material and determine if the deficiencies have been corrected. If the material is judged acceptable, final action shall be

completed on the access application within **45 calendar days**. If the resubmitted material is still deficient, the procedure established in this section shall be repeated until the modifications are acceptable.

504.4 After the TIS is completed in accordance with this Manual, the County Engineer shall, in writing,

- approve the access request as proposed,
- require modifications as appropriate and necessary, or
- deny the access request.

Such action shall be consistent with the standards of this Manual.

504.5 Approval of a TIS shall be valid for a period of 3 years from the date of approval in **Section 504.4**.

504.6 The County Engineer's approval of a TIS per **Section 504.4** does not constitute approval of the application, nor shall it be construed as the granting of a permit. Rather, it initiates the procedures of **Sections 505 and 506**.

505

ACCESS PLAN DEVELOPMENT

505.1 Upon approval of the recommended alternative access proposal of the TIS, the applicant shall prepare and submit construction plans for the implementation of the recommended access scheme. Such construction plans shall be prepared in accordance with the applicable requirements of the Ohio Department of Transportation and the Subdivision Regulations of Erie County.

505.2 The construction plans shall be reviewed and approved by the County Engineer in accordance with the plan review requirements of the Subdivision Regulations of Erie County.

505.3 The County Engineer shall initiate any special agreements for work to be performed by the applicant, in accordance with the TIS, involving the construction, reconstruction, or modifications of significant portions of the roadway network, and for all other work, including the installation or modifications of traffic signals. The County Engineer shall review each agreement and approval shall be granted when satisfied that such agreement meets the requirements and intent of this Manual.

505.4 The applicant shall agree to entirely or primarily fund any and all improvements recommended for the access scheme proposed in the TIS. The methods of funding shall be included in the special agreement of **Section 505.3** or the signal agreement of **Section 505.5**.

505.5 If the work involves modifying or installing a new traffic signal, a signal agreement shall be required for approval.

505.6 The County Engineer shall require a maintenance bond or certified check for 50 percent of the estimated cost of roadway improvements to be constructed within public rights-of-way.

505.7 Once the construction plans have been approved by the County Engineer in accordance with **Section 505.2**, and when all agreements have been prepared, reviewed, and approved, the applicant shall sign such agreements and submit them to the County Engineer for final authorization. Copies of the final, signed agreements will be provided to the applicant.

505.8 Fees Fees shall be charged to defray the costs of reviewing the TIS and construction plans for access-related improvements, and the creation of any agreements. Such fees shall not exceed the actual costs incurred in the administration of these tasks. The applicant shall pay all fees prior to the issuance of an permit. All fees shall be made payable as per Section 213.3.

506

ACCESS PERMIT ISSUANCE

506.1 An access permit application shall not be approved nor a permit issued until the requirements of this section have been satisfied.

506.2 Upon final authorization by the County Engineer of all agreements of **Section 505.7** and approval of all necessary construction plans of **Section 505.2**, and upon payment of all fees of **Section 505.8**, the County Engineer shall approve the application and issue a permit.

506.3 The construction of access-related improvements shall not commence until an access permit application has been approved.

506.4 Violations of **Section 506** shall be treated under **Section 212**.

600 VARIANCES AND APPEALS

601 PURPOSE

601.1 Variance A variance grants permission to depart from the standards and requirements of this Manual due to unique conditions or circumstances when a literal enforcement of this Manual would result in unnecessary hardship and when such a variance is not contrary to the public interest.

601.2 Appeal An appeal may be made by an applicant when it is alleged that there is an error in any order, requirement, decision, or determination made by the County Engineer in the enforcement of this Manual.

602 APPLICATION FOR VARIANCE OR APPEAL

602.1 Form and Time of Application, Fees An application for a variance or appeal shall be made on **Form 125-5 VAR or Form 125-APPEAL**, respectively. An application for variance shall be filed as an attachment to the access permit application. An application for an appeal shall be filed with the County Engineer within **30 calendar days** of the date of action taken by the County Engineer in accordance with **Section 205**. The County Engineer shall, within **5 business days** of receipt of an application for appeal or variance, forward such application to the Board of Appeals.

A fee shall be paid by the applicant to defray the costs of administering variances and appeals. The fee shall be made payable as per Section 213.3.

602.2 Variance Application An application for variance shall specify, in writing, why the variance is appropriate and necessary and shall document the unique conditions or special circumstances that make it impractical or unfeasible to meet the requirements of this Manual. The applicant shall provide documentation showing that he or she has considered all practical and reasonable alternatives to mitigate the unique conditions or special circumstances, that the alternatives are not feasible or practical, and that without the variance the applicant will be deprived of reasonable access.

Variances shall not be granted for procedural requirements, or for the applicant acting without the knowledge of the applicable standards and requirements of this Manual.

602.3 Appeal Application An application for appeal shall specify, in writing, the error alleged to have been made in the administration and enforcement of the requirements of this Manual. The applicant shall provide documentation supporting the allegation.

603 FINAL ACTION

603.1 Final action on access permit applications with variance applications shall be as specified in **Section 204.3.3**

603.2 The terms and conditions of the approved permit and variance shall state that the permittee may be required to improve, modify, eliminate, or correct the condition responsible for the variance when it is evident that the justification for the variance is no longer valid.

603.3 If a variance is approved for direct access to a County or Township roadway when the access proposal cannot meet the standards of this Manual, or when the property would otherwise be without reasonable access, the permit may stipulate terms and conditions for the expiration of the permit when the necessity for the variance no longer exists.

603.4 If an application for variance is denied, the applicant may submit an access permit application reflecting the decision of the Board of Appeals.

604 APPEALS OF DECISIONS

604.1 Appeals of decisions made by the Board of Appeals shall be made in accordance with Ohio Revised Code §2506.

605 BOARD OF APPEALS

605.1 Designation Upon the adoption of this Manual, the County Commissioners shall designate a Board of Appeals to hear appeals and grant variances to the requirements and standards of this Manual.

605.2 Appointment, Terms of Members, Qualifications

605.2.1 Number and Appointment The Board shall consist of three regular members (members) and one alternate member (alternate), each to be appointed by the County Commissioners.

605.2.2 Terms The term of the first member appointed to the Board appointed shall be one year; the term of the second member, two years; the term of the third member, three years; the term of the alternate, three years; each term shall commence on the effective date of this Manual. Thereafter, the term of each member and alternate shall be three years, commencing on the respective anniversary of the effective date of this Manual.

605.2.3 Vacancies and Expiration of Terms, Absence In instances where a member of the Board of Appeals is unable to fulfill his or her term and a vacancy so exists, the County Commissioners shall appoint a new member to the Board of Appeals who shall then serve the remainder of the vacant term.

When the term of a member of the Board has expired, the Commissioners shall appoint a member to serve for the new term. The appointed member may be the same member whose term had expired.

Where a vacancy exists and no new member has yet been appointed, or when a member of the Board is absent from a regular or special meeting, the alternate shall fill such vacancy or absence until a new member is appointed or the absent member is able to resume his/her role. The alternate shall act with the full powers granted the Board and carry out all duties of the regular member.

605.2.4 Removal The County Commissioners may remove any member of the Board based when given just cause for such removal.

605.2.5 Quorum A quorum of the Board shall consist of two members, or one member and one alternate.

605.2.6 Qualifications Each member of the Board shall be a resident of the unincorporated area of the County, legally qualified to hold an elected office or position in the County or several Townships. At least one member of the Board should be a professional engineer.

605.3 Powers and Duties of the Board of Appeals

605.3.1 Variances The Board shall have the power to grant variances for any access connection where, due to unique or special conditions, a literal interpretation of the requirements and standards of this Manual would result in unnecessary hardship,

provided that such variance is not detrimental to the public interest and the spirit of this Manual is upheld.

605.3.2 Appeals The Board shall have the power to hear and decide appeals when it is alleged that there is an error in any order, requirement, decision, or determination made by the County Engineer in the enforcement of this Manual.

605.3.3 Chairperson The Board shall designate, on an annual basis, one member to serve as chairperson to preside over meetings of the Board, and one member to serve as vice-chairperson, who shall assume the powers and duties of the chairperson in the chairperson's absence.

605.3.4 Secretary The Board shall designate, on an annual basis, a secretary to keep attendance records and minutes of all meetings of the Board.

605.3.5 Hearings

605.3.5.1 The Board shall hold regular hearings to allow applicants for variances or appeals to present their cases. The Board shall make a verbatim record of each hearing.

605.3.5.2 Within **5 business days** of receipt of an application for an appeal or variance forwarded by the County Engineer, the Board shall schedule a hearing to consider such application. Such hearing shall be held within 30 calendar days of receipt of the application.

605.3.5.3 All hearings of the Board shall be open to the public and in conformance with Ohio Revised Code §121.22. Notice of the time and place of regular meetings and/or variance hearings shall be posted in accordance with the Board of Commissioners' policy for publicizing meetings of the Commissioners, and 72 hours prior to the hearing at the respective township office.

605.3.5.4 Notification The Board shall notify the applicant, the County Engineer, and any other party involved in the appeal or variance by regular mail at least three (3) calendar days prior to the scheduled hearing date.

605.3.6 Testimony All testimony made at a hearing held by the Board shall be made under oath. Both the applicant and the County Engineer shall have the right to present witnesses and evidence, and both shall have the right to cross-examine witnesses.

605.3.7 Decisions The Board of Appeals shall render its decision concerning any application for appeal or variance in writing within **30 calendar days** of the hearing of the appeal or variance. Decisions of the Board shall be binding on both the applicant and the County Engineer.

605.3.8 Documentation of Decision When a variance is granted or denied by the Board of Appeals, written documentation of the reason(s) for the approval or disapproval of the variance shall be conveyed to the applicant by the County Engineer.

605.3.9 Considerations In considering an application for a variance, the Board of Appeals shall determine

- if reasonable access is practical and feasible without the variance;
- if the variance would endanger public safety, diminish traffic capacity, or degrade roadway efficiency, or otherwise hinder the proper operation of the roadway;
- if the hardship was self-created by the applicant;
- if all other feasible and practical access options have been considered and investigated;
- if the variance is consistent with the purpose of this Manual as stated in **Section 104**, and the policy of Erie County stated in **Section 103**.

The Board shall not grant variances for procedural requirements, or for the applicant acting without the knowledge of the applicable standards and requirements of this Manual.

APPENDIX A. APPLICATION AND PERMIT FORMS

- A1.1** **County Permits.** A copy of a permit application for county roads is contained herein. The applicant should contact the respective township to obtain a copy of a permit application for township roads.

ERIE COUNTY ENGINEER'S OFFICE
2700 COLUMBUS AVENUE
SANDUSKY, OHIO 44870
(419) 627-7710

OFFICE USE ONLY.

Application # _____
Road _____
\$10 Fee Date Paid _____
Engineer's Receipt # _____

Form 125
APPLICATION FOR DRIVEWAY PERMIT
For a (circle one) NEW / EXISTING driveway

OWNER INFORMATION

Name _____
Current Mailing Address _____
City, State, ZIP Code _____
Phone # (____) _____
Fax # (____) _____
New Mailing Address (if known) _____
City, State, ZIP Code _____

DRIVEWAY CONTRACTOR INFORMATION (if known)

Name _____
Mailing Address _____
City, State, ZIP Code _____
Phone # (____) _____
Fax # (____) _____

LOCATION OF PLANNED/EXISTING DRIVEWAY

House # _____
Road _____
Side of Road N S E W (Circle one)
_____ Miles N S E W (Circle one)
of the intersection with _____ Road

DRIVEWAY USE

Check one. **Note: A change in driveway use will require a new driveway permit.**

☐ FARM/FIELD ☐ SINGLE RESIDENTIAL
☐ COMMERCIAL ☐ INDUSTRIAL
☐ MULTIPLE RESIDENTIAL ☐ OTHER _____

Attach **Form 125-HVA** for drives other than farm/field and single residential.

MATERIAL FOR DRIVEWAY APPROACH

Within 10 feet of the edge of pavement. Check one.

The driveway may be constructed of the owner's choice of materials further than 10 feet from the edge of pavement.

☐ STONE
☐ ASPHALT
☐ OTHER _____

☐ CONCRETE **Note: concrete is allowed only for curbed roads.**

MAILBOX INSTALLATION

Will a mailbox be installed?

☐ YES ☐ NO

If YES, then mailbox requirements on the reverse side of this sheet must be met.

DRIVEWAY CONSTRUCTION DATES (30 days is the normal limit)

START _____ FINISH _____

The inspector **must** be notified at least 2 working days prior to the start of construction.

☐ YES, I would like the County to install the drive pipe.

INDEMNIFICATION

I, the undersigned, agree to comply with all conditions, restrictions, and regulations of the Access Management Manual of Erie County, Ohio, in force on the date below. Except for negligent acts of Erie County, I also agree to assume all liability for and save Erie County harmless from any and all claims for damage arising out of the work to be done herein, in addition to any damage done by the continued use of the driveway and culvert.

Signed _____ Date _____

Signature of owner or person accepting all responsibility for driveway

OFFICE USE ONLY

APPROVAL

This application is approved subject to the conditions listed below when signed by an authorized representative of the Erie County Engineer.

Special Conditions _____

☐ **NO culvert pipe is required as of the date signed below.** However the approach must be sloped away from the road to insure that no ponding is created along the county highway. In the future, if a drainage problem arises that necessitates a drive culvert, the Owner will be required to install a culvert pipe at the Owner's expense. It is not the responsibility of the Erie County Engineer to install this culvert; however, it must be installed according to the Erie County Engineer's specifications. See the reverse side of this permit for additional information.

Signed _____ Date _____

Signature of Erie County Engineer or authorized representative

Planned length and size of culvert pipe, if necessary. Length _____ ft; Inside Diameter _____ in; Type _____
Number of driveways on the property _____ Is a manhole or catch basin in the way of the driveway _____
Sight distance _____ Curve _____ Level _____ Hilly _____

DRIVEWAY CONSTRUCTION AND DESIGN NOTES
ERIE COUNTY ENGINEER'S OFFICE

ACCESS MANAGEMENT REGULATIONS. All applications, permits, and access connections are subject to the requirements of the Access Management Manual of Erie County, Ohio, (the Manual) in force on the date of application.

WHEN IS A PERMIT NEEDED? A permit is needed for any new access connection or driveway, or when the use of a property changes and results in a change in traffic using the driveway. Section 210 of the Manual describes changes in use and the thresholds that require new permits. A permit is not needed for regrading a stone drive or for sealing a blacktop drive, or for other routine drive maintenance, but the safety requirements detailed here and in the Manual must be followed. The application fee is \$10, plus the costs of any additional attachments, plan reviews, inspection fees, and other charges as specified in the Manual.

GENERAL INFORMATION. Two or more flags shall be set to show the location of the proposed driveway.

The inspector must be notified a minimum of 2 working days prior to the installation of the driveway and pipe. The inspector will determine whether or not he needs to be present at the time of installation. A project without a permit will be stopped immediately by the inspector or the Erie County Sheriff, and subject to legal action under Section 212 of the Manual. A project with a permit will be stopped by the inspector if the work is not conducted as authorized by the permit, or jeopardizes road user safety.

The maintenance of the driveway and culvert pipe is the driveway owner's responsibility. If the said installation creates a drainage or road maintenance problem, the Erie County Commissioners may declare it an obstruction and order its removal. The cost of such a removal will be charged to the driveway owner.

SAFETY. Driveway locations with sight distances of less than that required by the Location and Design Manual, Volume 1, of the Ohio Department of Transportation are not recommended and may need special treatment--for example, a turnaround.

During construction, traffic shall be protected according to the regulations prescribed by the *Ohio Manual of Uniform Traffic Control Devices for Streets and Highways*. These include, as needed, advance-warning signs, cones, barricades, and flagmen.

Large, decorative, non-breakaway driveway markers are prohibited within County rights-of-way. If they must be used, they must be beyond the right-of-way line of the road.

CULVERT PIPE. A 12-inch minimum inside diameter and a 32-foot minimum length (a larger diameter and/or longer length may be needed, depending on the site conditions). Reinforced concrete pipe is recommended for all uses.

APRON SURFACES. Asphalt and stone are acceptable. **Concrete is allowed only for curbed roads.** Driveways must not drain onto the road pavement (curbed road excepted) and must be graded (sloped $\frac{3}{16}$ inch/foot down from the road) so as to not create a drainage or maintenance problem, and must meet the design requirements of the Manual.

CONSTRUCTION. No. 304 aggregate base is the recommended backfill for all uses. The groove (bell) end of the culvert shall be placed upstream. The invert shall be set with a sufficient grade (to be set by the Erie County Engineer's Office) to the next culvert or any planned improvements upstream. Manholes and catch basins shall be set $\frac{1}{4}$ -inch below the apron pavement surface. The road shall also be kept clear of all debris during construction.

MAILBOXES. All mailbox supports shall be of a "breakaway" design with the one of the following characteristics:

- a maximum of a 4 x 4-inch wood post,
- a maximum of a 4½-inch diameter wood post, or
- a maximum of a 2-inch diameter standard steel pipe ($2\frac{3}{8}$ inch outer diameter).

The post and mailbox shall be placed as far from the pavement as is practical.

All mailbox installations must meet the requirements of the U.S. Postal Service.

Form 125-HVA
HIGH VOLUME ATTACHMENT
To APPLICATION FOR ACCESS PERMIT

Office use only

Fee: _____
Paid: _____
Receipt No. _____
By _____

1. This form must be completed for low-volume driveways, medium-volume driveways, high-volume driveways, and intersections. This form is not required for minimum use driveways (single-family residential or farm/field drives). This form must be completed by the property owner or his/her authorized agent and attached to the application for driveway permit form obtained from Erie County or the Township.

Name _____
Address _____ City _____ State _____
Zip _____ Phone () _____ Other (Fax, E-mail) _____

2. Check with the issuing authority to determine which of the following documents and information are required and the number of copies needed to complete the review of your application. Plans should usually not be larger than 24"x 36."

(A) Map or plat showing property location, property lines, amount of frontage on abutting public roads;
(B) Any existing access or easements of access on the property;
(C) Highway and driveway plan profile;
(D) Location of proposed access with respect to property lines and to the highway; NOTE: The proposed access location should also be physically marked on the property by flags or other clearly visible means.
(E) Design and type of construction of the proposed access;

(F) Drainage plans showing drive culvert/pipe and impacts to the highway right of way;
(G) Subdivision, zoning, or development plan, if applicable;
(H) Maps and letters detailing utility locations before and after development in and along the right of way;
(I) Signing and striping plans;
(J) Traffic data and traffic control plan;
(K) Proof of liability insurance;
(L) Performance Bond, if required

Commercial, Industrial, and Multiple Residential Development

3. If you are requesting a permit for commercial, industrial, or multiple residential development, complete the following. Applicants completing this form are advised to request a preliminary meeting with appropriate Erie County and/or Township officials prior to submitting a formal application for access.

(3a) If the proposed access will serve residential development, what type (single family, apartment, townhouse) and number of units are in the proposed development?

Type of Units		Number of Units	
Type of Units		Number of Units	
Type of Units		Number of Units	

(3b) If the proposed access will serve commercial or industrial development, what types and numbers of businesses are in the proposed development and what is floor area square footage of each?

Type of Business		Square Footage	
Type of Business		Square Footage	
Type of Business		Square Footage	
Type of Business		Square Footage	

(3c) Number of vehicles using the access. Indicate if estimates are ___ Peak hour = ___ or ___ Average daily volumes = ____.
Leave this section blank if the number of vehicles is unknown.

Number of Passenger Cars:	Number of Trucks:	Total All Vehicles:
---------------------------	-------------------	---------------------

Complete this section if applicable or known.

(3d) Consulting Firm: _____ Name of Contractor: _____
Contact Name: _____ Contact Name: _____
Phone Number: _____ Phone Number: _____

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Date: _____

Form 125-INSP

ACCESS PERMIT INSPECTION CERTIFICATE

To be completed by the permitting agency or jurisdiction.

1. PERMITTEE INFORMATION.

Name: _____
Address: _____
City, State, ZIP: _____
Telephone: _____ Fax: _____ Other: _____

2. PERMIT INFORMATION.

Permit approval date: _____ Work Authorized: _____

3. STATUS OF WORK.

Was the work completed? _____ Yes _____ No As authorized? _____ Yes _____ No
If work was not completed as authorized, explain the variation(s): _____

If work was not completed as authorized, advise the person in charge at the work site, noting his/her name and relationship to the permittee and the date and time of the inspection. Note any instructions given to such person, including work stoppage if warranted. If no one is present at the site, so note. Attach another sheet if more room is required.

Signed: _____

Print name: _____

Date: _____

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Date: _____

Form 125-VAR

Office use only

Fee: _____

Paid: _____

Receipt No. _____

By: _____

Date: _____

APPLICATION FOR VARIANCE
from the Access Management Regulations of Erie County, Ohio.

Name: _____

Address: _____

City, State, ZIP: _____

Telephone: _____ Fax: _____ Other: _____

Describe Location: _____

Access Management Regulations Section to be varied: _____

Nature of variance and justification for variance. On a separate sheet, attach a statement explaining why the variance from the access management regulations is requested. Provide information addressing the following items:

1. What unique conditions or circumstances require the variance;
2. Why the strict interpretation of the regulations would result in unnecessary hardship for the applicant;
3. That the unique conditions or circumstances do not result from the previous actions of the applicant.

Attach any other drawings, plans, studies, statements, or other documents that justify, clarify, or provide further explanation of the request.

Certification. I, the undersigned, certify that the information contained in this application and attachments is, to the best of my knowledge, true and correct.

Sign name: _____ Date: _____

Print name: _____

For office use only:

Board of Appeals hearing date: _____

Action: _____

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Date: _____

Form 125-APPEAL

Office use only

Fee: _____

Paid: _____

Receipt No. _____

By: _____

Date: _____

APPLICATION FOR APPEAL
from the Access Management Regulations of Erie County, Ohio.

Name: _____

Address: _____

City, State, ZIP: _____

Telephone: _____ Fax: _____ Other: _____

Describe Location: _____

Nature of appeal and justification for appeal. On a separate sheet, attach a statement explaining why the appeal is being made. Provide information addressing the following items:

1. The nature of the alleged error in judgment made by the County Engineer or the Township Trustees, as applicable, in enforcing the regulations;
2. The effects, if any, of the alleged error and how such an error has resulted in unnecessary hardship;
3. The corrective or mitigative action the applicant believes is necessary.

Attach any other drawings, plans, studies, statements, or other documents that justify, clarify, or provide further explanation of the appeal.

Certification. I, the undersigned, certify that the information contained in this application and attachments is, to the best of my knowledge, true and correct.

Sign name: _____ Date: _____

Print name: _____

For office use only:

Board of Appeals hearing date: _____

Action: _____

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APPENDIX B FEE SCHEDULE

B1.1 The following fee schedule shall govern the applicable fees charged to defray the costs of administering access permits.

Permit application:	County – \$10.00 Township – as set by the respective township
High-Volume Attachment:	County – \$50.00 Township – as set by the respective township
Variance application:	\$25.00
Appeal application:	\$25.00
Traffic impact study review:	No charge for the first two TIS reviews; thereafter, per hour (\$50.00 per hour maximum)
Construction plan review:	No charge for the first two plan reviews; thereafter, per hour (\$50.00 per hour maximum)
Driveway inspection:	County – no charge Township – as set by the respective township
Inspection for roadway improvements in public rights-of-way:	County – per hour (\$30 per hour maximum) plus mileage (\$0.50 per mile maximum) Township – as set by the respective township.

B1.2 Actual hourly rates charged will be the respective rates for the employee(s) conducting the administrative and/or review tasks indicated. Mileage rates charged will be as specified by the IRS.

B1.3 All fees shall be paid prior to the issuance of an access permit, with the exception of inspection fees for roadway improvements within public rights-of-way, which shall be paid upon the satisfactory completion of access-related improvements.

APPENDIX C ACCESS CATEGORY INVENTORY

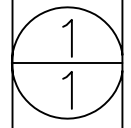
- C1.1** The map and inventory list of roads provided in this Appendix show the access category of County and Township roads in the unincorporated portions of Erie County.
- C1.2** Only roads not classified as Rural Local and Urban Local are included in the inventory list. If a road not included on the inventory list is inside the urban boundary, then the road is classified as an Urban Local. If a road not included on the inventory list is outside of the urban boundary, then the road is classified as a Rural Local.
- C1.3** For the classification and inventory of State, U.S., and Interstate Routes, refer to information available from the Ohio Department of Transportation, Office of Urban and Corridor Planning.

Name	Route	Number	FC	Classification	Beginning	Ending
BERLIN RD	CR	132	17	URBAN COLLECTOR	.01 MILE S OF DARROW RD	US 6
BERLIN RD	CR	132	7	RURAL MAJOR COLLECTOR	BERLIN RD	0.01 MILE SOUTH OF DARROW RD
BOGART RD	CR	10	16	URBAN MINOR ARTERIAL	CAMPBELL ST	BOOS RD
BOGART RD	CR	10	7	RURAL MAJOR COLLECTOR	BOOS RD	RYE BEACH RD
BOGART RD	CR	10	7	RURAL MAJOR COLLECTOR	BARDSHAR RD	SCHENK RD
BOGART RD	CR	10	16	URBAN MINOR ARTERIAL	RYE BEACH RD	SR 13
BOGART RD	CR	10	17	URBAN COLLECTOR	SCHENK RD	CAMPBELL ST
BOGART RD	CR	10	17	URBAN COLLECTOR	SR 101	BARDSHAR RD
BUTLER RD	TR	63	8	RURAL MINOR COLLECTOR	HURON CO LINE	SR 60
CAMP RD	TR	121	17	URBAN COLLECTOR	BOOS RD	US 6
CAMPBELL ST	CR	110	17	URBAN COLLECTOR	BOGART RD	COLUMBUS AVE
CEYLON RD	CR	58	8	RURAL MINOR COLLECTOR	HURON CO LINE	SR 113
COLUMBUS AVE	CR	120	16	URBAN MINOR ARTERIAL	BOGART RD	SR 4
DARROW RD	CR	14	8	RURAL MINOR COLLECTOR	BERLIN RD	SR 60
GALLOWAY RD	TR	118	16	URBAN MINOR ARTERIAL	BOGART RD	PERKINS AVE
HULL RD	CR	8	17	URBAN COLLECTOR	US 250	CAMP RD
HURON AVERY RD	CR	123	8	RURAL MINOR COLLECTOR	US 250	HURON SOUTH CORP LINE
HURON AVERY RD	CR	123	17	URBAN COLLECTOR	HURON SOUTH CORP LINE	SR 13
JOPPA RD	CR	140	17	URBAN COLLECTOR	.02 MILE NORTH OF NS RR	US 6
JOPPA RD	CR	140	8	RURAL MINOR COLLECTOR	BEGIN JCT SR113	.02 MILE NORTH OF NS RR
MASON RD	CR	13	7	RURAL MAJOR COLLECTOR	SR 269	END LORAIN CO LINE
OLD RAILROAD RD	TR	106	17	URBAN COLLECTOR	URBAN AREA LINE	PERKINS AVE
OLD RAILROAD RD	TR	106	8	RURAL MINOR COLLECTOR	BOGART RD	URBAN AREA LINE
PATTEN TRACT RD	CR	43	7	RURAL MAJOR COLLECTOR	SR 113	BOGART RD
PERKINS AVE	CR	5	16	URBAN MINOR ARTERIAL	SANFORD ST	US 6
PORTLAND RD	CR	32	8	RURAL MINOR COLLECTOR	SR 269	SR99
RIVER RD	CR	126	17	URBAN COLLECTOR	HURON SOUTH CORP LINE	US 6
RYE BEACH RD	CR	122	16	URBAN MINOR ARTERIAL	BOGART RD	US 6
SANFORD ST	CR	5A	16	URBAN MINOR ARTERIAL	PERKINS AVE	SR 101
SHAW MILL RD	TR	49	17	URBAN COLLECTOR	MILAN NORTH CORP LIMIT	US 250
SHAW MILL RD	TR	49	8	RURAL MINOR COLLECTOR	HURON CO LINE	MILAN NORTH CORP LIMIT
SOUTHWEST RD	CR	312	8	RURAL MINOR COLLECTOR	HALE RD	
SOUTHWEST RD	CR	312	17	URBAN COLLECTOR	HURON CO LINE	HALE RD
STRECKER RD	CR	15	8	RURAL MINOR COLLECTOR	SR 269	US 250
STRUB RD	CR	7	17	URBAN COLLECTOR	CAMPBELL ST	US 250
STRUB RD	TR	7	17	URBAN COLLECTOR	US 250	PERKINS AVE

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COUNTY AND TOWNSHIP ROADS

ACCESS CATEGORIES



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APPENDIX D AUXILIARY LANE GRAPHS

D1.1 General

The auxiliary lane graphs provided in this Appendix are used to determine when a separate turn lane is needed for proposed access connections.

D1.2 Left Turn Lane Warrants: Two-Lane Roadways

Two graphs are provided for left turn warrants on two-lane roadways: one for high-speed conditions (>40 MPH posted speed) and one for low-speed conditions (≤ 40 MPH posted speed). The plotted curve indicates the left turn percentage. Actual left turn percentage for the case being analyzed should be interpolated using the plotted curves as a guide. Any points that lie beyond the provided curves should likewise be extrapolated to determine if a left turn lane is warranted. Note that for 2-lane roadways, the advancing traffic volume includes the left-turn volume.

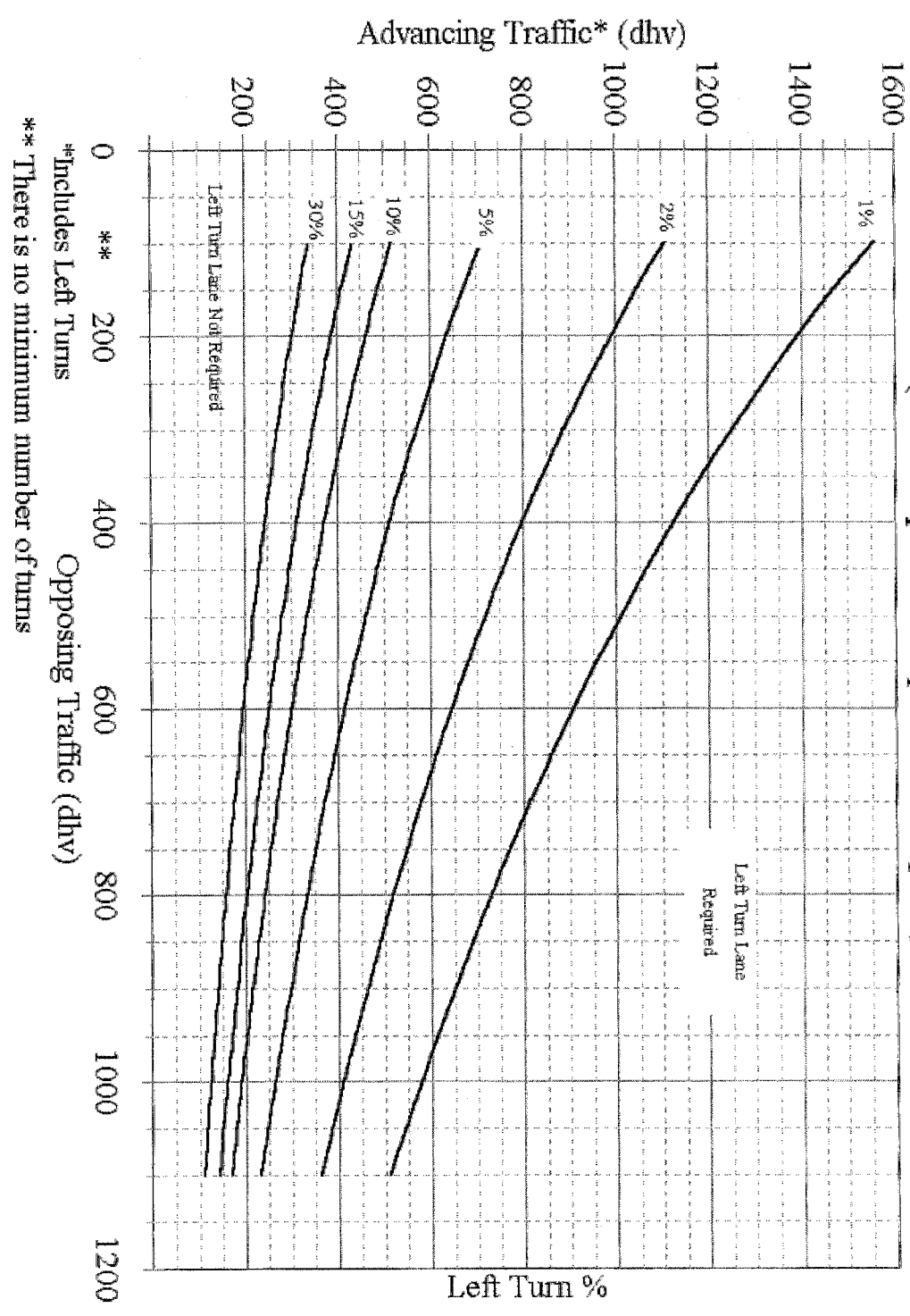
D1.3 Left Turn Lane Warrants: Four-lane Roadways

Two graphs are provided for divided and undivided four-lane roadways. Warrants for left turn lanes are based solely on left-turning vehicle volume and the opposing traffic volume. A roadway is considered divided as long as the median width is adequate to store at least one left-turning vehicle without impeding the progress of vehicles in the adjacent through lane.

D1.4 Right Turn Lane Warrants

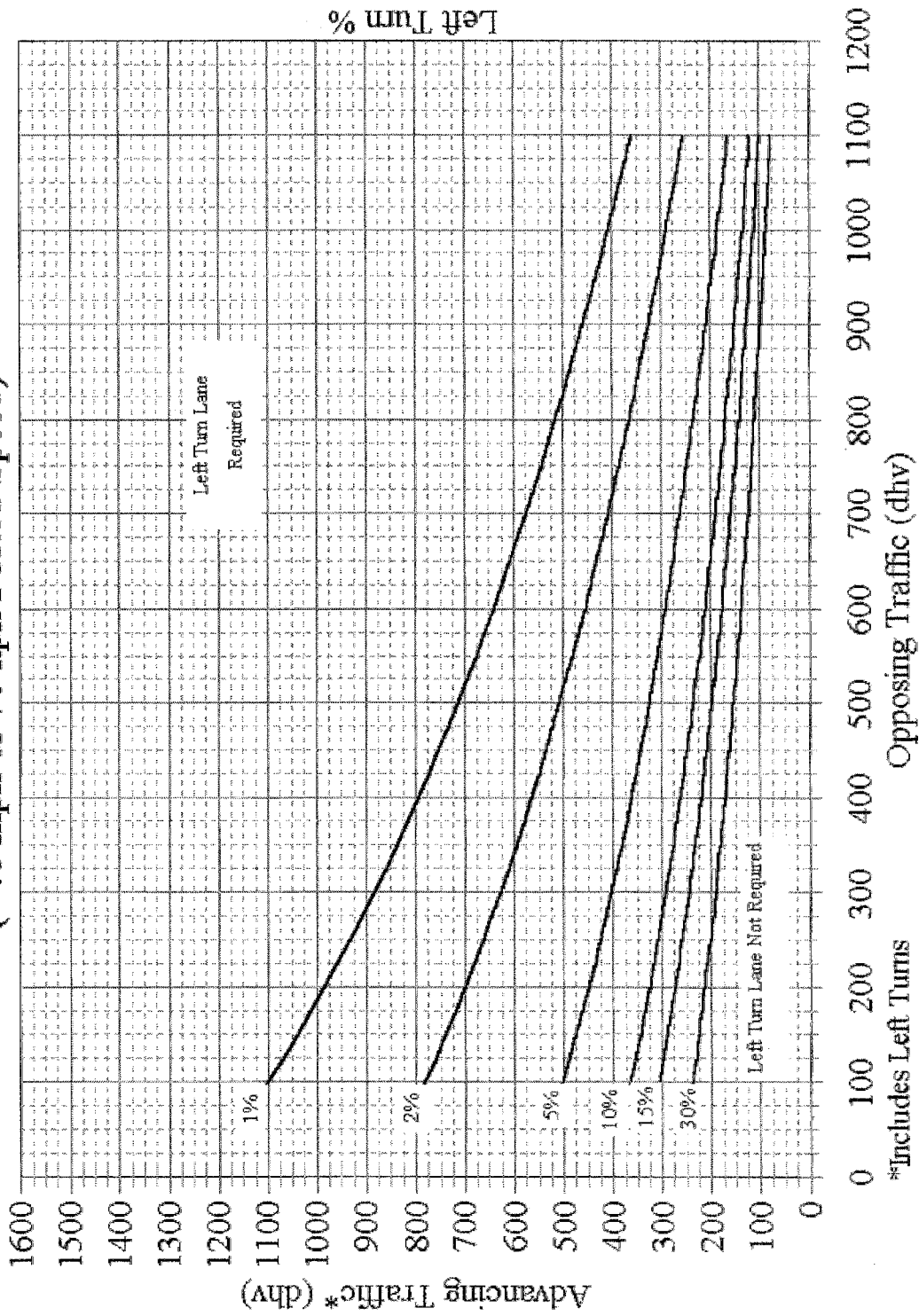
Separate graphs are provided for right turns for two-lane and four-lane roadways for both high-speed (>40 MPH posted speed) and low-speed (≤ 40 MPH posted speed) conditions. The plotted curve indicates the right turn percentage. Actual right turn percentage for the case being analyzed should be interpolated using the plotted curves as a guide. Any points that lie beyond the provided curves should likewise be extrapolated to determine if the turn lane is warranted.

2-Lane Highway Left Turn Lane Warrant (= < 40 mph or 70 kph Posted Speed)

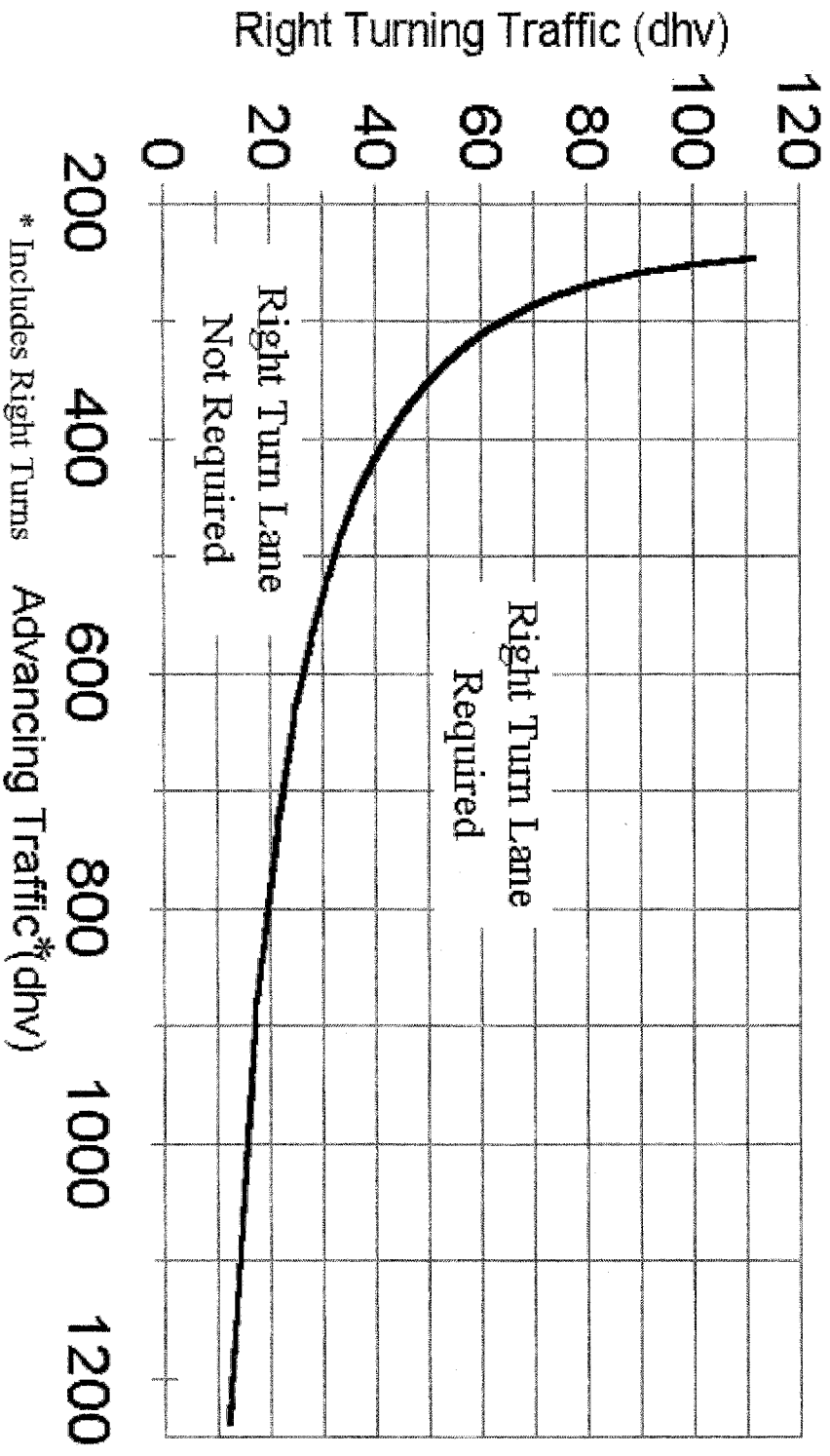


2-Lane Highway Left Turn Lane Warrant

(>40 mph or 70 kph Posted Speed)

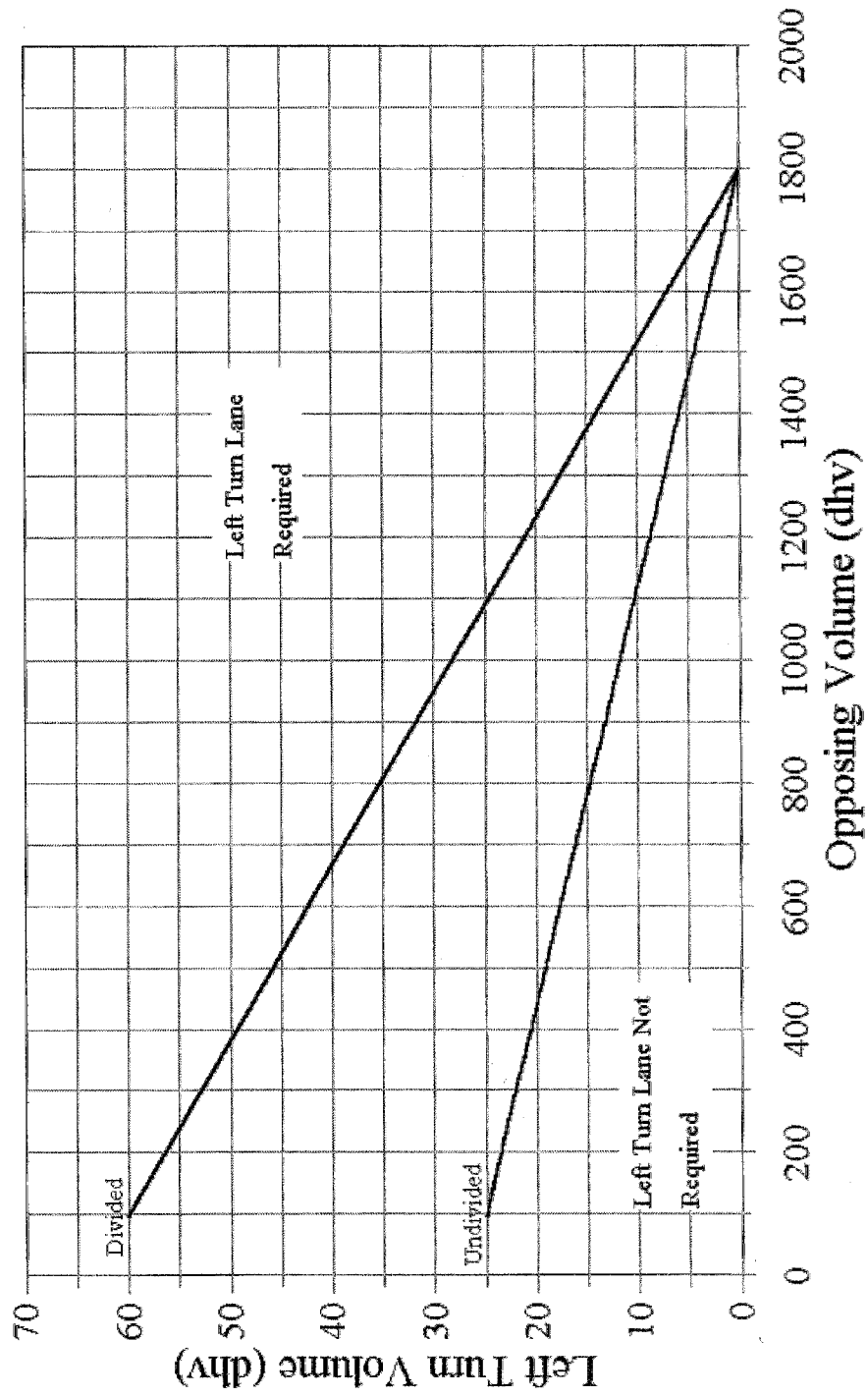


2-Lane Highway Right Turn Lane Warrant > 40 mph or 70 kph Posted Speed



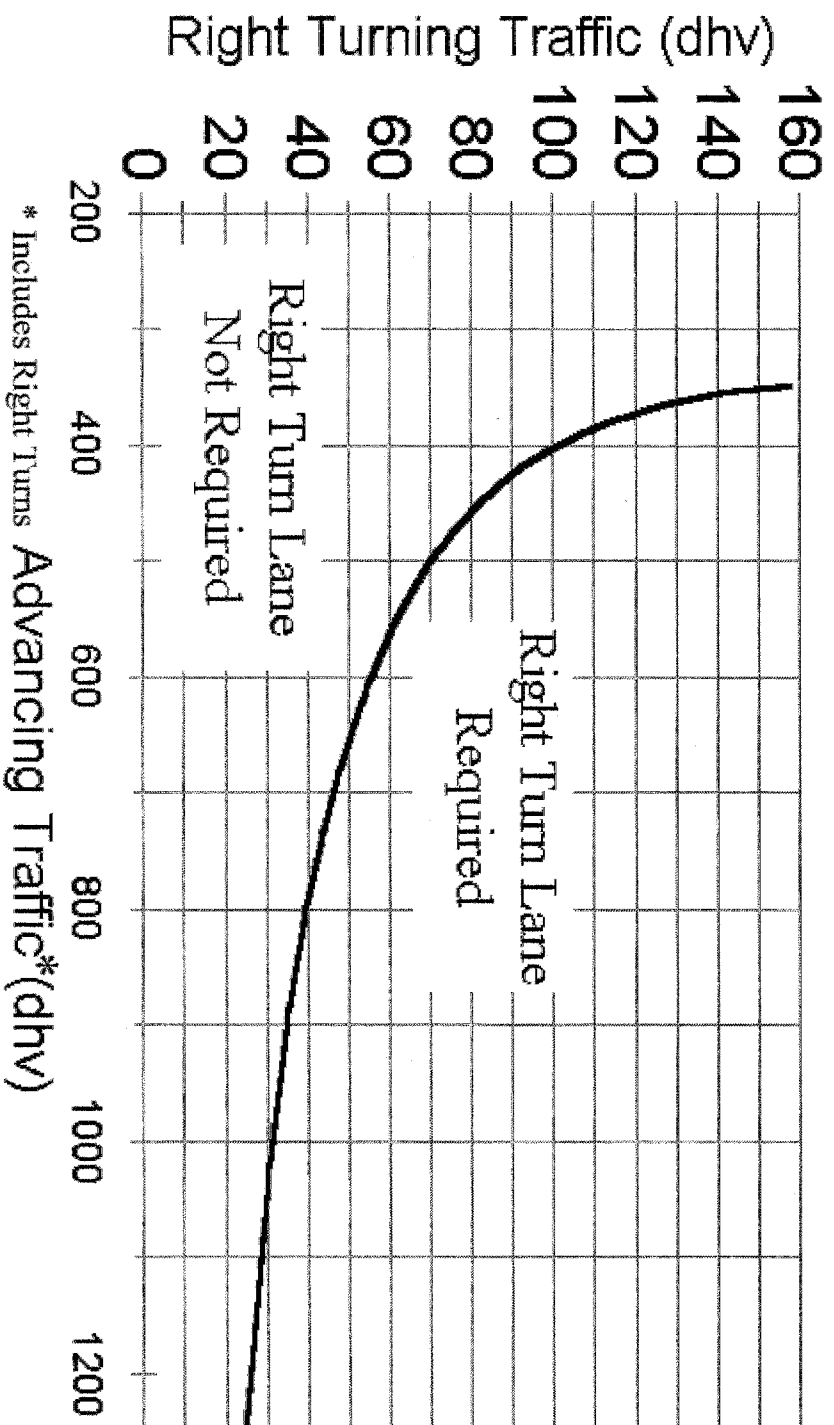
* Includes Right Turns

4-Lane Highway Left Turn Lane Warrant

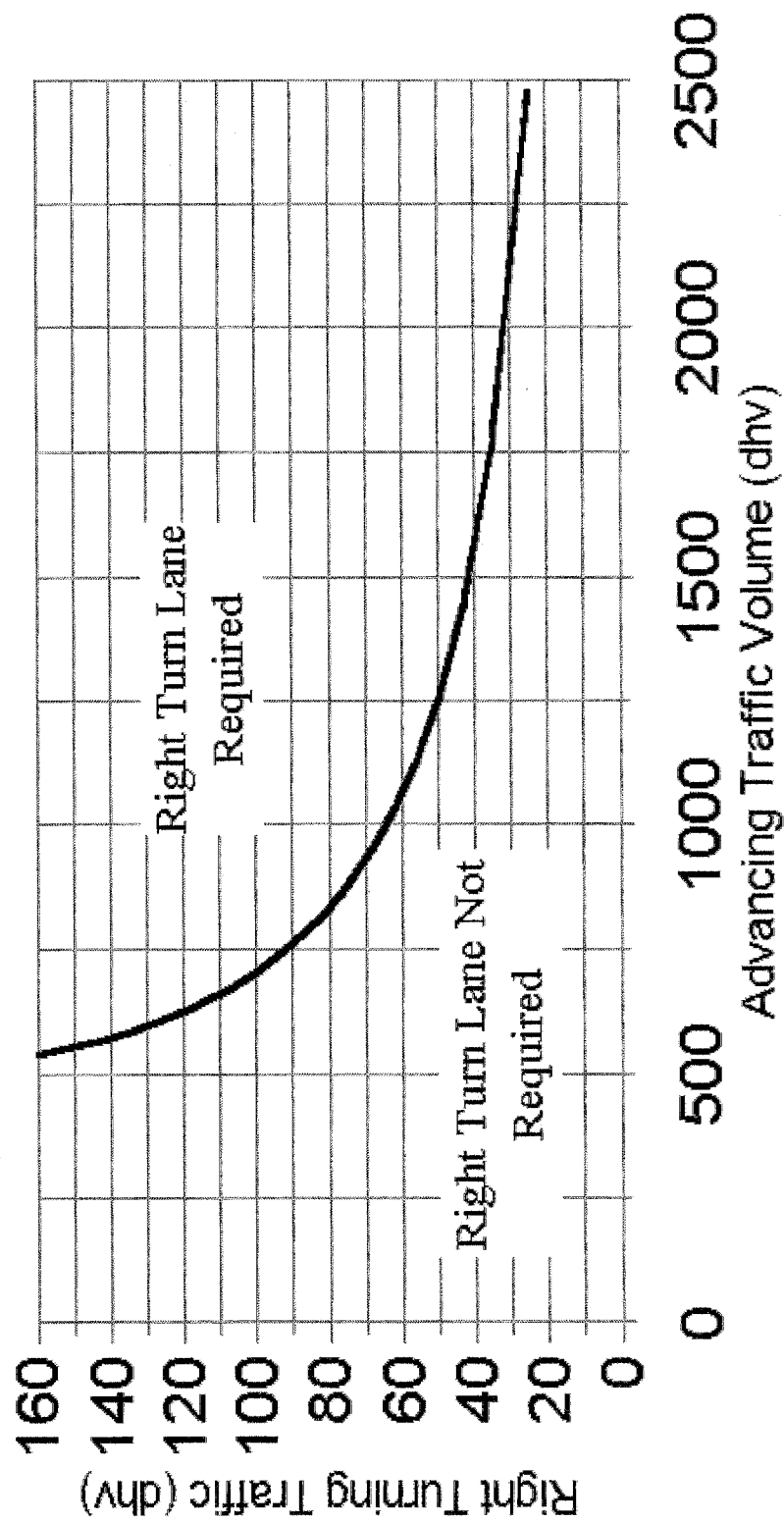


2-Lane Highway Right Turn Lane Warrant

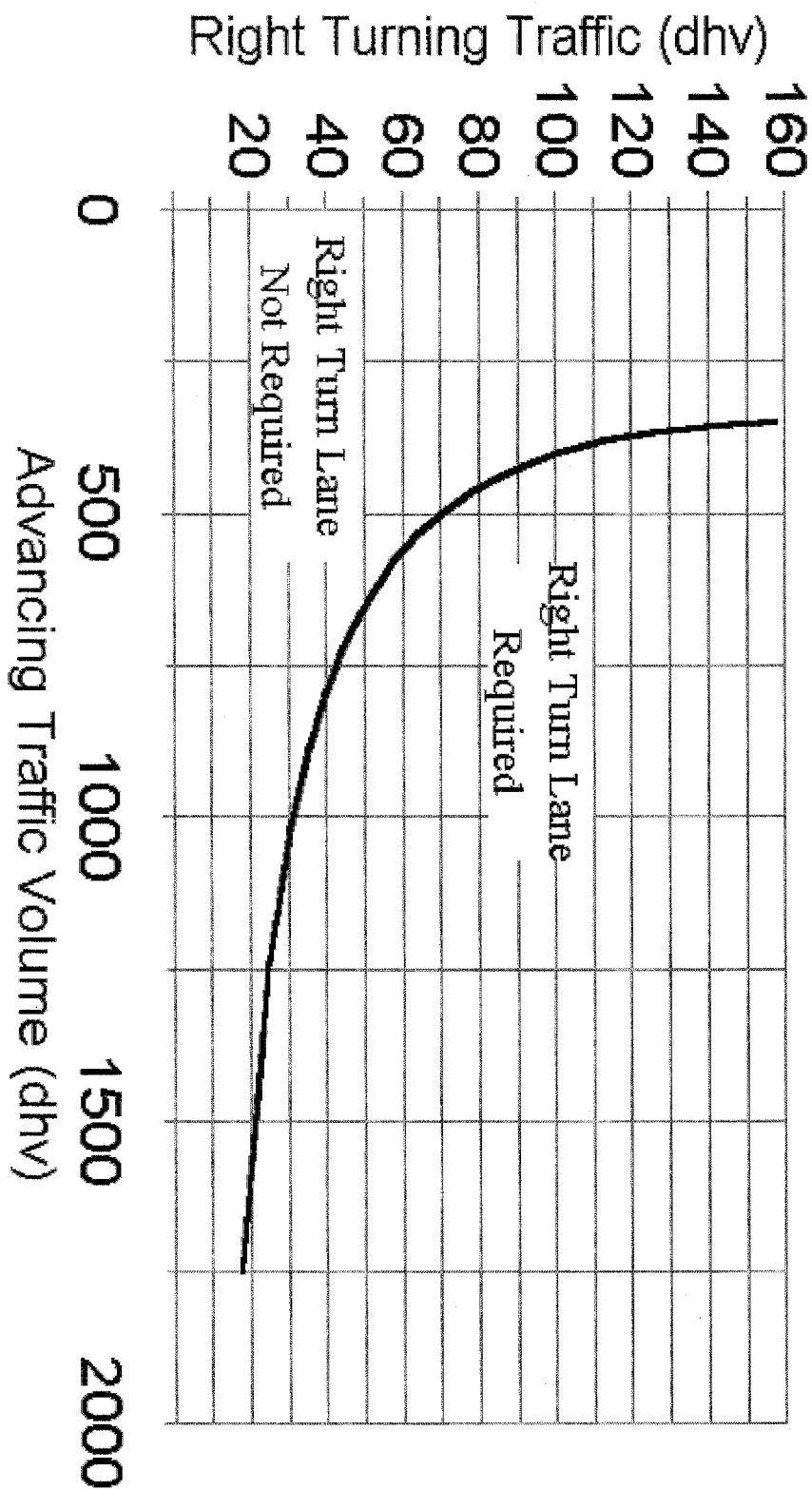
= < 40 mph or 70 kph Posted Speed



4 Lane Highway Right Turn Lane Warrant (≤ 40 mph or 70 kph Posted Speed)

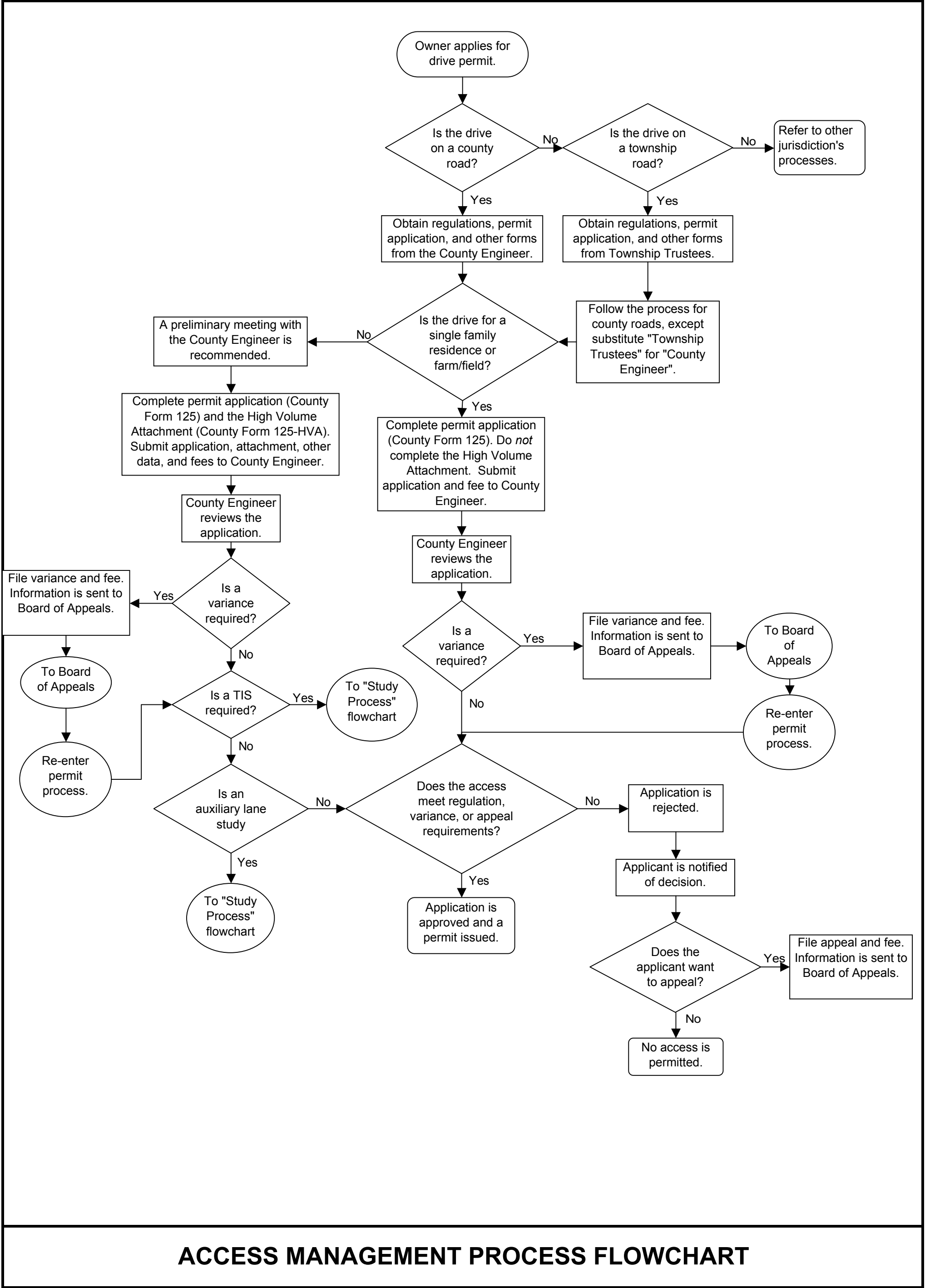


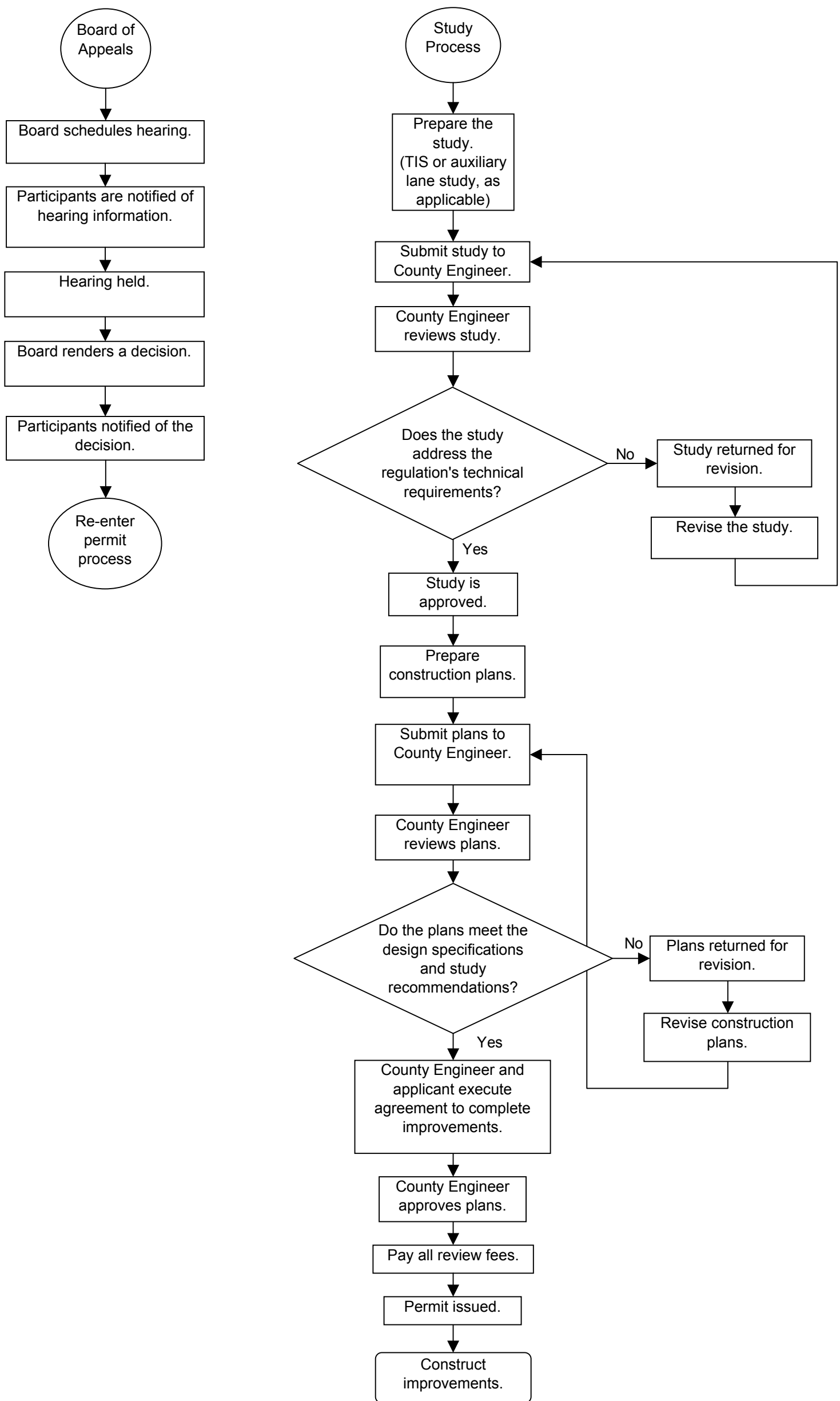
4 Lane Highway Right Turn Lane Warrant (>40 mph or 70 kph Posted Speed)



APPENDIX E PROCESS FLOWCHARTS

- E1.1** This appendix includes flowcharts illustrating the permitting process. These flowcharts are not comprehensive and do not include all possible permitting scenarios, nor do they cover the process for appealing decisions of the County Engineer. These flowcharts should only be used as a guide, and are not regulations themselves.





ACCESS MANAGEMENT PROCESS FLOWCHART