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## Rulemaking Hearing Rule(s) Filing Form

*Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing (Tenn. Code Ann. § 4-5-205).*

*Pursuant to Tenn. Code Ann. § 4-5-229, any new fee or fee increase promulgated by state agency rule shall take effect on July 1, following the expiration of the ninety (90) day period as provided in § 4-5-207. This section shall not apply to rules that implement new fees or fee increases that are promulgated as emergency rules pursuant to § 4-5-208(a) and to subsequent rules that make permanent such emergency rules, as amended during the rulemaking process. In addition, this section shall not apply to state agencies that did not, during the preceding two (2) fiscal years, collect fees in an amount sufficient to pay the cost of operating the board, commission or entity in accordance with § 4-29-121(b).*

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**Revision Type (check all that apply):**

- Amendment  
 New  
 Repeal

**Rule(s) Revised (ALL chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only ONE Rule Number/Rule Title per row)**

Chapter Number	Chapter Title
1680-02-01	Constructing Driveway Entrances on State Highway Rights-of-Way
Rule Number	Rule Title
1680-02-01-.01	Definition of Terms
1680-02-01-.02	Right-of-Way Encroachment
1680-02-01-.03	Sight Distance
1680-02-01-.04	Number and Arrangement of Driveways
1680-02-01-.05	Driveway Width and Edge Radius
1680-02-01-.06	Driveway Alignment and Profile
1680-02-01-.07	Driveway Surfacing
1680-02-01-.08	Curbs and Guide Posts
1680-02-01-.09	Drainage
1680-02-01-.10	Signing
1680-02-01-.11	Control Dimensions
1680-02-01-.12	Driveway Profile
1680-02-01-.13	Sketches and Examples
1680-02-01-.14	Plates

1680-02-01-.15	Application for Permit
1680-02-01-.16	Bond Requirements
1680-02-01-.17	Attachment "A" and "B"
1680-02-01-.18	Sample Permit

Rule 1680-02-01-.01 is repealed in its entirety.

Rule 1680-02-01-.02 is repealed in its entirety.

Rule 1680-02-01-.03 is repealed in its entirety.

Rule 1680-02-01-.04 is repealed in its entirety.

Rule 1680-02-01-.05 is repealed in its entirety.

Rule 1680-02-01-.06 is repealed in its entirety.

Rule 1680-02-01-.07 is repealed in its entirety.

Rule 1680-02-01-.08 is repealed in its entirety.

Rule 1680-02-01-.09 is repealed in its entirety.

Rule 1680-02-01-.10 is repealed in its entirety.

Rule 1680-02-01-.11 is repealed in its entirety.

Rule 1680-02-01-.12 is repealed in its entirety.

Rule 1680-02-01-.13 is repealed in its entirety.

Rule 1680-02-01-.14 is repealed in its entirety.

Rule 1680-02-01-.15 is repealed in its entirety.

Rule 1680-02-01-.16 is repealed in its entirety.

Rule 1680-02-01-.17 is repealed in its entirety.

Rule 1680-02-01-.18 is repealed in its entirety.

**New Rule(s)**

<b>Chapter Number</b>	<b>Chapter Title</b>
1680-10-01	Constructing Driveway Entrances on State Highway Rights-of-Way
<b>Rule Number</b>	<b>Rule Title</b>
1680-10-01-.01	Purpose
1680-10-01-.02	Applicability
1680-10-01-.03	Adoption of Manual for Constructing Driveway Entrances on State Highways
1680-10-01-.04	Appendix – Manual for Constructing Driveway Entrances on State Highways, 2015 Edition

1680-10-01-.01 Purpose.

- (1) Section 54-5-301 of the Tennessee Code authorizes the Commissioner of the Tennessee Department of Transportation to adopt reasonable and proper rules governing the construction of driveway entrances into highways on the State Highway System in order to maintain proper drainage, preserve the roadway from damage, and prevent interference with or the creation of hazards to public travel.
- (2) The primary function of a state highway is to provide system continuity and efficiency of state highway system operation and maintenance activities. The Department of Transportation recognizes that property owners have the right of reasonable access to their property, and the Department will work with property owners and local government authorities to provide reasonable access to the state highway system that is safe and enhances the movement of traffic through a permitting process that assesses the number, location, width, and design of driveways.
- (3) These rules establish procedures to apply for a driveway permit on a state highway, standards or guidelines for granting a driveway permit, and provisions for requesting a variance from the standards established in these rules.

Authority: T.C.A. § 54-5-301.

1680-10-01-.02 Applicability.

- (1) These rules shall govern the construction of all driveway entrances within the rights-of-way of highways designated as part of the state highway system.
- (2) No driveway entrance shall be constructed on any state highway right-of-way without a permit issued by the Department of Transportation. These rules provide a description of information to be contained in the driveway permit application, the standards against which the application shall be measured, and the administrative remedies offered by the Department to review the balance of private property rights of reasonable access versus the public need to preserve the smooth flow of traffic on the State Highway System.
- (3) The Department may issue driveway permits only when the application is found by the Department to be in compliance with these rules. The Department is authorized to impose terms, conditions, and limitations as necessary and convenient to meet the requirements of these rules.
- (4) The standards, procedures, and requirements of these rules are in addition to any county or municipal land use regulations that may also govern the construction of driveways within their respective jurisdictions.

Authority: T.C.A. § 54-5-301 and T.C.A. § 54-5-302.

1680-10-01-.03 Adoption of Manual for Constructing Driveway Entrances on State Highways.

- (1) The Tennessee Department of Transportation, Manual for Constructing Driveway Entrances on State Highways, 2015 Edition, set forth in Rule 1680-10-01, Appendix, is hereby adopted in its

entirety and incorporated herein by reference.

- (2) It is the intent of the Department to amend these rules as necessary to adopt future revisions of the Manual for Constructing Driveway Entrances on State Highways as may hereafter be approved.

Authority: T.C.A. § 54-5-301.

1680-10-01-.04 Appendix – Manual for Constructing Driveway Entrances on State Highways.

[See attached pdf. copy.]

Authority: T.C.A. § 54-5-301.



Manual for Constructing  
**Driveway Entrances**  
on State Highways

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2015 Edition

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# 1 – Introduction

## 1.1 Purpose

The purpose of the driveway permit process is to manage access on the State Highway System. Access regulations are necessary in order to preserve the functional integrity of the State Highway System and to promote the safe and efficient movement of people and goods while providing reasonable access to adjoining property owners. Reasonable access means that a property owner will have access to the public highway system, but it does not mean that potential patrons are guaranteed the most direct or convenient access from a specific roadway to the owner's property. This manual is intended to define the process for constructing a legal driveway or other work within the State Highway rights-of-way.

## 1.2 History

In 1974, the Tennessee Department of Highways, now known as the Tennessee Department of Transportation, adopted rules and regulations governing the construction of driveways on state highway right-of-way. Some of these rules were amended in 1978, but there have been no revisions since then. This new manual represents a comprehensive overhaul of the driveway regulations. A summary of changes can be found on the TDOT Traffic Engineering Office website's Highway Entrance Permit page.

## 1.3 Need

Every access point constructed on the state highway system increases the crash risk. The cumulative impact of closely spaced access points over time is one of the largest contributors to high crash rates and congestion on state highways. The majority of states in the nation have updated their driveway access standards in the last 20 years to curtail the accelerated degradation to highway efficiency and safety. It is the Department's intent to adopt national best practices that better preserve the safe and efficient movement of people and goods while also helping property owners make better decisions regarding access needs. Outdated access policies not only fail to protect the interests of highway users but also fail to enhance the economic opportunities a highly efficient roadway network offers businesses and customers.

## 1.4 Authority

This manual is authorized by the following sections of the Tennessee Code Annotated:

- (a) Section 4-3-2303(2), Powers and duties of commissioner, which authorizes the Commissioner to promulgate regulations governing the administration and operations of the Department.
- (b) Section 54-5-301(a), Regulations governing construction of entrances – Penalty for illegal entrances, which authorizes the Commissioner to make reasonable and proper rules governing the construction of driveway entrances on the State Highway System.
- (c) Section 54-5-302, Agreement prior to construction mandatory, which provides that no person

may construct any entrance onto a state highway unless it is constructed in accordance with the rules and regulations adopted by the Commissioner.

## 1.5 Severability

If any provision of this manual of standards and guidelines is proven or held to be invalid or unconstitutional, such invalidity shall not affect the validity of these standards and guidelines as a whole, or any part thereof, other than the part determined to be invalid.

## 1.6 Definitions

**AASHTO** – The American Association of State Highway and Transportation Officials.

**Access Point** – A location on a property frontage at which access to a state highway is allowed by the Department.

**ADA or Americans with Disabilities Act of 1990** – Federal law prohibiting discrimination against persons with disabilities. Requires public entities and public accommodations to provide accessible accommodations for persons with disabilities.

**Americans with Disabilities Act Accessibility Guidelines (ADAAG)** – Scoping and technical specifications for new construction and alterations undertaken by entities covered by the ADA.

**Algebraic Difference in Grade** – The total change in grade between intersecting grades.

**Apron** – That portion of the driveway extending from the edge of the pavement of the through roadway to the back of sidewalk section, or the right-of-way line if no sidewalk exists.

**Applicant** – The owner of a property or the owner’s representative applying for a state highway entrance permit.

**Auxiliary Lane** – A lane along the roadway that is used for the purpose of acceleration, deceleration, or storage of vehicles for turning movements.

**Buffer Area** – The border area along the frontage of a property, between the traveled way and the right-of-way line, and within the frontage boundary lines.

**Commercial Border Area** – The border area along the frontage boundary line that extends outside the right-of-way line onto a tract of commercial property. This area is designed to prevent vehicles from parking or being serviced on state owned right-of-way. Typically, commercial border areas are grassy or mulched, and surrounded by a concrete curb.

**Commercial Border Area Clearance** – The distance, measured perpendicular to the right-of-way line, between the right-of-way line and the edge of the commercial border area. See Figure A.3 dimension “CB”.

**Connection** – Any driveway, street, turnout, or other means of providing for the movement of vehicles to or from the public roadway system.

**Corner Clearance** – At an intersecting street or highway, the distance measured along the edge of traveled way between the intersection of right-of-way lines and the tangent projection of the nearest edge of the driveway. See Figure A.3 dimension “C”.

**Crossover** – A paved or graded area of the highway median designed to allow vehicles to cross the median of a divided highway.

**Department** – The Tennessee Department of Transportation.

**Distance Between Double Driveways** – The distance measured parallel to the right-of-way line between the tangent edges of two adjacent driveways servicing the same frontage. In the case of driveways at an angle less than 90° to the traveled way, the minimum distance required between them shall be applied at the point where the two tangent edges are closest to the traveled way. See Figure A.3 dimension “D”.

**Driveway** – An improved area between a public road and private property used to provide ingress and egress of vehicular traffic from the public road to a definite area of private property.

**Driveway Angle** – The angle of 90° or less between the driveway centerline and the edge of the traveled way. See Figure A.2 dimension “Y”.

**Driveway Width** – The perpendicular distance between the parallel edges of a driveway. See Figure A.2 dimension “W”.

**Drop/Lowered Curb** – A curb with reduced vertical dimension to allow vehicular access in specific areas while containing the flow of storm water under common flow conditions.

**Edge Clearance** – The distance measured parallel to the edge of the traveled way, between the frontage boundary line and tangent projection of the nearest edge of driveway. In the case of driveways at an angle less than 90° to the traveled way, the edge clearance shall be measured between the frontage boundary line and the point where the tangent edge of the driveway is closest to the traveled way. See Figure A.2 dimension “E”.

**Encroachment** – The use of state highway right-of-way by anyone other than the Department’s personnel or authorized agents for any purpose other than that intended by the Department.

**Field Entrance** – An area between a public road and private property used to provide ingress and egress of farm equipment from the public road to a definite area of private property used for agricultural purposes.

**Frontage** – The length along the highway right-of-way line of a single property tract or roadside development area between the edges of the property. Corner property at a highway intersection has a separate frontage along each highway.

**Frontage Boundary Line (F.B. Line)** – A line, perpendicular to the highway centerline, at each end of the frontage, extending from the right-of-way line to the edge of the traveled way. See Figure A.4.

**Functional Classification** – The grouping of streets and highways into classes or systems according to the character of service they are intended to provide.

**“May”** – see “Shall,” “Should,” and “May.”

**Median Offset** – The distance measured parallel to the right-of-way line from the end of the median to the nearest edge of the closest driveway.

**MUTCD** – Manual On Uniform Traffic Control Devices.

**Outparcel** – A small tract of land containing a small commercial establishment which is situated in close proximity to a large, high-volume generating commercial building. Outparcels derive a substantial amount of their business from the traffic generated by the primary commercial establishment in the area. See Figure A.11.

**Radius Type Driveway** – A driveway constructed with a transition curb defining the edges of the driveway.

**Radius of Curvature** – Curvature of a circular arc measured as the length of the curvature vector. See Figure A.2 dimension “R”.

**Ramp Type Driveway** – A driveway constructed with a drop curb used to define the edge of the pavement of the adjacent roadway.

**Right-Of-Way (R.O.W.)** – Lands conveyed or dedicated to the public for use as a street, alley, walkway, or other public purpose related to the provision of transportation services. See Figure A.2.

**Road, Roadway** – *See Street.*

**Rural** – Area located outside the urban boundary limits as determined by the TDOT Planning Division. Link to boundary maps provided on TDOT Traffic Engineering Office website’s Highway Entrance Permit page.

**“Shall,” “Should,” and “May”:**

**Shall** – A mandatory condition. Where certain requirements in the design or application are described with the “shall” stipulation, it is mandatory when an installation is made that these requirements be met.

**Should** – An advisory condition. Where the word “should” is used, it is considered to be advisable usage, recommended but not mandatory.

**May** – A permissive condition. No requirement for design or application is intended.

**Setback** – The lateral distance between the right-of-way line and the roadside business building, gasoline pump curb base, display stand, or other object, the use of which will result in space for vehicles to stop or park between such facilities and the right-of-way line.

**Sidewalk** – An improved pathway or other area on public or private property where pedestrians may walk

or stand.

**Sight Distance** – The distance at which a driver can see or be seen by an approaching vehicle.

**Street** – Any public thoroughfare primarily used by motor vehicles and not classified as an alley.

**Street-Type Entrance** – A point of access constructed to meet AASHTO street intersection standards with design features that include curb returns, channelized lane usage, lane use markings, etc.

**Traveled Way** – The portion of the roadway for the movement of vehicles, exclusive of shoulders, berms, sidewalks, and parking lanes.

**Urban** – Area located inside the urban boundary limits as determined by the TDOT Planning Division. Link to boundary maps provided on TDOT Traffic Engineering Office website’s Highway Entrance Permit page.

**Traffic Control Devices** – All signs, signals, markings and other devices placed on, over, or adjacent to a traveled way to regulate, warn, or guide traffic.

**Traffic Impact Study (or Report)** – A review and analysis of the access requirements for and traffic impacts created by a development, prepared by a licensed professional engineer, and meeting the standards set forth by the Institute of Transportation Engineers (ITE) and any requirements established by the Department.

## 2 – Highway Entrance Permits

### 2.1 General

No person may construct a driveway or related encroachment on state highway right-of-way, including the modification, revision, or change in use of any existing driveway facilities, without first obtaining a state highway entrance permit. Change in use includes increasing the number of trips. The property owner, whose property will be accessed by the driveway or street being built or modified, is responsible for obtaining a highway entrance permit and fulfilling all associated requirements. All entrance permit applications (except for residential drives or field entrances), along with any other required information shall be forwarded to the appropriate Tennessee Department of Transportation (TDOT) Region Traffic Engineering Office. See the TDOT Traffic Engineering Office website's Highway Entrance Permit page for a link to Region Traffic Engineering offices. *Please note: Any modification, revision, or new construction on state right-of-way, other than that of a "simple" driveway, may require the acquisition of additional TDOT permits prior to beginning work. Applicants should make sure to contact the appropriate Region Traffic Engineering Office to determine which permits will be required.*

### 2.2 Residential Driveways and Field Entrances

Owners wishing to construct a residential driveway or field entrance shall contact the local TDOT District Office (see TDOT Traffic Engineering Office website's Highway Entrance Permit page for a link to District Offices). All entrances onto state highways shall meet the conditions of this manual to be approved by the TDOT District Office representative.

### 2.3 Coordination with Local Authorities

The Department encourages cities, counties, or other local authorities to develop their own regulations governing the construction and design of driveways and intersections. If the ordinances or regulations of more than one jurisdiction apply to a proposed driveway or intersection, it is the responsibility of the applicant to contact each authority to ascertain all requirements and obtain approval from all jurisdictions. The more restrictive regulations shall apply, but the Department shall not issue a permit for a highway entrance that may meet local guidelines but violates the requirements of this manual. Also, the issuance of a permit by the Department does not eliminate the applicant's need to meet the requirements of local authorities.

The Department may opt to allow local agencies sole responsibility for issuing highway entrance permits. This will be done using a memorandum of understanding. The local agency will be required to either meet or exceed the conditions of this manual. Permittee should check with their area TDOT office to determine the appropriate agency authority. The current list of agencies that have sole responsibility can be found on the TDOT Traffic Engineering Office website's Highway Entrance Permit page.

The Department encourages developers to contact local authorities and the appropriate Region Traffic Office when considering the purchase of property where existing or future access to a state highway is of major concern. The Department at its discretion may provide a letter of written conceptual concurrence if provided development plans approved by the local jurisdiction prior to property purchase. The letter from the Department does not negate the land developer's responsibility to acquire a highway entrance permit prior to constructing a new entrance or modifying an existing entrance.

## 2.4 Liability Insurance

Either the property owner or the contractor performing the work shall carry general liability insurance with an insurance company authorized to do business in Tennessee and in a form acceptable to the Department. Proof of said insurance shall be furnished to the Department in the form of an insurance certificate indicating coverage which shall match the exposure of the Department to claims for negligence as set forth in Tennessee Code Annotated, Section 9-8-307 as it may be from time to time amended and construed. Said limits are currently three hundred thousand dollars (\$300,000) per person and one million dollars (\$1,000,000) for each occurrence. Certificate holder must be: State of Tennessee, Department of Transportation. Such insurance **shall remain in full force** and effect from the beginning of construction on the right-of-way until such construction has been completely approved, in writing, by the Department. Please specify permittee's name (property owner), and identify the location (state route and county) covered by this certificate of insurance. If this information is not provided, the permit will not be granted and the process may be delayed.

## 2.5 Bond Requirements

All applications, except for residential driveways and field entrances, for permits authorizing the construction or modification of entrances on state owned right-of-way shall be accompanied by a bond executed by or on behalf of the owner, guaranteeing the performance of the terms and conditions of the permit. Bond forms can be found on the TDOT Traffic Engineering Office website's Highway Entrance Permit page. The applicant may select one of the following procedures:

- A. Completely and accurately fill out the Cash Bond form, and post a cashier's or certified check. The amount of the cashier's or certified check shall be equal to one hundred ten percent (110%) of the estimated construction cost (as determined by the Department), or five thousand dollars (\$5000), whichever is greater.
- B. Completely and accurately fill out the Surety Bond form, and post a surety bond. The amount of the surety bond shall be equal to one hundred ten percent (110%) of the estimated construction cost (as determined by the Department), or five thousand dollars (\$5000), whichever is greater.

Regardless of the type of bond chosen, it shall remain in effect until construction on state right-of-way has been completed and approved by the Department. Upon completion of the authorized construction, the applicant shall notify the Region Traffic Engineering Office that issued the permit for construction. The Region Traffic Engineer, or another designated Department representative, shall inspect the site to ascertain that all construction has been satisfactorily completed and that all construction complies with the terms and conditions of the permit covering the work.

After the time period specified in the permit, the Department's representative shall make a final inspection of the site to ascertain that all construction has been maintained to design specifications. If the Department finds the construction satisfactory, the applicant shall be advised, in writing, that the construction has been accepted by the Department, and the cash bond shall be refunded, or the bonding agency shall be notified to release the bond, as applicable.

## 2.6 Requirements for Application

As early as possible in the application process, the owner or a designated representative should contact the Region Traffic Engineering Office nearest the proposed construction. This will allow the applicant to become familiar with the Department's requirements, and may inform the applicant as to any other permits that must be obtained prior to beginning construction.

### Forms

The applicant shall fill out the highway entrance permit application in full. All required copies of the permit itself are to be signed in the box designated "Permittee" by the property owner or a legal representative of the corporation that owns the property. Any other applicable forms shall also be filled out and forwarded to the Region Traffic Engineering Office. The permit application and other forms may be obtained from the TDOT Traffic Engineering Office website's Highway Entrance Permit page or from the Region Traffic Engineering Office.

### Expiration and Extensions

An entrance permit is valid for 1-year from the date of issuance. If construction cannot begin within this time period, an extension is available for an additional 6 months upon the written request of the applicant (made prior to the expiration of the permit). Once the permit expires or if additional extensions are needed, the renewal may require re-submittal of a permit application.

### Site Plan

In many cases, the Department will require the applicant to submit a site plan showing proposed and existing conditions as well as how the drainage of storm water will be handled at the newly-developed site. When required, a site plan shall be stamped by a qualified professional engineer who has been licensed by the State of Tennessee. See the TDOT Traffic Engineering Office website's Highway Entrance Permit page for a checklist of items to be included in a site plan.

### Traffic Control Plan

Due to the nature of the proposed construction, the roadway being accessed, peak hour volumes, and/or other characteristics of a particular site, the Department may require the applicant to submit a traffic control plan. If required, such a plan shall conform to the guidelines found in the state adopted Manual on Uniform Traffic Control Devices. Lane closures required for construction shall be coordinated with the Regional Traffic Engineer to be incorporated into the Department's construction reports.

### Traffic Impact Study

Depending upon the type and nature of the proposed entrance, along with considerations of future development at a given site, the Department may require the applicant to submit a Traffic Impact Study. These studies shall be performed and stamped by a qualified professional engineer who is registered in

Tennessee. See Section 5.7 for more information on Traffic Impact Studies.

See TDOT Traffic Engineering Office website's Highway Entrance Permit page for TDOT Region Traffic Engineering Offices, District Offices and for various forms associated with the permit application process.

## 3 – Right-of-Way Encroachment

### 3.1 General

No part of state highway right-of-way shall be used for servicing vehicles, displays, or the conducting of private business. The buffer area is to be kept clear of buildings, fences, business signs, parking areas, service equipment, and appurtenances thereto. Parking may be permitted on the roadway, as at curbs on city streets, when permitted by police control. The buffer area may be graded and landscaped as approved by the Department.

### 3.2 Buffer Areas

During the development of private property and the construction of driveways thereto, it may be necessary to re-grade the buffer area by cutting or filling. Such work shall be done in a manner to ensure adequate sight distance for traffic operations, proper drainage, suitable slopes for maintenance operations, and good appearance. The buffer area outside the driveways should be treated to prevent use by vehicles. This may be accomplished by grading, the use of curbs, rails, guide posts, low shrubs, etc., in a manner that will not impair clear sight across the area.

### 3.3 Parking and Storage

Each roadside business establishment should provide adequate parking or storage space off the right-of-way to prevent the storage of vehicles on the driveway or the backing up of traffic onto the travel way. This is particularly needed for businesses where a number of vehicles will be leaving and entering at the same time.

Where there are one or more driveways to a corner establishment at a highway intersection, parking should be prohibited or severely restricted on each highway between the intersection and the nearest driveway. This will improve the overall safety of the intersection by eliminating potential sight obstructions to motorists.

## 4 – Access Points

### 4.1 Types of Highway Access

Single or Two-Family Driveway: Driveways servicing single-family homes or duplexes are considered to be residential. See Figure A.2.

Field Entrance: This type of access is allowed to service farmland or other similar property. Driveways for such property are subject to the same regulations as a residential driveway.

NOTE: Owners wishing to construct either a residential driveway or field access shall contact the local Tennessee Department of Transportation District Office (see the TDOT Traffic Engineering Office website's Highway Entrance Permit page for a link to the District Offices).

Multi-Family Driveway: Residential properties consisting of more than two apartments or units are considered multi-family properties. Driveways for such complexes are subject to the same regulations as a commercial driveway.

Commercial Driveway: Driveways providing access to private property used for commercial purposes, or to public property, will be classified as commercial. See Figure A.3-A.8.

Street-Type Entrance: When development of a specified tract of property will generate 250 or more trips per day, a street-type intersection shall be required, and a Traffic Impact Study may also be required, at the Department's discretion. This may include, but is not limited to: shopping centers, residential neighborhoods, industrial parks, or educational complexes. Also, when access is granted to new streets or roads, they shall be of the street-type design. Driveways for such complexes are subject to the same regulations as a commercial driveway. See Figure A.9.

Joint Access Driveways: The physical configuration of some properties makes it difficult to provide access adequate to serve certain types of development. Examples include uses that normally require two points of access to be developed on a lot with limited frontage, sites with access limitations caused by narrow frontage, frontage that does not span a median opening on a divided highway, or corner clearance requirements. In these and other cases, it may be desirable to develop driveways that serve two or more properties. All involved property owners must agree in writing to the construction of a joint access driveway for a permit to be issued.

Frontage Roads: Where there are several adjacent roadside establishments, each with relatively limited frontage, or where there is a probability of such development, consideration should be given to the provision of a frontage road for the several driveways so as to reduce the number of separate connections to the highway. Where border width permits, the several driveways should be connected directly to such a frontage road paralleling the highway with connections to the highway only at the extremities of the frontage road or at well-spaced intervals along it. See Figure A.10 for a sample drawing of a typical frontage road. All frontage roads shall be off of the right-of-way and shall be designed such that queuing at the primary access with the state route does not affect traffic flow.

Outparcels: Frequently, when a large piece of commercial property is being developed, a high-volume traffic generator, such as a large department store or movie theater, will be the primary business at that location. However, a portion of the property may be divided into smaller outparcels, which will then be developed by smaller businesses. Since these establishments derive a substantial portion of their business from the traffic generated by the primary business, access to these outparcels should come from within the shopping area itself, rather than each business having its own access point from a state highway. This will improve the overall safety of the area, reduce potential points of conflict, and move traffic off of the main thoroughfare and into the shopping area. Access to outparcels are often dictated by local planned unit development (PUD) requirements. No future access should be permitted by the Department unless revisions have been made and approved through the local PUD. For an example of outparcel access, see Figure A.11.

## 4.2 Number of Entrances

Generally, the number of entrances to a single property shall be kept to the minimum necessary to provide adequate and reasonable service without compromising safety. For single-family residential properties, only one driveway shall be allowed unless the frontage is 200 feet or greater, then a second driveway may be allowed. No more than two driveways for single-family residential properties will be allowed. For all other uses, please consult the following:

- Typically, only one entrance shall be permitted.
- For frontages of 200 feet to 400 feet, an additional entrance may be permitted based on need demonstrated in a Traffic Impact Study.
- For frontages in excess of 400 feet, more than two entrances may be permitted based on need demonstrated in a Traffic Impact Study. The additional entrances may be allowed at the rate of one entrance per every 200 feet of continuous frontage, over 400 feet.
- Where corner lots are involved, the regulations described above shall apply separately to each roadway.

Exceptions to the limitation number of entrances may be granted when the need for such exceptions is demonstrated in a Traffic Impact Study, which concludes that the adverse impacts of additional driveways will be outweighed by the improvement of circulation and safety.

## 5 – Access Design

### 5.1 Control Dimensions

Driveways shall be designed to adequately handle the anticipated volume and type of traffic generated. Design shall be governed by the largest vehicle expected to regularly use the entrance. See Figures A.2 through A.9 in Appendix A for example drawings illustrating the control dimensions listed below.

#### 5.1.1 Edge Clearance (E):

All portions of a driveway, including radii, shall lie within the frontage boundary lines. At no time shall the edge clearance be less than the radius of curvature for the junction of the driveway and the edge of pavement. (see “Radius of Curvature” below)

Minimum Edge Clearances:

Rural:

Residential – 10 ft.

Commercial – 20 ft. (larger minimum edge clearance may be required if design vehicle is a single-unit truck or tractor trailer)

Urban:

Residential – 5 ft.

Commercial – 20 ft. (larger minimum edge clearance may be required if design vehicle is a single-unit truck or tractor trailer)

Note: when a single-unit truck or tractor trailer is used as the design vehicle, the minimum required edge clearance shall be equal to the required driveway radius (see “Radius of Curvature” below).

#### 5.1.2 Driveway Angle (Y) (Rural and Urban):

Driveway angles shall be as follows:

Driveways for two-way operation

90° to the centerline of the roadway.

Driveways for one-way operation

1. Driveways used by vehicles turning from both directions on the highway shall be the same as for two-way operation: 90° to the centerline of the roadway.

2. Driveways used by vehicles traveling in one direction on the highway (right-in, right-out only): 60° to the centerline of roadway preferred; may be reduced to 45° (with the approval of the Department).

5.1.3 Radius of Curvature (R):

The radii of driveways and street entrances will vary, depending on the type of establishment and the type of vehicle using the entrance. Particular site characteristics, such as the speed of the adjacent roadway, should also be considered in determining entrance radii.

Rural Driveways:

Residential - 10 ft. minimum; 20 ft. maximum

Commercial - 20 ft. minimum (larger radius may be required if design vehicle is a single-unit truck or tractor trailer)

Urban Driveways:

Residential - 5 ft. minimum; 15 ft. maximum

Commercial - 20 ft. minimum (larger radius may be required if design vehicle is a single-unit truck or tractor trailer)

Street-Type Entrances:

For entrances servicing passenger cars almost exclusively -  
25 ft. minimum, 30 ft. recommended

For entrances with a significant portion of single-unit trucks or WB-40 tractor trailers -  
40 ft. minimum

For entrances servicing WB-50 tractor trailers or larger -  
40 ft. minimum, 75 ft. maximum, 50 ft. recommended

5.1.4 Entrance Width (W) (Rural and Urban):

The entrance width shall be as listed in Table 5.1.

Table 5.1: Driveway Widths

Entrance Type	One-Way Driveways		Two-Way Driveways	
	Minimum	Maximum	Minimum	Maximum
Single Family or Duplex	N/A	N/A	14 ft.	20 or 24 ft.
Multi Family	12 ft.	20 ft.	24 ft.	40 ft.
Commercial or Industrial	12 ft.	24 ft.	24 ft.	40 ft.*

\*Note: Where developments are expected to serve a substantial volume of heavy vehicles (6 or more tires), this dimension may be increased to 50 feet.

Street Entrance Width: Generally, street entrances shall be limited to 50 feet. The Department may elect to expand the entrance width if it is determined through a Traffic Impact Study that extra lanes are warranted. Regardless of entrance width, medians for street entrances may not be constructed within the right-of-way.

See Figure A.9.

5.1.5 Corner Clearance (C) (Rural and Urban):

The corner clearance distance shall be as listed in Table 5.2.

Table 5.2: Corner Clearance Requirements

Classification of Intersecting Street	Functional Classification of Road to be Accessed by Driveway		
	Arterial	Collector	Local
Arterial	200 ft.	150 ft.	100 ft.
Collector	150 ft.	100 ft.	50 ft.
Local	100 ft.	50 ft.	50 ft.

NOTE: The functional classification of the route shall be determined using the functional class maps published by TDOT’s Planning Division. A link to the functional class maps can be found on the TDOT Traffic Engineering Office website’s Highway Entrance Permit page.

5.1.6 Distance Between Double Driveways (D) (Rural and Urban):

- Rural - 40 ft. minimum
- Urban - 40 ft. minimum

5.1.7 Fuel Pump Clearance (F) (Rural and Urban):

Where applicable, fuel pumps shall be placed so that refueling vehicles will not be parked or serviced on state right-of-way. The pumps shall be placed the following distances from the R.O.W. line(s):

- Pumps parallel to R.O.W. line - 15 ft. minimum
- Pumps perpendicular to R.O.W. line - 25 ft. minimum; 50 ft. recommended
- Pumps at any other angle to R.O.W. line - 25 ft. minimum; 50 ft. recommended

5.1.8 Commercial Border Area Clearance (CB) (Rural and Urban):

Commercial border area clearance shall be at least 3 feet. If border area clearance is less than 6 feet from R.O.W. line a 6” raised curb shall be required.

This clearance (and use of 6” curb) is designed to prevent vehicles from parking or being serviced within the R.O.W. line.

## 5.2 Sight Distance

Highway entrances should be located to provide adequate sight distance for all traffic movements allowed. Where sight distance requirements are not met, specific movements may be restricted. The developer of such a site may be required to perform additional grading work in order to ensure proper sight distance requirements are met. Sight distance requirements shall be in accordance with the Department's design standards, see Department's standard drawings RD01-SD series. See figures 5.1 and 5.2 below.

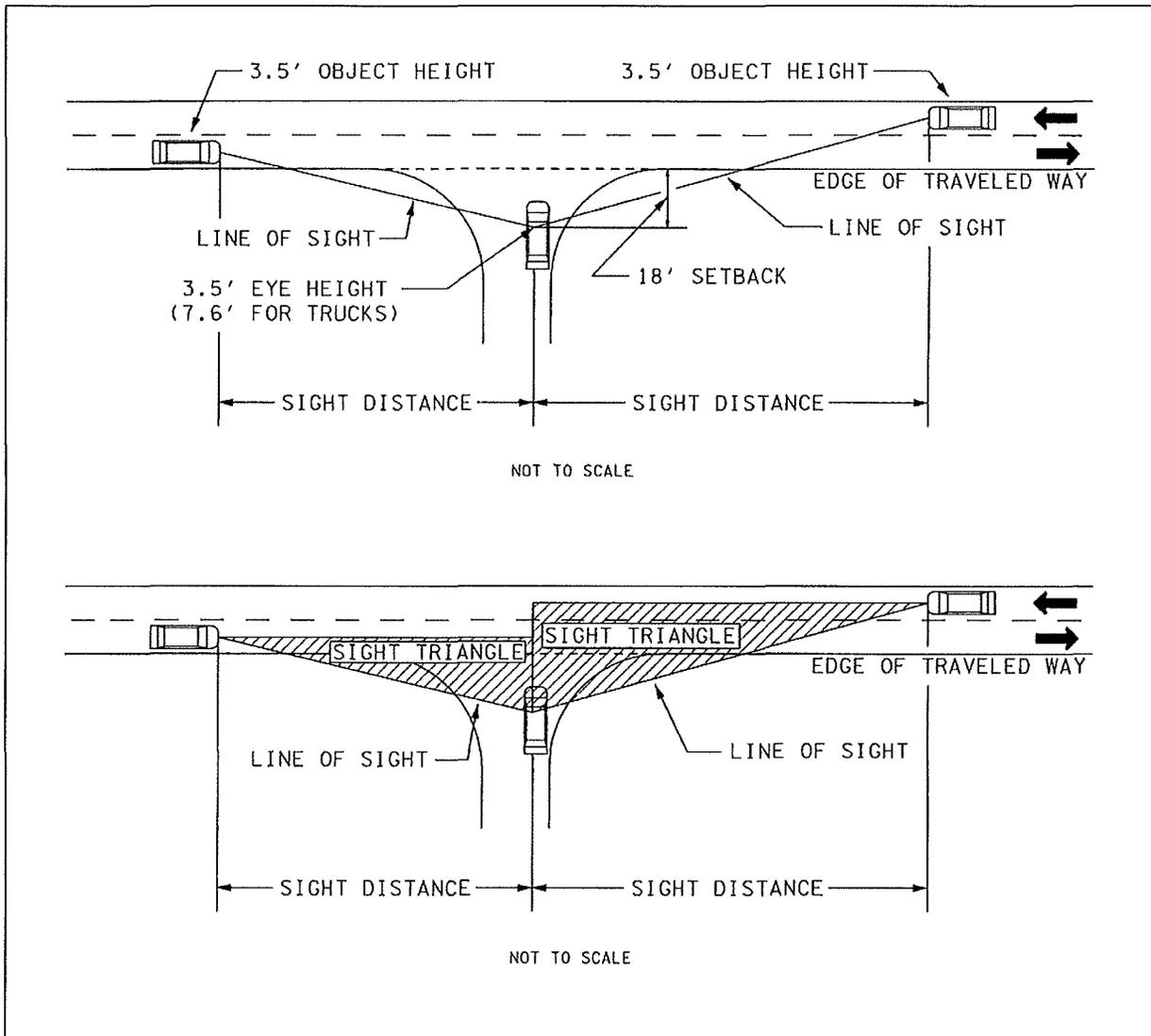


Figure 5.1: Sight Triangle

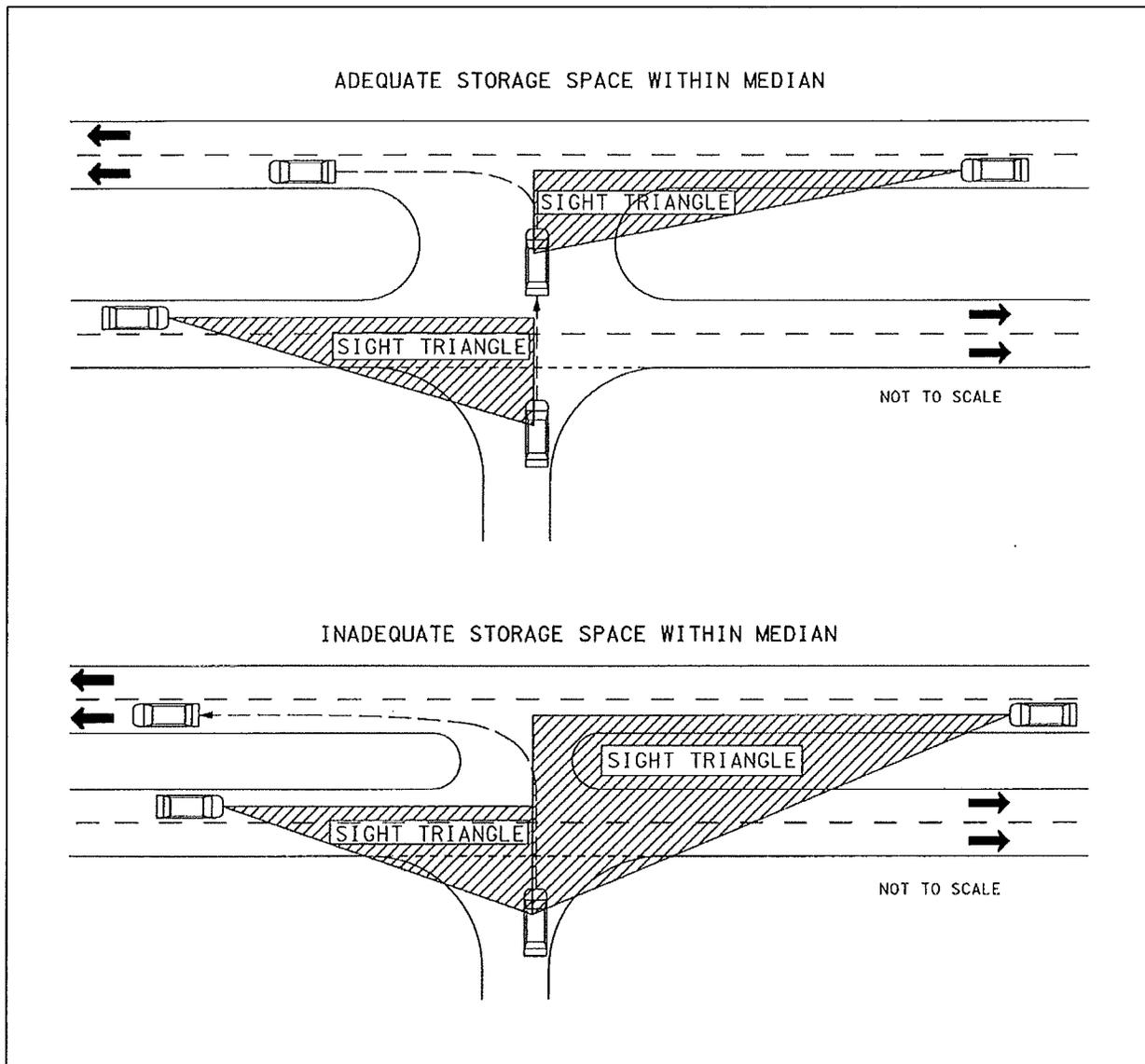


Figure 5.2: Sight Distance at Divided Highways

### 5.3 Driveway Construction and Grading Standards

All driveways connecting to state routes shall be constructed according to either local government or Department standards, whichever standards are the strictest. In the interest of safety, driveways shall be designed to minimize storm water flow from the driveway onto the public roadway. If there is a curb, the design should also minimize the diversion of storm water flowing against the curb into the driveway. Driveway side slopes shall be no steeper than 6:1. If there are culvert ends facing oncoming traffic, a side drain endwall with grates may be required. See the TDOT Traffic Engineering Office website's Highway Entrance Permit page for links to Department standard drawings.

### 5.3.1 Residential and field entrances on roads without curb & gutter:

For driveways classified as residential or field entrance, the portion of any driveway within the right-of-way should satisfy the following criteria:

- Driveway grade shall not exceed 15% (10% is recommended).
- From the edge of traveled way to the outer edge of the shoulder, the driveway grade shall match the existing shoulder grade.
- For Cut Sections - From the outer edge of the shoulder to the low point at the ditch line or over a culvert, the grade shall not exceed 8% (5% is recommended). Beyond the ditch line, the maximum grade allowed is 15% (10% is recommended).
- For Fill Sections – Beyond the outer edge of the shoulder, the grade shall not exceed 15% (10% is recommended).
- The maximum allowable difference in grade between intersecting grade lines is 10% in crests and 9% in sags
- The minimum separation distance between changes in grade is 10 feet.

### 5.3.2 All other entrance types on roads without curb & gutter:

For driveways serving all other uses, the portion of any driveway within the right-of-way shall satisfy the following criteria:

- Driveway grade shall not exceed 8% (5% is recommended).
- From the edge of traveled way to the outer edge of the shoulder, the driveway grade shall match the existing shoulder grade.
- For Cut Sections - From the outer edge of the shoulder the grade shall not exceed 8% (5% is recommended).
- For Fill Sections - Beyond the outer edge of the shoulder, the grade shall not exceed 8% (5% is recommended).
- The maximum allowable difference in grade between intersecting grade lines is 10% in crests and 9% in sags.
- The minimum separation distance between changes in grade is 30 feet.

### 5.3.3 Driveways on roads with curb & gutter:

Driveways should slope upward from the gutter line to meet the sidewalk (if applicable). Descending driveways are to be constructed in a manner which prevents water from leaving the roadway gutter. The maximum difference between the grades of the roadway cross slope and the driveway shall not exceed 10% in crests and 9% in sags. The driveway grade must not exceed 2% across a sidewalk. Beyond the outer edge of the sidewalk (or an equivalent point) the maximum allowable grade is 8% (5% recommended) for commercial applications, 15% (10% recommended) for residential applications.

Vertical Curves – All driveway vertical curves should be designed as flat as possible to prevent vehicles from dragging the pavement. This is especially important when developments are expected to serve a substantial

volume of oversized vehicles (5 or more vehicles per day with 3 or more axles). The maximum break in pavement grade, as well as all other appropriate factors, including vertical curve characteristics, should be checked by the designer to ensure adequate clearance for the long wheelbase of the oversized vehicles.

See Figure A.1 for an illustration of the regulations listed above.

## 5.4 Pavement Section

All driveways shall have a surface treatment adequate to permit reasonable use of the facility during all weather conditions. Gravel surfaces may be considered adequate for residential driveways unless drainage patterns and the grade of the driveway are likely to result in debris (including dirt and/or gravel) being transported into the roadway by storm water.

Commercial driveways shall be paved with concrete or bituminous material. The paving section shall be at least as deep as the pavement on the street or road to which access is being secured, and shall extend from the edge of the pavement of the existing roadway to either the back of the ditch line, the right-of-way line, or ten feet (10') from the outer edge of the shoulder or curb line, whichever is the greatest.

## 5.5 Signs and Pavement Markings

Signs and pavement markings shall be in accordance with the state adopted MUTCD. Markings shall be thermoplastic or as directed. Signs may be required for stop or yield conditions. Additional regulatory and/or warning signs may be required as directed. All signing and marking shall be maintained in accordance with the MUTCD.

## 5.6 Median Openings and Spacing

Medians provide safety along with improved traffic operations. In the interests of equity, openings shall be permitted at predetermined uniformly spaced specific locations. This allows a high degree of safety for the motoring public while providing reasonable access for property owners.

It is the policy of the Department to provide median openings at most existing city streets or county roads. It is also the policy of the Department to provide uniformly spaced openings for U-turn vehicles between median openings for city streets or county roads. The recommended uniform spacing is 1320 feet (a range of 880 feet - 1760 feet is acceptable) in rural areas and 660 feet (a range of 440 feet - 880 feet is acceptable) in urban areas.

Where possible, driveways should be located so that they are aligned with pre-existing median openings. When this is not possible, driveways should be located a minimum of 100 feet from the nearest median opening to minimize wrong-way movement and conflicts with traffic using the median opening.

## 5.7 Traffic Impact Studies

Due to site characteristics, new land use or development, or other circumstances, the Department may

require that a Traffic Impact Study be submitted. The following is a list of several types of new development as well as guidelines that may determine the necessity of a Traffic Impact Study, however, it is by no means complete or comprehensive. The Department has final authority to determine when a Traffic Impact Study shall be required.

- Shopping Center – 50,000+ gross square feet
- Planned Unit Development – 30+ acres
- Industrial – 200+ employees
- DHV (Design Hourly Volume) of 100 vehicles or more
- ADT (Average Daily Traffic) of 250 vehicles or more
- Residential Development – 50+ single family detached units or 100+ total dwelling units
- Offices – 50,000+ gross square feet
  - Proposed additional turning lanes
  - Proposed signalization
  - Business / Office Parks

A Traffic Impact Study shall meet the criteria established by the Institute of Transportation Engineers and shall be completed and stamped by a qualified professional engineer who is licensed by the State of Tennessee. The study shall analyze traffic conditions for both the initial development and the full development of the site under the most critical traffic situations expected. This is particularly important when considering the development of large areas, such as planned unit developments, business or office parks, large residential neighborhoods, etc. Studies are used to help assess the need for roadway improvements and modification of traffic control and channelizing devices to help alleviate the impact of new development. A Traffic Impact Study must also justify the proposed highway entrance and must demonstrate what effects the proposed development will have on adjacent roadways.

## 5.8 Auxiliary Lanes

Generally, the need for any type of auxiliary lane should be documented in a Traffic Impact Study. However, in certain situations the Department may elect to require that an auxiliary lane be constructed without requiring a Traffic Impact Study.

When adding auxiliary lanes, the entire roadway at the site should be resurfaced to prevent differential settlement, eliminate undesirable pavement contrast, and provide proper pavement markings. (See Section 5.5 regarding pavement markings) When the design of an auxiliary lane or lanes requires that the through lanes of the highway must be shifted to a new alignment, the entire roadway within the limits of the shift shall be resurfaced. All seams shall be in line with lane boundaries.

### 5.8.1 Design of Auxiliary Lanes:

The design of acceleration, deceleration, and storage lanes on state highways shall be based on the Department's Design Guidelines. See the TDO's Traffic Engineering Office website's Highway Entrance Permit page for links to Department's Design Guidelines. In addition, design of such lanes shall satisfy the following criteria:

- The installation of any auxiliary lane shall not adversely impact the access of adjacent property.
- If an auxiliary lane is required based on the recommendations of a Traffic Impact Study, the owner of the property shall install the lane(s) within the public right-of-way. Where public right-of-way is not available, the owner shall dedicate any required right-of-way under the owner's control, so that the auxiliary lane may be accommodated.
- Tapers used to introduce or terminate an auxiliary lane should be designed to meet the guidelines set forth in AASHTO's A Policy on Geometric Design of Highways and Streets, current edition, where physically possible.
- Acceleration and deceleration lane lengths should be designed to meet AASHTO guidelines where physically possible.
- Consideration should be given to provide better visibility of opposing through traffic and reducing potential conflicts between opposing left-turn vehicles by aligning opposing left turn lanes or providing a positive offset of left turn lanes.

#### 5.8.2 Unsignalized Intersections:

The determination of a warrant for and the length of left-turn storage lanes at unsignalized intersections shall be based on the Department's Design Guidelines. See the TDOT Traffic Engineering Office website's Highway Entrance Permit page for links to Department's Design Guidelines.

#### 5.8.3 Signalized Intersections:

The length of left-turn and right-turn storage lanes at signalized intersections shall be determined as part of a Traffic Impact Study.

### 5.9 Department's Design Standards and Guidelines

The edition of the Department's Standard Drawings and Design Guidelines required to be met are the ones in effect on the date of application for a Highway Entrance Permit.

## 6 – Drainage

### 6.1 General

Each new entrance and associated buffer areas shall be constructed so as to prevent water from flowing onto the roadway or shoulder and also shall not impair drainage within the right-of-way. In addition, new entrances and buffer areas shall not materially alter the drainage characteristics of adjacent property. All culverts, catch basins, drainage channels, and other drainage structures required within the buffer area and under driveways as the result of the property being developed shall be designed and installed in accordance with current standards set by the Department.

### 6.2 Design of Drainage Systems

Drainage discharged into the state highway drainage system shall not exceed the undeveloped flow rate, as determined in accordance with the Department's design policy. Applicants may be required to submit a drainage plan, as well as all appropriate hydrologic and hydraulic calculations, which show that the proposed system will adhere to the regulations set forth by the Department, and the plan shall be subject to approval by the appropriate Department official. Required drainage plans shall be stamped by a qualified professional engineer who is licensed by the State of Tennessee.

Drainage pipes shall be a minimum of eighteen inches (18") in diameter, and type "6D" endwalls shall be required if the drainage pipe falls within the clear zone or if the speed limit is greater than or equal to 50 miles per hour. In other conditions, endwalls may still be required (see the TDOT Traffic Engineering Office website's Highway Entrance Permit page for links to Department's Design Guidelines - for further information on endwalls). Drainage pipes underneath driveways shall extend beyond the driveway and radius. All drainage structures, including endwalls and culverts, shall be installed by the applicant in accordance with Department standards. The drainage design must be approved by the Department prior to construction.

### 6.3 Construction

Erosion and sediment control devices, designed according to Department standards, shall be shown on the drainage plan and installed as the first phase of construction. **Please Note:** It is the responsibility of the applicant to ensure that all storm water quality requirements are met. Other agencies that have storm water regulations, such as the Tennessee Department of Environment and Conservation or city and county governments, may require additional drainage management practices.

Structures connecting to the highway drainage system shall be constructed so as to prevent scour, erosion, and blockage of existing structures. Drainage systems shall not alter the stability of roadway subgrades, nor shall they adversely affect the existing profile or cross-section.

Curbs on driveways or street-type entrances shall not continue beyond the right-of-way line or ditch line

when the driveway or street-type entrance connects to a roadway without curbs.

## 7 – Engineering Exceptions

### 7.1 General

It is recognized that certain developments, due to location, topography, or other conditions, may not be able to meet the criteria set forth in this manual. In such cases, the applicant shall request, in writing, that an exception to the Department's policy be made. The request shall show why the requirements of Department policy cannot be met and the effect the proposed exception will have.

All requests for exceptions shall be made to the Region Traffic Engineering Office that is handling the proposed entrance permit. Once reviewed by the Region Traffic Engineer, potentially acceptable requests shall be forwarded to the State Traffic Engineer's Office at Tennessee Department of Transportation Headquarters to grant or deny exception based on the majority decision reached by a panel of transportation professionals with knowledge relevant to the unique conditions of the exception. The panel will meet quarterly and all requests must be received two weeks prior to the scheduled meeting in order to be considered. The Region Traffic Engineering Office that is submitting the request will then be notified of the decision and the Region Traffic Engineering Office will in turn notify the applicant.

All correspondence and notification shall be in writing and shall be included as an addendum to the issued permit.

## 8– Maintenance

### 8.1 General

#### Property Owner's Responsibility

It is the responsibility of the property owner to maintain the following:

- Entrance surface material (paved or gravel), shoulder and slopes from the highway edge of pavement to the right-of-way line.
- Pavement markings from the highway edge of pavement to the right-of way line.

#### Department's Responsibility

It is the responsibility of the Department to maintain the following:

- Entrance drainage structures within the state's right-of-way, if installed under a Department issued permit. Entrance pipes and culverts properly installed on public right-of-way under a highway entrance permit become the property of the Department.

#### Approved Permitting Authority's Responsibility

It is the responsibility of the local permitting authority within their jurisdiction to maintain the following:

- Entrance drainage structures within the state's right-of-way, if installed under a Municipality issued permit. Entrance pipes and culverts properly installed on public right-of-way under a highway entrance permit become the property of the Municipality.

Refer to Section 2.3 of this manual for a detailed discussion on local authorities with sole responsibility for issuing Highway Entrance Permits within their jurisdiction.

## A – Example Drawings

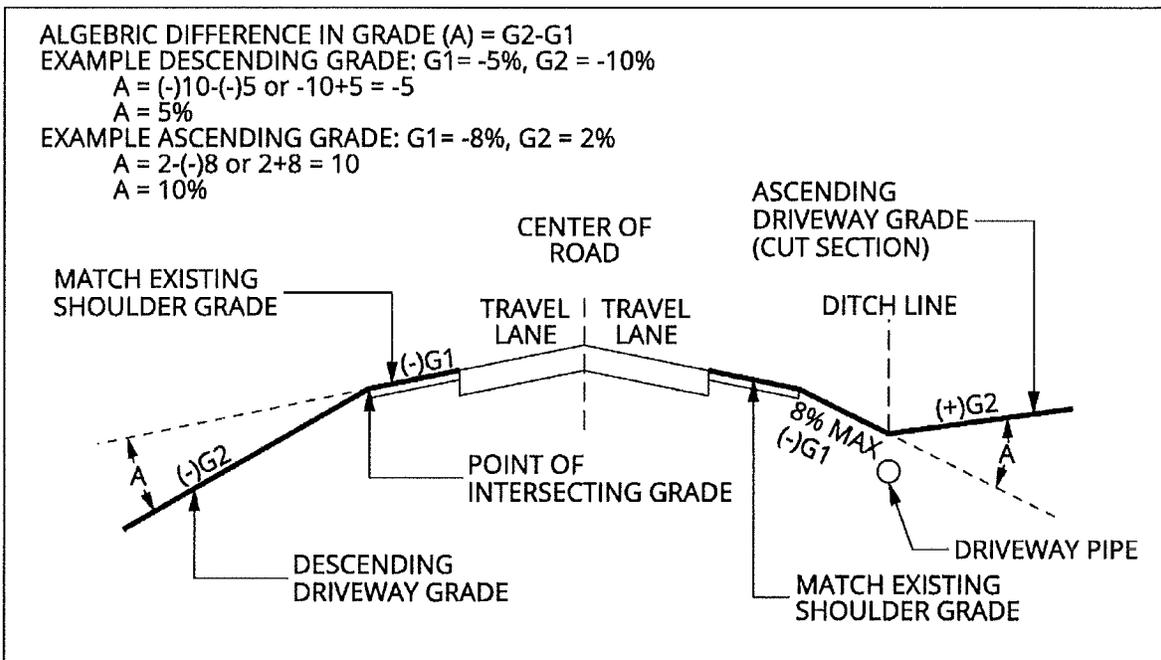
The following diagrams are included for illustrative purposes only. Applicants may use them as a guide, but each location must be considered individually. Actual layouts of planned highway entrances may differ based on topography, property line configuration, sight distance, traffic generated by new development, or other factors.

### Legend

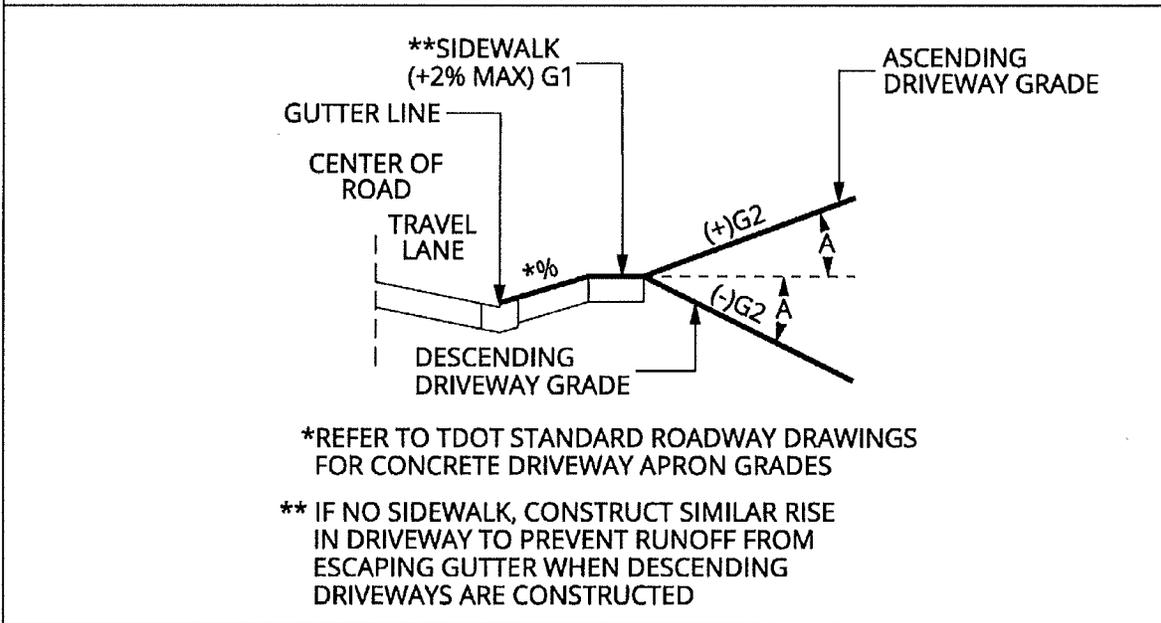
E = Edge Clearance	C = Corner Clearance
W = Width	CB = Commercial Border Area Clearance
R = Radius of Curvature	F = Fuel Pump Clearance
Y = Driveway Angle	D = Distance b/w Double Driveways
R.O.W. = Right-of-Way	F.B. = Frontage Boundary
G1 = Grade of Roadway Constraint	G2 = Grade of Driveway
A = Algebraic Difference In Grade (G2%-G1%)	

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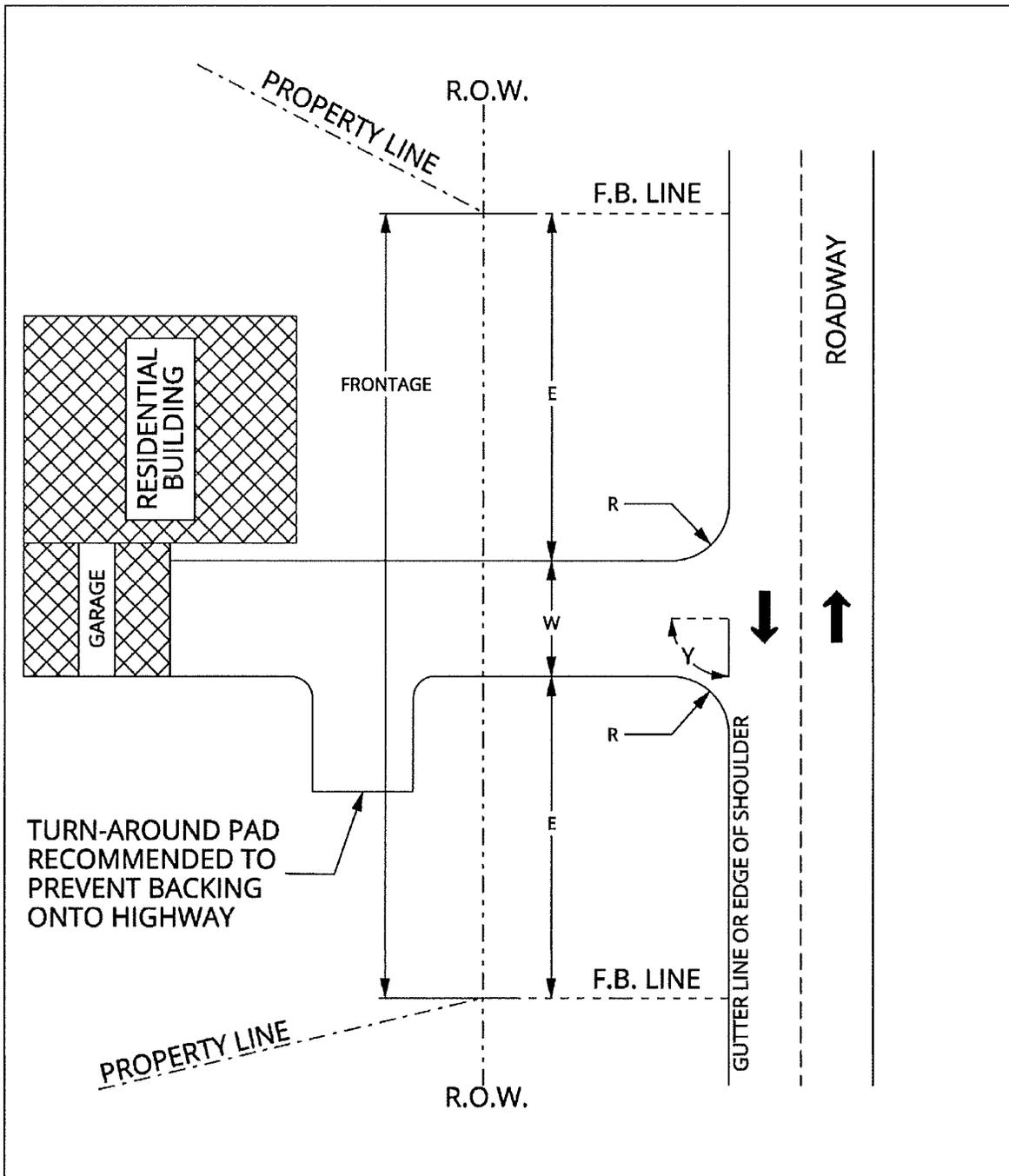


ROADWAYS WITH SHOULDERS



ROADWAYS WITH CURB

A = ALGEBRAIC DIFFERENCE (G2%-G1%)	SECTION 5.3	STATE OF TENNESSEE
G1 = GRADE OF ROADWAY CONSTRAINT	SECTION 5.3	
G2 = GRADE OF DRIVEWAY	SECTION 5.3	
FIGURE A.1 DOES NOT SHOW PROFILES FOR NEW STREET CONNECTIONS. REFER TO TDOT STANDARD ROADWAY DRAWINGS		FIGURE A.1
		DRIVEWAY PROFILE SCHEMATIC
		NOT TO SCALE
		06/22/2015



E = EDGE CLEARANCE  
 W = WIDTH  
 R = RADIUS OF CURVATURE  
 Y = DRIVEWAY ANGLE  
 F.B. = FRONTAGE BOUNDARY

SECTION 5.1.1  
 SECTION 5.1.4  
 SECTION 5.1.3  
 SECTION 5.1.2  
 SECTION 1.6

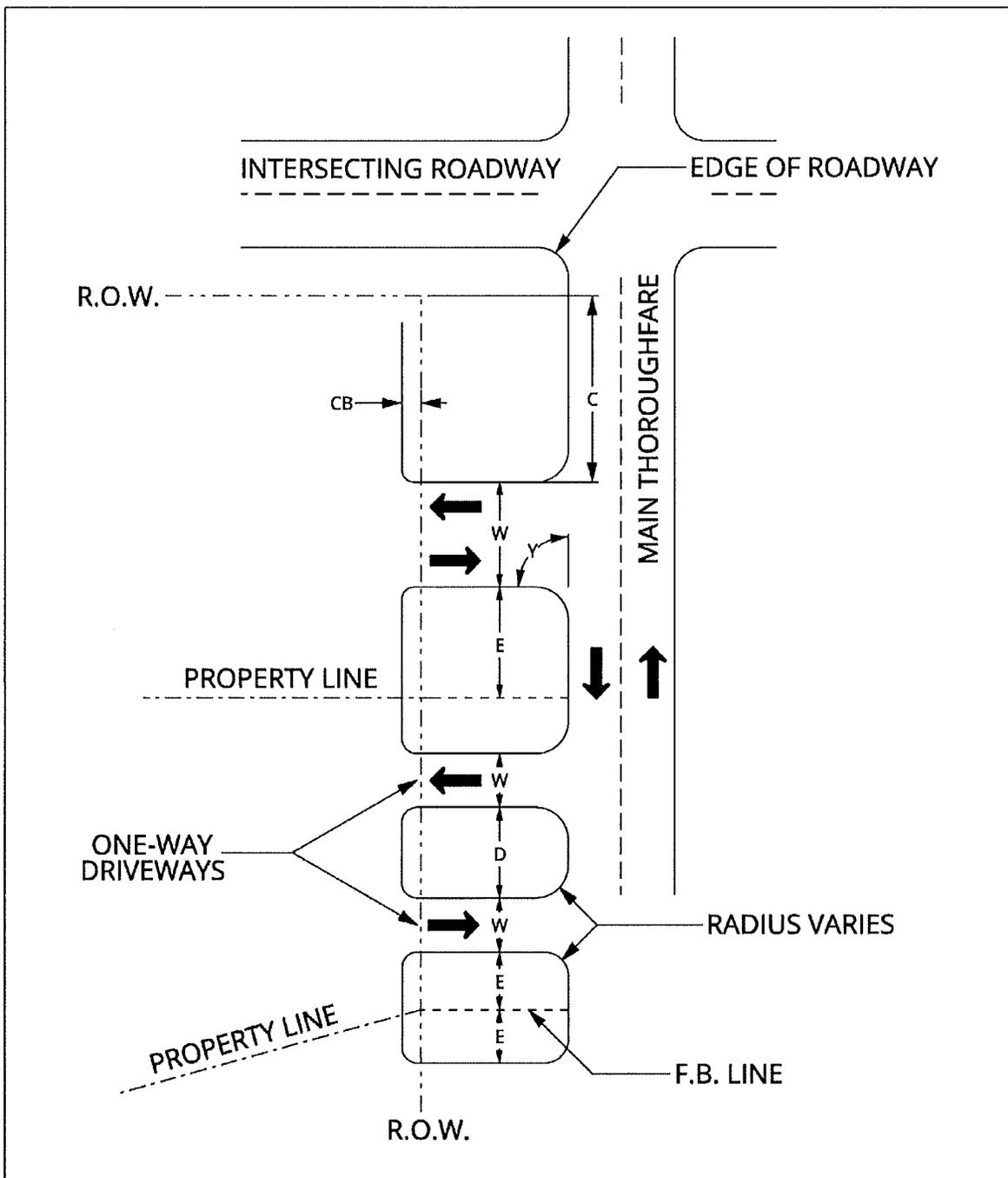
STATE OF TENNESSEE

**FIGURE A.2**

**TYPICAL  
 RESIDENTIAL  
 DRIVEWAY**

NOT TO  
 SCALE

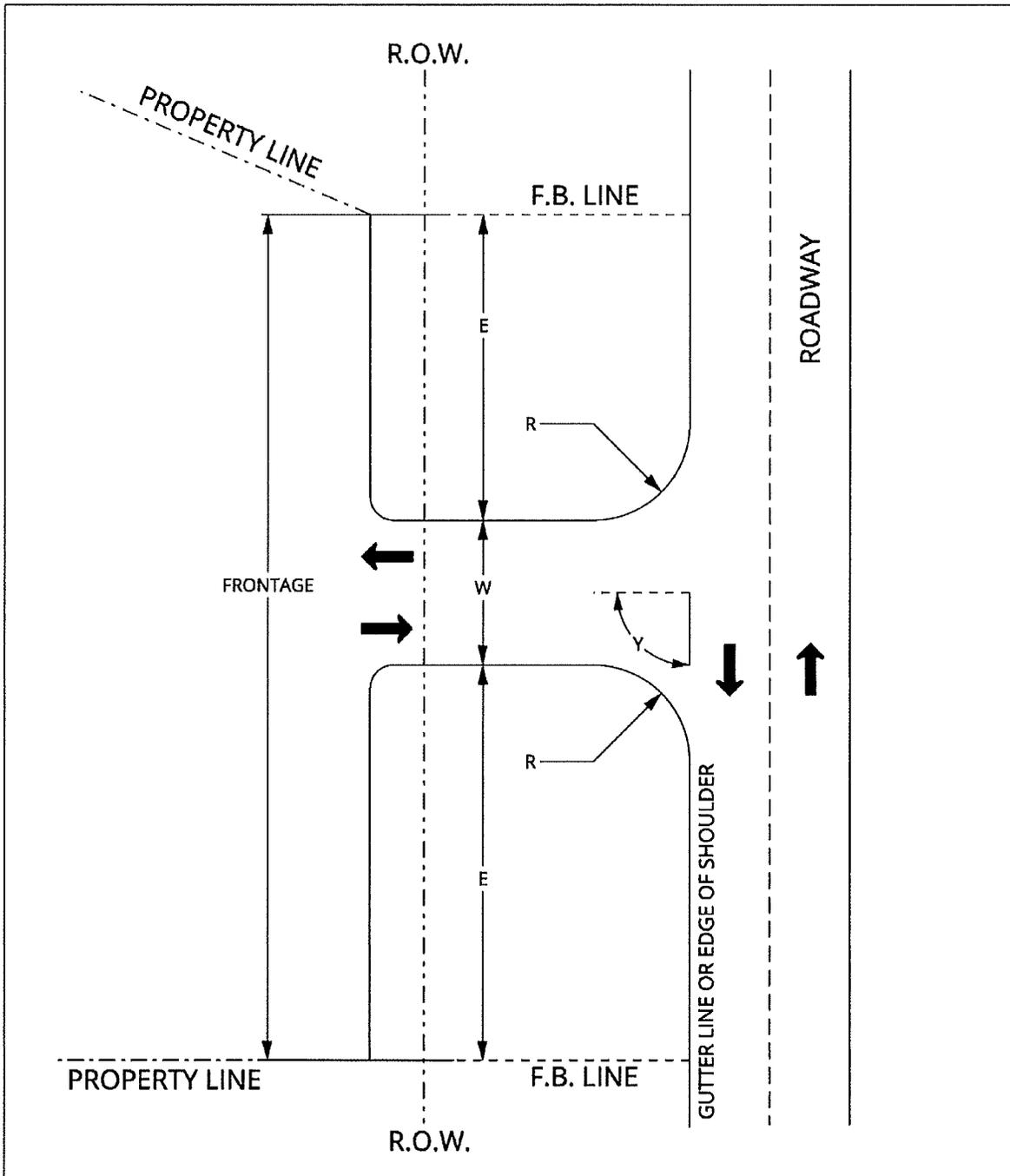
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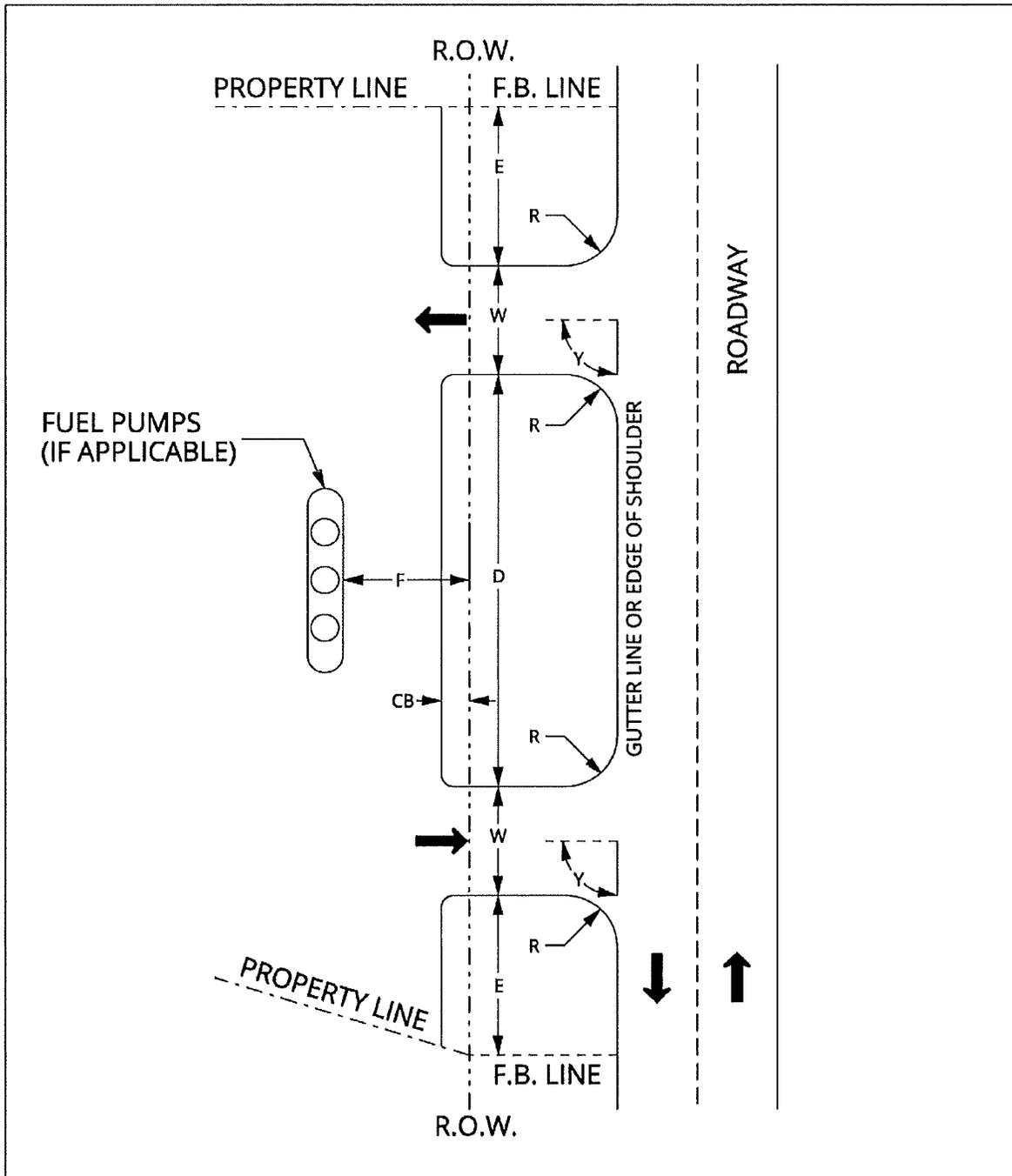
E = EDGE CLEARANCE  
 W = WIDTH  
 Y = DRIVEWAY ANGLE  
 C = CORNER CLEARANCE  
 CB = COMMERCIAL BORDER AREA CLEARANCE  
 D = DISTANCE BETWEEN DOUBLE DRIVEWAYS  
 F.B. = FRONTAGE BOUNDARY

SECTION 5.1.1  
 SECTION 5.1.4  
 SECTION 5.1.2  
 SECTION 5.1.5  
 SECTION 5.1.8  
 SECTION 5.1.6  
 SECTION 1.6

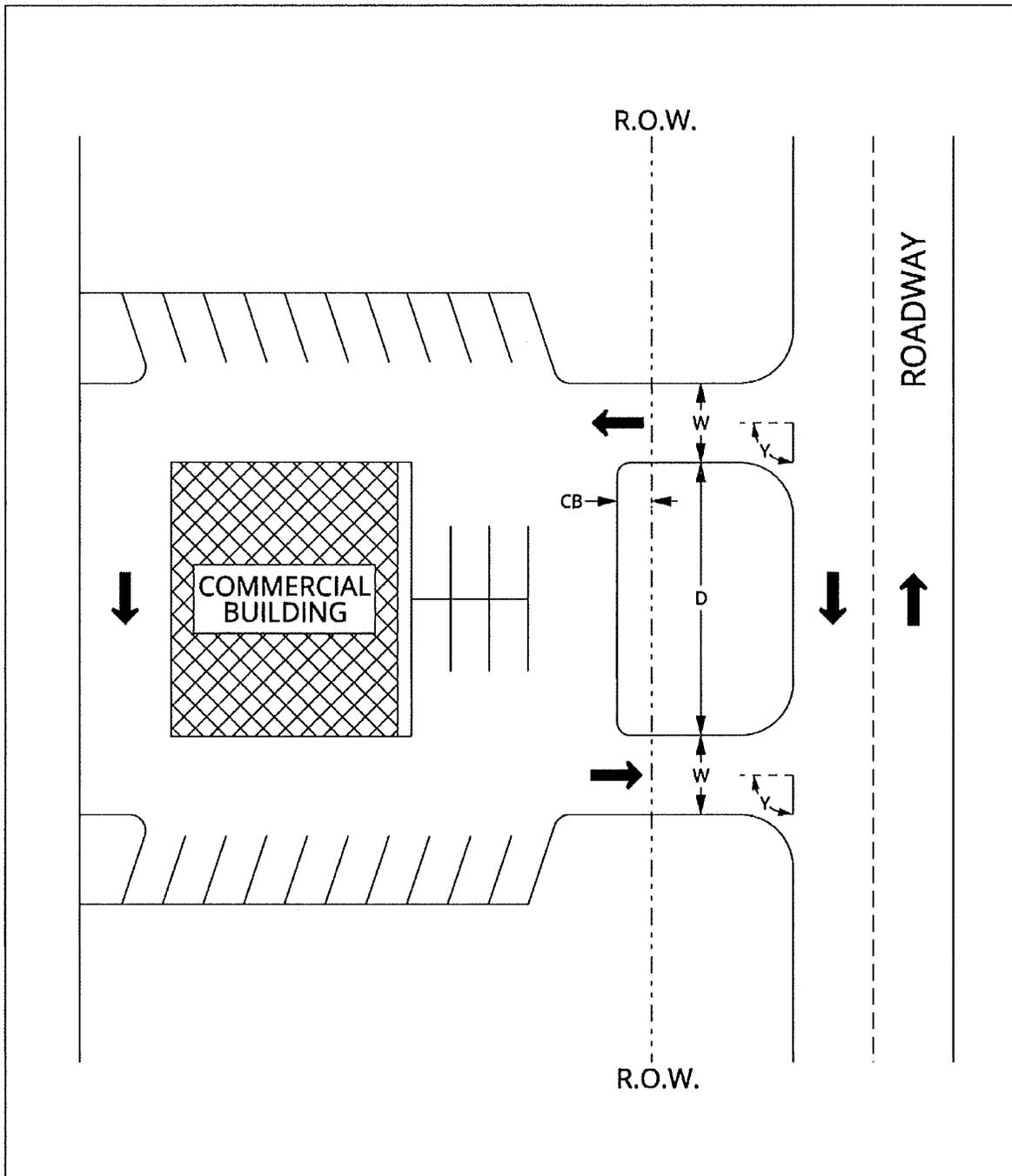
STATE OF TENNESSEE	
<b>FIGURE A.3</b>	
<b>COMMERCIAL DRIVEWAY CONTROL DIMENSIONS</b>	
NOT TO SCALE	06/22/2015



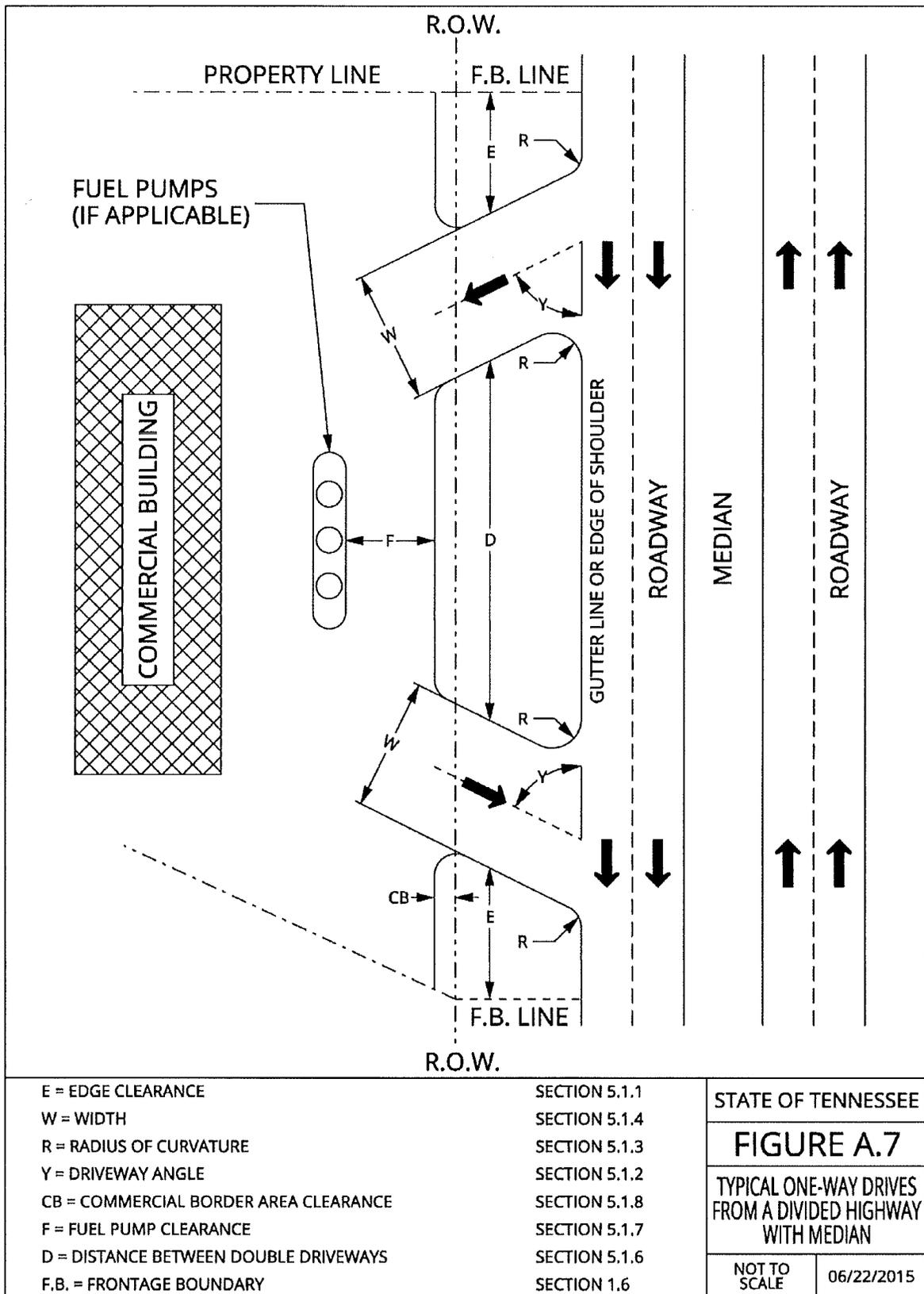
E = EDGE CLEARANCE	SECTION 5.1.1	STATE OF TENNESSEE	
W = WIDTH	SECTION 5.1.4	<b>FIGURE A.4</b>	
R = RADIUS OF CURVATURE	SECTION 5.1.3	TYPICAL TWO-WAY COMMERCIAL DRIVEWAY	
Y = DRIVEWAY ANGLE	SECTION 5.1.2		
F.B. = FRONTAGE BOUNDARY	SECTION 1.6		
		NOT TO SCALE	06/22/2015



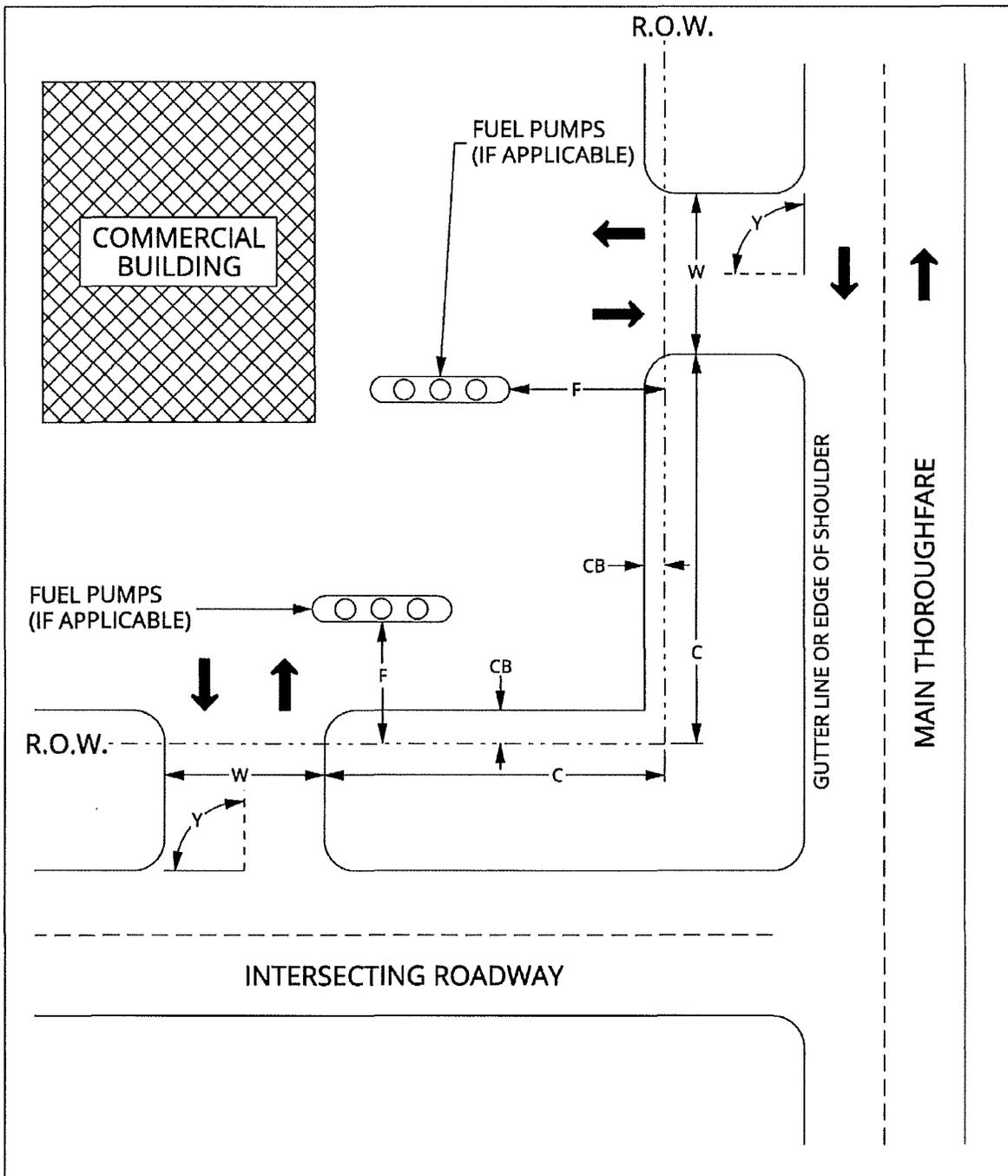
E = EDGE CLEARANCE	SECTION 5.1.1	STATE OF TENNESSEE	
W = WIDTH	SECTION 5.1.4	<b>FIGURE A.5</b>	
R = RADIUS OF CURVATURE	SECTION 5.1.3	TYPICAL ONE-WAY COMMERCIAL DRIVEWAY	
Y = DRIVEWAY ANGLE	SECTION 5.1.2	NOT TO SCALE	06/22/2015
CB = COMMERCIAL BORDER AREA CLEARANCE	SECTION 5.1.8		
F = FUEL PUMP CLEARANCE	SECTION 5.1.7		
D = DISTANCE BETWEEN DOUBLE DRIVEWAYS	SECTION 5.1.6		
F.B. = FRONTAGE BOUNDARY	SECTION 1.6		



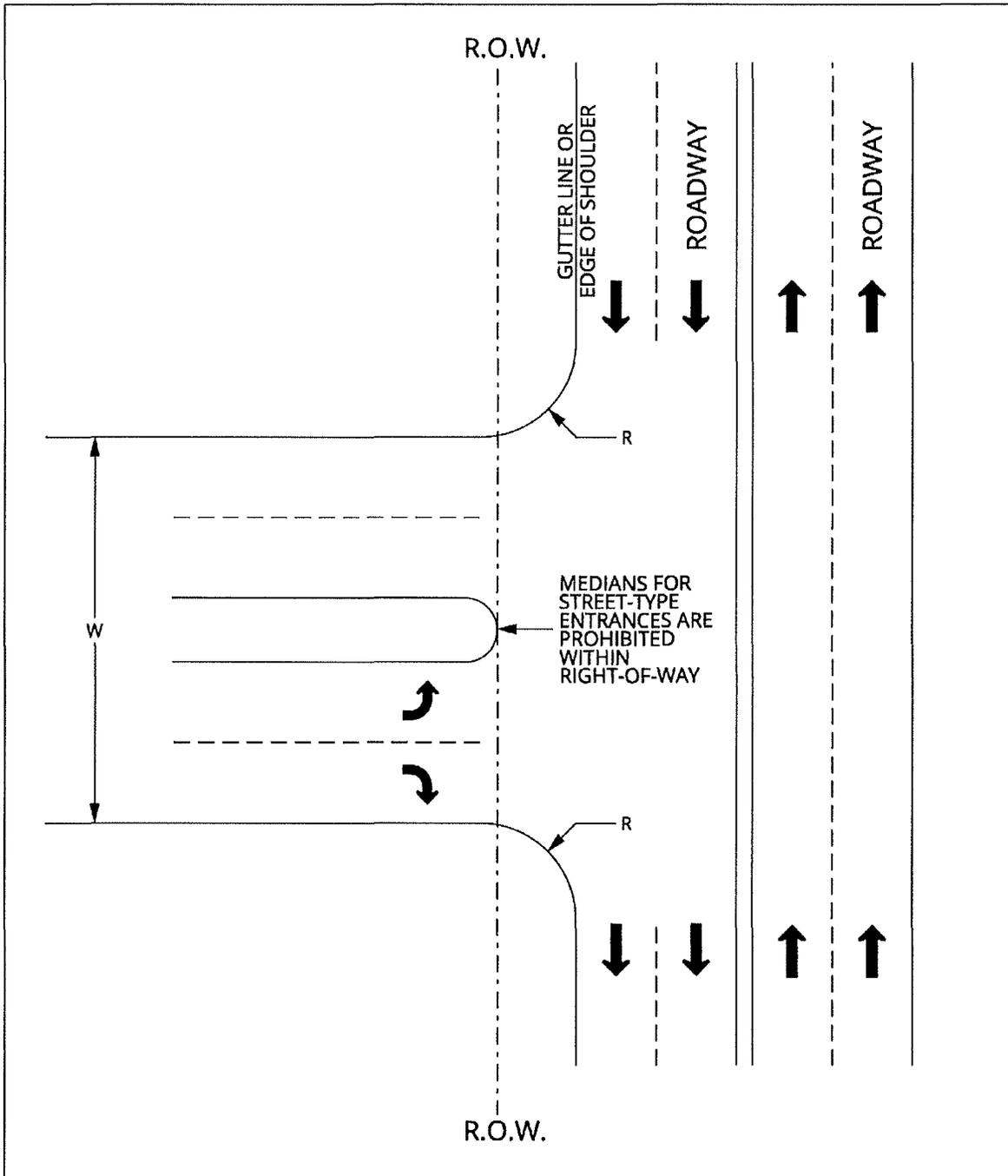
W = WIDTH	SECTION 5.1.4	STATE OF TENNESSEE
Y = DRIVEWAY ANGLE	SECTION 5.1.2	<b>FIGURE A.6</b>
CB = COMMERCIAL BORDER AREA CLEARANCE	SECTION 5.1.8	TYPICAL COMMERCIAL DRIVE-THROUGH WITH ONE-WAY DRIVEWAYS
D = DISTANCE BETWEEN DOUBLE DRIVEWAYS	SECTION 5.1.6	NOT TO SCALE
		06/22/2015



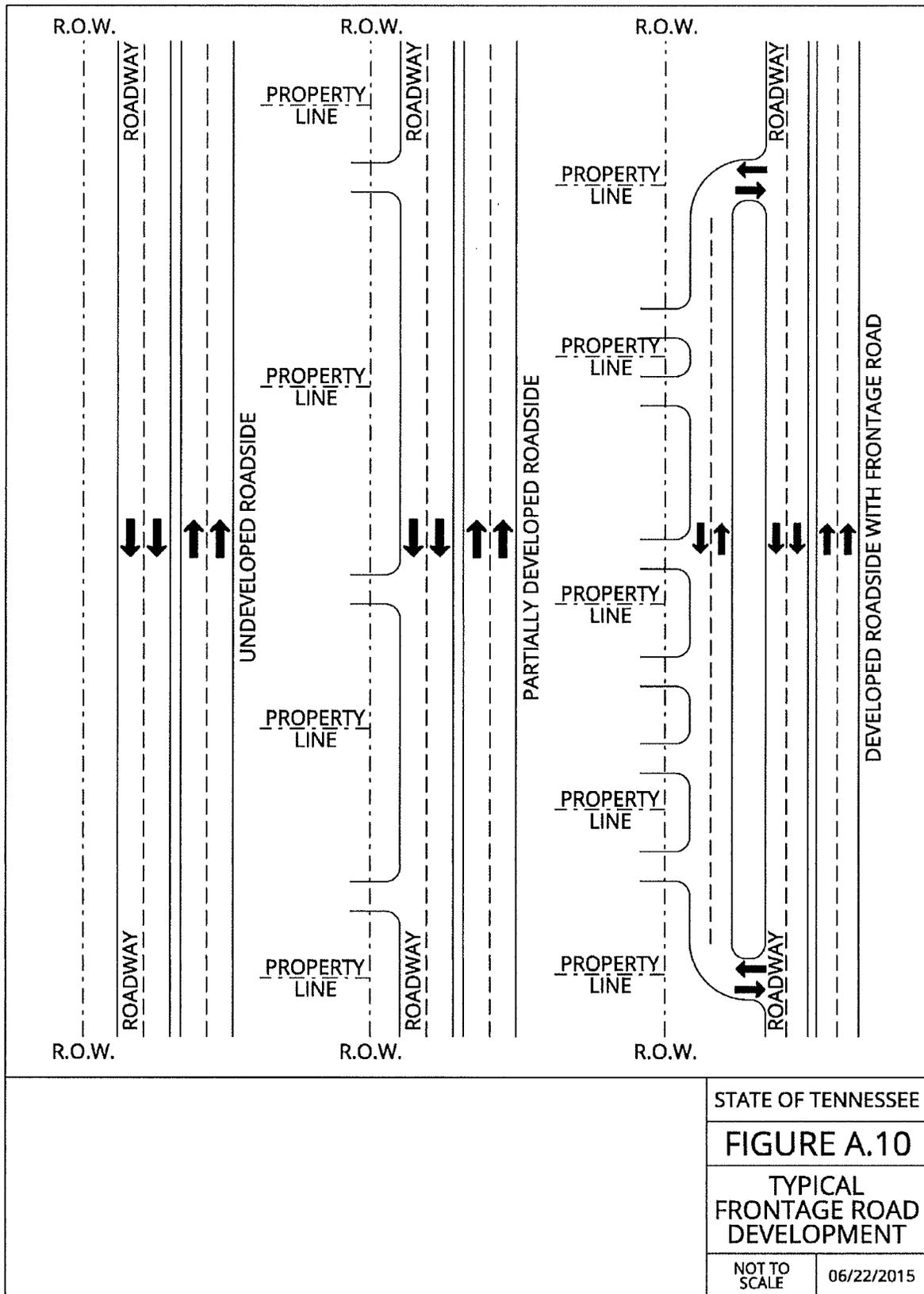
STATE OF TENNESSEE  
**FIGURE A.7**  
 TYPICAL ONE-WAY DRIVES FROM A DIVIDED HIGHWAY WITH MEDIAN  
 NOT TO SCALE | 06/22/2015

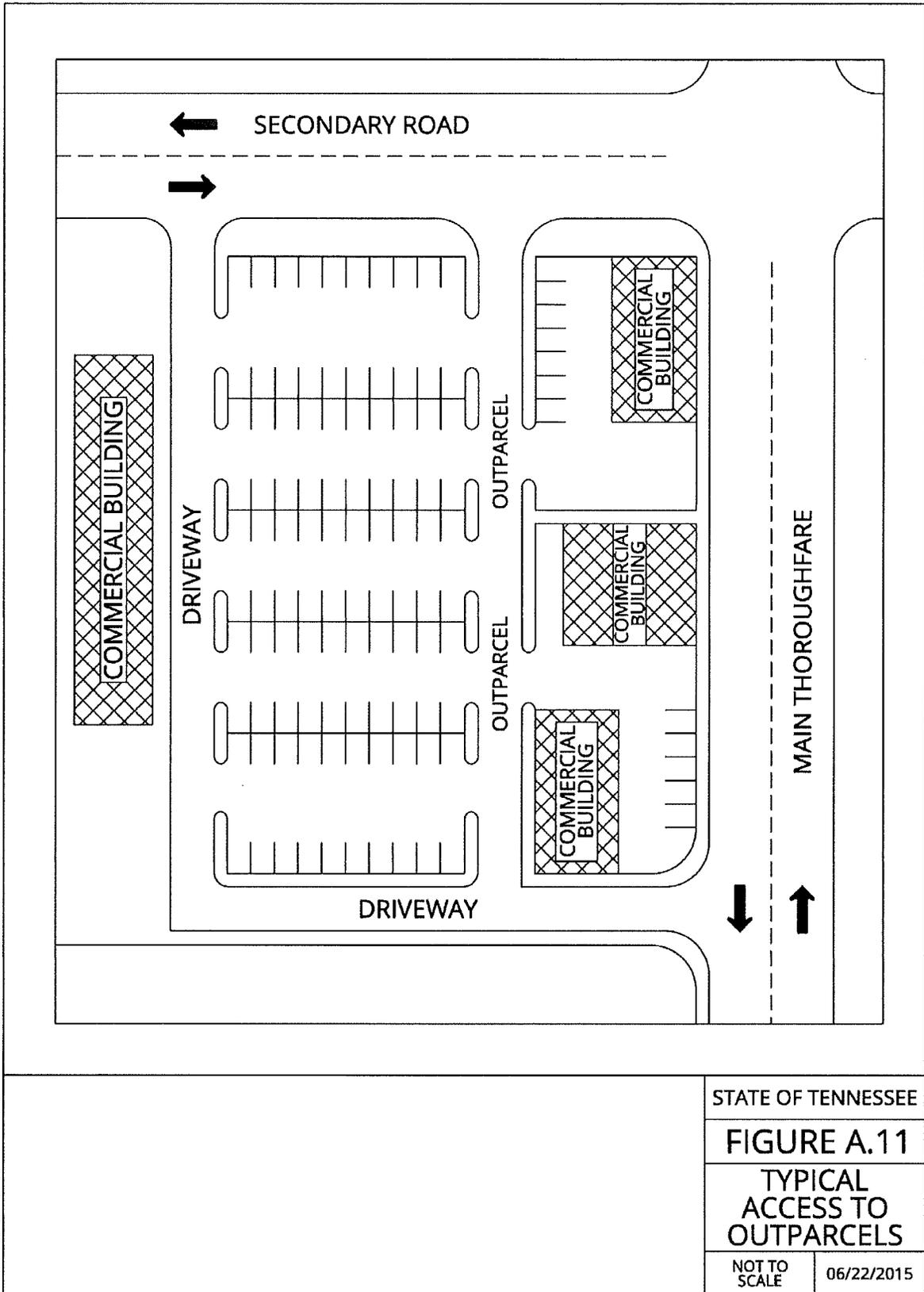


W = WIDTH	SECTION 5.1.4	STATE OF TENNESSEE	
Y = DRIVEWAY ANGLE	SECTION 5.1.2	<b>FIGURE A.8</b>	
C = CORNER CLEARANCE	SECTION 5.1.5	TYPICAL COMMERCIAL DRIVEWAYS CORNER LOT	
CB = COMMERCIAL BORDER AREA CLEARANCE	SECTION 5.1.8		
F = FUEL PUMP CLEARANCE	SECTION 5.1.7		
		NOT TO SCALE	06/22/2015



W = WIDTH	SECTION 5.1.4	STATE OF TENNESSEE	
W = 50 FT. MAX		<b>FIGURE A.9</b>	
R = RADIUS OF CURVATURE	SECTION 5.1.3	TYPICAL STREET-TYPE ENTRANCE WITH MEDIAN	
NOTE: ALL STREET-TYPE ENTRANCES SHALL BE DESIGNED TO MEET AASHTO SPECIFICATIONS		NOT TO SCALE	06/22/2015





STATE OF TENNESSEE

**FIGURE A.11**

**TYPICAL  
ACCESS TO  
OUTPARCELS**

NOT TO  
SCALE

06/22/2015

\* If a roll-call vote was necessary, the vote by the Agency on these rulemaking hearing rules was as follows:

Board Member	Aye	No	Abstain	Absent	Signature (if required)

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Department (board/commission/ other authority) on 09/21/2015 (mm/dd/yyyy), and is in compliance with the provisions of T.C.A. § 4-5-222.

I further certify the following:

Notice of Rulemaking Hearing filed with the Department of State on: 04/16/15

Rulemaking Hearing(s) Conducted on: (add more dates). 06/11/15

Date: 9-21-2015

Signature: [Handwritten Signature]

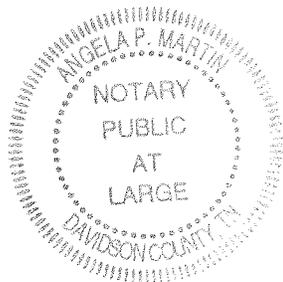
Name of Officer: John C. Schroer

Title of Officer: Commissioner

Subscribed and sworn to before me on: 21<sup>st</sup> September, 2015

Notary Public Signature: Angela P. Martin

My commission expires on: 3/8/2016



All rulemaking hearing rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

Herbert H. Slatery III  
Herbert H. Slatery III  
Attorney General and Reporter

12/11/2015  
Date

Department of State Use Only

Filed with the Department of State on: 12/28/15

Effective on: 3/27/16

Tre Hargett  
Tre Hargett  
Secretary of State

RECEIVED  
2015 DEC 28 PM 2:21  
SECRETARY OF STATE  
PUBLICATIONS

## Public Hearing Comments

Of the few in attendance at the public hearing, the response was positive, supporting the idea of updated rules and creation of the Manual for Constructing Driveway Entrances on State Highways. Below is a list of questions posed at the public hearing.

Question: May written comments be emailed?

Affirmative. However, no written comments of any format were received by the Department.

Question: Will the Department's new driveway entrance website be visible before June 30, 2015?

The website is currently under construction.

Question: Will the driveway manual be in effect by the end of the year?

Dependent upon remainder of rulemaking process.

Question: Manual Section 2.1 General states that no person may construct a driveway or related encroachment. Is there a penalty for so doing?

Affirmative. Class B misdemeanor, \$500.00 fine per T.C.A. § 54-5-301; encroachments subject to removal per T.C.A. § 54-5-136.

### **Regulatory Flexibility Addendum**

Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule affects small businesses.

Rule 1680-10-01-.01: The new rule states that the purpose of Chapter 1680-10-01, Constructing Driveway Entrances on State Highway Rights-of-Way, is to establish an application process for requesting driveway permits, standards and guidelines for granting driveway permits, and provisions for requesting a variance from the standards. It further expresses the Department's intent in the permitting process is to provide reasonable access to property owners while protecting the safe and efficient operation of the state highway system. As such, the rule has no direct impact on small businesses but reflects the Department's intent to implement a balanced approach.

Rule 1680-10-01-.02: The new rule restates the statutory mandate in T.C.A. § 54-5-302 that no driveway entrance shall be constructed on any state highway without first having obtained a permit in accordance with the Department of Transportation's regulations. As such, the rule has no direct impact on small businesses and again reflects the Department's intent to implement a balanced approach between the private right of access and the public's interest in the operation of a safe and efficient state highway system.

Rule 1680-10-01-.03: The new rule adopts the Tennessee Department of Transportation, Manual for Constructing Driveway Entrances on State Highways, 2015 Edition, set forth in Rule 1680-10-01-.04, Appendix, as the regulations governing the permitting of driveways on state highways. This is similar to TDOT Rule 1680-03-01-.02, whereby the Department has adopted the Federal Highway Administration, Manual on Uniform Traffic Control Devices, to govern the design and location of all signs, signals, markings and postings of traffic regulations on all streets and highways in the State of Tennessee. The Driveway Manual is discussed below.

Rule 1680-10-01-.04: The new rule incorporates the text of the Tennessee Department of Transportation, Manual for Constructing Driveway Entrances on State Highways, 2015 Edition ("Driveway Manual"). The Driveway Manual updates and replaces the content of the Department's existing Chapter 1680-02-01, Constructing Driveways on State Highway Right of Way, which was promulgated in 1974. The purpose of the new Driveway Manual is to update the driveway regulations – for example, to make them consistent with the Department's current design standards – and put them in a more accessible and easier to use format. (See summary of changes below.) New language has been added regarding the sharing of driveway maintenance responsibilities to formalize how most driveways are currently maintained. New language has also been added to aid land developers in coordinating with state and local permitting authorities to improve and expedite the permitting process and aid developers in making more informed property investment decisions. While some of the new standards and requirements are more restrictive than the existing rules, adjoining property owners and the public generally will benefit from the improved safety and efficiency of the highway system. Also, the new manual adds a process for requesting variances from the standards in appropriate circumstances.

In accordance with T.C.A. § 4-5-403, the following information is provided:

(1) The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, or directly benefit from the proposed rule:

The proposed Driveway Manual will not impact any one type of business more than any other, and the number of businesses, small or otherwise, that may potentially be impacted cannot be determined. The updated design standards will apply to future applicants for new driveway entrance permits on state highways but will not be applied retroactively to existing driveways unless the driveway is to be modified or replaced.

(2) The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record:

The proposed Driveway Manual does not impose any reporting or recordkeeping requirements on any private businesses. The driveway permit records will be maintained by TDOT. Businesses applying for a driveway permit will incur some administrative costs, e.g., applicants will be required to provide a

performance bond and liability insurance during construction so as to assure that the driveway is constructed according to the approved plans and that the applicant is responsible for any injuries to third parties. In some cases, particularly with larger developments, the business or developer may be required to submit a site plan, traffic control plan, and/or a traffic impact study with the driveway permit application. The purpose of these requirements is to control storm water drainage and to protect the public interest in the safe and efficient flow of traffic.

(3) A statement of the probable effect on impacted small businesses and consumers:

As noted in the response to item (2), some businesses may incur additional administrative costs, particularly with larger developments. The businesses and the motoring public generally will benefit from better control of storm drainage onto state highway right-of-way and from improved safety and efficiency of traffic flow on state highways. In general, the proposed new Driveway Manual will implement current design standards and national best practices, and it will bring more clarity and consistency in the enforcement of these standards.

(4) A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule that may exist, and to what extent the alternative means might be less burdensome to small business:

Any additional administrative costs will primarily fall on larger developments that have the potential for greater adverse effects on storm drainage and traffic flow. New developments are already required to prepare a site plan in order to obtain a local building permit, and any additional requirement such as a traffic impact study will be imposed as needed on the entity which will benefit from the new development. This will assist the Department in managing the potentially adverse impacts on traffic that may be created by the development.

(5) A comparison of the proposed rule with any federal or state counterparts:

The intent of the proposed new Driveway Manual is to promote better decisions by developers in how they access state highways in order to benefit both the traveling public and customers accessing businesses adjacent to the highway. The National Cooperative Highway Research Program (NCHRP) Synthesis 304 report on Driveway Regulation Practices, published by the Transportation Research Board in 2002, is the most current report available that compares driveway permitting differences between states. The majority of states surveyed reported improved safety, roadway level of service, improved driveway design, and better site design.

The Department's proposed regulations are generally more permissive than driveway regulations in other states, as demonstrated by the following comparisons with current regulations in other southeastern states:

Corner Clearance

TN (Current): 25' to 30'  
TN (Proposed): 50' to 200'  
SC: 75' to 400'  
GA: 125' to 550'

Driveway Maintenance

TN (Current): Not specified  
TN (Proposed): Property owner responsible for maintaining driveway entrance surface material (paved or gravel), shoulder, and slopes from the highway edge of pavement to the right-of-way line. TDOT will maintain drainage pipe.  
FL: Property owner responsible for maintaining entrance up to back of sidewalk or 5 feet from edge of pavement.  
GA: Property owner to provide routine maintenance of the pipe and driveway up to the roadway edge of pavement.  
NC: Property owner responsible for maintaining entrance up to back of curb or 6 feet from edge of pavement. Property owner must replace damaged drainage pipe. Driveways deemed a danger to the public will be barricaded until repairs are made.

Median Openings

TN (Current): Not specified

TN (Proposed): 880' to 1760' (Current TDOT Road Design Policy)

SC: 500' to 1000'

GA: 1000' to 2640'

NC: 1200' to 2000'

(6) Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule:

The proposed rules contain a provision allowing for engineering exceptions where the general driveway standards cannot be met.

## Impact on Local Governments

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (<http://state.tn.us/sos/acts/106/pub/pc1070.pdf>) of the 2010 Session of the General Assembly)

Rule 1680-10-01-.01: The new rule states that the purpose of Chapter 1680-10-01, Constructing Driveway Entrances on State Highway Rights-of-Way, is to establish an application process for requesting driveway permits, standards and guidelines for granting driveway permits, and provisions for requesting a variance from the standards. It further expresses the Department's intent to work with local governments to provide reasonable access to the state highway system. As such, the rule has no direct impact on local governments but reflects the Department's intent to implement a balanced approach.

Rule 1680-10-01-.02: The new rule provides that the Department's regulation of driveway entrances on state highways is in addition to any county or municipal land use regulations that may also regulate the construction of driveways within their jurisdiction; therefore, the rule has no direct impact on local governments.

Rule 1680-10-01-.03: The new rule adopts the Tennessee Department of Transportation, Manual for Constructing Driveway Entrances on State Highways, 2015 Edition, as set forth in Rule 1680-10-01-.04, Appendix, as the regulations governing the permitting of driveways on state highways. This is similar to TDOT Rule 1680-03-01-.02, whereby the Department has adopted the Federal Highway Administration, Manual on Uniform Traffic Control Devices, to govern the design and location of all signs, signals, markings and postings of traffic regulations on all streets and highways in the State of Tennessee. The impact of the proposed new Driveway Manual is described below.

Rule 1680-10-01-.04: The new rule incorporates the text of the Tennessee Department of Transportation, Manual for Constructing Driveway Entrances on State Highways, 2015 Edition. The Driveway Manual updates and replaces the content of the Department's existing Chapter 1680-02-01, Constructing Driveways on State Highway Right of Way, which was promulgated in 1974. The purpose of the new Driveway Manual is to update the driveway regulations and put them in a more accessible and easier to use format (see summary of changes below). New language has been added to aid land developers in coordinating with state and local permitting authorities to improve and expedite the permitting process. As such, any impact on local governments should be positive.

## Additional Information Required by Joint Government Operations Committee

All agencies, upon filing a rule, must also submit the following pursuant to T.C.A. § 4-5-226(i)(1).

- (A) A brief summary of the rule and a description of all relevant changes in previous regulations effectuated by such rule:

The Department has elected to create a detailed user-friendly manual regarding highway entrances in place of the majority of its existing rules. This new manual represents a comprehensive update to the Department's driveway rules. The rule chapter has been given a new chapter number to reflect the current Departmental organizational structure, moving the driveway entrances rules from Maintenance 1680-02-01 to Traffic Operations 1680-10-01. A summary of significant changes to the rules as contained in the manual is below:

### NOTABLE REVISIONS:

- 1) Sight Distance, Section 5.2 (old 1680-2-1-.03, Sight Distance). The requirements for this section have been altered to match current Department design standards.
- 2) Number of Connections, Section 4.2 (old 1680-2-1-.04, Number & Arrangement of Driveways). The frontage distance for more than one driveway has been increased from 50 feet to 200 feet.
- 3) Drainage, Section 6 (old 1680-2-1-.09, Drainage). Adds a new requirement for the design of a drainage system. The construction plans must show erosion and sediment control devices as needed according to Department design standards.
- 4) Signs and Pavement Markings, Section 5.5 (old 1680-2-1-.10, Signing). Signs and markings must now comply with the Manual on Uniform Traffic Control Devices (MUTCD).
- 5) Control Dimensions, Section 5.1 (old 1680-2-1-.11, Control Dimensions). Requirements have been updated to match current Department design standards. Many of the minimums have been increased and some exceptions for certain maximums have been allotted.
- 6) Driveway Construction and Grading Standards, Section 5.3 (old 1680-2-1-.12, Driveway Profile). This section has been updated to match Department design standards to prevent drag of longer vehicles or vehicles with trailers.
- 7) Example Drawings, Appendix A (old 1680-2-1-.13, Sketches and Examples). Drawings in this section have been updated to reflect typical scenarios that may be encountered.
- 8) TDOT Region and District Offices (old 1680-2-1-.15, Application for Permit). Contact information has been removed from the manual and will be added to the Department website that can be more easily updated as needed.
- 9) Requirements for Application, Section 2.6 (old 1680-2-1-.15, Application for Permit). The application requirements have been relocated to the beginning of the manual and have been updated with more detailed explanations of requirements.
- 10) Bond Requirements, Section 2.5 (old 1680-2-1-.16, Bond Requirements). The amount of the required bond has been increased to reflect current costs.
- 11) Sample Permit (old 1680-2-1-.18, Sample Permit). This section has been removed from the rules. Sample forms will be included on the Department website.

### NOTABLE ADDITIONS:

- 1) Highway Entrance Permits, Sections 2.1, 2.2, and 2.3. Explains in greater detail when and for whom a driveway permit is needed and whom the applicant must contact.
- 2) Liability Insurance, Section 2.4. The amount of insurance required has been increased to match current statutory limits applicable to the Department.
- 3) Types of Highway Access, Section 4.1. Describes the various types of highway access (e.g. single-family driveways, commercial driveways, frontage roads, etc.).
- 4) Median Openings and Spacing, Section 5.6. Helps applicants design the location of their driveway to minimize the need for additional median openings on State routes.
- 5) Traffic Impact Studies, Section 5.7. Describes circumstances under which the Department may require the driveway permit applicant to provide a traffic impact study and what must to be included in the study.
- 6) Auxiliary Lanes, Section 5.8. Explains when auxiliary lanes are needed and their design requirements.
- 7) Engineering Exceptions, Section 7. Details the process for applicants to request an exception when the standard requirements for a driveway permit cannot be met.

8) Maintenance, Section 8. Explain which parties are responsible for the various maintenance activities associated with the driveway.

(B) A citation to and brief description of any federal law or regulation or any state law or regulation mandating promulgation of such rule or establishing guidelines relevant thereto:

T.C.A. § 54-5-301 authorizes the Commissioner of the Tennessee Department of Transportation to promulgate regulations governing the construction of driveway entrances on state highways, and T.C.A. § 54-5-302 prohibits the construction of driveway entrances on state highways without first obtaining a permit in accordance with the Department's regulations.

(C) Identification of persons, organizations, corporations or governmental entities most directly affected by this rule, and whether those persons, organizations, corporations or governmental entities urge adoption or rejection of this rule:

Those involved with the commercial development of land and initiating the permits for access will be most directly affected, but any person owning land adjacent to a state highway could be affected by these regulations.

(D) Identification of any opinions of the attorney general and reporter or any judicial ruling that directly relates to the rule:

N/A

(E) An estimate of the probable increase or decrease in state and local government revenues and expenditures, if any, resulting from the promulgation of this rule, and assumptions and reasoning upon which the estimate is based. An agency shall not state that the fiscal impact is minimal if the fiscal impact is more than two percent (2%) of the agency's annual budget or five hundred thousand dollars (\$500,000), whichever is less:

N/A

(F) Identification of the appropriate agency representative or representatives, possessing substantial knowledge and understanding of the rule:

Jason Oldham, Traffic Engineering Manager  
Michelle Powell, Traffic Engineer

(G) Identification of the appropriate agency representative or representatives who will explain the rule at a scheduled meeting of the committees:

Jason Oldham, Traffic Engineering Manager  
Michelle Powell, Traffic Engineer  
John Reinbold, General Counsel  
Leslie South, Assistant General Counsel

(H) Office address, telephone number, and email address of the agency representative or representatives who will explain the rule at a scheduled meeting of the committees:

Jason Oldham, P.E.  
Traffic Engineering Office  
James K. Polk Building  
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- (I) Any additional information relevant to the rule proposed for continuation that the committee requests:

None at this time.