DEPARTMENT OF TRANSPORTATION

Chapter 91 – Subdivision Street Requirements

Part I

General Provisions

24VAC30-91-10. Definitions.

The following words and terms when used in these regulations shall have the following meanings unless the context clearly indicates otherwise:

"AASHTO" means the American Association of State Highway and Transportation Officials.

"Abandon" in all its forms means the legislative action reserved for and granted to the local governing body to extinguish the public's right to a roadway under the jurisdiction of the Virginia Department of Transportation, pursuant to §§ 33.1-151 and 33.1-155 of the Code of Virginia.

"Accessible route" means a continuous unobstructed, stable, firm and slip-resistant path connecting all accessible elements of a facility (may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps and lifts) that can be approached, entered and used by persons with disabilities. An accessible route shall, to the maximum extent feasible, coincide with the route for the general public.

"ADT" means average daily traffic count (see "Projected Traffic").

"Board" means the Commonwealth Transportation Board.

"Clear zone" means the total border area of a roadway or shared use path that is sufficiently wide for an errant vehicle to avoid a serious accident. (See the Subdivision Street Design Guide (24VAC30-91-160) for details.)

"Commissioner" means the chief executive officer of the Virginia Department of Transportation.

"Complete development (land)" means the utilization of the available areas in a manner as to realize its highest density for the best potential use based on zoning, pending rezoning, the adopted comprehensive plan of the governing body, or the customary use of similar parcels of land.

"Complete development (streets)" means the development of a subdivision street in full compliance with all applicable provisions of these regulations to the necessary standards of design and construction for the effective and efficient accommodation of the traffic generated by the complete development of the land, both internal and external to the subdivision.

"County controlled grade separation structure" means a grade separation structure that does not qualify for maintenance by the department but was established within the right-of-way of a street intended for state maintenance.

"County official" means the representative of the governing body appointed to serve as its agent in matters relating to subdivisions.

"Cul-de-sac" means a street with only one outlet and having an appropriate turnaround for a safe and convenient reverse traffic movement and more specifically the turning area.

"Dam" means an embankment or structure intended or used to impound, retain, or store water, either as a permanent pond or as a temporary storage facility.

"Department" means the Virginia Department of Transportation.

"Design manual" means the department's Road Design Manual (see 24VAC30-91-160), Location and Design Division.

"Design speed" means a speed selected for purposes of design and correlation of those features of a street such as curvature, super elevation, and sight distance, upon which the safe operation of vehicles is dependent.

"Developer" means an individual, corporation, or registered partnership engaged in the subdivision of land.

"Director of the Local Assistance Division" means the department employee responsible for overseeing all programs administered by the Local Assistance Division, including these requirements and the final acceptance of streets as part of the secondary system of state highways maintained by the department or his designee.

"Discontinue," in all its forms, means the legislative act of the Commonwealth Transportation Board, pursuant to § 33.1-150 of the Code of Virginia, that determines that a road no longer serves public convenience warranting its maintenance with funds at the disposal of the department.

"District administrator" means the department employee assigned the overall supervision of the departmental operations in each of the Commonwealth's nine construction districts.

"Drainage manual" means the department's Drainage Manual (see 24VAC30-91-160), Location and Design Division.

"Dwelling unit" means a structure or part of a structure containing sleeping, kitchen, and bathroom facilities that is suitable for occupancy as a home or residence by one or more persons.

"Easement" means a grant of a right to use property of an owner for specific, limited use or purpose.

"Functional classification" means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

"Governing body" means the board of supervisors of the county but may also mean the local governing body of a town or city, if appropriate, in the application of these requirements.

"Intersection" means the juncture of two or more streets at which point there are three or more legs.

"Level of service" means a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and passengers. For the purposes of these requirements, the applicable provisions of the Highway Capacity Manual (see 24VAC30-91-160) shall serve as the basis for determining "levels of service."

"Level terrain" means that condition where highway sight distances, as governed by both horizontal and vertical restrictions, are generally long or could be made so without construction difficulty or major expense.

"Loop street" means a street whose two outlets are to the same street.

"Mountainous terrain" means that condition where longitudinal and traverse changes in the elevation of the ground with respect to the road or street are abrupt and where benching and side hill excavation are frequently required to obtain acceptable horizontal and vertical alignment.

"Neotraditional development" means a type of subdivision that creates a neighborhood or community design with qualities of a traditional small town, combining a mix of uses that may include retail establishments, offices, civic buildings, public squares, and multi-family and single-family housing, all within walking distance of one

another, as well as a mix of transportation facilities that focuses on the needs of pedestrians and bicyclists in addition to the needs of motorists. These developments may include a variety of buildings and land use densities along the same street. Street layout may follow a grid pattern using narrow streets and having multiple connections to surrounding neighborhoods. These developments may be referred to as "villages" or "hamlets" within the ordinances of the governing body.

"Nonresidential street" means a subdivision street adjacent to property that is anticipated to develop for purposes other than residential use.

"Office building" means a building that is used primarily for conducting business transactions other than retail sales.

"Parking bay" means an off-street area for parking two or more vehicles that are served by a short driveway connecting the parking area and the public street.

"Parking lane" means an area, generally seven or eight feet in width, adjacent to and parallel with the travel lane of a roadway that is used for parking vehicles.

"Pavement Design Guide" means the Pavement Design Guide for Subdivision and Secondary Roads in Virginia (see 24VAC30-91-160).

"Permit Manual Regulations" means the department's Land Use Permit Manual (24VAC30-150) Regulations (see 24VAC30-91-160).

"Phased development" (streets) means the method outlined in 24VAC30-91-70 (Phased development of subdivision streets) whereby the acceptance of certain subdivision streets into the secondary system of state highways may be considered before being completely developed in accordance with all applicable requirements (e.g., two lanes of a four-lane facility are considered for acceptance in advance of lanes 3 and 4 being finished).

"Plans" means the standard drawings, including profile and roadway typical section, that show the location, character, dimensions and details for the proposed construction of the subdivision street.

"Plat" means the schematic representation of the land divided or to be divided.

"Private streets" means subdivision streets that have not been dedicated to public use or that require the permission or invitation of a resident or owner to use the street. Such streets are not intended to be included in the secondary system of state highways maintained by the department.

"Privately maintained streets" means any public or private street that is not maintained by the department or the local governing body.

"Projected traffic" means the number of vehicles, normally expressed in average daily traffic (ADT), forecast to travel over the segment of the subdivision street involved.

"Public street" means a street dedicated to public use and available to the public's unrestricted use without regard to the jurisdictional authority responsible for its operation and maintenance.

"Requirements" means the design, construction, and related administrative considerations herein prescribed for the acceptance of a subdivision street for maintenance by the department as part of the secondary system of state highways.

"Resident engineer" means the department employee assigned to supervise departmental operations within a specified geographical portion of the Commonwealth, consisting of one to four counties, or his designee. In the context of either this regulation or the Subdivision Street Design Guide (24VAC30-91-160), the term can also refer to:

1. In districts having centralized functions for the review and approval of subdivision plans, either:

a. The district land development manager for functions related to plan approval;

b. The residency permit manager for functions related to construction, inspection, and acceptance of streets; or

c. Any other position specifically designated to perform the functions described in subdivisions 1a and 1b of this definition or employees designated by the district administrator to oversee the implementation of this regulation. 2. In cities and towns that maintain and operate their own system of streets and elect to use the pavement and right-of-way width requirements of the Subdivision Street Design Guide (24VAC30-91-160) as a basis for street maintenance payments under the provisions of § 33.1-41.1 of the Code of Virginia, as well as the counties of Arlington and Henrico, the local official responsible for the review and approval of subdivision street design.

"Residential street" means a subdivision street adjacent to property that is anticipated to develop as single-family residences, apartment buildings, or other similar dwelling structures.

"Right-of-way" means the land, property, or interest therein, usually in a strip, acquired for or devoted to a public street designated to become part of the secondary system of state highways.

"Roadway" means the portion of the road or street within the limits of construction and all structures, ditches, channels, etc., necessary for the correct drainage thereof.

"Secondary system of state highways" means those public roads, streets, bridges, etc., established by a local governing body pursuant to § 33.1-229 of the Code of Virginia and subsequently accepted by the department for supervision and maintenance under the provisions of Articles 6 (§ 33.1-67 et seq.) and 11 (§ 33.1-150 et seq.) of Chapter 1 of Title 33.1 of the Code of Virginia.

"Shared use path" means a facility, as defined in § 46.2-100 of the Code of Virginia, that is set apart from the travelway and intended to be used by pedestrians and bicyclists.

"Shopping center" means a building or buildings containing two or more stores that are used primarily for retail sales but may include commercial trade or professional uses.

"Single-family residence" means a structure, other than an apartment building, maintained and used as a single dwelling unit or any dwelling unit that has direct access to a street and shares neither heating facilities, hot water equipment, nor any other essential facility or service with any other dwelling unit.

"Specifications" means the department's Road and Bridge Specifications (24VAC30-91-160), including related supplemental specifications and special provisions.

"Standards" means the applicable drawings and related criteria contained in the department's Road and Bridge Standards (24VAC30-91-160).

"Subdivision" means the division of a lot, tract, or parcel into two or more lots, plats, sites, or other divisions of land for the purpose, whether immediate or future, of sale or of building development. Any resubdivision of a previously subdivided tract or parcel of land shall also be interpreted as a "subdivision." The division of a lot or parcel permitted by § 15.2-2244 of the Code of Virginia will not be considered a "subdivision" under this definition, provided no new road or street is thereby established. However, any further division of such parcels shall be considered a "subdivision."

"Subdivision street" means a public way for purposes of vehicular travel that results from the subdivision of land, including the entire area within the right-of-way. Public streets developed in accordance with these requirements and meeting the necessary public service provisions established herein shall be eligible for addition to the secondary system of state highways maintained by the department. Streets primarily intended to

access property abutting or in the immediate vicinity of the street are deemed "local" subdivision streets.

"Subdivision Street Design Guide" means Appendix B of the Road Design Manual (24VAC30-91-160).

"Swale" means a broad depression within which stormwater may drain during inclement weather, but which does not have a defined bed or banks.

"Through street" means a street that provides access between two other streets.

"Traveled way" means the portion of the subdivision street designated for the movement of vehicles, exclusive of shoulders, parking areas, turn lanes, etc.

"VDOT" means the Virginia Department of Transportation.

"VPD" means vehicles per day.

"VPH" means vehicles per hour.

"Watercourse" means a definite channel with bed and banks within which water flows, either continuously or in season.

24VAC30-91-20. Applicability, effective date, and transition.

A. Applicability. This regulation is intended to govern subdivision street development and the criteria for acceptance of these streets by the department for subsequent maintenance. The Subdivision Street Design Guide (24VAC30-91-160) offers guidance on the design and construction features of subdivision street development and sets out design parameters deemed appropriate for most land development scenarios. However, the business of land development is fluid and the department, in consultation with local government officials, is prepared to consider innovative transportation approaches associated with land development proposals that are consistent with the geometric requirements of the Subdivision Street Design Guide (24VAC30-91-160). However,

when not specifically addressed in one of these documents, the relevant requirements of the Road Design Manual (24VAC30-91-160), standards, specifications, Pavement Design Guide (24VAC30-91-160) and associated instructions shall govern.

These requirements apply to all subdivision streets designated to be maintained by the department as part of the secondary system of state highways. The department's review and approval shall apply only to streets proposed for addition to the secondary system of state highways maintained by the department. Any plans submitted for review that contain only streets proposed for maintenance by others may be reviewed for general guidance at the discretion of the resident engineer but will not be officially approved. However, any such review shall not represent the department's commitment to accept such streets for maintenance irrespective of the quality of the construction of the street or streets.

If a subdivision plan with streets proposed for VDOT acceptance includes any streets that are not initially intended to be accepted for maintenance by the department as part of the secondary system, the plan must include a notation identifying these streets. In the absence of this notation, the plans will not be approved. It is also recommended that any streets proposed to be privately maintained also have a notation on the plat and impacted deeds that clearly indicate that as a prerequisite for the streets future acceptance, the streets must be improved to the department's prevailing standards for acceptance at no cost to the department.

- B. Effective date. All streets proposed for acceptance by the department after January 1, 2005, shall be accepted in accordance with these provisions, except as may be waived by the commissioner or his designee.
- C. Transition. Prior to July 1, 2005, the department will allow the design of streets developed in accordance with either the former requirements (1996) or these

requirements. Any street design initially submitted to the department for consideration after June 30, 2005, however, shall be in accordance with these requirements.

24VAC30-91-30. Local subdivision ordinances

A. Precedence of local subdivision ordinance. Pursuant to § 33.1-229 of the Code of Virginia, new streets are established by the governing body of the locality in which they are located. Any requirements of the subdivision ordinance adopted by the governing body that are equal to or greater than these provisions shall become the department's requirements in that locality and govern unless the local governing body concurs with an exception to their higher standards.

B. Exemptions in local ordinances. The department does not recognize any provision of an ordinance adopted by the governing body that exempts the development of streets from these requirements based on its definition of the term subdivision. Consequently, any street proposed for addition to the secondary system of state highways maintained by the department shall comply with applicable requirements as herein provided or, if greater than these provisions, the requirements of the local ordinance.

24VAC30-91-40. Continuity of public street system.

The continuity of a publicly maintained street system is a prerequisite to the addition of any subdivision street into the secondary system of state highways. A street may only be accepted for state maintenance if it is the continuation of the network of public streets whose maintenance has been officially accepted by the department or, if appropriate, a city, town or county.

24VAC30-91-50. Service requirements.

A. Service consideration. A street may only be accepted by the department for maintenance as part of the secondary system of state highways if it renders sufficient public service to justify expending public funds for its subsequent maintenance.

In the event the governing body requests the addition of a street before it meets these public service provisions, the resident engineer will review each request on an individual case basis and determine if the acceptance of a street prior to normal service requirements is justified. However, prior to deferring acceptance based solely on service requirements, the resident engineer shall confer with the Director of the Local Assistance Division appropriate Central Office Division Administrator or other designee appointed by the commissioner.

The public service requirements of this subsection may be waived for cul-de-sac streets less than 0.25 miles in length when the acceptance of the street or streets will complete the acceptance of all streets within the subject section of the subdivision.

- B. Criteria. For the purpose of these requirements, public service may include, but is not necessarily limited to, streets meeting one or more of the following situations:
 - 1. Serves three or more occupied units of varied proprietorship with a unit being a single-family residence, owner-occupied apartment, owner-occupied residence in a qualifying manufactured home park, a stand-alone business, or single business entity occupying an individual building, or other similar facility. However, streets providing service in settings similar to an apartment building setting will only be considered for acceptance if the street is well defined and appears to be a street rather than a travel way through a parking lot.
 - 2. Constitutes a connecting link between other streets that qualify from the point of public service.
 - 3. Provides an extension of a street to the subdivision boundary to facilitate the continuity of possible adjacent development, if required by local ordinance. Such streets shall normally incorporate an adequate means for vehicles to turn around and reverse direction.

- 4. Serves as access to schools, churches, public sanitary landfills, transfer stations, public recreational facilities, or similar facilities open to public use.
- 5. Serves at least 100 vehicles per day generated by an office building, industrial site, or other similar nonresidential land use in advance of the occupancy of three or more such units of varied proprietorship. Any addition under this provision shall be limited to the segment of a subdivision street that serves this minimum projected traffic and has been developed in compliance with these requirements.
- 6. Constitutes a part of the network of streets envisioned in the transportation plan or element of a county's comprehensive plan that, at the time of acceptance, serves an active traffic volume not less than 100 vehicles per day.
- C. Apartment and retail shopping complexes. A through street that serves a shopping center or rental apartment building may be considered for maintenance as part of the secondary system of state highways if it is deemed by the department to provide a public service. However, internal streets in these complexes do not normally qualify for addition to the system because their operation and maintenance are considered to be a responsibility of the owner, who stands to profit, rather than the tenant or customer.
 - 1. However, a street that serves as the principal access to rental apartment buildings may be considered to provide public service if unrestricted public use is permitted and maintenance continuity is practical.
 - 2. Entrance streets and the internal traffic circulation system of shopping centers and apartment complexes qualify only if more than three property owners are served and the street is separated from the parking areas.
 - 3. Streets serving manufactured home parks may only be considered if the residents of the park own the land occupied in fee simple.

D. Special exceptions. There may be other sets of circumstances that could constitute public service. Consequently, any request for clarification regarding unclear situations should be made in writing to the resident engineer. The resident engineer should then consult the <u>Director of the Local Assistance Division appropriate Central Office Division Administrator</u> or other designee appointed by the commissioner for resolution.

24VAC30-91-60. Administrative procedure.

A. Conceptual subdivision sketch. Prior to preparing detailed construction plans for review, the resident engineer shall be provided a preliminary plan of the entire development, prepared by the developer, that shows sufficient information for VDOT to review and concur with the functional classification proposed for each street in the subdivision. Any preliminary or conceptual plat, plan or sketch that conforms to the locality's zoning requirements or subdivision ordinance is acceptable if the required information is shown. The submittal should include:

- 1. The general location and configuration, including the terminus, of each street, including the traffic volume anticipated when the land served is fully developed in accordance with the land uses anticipated.
- 2. The location and area of each type of permitted land use within the subdivision.
- 3. The location of any proposed transportation facility, within the subdivision's boundaries, included in the comprehensive plan of the governing body.
- 4. The proposed functional classification for each street in the subdivision.
- 5. Other available information pertinent to the intended development of the subdivision, including but not limited to any proposed phased development of streets pursuant to 24VAC30-91-70 (Phased development of subdivision streets).

The resident engineer will review the layout and functional classification of streets shown in the concept plan and notify the appropriate county official in writing, as well as the developer, if applicable, of his concurrence or recommendations. Approval of the conceptual plan or subdivision sketch shall be considered concurrence only in the functional classifications and layout of the streets and is deemed to satisfy any requirement for notification to the county official. This approval or concurrence will be valid as long as the basic concept for the subdivision's development, as submitted for review, remains unchanged.

- B. Plan submission. Plats or plans, or both, together with other pertinent data as herein prescribed, shall be submitted to appropriate officials in the local government and to the responsible resident engineer in accordance with the practices of the local government for all proposed subdivisions whose streets are intended to be added to the secondary system of state highways maintained by the department. The resident engineer may, subject to the availability of staff and upon the request of a county, cooperate in the review of proposed subdivisions to be developed to these standards but not initially intended for addition to the secondary system of state highways maintained by the department. VDOT may recover the costs for this service in accordance with 24VAC30-91-140 (Surety and fees).
- C. Plan review. Upon receipt of the plats or plans, or both, the resident engineer will arrange for the appropriate review to determine compliance with all applicable requirements. The general procedure for this review is described in 24VAC30-91-150 (Subdivision street development, plan review, and acceptance).
- D. Plan approval. The resident engineer will advise the appropriate county official and the developer, if applicable, as to the results of the review.

- 1. If the street development proposed by the plats or plans, or both, is determined to be in compliance with these requirements, the resident engineer will provide written confirmation of this finding. This action signifies the resident engineer's approval of the street design shown on the plats or plans, as submitted. Any subsequent revision, additions, or deletions thereto shall require specific written approval of the resident engineer for each such change.
- 2. If a revision of the submitted plats or plans is determined necessary, the resident engineer will list the required changes in a written response to the county official and the developer, if applicable. Upon completion of the specified revisions, the plats or plans will be resubmitted for review and approval by the resident engineer as prescribed in 24VAC30-91-150 (Subdivision street development, plan review, and acceptance).

The department's approval of a subdivision street construction plan shall constitute its commitment to accept the streets depicted thereon when all applicable provisions of these requirements are satisfied and the streets have been constructed according to the approved construction plan and supporting specifications. However, during VDOT's inspection of construction, if a situation is discovered that was not addressed on the approved plan that could, in the opinion of the resident engineer, adversely affect public safety or the integrity of either the roadway or the adjacent property, acceptance of the street shall be deferred until the situation is corrected.

The department's approval of a subdivision street construction plan shall expire after a period of three years if construction has not commenced, in which case the subdivision street construction plan shall be resubmitted for subsequent review and approval. This

shall not affect the adequacy of the approved concept plan as depicted on a recorded final plat, as provided for under § 15.2-2241 of the Code of Virginia.

- E. Street acceptance. Upon the satisfactory completion of construction of the subdivision street, the department will advise the local governing body regarding the street's readiness for acceptance and the governing body, in consultation with the resident engineer, will initiate its acceptance into the secondary system of state highways maintained by the department provided:
 - 1. The developer dedicates the prescribed right-of-way to public use.
 - 2. The street has been constructed in accordance with the applicable specifications, standards and the plats or plans approved by the department.
 - 3. The street renders a public service as prescribed in 24VAC30-91-50 (Service requirements) or as may otherwise be approved under those provisions.
 - 4. The street has been properly maintained since its completion.
 - The developer furnishes the surety and fees in accordance with 24VAC30-91 (Surety and fees).
 - 6. The governing body has executed all agreements prescribed by these requirements, unless specifically waived on an individual case basis by the Director of the Local Assistance Division appropriate Central Office Division Administrator, or other designee appointed by the commissioner.
 - 7. The governing body, by proper resolution, requests the department to accept the street or streets for maintenance as part of the secondary system of state highways under its jurisdiction. The resolution shall include the governing body's guarantee of an unrestricted and unencumbered right-of-way as dedicated, plus any necessary easements for fills, drainage, or sight distance.

Upon the department's determination that the requested addition is in compliance with the applicable provisions of these requirements, the governing body will be officially advised of the street's acceptance into the secondary system of state highways and the effective date of such action. This notification serves as the resident engineer's authority to begin maintenance thereon.

24VAC30-91-70. Phased development of subdivision streets.

A. Policy. Certain subdivision streets that require four or more travel lanes to accommodate the projected traffic may be accepted by the department for maintenance after completion of the first two lanes to an acceptable, initial phase of construction, upon the request of the governing body. It is recognized that there is a distinction between those streets that benefit the overall transportation network and those that primarily serve the development of land and, therefore, the criteria for phased construction for each situation differs as described in subsection B of this section.

However, in all cases, the right-of-way required for the road at its complete stage of construction shall be dedicated and accepted as part of the initial street acceptance. In addition, the initial phase of construction shall be designed and constructed to facilitate construction of the remaining phase in a manner that will avoid the need to reconstruct the initial two lanes.

Consideration for the acceptance of any street under the provisions of this section shall be limited to the phased development of only the street's roadway. All other applicable requirements, e.g., public service, drainage easements, and administrative procedures, shall apply.

B. Criteria.

1. For streets included in the transportation element of the county's comprehensive plan that serve diverse areas of the region or county, no special

agreement or acknowledgement is needed as a prerequisite to acceptance, provided:

- a. The street is part of a transportation corridor that was formally adopted as a part of the county's comprehensive transportation plan prior to the local governing body's approval of the plat or plan for the development of the adjacent land.
- b. The transportation corridor is a major thoroughfare planned primarily to move through traffic.
- c. When fully developed the street must satisfy the department's functional classification criteria as a major collector or higher.
- d. The street has a projected traffic volume of 8,000 vehicles per day or less for a period of 10 years following the date of the acceptance for maintenance by the department.
- 2. For all other streets, the local governing body's resolution requesting acceptance of the initial two lane section must include provisions that acknowledge:
 - a. The local governing body agrees that all costs incurred in the street's complete construction, including right-of-way, engineering, utility adjustment, etc., shall be provided from funds other than those derived from state revenue sources administered by VDOT, except as may be expressly authorized by the department's Director of the Local Assistance Division appropriate Central Office Division Administrator.
 - b. The local governing body agrees that it is their responsibility to ensure that the roadway is completed as needed to accommodate the traffic. However, the county also acknowledges that a determination that the street needs to be

completed to its ultimate section will be made by the resident engineer or his designee once it is determined that the first two lanes will not sustain an acceptable level of service for the function classification of the roadway in accordance with the Highway Capacity Manual (24VAC30-91-160).

C. Procedures.

- 1. Plats or plans, or both, for the street's complete development, in accordance with all applicable provisions of these requirements, shall be submitted for approval.
- 2. The plats or plans shall also delineate the street's initial development as proposed pursuant to this section. In no case shall this design provide less than one-half of the roadway typical section required by the applicable requirements for the street's complete development.
- 3. Unless waived by the resident engineer, a capacity analysis shall be submitted to document that an acceptable level of service will be maintained for the intended duration of the initial phase of development. In determining an acceptable level of service, the beneficial effect of the proposed street on the overall transportation network will be considered. The resident engineer or his designee may waive this requirement for a traffic capacity analysis.
- 4. A determination will be made by VDOT in consultation with the locality whether the street can be approved for phased development and which criterion in subsection B of this section applies.
- 5. Upon the resident engineer's determination that the proposal is in compliance with the applicable provisions of this section, the plans may be approved accordingly.

6. Upon completion of the street's initial phase in accordance with approved plans, its compliance with all other applicable provisions of this section, and the inclusion of the appropriate language in the resolution, the street may be accepted for maintenance by the department as part of the secondary system of state highways.

24VAC30-91-80. Connections to or work within streets maintained by the department.

A. Connections to streets maintained by the department. A land use permit issued by the department is required for new connections of any kind to existing streets maintained by the department. Due to the wide variation in prevailing conditions, each location shall be evaluated individually to determine exact requirements. Therefore, it is incumbent upon the developer or his designee to apply for a land use permit at the appropriate time to ensure the desired completion of the development. Such application shall be made to the resident engineer and be consistent with the approved plats or plans for the subdivision or the document reviewed for the connection of a street that is to remain privately maintained.

- B. Relocations, adjustments, and improvement of streets maintained by the department. All work performed within the existing right-of-way of streets maintained by the department, including pavement widening, the addition of turn lanes, realignments and relocations of existing streets, shall be coordinated with and approved by VDOT as follows:
 - 1. All such work shall be accomplished pursuant to a land use permit issued by the department after the required right-of-way has been dedicated to public use or as otherwise required by the department.

- 2. All work, including the relocation, adjustment, and improvement of existing streets under VDOT jurisdiction shall be subject to the department's direction rather than these requirements. Such work should include overlaying and restriping the old and new portions of the roadway.
- 3. The relocation of streets maintained by the department shall only be accomplished with the consent of the local governing body.
- 4. Traffic should be maintained on streets under the department's jurisdiction until the new portion has been accepted by the department for maintenance unless the department authorizes a closure of the road to traffic.
- 5. No street or roadway maintained by the department and actively used by the public shall be abandoned or vacated unless a new street serving the same citizens has been constructed and accepted for maintenance by the department.
- 6. Streets previously discontinued exist as a public way under the jurisdiction of the local governing body and should be abandoned or vacated prior to the development of land associated with such streets.

24VAC30-91-90. Discretionary authority.

The department's resident engineers are authorized considerable discretionary authority regarding the design of subdivision streets functionally classified as "local." Such judgments should take into consideration the individual situation, but in no instance are the safety features, structural integrity, or traffic capacities prescribed by these requirements to be sacrificed. Meandering alignment and rolling grades are satisfactory, provided adequate stopping sight distances and reasonable alignment and gradients are provided to safely accommodate the projected traffic at the design speed.

24VAC30-91-100. Appeal to district administrator.

The district administrator is authorized to consider and render a ruling on unresolved differences of opinion between the developer and the resident engineer that pertain to the interpretation and application of these requirements.

To obtain this review, the developer shall provide the district administrator, the resident engineer and the county official a written request for such action, describing any unresolved issue. After reviewing all pertinent information, the district administrator will advise the developer in writing regarding the decision of the appeal, with a copy to the county official and the resident engineer. The developer may further appeal the district administrator's decision to the commissioner's designee. All correspondence requesting an appeal should include copies of all prior correspondence regarding the issue or issues with the county officials and department representatives.

Part II

Specific Provisions

24VAC30-91-110. Design and agreement requirements.

A. General requirements. Most criteria addressing the design of new subdivision streets can be found in the Subdivision Street Design Guide (24VAC30-91-160). However, the following provisions are provided for guidance, particularly in regard to features that require agreements or formal acknowledgements of the governing body before VDOT's acceptance of the street or streets within a subdivision.

When an agreement is required between the local governing body and the department as a prerequisite to the acceptance of a subdivision street, nothing in these requirements shall preclude the local governing body from entering into separate agreements with other entities to fulfill its responsibilities. However, if the provisions are

intended to ensure the safety of the public using the street, the department reserves the right to approve the involvement of the other party or parties.

- B. Geometric requirements. Geometric requirements for new subdivision streets are established in the Subdivision Street Design Guide of the Road Design Manual (24VAC30-91-160). In certain circumstances the Subdivision Street Design Guide (24VAC30-91-160) allows reduced pavement widths for curb and gutter sections. Any such reduction must be specifically requested by the governing body in writing and be approved by the resident engineer. Sufficient off-street parking must be provided by the local governing body as indicated in the Subdivision Street Design Guide (24VAC30-91-160) to accommodate any request for reduced pavement widths. However, no special request from the local governing body shall be required in the event the department has approved a design standard for use throughout that county that includes street width reductions for a specific type of subdivision, such as a Neotraditional subdivision.
- C. Turn lanes. Left or right turn lanes shall be provided at intersections when the department determines that projected turning movements warrant their installation. These facilities shall be designed in accordance with the Subdivision Street Design Guide (24VAC30-91-160) and, if necessary, additional right-of-way shall be provided to accommodate these facilities.

D. Pavement structure.

1. Pavement design. The pavement structure for new subdivision streets shall be in accordance with the Pavement Design Guide (24VAC30-91-160), including any prescribed underdrains. Prior to construction of the pavement sub-base and finish courses, the resident engineer shall approve the proposed pavement design.

- 2. Special pavement surfaces. The resident engineer may approve special pavement surfaces, such as the use of stamped pavement or the use of paving blocks or bricks. However, if the pavement design is a type not addressed by the Pavement Design Guide (24VAC30-91-160) or otherwise not in general use by the department, an agreement shall be provided by the governing body that addresses the future maintenance of such pavement.
- 3. Pavement additions to existing streets. When an existing VDOT maintained roadway is to be widened to accommodate additional lanes or the addition of turn lanes, the necessary pavement design shall be obtained from the resident engineer and the entire surface of the roadway (old and new portions) shall be overlaid and re-striped as required by the resident engineer.

E. Parking.

1. Perpendicular and angle parking along subdivision streets is normally prohibited. However, perpendicular and angle parking along subdivision streets may be considered if the features along the street cause the street to readily appear to be a street rather than a travel way through a parking lot. In addition, additional pavement width may be necessary between the travel lanes and the parking spaces to allow a car to back from its normal parked position, orient itself for entering the travel lanes and stop without either encroaching into the travel lanes or having the driver's vision of oncoming traffic obscured by adjacent, parked vehicles.

Street designs that anticipate the restriction of on-street parking shall only be approved with the consent of the county official and the resident engineer.

2. Localities are encouraged to adopt local ordinances to appropriately address adequate off street parking in subdivisions. In the absence of local regulations

that are deemed acceptable by the department, the following criteria shall apply for the design of subdivision streets:

- a. A minimum of two off-street parking spaces per dwelling unit, exclusive of garage facilities associated with the unit, shall be provided in the proximity of the unit they are intended to serve. Additional off-street parking space shall be provided when the width of any residential curb and gutter roadway is proposed for reduction as permitted in the Subdivision Street Design Guide (24VAC30-91-160). Except as may be associated with corner dwellings, the availability of on-street parking along other streets will not normally be considered as additional off-street parking.
- b. If parking bays are provided, they shall be located off the street's right-ofway and designed to prevent vehicles from backing into the adjacent subdivision street.
- c. Entrances to parking bays shall be separated by at least 50 feet and designed in accordance with the appropriate provisions of the standards or Land Use Permit Manual Regulations.
- F. Cul-de-sacs and turnarounds. An adequate turnaround facility shall be provided at the end of each cul-de-sac or stub street to permit the safe and convenient maneuvering by service vehicles. Various configurations of turnarounds are illustrated in the Subdivision Street Design Guide (24VAC30-91-160); however, alternative configurations may be approved by the resident engineer. Additional right-of-way shall be provided as required by the design of the turnaround. Normally, any nontraveled way areas within the turnaround, such as an island, shall be included in the dedicated right-of-way of the facility.

For circular turnarounds, a well-defined, identifiable street segment, equal to the normal lot width along the intersected street that serves the cul-de-sac or 50 feet, whichever is greater, shall extend from the intersected street to the turning area.

- G. Curb and gutter. For the purpose of these requirements, the use of curb and gutter is an acceptable roadway design alternative, rather than a requisite. However, when used, curb and gutter shall be designed in accordance with the Subdivision Street Design Guide (24VAC30-91-160) and only one curb and gutter design may be used along the length of a street.
 - 1. Driveway entrance requirements. Without regard to the curb design used, the curb shall incorporate a driveway entrance apron, as illustrated in the Subdivision Street Design Guide (24VAC30-91-160), to provide a smooth transition from the gutter invert or roadway surface onto the driveway. However, exceptions may be granted by the resident engineer when roll top curb is used if requested by the local official.
 - 2. Curb ramps. All streets that incorporate accessible routes for pedestrian use shall, without regard to the curb design used, include curb ramps at intersections for use by persons with disabilities and shall incorporate other applicable provisions of the Americans with Disabilities Act.
- H. Private entrances. All private entrances shall be designed and constructed in accordance with the Subdivision Street Design Guide (24VAC30-91-160).
- I. Pedestrian, bicycle, and shared use path facilities. The Commonwealth Transportation Board's "Policy for Integrating Bicycle and Pedestrian Accommodations" emphasizes accommodating pedestrian and bicycle traffic as an essential part of any VDOT financed transportation project. While separate pedestrian and bicycle facilities are not mandated for local subdivision streets, unless required by local ordinance, any

street proposed for VDOT acceptance should accommodate the anticipated pedestrian and bicycle traffic. When separate pedestrian and bicycle facilities are deemed appropriate, they should be included in the initial construction of the street, prior to VDOT acceptance. These facilities are eligible for VDOT acceptance based on the criteria of this section.

- 1. Compliant facilities. Pedestrian and bicycle facilities, including shared use paths as defined under § 46.2-100 of the Code of Virginia, shall be accepted as part of subdivision streets, unless otherwise requested by the governing body, provided they are located fully within the dedicated right-of-way of the street and they are constructed in accordance with applicable criteria and standards of the department.
 - a. Sidewalk criteria. Sidewalks shall be constructed in accordance with the Subdivision Street Design Guide (24VAC30-91-160). However, sidewalks that meander vertically in comparison to the grade of the roadway may be considered noncompliant sidewalks.
 - b. Bicycle facility criteria. Bicycle facilities contiguous with the street shall be in accordance with the department's design and construction criteria set forth in the Road Design Manual (24VAC30-91-160).
 - c. Shared use path criteria. Shared use paths shall be constructed in accordance with the Road Design Manual (24VAC30-91-160) and closely follow the vertical alignment of the roadway without meandering on and off the right-of-way.
- 2. Noncompliant sidewalk, bicycle, and shared use paths. Noncompliant sidewalk, bicycle and shared use paths that fail to meet requirements of the department's standards for construction, alignment, or placement within the

dedicated right of the street shall be deemed to be noncompliant and not qualify for maintenance. However, such facilities may co-exist within the dedicated right-of-way of the street under a land use permit issued by the resident engineer to the local governing body responsible for having established the facility through its subdivision process.

Such permits will clearly specify the responsibility for maintenance of the facility and related activities to the extent the facility occupies the street's right-of-way. The permit applicant should be a county, incorporated town, or other entity that has perpetual maintenance capability. Noncompliant sidewalks and shared use paths may be constructed of bituminous concrete, hydraulic concrete, gravel, or other stabilizer convenient to the applicant.

J. Bridge, drainage, and other grade separation structures. Bridges, drainage, and other grade separation structures shall be designed and constructed in accordance with all applicable department criteria and standards. The resident engineer may require special review of the plans and construction inspection.

The department will accept grade separation structures as part of new subdivision streets provided the structure is a drainage structure or is intended to separate the movement of registered motor vehicles. In addition, the department will accept grade separation structures intended to separate pedestrians or bicyclists or any combination thereof from traffic using the roadway, provided:

- 1. The structure is available for unrestricted public use;
- 2. The structure is accessible to pedestrian facilities, if any, situated along the street; and

3. The projected traffic volume of the street is not less than 4000 vpd or, if the structure otherwise serves as part of the principle pedestrian access to a school and a peak hour traffic volume of 450 vph is projected.

In all other instances, the grade separation structure shall be deemed to be a county controlled grade separation structure within the right-of-way of the street, in which case the street will only be accepted as part of the secondary system of state highways maintained by the department after the local governing body and the department have executed an agreement acceptable to the department that (i) acknowledges the department has no responsibility or liability due to the presence of the structure and (ii) assures the costs of inspection, maintenance, and future improvements to the structure are provided from sources other than those administered by the department.

In all cases, whether the structure is accepted as an integral part of the roadway for maintenance by the department or it remains a county controlled structure, the responsibility for lighting, safety, and security of those using such facilities shall remain a responsibility of local government.

K. Dams. The department will only consider accepting subdivision streets for maintenance that occupy dams when all of the following provisions are satisfied. For the purpose of this section, a roadway will be considered to occupy a dam if any part of the fill for the roadway and the fill for the dam overlap or if the area between the two embankments is filled in so that the downstream face of the dam is obscured or if a closed drainage facility from a dam extends under a roadway fill.

1. Agreements with the governing body. Except as exempt under subdivision 6 of this subsection, the governing body acknowledges by formal agreement the department's liability is limited to the maintenance of the roadway and that the department has no responsibility or liability due to the presence of the dam, the

maintenance of which shall remain the responsibility of an owner, other than VDOT, as established by § 33.1-176 of the Code of Virginia.

- 2. Design review. An engineer, licensed to practice in the Commonwealth of Virginia, shall certify that the hydraulic and structural design of any dam, as described below, is in accordance with current national and state engineering practice and that all pertinent provisions of the Subdivision Street Design Guide (24VAC30-91-160) have been considered. Prior to approval of the roadway construction plans, the hydraulic and structural design of a proposed dam shall be reviewed by and meet the department's satisfaction if:
 - a. A roadway is considered to occupy a dam; or
 - b. A roadway is located below but sufficiently close to the dam that a catastrophic breach could endanger the roadway or the safety of those using the roadway.
- 3. Right-of-way requirements. The right-of-way of roads considered to occupy dams shall be recorded either as an easement for public road purposes or as a dedication specifically to the governing body. Right-of-way dedicated in the name of the Commonwealth or any of its agencies is not acceptable if it includes a dam and roads through such right-of-way will not be accepted as a part of the secondary system of state highways maintained by the department.
- 4. Supplemental, alternative access. To be considered for VDOT maintenance, roadways that occupy a dam must be supplemented by an appropriate alternative roadway facility for public ingress or egress, having suitable provisions that ensure perpetual maintenance.

- 5. Permits. All applicable federal and state permits associated with dams shall be secured and filed with the county prior to VDOT's acceptance of any street that occupies a dam.
- 6. Dams exempt from agreements. The acceptance of roadways that occupy dams shall be exempt from the requirements for an agreement with the governing body, as required by subdivision 1 of this subsection, if all of the following is satisfied:
 - a. The dam is used to create a stormwater detention or retention facility;
 - b. The maximum depth of the water retained by the impoundment at its 100year storm flood elevation is not greater than four feet; and
 - c. The surface area of the impoundment at full flood is not greater than two acres and is beyond the right-of-way dedicated to public use.

L. Roadway drainage.

- 1. Policy and procedures. All drainage facilities shall be designed in accordance with the department's Drainage Manual (24VAC30-91-160) and supplemental directives. All drainage computations supporting a proposed drainage design shall be submitted to the department for review as part of the documents necessary for the approval of a construction plan.
- 2. Stormwater management. Whereas the department considers matters regarding stormwater management associated with the construction of new subdivision streets to be under the authority of the local governing body, decisions regarding stormwater management in the construction of subdivision streets are deferred to the locality. However, stormwater management, including the construction of detention or retention facilities, or both, is recognized as an available design alternative. Where the developer is required by regulations

promulgated by an agency or governmental subdivision other than the department or the developer chooses to use stormwater management facilities in the design of a subdivision, the governing body shall, by formal agreement, and as a prerequisite for the transfer of jurisdiction over the street to the department, acknowledge that the department is not responsible for the operation, maintenance, or liability of the stormwater management facility or facilities associated with the subdivision. However, in the event the governing body has executed a comprehensive, countywide agreement with the department addressing these matters, a specific agreement addressing stormwater management controls in the subdivision will not be required as a condition for street acceptance.

Stormwater management controls for VDOT projects are designed in accordance with the VDOT Erosion and Sediment Control and Stormwater Management Program Specifications Manual (24VAC30-91-160), the Virginia Erosion and Sediment Control Regulations, 4VAC50-30, and the Virginia Stormwater Management Regulations, 4VAC3-20. While these controls may be necessary whenever a street maintained by VDOT is widened or relocated, the department does not require them in the development of new subdivision streets, because such activity is regulated by the local governments. However, developers and counties may find these controls useful in managing land development activity.

Devices and treatments intended to mitigate the impact of stormwater shall be placed off of the right-of-way and shall be designed to prevent the backup of water against the roadbed.

Where development activity results in increased runoff to the extent that adjustment of an outfall facility is required, such adjustment shall be at the developer's expense and be contained within an appropriate easement.

3. Drainage easements.

- a. An acceptable easement shall be provided from all drainage outfalls to a natural watercourse, as opposed to a swale. (See 24VAC30-91-10 for definitions.)
- b. The department normally accepts and maintains only that portion of a drainage system that falls within the limits of the dedicated right-of-way for a street. The department's responsibility to enter drainage easements outside of the dedicated right-of-way shall be limited to undertaking corrective measures to alleviate problems that may adversely affect the safe operation or integrity of the roadway.
- c. In the event drainage to a natural watercourse is not accomplished or is interrupted, an acceptable agreement from the governing body may be considered as an alternative to providing an easement to a natural watercourse, provided the agreement acknowledges that the department is neither responsible nor liable for drainage from the roadway.

M. Other design considerations.

- 1. Guardrail. Guardrail shall be used when required by the resident engineer consistent with the Road Design Manual (24VAC30-91-160). For placement considerations, see the Subdivision Street Design Guide (24VAC30-91-160).
- 2. Landscaping and erosion control. All disturbed areas within the dedicated right-of-way and easements of any subdivision street shall be restored with vegetation compatible with the surrounding area. Where there is visual evidence

of erosion or siltation, acceptance of the street as part of the secondary system of state highways maintained by the department will be postponed until appropriate protective measures, in accordance with VDOT's construction practices, are taken. Except as otherwise approved by the resident engineer, planting of trees or shrubs on the right-of-way shall be in accordance with the Subdivision Street Design Guide (24VAC30-91-160).

3. Lighting. Roadway, security, or pedestrian lighting, when required by the governing body or desired by the developer, shall be installed in accordance with the Subdivision Street Design Guide (24VAC30-91-160). However, VDOT shall not be responsible for the maintenance or replacement of lighting fixtures or the provision of power for lighting.

4. Railroad crossings.

a. Short-arm gates with flashing signals, flashing signals alone, or other protective devices as deemed appropriate by the department shall be

provided at any at-grade crossing of an active railroad by a subdivision street.

b. Crossings of railroad right-of-way are subject to the requirements of the railroad. Subdivision streets to be accepted by the department for maintenance as part of the secondary system of state highways that cross railroad right-of-way will only be considered if the protective measures outlined under this section have been fully installed and an agreement between the railroad, the developer and the local governing body has been executed. Prior to execution, such agreements shall be presented to the department for consideration in consultation with the Department of Rail and Public Transportation.

- 5. Utilities. Local governments, the development community, and the utility community are encouraged to coordinate and consolidate their interests as part of the initial development plan.
 - a. Underground utilities. The department allows the placement of underground utilities within the dedicated right-of-way of streets, but normally restricts placement to areas outside of the travel lanes and desirably beyond pavement areas. However, if the governing body has established adequate requirements for the design, location, and construction of underground utilities within the right-of-way of subdivision streets, including provisions that ensure that adequate testing and inspection is performed to minimize future settlement, those requirements shall become the department's requirements and govern unless those requirements conflict with a requirement of the department.

When location of the utilities outside of the pavement area is not practical and is endorsed by the local government through its requirements, such installations:

- (1) Are acceptable within the shoulders along the street or within the parking area adjacent to curb and gutter roadways.
- (2) May be acceptable beneath the travel lanes of the street when provisions are made to ensure adequate inspection and compaction tests and:
- (a) Longitudinal installations and manholes are located outside of the normal travel lanes, or
- (b) Longitudinal installations and manholes are placed in the center of an undivided roadway out of the wheel path.

However, manholes shall not be placed in sidewalk or shared use path facilities within five feet of curb ramps or within driveway entrances.

b. Open-cutting of hard-surfaced roadways. The department usually prohibits the open-cutting of hard-surfaced roads except in extenuating circumstances. Therefore, all underground utilities within the right-of-way, as determined necessary by good engineering practice to serve the complete development of adjacent properties, shall be installed during the street's initial construction and prior to the application of its final pavement surface course. This shall include extensions of all necessary cross-street connections or service lines to an appropriate location beyond the pavement and preferably the right-of-way line.

In the event it is necessary to open the street pavement to work on utilities after the surface has been placed, additional compaction tests and paving as necessary to restore the integrity and appearance of the roadway may be required at the discretion of the resident engineer.

- c. Cross-street conduits. To facilitate the placement of future underground utilities, cross-street conduits are encouraged, with placement of such conduits occurring on each street at intersections and approximately every 1,000 feet along the length of a street.
- d. Aboveground utilities. All aboveground utilities shall be installed behind the sidewalk or as close as possible to the limits of the street's right-of-way but shall not encroach on the sidewalk, the shared use path, or any clear zone.

To assure the unencumbered dedication of the right-of-way for subdivision street additions, easements or other interests within the platted right-of-way shall be guitclaimed of any prior rights therein. In exchange, a permit may be

issued by the department for a utility to occupy the area involved. This permit will be processed by the resident engineer upon acceptance of the street into the secondary system of state highways maintained by the department. No inspection fee is required for permits so issued. However, the approval of the permit shall be contingent upon the utility's compliance with applicable provisions of the Land Use Permit Manual Regulations.

24VAC30-91-120. Right-of-way width, spite strips, and encroachments.

A. Right-of-way width. A clear and unencumbered right-of-way shall be dedicated to public use for any subdivision street proposed for addition to the secondary system of state highways maintained by the department. However, in certain, rare extenuating circumstances involving a party beyond the influence of the developer, an easement for transportation purposes may be approved by the resident engineer in lieu of dedicated right-of-way. In all other cases, any easement that might interfere with the public's unencumbered use of the street shall be quitclaimed in exchange for a land use permit, as outlined in 24VAC30-91-110 M 5 (Design and agreement requirements—Utilities).

The width of right-of-way shall be as indicated in the Subdivision Street Design Guide 24VAC30-91-160) and shall be sufficient to include all essential elements of the roadway intended to be maintained by the department, including pedestrian, bicycle, or shared use path facilities and clear zone. However, supplemental easements may be used to accommodate sight distance requirements and slopes for cuts and fills. The right-of-way requirements are defined in the Subdivision Street Design Guide (24VAC30-91-160).

When an existing state maintained road is widened, the additional right-of-way should be dedicated as follows:

- 1. If the existing right-of-way consists of a prescriptive easement, to the degree that the developer controls the land, the right-of-way shall be dedicated to public use from the centerline of the alignment.
- 2. If the existing right-of-way is dedicated to public use, the additional right-of-way shall be dedicated to public use.
- 3. If the existing right-of-way is titled in the name of the department or the Commonwealth, the additional right-of-way shall be deeded to the department or to the Commonwealth, consistent with the title of the existing right-of-way.
- B. "Spite strips." Plans that include a reserved or "spite" strip that prohibits otherwise lawful vehicular access to a street from the adjacent properties, whether within or outside the subdivision, will not be approved.
- C. Encroachments within the right-of-way. Recording of a plat causes the fee title interest of areas dedicated to public use to transfer to the local governing body. Therefore, objects installed within the right-of-way for purposes other than transportation may be considered an unlawful encroachment in the right-of-way and prevent the right-of-way from being considered clear and unencumbered.

Posts, walls, signs, or similar ornamental devices that do not interfere with roadway capacity or encroach into a clear zone or interfere with prescribed sight distance requirements may be permitted within the right-of-way. However, specific authorization by the resident engineer or as authorized under the Land Use Permit Manual Regulations is a requisite for these devices or any other encroachment located within the right-of-way. For the purposes of this subsection, mailboxes installed on breakaway posts may occupy the right-of-way without permit. Otherwise encroachments that do not fall within the safe clear zone may be allowed within the right-of-way pursuant to a land use permit issued by the resident engineer or other designee.

24VAC30-91-130. Neotraditional developments.

Streets maintained with public transportation funds should be able to safely accommodate the effective and efficient movement of those expected to use those streets. Consequently, the design of streets intended for maintenance by the department within neotraditional or other unique developments also must comply with all applicable provisions of these requirements and the department's applicable design criteria.

The Subdivision Street Design Guide (24VAC30-91-160) offers additional guidance on neotraditional developments and acceptable unique features typically seen in these types of developments. The utilization of many neotraditional concepts and traffic calming features can normally be accomplished within the flexibility available within VDOT's subdivision street design criteria, and specific requests for exceptions when requests cannot be accommodated should be in writing to the resident engineer.

24VAC30-91-140. Surety and fees.

A. Policy. Except as otherwise provided herein, the developer shall provide surety to guarantee the satisfactory performance of the street, a maintenance fee to offset the department's maintenance costs, and an administrative cost recovery fee to recover the department's costs associated with the review of subdivision plans, the inspection of new subdivision streets, and the administrative processing of the acceptance of new streets as determined in this section. All surety and fees collected under this section shall be based on the date of the local governing body's request and the aggregate mileage of new subdivision streets in that request, rounded up to the next tenth. In the event of extenuating circumstances beyond the developers control, the commissioner or his designee may waive all or a portion of any of the surety and fees.

B. Surety.

1. Type of surety and expiration. An acceptable surety, in accordance with this section, shall be provided by the developer to guarantee the satisfactory performance of the street for a period of one year from the date of its acceptance into the secondary system of state highways. In the event the developer fails to provide surety or any of the fees described in this section within the 30-day period following the local governing body's request for the department to accept the maintenance of a street, the department's previous final inspection of the street shall be considered void and a new inspection shall be required. Surety may be in the form of a performance bond, cash deposit, certified check, irrevocable letter of credit, third party escrow account, or other form mutually satisfactory to the department and the developer. Under no circumstances shall the department or any agency of the Commonwealth be named the escrow agent nor shall funds deposited with the department as surety be subject to the payment of interest.

2. Alternatives to surety.

- a. In jurisdictions where the staff of the governing body administers a comprehensive subdivision construction inspection program that has been approved by the department, the surety may be waived upon certification by the governing body that the proposed addition has been constructed in accordance with approved plans and specifications.
- b. If requested by the developer and subject to availability of departmental personnel, VDOT may perform the construction inspection of subdivision streets proposed to be added to the secondary system of state highways. In such cases, the developer shall bear all costs incurred by the department and the surety shall be waived.

3. Amount of surety. Surety shall be calculated at the rate of \$2,000 per lane per tenth mile of street, or portion thereof, to be accepted by the department for maintenance as part of the secondary system of state highways.

C. Maintenance fee.

A maintenance fee, provided by the developer, shall be required for the acceptance of any street as part of the secondary system of state highways. The maintenance fee shall be calculated at the rate of \$150 per lane per tenth mile or portion thereof.

D. Administrative cost recovery fee.

- 1. Application of the administrative cost recovery fee. To recover a portion of the department's direct costs associated with the review of subdivision plans, the inspection of new subdivision streets, and the administrative processing of the acceptance of new streets, an administrative cost recovery fee shall be required from the developer at the time the streets are accepted by the department. The amount of this cost recovery fee shall be based on the following:
 - a. For streets shown on subdivision construction plans approved prior to (the effective date of the regulation):
 - (1) No cost recovery fee will be collected for street additions requested by the local government before July 1, 2005; and
 - (2) The cost recovery fee structure described in subdivision 1 c of this subsection shall apply until July 1, 2007, after which the department's prevailing cost recovery fee structure will apply.
 - b. For streets shown on subdivision construction plans approved after the effective date of the regulation, the department's cost recovery fee structure in effect at the time of construction plan approval shall apply and be fixed for

- a period of three years from the date of said approval, after which the prevailing cost recovery fee structure shall apply.
- c. The administrative cost recovery fee shall be computed at a base rate of \$250 per lane, without regard to street length, plus \$100 per lane per tenth mile, or portion thereof. However, in the event the surety for new streets is waived under the provisions of subdivision A 2 of this section, the administrative cost recovery fee shall be reduced 50%.
- 2. Alternatives to the administrative cost recovery fee. As an alternative to the administrative cost recovery fee, the department may use one of the following approaches to recover its direct costs:
 - a. For any subdivision, at the developer's request, the department may establish an account for the purpose of tracking these costs and billing the developer not more often than every 30 days;
 - b. For large, complex, multi-use developments, the department, at its option, may establish an account for the purpose of tracking these costs and billing the developer not more often than every 30 days. However, the cost recovery fee assessed under this provision shall not be greater than two times the prevailing cost recovery fee structure; or
 - c. If requested to provide plan review or inspection services or both for subdivision streets that are not intended for maintenance by the department, the department may establish an account for the purpose of tracking these costs and billing the developer not more often than every 30 days.
- 3. Administrative cost recovery fee, annual adjustments. The department shall have the option of adjusting the annual cost recovery fee, in which case it shall compile information regarding its costs for the review of subdivision plans, the

inspection of new subdivision streets, and the administrative processing of the acceptance of new streets during the previous fiscal year and report this information to the commissioner by January 1 of each year. The commissioner may adjust the administrative cost recovery fee by not more than 25% of the fee structure in effect on July 1 of the previous calendar year but not greater than the department's average direct cost as established in the report.

If the commissioner deems that a change in the cost recovery fee structure is warranted, implementation of the change shall be made as follows:

- a. Notice of the adjusted fee structure, including the report on which it is based or information about where the report may be viewed, will be published in the Virginia Register of Regulations in April of that year, and
- b. The adjusted fee structure shall become effective on July 1 of that year.

Part III

Reference Section

24VAC30-91-150. Subdivision street development, plan review, and acceptance.

A. The county-state partnership governing VDOT acceptance of new streets for maintenance. Section 33.1-229 of the Code of Virginia (a Byrd Act provision) creates the authority under which local governments establish new roads as part of the secondary system of state highways. Sections 15.2-2240 and 15.2-2241 of the Code of Virginia establish the authority of local subdivision ordinances and the authority of counties to set the standards for new streets within their territories.

VDOT's participation in the development and acceptance of subdivision streets for maintenance is a cooperative commitment of the Commonwealth Transportation Board.

VDOT's concurrence with or approval of a construction plan represents VDOT's commitment to accept the streets shown on the plan when satisfactorily constructed and

all other requirements governing the department's acceptance of streets are satisfied, including the governing body's request for the acceptance of or transfer of the maintenance and operational jurisdiction over the street, as outlined in these requirements.

Pursuant to these principles:

- 1. Local government controls land development activity and establishes new streets, the relocation of existing streets, and the criteria governing the development of such streets.
- 2. VDOT establishes the minimum standards that must be satisfied for new subdivision streets to be considered for maintenance by the department as part of the secondary system of state highways under its jurisdiction.

Within each locality, VDOT is represented by a resident engineer or comparable designee.

- B. Street development and acceptance of maintenance process.
 - 1. Concept and construction plan approval phase. The proposed construction plan shall be considered incomplete in the absence of a preliminary pavement design based on the Pavement Design Guide (24VAC30-91-160) and the presumed values therein.
 - 2. Construction phase. Upon approval of the construction plan and prior to construction, the resident engineer should advise the developer regarding inspection of the construction phases and the scheduling of those inspections. VDOT approval of each of the following phases of construction is recommended.
 - a. Installation of any enclosed drainage system before it is covered.
 - b. Installation of any enclosed utility placements within the right-of-way before being covered.

- c. Construction of the cuts and fills, including field density tests, before placement of roadbed base materials.
- d. A final pavement design, based on actual soil characteristics and certified tests, shall be completed and approved before the pavement structure is placed.
- e. Placement of base materials, including stone depths, consistent with the approved pavement design, prior to placement of the paving course or courses, followed by field density and moisture tests and the placement of a paving course as soon as possible.
- f. Construction of pavement, including depth and density, upon completion as part of the final inspection.
- 3. Street acceptance process. In the absence of any other formal acceptance, the governing body's resolution requesting the department to accept a street for maintenance as part of the secondary system of state highways completes the dedication and is deemed to constitute the governing body's acceptance of the street.
- 4. Post acceptance phase.

24VAC30-91-160. Listing of documents (publications) incorporated by reference.

Information pertaining to the availability and cost of any of these publications should be directed to the address indicated below the specific document. Requests for documents available from the department may be obtained from the department's division and representative indicated submitted to VDOT; however, department documents may be available over the Internet at www.Virginiadot.org.

1. Drainage Manual, effective April 2002.

Location and Design Division (VDOT)

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Location and Design Engineer
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1401 E. Broad Street

Richmond, Virginia 23219

2. Land Use Permit Manual, 24VAC30-150, effective November 15, 1983 Regulations, 24VAC30-151, effective TBD.

Local Assistance Division (VDOT)

Director of the Local Assistance Division

1401 E. Broad Street

Richmond, Virginia 23219

3. Pavement Design Guide for Subdivision and Secondary Roads in Virginia, effective August 1, 2000.

Materials Division (VDOT)

State Materials Engineer

1401 E. Broad Street

Richmond, Virginia 23219

4. Road and Bridge Specifications, effective 2002.

Construction Division (VDOT)

State Construction Engineer

1401 E. Broad Street

Richmond, Virginia 23219

5. Road Design Manual, effective January 1, 2005.

Location and Design Division (VDOT)

Location and Design Engineer

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1401 E. Broad Street
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Richmond, Virginia 23219

6. Subdivision Street Design Guide (Appendix B: Road Design Manual, effective January 1, 2005)

Location and Design Division (VDOT)

Location and Design Engineer

1401 E. Broad Street

Richmond, Virginia 23219

7. Road and Bridge Standards, effective February 1, 2001.

Location and Design Division (VDOT)

Location and Design Engineer

1401 E. Broad Street

Richmond, Virginia 23219

8. Standard Specifications for Highway Bridges, effective 1996.

American Association of State Highway and Transportation Officials

North Capital Street, Suite 225

Washington, DC 20001

VDOT Modifications to document above

Structure and Bridge Division (VDOT)

Structure and Bridge Engineer

1401 E. Broad Street

Richmond, Virginia 23219

9. Virginia Erosion and Sediment Control Handbook, effective 1992.

Division of Soil and Water Conservation with The Virginia Erosion and

Sediment Control Law and Regulations

Division of Soil and Water Conservation

Governor Street, Suite 206

Richmond, Virginia 23219

10. Highway Capacity Manual, effective 2000.

Transportation Research Board

Keck Center of the National Academies

Transportation Research Board

500 Fifth Street, NW

Washington, DC 20001

Attn: TRB Publications Sales & Affiliate Services

11. VDOT Erosion and Sediment Control and Stormwater Management Program

Specifications Manual (effective March 1, 2004).

Location and Design Division (VDOT)

Location and Design Engineer

1401 E. Broad Street

Richmond, Virginia 23219

12. Policy for Integrating Bicycle and Pedestrian Accommodations—

Commonwealth Transportation Board (effective March 18, 2004.) Note: This

policy reference is included in the regulation only for informational purposes and

is not considered a regulatory provision. Applicable elements of this policy are

stated in the regulation itself.