MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	

Department of Transportation
Montgomery County Regulation on:

ADOPTION OF CONTEXT SENSITIVE ROAD DESIGN STANDARDS - REPEAL

Issued by: County Executive
COMCOR 49.28.01
Authority: Code Section 49-28
Supersedes: Executive Regulation 31-08AM
Council Review Method (2) Under Code Section 2A-15
Register Vol. 42, No. 10
Comment Deadline: October 31, 2025
Effective Date: _____
Sunset Date: None

SUMMARY: The regulation repeals the language of Executive Regulation 31-08AM and establishes new processes for street projects.

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BACKGROUND: This regulation is being repealed to accommodate a substantial rewrite of Chapter 49 of the County Code via Bill 24-22, which became effective in February 2023.

[COMCOR 49.28.01 Context Sensitive Road Design Standards

APPLICABILITY: This new regulation applies to all projects except as follows:

1. All capital projects already included in the Adopted CIP FY09-14, except those projects listed in Facility Planning Transportation, are exempt from these regulations. Projects listed in Facility Planning Transportation which have completed Facility Planning Phase I including review of the project prospectus by the Council Transportation and Environment Committee by the date of adoption of these regulations are also exempt from these regulations, except that they shall comply with the Stormwater Management provisions of these regulations.

2. Development Projects – All development projects that have received preliminary plan approval by the date of adoption of these regulations are exempt from these regulations.

3. These Standards together with those existing design standards maintained by the DOT (Standards 100.01 – 811.01) are available for use until such time as the existing design standards are reviewed for applicability and either retained or eliminated. DOT will review the existing design standards for applicability within 12 months of the adoptions of these regulations to determine which standards should remain in place and which elements of the existing standards should be incorporated into the new standards. Additionally, details such as paving sections and general notes will be updated. A new Executive Regulation will then be submitted identifying which of the existing standards are to be eliminated.

ATTACHMENTS AND INDEX TO STANDARDS

Standard 010.01 - Introduction and Application
Standard 020.01 - Target and Design Speed
Standard 030.01 - Tree Placement
Standard 040.01 - Stormwater Management

Tertiary Roads
Standard 2001.01 - Tertiary Residential Street – Sidewalk on One Side
Standard 2001.02 - Tertiary Residential Street – Sidewalk on Both Sides
Standard 2001.03 - Tertiary Residential Street – Open Section

Secondary Roads
Standard 2002.01 - Secondary Residential Street – No Parking
Standard 2002.02 - Secondary Residential Street – Parking on One Side

Standard 2002.03 - Secondary Residential Street – Parking on Both Sideds
Standard 2002.04 - Secondary Residential Street – Open Section

Primary/Principal Secondary Residential Streets

Standard 2003.08 - Primary/Principal Secondary Residential Street – With Bike Lane, Parking on One Side
Standard 2003.09 - Primary/Principal Secondary Residential Street – With Bike Lane, parking on Both Sides
Standard 2003.10 - Primary/Principal Secondary Residential Street – No Parking
Standard 2003.11 - Primary/Principal Secondary Residential Street – Parking on One Side
Standard 2003.12 - Primary/Principal Secondary Residential Street – Parking on Both Sides
Standard 2003.13 - Primary/Principal Secondary Residential Street – Open Section

Arterial/Minor Arterial/Country Arterial/Country Road

Standard 2004.01 - Urban Arterial Road – 4 Lanes
Standard 2004.02 - Urban Arterial Road – 4 Lanes, With Bike Lanes
Standard 2004.03 - Urban Arterial Road – 5 Lanes
Standard 2004.04 - Urban Arterial Road – 5 Lanes, With Bike Lanes
Standard 2004.05 - Divided Urban Arterial Road – 4 Lanes
Standard 2004.06 - Divided Urban Arterial Road – 4 Lanes, With Bike Lanes
Standard 2004.07 - Suburban Arterial Road – 4 Lanes
Standard 2004.08 - Suburban Arterial Road – 4 Lanes, With Bike Lanes
Standard 2004.09 - Divided Suburban Arterial Road – 4 Lanes
Standard 2004.10 - Divided Suburban Arterial Road – 4 Lanes, With Bike Lanes
Standard 2004.11 - Suburban Arterial Road – 5 Lanes
Standard 2004.12 - Suburban Arterial Road – 5 Lanes, With Bike Lanes
Standard 2004.14 - Suburban Arterial Road – 4 Lanes, Open Section, With Bike Lanes
Standard 2004.16 - Divided Suburban Arterial Road – 4 Lanes, Open Section With Bike Lanes
Standard 2004.18 - Rural Arterial Road – 4 Lanes, Open Section, With Bike Lanes
Standard 2004.19 - Urban Minor Arterial Road – 2 Lanes
Standard 2004.20 - Urban Minor Arterial Road – 2 Lanes, With Parking
Standard 2004.21 - Urban Minor Arterial Road – 2 Lanes, With Bike Lanes
Standard 2004.22 - Urban Minor Arterial Road – 2 Lanes, With Bike Lanes, Parking
Standard 2004.23 - Urban Minor Arterial Road – 3 Lanes
Standard 2004.24 - Urban Minor Arterial Road – 3 Lanes, With Parking
Standard 2004.25 - Suburban Minor Arterial Road – 2 Lanes
Standard 2004.26 - Suburban Minor Arterial Road – 2 Lanes, With Bike Lanes
Standard 2004.27 - Suburban Minor Arterial Road – 2 Lanes, With Parking
Standard 2004.28 - Suburban Minor Arterial Road – 2 Lanes, With Bike Lanes, Parking
Standard 2004.29 - Suburban Minor Arterial Road – 3 Lanes, With Parking

Standard 2004.31 - Suburban Minor Arterial Road – 2 Lanes, Open Section With Bike Lanes
Standard 2004.33 - Rural Minor Arterial Road – 2 Lanes, With Bike Lanes
Standard 2004.34 - County Road
Standard 2004.35 - Country Arterial

Business District Streets
Standard 2005.01 - Business District Street – 2 Lanes, Parking on One Side
Standard 2005.02 - Business District Street – 2 Lanes, Parking on Both Sides
Standard 2005.03 - Business District Street – 4 Lanes With Parking
Standard 2005.04 - Divided Business District Street, 4 Lanes With Parking

Industrial/Office Park Roads
Standard 2006.01 - Industrial Street – 2 Lanes
Standard 2006.02 - Industrial Street – 3 Lanes
Standard 2006.03 - Industrial Street – 4 Lanes
Standard 2006.04 - Divided Industrial Street – 4 Lanes

Parkways
Standard 2007.01 - Urban Parkway
Standard 2007.02 - Suburban Parkway
Standard 2007.03 - Rural Parkway

Major Highway/Controlled Major Highway
Standard 2008.01 - Urban Major Highway – 6 Lanes
Standard 2008.02 - Urban Major Highway – 6 Lanes, With Bike Lanes
Standard 2008.04 - Suburban Major Highway – 6 Lanes, With Bike Lanes
Standard 2008.05 - Rural Major Highway – 6 Lanes, Open Section
Standard 2008.07 - Urban Controlled Major Highway – 6 Lanes, Speeds <45 mph
Standard 2008.08 - Urban Controlled Major Highway – 6 Lanes, Speeds ≥45 mph
Standard 2008.09 - Suburban Controlled Major Highway – 6 Lanes, Speeds <45 mph
Standard 2008.10 - Suburban Controlled Major Highway – 6 Lanes, Speeds ≥45 mph
Standard 2008.11 - Suburban Controlled Major Highway – 4 Lanes, Open Section
Standard 2008.12 - Rural Controlled Major Highway – 4 Lanes, Open Section

Freeways (Reference to AASHTO Interstate Design Guide)

Montgomery County Design Standards

MC-100.01	Combination Concrete Curb and Gutter – Type A
MC-101.01	Combination Concrete Curb and Gutter – Type C

MC-102.01	Depressed Curb Entrance
MC-103.01	Bituminous Concrete Curb
MC-104.01	Mountable Concrete Curb and Gutter – Type F
MC-110.01	Residential Sidewalk Closed Section
MC-111.01	Business District Sidewalk
MC-112.01	Residential Sidewalk Ramp
MC-113.01	Business District Sidewalk Single Ramp
MC-113.02	Business District Sidewalk Dual Ramp
MC-114.01	Median Opening
MC-200.01	Residential Alley
MC-201.01	Commercial Alley
MC-210.01	Tertiary Residential Street – 44’ Right-Of-Way
MC-210.02	Tertiary Residential Street – 50’ Right-Of-Way
MC-210.03	Modified Tertiary Residential Street
MC-210.04	Tertiary Residential Street with Parking Bays
MC-210.05	Tertiary Residential Street – Open Section with Sidewalks and Street Trees
MC-211.01	Secondary Residential Road
MC-211.02	Secondary Residential Road – Open Section
MC-211.03	Secondary Residential Road – Open Section with Sidewalks and Street Trees
MC-212.01	Primary Residential Road
MC-212.02	Alternative Primary Residential Road
MD-212.03	Primary Residential Road – Open Section
MC-212.04	Primary Residential Road – Open Section with Sidewalk, Bikepath and Street Trees
MC-212.05	Master Plan Primary Road – Open Section with Sidewalk, Bikepath and Street Trees
MC-213.01	Arterial Road
MC-213.02	Arterial Road – Open Section
MC-213.03	Arterial Road – 5 Lanes Including Center Left Turn Lane
MC-213.04	Arterial Road – Open Section with Sidewalk, Bikepath and Street Trees
MC-214.01	Commercial-Business District Road
MC-214.02	Commercial/Industrial Road – 60’ Right-of-way
MC-214.03	Commercial/Industrial Road – 70’ Right-of-way
MC-215.01	Secondary Residential Dual Road – 76’ Right-of-way
MC-215.02	Secondary Residential Dual Road – 100’ Right-of-way
MC-216.01	Primary Residential Dual Road – 84’ Right-of-way
MC-216.02	Primary Residential Dual Road – 100’ Right-of-way

MC-217.01	Arterial Dual Road – 100’ Right-of-way
MC-217.02	Arterial Dual Road – 110’ Right-of-way
MC-217.03	Arterial Dual Road – 120’ Right-of-way
MC-217.04	Arterial Dual Road – Open Section with Sidewalk, Bikepath, and Street Trees
MC-218.01	Major Dual Road – 120’ Right-of-way
MC-218.02	Major Dual Highway – 150’ Right-of-way
MC-219.01	Commercial/Industrial Dual Road – 80’ Right-of-way
MC-219.02	Commercial/Industrial Dual Road – 100’ Right-of-way
MC-219.03	Commercial/Industrial Dual Road – 112’ Right-of-way
MC-219.04	Commercial/Industrial Dual Road – 120’ Right-of-way
MC-220.01	Residential Road Intersection – Open Section with Curb and Gutter Placement
MC-221.01	Traffic Control Intersection – Residential Roads
MC-221.02	Traffic Control Circle – Residential Roads
MC-222.01	Cul-De-Sac Curb and Gutter Road
MC-222.02	Cul-De-Sac Open Section Road
MC-223.01	Temporary Turnaround – Curb and Gutter Roadway
MC-223.02	Temporary Turnaround – Open Section Roadway
MC-224.01	Monumental Entrance
MC-224.02	Monumental Entrance – With Accel./Decel. Lanes
MC-225.01	Edge Transit Way – 150’ Right-of-way
MC-225.02	Median Transit Way – 150’ Right-of-way
MC-225.03	Exclusive Transit Way – 70’ Right-of-way
MC-300.01	Tertiary Driveway
MC-300.02	Tertiary Driveway with Mountable Curb
MC-301.01	Residential Driveway
MC-301.02	Residential Driveway with Mountable Curb
MC-301.03	Residential Driveway Open Section Road
MC-301.04	Residential Driveway Limited Width
MC-301.05	Residential Driveway with Curb Radius
MC-302.01	Commercial Driveway
MC-303.01	Methods of Transitioning Driveways
MC-500.01	Driveway Endwall Open Section Road
MC-501.01	“A” Inlet
MC-502.01	“B” Inlet
MC-502.02	Reverse “B” Inlet
MC-503.01	“D” Inlet

MC504.01	"E" Inlet
MC-505.01	"E-4" Inlet
MC-506.01	"J" Inlet
MC-506.02	"J" Inlet as a Terminus
MC-507.01	Precast Curb Inlet Guidelines
MC-510.01	"A" Manhole
MC-515.01	"B" Manhole
MC-520.01	Manhole and Inlet Steps
MC-520.02	Manhole and Inlet Steps in Channels
MC-521.01	Cutoff Wall with Concrete Outfall
MC-521.02	Cutoff Wall with Riprap Outfall
MC-525.01	Subgrade Drains – Open Section Roadways
MC-700.01	Tree Locations – Closed Section Roads
MC-701.01	Tree Locations – Open Section Roads
MC-702.01	Tree Planting Detail
MC-703.01	Approved Tree Variety List
MC-703.02	Approved Tree Species List
MC-704.01	Allowable Greenspace Plantings
MC-800.01	Barricade Post
MC-801.01	Utility Patch in Rigid Pavement
MC-801.02	Utility Patch in Flexible Pavement
MC-801.03	Utility Patch for Appurtenance Adjustment
MC-810.01	Swale Section
MC-811.01	Methods of Grading Side Slopes

APPENDIX A – Urban and Rural Boundaries

Standard No. 010.01 INTRODUCTION AND APPLICATION

Well-designed transportation infrastructure that is responsive to its context is the product of thoughtful planning. By bringing together transportation design professionals and representatives of interest groups (e.g. fire and police, mass transit, advocates for bicyclists, pedestrians, the disabled, the environment, and development community), transportation planning and design can produce transportation infrastructure and programs that support community goals, provide safe and efficient movement for individuals and goods, enhance the economy, and protect the natural environment.

The purpose of these Standards is to provide designers and decision-makers with a framework for incorporating context sensitive design and multi-modal elements into transportation improvement projects. The emphasis is to encourage projects that are sensitive to the local context and environment while meeting the important needs of the people they serve. The Standards presented in this document are intended to provide templates for Montgomery County public roads that are planned, designed, and constructed to:

- Provide for the safety and convenience of all users of the roadway system including:
  - Pedestrians (including those who require mobility aids)
  - Bicyclists
  - Transit Users
  - Emergency Service Operators
  - Automobile Drivers
  - Commercial Vehicle Operators
- Facilitate multi-modal use
- Provide for treatment of storm water using Vegetated Integrated Management Practices ("V-IMP") in the road right-of-way
- Accommodate, to the greatest extent possible, street trees as an important environmental and community character element of the right-of-way and associated easements

Montgomery County includes a wide variety of settings, unique landscapes, and environmental conditions. These Roadway Design Standards have been developed to provide and promote sufficient flexibility to allow application of appropriate roadway elements and dimensions to different situations within the County. Different standards have been developed for urban areas, suburban areas, and rural areas. These Standards reflect the different roles of roadway infrastructure in these distinct settings. Other examples of flexibility included in these standards are different cross-sections for similarly

classified streets that recognize the need for varying approaches to multi-modal accommodation, storm water management, tree placement, and differing right-of-way dimensions.

These Standards also respond to and reinforce several important County initiatives:

- Safety – The Standards seek to provide for the safety of all users of the transportation system (pedestrians, bicyclists and drivers). This includes a commitment to comply with state and federal accessibility standards for people with disabilities. The Standards aim to reduce the number of and severity of collisions between roadway users with a corresponding reduction in injuries and fatalities.

- Mobility – These standards are intended to provide for mobility by multiple modes of transportation, sustain and encourage economic activity and to reduce wasted motor vehicle fuel, time lost to congestion, and harmful emissions.

- Emergency Response – The coordination and refinement of emergency response requirements are addressed in the Standards.

- Transit Operations – The requirements to accommodate transit riders, vehicles and operations have been considered in the development of the Cross-Section Standards.

- Environmental Stewardship – The Standards seek to promote smart growth, to preserve and enhance Montgomery County's natural, community, and historic resources, and to support initiatives that further environmental quality such as storm-water management.

Achieving these purposes and goals within a limited right-of-way often requires achieving a careful balance. These Standards intend to provide that balance, but will not be suitable to all conditions. Therefore, a design exceptions process is outlined to address situations when the desired objectives cannot be achieved to their maximum extent.

1. LEGISLATIVE BACKGROUND

On July 3, 2007, the Montgomery County Council adopted Bill 48-06 which revised and updated Chapter 49 of the Montgomery County Code. These changes were introduced concurrently with changes to Chapter 50. Chapter 49 governs, among other things, the design and construction of County roads, walkways and bikeways. These changes include the objective of designing roads, walkways and bikeways using context sensitive policies. Also, changes encourage the design of County roads and streets in a manner that provides for the safety and convenience of all users of the roadway system – including pedestrians, bicyclists, transit users, automobile drivers, commercial vehicles and freight haulers, and emergency service vehicles. Additionally, Bill 48-

06 addresses storm water and provides for on-site treatment of a certain amount of storm water, in the road or street right-of-way including through the use of vegetation-based infiltration techniques.

To meet these objectives the County Executive – with the advice of stakeholders, including representatives of motorists, pedestrians, bicyclists, transit users, engineering consultants, disability community, smart growth and environmental advocates, businesses, and other experts located in the County – developed these Standards.

2. IMPORTANT CONSIDERATIONS IN TRANSPORTATION FACILITY DESIGN

Transportation and quality of life in Montgomery County are inextricably linked. This connection is largely influenced by the role that highways, streets, bikeways, and sidewalks play in our communities. The development and maintenance of a comprehensive and effective multimodal transportation network is critical to a healthy and vibrant County. The Executive Branch, through the Department of Transportation (DOT) and partners in other County departments, serves as the steward for roadways and must consider a broad range of factors in maintaining and improving this system, including:

- Safety for all users
- Usability for all users
- Functionality – the need for access and mobility including transit operations and emergency response
- Accessibility for people with disabilities – as a prerequisite to access to housing, employment, recreation, and healthcare
- Mutual support and compatibility between transportation facilities and services and the adjacent land uses, and associated activities they serve
- Consistency with the Master and Sector plans, transportation plans and policies, and environmental regulations, that guide the County, the region, the state, and the Federal government
- Transportation facility design and operational requirements established by others such as Maryland State Highway Administration (SHA) and the Federal Highway Administration (FHWA)

- Input and participation from local stakeholders, and the appropriate local, regional and state reviewing agencies

- Cost effectiveness – the value returned to the County for the investments made in transportation

- Environmental concerns – such as noise, air quality, watershed protection, habitat protection, forest cover, and many other issues

Montgomery County is committed to caring for both the developed and natural environments by promoting sustainable development practices that minimize negative impacts on natural resources, historic, scenic and other community values, while also recognizing that transportation improvements have significant potential to contribute to local, regional, and statewide quality of life and economic development objectives. In order to improve environmental quality, these Standards provide for street trees and introduce new storm water management standards to protect the waterways from roadway runoff from streets and highways within the County.

3. KEY PRINCIPLES OF THESE ROAD DESIGN STANDARDS

The following are the key principles that the Roadway Design Standards are intended to achieve.

Multimodal Consideration – A guiding principle of the Standards is that the roadway system of the County should safety accommodate all users of the public right-of-way including:

- Pedestrians, including people requiring mobility aids (canes, service animals, wheelchairs, walkers, and scooters)

- Bicyclists

- Drivers and Passengers

    - Transit vehicles
    - Trucks
    - Automobiles and Motorcycles

These Standards do not diminish the importance of providing a safe operating environment for motor vehicles – rather the Standards provide balanced guidance on public right-of-way design to serve both non-motorized (i.e. bicycles and pedestrians) and motorized travel. As such,

pedestrian and bicycle design requirements within a shared right-of-way are integrated into the Cross-Section Standards.

The County requires that designers and decision-makers fully consider all modes of transportation throughout the planning, design, and construction phases of a transportation improvement project. Ultimately, thoughtful consideration and evaluation of all modes should result in a robust, multimodal transportation system for the County.

Context Sensitive Design – The Standards incorporate the overarching principles of Context Sensitive Design (a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility for all users).

An important concept in planning and design is that every project is unique. Whether the project is a modest safety improvement, reconstruction of a small section of street, or construction of a ten-mile arterial street, there are no generic solutions. Each project requires designers to address needed roadway facility modifications while safely integrating the design into the surrounding natural and built environment. Several characteristics of context-sensitive projects have been identified through Federal highway Administration (FHWA) research and workshops. Among those concepts, the following are incorporated within these Standards:

- The project satisfies its purpose and need as agreed to by a wide range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.

- The project is a safe facility for users of all ages and abilities as well as for the surrounding community.

- The project meets minimum design standards for accessibility for people with disabilities and gives attention to universal design principles.

- The project contributes to community character, is in harmony with existing communities and preserves environmental, scenic, aesthetic, historic, and built and natural resources of the area.

- The project is well managed and involves efficient and effective use of the resources (time, budget, materials, community) of all involved.

- The project is designed and built with the least possible disruption to the community.

· The project is seen as having added lasting value to the community.

The Standards themselves can only go so far in terms of achieving Context Sensitive Design. A collaborative approach to selecting the appropriate standard and modifying it as necessary is critical to achieving a context sensitive design. These Standards are intended to be applied with sufficient flexibility to allow context-sensitive designs to be achieved, through the project planning, review, and design exception process.

Consensus About Design Intent – Consensus about the design intent is needed to ensure that the project will ultimately satisfy its objectives. Consensus requires participation of the public, interest groups and stakeholders, the DOT, the Department of Permitting Services (DPS), the Department of Environmental Protection (DEP), the Montgomery County Fire and Rescue Service (MCFRS), the Montgomery County Police Department (MCPD), the Maryland-National Capital Park and Planning Commission (M-NCPPC) staff, among others, in the development and review of a design. With this consensus, the Planning Board (for privately funded and constructed projects and through mandatory referral of public projects) and County Council (for capital improvement projects) may review and approve projects that meet the County's objectives. The ideal is a process that results in projects which can be expeditiously accomplished within reasonable project cost and that assure desired benefits to the community.

Often, the process through which a project is developed is as important as the design standards employed. A clear and consistent process for developing and review the design of a transportation facility is important for a number of reasons. The most significant are:

· To encourage early planning and evaluation so that project needs, goals and objectives, issues, and impacts can be identified before significant resources are expended.

· To ensure context sensitivity through an open, consensus-building dialog with project constituents and decision-makers.

· To achieve consistent expectations and understanding between project proponents and those entities who evaluate and prioritize projects (including the County Executive, County Council and the Planning Board).

· The project is seen as having added lasting value to the community.

An effective process helps achieve projects that respect the values of the community and the natural and developed environment, while meeting the transportation needs.

4. KEY DETERMINATIONS OF THE DESIGN STANDARDS

The design standards are organized by area types and roadway classification. These concepts are introduced below.

4.1 AREA TYPES

The context of a roadway begins with its nearby natural resources, terrain, and the manmade environment (development patterns, historic, cultural, and recreational assets). The environmental context can be a determinant of the desired type of roadway features to serve different users. This context often establishes the physical constraints of the roadway alignment and cross-section, and influences the selection of target and design speed. This environmental context is generalized as area type as identified in Master Plans, the County Code, and field conditions. A description of the area types applicable to these standards follow.

URBAN

Urban areas are designed by the County Council. Urban areas typically include central business districts, town centers, or Metro Station Policy Areas (MSPA) with high density commercial and residential development. Open space is generally found in formal parks or urban preserves.

SUBURBAN

Suburban areas vary widely in character and are usually found surrounding the urban areas. Some components of suburban areas may appear rural in character, while others are densely populated and more closely resemble urban areas.

RURAL

Rural areas are generally undeveloped or sparsely settled with development at low densities along a small number of roadways or clustered in small villages. Rural areas are often distant from the metropolitan center. Large portions of the County's rural areas are in the agricultural reserve.

The Boundaries for Urban and Rural Areas have been established by the County Council and are shown in Appendix A. All other areas of the County are considered Suburban. The County Council may change these boundaries from time to time.

4.2 ROADWAY CLASSIFICATION

The transportation network is composed of several different types of roadways that provide different functions, traditionally referred to as functional classification. The primary purpose of some roads is to facilitate movement of vehicles (cars, trucks, buses, bicycles) between major cities and towns (mobility). The primary purpose of other roads is to provide access to the adjoining land (accessibility). Most roads provide a combination of these purposes and a typical trip will often entail traveling along a variety of roadway types, each of which provides a different degree of local access and a different degree of regional mobility.

It should be noted that design standards presented herein do not apply to roadways classified as a Rustic Road or an Exceptional Rustic Road. The following definitions are those provided in the Montgomery County Code Chapter 49, Streets and Roads (Bill 48-06 effective October 14, 2007).

FREEWAY

A road meant exclusively for the through movement of vehicles at a high speed. Access must be limited to grade-separated interchanges.

CONTROLLED MAJOR HIGHWAY

A road meant exclusively for the through movement of vehicles at lower speeds than a Freeway. Access must be limited to grade-separated interchanges or at-grade intersections with public roads.

MAJOR HIGHWAY

A road meant exclusively for the through movement of vehicles at a moderate speed. Access must be primarily from grade-separated interchanges and at-grade intersections with public roads, although driveway access is acceptable in urban and denser suburban settings.

PARKWAY

A road meant exclusively for the through movement of vehicles at a moderate speed. Access must be limited to grade-separated interchanges and at-grade intersections. Any truck with more than four wheels must not use a Parkway, except in an emergency or if the truck is engaged in Parkway maintenance.

ARTERIAL

A road meant primarily for the through movement of vehicles at a moderate speed, although some access to abutting property is expected.

COUNTRY ARTERIAL

A Country Arterial is an Arterial that is typically in the County's agricultural reserve.

MINOR ARTERIAL

A Minor Arterial is a two-lane Arterial meant nearly equally for through movement of vehicles and access to abutting property.

BUSINESS DISTRICT STREET

A road meant for circulation in commercial and mixed-use zones.

INDUSTRIAL ROAD

A road meant for circulation in industrial zones.

PRIMARY RESIDENTIAL STREET

A road meant primarily for circulation in residential zones, although some through traffic is expected.

COUNTY ROAD

A Country Road has the function of a Primary Residential Street, typically in the County's agricultural reserve.

PRINCIPAL SECONDARY RESIDENTIAL STREET

A Principal Secondary Street is a Secondary Residential Street meant to carry somewhat more through traffic.

SECONDARY RESIDENTIAL STREET

A road meant nearly exclusively for access to abutting properties in residential zones. A road meant to provide access between a residential development with fewer than 200 dwelling units and one or more higher classification roads.

TERTIARY RESIDENTIAL STREET

A road meant (exclusively for access to abutting property in residential zones) to provide direct access to a residential development with 75 or fewer dwelling units. A Tertiary Residential Street must not be built unless the Planning Board allows its use when the Board approves a preliminary subdivision plan or site plan.

5. KEY ELEMENTS OF THE DESIGN STANDARDS

There are four key technical elements to the Standards. These include target and design speed, cross-sections, street tree placement, and stormwater management. Each of these is described in the following sections.

5.1 TARGET AND DESIGN SPEED

Target speeds serve as an important factor for determining design speeds, influencing operating speeds, and serving as a reference for establishing speed limits. The intent of the Target and Design Speed Standard is to provide consistency among the design characteristics of the roadway, its operating speed, the speed limit, and the required safety and mobility for all roadway users. The target and design speed ranges identified in this standard are intended to capture a broad range of conditions and applications, but will not be suitable to every possible situation. Therefore, it is expected that variances from the Standards and guidance provided will be necessary on a case-by-case basis.

5.2 CROSS-SECTIONS TO ACCOMMODATE ROADWAY USERS

The objectives for selecting an appropriate roadway cross-section and the design of roadside elements are (1) to develop a transportation infrastructure that provides access for all appropriate modes of transportation and safety in equal measure for each mode of travel and (2) to ensure that transportation facilities fit their physical setting and preserve scenic, historic, aesthetic, community, and environmental resources to the extent possible.

In some cases, these design objectives can be achieved within the available right-of- way. In other cases, the cost-benefit of acquiring additional right-of-way needs to be analyzed. Sometimes, tradeoffs in user accommodation need to be made to preserve environmental

or community resources located within or adjacent to the right-of- way. In these situations, the challenge is to provide access and safety for each mode of travel. In other situations, it will be necessary to modify environmental characteristics in order to provide a safe and accommodating facility.

These Cross-Section Standards are seen as starting points or templates for the design process. It is recognized that differing conditions around the County will require different cross-sectional configurations. To the extent possible, these Cross-Section Standards try to establish configurations that will occur more frequently throughout the County. However, it is expected that variance from the Standards will be necessary on a case-by-case basis. It should be noted that the Minor Arterial Cross- Section Standards may apply to the design of two-land arterials.

5.2.1 USER ACCOMMODATION

In addition to medians, buffer areas, and maintenance offsets, the cross-sections are developed to accommodate users of the roadway through provisions of the following facilities within the cross-sections.

PEDESTRIANS (including people requiring mobility aids)

- Sidewalks
- Shoulders
- Shared lanes (such as on Country Roads)
- Shared use paths

BICYCLISTS

- Bicycle lanes
- Shoulders
- Shared lanes
- Shared use paths

MOTOR VEHICLES

- Shoulders
- On-street parking

- Travel lane

5.2.2 EMERGENCY RESPONSE REQUIREMENTS

In addition to the everyday users of transportation facilities, the cross- sections have been developed to accommodate emergency service vehicles and response requirements. Emergency response is a key function of the County's roadway network. Fire and Rescue Service apparatus access is required for all new development, redevelopment and for roadway reconstruction. Fire and Rescue Service apparatus access may include public roads, private roads, access roads, private driveways or other approved surfaces capable of supporting Fire and Rescue Service vehicles. The Fire Marshall may require the designation of one or more fire lanes on roads to ensure adequate Fire and Rescue Service apparatus access. Regulations defining detailed Fire and Rescue Service requirements have been developed separately from these Standards in Regulation 29-08.

5.2.3 CROSS-SECTION ELEMENT WIDTHS

The following sections provide the dimensions that serve as the starting point for the Cross-Section Standards. These dimensions can be assembled to create "idealized" cross-sections that do not necessarily correspond to master planned or existing rights-of-way while still respecting the general idea of a constrained right-of-way. It is expected that the standard cross- sections will be modified during the design process to reflect project specific conditions In these cases the dimensions provided below may serve as a useful reference, although the designer may select wider or narrower dimensions as appropriate. A concept of design exception process is included in these Standards (see 7.1) for these types of modifications.

One way in which these cross-sections may be routinely modified is through reassignment of the curbside width. The curbside width includes the maintenance offset, buffer, and sidewalk or shared use path. All elements of the curbside can be designed as an integrated streetscape achieving a safe, unified and attractive pedestrian environment appropriately designed to also provide a safe environment for other roadway users. Plant material specified for the right-of-way, and associated public easements can be developed as part of an overall streetscape design.

Cross-section elements are described from the edge of the right-of-way to the center line as follows:

A. MAINTENANCE OFFSET

An offset of 2-feet from the back-of-sidewalk to the right-of-way line is preferred. This offset can be incorporated into the sidewalk area in zero- setback areas or

other appropriate situations. This offset can also be increased in locations where street trees are located behind the sidewalk.

B. SHARED-USE PATH

A shared-use path 8 to 10-feet wide along one or both sides of the road can be provided in lieu of sidewalks and/or a marked bike lane on Parkways and Major Highways and Controlled Major Highways. Additional 2-foot clear offsets to signage, lighting, and trees are needed on both sides of a shared use path.

C. SIDEWALKS

Sidewalks provide a walking path parallel to the roadway. A minimum sidewalk width of 5-feet is provided in the Cross-Section Standards. Sidewalk width is increased as pedestrian demands increase. The following dimensions are indicated for different situations.

- Minimum 5-foot sidewalks are acceptable on most roadways with low to moderate pedestrian volumes
- 6-foot sidewalks are preferred on higher pedestrian use streets where group walking and multiple wheelchair users can be anticipated
- 8-foot sidewalks are preferred on Urban Major Highways and Arterials where higher pedestrian volumes are anticipated
- 10-foot sidewalks are preferred on Business District Streets where the highest pedestrian volumes are expected. In many cases the buffer area and maintenance offset will be incorporated into the sidewalk area through an integrated streetscape design
- In Urban and Suburban areas, additional sidewalk area may be obtained by including the maintenance offset and portions of the buffer as paved sidewalk areas
- Sidewalks are typically provided on both sides of the street, except where shared-use paths are provided. Sidewalks may be provided on only one side of some residential streets and rural roads

D. BUFFERS

Buffers provide a clear zone, a planting area, a location for street lighting, signage, and emergency service appurtenances. Buffers may also serve as a location for

Vegetated Integrated Management Practices (VIMPs) for storm water. The following dimensions are indicated for different situations.

CONTROLLED MAJOR HIGHWAY

- AASHTO Clear Zone setbacks for the Roadside Design Guide or suitable barriers are preferred

PARKWAY

- 10-foot buffers are generally suitable in Urban areas
- 20-foot buffers are generally suitable in Suburban areas
- 20-foot buffers are generally suitable in Rural areas
- AASHTO Clear Zone setbacks and/or barriers are preferred for high speed (greater than 45 mph) roadways in Suburban and Rural areas.

MAJOR HIGHWAY/ARTERIAL

- 8-foot buffers are generally suitable in Urban areas
- 10-foot buffers are generally suitable in Suburban areas
- 20-foot buffers are generally suitable in Rural areas
- 20-foot buffers are preferred on Country Arterials (If applicable to their reconstruction)
- AASHTO Clear Zone setbacks and/or barriers are preferred for high speed (greater than 45 mph) roadways in Suburban and Rural areas

BUSINESS DISTRICT STREETS

- 8-foot buffers are generally suitable. The buffer strip is often incorporated into the sidewalk area through streetscape design

INDUSTRIAL STREETS

- 10-foot buffers are generally suitable

RESIDENTIAL STREETS

- 10-foot buffers are generally suitable on closed-sections

- 20-foot buffers are generally suitable on open-sections

E. PARKING

The following provisions are included for on-street parking.

- 8-foot parking lanes (including the gutter pan) are generally suitable on Minor Arterials, Business District Streets, and Residential Streets
- Off-peak use of a curbside travel lane may be permitted on Arterials, Major Highways, and Industrial Streets

F. SHOULDERS

Shoulders are provided on open-section and higher speed roads. The following dimensions are indicated for different situations.

CONTROLLED MAJOR HIGHWAY

- 4-foot median shoulders are generally suitable
- 8-foot outside shoulders are generally suitable

MAJOR HIGHWAY

- Shoulders are not typically provided in Urban areas (see bike and travel lanes)
- 4-foot median shoulders are generally suitable in Rural and high speed (greater than 45 mph) Suburban areas
- 6-foot outside shoulders are generally suitable in Suburban areas
- 8-foot outside shoulders are generally suitable in Rural areas

PARKWAY

- 4-foot median shoulders are generally suitable in Rural and high speed (greater than 45 mph) Suburban areas
- 6-foot outside shoulders are generally suitable in Suburban and Urban areas
- 8-foot outside shoulders are generally suitable in Rural areas

ARTERIAL

- 4-foot shoulders are generally suitable on open-section and on County Arterials

RESIDENTIAL STREETS

- 2-foot shoulders are generally suitable on open-section Secondary Residential Streets and on Country Roads
- 4-foot shoulders are generally suitable on open-section Primary and Principal Secondary Residential Streets

G. BIKE LANES

Bike Lanes are provided on closed-section roads. The following dimensions are indicated for different situations.

- 6- to 6.5-foot bike lanes are generally suitable on higher speed roads and adjacent to parking
- 6-foot bike lanes (inclusive of the gutter pan) are also generally suitable on Urban and Suburban closed section Major Highways
- 5.5-foot bike lanes (inclusive of the gutter pan) are generally suitable when adjacent to the curb on all roadway types except for Major Highway

H. TRAVEL LANES

GENERAL GUIDANCE

- The land widths shown in Standards 2001.01 through 2008.12 for lanes adjacent to curb include 1.5' for a gutter pan, which provides for drainage as well as shy distance (comfortable separation) from the curb. For inside lanes adjacent to a raised median on roads at the lower end of the target speed range, when drainage does not require a median gutter pan, the shy distance may be reduced to a minimum of 6" by reducing the width of the gutter pan.
- In laying out the striping plan, the traffic engineer shall consider the context of the specific road segment under design. When there is a significant change in context once a roadway has been constructed, consideration may be given to modifying the lane widths by re-

striping after considering all the factors impacting the roadway context. Where on-street parking is provided on minor arterial and business district streets, the striping plan should maximize the amount of pavement space provided for parking and bicycle accommodation with an objective toward limiting the adjacent travel lane to 10.5 feet effective width.

Travel Lanes are provided on all roads. The following dimensions are indicated for different situations.

CONTROLLED MAJOR HIGHWAY

- 12-foot lanes are generally suitable when adjacent to a shoulder or travel lane
- 13.5-foot lanes are generally suitable when adjacent to curb (12 foot effective width)

MAJOR HIGHWAY

- 11-foot lanes are generally suitable when adjacent to a shoulder, bike lane, or travel lane in Urban and Suburban areas
- 12-foot lanes are generally suitable when adjacent to a shoulder or travel lane in Rural areas
- 12.5-foot lanes are generally suitable when adjacent to a curb in Urban and Suburban areas (11 foot effective width)
- 13.5-foot lanes are generally suitable when adjacent to a curb in Rural areas (12 foot effective width)

PARKWAY

- 11-foot lanes are generally suitable when adjacent to a shoulder, bike lane, or travel lane in Urban and Suburban areas
- 12-foot lanes are generally suitable when adjacent to a shoulder or travel lane in Rural areas
- 12.5-foot lanes are generally suitable when adjacent to a curb in Urban and Suburban areas (11 foot effective width)

- 13.5-foot lanes are generally suitable when adjacent to a curb in Rural areas (12 foot effective width)

ARTERIAL/MINOR ARTERIAL

- 10-foot lanes may be suitable when between a shoulder/bike lane and a travel lane in the same direction without frequent bus or truck traffic in Urban areas.
- 11-foot lanes are generally suitable when between a shoulder/bike lane and a travel lane in the same direction in Urban and Suburban areas
- 11-foot lanes are generally suitable when an inside travel lane is adjacent to a flush median or a lane of opposing traffic in Urban and Suburban areas
- 11-foot lanes are generally suitable on Country Arterials
- 11.5-foot lanes are generally suitable when adjacent to a median curb (inclusive of the gutter pan) in Urban areas (10 foot effective width)
- 12-foot lanes are generally suitable in Rural areas
- 12.5-foot lanes are generally suitable when adjacent to a median curb in Suburban areas (11 foot effective width)
- 14.5-foot lanes are generally suitable (including the gutter pan) when adjacent to the outside curb in Urban and Suburban areas to provide bicycle accommodation (13 foot effective width)

BUSINESS DISTRICT STREET

- 11-foot lanes are generally suitable when adjacent to a parking or travel lane
- 12.5-foot lanes are generally suitable (including the gutter pan) when adjacent to a curb (11 foot effective width)

INDUSTRIAL STREET

- 12-foot lanes are generally suitable when adjacent to a travel lane

- 13.5-foot lanes are generally suitable (including the gutter pan) when adjacent to a curb (12 foot effective width)

PRIMARY AND PRINCIPAL SECONDARY RESIDENTIAL STREET

- 10-foot lanes are generally suitable when adjacent to a shoulder or bike lane
- 11-foot lanes are generally suitable when adjacent to a parking lane
- 11.5-foot lanes are generally suitable when adjacent to a curb (10 foot effective width)

SECONDARY RESIDENTIAL STREET

- 10-foot lanes are generally suitable when adjacent to shoulder, parking, or bike lane
- 11.5-foot lanes are generally suitable (inclusive of the gutter pan) when adjacent to a curb (10 foot effective width)

TERTIARY RESIDENTIAL STREET

- 10-foot lanes are generally suitable (8.5 to 10 foot effective width)

I. MEDIANS

Medians provide a landscape amenity, provide separation from opposing directions of travel, to provide pedestrian refuge, and to shield turning vehicles, among other purposes. The following dimensions are indicated for different situations.

CONTROLLED MAJOR HIGHWAY

- 24-foot medians are generally suitable in Urban and Suburban areas
- 32-foot medians are generally suitable in Rural areas

MAJOR HIGHWAY

- 17-foot medians are generally suitable in Urban and Suburban areas
- 32-foot medians are generally suitable in Rural areas

PARKWAY

- 17-foot medians are generally suitable in Urban and Suburban areas
- 32-foot medians are generally suitable in Rural areas

ARTERIAL

- 8-foot medians may be used when provision of a left-turn lane in the median is not needed
- 11 - 12-foot medians are generally suitable for center Two-Way Left Turn Lanes (TWLTL). A 10.5-foot TWLTL width may be considered in cases where the target speed is at the low end of the applicable range, the expected percentage of heavy vehicles is low for the roadway class, and driveway or public street access is frequent.
- 17-foot medians are generally suitable for raised medians

BUSINESS DISTRICT STREET

- 8-foot medians may be used when provision of left-turn lane in the median is not needed
- 17-foot medians are generally suitable for raised medians

INDUSTRIAL STREET

- 8-foot medians may be used when provision of left-turn lane in the median is not needed
- 12-foot medians are generally suitable for center two-way left turn lanes
- 17-foot medians are generally suitable for raised medians

PRIMARY AND PRINCIPAL SECONDARY RESIDENTIAL STREET

- 17-foot medians are generally suitable for raised medians

5.3 STREET TREE PLACEMENT

Street trees provide a number of valuable functions including enhancing community character, defining the roadway edge, enhancing pedestrian comfort, providing separation between the sidewalk and street, providing a visual buffer for abutting properties, providing storm water and air quality benefits, shading the roadway and sidewalk, and in some cases,

encouraging lower operating speeds. The intent of the Street Tree Placement Standard is to establish appropriate locations for placement of street trees on County roads that safely attain the environmental, aesthetic, character, and place-making objectives for developed areas in the County. Improperly located trees may pose a serious safety hazard, may obstruct sight-lines to intersections and important traffic control devices such as stop signs and traffic signals, and may impair visibility for and of pedestrians along sidewalks, shared-use paths, and at street crossings. Improper location of trees may also result in poor tree health, and restrict emergency response operations, and may interfere with utility placement, maintenance and repair.

5.4 STORMWATER MANAGEMENT

One of the most important considerations in roadway design is stormwater management. One major storm water management consideration is ensuring proper drainage of surface runoff from the roadway. This includes evaluating how the roadway design affects existing drainage patterns in the surrounding area, and ensuring that adequate subsurface drainage and erosion control are provided to maintain the integrity of the roadway structure. A second key management consideration is preserving water quality and minimizing erosion resulting from roadway storm water runoff. These Standards address stormwater runoff from the public right-of-way. Water quality problems associated with roadway runoff include increased pollutant loadings, higher water temperatures, higher in-stream flow rates and volumes, and increased erosion. Roadway stormwater management should be designed to prevent or mitigate these impacts. Accordingly, this Standard sets goals for management of stormwater runoff on all roadways through the application of vegetated management techniques (referred to as V-IMPs).

6. APPLICATION OF THE STANDARDS

The context sensitive road design standards have a number of applications to master planning, development planning and review, and capital facility planning. Application of these Standards to these ongoing activities is described below.

6.1 MASTER PLANNING PROCESS

The Standards serve as a useful reference for the community master planning process. The master planning process can identify and apply preferred Cross-Section Standards to determine desired rights-of-way. The master planning process can also suggest preferred roadway classifications and inform the development of new Cross-Section Standards in the future. However, new Standards may only be adopted in accordance with Montgomery County Code, Chapter 49, Streets and Roads, by Executive Regulation under Method 2.

6.2 DEVELOPMENT PROVIDED STREETS

In many cases, streets are constructed or reconstructed as part of land development projects. These standards, in combination with the previous road design standards maintained by DOT, provide a broad template of street configurations to fit the needs of the public in a proposed development. These Cross-Section Standards and those existing design standards maintained by the DOT (Standards 100.01 - 811.01) are available for use until such time as the existing design standards are reviewed for applicability and either retained or eliminated. DOT will review the existing design standards for applicability within 12 months of the adoptions of these regulations to determine which standards should remain in place and which elements of the existing standards should be incorporated into the new standards. Additionally, details such as paving sections and general notes will be updated.

The new standards are to be used in all new subdivision approved projects. In cases where there is no equivalent new standards (such as curbs, inlets, manholes, driveways, etc.) the appropriate existing standards (MC100.01 - MC811.01) are to be used. The existing standards may also be used when completing or extending short sections of existing roads.

The appropriate cross-section for development provided streets is usually proposed by the developer's designer and reviewed through the Planning Board's development review process and approved by DPS in consultation with DOT when appropriate. When a developer is reconstructing an existing street, it is anticipated that flexibility in the application of the Cross-Section Standards will be needed.

6.3 CAPITAL IMPROVEMENT PROJECTS

Streets and highways are also constructed by the County as Capital Improvement Projects. These Standards, in combination with the previous road design standards maintained by DOT, provide a broad template of street configurations to fit the needs of the public as well. These Cross-Section Standards and those existing design standards maintained by the DOT (Standards 100.01 - 811.01) are available for use until such time as the existing design standards are reviewed for applicability and either retained or eliminated. DOT will review the existing design standards for applicability within 12 months of the adoptions of these regulations to determine which standards should remain in place and which elements of the existing standards should be incorporated into the new standards. Additionally, details such as paving sections and general notes will be updated.

New CIP Road Projects will be built in accordance with the new standards and cross sections after completion of the first phase of the Facility Planning Process. In cases where there is no equivalent new standard (such as curbs, inlets, manholes, driveways, etc.) the

appropriate existing standards (MC 100.01 - MC 811.01) are to be used. The existing standards may also be used when completing or extending short sections of existing roads.

The appropriate cross-section standard for Capital Improvement Projects is usually proposed in the project prospectus, reviewed by the Planning Board through the mandatory referral process, and approved by the County Council. When an existing street is being reconstructed as a Capital Improvement Project, it is anticipated that flexibility in the application of the Cross-Section Standards will be needed.

7. EXPECTATIONS FOR COLLABORATION AND FLEXIBILITY

In order for application of these Standards to meet the goals fo the Council and the Executive, collaboration between the reviewing and implementing agencies will be necessary. It will also be necessary for proposed designs to be developed with input from other stakeholders such as interest groups, abutting property owners, nearly residents, and businesses.

7.1 EXCEPTIONS TO THE STANDARDS

Exceptions to the Standards will be required from time to time. The Roadway Design Standards have been developed to provide and promote sufficient flexibility to allow application of appropriate roadway elements and dimensions to different situations within the County. However, every project is unique and some may require adaption of the standards to fit the project specific circumstances.

Adjustment to these Standards is possible through a design exception process. The Cross-Section Standards, most notably, serve as a starting point or template for the design process while adjustments to the cross-sections are anticipated to fit project conditions. Depending upon the degree of adjustment necessary, these adjustments may require a design exception.

7.2 MODIFICATION OF STANDARDS

These Standards have been developed through a thoughtful analysis of typical rights-of-way, the needs of roadway users, and the state-of-the practice in roadway design expressed by recent guidance documents and research. As research continues and these Standards are tested through application, necessary changes to the standards will become known. It is expected that these Standards will be periodically reviewed and updated by Executive Regulation under Method 2, in accordance with Montgomery County Code, Chapter 49, Streets and Roads, so that they continue to meet the needs of the County.

Standard No. 020.01 TARGET AND DESIGN SPEED

The following Target and Design Speed Standard consists of four parts: Statement of Intent, Definition of Terms, Target Speed Table and Application Guidance for New and Reconstructed Roads.

INTENT

To establish target speeds for the design of county roads that provide safety and reasonable mobility for all users including pedestrians and bicyclists. These target speeds will serve as an important factor for determining design speeds, influencing operating speeds, and serve as a reference for establishing speed limits.

- The target speed is a determinant of the design speed selected for a roadway.
- The design speed is a determinant of the roadway geometrics and required sight distances.
- The roadway geometrics are a determinant of operating speed on a roadway.
- The operating speed is a determinant of the posted speed limit on a roadway using the Manual on Uniform Traffic Control Devices (MUTCD) guidelines.
- Operating speed (the mean value and range) is a determinant of the safety of the roadway for all users and the efficiency of movement provided for motor vehicles.

The intent of the Target and Design Speed Standard is to provide consistency among the design characteristics of the roadway, its operating speed, the speed limit, and the required safety and mobility for all roadway users. It is expected that the complete range of target speeds contained in this standard is reasonable for different locations and roadways within the county. The application guidance identifies situations in which the designer may select a target speed at the lower end of the range, in the middle of the range, and from the higher end of the range. The target and design speed ranges identified in this standard are intended to capture a broad range of conditions and applications, but will not be suitable to every possible situation. Therefore, it is expected that variances from the standards and guidance provided will be necessary on a case-by-case basis.

DEFINITIONS

Target Speed is the speed at which vehicles should operate on a thoroughfare in a specific context, consistent with the level of multimodal activity generated by adjacent land uses, to provide mobility for motor vehicles and a safe environment for pedestrians and bicyclists. The target speed is usually the posted speed limit.

Operating Speed is the speed at which drivers are observed operating their vehicles during free-flow conditions.

Design Speed is the selected speed used to determine various geometric features of the roadway. A road may have a different design speed for different sections of the road.

Speed Limit is the maximum speed allowed by law determined by a posted speed limit established through an engineering study and application of the MUTCD standards and guidance or by default should a posted speed be absent.

GENERAL TARGET SPEED GUIDANCE AND EXPECTATIONS

Design speed determines various geometric features of the roadway, including vertical and horizontal curvature and sight distance, which is a critical element in the safety of the roadway.

Operating speed is the prevailing travel speed under free flow conditions.

The operating speed of a road is influenced by many factors, or cues, including:

- Land use
- Access to adjoining land use
- Building massing and proximity
- Pedestrian and bicycle activity
- Road classification and function
- Traffic control
- Intersection spacing
- Traffic calming
- Speed limits
- Enforcement
- Roadway geometry

Roadway geometry, by itself, has limited influence on operating speed, particularly on multi-lane roadways.

Target speed is a new concept introduced by these regulations. Target speed is the goal or desired ultimate outcome of the road when all of the factors that influence operating speed are in place.

In establishing a “target speed” it is the intent of these standards that the designer should take into consideration the foregoing factors for the ultimate build-out of the planning area when designing

the road. It is not the intent that the designer should modify the roadway geometry by introducing horizontal or vertical curvature to reduce operating speed. Also, it is not expected that horizontal curves be "sharpened" by reducing the radius to reduce operating speed.

Ideally, when all of the factors that influence target speed are in place, the operating speed of the vehicles using the road will be consistent with the target speed. However, there are circumstances where the roadway has been or will be constructed long before the adjoining development. Until all those factors or cues are in place, many of which are provided by the adjacent land use, it is not reasonable to expect operating speeds to match the target speeds.

Therefore, the roadway may meet or have a higher design speed than the ultimate target speed, and the speed limit may be posted higher than the ultimate target speed where new roadways are to be designed and constructed in advance of the planned land-use build-out. When the full complement of cues associated with the planned development to reduce operating speed are in place, the speed limit may be modified for consistency with the intended target speed for the built-out condition.

In addition, the application of target speeds to roads along the boundary of a particular area type need to be considered on a case by case basis. Even in the ultimate build-out of the road, the cues which influence operating speed may not be available or may be available on one side of the road only. Therefore, expectations of a reasonable target speed need to be carefully and realistically considered.

STANDARD

The following target speeds shall apply to county roads in a manner consistent with the guidance provided in the APPLICATION section of this standard. A Design Exception for a Target Speed outside the standard range may be issued by DOT on the basis of an Engineering and Traffic Investigation. This investigation should include a comprehensive analysis of the existing and planned development, the connecting transportation system, and the environmental conditions surrounding the project. Situations in which a design exception for a lower target speed may be warranted include, but are not limited to, roadways with pedestrian and bicycle activity higher than typically encountered in densely developed urban core areas. Design exceptions for higher target speeds may also be warranted in some circumstances. The Design Exception documentation should clearly document project-specific circumstances requiring variance from the standard range.

	Minimum 300-f**Target Speed**		
Road Classification/Area Type	**Urban**	**Suburban**	**Rural***
Country Arterial	**-**	**-**	**35 – 50**
Arterial	**25 – 35**	**30 – 40**	**35 - 50**
Minor Arterial	**35 – 30**	**25 – 35**	**30 - 50**
Business District Street	**25 - 30**	**25 – 35**	**25 – 35**
Industrial Street	**25 – 35**	**25 – 35**	**30 - 35**
Country Road	**-**	**25 – 40**	**25 - 40**
Primary and Principal Secondary Residential Streets	Minimum 300-foot centerline radius (Minimum Sight distance for 30 mph)		
Secondary Residential Street	Minimum 150-foot centerline radius (Minimum Sight distance for 25 mph)		
Tertiary Residential Street	Minimum 100-foot centerline radius (Minimum Sight distance for 25 mph)		

* In rural communities and villages where the land use context suggests a target speed lower than that shown in the table, the designer may need to select a lower target speed independent of the rural area designation.

The designer is responsible for selecting the design speed based on the recommended target speed and guidance provided in this standard and a thorough understanding of project conditions. When selecting a target and design speed, the designer should consider the anticipated speed limit on the

roadway. The designer must document the rationale for selecting a target speed value from the ranges defined above following the application criteria provided in the following section.

If a design speed outside the ranges defined above is necessary due to project-specific conditions, the designer must justify and document the variance from this standard. In order to ensure continuity and/or a logical progression of design speeds along a roadway segment, the recommended target speed and selected design speed are subject to the approval of the Director of the appropriate Executive Branch Department (DOT for CIP projects and in accordance with the normal subdivision review process for private development projects) or their designees.

All county roads with design speeds of 45 MPH or less shall be designed using the AASHTO "Low Speed" criteria for superelevation.

APPLICATION GUIDANCE

The following sections contain criteria for application of target speed and design speed standards for reconstructed roads and new roads.

RECONSTRUCTED ROADS

To determine the applicability of the above standards, the designer must evaluate existing conditions along the corridor including existing operating speeds, speed limits, the safety record of the road, and the pedestrian and bicycle accommodation provided. Where feasible, the designer should select a design speed within the target speed range provided in the standard following the appropriate application guidelines. If infeasible due to project- specific conditions, the designer should select an appropriate design speed and document the supporting analysis. In these cases, the designer should follow one of two approaches:

- Select a design speed that falls outside the target speed range provided in the standard since conditions will not be significantly modified by the proposed design.
- Evaluate the proposed design modifications to determine if the design is likely to change current speed conditions. If change is likely, the designer should carefully evaluate the likely change in speeds associated with the design to select an appropriate design speed.

NEW ROADS

The designer should use the criteria below for determining the appropriate target and design speeds for new roads. In addition, for projects that are extensions of existing facilities, the designer should review the reconstruction criteria above, evaluate conditions

on the existing facilities, and determine a target and design speed to provide overall consistency along the corridor.

CONTROLLED MAJOR HIGHWAY

The following criteria are provided for determining the appropriate target and design speeds for controlled major highways:

- In areas with regular, recurring and significant pedestrian and bicycle crossings and with unsignalized intersections allowing crossing and left-turn movements, the target speed may be selected at the low end of the range.
- In areas without regular, recurring and expected pedestrian and bicycle crossings, and without unsignalized intersections that allow crossing and left-turn movements, the target speed may be selected at the high end of the range.
- When warranted, measured to mitigate the effects of higher speed on pedestrian and bicycle users must be incorporated into the design. These measures may include:
  - Signal-protected pedestrian crossings,
  - Pedestrian/Bicycle crossing islands,
  - Landscape buffers between the edge of the shoulder and the sidewalk with street trees located as described in Standard 020.01.
  - Off-road bicycle and pedestrian paths,
  - High-visibility pedestrian crossing markings, and
  - Advance warning signs.
- In most cases, the target speed should serve as the design speed. In cases where roadway geometrics are unlikely to control operating speeds, the design speed should be equal to or greater than the target speed.
- The designer must document the selection of the target speed and design speed for the facility. The rationale for any deviation from the range should be provided in this documentation.

MAJOR HIGHWAY

The following criteria are provided for determining the appropriate target and design speeds for major highways:

- Urban Areas:
  - In core locations or other densely developed areas with regular, recurring, expected, and significant pedestrian activity, the target speed may be selected at the low end of the range.
    - Core locations and densely developed areas are those which have a combination of the following factors:
    - Master planned land use and zoning allowing densities of 1.0 FAR or greater on parcels adjacent to the street
    - Existing or planned buildings oriented to the street, with setbacks of 10 feet or less and with primary pedestrian access to buildings to and from the public sidewalk along the street.
  - For low-density urban areas without unprotected pedestrian crossings, low levels of bicycle activity, or bicycle accommodation outside the motor vehicle travel lanes, the target speed may be selected at the high end of the range. The high end of the range is intended for corridors where traffic movement is a priority and interaction with surrounding land use is minimal, such as existing or planned adjacent land uses with primary frontage from a parallel public street.
- Suburban Areas:
  - In densely settled suburban areas with characteristics typical of an urban area such as regular, recurring, significant, and expected pedestrian crossings; high volumes of bicycle activity without accommodation outside the motor vehicle travel lanes; and frequent intersections and driveways, the target speed may be selected from the low end of the range.
  - For typical suburban conditions, the target speed may be selected within the middle of the range.
  - For low-density settings with a more rural character including lower pedestrian and bicycle activity, less frequent intersections, and few

driveways, the target speed may be selected from the high end of the range.

- Rural Areas:
  - In rural developed areas with pedestrian and bicycle activity within the roadway, frequent intersections, and frequent driveways, target speeds at the low end of the range may be selected.
  - In rural areas, without pedestrian activity, bicycle activity within the travel lanes, unsignalized intersections, or driveways, the target speed may be selected at the high end of the range.
- The target speed should serve as the design speed. In cases where roadway geometrics are unlikely to control operating speeds, the design speed should be equal to or greater than the target speed.
- When warranted, measures to mitigate the effects of higher speed on pedestrian and bicycle users should be incorporated into the design. These measures may include:
  - Signal-protected pedestrian crossings,
  - Pedestrian crossing islands,
  - Bicycle lanes/minimum 4-foot shoulders,
  - Landscape buffers between the edge of the shoulder and the sidewalk with street trees located as described in Standard 020.01.
  - Off-road bicycle and pedestrian paths,
  - High-visibility pedestrian crossing markings, and
  - Advance warning signs.
- The designer must document the selection of the target speed and design speed for the facility. The rationale for any deviation from the range should be provided in this documentation.

PARKWAY

The following criteria are provided for determining the appropriate target and design speeds for parkways:

- In areas with regular, recurring and significant pedestrian crossings, the target speed may be selected at the low end of the range.
- In areas without regular, recurring and significant pedestrian crossings, the target speed may be selected at the high end of the range.
- The selected target speed should serve as the design speed. In cases where roadway geometrics are unlikely to control operating speeds, the design speed should be equal to or greater than the target speed.
- When warranted, measures to mitigate the effects of higher speed on pedestrian and bicycle users should be incorporated into the design. These measures may include:
    - Signal-protected pedestrian crossings,
    - Pedestrian crossing islands,
    - Landscape buffers between the edge of the shoulder and the sidewalk with street trees located as described in Standard 020.01.
    - Off-road bicycle and pedestrian paths,
    - High-visibility pedestrian crossing markings, and
    - Advance warning signs.
- The designer must document the selection of the target speed and design speed for the facility. The rationale for any deviation from the range should be provided in this documentation.

ARTERIAL

The following criteria are provided for determining the appropriate target and design speeds for arterials:

- Urban Areas:
    - In core locations or other densely developed areas with regular, recurring, expected, and significant pedestrian activity, the target speed may be selected at the low end of the range.
        - Core locations and densely developed areas are those which have a combination of the following factors:

- Master planned land use and zoning allowing densities of 1.0 FAR or greater on parcels adjacent to the street
- Existing or planned buildings oriented to the street, with setbacks of 10 feet or less and with primary pedestrian access to buildings to and from the public sidewalk along the street.

    - For low-density urban areas with few pedestrian crossings, low levels of bicycle activity, or bicycle accommodation outside the motor vehicle travel lanes, the target speed may be selected at the high end of the range. The high end of the range is intended for corridors where traffic movement is a priority and interaction with surrounding land use is minimal.

- Suburban Areas:

    - In densely settled suburban areas with characteristics typical of an urban area such as regular, recurring, significant, and expected pedestrian crossings; high volumes of bicycle activity without accommodation outside the motor vehicle travel lanes; and frequent intersections and driveways, the target speed may be selected from the low end of the range.
    - For typical suburban conditions, the target speed may be selected within the middle of the range.
    - For low-density settings with a more rural character including lower pedestrian and bicycle activity, less frequent intersections, and few driveways, the target speed may be selected from the high end of the range.

- Rural Areas:

    - In rural developed areas with pedestrian and bicycle activity within the roadway, frequent intersections, and frequent driveways, target speeds at the low end of the range may be selected.
    - In rural areas, without pedestrian activity, bicycle activity within the travel lanes, unsignalized intersections, or driveways, the target speed may be selected at the high end of the range.

- The selected target speed should serve as the design speed. In cases where roadway geometrics are unlikely to control operating speeds, the design speed should be equal to or greater than the target speed.
- When warranted, measures to mitigate the effects of higher speed on pedestrian and bicycle users should be incorporated into the design. These measures may include:
    - Signal-protected pedestrian crossings,
    - Pedestrian crossing islands,
    - Bicycle lanes/minimum 4-foot shoulders,
    - Landscape buffers between the edge of the shoulder and the sidewalk with street trees located as described in Standard 020.01.
    - Off-road bicycle and pedestrian paths,
    - High-visibility pedestrian crossing markings, and
    - Advance warning signs.
- The designer must document the selection of the target speed and design speed for the facility. The rationale for any deviation from the range should be provided in this documentation.

MINOR ARTERIAL

The following criteria are provided for determining the appropriate target and design speeds for minor arterials:

- Urban Areas:
    - In core locations or other densely developed areas with regular, recurring, expected, and significant pedestrian activity, the target speed may be selected at the low end of the range.
        - Core locations and densely developed areas are those which have a combination of the following factors:
        - Master planned land use and zoning allowing densities of 1.0 FAR or greater on parcels adjacent to the street

- Existing or planned buildings oriented to the street, with setbacks of 10 feet or less and with primary pedestrian access to buildings to and from the public sidewalk along the street.

  - For low-density urban areas with few pedestrian crossings, low levels of bicycle activity, or bicycle accommodation outside the motor vehicle travel lanes, the target speed may be selected at the high end of the range.

- Suburban Areas:

  - In densely settled suburban areas with characteristics typical of an urban area such as regular, recurring, significant, and expected pedestrian crossings; high volumes of bicycle activity without accommodation outside the motor vehicle travel lanes; and frequent intersections and driveways, the target speed may be selected from the low end of the range.

  - For typical suburban conditions, the target speed may be selected within the middle of the range.

  - For low-density settings with a more rural character including lower pedestrian and bicycle activity, less frequent intersections, and few driveways, the target speed may be selected from the high end of the range.

- Rural Areas:

  - In rural developed areas with pedestrian and bicycle activity within the roadway, frequent intersections, and frequent driveways, target speeds at the low end of the range may be selected.

  - In rural areas, without pedestrian activity, bicycle activity within the travel lanes, unsignalized intersections, or driveways, the target speed may be selected at the high end of the range.

- The selected target speed should serve as the design speed. In cases where roadway geometrics are unlikely to control operating speeds, the design speed should be equal to or greater than the target speed.

- When warranted, measures to mitigate the effects of higher speed on pedestrian and bicycle users should be incorporated into the design. These measures may include:
  - Signal-protected pedestrian crossings,
  - Pedestrian crossing islands,
  - Bicycle lanes/minimum 4-foot shoulders,
  - Landscape buffers between the edge of the shoulder and the sidewalk with street trees located as described in Standard 020.01.
  - Off-road bicycle and pedestrian paths,
  - High-visibility pedestrian crossing markings, and
  - Advance warning signs.
- The designer must document the selection of the target speed and design speed for the facility. The rationale for any deviation from the range should be provided in this documentation.

COUNTRY ARTERIAL (Reconstruction Only)

The target speeds for country arterials should be selected within the range provided to best match the design of the facility to the natural environment and topography of the area following the reconstruction guidelines provided above. If practical, the design speed for country arterials should be the target speed. A higher design speed may be used in situations where higher speeds may be expected on a regular basis and the MUTCD guidelines may not allow posting of a lower speed limit.

COUNTRY ROAD (Reconstruction only)

The target speeds for country roads should be selected within the range provided to best match the design of the facility to the natural environment and topography of the area following the reconstruction guidelines provided above. If practical, the design speed for country roads should be the target speed. A higher design speed may be used in situations where higher speeds may be expected on a regular basis and the MUTCD guidelines may not allow posting of a lower speed limit.

BUSINESS DISTRICT STREET

If practical, the target and design speed for a business district street should be selected at the low end of the range to facilitate safe pedestrian and bicycle movement, and low- speed motor vehicle travel. Target and design speeds at the high end of the range may be used in exceptional situations where higher speeds are expected on a regular basis due to the prevailing roadway geometrics, intersection spacing, and mobility characteristics of the facility.

INDUSTRIAL STREET

If practical, the target and design speed for an industrial street should be selected to facilitate efficient movement of commercial vehicles. The target and design speeds should be selected based on the development conditions, natural environment, topography, presence of pedestrian and bicycle travel and desired efficiency of commercial vehicle movement. Target and design speeds at the high end of the range may be used in situations where higher speeds are expected on a regular basis due to the prevailing roadway geometrics, intersection spacing, and mobility characteristics of the facility.

PRIMARY AND PRINCIPAL SECONDARY RESIDENTIAL STREET

Minimum centerline radii establish a de facto design speed. Minimum sight distance for travel at 30 miles per hour should be provided. When curvatures resulting in design speeds less than 30 miles-per-hour are employed, appropriate warning and advisory signage should be installed.

SECONDARY RESIDENTIAL STREET

Minimum centerline radii establish a de facto design speed. Minimum sight distance for travel at 25 miles per hour should be provided. When curvatures resulting in design speeds less than 25 miles-per-hour are employed, appropriate warning and advisory signage should be installed.

TERTIARY RESIDENTIAL STREET

Minimum centerline radii establish a de facto design speed. Minimum sight distance for travel at 25 miles per hour should be provided. When curvatures resulting in design speeds less than 25 miles-per-hour are employed, appropriate warning and advisory signage should be installed.

Standard No. 030.01 TREE PLACEMENT

The following Tree Placement Standard consists of three parts: Statement of Intent, Tree Placement Standards for Close Section Roadway Segments, Tree Placement Standards for Open Section Roadway Segments and General Standards Applicable for All Roadway Types.

INTENT

To establish appropriate locations for placement of street trees on county roads that provide safe facilities for all users and attain the environmental, aesthetic, character, and place-making objectives for developed areas in the county. Street trees may provide a number of valuable functions including enhancing community character, defining the roadway edge, providing a visual buffer for abutting properties, contributing stormwater and air quality benefits, shading the roadway and sidewalk, and in some cases, encouraging lower operating speeds. Improperly sited trees, however, may pose a safety hazard and may obstruct sight-lines to intersections, important traffic control devices and inhibit restoration of utilities. Improper locations of trees may also result in poor tree health The following standard is intended to achieve the desired benefits of trees and to avoid the unintended hazards described above.

STANDARD:

Closed Section

- On closed section roadway segments where the target speed is less than or equal to 35 mph, trees should be placed in the buffer panel between the curb and the sidewalk.
- On closed section roadway segments where the target speed is 40 mph, tree species from the approved “Small Street-Tree” list may be placed in the buffer panel between the curb and the sidewalk.
- On URBAN and Suburban closed section roadways segments where the target speed is equal to 40 mph, a 10 feet minimum clear zone should be provided when placing trees. Widths of the gutter pan, parking lane and/or bike lane may be measured as clear zone width. When the distance between the edge of the right-most motor vehicle travel lane and sidewalk is less than 13 feet, trees must be placed outside of the sidewalk.
- On SUBURBAN closed section roadway segments where the target speed is greater than 40 mph, apply the clear zone dimensions from Table 3.1, pg 3-6 of AASHTO’s 2002 Roadside Design Guide (or the latest edition thereof) based on the design speed and estimated ADT’s.
- On RURAL closed section roadway segments where the target speed is greater than or equal to 40 mph, apply the clear zone dimensions from Table 3.1, pg 3-6 of AASHTO’s

2002 Roadside Design Guide (or the latest edition thereof) based on the design speed and estimated ADT's.

- On closed section roadway segments where trees may be located between the curb and sidewalk as noted above, the following guidelines apply:
  - A six (6) foot buffer panel is encouraged for placement of a tree which should be centered in the buffer panel. In retrofit situations or for species that can tolerate a narrower buffer, a four (4) foot minimum buffer is required with the tree centered in the buffer panel.
  - When the distance between the sidewalk and the back of curb is greater than 6 feet and less than or equal to 10 feet, the tree should be located 3 feet from the edge of the sidewalk.
  - When the distance between the sidewalk and the back of curb is between 10 and 14 feet, the tree should be located 7 feet from the back of the curb.
  - When the distance between the sidewalk and the back of curb is greater than 14 feet, the tree should be centered in the landscape buffer.
  - When the cross section elements permit, the designer should place trees to achieve the clear zone dimensions from Table 3.1, pg 3-6 of AASHTO's 2002 Roadside Design Guide (or the latest edition thereof) through modification of the placement guidelines listed above.

Open Section

- In open section residential roadway classifications, trees may be located on the foreslope with a minimum clear zone of 6 feet for tertiary roads, 9 feet for secondary roads and 12 feet for primary roads.
- For all other open section roadway classification segments with target speeds less than or equal to 40 mph, trees should be placed at a location above the bottom of a swale on the backslope at least 14 feet from the edge of the right-most vehicle travel lane.
- For all open section roadway segments with target speeds greater than or equal to 45 mph, the designer should apply the clear zone dimensions from Table 3.1, pg 3-6 of AASHTO's 2002 Roadside Design Guide (or the latest edition thereof) based on the target speed and estimated ADT's. Trees should be placed at a location above the bottom of a swale on the backslope or closer to the edge of the right-of-way.

General Standards for All Roadway Types

- Generally, dimensions are measured to the center of the tree.
- The width of bike lanes, parking lanes, shoulder and gutter pan may be measured as clear zone width.
- Trees may not be planted where the tree placement will impair a driver's cone of vision to intersections, signage, traffic control devices, crosswalks, and other key features along the roadside. As a general guideline, the driver should have clear sight-lines to a point 10 feet outside the edge of the travel lane from a distance of 100 feet. When engineering studies verify that driver's line of sight is impaired, trees should be offset from the intersection to improve sight distances. In no instance should trees be planted within 30 feet of an intersection.
- Trees may not be planted within 5 feet of a utility appurtenance (manhole, valve, or other structure, except a SWM structure intended to incorporate a tree as part of the design) or 10 feet of a driveway, fire hydrant, or fire service appurtenance.
- When adjacent to a sidewalk, trees should be at least 3 feet from the edge of the sidewalk.
- The longitudinal spacing of the trees should be determined on a project by project basis to accommodate emergency service access requirements, stormwater management structures, traffic signs, street lights, transit stops and the three preceding general standards while achieving the desired tree canopy cover and placemaking objectives.
- For reconstruction projects, existing trees may be maintained closer to the edge of the right- most motor vehicle travel lane if the safety record of the roadway does not include a crash history involving trees and if the reconstruction does not cause the right-most vehicle travel lane to be any closer to the trees than existed prior to the reconstruction.
- Trees planted in a median must meet the appropriate lateral offsets from travel lanes defined in the closed and open section components of this standard based on the area type and target and design speed. Median trees should also satisfy the general requirements enumerated in this section of the standard.

Standard No. 040.01 STORMWATER MANAGEMENT

The following Stormwater Standard consists of four parts: Statement of Intent, Definition of Terms, Stormwater Standard and Application Guidance.

INTENT

To establish policies for stormwater treatment within the right-of-way and Public Improvement Easements (P.I.E.) to offset the water quality impacts and water discharge increases from roadway runoff to the extent practical.

To establish vegetated integrated management practices (V-IMP's) as the preferred stormwater treatment method within rights-of-way.

To provide the design community and applicants with clear guidance, standards and updates in order to properly incorporate stormwater treatment within rights-of-way.

To provide concise definitions for known limiting factors such that if stormwater treatment goals cannot be met, it is reasonable to require that applicants clearly identify why not.

To establish protocols for updating this standard as advances in technology and engineering design allow, subject to County approval.

To assure that all roadway projects and development plans that affect Montgomery County rights-of-way, not to include resurfacing projects per Chapter 49 of the Montgomery County Code, continue to meet Maryland Department of the Environment (MDE) Stormwater Design Manual requirements.

DEFINITIONS

Stormwater Runoff is liquid rain, and any precipitation that eventually melts and drains from the roadway.

Stormwater Quality is affected by auto emissions, auto leakages, sand, salt and other incidental deposits on the road surface that may be washed away by stormwater runoff.

Water Quality Volume (WQ_v) is the volume of stormwater runoff required by the Maryland Department of Environment (MDE) or Montgomery County Stormwater Code that must be treated in order to satisfactorily mitigate roadway impacts to stormwater quality.

Stormwater Discharge is the volumetric rate of stormwater runoff, and is required to be controlled so as not to erode and degrade natural channels downstream.

Channel Protection Volume (CP_v) is the volume of stormwater runoff required by MDE to be detained and slowly released in order to mitigate the increased stormwater discharge from impervious roadway areas.

Stormwater Treatment may refer to either stormwater quality or stormwater discharge, or both.

V-IMP's are Vegetated Intergrated Management Practices such as filtration or infiltration stormwater treatment measures with surface vegetation designed to withstand impacts from roadway runoff and enhance water quality through pollutant uptake and evapotranspiration. Detention basins and ponds that are vegetated only for slope stabilization are not considered to be V-IMP's for the purposes of Context Sensitive Road Design.

Filtration Stormwater Measures require underdrains discharging into piped stormwater systems, or into an open channel discharge point. Insitu soil conditions with infiltration rates less than 0.5" per hour require underdrains for V-IMP's. Filtration Stormwater Measures achieve stormwater quality treatment by filtration through an engineered media.

Infiltration Stormwater Measures do not typically require underdrains because insitu soil percolation rates are greater than 0.5" per hour.

Non-V-IMP's are structural or non-structural water quality devices that are not listed above as V-IMP Measures such as Montgomery County sand filters or other proprietary cartridge systems. Non-vegetated IMP Measures may also include conventional ponds and basins.

P.I.E.'s are Public Improvement Easemetns that are typically linear easements adjacent and contiguous to rights-of-way where impervious areas are publicly maintained.

STANDARD

1. STORMWATER QUALITY

   A. New roadway projects and development plans proposing new roadways shall provide water quality volume (WQ v) treatment over the entire area of the right-of-way and P.I.E.

   B. Roadway renovation, widening or roadway improvements associated with development projects shall provide water quality volume (WQ v) treatment over all impervious areas within the limits of disturbance in the right-of-way and P.I.E. of the reconstructed roadway.

   C. All roadway projects shall incorporate V-IMP's; The goal is to treat 25% WQ v by Vegetated Integrated Management Practices (V-IMP's) to the extent physically possible within right-of-way and P.I.E. buffers and/or medians for the given typical roadway section. For open section residential roads, the goal is to treat 60% WQ v by V-IMP's within the right-of-way and P.I.E. to the extent practicable.

D. The percentage of WQ v managed within a right-of-way and P.I.E. will vary by the road section being applied, and according to the following:

i. V-IMP's that are suitable for meeting WQ v shall follow Montgomery County Department of Permitting Services (DPS) standards and MDE standards (including the Maryland Stormwater Design Manual) where such standards exist, and include, but are not limited to:

a. Biofiltration

b. Bioretention

c. Bio-Swales

d. Curb Inlet Biofiltration Structures

e. Enhanced Wetland Facility

f. Grassed Swales

g. Open Section Roadways with Bio-Swales

h. Vegetated Continuous Trench

i. Vegetated Curb Extensions

ii. As the technology matures and evolves, Montgomery County shall, after receiving justification demonstrating the practical benefit of a proposed measure, update the list of suitable V-IMP's under 1.D.i. to include additional acceptable V-IMP measures. An applicant may, with County approval, request use of a V-IMP not previously implemented in Montgomery County.

iii. V-IMP's in the right-of-way and P.I.E. shall be considered as secondary to roadway safety elements. Such safety elements may include, but not be limited to hydrants, light poles, pedestrian access, signage, emergency access, clear zones, etc. However, placement of safety elements shall be coordinated to maximize V-IMP placement within the right-of-way and P.I.E. without compromising safety.

iv. The spacing of new required street trees, utility poles and signage shall be integrated with V-IMP placement within the right-of-way and P.I.E.

without excluding required street trees and applicable root zone requirements, utility poles or signage.

v. Utility line placement shall be optimized according to minimum utility separations in areas not suitable for V-IMP's before reducing V-IMP's in buffers and medians. The intent is to place new utility lines outside V-IMP buffer strips and medians to the extent practical unless that utility line can tolerate periodic wet conditions and run parallel within buffer strips without impeding the size and function and maintenance of V-IMP's. This does not preclude minimized crossings of V-IMP's by utility lines.

vi. Landscape and planting plans shall consider potential impacts of salt and other runoff pollutants on vegetation when making design selections of tree species and planing materials within and adjacent to V-IMP's.

E. The balance of WQ v required for each project that is not treated by V-INP's within the right-of-way and P.I.E. shall be treated, and may be treated in the following manners, listed in order of preference.

i. Additional V-IMP's may be placed outside the right-of-way and P.I.E.

ii. Structural, underground or cartridge water quality facilities may be placed within the right-of-way and P.I.E. without displacing V-IMP's.

iii. Additional non-V-IMP stormwater treatment may be placed outside the right-of-way and P.I.E.

F. Open section design utilizing Bio-Swales shall be the preferred option for rural roadway stormwater treatment.

G. Should an applicant be unable to achieve the WQ v goals for a project stated in Section 1.C. of this standard, the applicant shall quantify the percentage of WQ v provided in the right-of-way and P.I.E. and identify the specific constraints limiting achievement of the WQ v goal as part of the review and permitting process with Montgomery County. It must be clear and evident in graphic and/or written descriptions and justifications that V- IMP's have been placed inside the right-of-way and P.I.E. to the greatest extent practical. At the onset of this standard, acceptable limitations for V-IMP placement may include, but not be limited to:

i. Intrusion of safety elements into buffers that cannot be place in any other practical location.

ii. Existing underground utility lines that would be dangerous to co-mingle with saturated ground conditions.

iii. Subgrade conditions that would become unstable with water intrusion combined with an inability to provide impermeable membranes around water treatment facilities.

iv. Impeding locations of existing street trees and root zone requirements that are not otherwise required to be removed for the roadway construction.

v. Impediments from required new street trees and root zone requirements that cannot be accommodated in any other practical manner.

vi. Site constraints including slopes, grades, soils, wetlands, environmental protection areas, and others that would result in more detriment than benefit upon installation.

vii. Other justifications not listed above that are encountered may be submitted for acceptability to the county and made publicly available to the design community when found acceptable, as staged in (4.).

2. STORMWATER DISCHARGE

All new roadway projects, roadway renovation projects and development plans having roadway components shall provide channel protection storage volume CP v in accordance with MDE regulations. Additional flexibility and credits apply as stated below.

A. CP v for the roadway right-of-way and P.I.E. only may be provided within the right-of- way and P.I.E. subject to County approval. Water quantity devices placed within the right-of-way and P.I.E. are subject to the same spatial limitations stated in 1.D. and subsections.

i. New roadways shall provide CP v for the entire right-of-way and P.I.E. being improved.

ii. Roadway renovation, widening or roadway improvements associated with development projects shall provide CP v for the limits of disturbance within the right- of-way and P.I.E.

B. CP v credit for all water quality measures shall be granted as much as is currently and subsequently quantified and proven valid to MDE.

3. MAINTENANCE

Montgomery County shall maintain stormwater treatment measures installed by permit within the right-of-way and P.I.E.

A. Applicants shall submit maintenance schedules and life-cycle cost estimates for all water quality and water quantity measures proposed in the right-of-way and P.I.E.

B. As part of a coordinated maintenance plan, the maintenance logistics and traffic operations during maintenance activities of stormwater facilities in the right-of-way and P.I.E. shall be outlined.

4. MODIFICATIONS

This standard is written with the expectation that future innovations in stormwater treatment will develop.

A. When studies or design plans document innovative vegetated stormwater treatment that fits within rights-of-way and which meets or exceeds MDE and Montgomery County stormwater regulations, the County may consider such studies and plans to be the basis for modifying this standard after such advances have been proven to provide measurable and practical stormwater treatment benefits.

B. All newly permitted stormwater treatment facilities in Montgomery County not explicitly listed in this standard shall be the basis for a modification of this standard. Such newly permitted stormwater treatment facilities shall be posted to montgomerycountymd.gov and the plan announced to the design community.

C. Such stormwater treatment applications shall be aggregated as amendments to the Road Code not less than once every calendar year in years when acceptable modifications have been demonstrated. Montgomery County shall coordinate additional aggregated guidance and illustrations for the design community to use based on these specific permitted stormwater applications.

D. The WQ v goal established in Section 1.C of this standard shall be reassessed every three (3) years. The goal may be changed if justified by new data or evidence.

APPLICATION GUIDANCE

V-IMP's in the right-of-way and P.I.E. are anticipated to be primarily linear stormwater treatment features in buffers and median strips. Placement of V-IMP's that do not actually receive runoff from impervious areas will not meet the intent of this standard. V-IMP's shall be placed so as to maximize interception of stormwater runoff and pollutant removal from impervious surfaces in the right-of-way and P.I.E.

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	

(Administrative History: Reg. No. 31-08AM (Method 2); Dept.: Transportation)

ATTACHMENTS FOLLOW

TERTIARY ROADS

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2001.01	Tertiary Residential Street - Sidewalk on One Side																
	44'	2	5	5	0	0	10	0	0	0	10	0	0	12	0	0	1
2001.02	Tertiary Residential Street - Sidewalk on Both Sides																
	50'	2	5	8	0	0	10	0	0	0	10	0	0	8	5	2	1
2001.03	Tertiary Residential Street - Open Section																
	74'	2	5	20	0	0	10	0	0	0	10	0	0	20	5	2	2,3

Notes: 1. Parking lane may be added where regular on-street parking is expected
2. Occassional parking may be accomodated in the buffer
3. New Standard ROW needed to avoid sidewalk placement in a PIE

SECONDARY ROADS

2002.01	Secondary Residential Street - No Parking																
	60'	2	5	10	0	0	13	0	0	0	13	0	0	10	5	2	
2002.02	Secondary Residential Street - Parking on One Side																
	60'	2	5	7.5	8	0	10	0	0	0	11.5	0	0	9	5	2	
2002.03	Secondary Residential Street - Parking on Both Sides																
	70'	2	5	10	8	0	10	0	0	0	10	0	8	10	5	2	
2002.04	Secondary Residential Street - Open Section																
	78'	2	5	20	0	2	10	0	0	0	10	2	0	20	5	2	1

Notes: 1. New Standard ROW needed to avoid Sidewalk placement in a PIE

PRIMARY/PRINCIPAL SECONDARY RESIDENTIAL ROADS

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2003.08	Primary/Principal Secondary Residential Street - With Bike Lanes, Parking on One Side																
	70'	2	5	8.5	8	5	10	0	0	0	10	5.5	0	9	5	8	
2003.09	Primary/Principal Secondary Residential Street - With Bike Lanes, Parking on Both Sides																
	84'	2	6	10	8	6	10	0	0	0	10	6	8	10	6	2	
2003.10	Primary/Principal Secondary Residential Street - No Designated Parking																
	70'	2	6	14	0	0	13	0	0	0	13	0	0	14	6	2	
2003.11	Primary/Principal Secondary Residential Street - Parking on One Side																
	70'	2	6	12	8	0	11	0	0	0	11.5	0	0	11.5	6	2	
2003.12	Primary/Principal Secondary Residential Street - Parking on Both Sides																
	70'	2	5	9	8	0	11	0	0	0	11	0	8	9	5	2	
2003.14	Primary/Principal Secondary Residential Street - Open Section																
	84'	2	5	20	0	5	10	0	0	0	10	5	0	20	5	2	

ARTERIAL/MINOR ARTERIAL/ COUNTRY ARTERIAL/ COUNTRY ROAD

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2004.01	Urban Arterial Road - 4 Lanes																
	80'	2	7	6	0	0	14	11	0	11	14	0	0	6	7	2	
2004.02	Urban Arterial Road - 4 Lanes With Bike Lanes																
	80'	2	5.5	6	0	5.5	10	11	0	11	10	5.5	0	6	5.5	2	
2004.03	Urban Arterial Road - 5 Lanes																
	90'	2	6	6	0	0	14	11	11	11	14	0	0	6	6	2	1
2004.04	Urban Arterial Road - 5 Lanes With Bike Lanes																
	90'	2	5	5.5	0	5.5	10	11	11	11	10	5.5	0	5.5	5	2	1,4
2004.05	Divided Urban Arterial Road - 4 Lanes																
	100'	2	8	6	0	0	14	11.5	17	11.5	14	0	0	6	8	2	
2004.06	Divided Urban Arterial Road - 4 Lanes With Bike Lanes																
	100'	2	6.5	6	0	5.5	10	11.5	17	11.5	10	5.5	0	6	6.5	2	

Notes: 1. Median is TWLTL
2. For 40 mph, adjust the curbside dimension to accommodate tree in the maintenance offset area
3. Use Suburban Open Section Standard 2004.14 to accommodate sidewalks and 2004.16 to accommodate sidewalks & median
4. Std. 2004.06 is preferred

General note: 14' or 14.5' outside lane widths are intended to provide one or more of the following:
> Improved bike accomodation on busier streets without bike lanes
> Space for off-peak parking on arterials and major highways while maintaining bike accomodation
> Improved accomodation for transit vehicles (and stops) on heavily traveled streets

ARTERIAL/MINOR ARTERIAL/ COUNTRY ARTERIAL/ COUNTRY ROAD (continued)

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2004.07	Suburban Arterial Road - 4 Lanes																
	80'	2	5	8	0	0	14	11	0	11	14	0	0	8	5	2	
2004.08	Suburban Arterial Road - 4 Lanes With Bike Lanes																
	80'	2	5	6.5	0	5.5	10	11	0	11	10	5.5	0	6.5	5	2	
2004.09	Divided Suburban Arterial Road - 4 Lanes																
	100'	2	5	9	0	0	14	11.5	17	11.5	14	0	0	9	5	2	2
2004.10	Divided Suburban Arterial Road - 4 Lanes With Bike Lanes																
	100'	2	5	6.5	0	5.5	11	11.5	17	11.5	11	5.5	0	6.5	5	2	2
2004.11	Suburban Arterial Road - 5 Lanes																
	90'	2	5	7	0	0	14	11	11	11	14	0	0	7	5	2	1
2004.12	Suburban Arterial Road - 5 Lanes With Bike Lanes																
	90'	2	5	5.5	0	5.5	10	11	11	11	10	5.5	0	5.5	5	2	1,5
2004.14	Suburban Arterial Road - 4 Lanes - Open Section With Bike Lanes																
	110'	2	5	21	0	5	11	11	0	11	11	5	0	21	5	2	6

Notes: 1. Median is TWLTL
2. For 40 mph, adjust the curbside dimension to accommodate tree in the maintenance offset area
3. Use Suburban Open Section Standard 2004.14 to accommodate sidewalks and 2004.16 to accommodate sidewalks & median
4. Std. 2004.06 is preferred
5. Std 2004.10 is preferred
6. Std 2004.16 is preferred

General note: 14' or 14.5' outside lane widths are intended to provide one or more of the following:
> Improved bike accomodation on busier streets without bike lanes
> Space for off-peak parking on arterials and major highways while maintaining bike accomodation
> Improved accomodation for transit vehicles (and stops) on heavily traveled streets

ARTERIAL/MINOR ARTERIAL/ COUNTRY ARTERIAL/ COUNTRY ROAD (continued)

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2004.16	Divided Suburban Arterial Road - 4 Lanes - Open Section With Bike Lanes																
	120'	2	5	17	0	5	11	11.5	17	11.5	11	5	0	17	5	2	
2004.18	Rural Arterial Road - 4 Lanes - Open Section with Bike Lanes																
	100'	2	5	17.5	0	5	12	12	0	12	12	5	0	17.5	0	2	3
2004.19	Urban Minor Arterial Road - 2 Lanes																
	70'	2	8	10.5	0	0	14.5	0	0	0	14.5	0	0	10.5	8	2	
2004.20	Urban Minor Arterial Road - 2 Lanes With Parking																
	70'	2	7	7	8	0	11	0	0	0	11	0	8	7	7	2	
2004.21	Urban Minor Arterial Road - 2 Lanes With Bike Lanes																
	70'	2	8	8.5	0	5.5	11	0	0	0	11	5.5	0	8.5	8	2	
2004.22	Urban Minor Arterial Road - 2 Lanes With Bike Lanes and Parking																
	80'	2	7	6	8	6	11	0	0	0	11	6	8	6	7	2	
2004.23	Urban Minor Arterial Road - 3 Lanes																
	70'	2	7	6	0	0	14	0	11	0	14	0	0	6	7	2	1
2004.24	Urban Minor Arterial Road - 3 Lanes With Parking																
	80'	2	7	6	8	0	11	0	11	0	11	0	8	6	7	2	1

Notes: 1. Median is two way left turn lane

2. Sidewalk Optional

3. Use Suburban Open Section Standard 2004.14 to accommodate sidewalks and 2004.16 to accommodate sidewalks & median

General note: 14' or 14.5' outside lane widths are intended to provide one or more of the following:

> Improved bike accomodation on busier streets without bike lanes

> Space for off-peak parking on arterials and major highways while maintaining bike accomodation

> Improved accomodation for transit vehicles (and stops) on heavily traveled streets

ARTERIAL/MINOR ARTERIAL/ COUNTRY ARTERIAL/ COUNTRY ROAD (continued)

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2004.25	Suburban Minor Arterial Road - 2 Lanes																
	70'	2	5	13.5	0	0	14.5	0	0	0	14.5	0	0	13.5	5	2	
2004.26	Suburban Minor Arterial Road - 2 Lanes With Bike Lanes																
	70'	2	5	11.5	0	5.5	11	0	0	0	11	5.5	0	11.5	5	2	
2004.27	Suburban Minor Arterial Road - 2 Lanes With Parking																
	70'	2	5	9	8	0	11	0	0	0	11	0	8	9	5	2	
2004.28	Suburban Minor Arterial Road - 2 Lanes With Bike Lanes and Parking																
	80'	2	5	8	8	6	11	0	0	0	11	6	8	8	5	2	
2004.29	Suburban Minor Arterial Road - 3 Lanes With Parking																
	80'	2	5	8	8	0	11	0	11	0	11	0	8	8	5	2	1
2004.31	Suburban Minor Arterial Road - 2 Lanes - Open Section With Bike Lanes																
	80'	2	5	17	0	5	11	0	0	0	11	5	0	17	5	2	
2004.33	Rural Minor Arterial Road - 2 Lanes With Bike Lanes																
	82'	2	5	20	0	5	12	0	0	0	12	5	0	19	0	2	2
2004.34	Country Road																
	62'	2	0	17	0	2	10	0	0	0	10	2	0	17	0	2	
2004.35	Country Arterial																
	70'	2	0	18	0	4	11	0	0	0	11	4	0	18	0	2	

Notes: 1. Median is two way left turn lane

2. Sidewalk Optional

General note: 14' or 14.5' outside lane widths are intended to provide one or more of the following:

> Improved bike accomodation on busier streets without bike lanes

> Space for off-peak parking on arterials and major highways while maintaining bike accomodation

> Improved accomodation for transit vehicles (and stops) on heavily traveled streets

ARTERIAL/MINOR ARTERIAL/ COUNTRY ARTERIAL/ COUNTRY ROAD (continued)

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2004.25	Suburban Minor Arterial Road - 2 Lanes																
	70'	2	5	13.5	0	0	14.5	0	0	0	14.5	0	0	13.5	5	2	
2004.26	Suburban Minor Arterial Road - 2 Lanes With Bike Lanes																
	70'	2	5	11.5	0	5.5	11	0	0	0	11	5.5	0	11.5	5	2	
2004.27	Suburban Minor Arterial Road - 2 Lanes With Parking																
	70'	2	5	9	8	0	11	0	0	0	11	0	8	9	5	2	
2004.28	Suburban Minor Arterial Road - 2 Lanes With Bike Lanes and Parking																
	80'	2	5	8	8	6	11	0	0	0	11	6	8	8	5	2	
2004.29	Suburban Minor Arterial Road - 3 Lanes With Parking																
	80'	2	5	8	8	0	11	0	11	0	11	0	8	8	5	2	1
2004.31	Suburban Minor Arterial Road - 2 Lanes - Open Section With Bike Lanes																
	80'	2	5	17	0	5	11	0	0	0	11	5	0	17	5	2	
2004.33	Rural Minor Arterial Road - 2 Lanes With Bike Lanes																
	82'	2	5	20	0	5	12	0	0	0	12	5	0	19	0	2	2
2004.34	Country Road																
	62'	2	0	17	0	2	10	0	0	0	10	2	0	17	0	2	
2004.35	Country Arterial																
	70'	2	0	18	0	4	11	0	0	0	11	4	0	18	0	2	

Notes: 1. Median is two way left turn lane

2. Sidewalk Optional

General note: 14' or 14.5' outside lane widths are intended to provide one or more of the following:

> Improved bike accomodation on busier streets without bike lanes

> Space for off-peak parking on arterials and major highways while maintaining bike accomodation

> Improved accomodation for transit vehicles (and stops) on heavily traveled streets

PARKWAYS

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2007.01	Urban Parkway																
	120'	2	10	17	0	0	12.5	12.5	17	12.5	12.5	0	0	16	6	2	
2007.02	Suburban Parkway																
	150'	7	10	24	0	6	11	12.5	17	12.5	11	6	0	25	6	2	
2007.03	Rural Parkway																
	150'	2	10	20	0	8	12	12	32	12	12	8	0	20	0	2	1

Notes: 1. A 5' SW can be provided by reducing the median to 27'

MAJOR HIGHWAYS, CONTROLLED MAJOR HIGHWAYS

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Middle Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Middle Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2008.01	Urban Major Highway - 6 Lanes																		
	120'	2	6	6	0	0	14	11	12.5	17	12.5	11	14	0	0	6	6	2	
2008.02	Urban Major Highway - 6 Lanes With Bike Lanes																		
	150'	2	8	16	0	6	11	11	12.5	17	12.5	11	11	6	0	16	8	2	
2008.04	Suburban Major Highway - 6 Lanes With Bike Lanes																		
	150'	2	5	19	0	6	11	11	12.5	17	12.5	11	11	6	0	19	5	2	
2008.05	Rural Major Highway - 6 Lanes - Open Section																		
	150'	2	5	22.5	0	8	12	0	13.5	24	13.5	0	12	8	0	22.5	0	7	1

Notes: 1. To provide SW on both sides, adjust the Maint. Offset

General note: 14' or 14.5' outside lane widths are intended to provide one or more of the following:

> Improved bike accomodation on busier streets without bike lanes

> Space for off-peak parking on arterials and major highways while maintaining bike accomodation

> Improved accomodation for transit vehicles (and stops) on heavily traveled streets

MAJOR HIGHWAYS, CONTROLLED MAJOR HIGHWAYS

Std. No.	Sum of Cross Section	Maintenance Offset	Sidewalk Width	Buffer Width	Parking Lane Width	Bike Lane / Shoulder	Outside Lane Width	Middle Lane Width	Inside Lane Width	Median/Center Lane Width	Inside Lane Width	Middle Lane Width	Outside Lane Width	Bike Lane / Shoulder	Parking Lane Width	Buffer Width	Sidewalk Width	Maintenance Offset	Notes
2008.07	Urban Controlled Major Highway - 6 Lanes < 45 mph																		
	150'	2	10	14.5	0	0	13.5	12	13.5	24	13.5	12	13.5	0	0	14.5	5	2	
2008.08	Urban Controlled Major Highway - 6 Lanes ≥ 45 mph																		
	150'	2	10	13	0	8	12	12	12	17	12	12	12	8	0	13	5	2	
2008.09	Suburban Controlled Major Highway - 6 Lanes < 45 mph																		
	150'	2	10	19	0	0	13.5	12	13.5	24	13.5	12	13.5	0	0	7	5	5	
2008.10	Suburban Controlled Major Highway - 6 Lanes ≥ 45 mph																		
	160'	5	10	10	0	8	12	12	12	17	12	12	12	8	0	10	5	5	
2008.11	Suburban Controlled Major Highway - 4 Lanes - Open Section																		
	150'	2	10	21.5	0	8	12	0	12	24	12	0	12	8	0	21.5	5	2	
2008.12	Rural Controlled Major Highway - 4 Lanes - Open Section																		
	150'	2	10	20	0	8	12	0	12	32	12	0	12	8	0	20	0	2	1

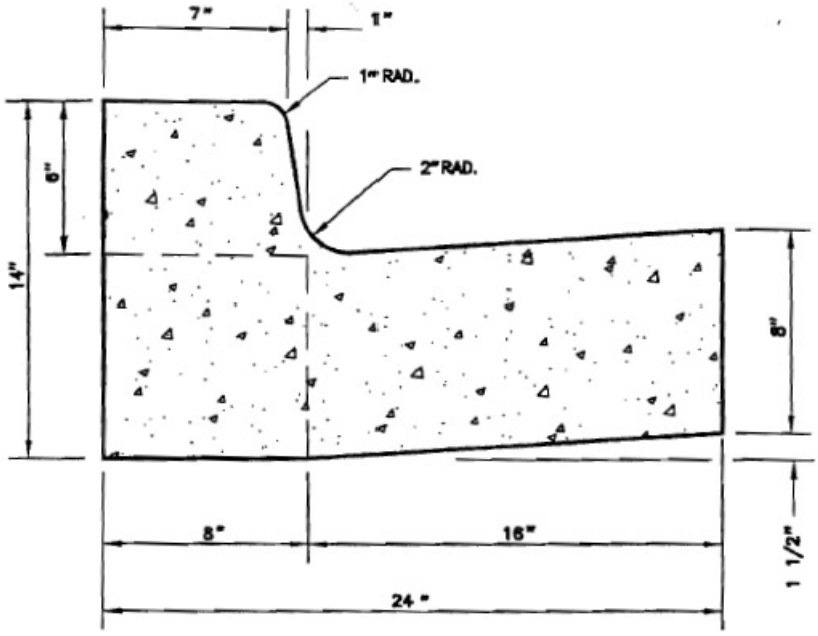
Notes: 1. Use Standard 2008.11 to provide sidewalks on both sides

2009.01 Freeways should be designed in accordance to the guidelines provided in the American Association of State Highway and Transportation Officials (AASHTO) document, "A Policy on Design Standards - Interstate System"

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

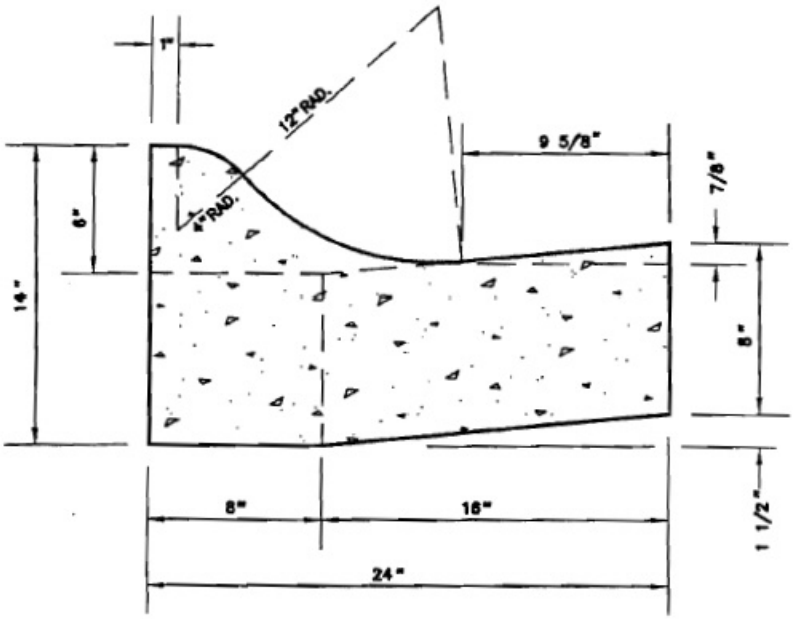
1. REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR MATERIALS, METHODS OF CONSTRUCTION AND EXPANSION JOINT LOCATIONS.
2. THIS STANDARD SHALL BE USED ON PRIMARY RESIDENTIAL, ARTERIAL AND BUSINESS DISTRICT ROADS AS WELL AS CURB RETURNS AND INLET THROATS.
3. WHENEVER STANDARD MC-101.01 CURB IS USED IN CONJUNCTION WITH THIS STANDARD, A TEN FOOT TRANSITION SHALL BE PROVIDED FROM STANDARD MC-100.01 TO STANDARD MC-101.01 FOR CURB RETURNS AND CURB SECTIONS WHICH INCLUDE INLETS.
4. THE STANDARD DISTANCE BETWEEN JOINTS SHALL BE TEN FEET (MAXIMUM AND MINIMUM DISTANCES SHALL BE THIRTEEN FEET AND FIVE FEET RESPECTIVELY).
5. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. (1)

APPROVED 14 APR '06 DATE DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION for CHIEF, DIV. OF CAP. DEV.	REVISED (1) ASTM-C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION COMBINATION CONCRETE CURB AND GUTTER TYPE A STANDARD NO. MC-100.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

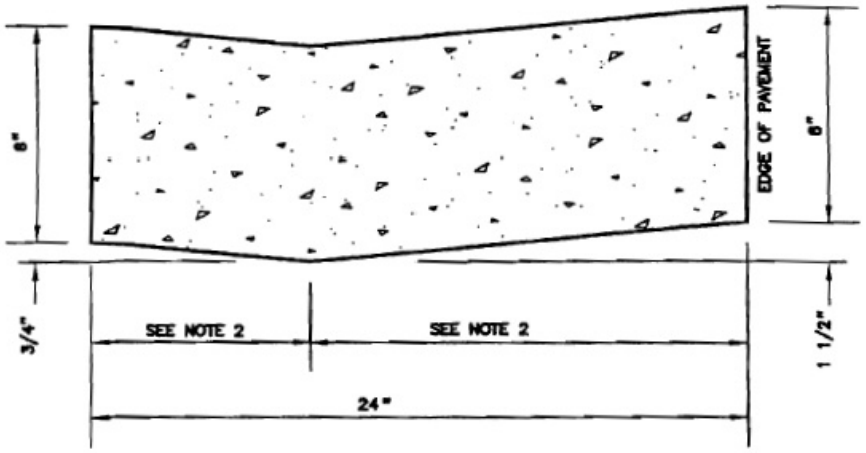
1. REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR MATERIALS, METHODS OF CONSTRUCTION AND EXPANSION JOINT LOCATIONS.
2. THIS STANDARD SHALL BE USED ON PRIMARY, SECONDARY AND TERTIARY RESIDENTIAL ROADS EXCEPT AT CURB RETURNS AND INLET THROATS.
3. WHENEVER STANDARD MC-100.01 CURB IS USED IN CONJUNCTION WITH THIS STANDARD, A TEN FOOT TRANSITION SHALL BE PROVIDED FROM STANDARD MC-101.01 TO STANDARD MC-100.01 FOR CURB RETURNS AND CURB SECTIONS WHICH INCLUDE INLETS.
4. THE STANDARD DISTANCE BETWEEN JOINTS SHALL BE TEN FEET (MAXIMUM AND MINIMUM DISTANCES SHALL BE THIRTEEN FEET AND FIVE FEET RESPECTIVELY).
5. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. (1)

APPROVED 14 APR '06 DATE DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION for CHIEF, DIV. OF CAP. DEV.	REVISED (1) ASTM-C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION COMBINATION CONCRETE CURB AND GUTTER TYPE C STANDARD NO. MC-101.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

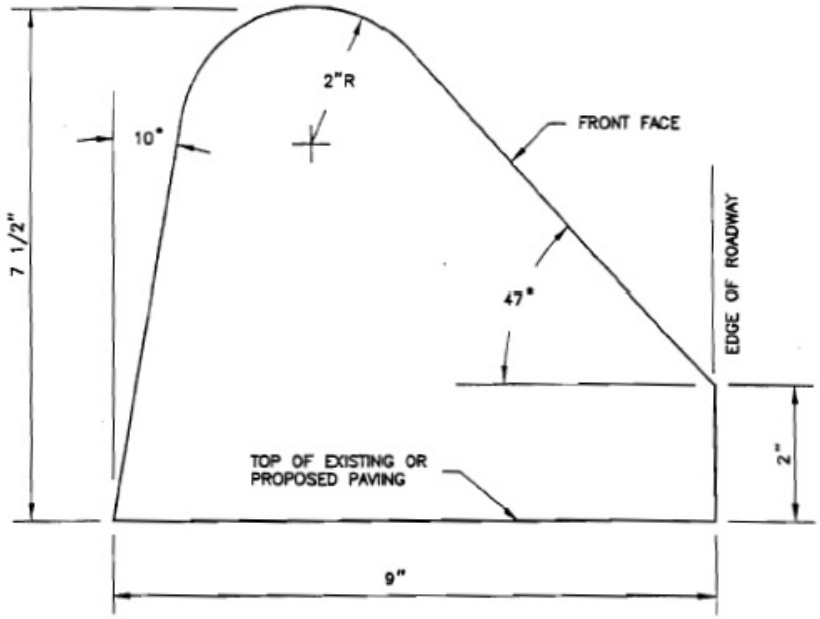
1. REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR MATERIALS, METHODS OF CONSTRUCTION AND EXPANSION JOINT LOCATIONS.
2. THE DISTANCES FROM THE FLOWLINE TO THE FRONT AND BACK EDGE OF CURB SHALL BE ADJUSTED TO MATCH EXISTING CONDITIONS.
3. THE STANDARD DISTANCE BETWEEN JOINTS SHALL BE TEN FEET (MAXIMUM AND MINIMUM DISTANCES SHALL BE THIRTEEN FEET AND FIVE FEET RESPECTIVELY).
4. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. (1)

APPROVED 14 APR 86 DATE DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION for CHIEF, DIV. OF CAP. DEV.	REVISED (1) ASTM-C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
		DEPRESSED CURB ENTRANCE
		STANDARD NO. MC-102.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. CURB TO BE MARYLAND STATE HIGHWAY ADMINISTRATION TYPE SN OR BF BITUMINOUS CONCRETE.
3. THIS STANDARD IS INTENDED TO BE USED IN TEMPORARY SITUATIONS ONLY.
4. BACK OF CURB TO BE LOCATED 6 INCHES MINIMUM INSIDE EDGE OF PAVING.
5. APPLY TACK COAT WHEN PLACED ON EXISTING PAVEMENT.

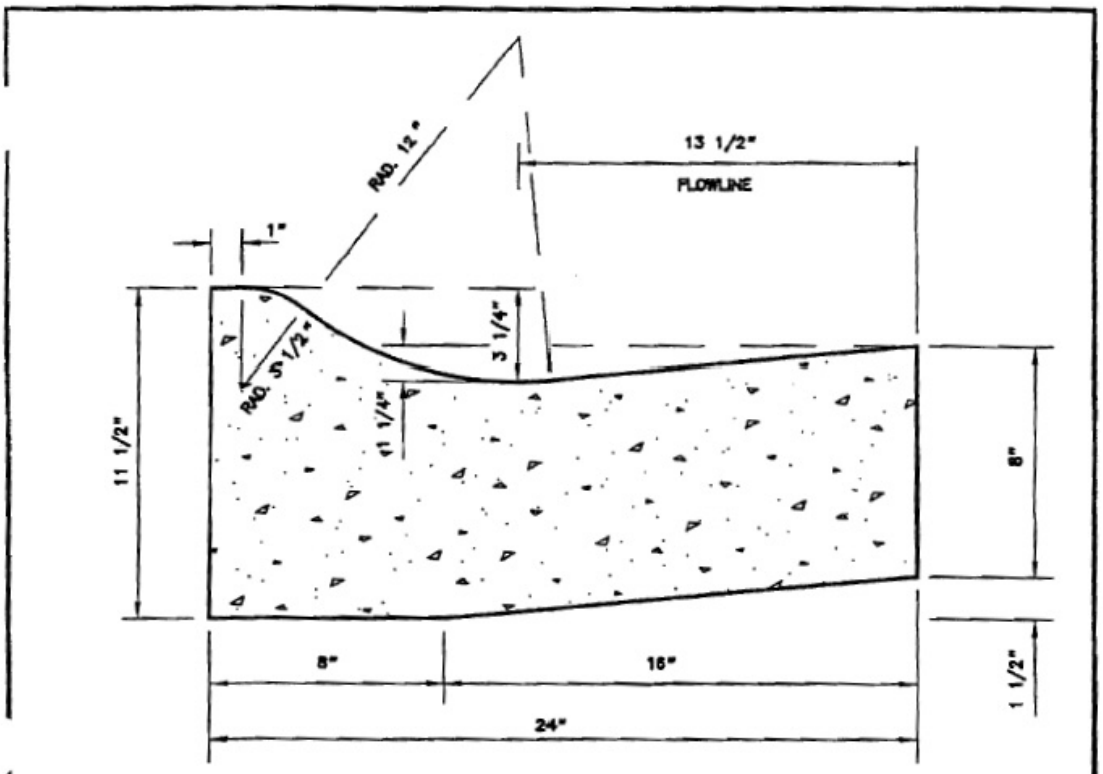
APPROVED JAN 5/95 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION BITUMINOUS CONCRETE CURB STANDARD NO. MC-103.01

PWDOTSTDWG; 1-24-94 6:44:54 pm EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR MATERIALS, METHODS OF CONSTRUCTION, AND EXPANSION JOINT LOCATIONS.
2. MOUNTABLE CURB SHALL ONLY BE USED ON TERTIARY STREETS OR ON SECONDARY RESIDENTIAL CUL-DE-SACS 500 FEET OR LESS IN LENGTH, MEASURED FROM THE LAST INTERSECTING STREET.
3. WHENEVER STANDARD MC-100.01 IS USED IN CONJUNCTION WITH THIS STANDARD, A TEN FOOT TRANSITION SHALL BE PROVIDED FROM STANDARD MC-104.01 TO STANDARD MC-100.01 FOR CURB RETURNS AND CURB SECTIONS WHICH INCLUDE INLETS.
4. TRANSITION BETWEEN STANDARD MC-104.01 AND MC-100.01 OR MC-101.01 SHALL BE ACCOMPLISHED HOLDING THE FLOW LINE SLOPE CONSTANT.
5. THE STANDARD DISTANCE BETWEEN JOINTS SHALL BE TEN FEET (MAXIMUM AND MINIMUM DISTANCES SHALL BE THIRTEEN FEET AND FIVE FEET RESPECTIVELY).
6. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING COMPLYING WITH ASTM-C920. 1

APPROVED 14 APR 06 DATE

DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION

Holger Serrano

for CHIEF, DIV. OF CAP. DEV.

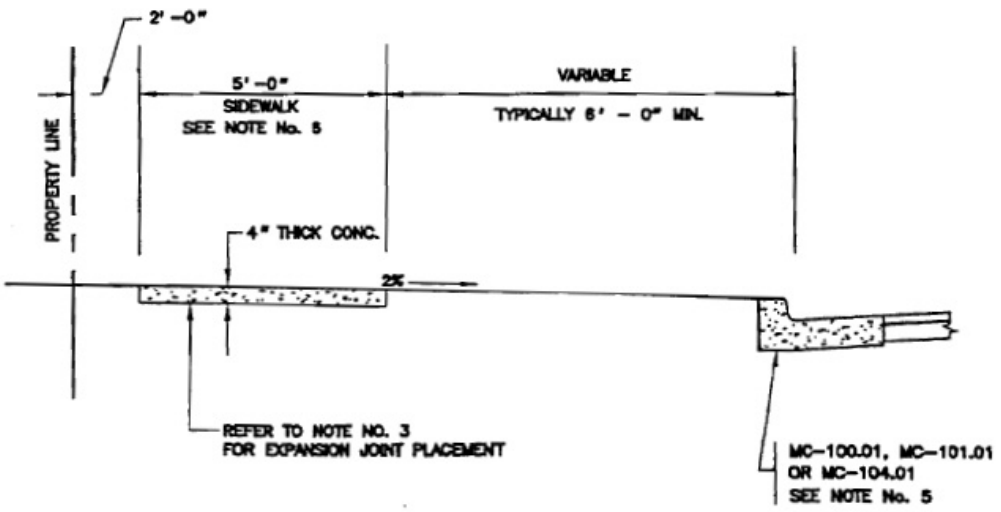
REVISED

1 ASTM-C920 4/2006

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION

MOUNTABLE CONCRETE CURB AND GUTTER TYPE F

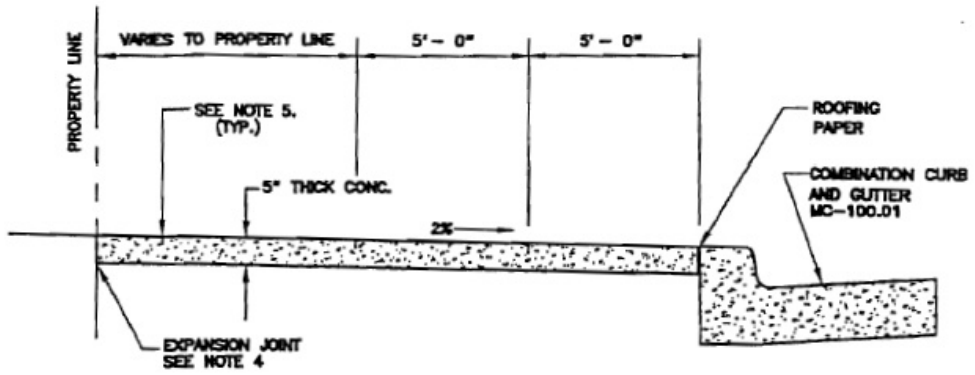
STANDARD NO. MC-104.01



GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. REFER TO THE APPLICABLE MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DETAILS AT DRIVEWAYS.
3. EXPANSION JOINTS SHALL HAVE A MAXIMUM SPACING OF 100 FEET AND BE LOCATED AT POINTS OF CURVATURE. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. (1)
4. SCORE THE CONCRETE TO A DEPTH OF 1/3 THE SLAB THICKNESS TO PROVIDE WEAKENED PLANE TRANSVERSE JOINTS AT 5'-0" INTERVALS.
5. REFER TO THE APPLICABLE ROAD STANDARD AND CURB AND GUTTER STANDARDS FOR OTHER OPTIONS.
6. SIDEWALK WIDTH SHALL BE 4'-0" FOR SECONDARY AND TERTIARY ROADWAYS.

APPROVED 14APR '06 DATE DIRECTOR, DEPT. OF TRANS. Holga Serano for CHIEF, DIV. OF CAP. DEV.	REVISED (1) ASTM-C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION RESIDENTIAL SIDEWALK CLOSED SECTION STANDARD NO. MC-110.01



GENERAL NOTES

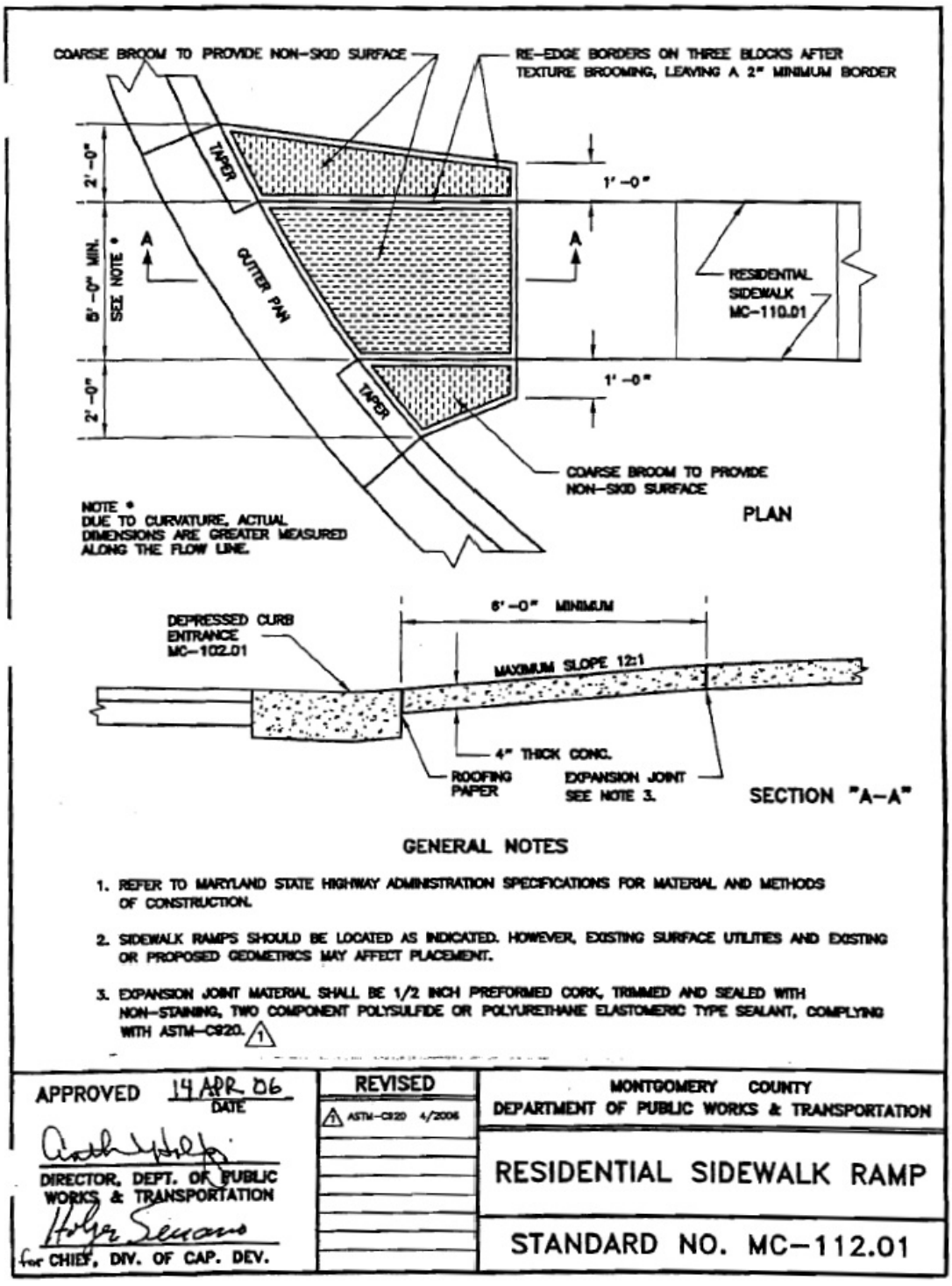
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DESIGN STANDARD No. MC–302.01 FOR DETAILS AT A DRIVEWAY.
3. EXPANSION JOINT MATERIAL SHALL BE PLACED AROUND POLES, HYDRANTS, ETC. AND ALONG THE PROPERTY LINE WHEN THE SIDEWALK ABUTS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE.
4. EXPANSION JOINT MATERIAL SHALL HAVE A MAXIMUM LONGITUDINAL SPACING OF 100 FEET. THE MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON–STAINING, TWO–COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM–C920. ⚠1
5. SCORE THE CONCRETE TO A DEPTH OF 1/3 THE SLAB THICKNESS TO PROVIDE WEAKENED PLANE TRANSVERSE JOINTS AT 5' – 0" INTERVALS PARALLEL WITH AND PERPENDICULAR TO THE CURBING.

APPROVED 14 APR 06 DATE DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION for CHIEF, DIV. OF CAP. DEV.	REVISED ⚠1 ASTM–C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION BUSINESS DISTRICT SIDEWALK STANDARD NO. MC–111.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

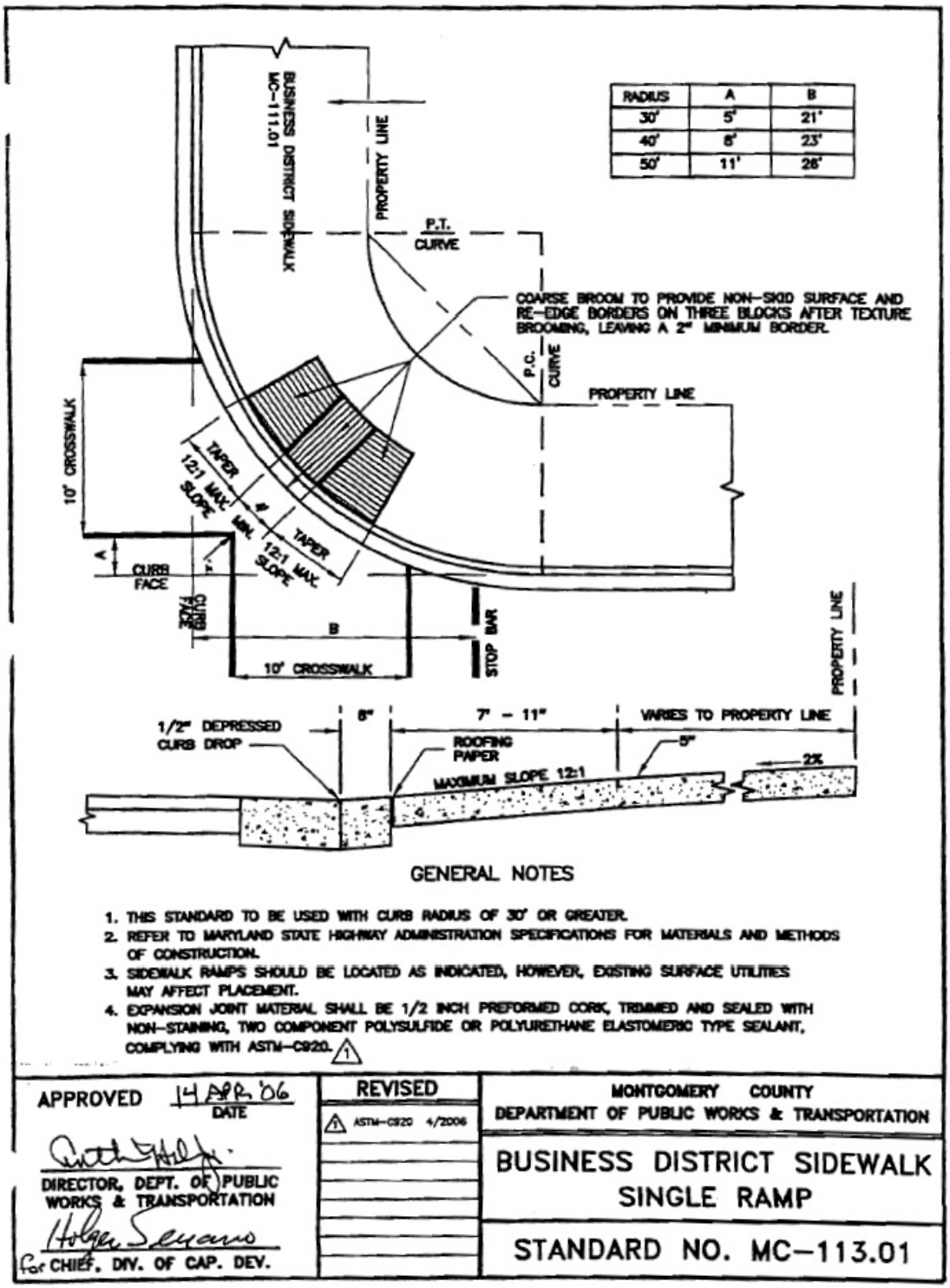
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIAL AND METHODS OF CONSTRUCTION.
2. SIDEWALK RAMPS SHOULD BE LOCATED AS INDICATED. HOWEVER, EXISTING SURFACE UTILITIES AND EXISTING OR PROPOSED GEOMETRICS MAY AFFECT PLACEMENT.
3. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT, COMPLYING WITH ASTM-C920. (1)

APPROVED 14 APR 06 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION	(1) ASTM-C920 4/2006	RESIDENTIAL SIDEWALK RAMP
for CHIEF, DIV. OF CAP. DEV.		STANDARD NO. MC-112.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



RADIUS	A	B
30'	5'	21'
40'	8'	23'
50'	11'	26'

GENERAL NOTES

1. THIS STANDARD TO BE USED WITH CURB RADIUS OF 30' OR GREATER.
2. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
3. SIDEWALK RAMPS SHOULD BE LOCATED AS INDICATED, HOWEVER, EXISTING SURFACE UTILITIES MAY AFFECT PLACEMENT.
4. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT, COMPLYING WITH ASTM-C920. 1

APPROVED 14 APR '06 DATE

DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION

for CHIEF, DIV. OF CAP. DEV.

REVISED

1 ASTM-C920 4/2006

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION

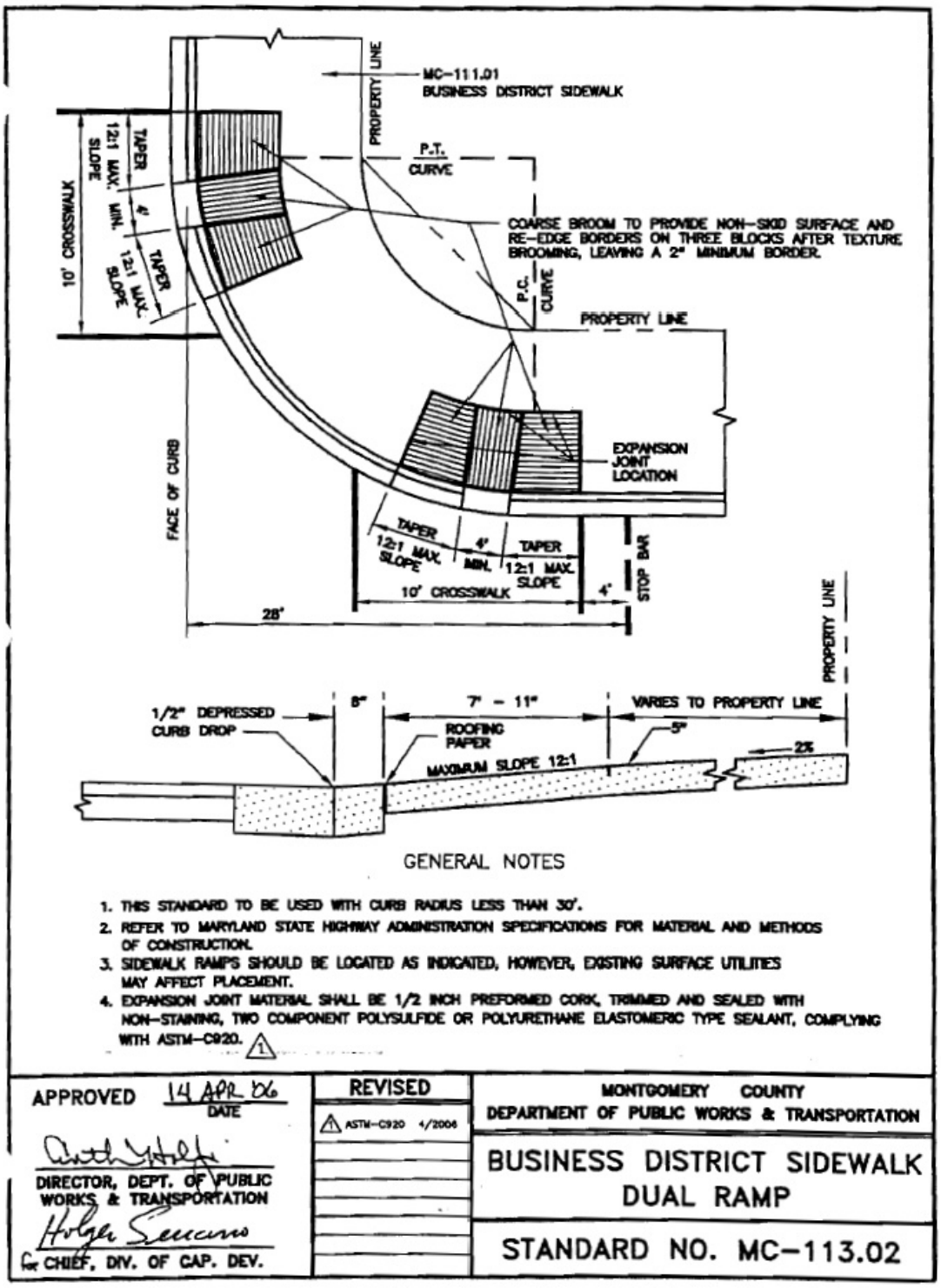
BUSINESS DISTRICT SIDEWALK
SINGLE RAMP

STANDARD NO. MC-113.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

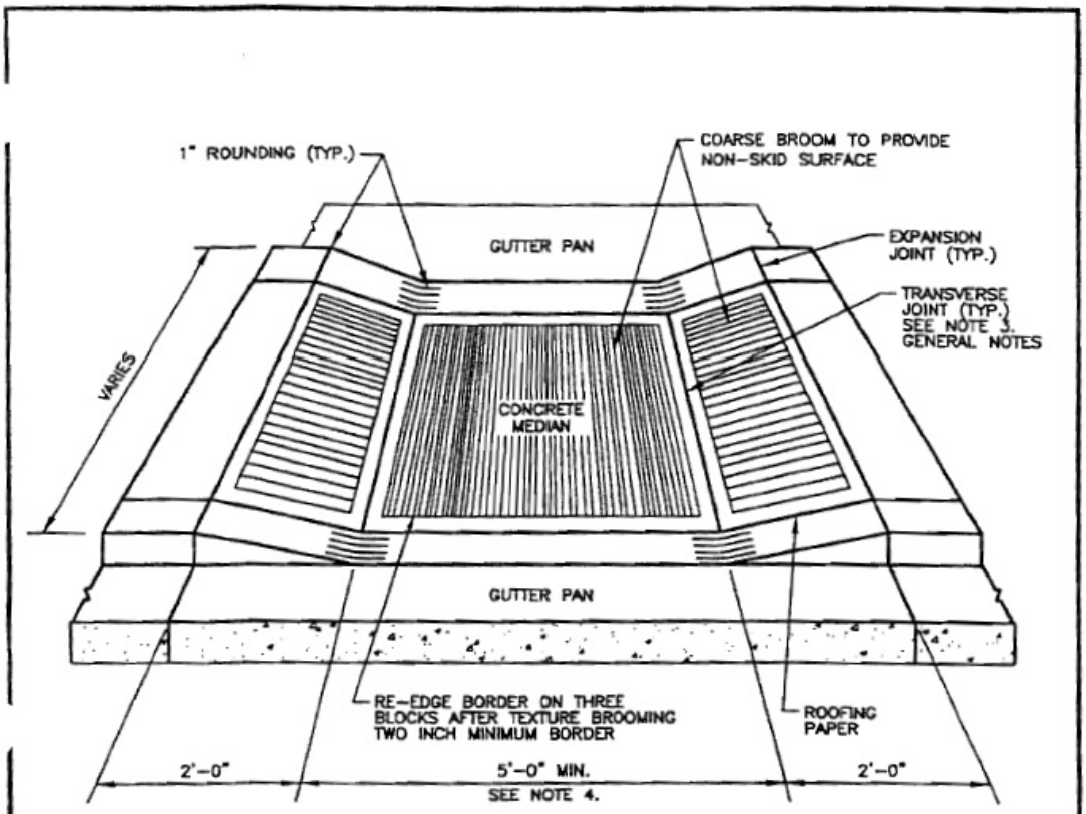
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. THIS STANDARD TO BE USED WITH CURB RADIUS LESS THAN 30'.
2. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIAL AND METHODS OF CONSTRUCTION.
3. SIDEWALK RAMPS SHOULD BE LOCATED AS INDICATED, HOWEVER, EXISTING SURFACE UTILITIES MAY AFFECT PLACEMENT.
4. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT, COMPLYING WITH ASTM-C920. 1

APPROVED 14 APR 06 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION	1 ASTM-C920 4/2006	BUSINESS DISTRICT SIDEWALK DUAL RAMP
for CHIEF, DIV. OF CAP. DEV.		STANDARD NO. MC-113.02



GENERAL NOTES

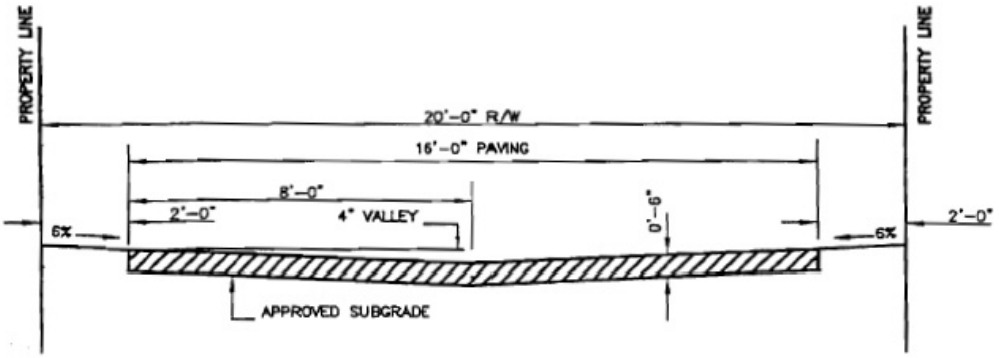
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT, COMPLYING WITH ASTM-C920. 1
3. SCORE THE CONCRETE FOR THE TRANSVERSE JOINTS TO A DEPTH OF 1/3 OF THE THICKNESS TO PROVIDE A WEAKENED PLANE.
4. THE WIDTH MAY BE INCREASED TO MATCH THE WIDTH OF AN APPROACHING BIKEWAY.

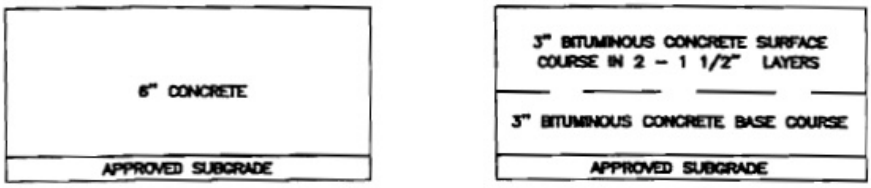
APPROVED 14 APR 06 DATE DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION for CHIEF, DIV. OF CAP. DEV.	REVISED 1 ASTM-C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION MEDIAN OPENING STANDARD NO. MC-114.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**





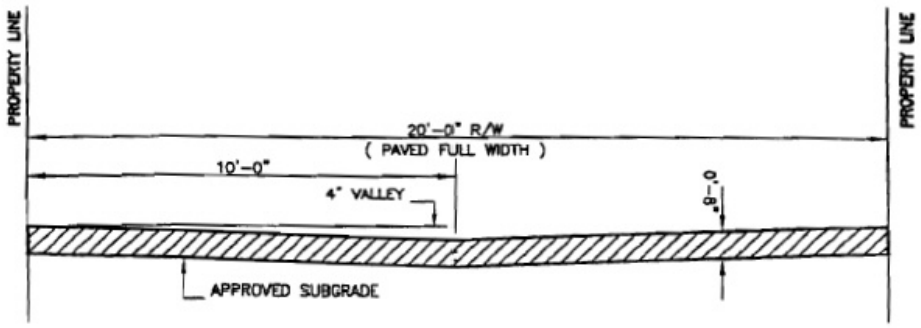
PRIMARY PAVING

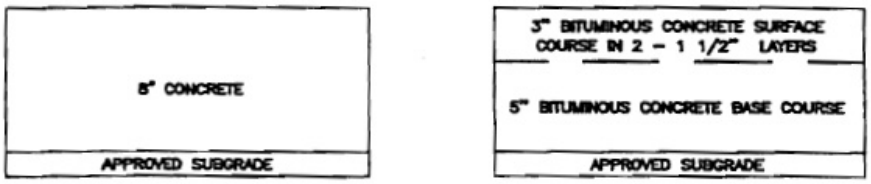
ALTERNATE PAVING

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. EXPANSION JOINT MATERIAL SHALL HAVE A MAXIMUM LONGITUDINAL SPACING OF 100 FEET. THE MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. (1)
3. SCORE THE CONCRETE TO A DEPTH OF 1/3 THE SLAB THICKNESS TO PROVIDE WEAKENED PLANE TRANSVERSE JOINTS AT 10'-0" MAXIMUM INTERVALS.

APPROVED 14 APR '06 DATE DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION for CHIEF, DIV. OF CAP. DEV.	REVISED (1) ASTM-C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION RESIDENTIAL ALLEY STANDARD NO. MC-200.01





PRIMARY PAVING

ALTERNATE PAVING

GENERAL NOTES

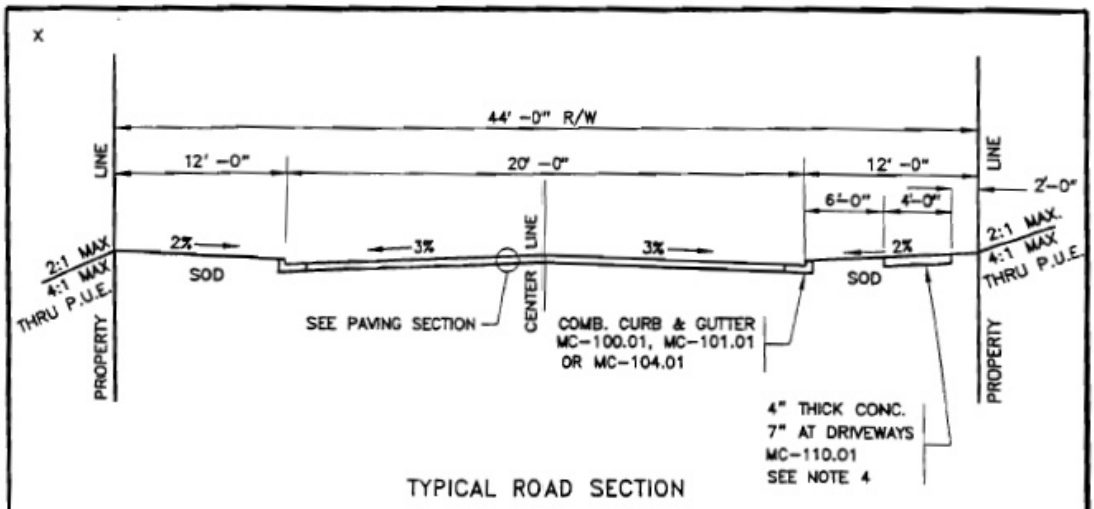
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. EXPANSION JOINT MATERIAL SHALL BE PLACED ALONG THE PROPERTY LINE WHEN ABUTTING CONCRETE STRUCTURES.
3. EXPANSION JOINT MATERIAL SHALL HAVE A MAXIMUM LONGITUDINAL SPACING OF 100 FEET. THE MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. (1)
4. SCORE THE CONCRETE TO A DEPTH OF 1/3 THE SLAB THICKNESS TO PROVIDE WEAKENED PLANE TRANSVERSE JOINTS AT 10'-0" MAXIMUM INTERVALS.

APPROVED 14 APR 06 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION	(1) ASTM-C920 4/2006	COMMERCIAL ALLEY
for CHIEF, DIV. OF CAP. DEV.		STANDARD NO. MC-201.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS
3" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. TOP OF CURB ELEVATION = CENTERLINE ELEVATION + 0.11' (FOR 6" CURB HEIGHT).
4. THIS STANDARD CAN BE USED FOR CUL-DE-SAC LESS THAN 300' IN LENGH AND WITH ON STREET PARKING ALLOWED ON ONE SIDE ONLY.
5. THIS STANDARD CAN BE USED FOR ONE WAY LOOP STREETS WITH ON STREET PARKING ALLOWED ON ONE SIDE ONLY.
6. SIDEWALK OBSTRUCTIONS THAT VIOLATE THE CLEARANCE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" OF 1990 WILL NOT BE ALLOWED.
7. THIS STANDARD SHALL NOT BE USED WHERE ANY CLASS OF BIKEWAY IS SPECIFIED.
8. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

TERTIARY RESIDENTIAL STREET
44' RIGHT-OF-WAY

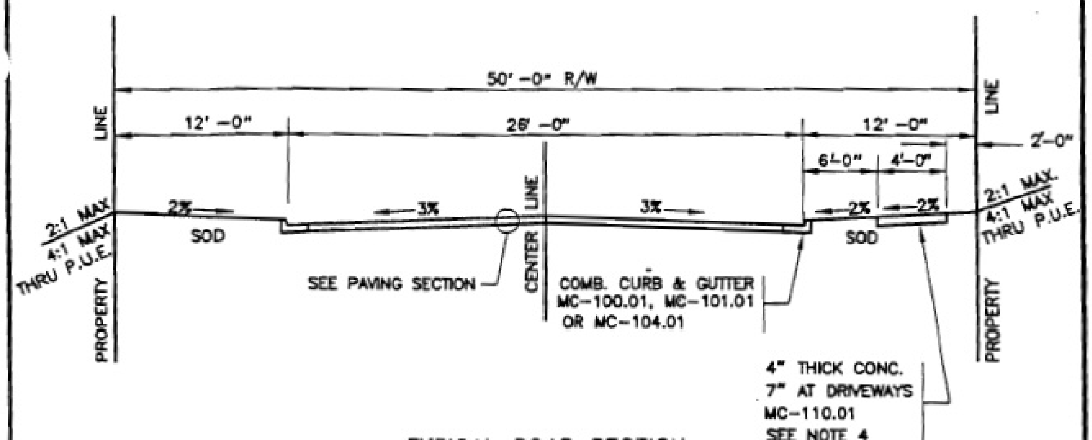
STANDARD NO. MC-210.01

P:\BUTSTDVMC\... 9-28-95 2:10:19 pm EST

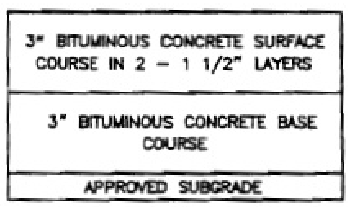
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



TYPICAL ROAD SECTION



PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. TOP OF CURB ELEVATION = CENTERLINE ELEVATION + 0.02' (FOR 6" CURB HEIGHT).
4. SIDEWALK SHALL BE REQUIRED ON ONE SIDE ONLY FOR STREETS LONGER THAN 300'.
5. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

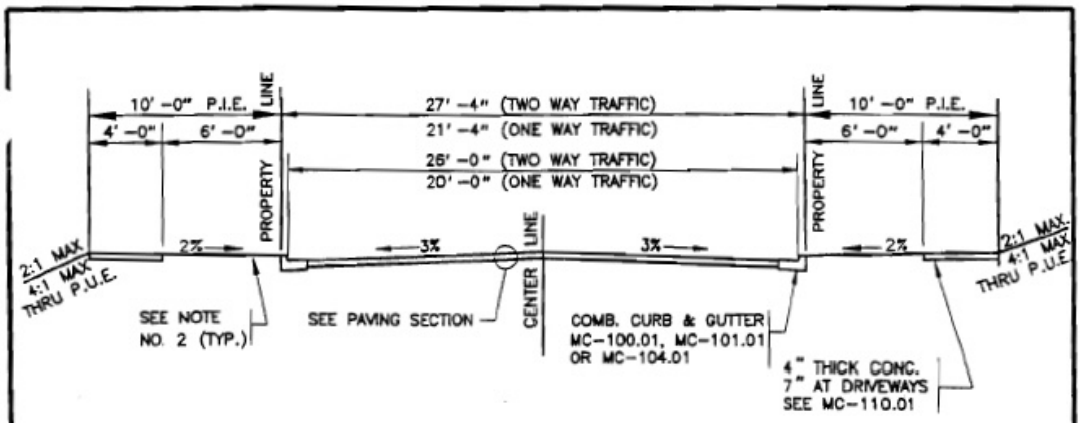
TERTIARY RESIDENTIAL STREET
50' RIGHT-OF-WAY

STANDARD NO. MC-210.02

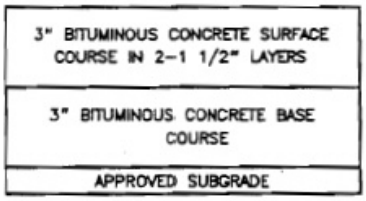
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION



PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. THE SLOPE BEHIND THE CURB TOWARD THE ROAD SHALL BE 2% FOR A DISTANCE OF 3' – 0" FROM THE FACE OF CURB.
3. SURFACE AREA OF INLET SLABS SHALL REMAIN ENTIRELY EXPOSED.
4. TOP OF CURB ELEVATION (20' PAVEMENT) = CENTERLINE ELEVATION + 0.11' (FOR 6" CURB HEIGHT)
5. TOP OF CURB ELEVATION (26' PAVEMENT) = CENTERLINE ELEVATION + 0.02' (FOR 6" CURB HEIGHT)

APPROVED JAN 5/98
DATE
DIRECTOR, DEPT. OF TRANS.
CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

MODIFIED TERTIARY RESIDENTIAL STREET

STANDARD NO. MC-210.03

-1-94 11/08/00 on EST
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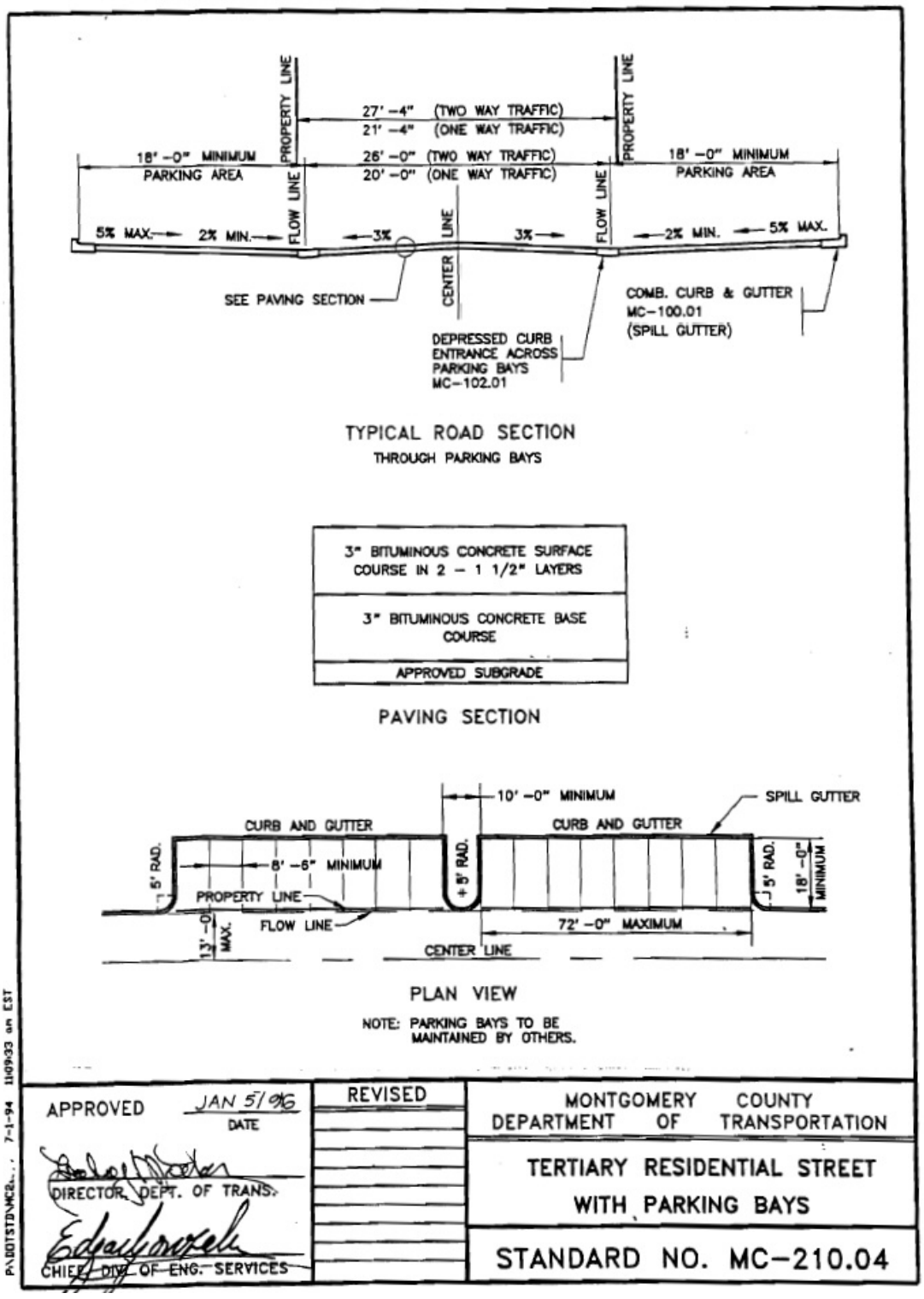
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

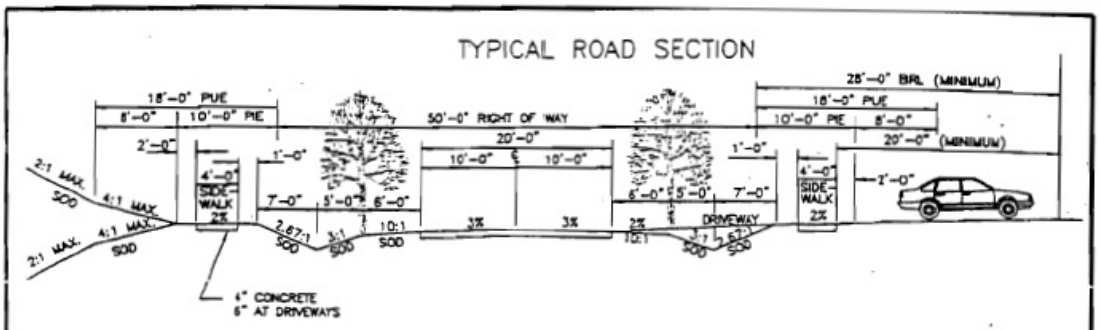
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



PAVING SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
3" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

GENERAL NOTES

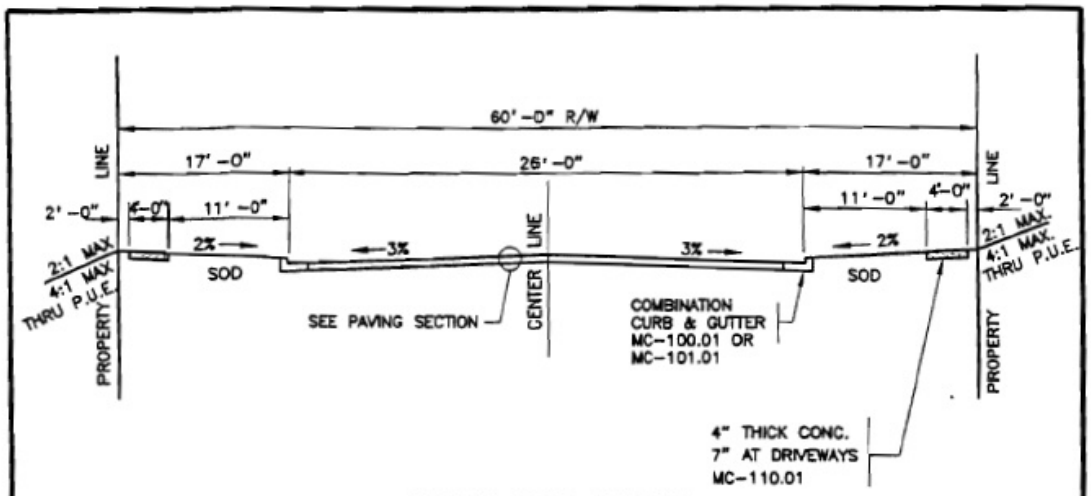
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. PUBLIC UTILITY EASEMENTS (PUEs) ARE SUBJECT TO THE TERMS AND CONDITIONS OF A DOCUMENT ENTITLED "DECLARATIONS OF TERMS AND PROVISIONS OF PUBLIC UTILITY EASEMENTS" THAT IS RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY IN LIBER 3834 AT FOLIO 457.
4. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.
5. SEE STANDARDS NO. MC-701.01 AND MC-703.02 FOR SPECIES, SIZE AND SPACING OF STREET TREES.
6. WHEN USING THIS STANDARD, THE GARAGE SHALL BE SET BACK A MINIMUM DISTANCE OF 20 FEET, MEASURED FROM THE BACK EDGE OF THE SIDEWALK. THE MINIMUM BUILDING RESTRICTION LINE SETBACK IS 28 FEET.
7. STREET LIGHTING POLES ARE TO BE LOCATED AS DIRECTED BY THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
8. PUBLIC IMPROVEMENTS EASEMENTS (PIEs) ARE TO BE GRANTED BY A SITE SPECIFIC DECLARATION OF PUBLIC IMPROVEMENTS EASEMENT DOCUMENT. THAT DOCUMENT IS TO BE RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY, MARYLAND AND REFERENCED ON THE RECORD PLAT.
9. THE 2-FOOT WIDE SECTION OF THE PIEs BEHIND THE SIDEWALKS IS TO ALLOW FOR THE TEMPORARY CONSTRUCTION, RECONSTRUCTION, AND MAINTENANCE OF THE SIDEWALKS. NO PERMANENT PUBLIC IMPROVEMENTS ARE TO BE PLACED WITHIN THESE 2-FOOT WIDE STRIPS.
10. SEVERAL OF THE DIMENSIONS SPECIFIED ON THIS STANDARD REFLECT MODIFICATIONS TO THE VALUES SHOWN ON STANDARD NO. MC-301.03 (RESIDENTIAL DRIVEWAY/OPEN SECTION ROAD).
11. ELEVATION AT THE FRONT EDGE OF SIDEWALK = EDGE OF PAVEMENT ELEVATION + 0.38'

APPROVED 11 July 2000 DATE DIRECTOR, DPWT CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION TERTIARY RESIDENTIAL STREET OPEN SECTION WITH SIDEWALKS AND STREET TREES STANDARD NO. MC-210.05

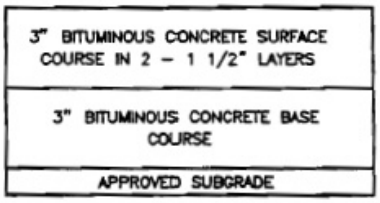
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION



PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. TOP OF CURB ELEVATION = CENTERLINE ELEVATION +0.02' (FOR 6" CURB HEIGHT).
4. WHEN A TRAFFIC BARRIER IS WARRANTED HOLD A MINIMUM OF 7'-0" GREEN SPACE BETWEEN THE CURB AND THE SIDEWALK.

APPROVED JAN 5 / 96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

SECONDARY RESIDENTIAL ROAD

STANDARD NO. MC-211.01

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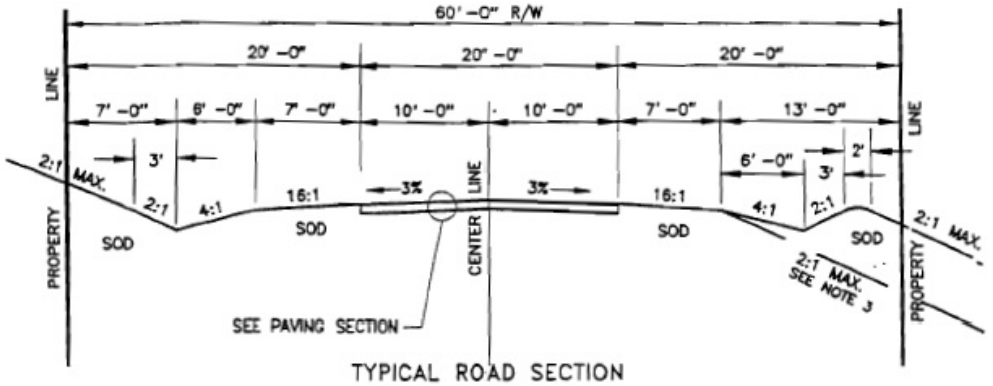
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION
(OUTSIDE SURBURBAN DISTRICT)

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
3" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.

APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

SECONDARY RESIDENTIAL ROAD OPEN SECTION

STANDARD NO. MC-211.02

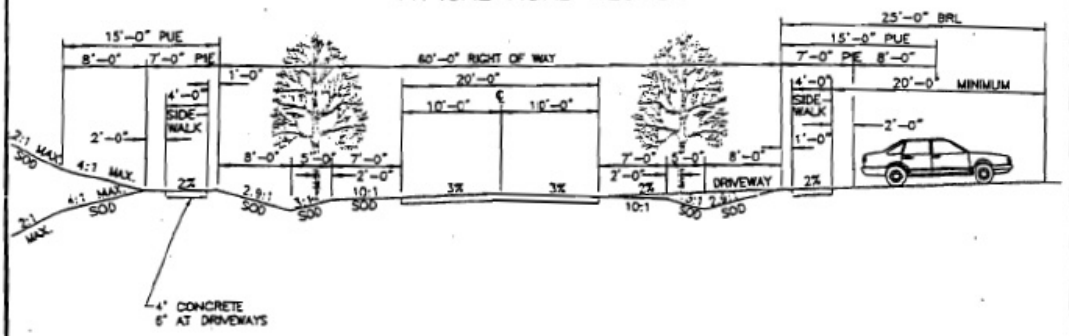
P:\DOTSTD\MC211us 6-24-94 7/6/32 am EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**

TYPICAL ROAD SECTION



PAVING SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS
3" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

GENERAL NOTES

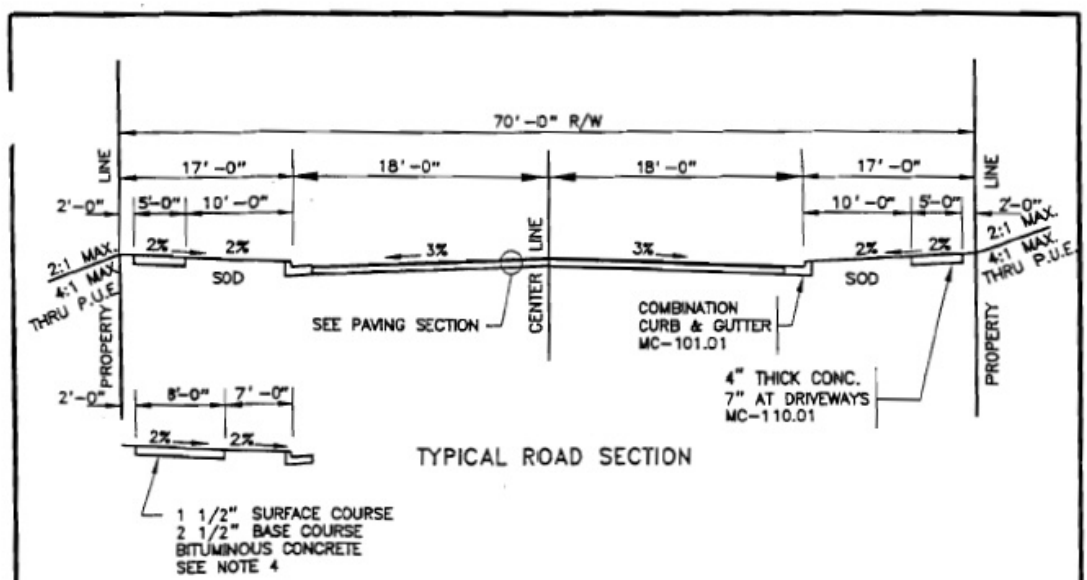
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. PUBLIC UTILITY EASEMENTS (PUEs) ARE SUBJECT TO THE TERMS AND CONDITIONS OF A DOCUMENT ENTITLED "DECLARATIONS OF TERMS AND PROVISIONS OF PUBLIC UTILITY EASEMENTS" THAT IS RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY IN LIBER 3834 AT FOLIO 457.
4. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.
5. SEE STANDARDS NO. MC-701.01 AND MC-703.02 FOR SPECIES, SIZE AND SPACING OF STREET TREES.
6. WHEN USING THIS STANDARD, THE GARAGE SHALL BE SET BACK A MINIMUM DISTANCE OF 20 FEET, MEASURED FROM THE BACK EDGE OF THE SIDEWALK. THE MINIMUM BUILDING RESTRICTION LINE SETBACK IS 25 FEET.
7. STREET LIGHTING POLES ARE TO BE LOCATED AS DIRECTED BY THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
8. PUBLIC IMPROVEMENTS EASEMENTS (PIEs) ARE TO BE GRANTED BY A SITE SPECIFIC DECLARATION OF PUBLIC IMPROVEMENTS EASEMENT DOCUMENT. THAT DOCUMENT IS TO BE RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY, MARYLAND AND REFERENCED ON THE RECORD PLAT.
9. THE 2-FOOT WIDE SECTION OF THE PIEs BEHIND THE SIDEWALKS IS TO ALLOW FOR THE TEMPORARY CONSTRUCTION, RECONSTRUCTION, AND MAINTENANCE OF THE SIDEWALKS. NO PERMANENT PUBLIC IMPROVEMENTS ARE TO BE PLACED WITHIN THESE 2-FOOT WIDE STRIPS.
10. SEVERAL OF THE DIMENSIONS SPECIFIED ON THIS STANDARD REFLECT MODIFICATIONS TO THE VALUES SHOWN ON STANDARD NO. MC-301.03 (RESIDENTIAL DRIVEWAY/OPEN SECTION ROAD).
11. ELEVATION AT THE FRONT EDGE OF SIDEWALK = EDGE OF PAVEMENT ELEVATION + 0.42'

APPROVED 11 July 2000 DATE DIRECTOR, DPWT CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION SECONDARY RESIDENTIAL ROAD OPEN SECTION WITH SIDEWALKS AND STREET TREES STANDARD NO. MC-211.03

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. TOP OF CURB ELEVATION = CENTERLINE ELEVATION -0.13' (FOR 6" CURB HEIGHT).
4. BIKE PATH SHALL BE REQUIRED ONLY IF SPECIFIED IN MASTER PLAN.
5. WHEN A TRAFFIC BARRIER IS WARRANTED HOLD A MINIMUM OF 7'-0" GREEN SPACE BETWEEN THE CURB AND THE SIDEWALK.

APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

PRIMARY RESIDENTIAL ROAD

STANDARD NO. MC-212.01

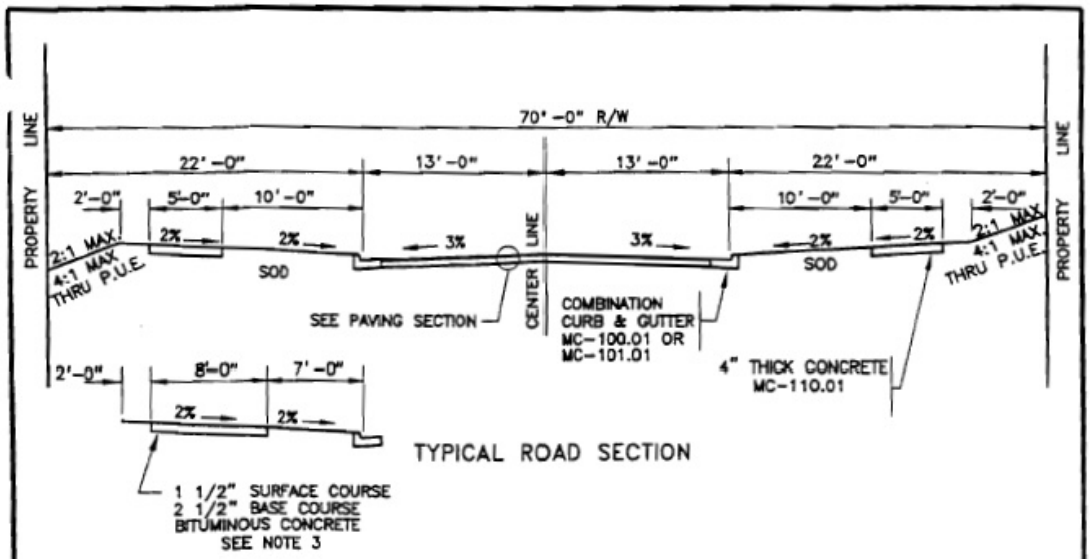
-24-94 7:38:37 am EST

P:\DOT\STD\MC212.

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

CLASS I BIKE PATH

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. A CLASS I BIKE PATH SHALL BE PROVIDED IF REQUIRED AS A RESULT OF THE DEVELOPMENT REVIEW PROCESS. WHERE A CLASS III BIKE ROUTE IS SPECIFIED, CONSIDERATION SHALL BE GIVEN TO ADDITIONAL PAVEMENT WIDTH (DESIRABLE 2' IN EACH DIRECTION, R.O.W.= 70'). THIS STANDARD SHALL NOT BE USED WHERE A CLASS II BIKE ROUTE IS SPECIFIED.
4. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" OF 1990 WILL NOT BE ALLOWED.
5. THIS STANDARD IS USED TO REDUCE THE IMPACT TO ADJACENT AREAS, IN LIEU OF USING THE "PRIMARY RESIDENTIAL ROAD" STANDARD, AS DETERMINED AT THE PRELIMINARY PLAN STAGE, WITH PRIOR APPROVAL OF M.C.D.O.T.
6. THIS STANDARD IS TO BE USED ONLY IN AREAS WHERE THERE ARE NO DRIVEWAYS, AND ON-STREET PARKING IS NOT NEEDED.
7. TOP OF CURB ELEVATION = CENTERLINE ELEVATION + 0.02' (FOR 6" CURB HEIGHT) .

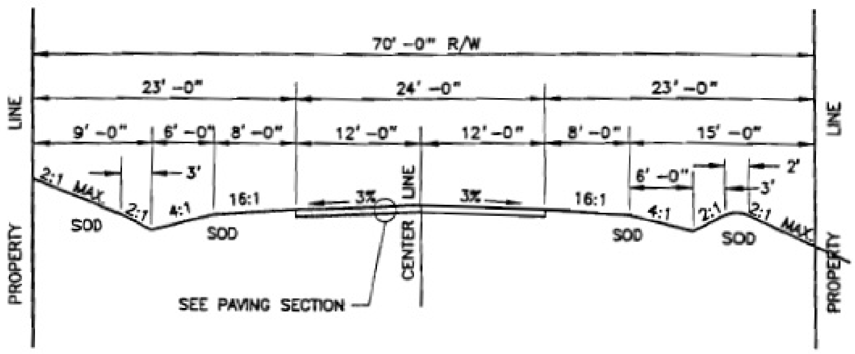
P:\DOTSTD\MC21202 v-24-94 9:00:37 am EST

APPROVED JAN 5/96 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		ALTERNATIVE PRIMARY RESIDENTIAL ROAD
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC-212.02

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



TYPICAL ROAD SECTION

(OUTSIDE SURBURBAN DISTRICT)

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS
5" BITUMUNOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.
4. WHEN SUBGRADE DRAINS ARE REQUIRED, THEY SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD NO. MC-525.01.

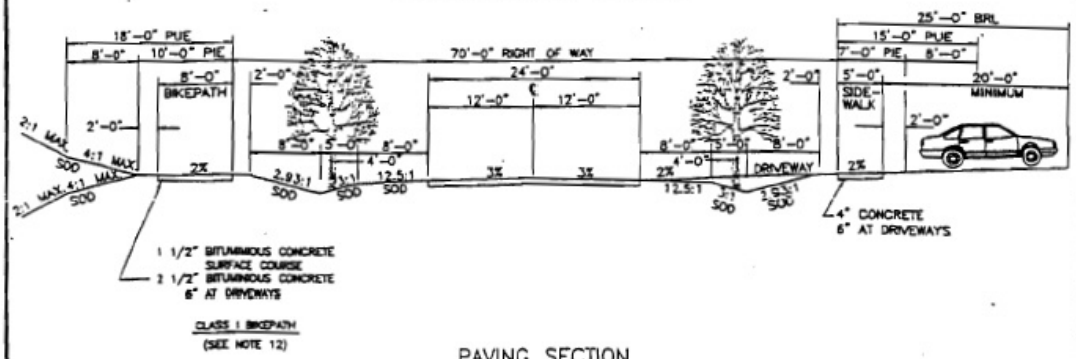
APPROVED JAN 5 / 96 (DATE)	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		PRIMARY RESIDENTIAL ROAD OPEN SECTION
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC-212.03

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	

TYPICAL ROAD SECTION



PAVING SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

GENERAL NOTES

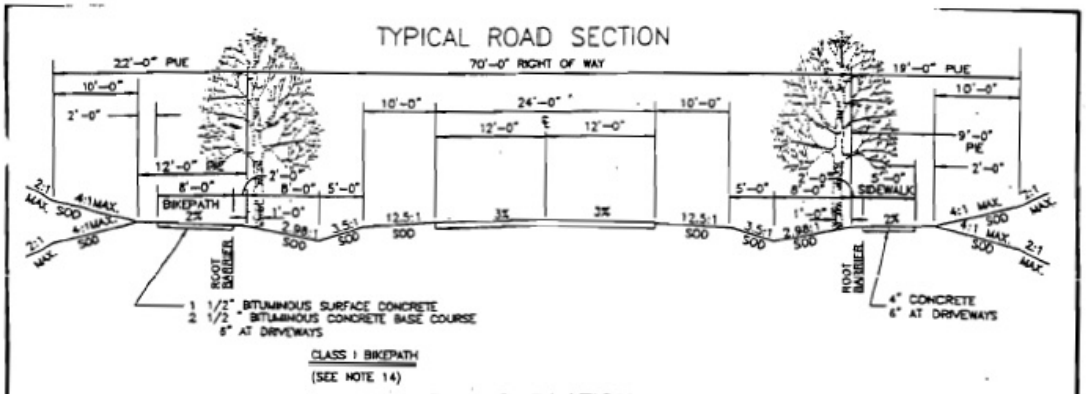
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. PUBLIC UTILITY EASEMENTS (PUEs) ARE SUBJECT TO THE TERMS AND CONDITIONS OF A DOCUMENT ENTITLED "DECLARATIONS OF TERMS AND PROVISIONS OF PUBLIC UTILITY EASEMENTS" THAT IS RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY IN LIBER 3834 AT FOLIO 457.
4. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.
5. SEE STANDARDS NO. MC-701.01 AND MC-703.02 FOR SPECIES, SIZE AND SPACING OF STREET TREES.
6. WHEN USING THIS STANDARD, THE GARAGE SHALL BE SET BACK A MINIMUM DISTANCE OF 20 FEET, MEASURED FROM THE BACK EDGE OF THE SIDEWALK (OR BIKEPATH, AS APPROPRIATE). THE MINIMUM BUILDING RESTRICTION LINE SETBACK IS 25 FEET.
7. STREET LIGHTING POLES ARE TO BE LOCATED AS DIRECTED BY THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
8. PUBLIC IMPROVEMENTS EASEMENTS (PIEs) ARE TO BE GRANTED BY A SITE SPECIFIC DECLARATION OF PUBLIC IMPROVEMENTS EASEMENT DOCUMENT. THAT DOCUMENT IS TO BE RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY, MARYLAND AND REFERENCED ON THE RECORD PLAT.
9. THE 2-FOOT WIDE SECTION OF THE PIEs BEHIND THE SIDEWALKS IS TO ALLOW FOR THE TEMPORARY CONSTRUCTION, RECONSTRUCTION, AND MAINTENANCE OF THE SIDEWALKS. NO PERMANENT PUBLIC IMPROVEMENTS ARE TO BE PLACED WITHIN THESE 2-FOOT WIDE STRIPS.
10. SEVERAL OF THE DIMENSIONS SPECIFIED ON THIS STANDARD REFLECT MODIFICATIONS TO THE VALUES SHOWN ON STANDARD NO. MC-301.03 (RESIDENTIAL DRIVEWAY/OPEN SECTION ROAD).
11. ELEVATION AT THE FRONT EDGE OF SIDEWALK = EDGE OF PAVEMENT ELEVATION + 0.46'
12. BIKEPATH WILL BE REQUIRED ONLY IF SPECIFIED IN THE MASTER PLAN OR IF INCLUDED AS A CONDITION OF SUBDIVISION APPROVAL.

APPROVED 11 July 2000 (DATE) DIRECTOR, DPWT CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION PRIMARY RESIDENTIAL ROAD OPEN SECTION WITH SIDEWALK, BIKEPATH AND STREET TREES STANDARD NO. MC-212.04

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



CLASS I BIKEPATH
(SEE NOTE 14)

PAVING SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

GENERAL NOTES

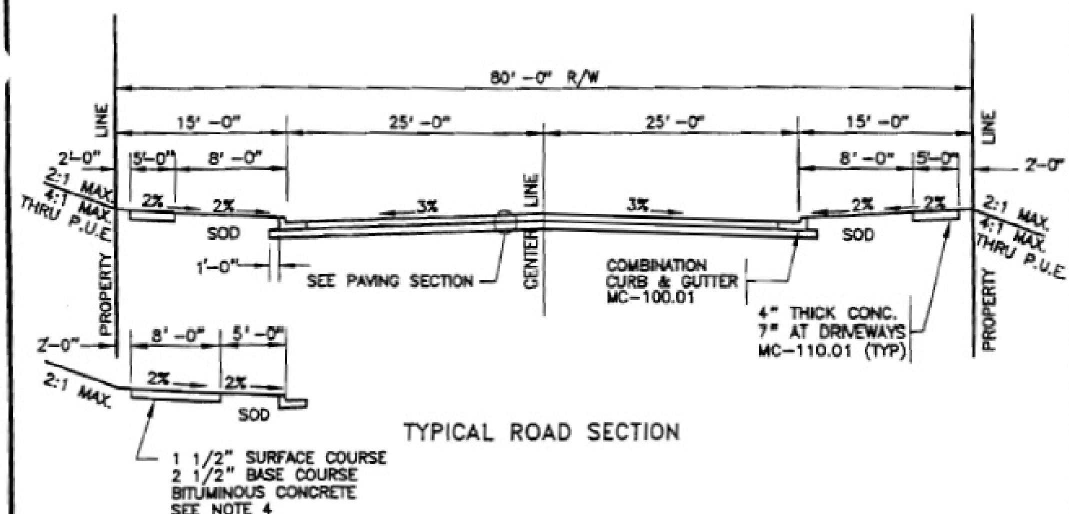
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. PUBLIC UTILITY EASEMENTS (PUEs) ARE SUBJECT TO THE TERMS AND CONDITIONS OF A DOCUMENT ENTITLED "DECLARATIONS OF TERMS AND PROVISIONS OF PUBLIC UTILITY EASEMENTS" THAT IS RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY IN LIBER 3834 AT FOLIO 457.
4. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.
5. A PHYSICAL ROOT BARRIER SHALL BE PROVIDED WHERE STREET TREES ARE CLOSER THAN SIX FEET TO A SIDEWALK OR BIKEPATH. MINIMUM DEPTH OF ROOT BARRIER SHALL BE EIGHTEEN INCHES. ROOT BARRIER SHALL EXTEND A MINIMUM DISTANCE OF 10 FEET LONGITUDINALLY ON EITHER SIDE OF THE TREE.
6. SEE STANDARDS NO. MC-701.01 AND MC-703.02 FOR SPECIES, SIZE AND SPACING OF STREET TREES.
7. WHEN USING THIS STANDARD, THE GARAGE SHALL BE SET BACK A MINIMUM DISTANCE OF 20 FEET, MEASURED FROM THE BACK EDGE OF THE SIDEWALK (OR BIKEPATH, AS APPROPRIATE).
8. STREET LIGHTING POLES ARE TO BE LOCATED AS DIRECTED BY THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
9. PUBLIC IMPROVEMENTS EASEMENTS (PIEs) ARE TO BE GRANTED BY A SITE SPECIFIC DECLARATION OF PUBLIC IMPROVEMENTS EASEMENT DOCUMENT. THAT DOCUMENT IS TO BE RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY, MARYLAND AND REFERENCED ON THE RECORD PLAT.
10. THE 2-FOOT WIDE SECTIONS OF THE PIEs BEHIND THE SIDEWALK/BIKEPATH ARE TO ALLOW FOR THE CONSTRUCTION, RECONSTRUCTION, AND MAINTENANCE OF THE SIDEWALKS AND BIKEPATH (AND THE INSTALLATION OF STREETLIGHTING BEHIND THE SIDEWALK AND/OR THE BIKEPATH, IF REQUIRED BY THE DIVISION TRAFFIC AND PARKING SERVICES).
11. SEVERAL OF THE DIMENSIONS SPECIFIED ON THIS STANDARD REFLECT MODIFICATIONS TO THE VALUES SHOWN ON STANDARD NO. MC-301.03 (RESIDENTIAL DRIVEWAY/OPEN SECTION ROAD).
12. THIS STANDARD MAY BE MODIFIED AS APPROPRIATE TO ACCOMMODATE MASTER PLANNED CLASS II BIKEWAYS.
13. ELEVATION AT THE FRONT EDGE OF SIDEWALK/BIKEPATH = EDGE OF PAVEMENT ELEVATION + 0.50'
14. BIKEPATH WILL BE REQUIRED ONLY IF SPECIFIED IN THE MASTER PLAN OR IF INCLUDED AS A CONDITION OF SUBDIVISION APPROVAL.

APPROVED 11 July 2000 DATE DIRECTOR, DPWT CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION MASTER PLAN PRIMARY ROAD OPEN SECTION WITH SIDEWALK, BIKEPATH AND STREET TREES STANDARD NO. MC-212.05

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



TYPICAL ROAD SECTION

BIKE PATH OPTION

PREFERRED	ALTERNATE
3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS	3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE	9" BITUMINOUS CONCRETE BASE COURSE IN 2 - 4 1/2" LAYERS *
8" GRADED AGGREGATE BASE COURSE IN 2 - 4" LAYERS *	
APPROVED SUBGRADE	APPROVED SUBGRADE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

ALTERNATE PAVING SECTIONS

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. TOP OF CURB ELEVATION = CENTERLINE ELEVATION -0.34' (FOR 6" CURB HEIGHT).
4. BIKE PATH WILL BE REQUIRED ONLY IF SPECIFIED IN MASTER PLAN.
5. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

P:\DOT\STD\MC213A -24-94 8:03:20 am EST

APPROVED JAN 5/96
DATE

[signature]
DIRECTOR, DEPT. OF TRANS.

[signature]
CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

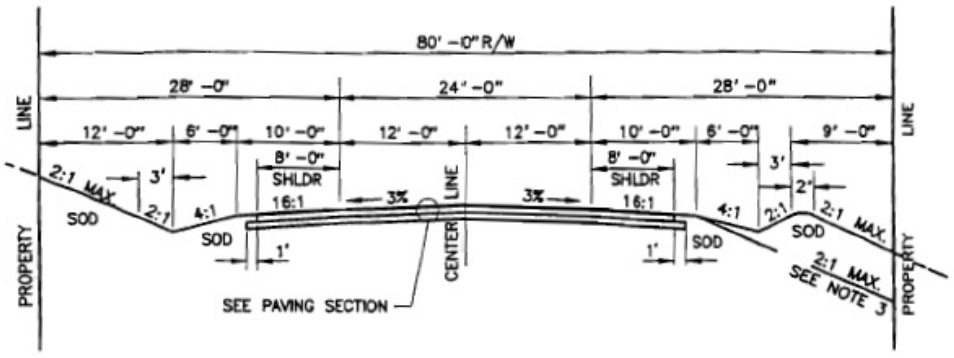
ARTERIAL ROAD

STANDARD NO. MC-213.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION
(OUTSIDE SURBURBAN DISTRICT)

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2 "LAYERS
5" BITUMINOUS CONCRETE BASE COURSE
8" GRADED AGGREGATE BASE COURSE IN 2 – 4" LAYERS *
APPROVED SUBGRADE

PREFERRED

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2 "LAYERS
9" BITUMINOUS CONCRETE BASE COURSE IN 2 – 4 1/2" LAYERS *
APPROVED SUBGRADE

ALTERNATE

* SUBGRADE DRAINS REQUIRED
SEE MC-525.01

ALTERNATE PAVING SECTIONS

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.

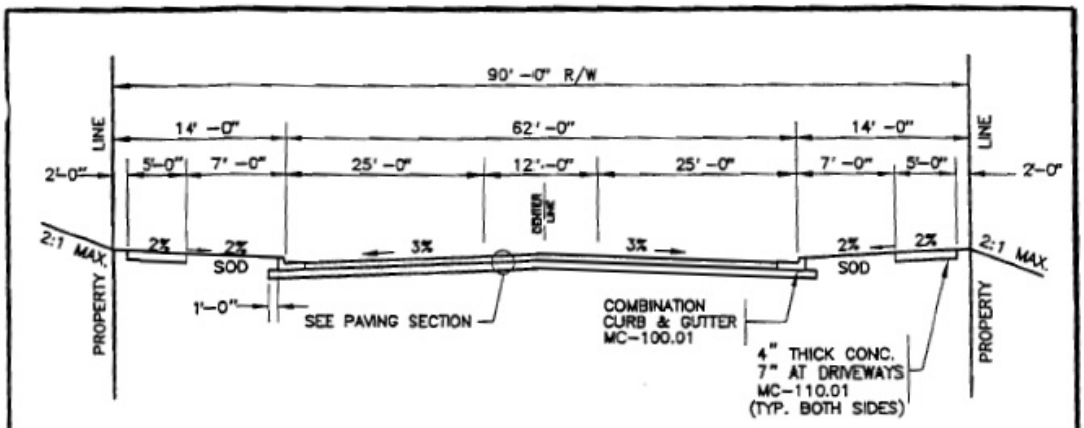
APPROVED JAN 5/96 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		ARTERIAL ROAD OPEN SECTION
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC-213.02

6-24-94 8:07:15 am EST
PW30TSTDWG

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



TYPICAL ROAD SECTION

PREFERRED	ALTERNATE
3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2" LAYERS	3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2 LAYERS
5" BITUMINOUS CONCRETE BASE COURSE	9" BITUMINOUS CONCRETE BASE COURSE IN TWO 4 1/2" LAYERS
8" GRADED AGGREGATE BASE COURSE IN TWO 4" LAYERS *	*
APPROVED SUBGRADE	APPROVED SUBGRADE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. WHERE A CLASS III BIKE ROUTE IS SPECIFIED, CONSIDERATION SHALL BE GIVEN TO ADDITIONAL PAVEMENT WIDTH (DESIRABLE 2' IN EACH DIRECTION, R.O.W.= 94'). WHERE A CLASS II BIKE ROUTE IS SPECIFIED, THE PAVEMENT WIDTH SHALL BE 68' (R.O.W.=96'). WHERE A CLASS I BIKE ROUTE (8' WIDE, 2' FROM THE PROPERTY LINE) IS SPECIFIED, A WIDTH OF 17' SHALL BE USED FROM FACE OF CURB TO THE PROPERTY LINE.
4. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" OF 1990 WILL NOT BE ALLOWED.
5. RAISED MEDIANS MAY BE USED TO CONTROL TURNING MOVEMENTS AND/OR TO PROVIDE PEDESTRIAN REFUGE.
6. TOP OF CURB ELEVATION = CENTERLINE ELEVATION -0.52' (FOR 6" CURB HEIGHT).
7. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

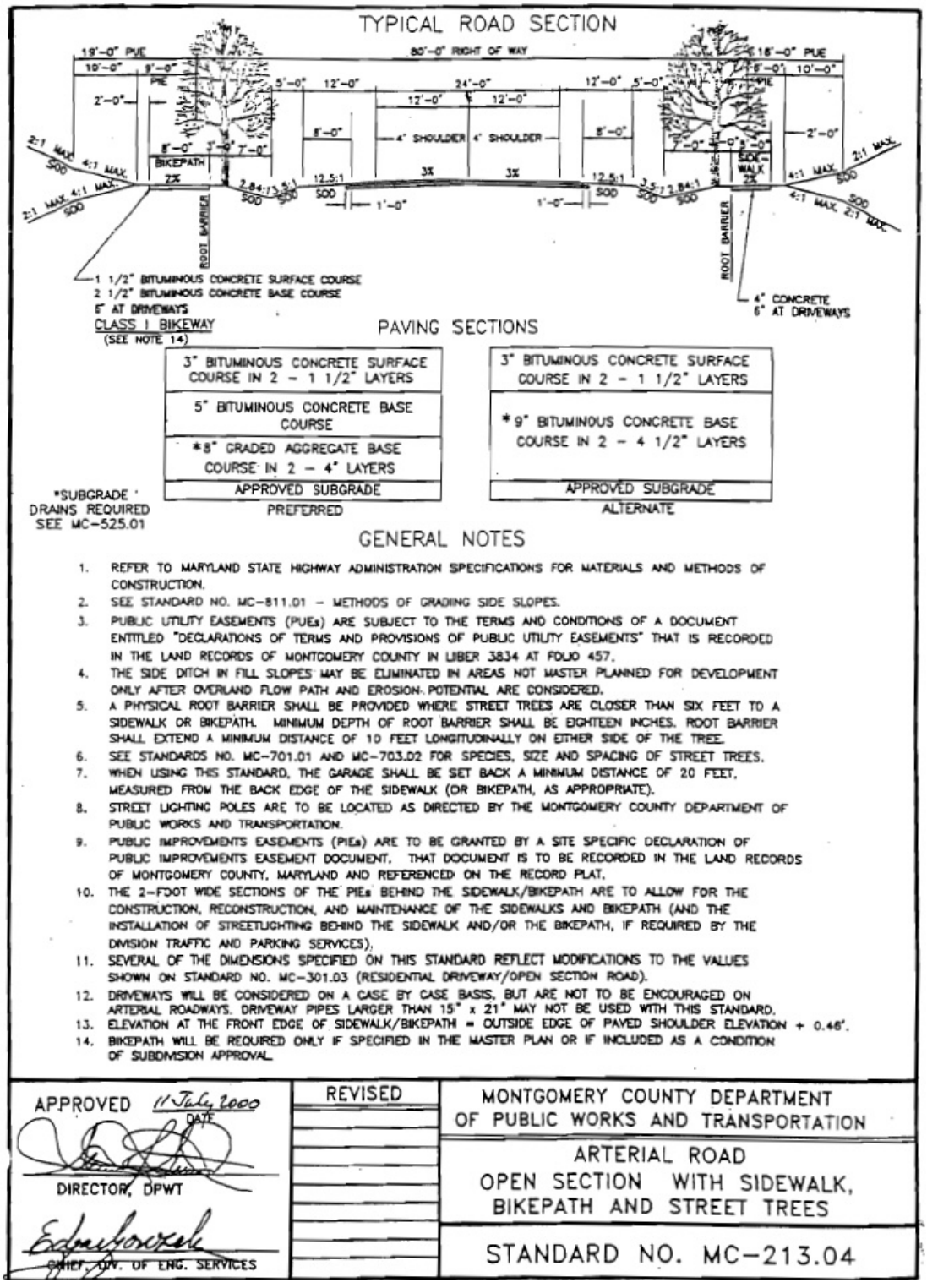
ARTERIAL ROAD - 5 LANES INCLUDING CENTER LEFT TURN LANE

STANDARD NO. MC-213.03

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. PUBLIC UTILITY EASEMENTS (PUEs) ARE SUBJECT TO THE TERMS AND CONDITIONS OF A DOCUMENT ENTITLED "DECLARATIONS OF TERMS AND PROVISIONS OF PUBLIC UTILITY EASEMENTS" THAT IS RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY IN LIBER 3834 AT FOLIO 457.
4. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.
5. A PHYSICAL ROOT BARRIER SHALL BE PROVIDED WHERE STREET TREES ARE CLOSER THAN SIX FEET TO A SIDEWALK OR BIKEPATH. MINIMUM DEPTH OF ROOT BARRIER SHALL BE EIGHTEEN INCHES. ROOT BARRIER SHALL EXTEND A MINIMUM DISTANCE OF 10 FEET LONGITUDINALLY ON EITHER SIDE OF THE TREE.
6. SEE STANDARDS NO. MC-701.01 AND MC-703.02 FOR SPECIES, SIZE AND SPACING OF STREET TREES.
7. WHEN USING THIS STANDARD, THE GARAGE SHALL BE SET BACK A MINIMUM DISTANCE OF 20 FEET, MEASURED FROM THE BACK EDGE OF THE SIDEWALK (OR BIKEPATH, AS APPROPRIATE).
8. STREET LIGHTING POLES ARE TO BE LOCATED AS DIRECTED BY THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
9. PUBLIC IMPROVEMENTS EASEMENTS (PIEs) ARE TO BE GRANTED BY A SITE SPECIFIC DECLARATION OF PUBLIC IMPROVEMENTS EASEMENT DOCUMENT. THAT DOCUMENT IS TO BE RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY, MARYLAND AND REFERENCED ON THE RECORD PLAT.
10. THE 2-FOOT WIDE SECTIONS OF THE PIEs BEHIND THE SIDEWALK/BIKEPATH ARE TO ALLOW FOR THE CONSTRUCTION, RECONSTRUCTION, AND MAINTENANCE OF THE SIDEWALKS AND BIKEPATH (AND THE INSTALLATION OF STREETLIGHTING BEHIND THE SIDEWALK AND/OR THE BIKEPATH, IF REQUIRED BY THE DIVISION TRAFFIC AND PARKING SERVICES).
11. SEVERAL OF THE DIMENSIONS SPECIFIED ON THIS STANDARD REFLECT MODIFICATIONS TO THE VALUES SHOWN ON STANDARD NO. MC-301.03 (RESIDENTIAL DRIVEWAY/OPEN SECTION ROAD).
12. DRIVEWAYS WILL BE CONSIDERED ON A CASE BY CASE BASIS, BUT ARE NOT TO BE ENCOURAGED ON ARTERIAL ROADWAYS. DRIVEWAY PIPES LARGER THAN 15" x 21" MAY NOT BE USED WITH THIS STANDARD.
13. ELEVATION AT THE FRONT EDGE OF SIDEWALK/BIKEPATH = OUTSIDE EDGE OF PAVED SHOULDER ELEVATION + 0.46'.
14. BIKEPATH WILL BE REQUIRED ONLY IF SPECIFIED IN THE MASTER PLAN OR IF INCLUDED AS A CONDITION OF SUBDIVISION APPROVAL.

APPROVED 11 July 2000
DATE
DIRECTOR, DPWT
CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

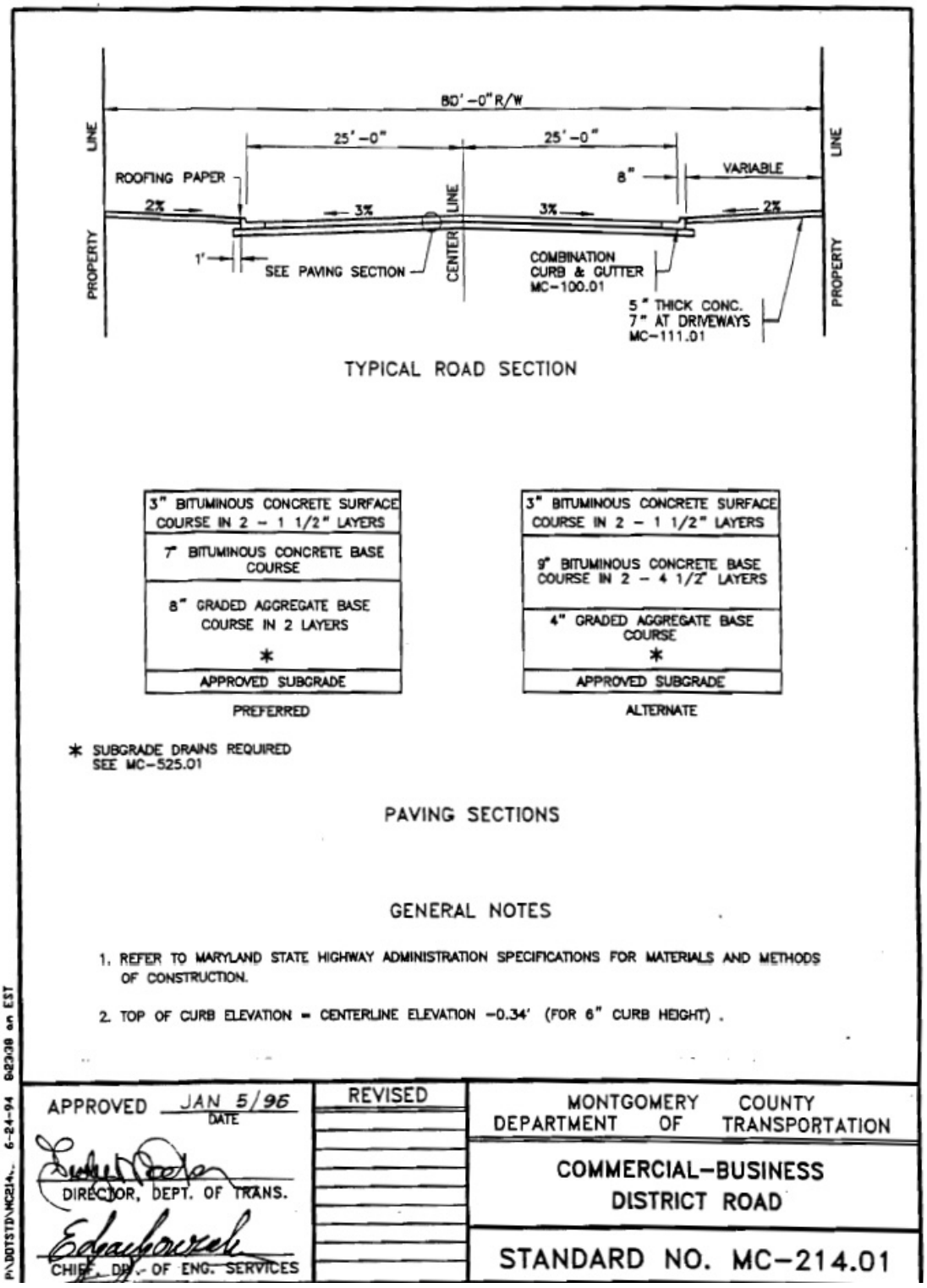
ARTERIAL ROAD
OPEN SECTION WITH SIDEWALK, BIKEPATH AND STREET TREES

STANDARD NO. MC-213.04

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

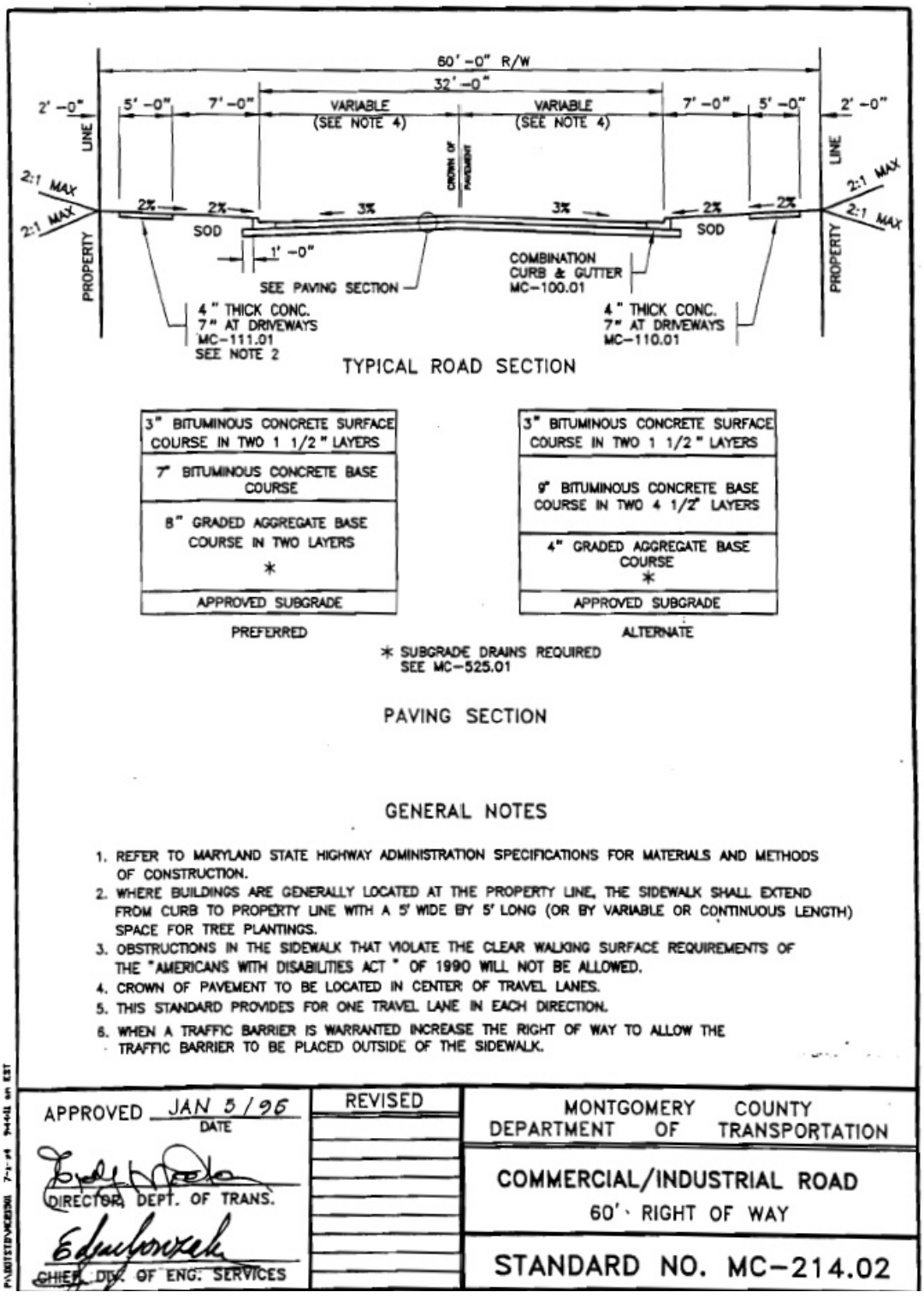
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

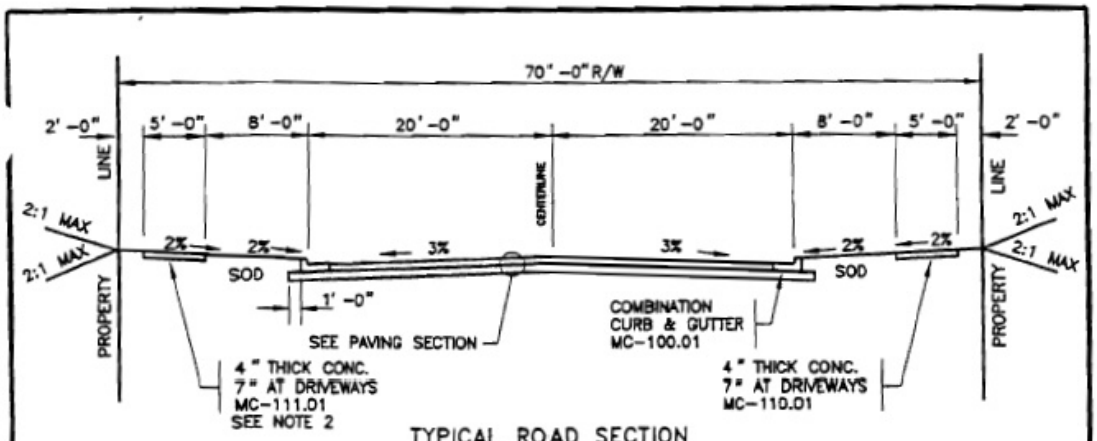
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

PREFERRED	ALTERNATE
3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2" LAYERS	3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2" LAYERS
7" BITUMINOUS CONCRETE BASE COURSE	9" BITUMINOUS CONCRETE BASE COURSE IN TWO 4 1/2" LAYERS
8" GRADED AGGREGATE BASE COURSE IN TWO LAYERS *	4" GRADED AGGREGATE BASE COURSE *
APPROVED SUBGRADE	APPROVED SUBGRADE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION

GENERAL NOTES

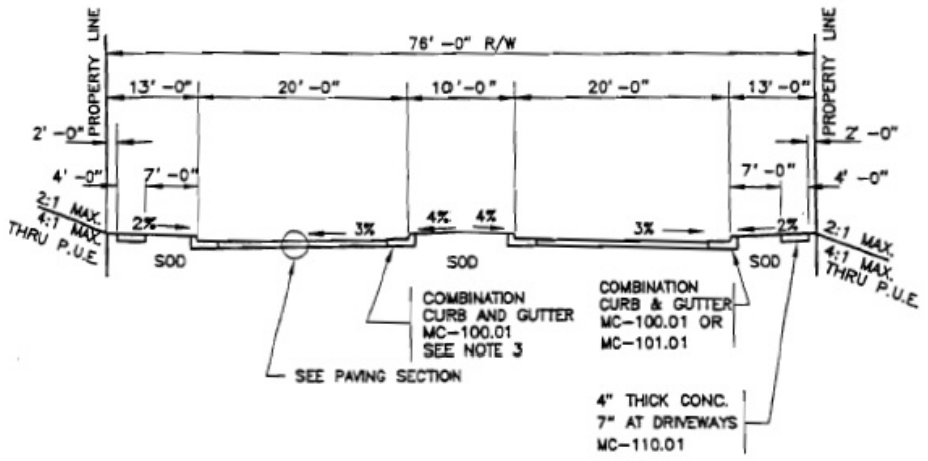
1. WHERE BUILDINGS ARE GENERALLY LOCATED AT THE PROPERTY LINE, THE SIDEWALK SHALL EXTEND FROM CURB TO PROPERTY LINE WITH A 5' WIDE BY 5' LONG (OR BY VARIABLE OR CONTINUOUS LENGTH) SPACE FOR TREE PLANTINGS.
2. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" OF 1990 WILL NOT BE ALLOWED.
3. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
4. TOP OF CURB ELEVATION = CENTERLINE ELEVATION - 0.19 (FOR 6" CURB HEIGHT).
5. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED JAN 5/96 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION COMMERCIAL/INDUSTRIAL ROAD 70' RIGHT OF WAY STANDARD NO. MC-214.03

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
3" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION
GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. IN TYPICAL SECTION OR SUPERELEVATED SECTION, THE HIGH SIDE GUTTER PAN SLOPE SHALL EQUAL THE PAVEMENT SLOPE.
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGHSIDE) ELEVATION –0.19'(FOR 6" CURB HEIGHT).
5. THIS STANDARD PROVIDES FOR ONE TRAVEL LANE IN EACH DIRECTION WITHOUT LEFT TURN STORAGE LANES.
6. WHERE A CLASS I BIKE ROUTE (8' WIDE 2' FROM THE PROPERTY LINE) IS SPECIFIED, A WIDTH OF 16'–0" SHALL BE USED FROM FACE OF CURB TO PROPERTY LINE. (80' RIGHT OF WAY)
7. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT " OF 1990 WILL NOT BE ALLOWED.
8. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

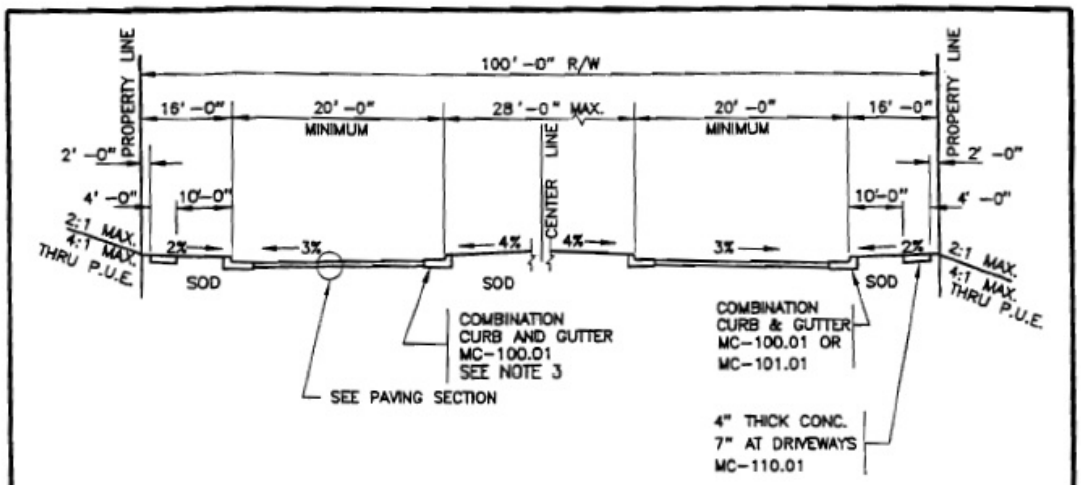
P:\DOT\STD\MC215D1 9-28-95 2:19:19 pm EST

APPROVED JAN 5/96 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SECONDARY RESIDENTIAL DUAL ROAD 76' , RIGHT OF WAY STANDARD NO. MC-215.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
3" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. IN TYPICAL SECTION OR SUPERELEVATED SECTION, THE HIGH SIDE GUTTER PAN SLOPE SHALL EQUAL THE PAVEMENT SLOPE.
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGHSIDE) ELEVATION –0.19'(FOR 6" CURB HEIGHT).
5. THIS STANDARD PROVIDES FOR ONE TRAVEL LANE IN EACH DIRECTION WITHOUT LEFT TURN STORAGE LANES.
6. WHERE A CLASS I BIKE ROUTE (8' WIDE 2' FROM THE PROPERTY LINE) IS SPECIFIED, A WIDTH OF 16'-0" SHALL BE USED FROM FACE OF CURB TO PROPERTY LINE.
7. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" OF 1990 WILL NOT BE ALLOWED.
8. WHEN A TRAFFIC BARRIER IS WARRANTED HOLD A MINIMUM OF 7'-0" GREEN SPACE BETWEEN THE CURB AND THE SIDEWALK.

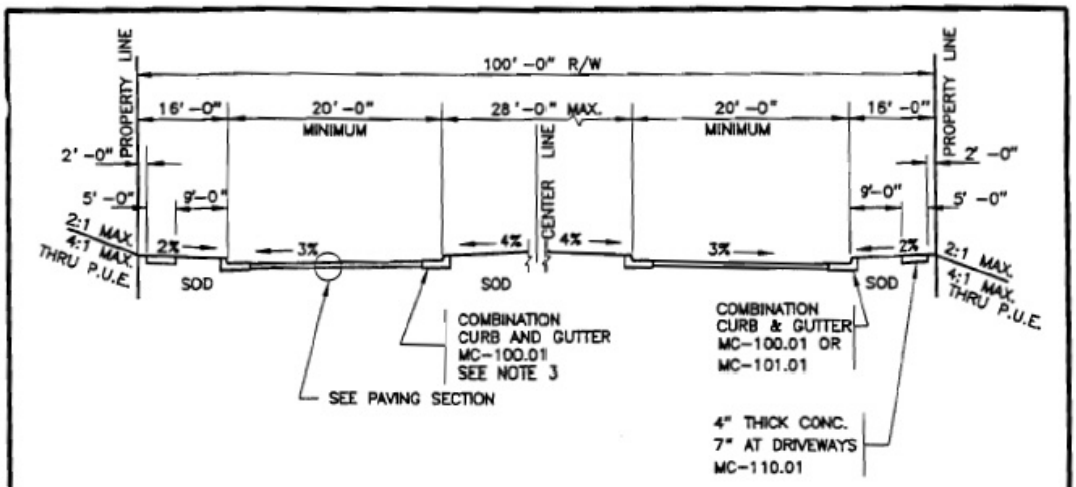
APPROVED JAN 5/96 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SECONDARY RESIDENTIAL DUAL ROAD 100', RIGHT OF WAY STANDARD NO. MC-215.02

P:\DOT\STD\MC215NE 9-26-95 2:26:27 pm EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. IN TYPICAL SECTION OR SUPERELEVATED SECTION, THE HIGH SIDE GUTTER PAN SLOPE SHALL EQUAL THE PAVEMENT SLOPE.
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGHSIDE) ELEVATION -0.19'(FOR 6" CURB HEIGHT).
5. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT " OF 1990 WILL NOT BE ALLOWED.
6. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

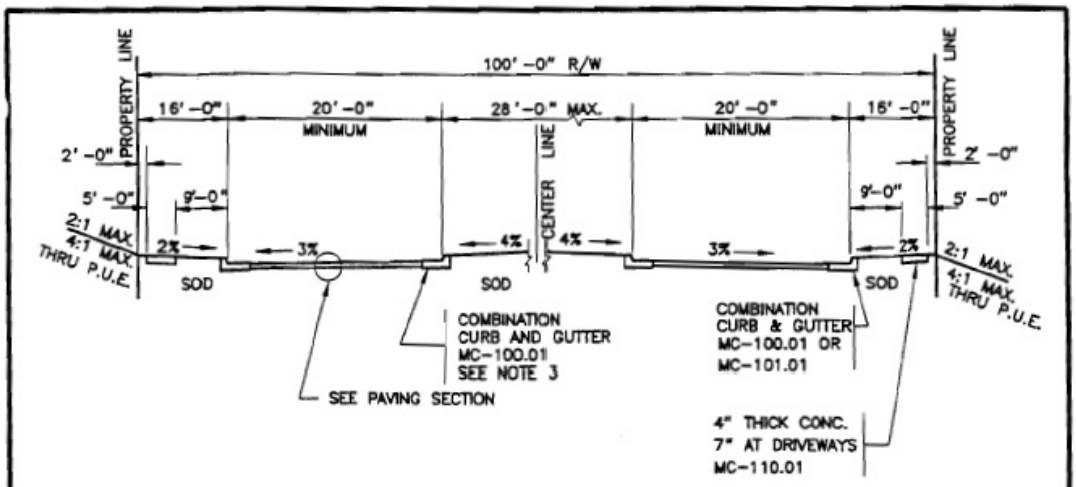
APPROVED JAN 5/96 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION PRIMARY RESIDENTIAL DUAL ROAD 100'' RIGHT OF WAY STANDARD NO. MC-216.02

P:\DOT\STD\MC216. 1-28-95 2:28:49 pm EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 - 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE
APPROVED SUBGRADE

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. IN TYPICAL SECTION OR SUPERELEVATED SECTION, THE HIGH SIDE GUTTER PAN SLOPE SHALL EQUAL THE PAVEMENT SLOPE.
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGHSIDE) ELEVATION -0.19'(FOR 6" CURB HEIGHT).
5. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT " OF 1990 WILL NOT BE ALLOWED.
6. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

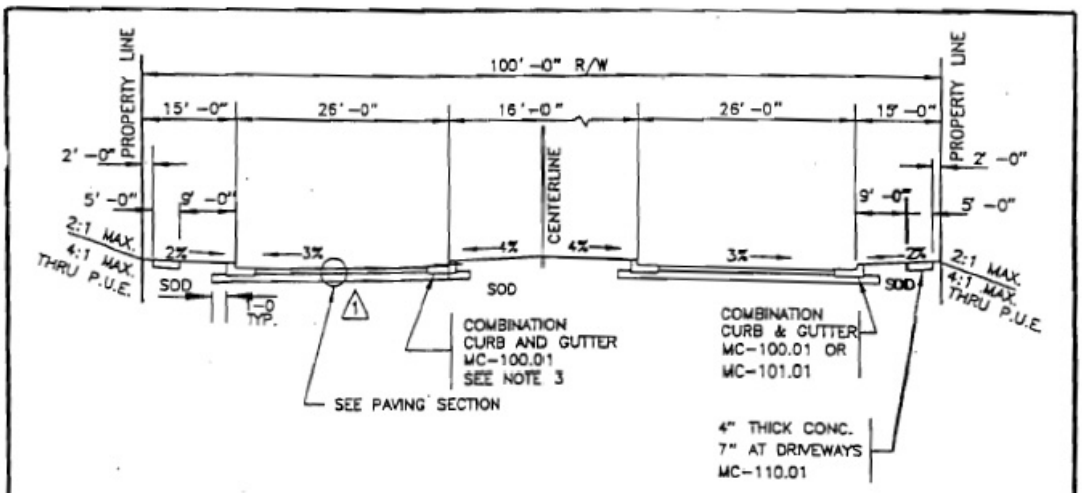
APPROVED JAN 5/96 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION PRIMARY RESIDENTIAL DUAL ROAD 100'' RIGHT OF WAY STANDARD NO. MC-216.02

P:\DOT\STD\MC216. 1-28-95 2:28:49 pm EST

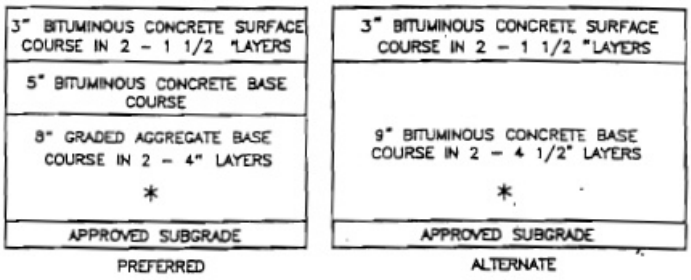
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



TYPICAL ROAD SECTION



* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. IN TYPICAL SECTION OR SUPERELEVATED SECTION, THE HIGH SIDE GUTTER PAN SLOPE SHALL EQUAL THE PAVEMENT SLOPE .
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGHSIDE) ELEVATION -0.37' (FOR 6" CURB HEIGHT).
5. A CLASS I BIKE ROUTE SHALL BE PROVIDED IF REQUIRED AS A RESULT OF THE DEVELOPMENT PROCESS OR IF SPECIFIED IN THE MASTER PLAN.
6. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT " OF 1990 WILL NOT BE ALLOWED.
7. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED 15 Sep '00 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED 1 Add (GAB) 08-24-00	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ARTERIAL DUAL ROAD 100' RIGHT OF WAY STANDARD NO. MC-217.01

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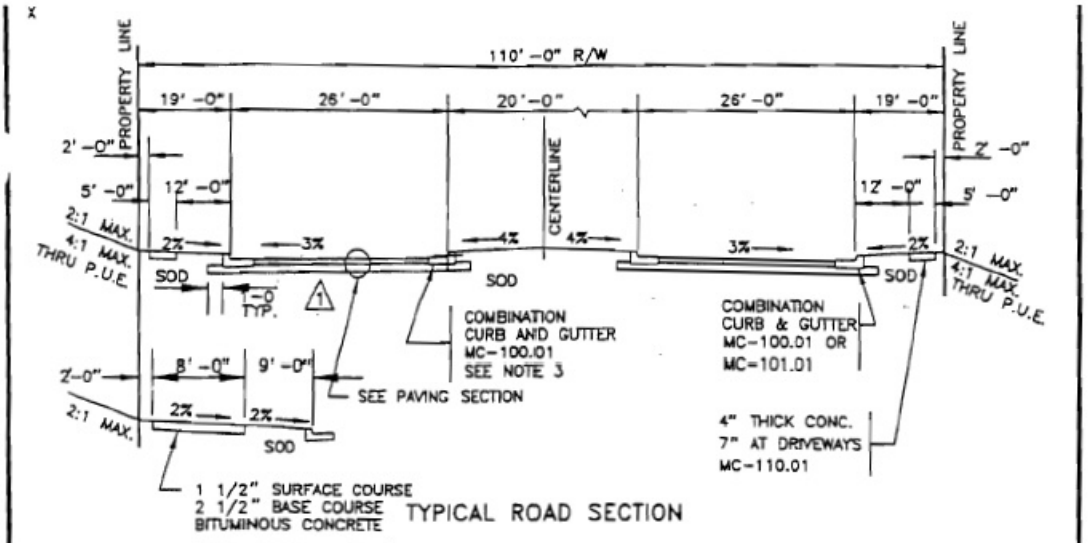
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



TYPICAL ROAD SECTION

(ALTERNATE 8' BIKEPATH)

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE
8" GRADED AGGREGATE BASE COURSE IN 2 – 4" LAYERS
*
APPROVED SUBGRADE

PREFERRED

3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
9" BITUMINOUS CONCRETE BASE COURSE IN 2 – 4 1/2" LAYERS
*
APPROVED SUBGRADE

ALTERNATE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. IN TYPICAL SECTION OR SUPERELEVATED SECTION, THE HIGH SIDE GUTTER PAN SLOPE SHALL EQUAL THE PAVEMENT SLOPE .
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGHSIDE) ELEVATION –0.37' (FOR 6" CURB HEIGHT).
5. A CLASS I BIKE ROUTE SHALL BE PROVIDED IF REQUIRED AS A RESULT OF THE DEVELOPMENT PROCESS OR IF SPECIFIED IN THE MASTER PLAN.
6. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT " OF 1990 WILL NOT BE ALLOWED.
7. WHEN A TRAFFIC BARRIER IS WARRANTED HOLD A MINIMUM OF 7'-0" GREEN SPACE BETWEEN THE CURB AND THE SIDEWALK.

APPROVED 15 Sep '00 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.	1 Add (GAB) 08-24-00	ARTERIAL DUAL ROAD 110' RIGHT OF WAY
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC-217.02

7-1-94 10:44:50 am EST

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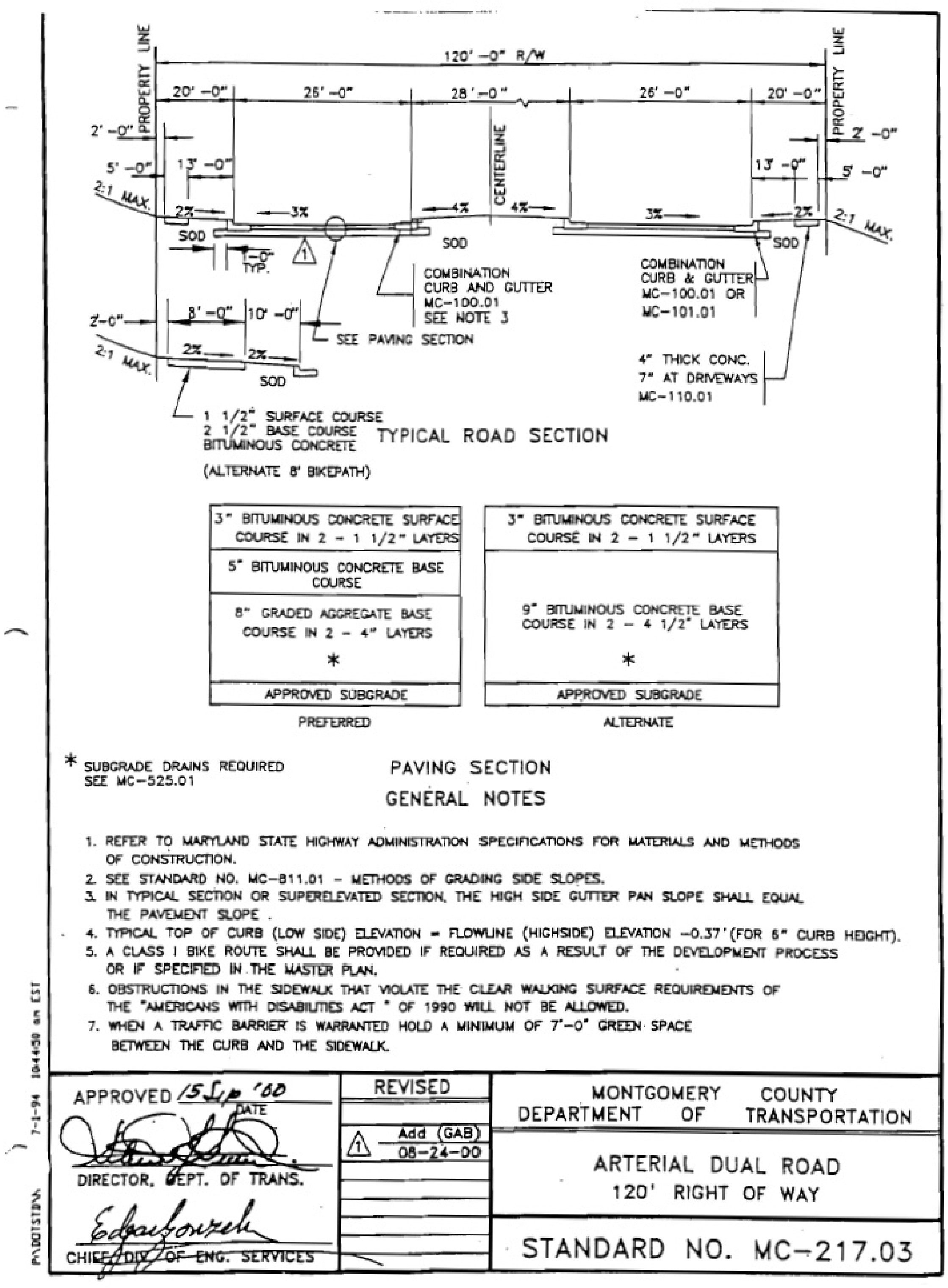
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

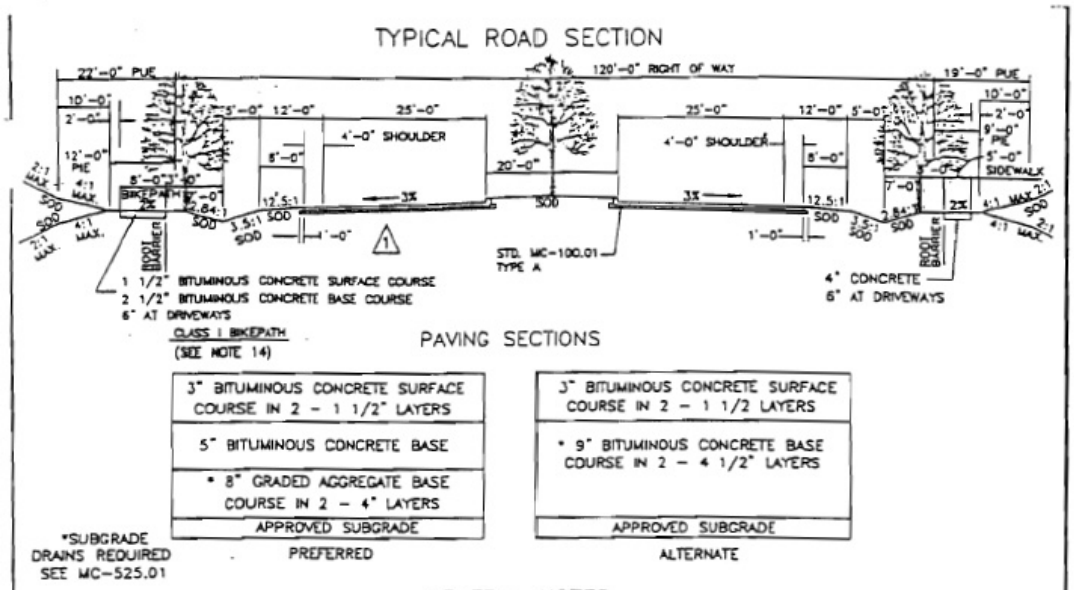
Subject Adoption of Context Sensitive Road Design Standards - Repeal	Number 025-25
Originating Department Department of Transportation	Effective Date



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

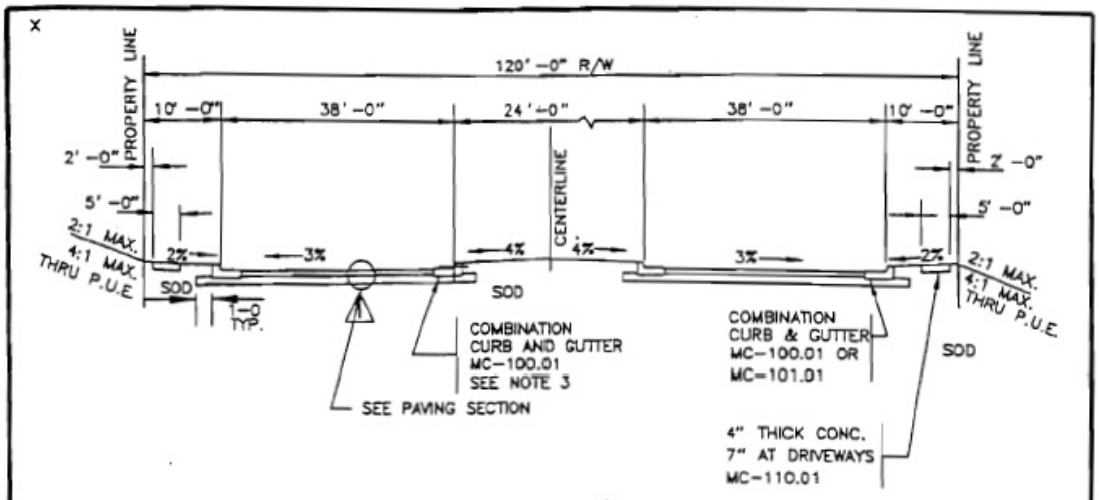
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 - METHODS OF GRADING SIDE SLOPES.
3. PUBLIC UTILITY EASEMENTS (PUEs) ARE SUBJECT TO THE TERMS AND CONDITIONS OF A DOCUMENT ENTITLED "DECLARATIONS OF TERMS AND PROVISIONS OF PUBLIC UTILITY EASEMENTS" THAT IS RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY IN LIBER 3834 AT FOLIO 457.
4. THE SIDE DITCH IN FILL SLOPES MAY BE ELIMINATED IN AREAS NOT MASTER PLANNED FOR DEVELOPMENT ONLY AFTER OVERLAND FLOW PATH AND EROSION POTENTIAL ARE CONSIDERED.
5. A PHYSICAL ROOT BARRIER SHALL BE PROVIDED WHERE STREET TREES ARE CLOSER THAN SIX FEET TO A SIDEWALK OR BIKEPATH. MINIMUM DEPTH OF ROOT BARRIER SHALL BE EIGHTEEN INCHES. ROOT BARRIER SHALL EXTEND A MINIMUM DISTANCE OF 10 FEET LONGITUDINALLY ON EITHER SIDE OF THE TREE.
6. SEE STANDARDS NO. MC-701.01 AND MC-703.02 FOR SPECIES, SIZE AND SPACING OF STREET TREES.
7. WHEN USING THIS STANDARD, ALL GARAGES SHALL BE SET BACK A MINIMUM DISTANCE OF 20 FEET, MEASURED FROM THE BACK EDGE OF THE SIDEWALK (OR BIKEPATH, AS APPROPRIATE).
8. STREET LIGHTING POLES ARE TO BE LOCATED AS DIRECTED BY THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
9. PUBLIC IMPROVEMENTS EASEMENTS (PIEs) ARE TO BE GRANTED BY A SITE SPECIFIC DECLARATION OF THE PUBLIC IMPROVEMENTS EASEMENT DOCUMENT. THAT DOCUMENT IS TO BE RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY, MARYLAND AND REFERENCED ON THE RECORD PLAT.
10. THE 2-FOOT WIDE SECTIONS OF THE PIEs BEHIND THE SIDEWALK/BIKEPATH ARE TO ALLOW FOR THE CONSTRUCTION, RECONSTRUCTION, AND MAINTENANCE OF THE SIDEWALKS AND BIKEPATH (AND THE INSTALLATION OF STREETLIGHTING BEHIND THE SIDEWALK AND/OR THE BIKEPATH, IF REQUIRED BY THE DIVISION TRAFFIC AND PARKING SERVICES).
11. SEVERAL OF THE DIMENSIONS SPECIFIED ON THIS STANDARD REFLECT MODIFICATIONS TO THE VALUES SHOWN ON STANDARD NO. MC-301.03 (RESIDENTIAL DRIVEWAY/OPEN SECTION ROAD).
12. DRIVEWAYS WILL BE CONSIDERED ON A CASE BY CASE BASIS BUT ARE NOT TO BE ENCOURAGED ON ARTERIAL ROADWAYS. DRIVEWAY PIPES LARGER THAN 15" x 21" MAY NOT BE USED WITH THIS STANDARD.
13. ELEVATION AT THE FRONT EDGE OF SIDEWALK/BIKEPATH = OUTSIDE EDGE OF PAVED SHOULDER ELEVATION + 0.46'.
14. BIKEPATH WILL BE REQUIRED ONLY IF SPECIFIED IN THE MASTER PLAN OR IF INCLUDED AS A CONDITION OF SUBDIVISION APPROVAL.

APPROVED 14 Feb 2001 DATE DIRECTOR, DPWT CHIEF, DIV. OF ENG. SERVICES	REVISED 1 Add (GAB) 08-24-00	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION ARTERIAL DUAL ROAD OPEN SECTION WITH SIDEWALK BIKEPATH, AND STREET TREES STANDARD NO. MC-217.04

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



TYPICAL ROAD SECTION

PREFERRED	ALTERNATE
3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS	3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2 "LAYERS
5" BITUMINOUS CONCRETE BASE COURSE	9" BITUMINOUS CONCRETE BASE COURSE IN 2 – 4 1/2" LAYERS
8" GRADED AGGREGATE BASE COURSE IN 2 – 4" LAYERS *	*
APPROVED SUBGRADE	APPROVED SUBGRADE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. IN TYPICAL SECTION OR SUPERELEVATED SECTION, THE HIGH SIDE GUTTER PAN SLOPE SHALL EQUAL THE PAVEMENT SLOPE .
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGHSIDE) ELEVATION –0.73'(FOR 8" CURB HEIGHT).
5. A CLASS I BIKE ROUTE SHALL BE PROVIDED IF REQUIRED AS A RESULT OF THE DEVELOPMENT PROCESS OR IF SPECIFIED IN THE MASTER PLAN.
6. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT " OF 1990 WILL NOT BE ALLOWED.
7. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED 15 Sep '00 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.	1 Add (GAB) 08-24-00	MAJOR DUAL ROAD 120' RIGHT OF WAY
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC-218.01

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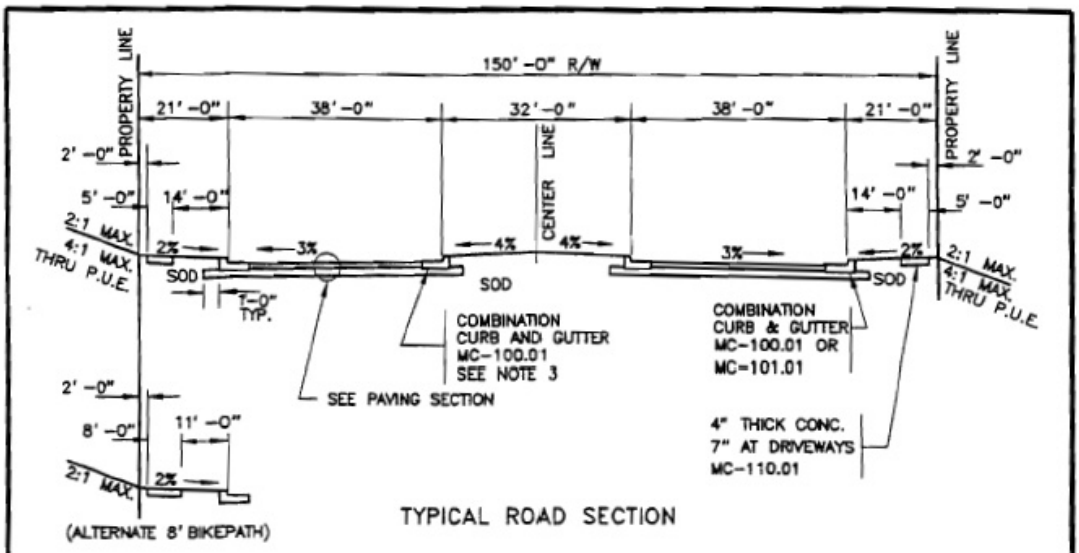
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

PREFERRED	ALTERNATE
3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS	3" BITUMINOUS CONCRETE SURFACE COURSE IN 2 – 1 1/2" LAYERS
5" BITUMINOUS CONCRETE BASE COURSE	9" BITUMINOUS CONCRETE BASE COURSE IN 2 – 4 1/2" LAYERS
8" GRADED AGGREGATE BASE COURSE IN 2 – 4" LAYERS	
*	*
APPROVED SUBGRADE	APPROVED SUBGRADE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION
GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. SEE STANDARD NO. MC-811.01 – METHODS OF GRADING SIDE SLOPES.
3. IN TYPICAL SECTION OR SUPERELEVATED SECTION, THE HIGH SIDE GUTTER PAN SLOPE SHALL EQUAL THE PAVEMENT SLOPE .
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGHSIDE) ELEVATION –0.37'(FOR 6" CURB HEIGHT).
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6. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT " OF 1990 WILL NOT BE ALLOWED.
7. WHEN A TRAFFIC BARRIER IS WARRANTED HOLD A MINIMUM OF 7'–0" GREEN SPACE BETWEEN THE CURB AND THE SIDEWALK.

APPROVED JAN 5 / 96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

MAJOR DUAL HIGHWAY
150' RIGHT OF WAY

STANDARD NO. MC-218.02

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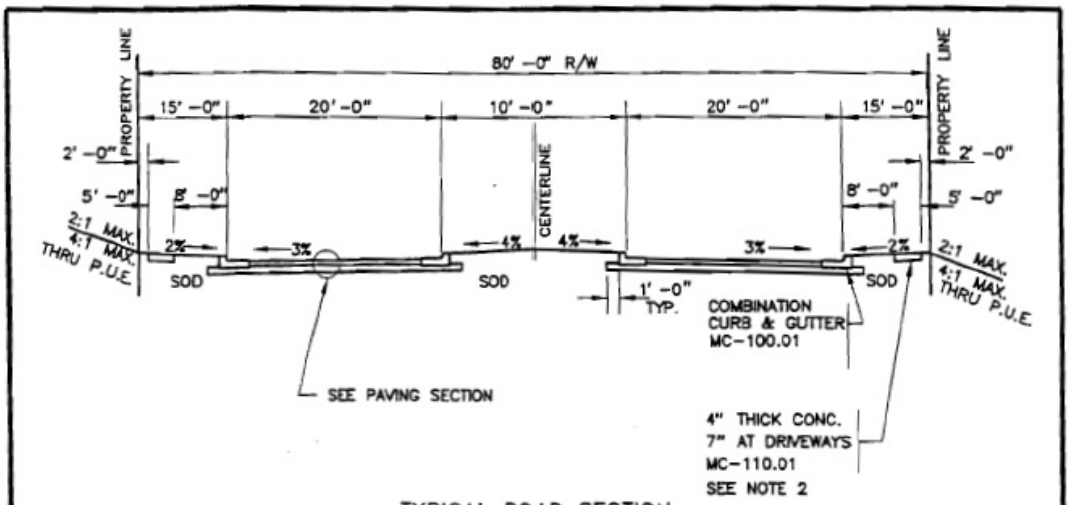
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2 " LAYERS
7" BITUMINOUS CONCRETE BASE COURSE
8" GRADED AGGREGATE BASE COURSE IN TWO LAYERS *
APPROVED SUBGRADE

PREFERRED

3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2 " LAYERS
9" BITUMINOUS CONCRETE BASE COURSE IN TWO 4 1/2" LAYERS
4" GRADED AGGREGATE BASE COURSE *
APPROVED SUBGRADE

ALTERNATE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. WHERE BUILDINGS ARE GENERALLY LOCATED AT THE PROPERTY LINE, THE SIDEWALK SHALL EXTEND FROM CURB TO PROPERTY LINE WITH A 5' WIDE BY 5' LONG (OR BY VARIABLE OR CONTINUOUS LENGTH) SPACE FOR TREE PLANTINGS.
3. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT " OF 1990 WILL NOT BE ALLOWED.
4. TYPICAL TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGH SIDE) ELEVATION -0.19' (FOR 6" CURB HEIGHT).
5. THIS STANDARD PROVIDES ONE TRAVEL LANE IN EACH DIRECTION WITHOUT LEFT TURN STORAGE LANES.
6. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

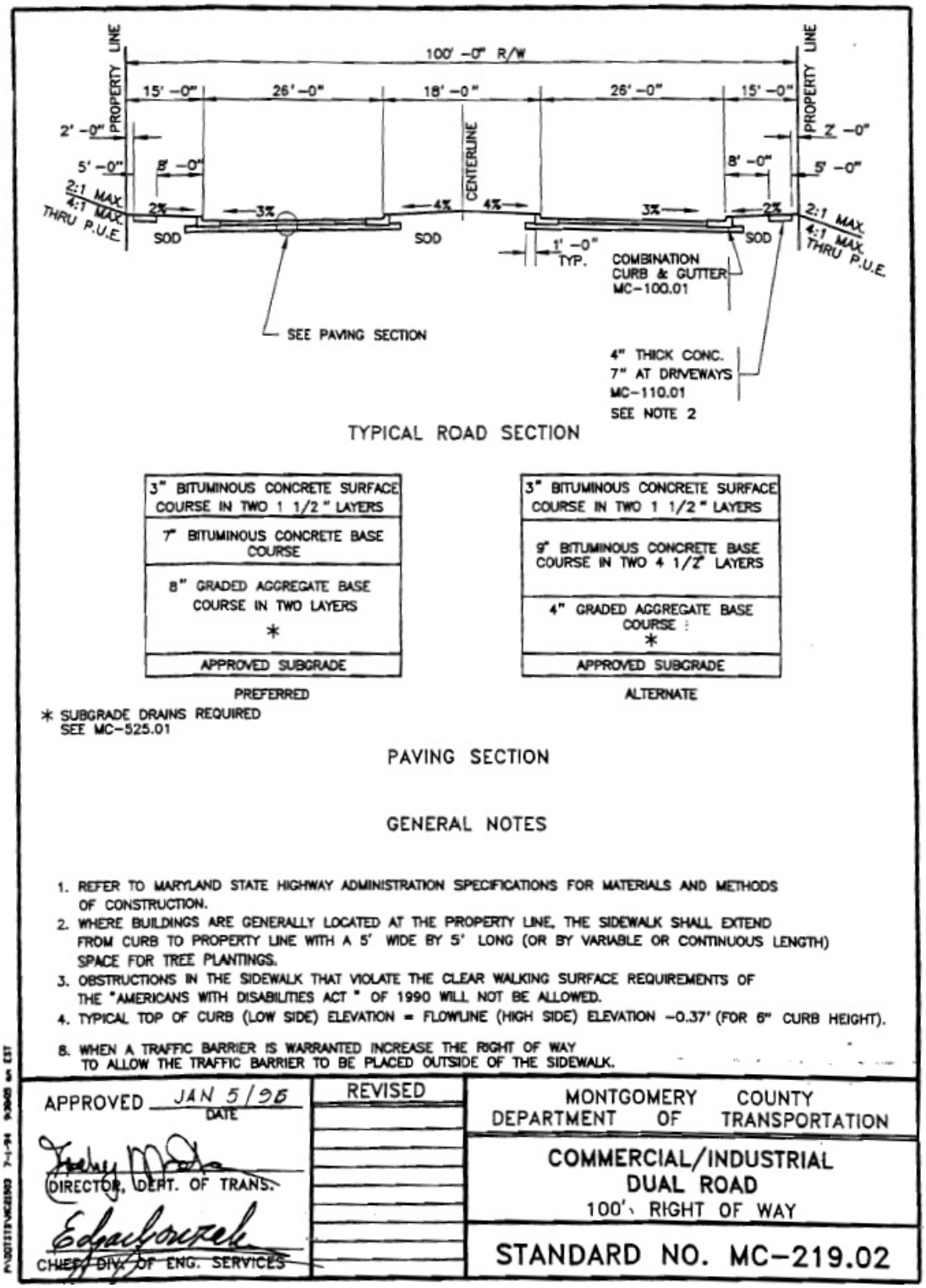
COMMERCIAL/INDUSTRIAL
DUAL ROAD
80' RIGHT OF WAY

STANDARD NO. MC-219.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

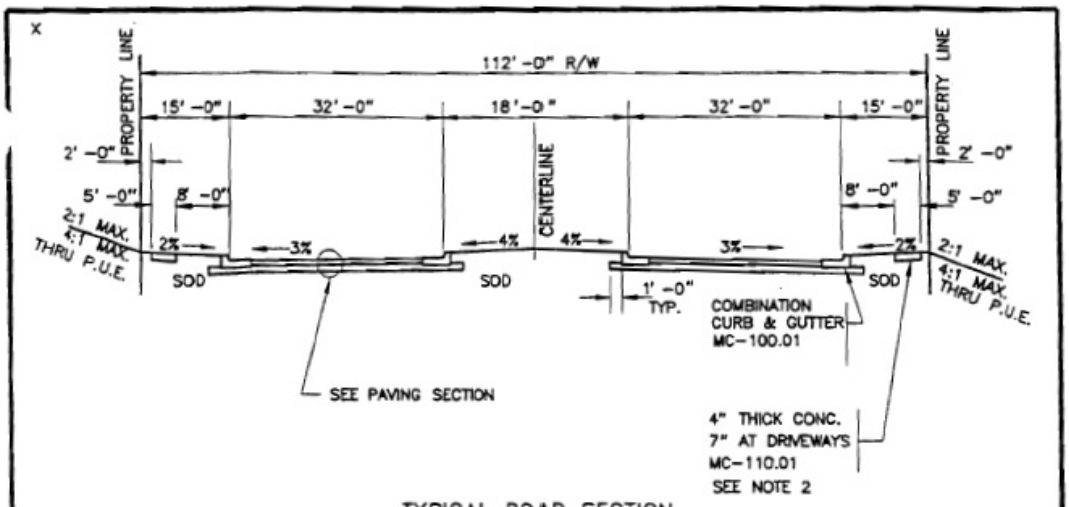
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



TYPICAL ROAD SECTION

3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2" LAYERS
7" BITUMINOUS CONCRETE BASE COURSE
8" GRADED AGGREGATE BASE COURSE IN TWO LAYERS *
APPROVED SUBGRADE

PREFERRED

3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2" LAYERS
9" BITUMINOUS CONCRETE BASE COURSE IN TWO 4 1/2" LAYERS
4" GRADED AGGREGATE BASE COURSE *
APPROVED SUBGRADE

ALTERNATE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION

GENERAL NOTES

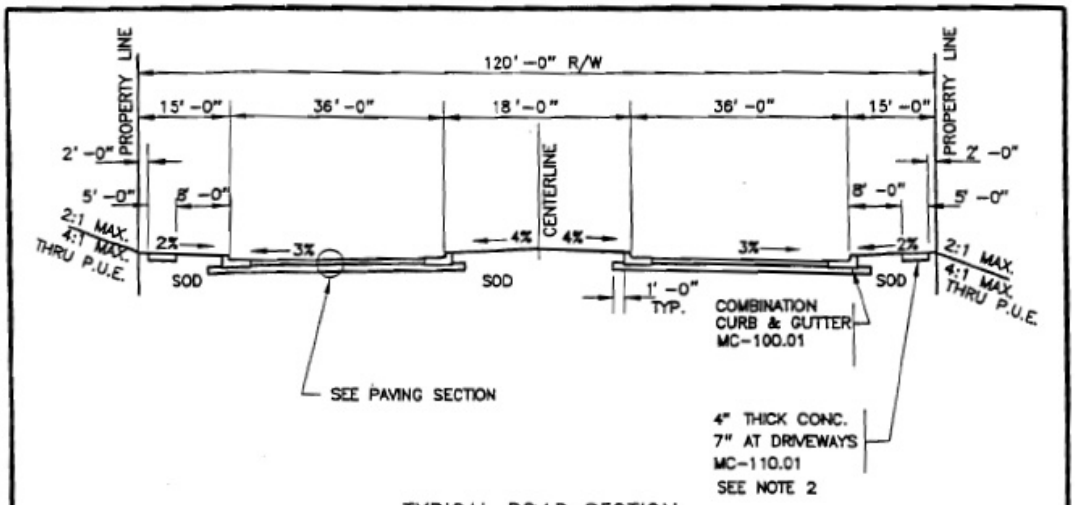
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. WHERE BUILDINGS ARE GENERALLY LOCATED AT THE PROPERTY LINE, THE SIDEWALK SHALL EXTEND FROM CURB TO PROPERTY LINE WITH A 5' WIDE BY 5' LONG (OR BY VARIABLE OR CONTINUOUS LENGTH) SPACE FOR TREE PLANTINGS.
3. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" OF 1990 WILL NOT BE ALLOWED.
4. TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGH SIDE) ELEVATION − 0.55' (FOR 6" CURB HEIGHT).
5. THIS STANDARD PROVIDES TWO TRAVEL LANES IN EACH DIRECTION WITH LEFT TURN STORAGE LANES.
6. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED JAN 5 '96 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION COMMERCIAL/INDUSTRIAL DUAL ROAD 112' RIGHT OF WAY STANDARD NO. MC-219.03

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



TYPICAL ROAD SECTION

PREFERRED	ALTERNATE
3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2" LAYERS	3" BITUMINOUS CONCRETE SURFACE COURSE IN TWO 1 1/2" LAYERS
7" BITUMINOUS CONCRETE BASE COURSE	9" BITUMINOUS CONCRETE BASE COURSE IN TWO 4 1/2" LAYERS
8" GRADED AGGREGATE BASE COURSE IN TWO LAYERS *	4" GRADED AGGREGATE BASE COURSE *
APPROVED SUBGRADE	APPROVED SUBGRADE

* SUBGRADE DRAINS REQUIRED SEE MC-525.01

PAVING SECTION

GENERAL NOTES

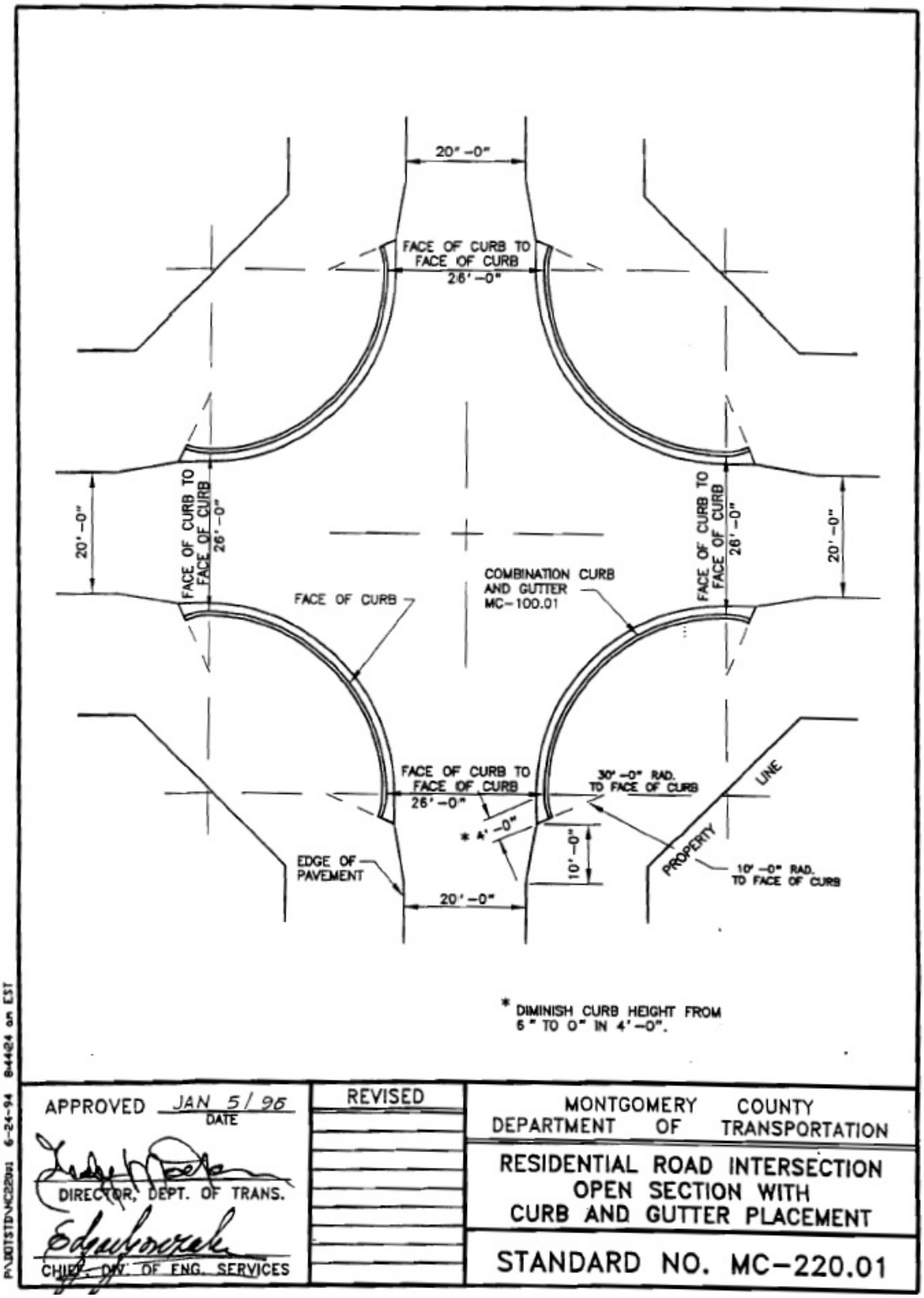
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. WHERE BUILDINGS ARE GENERALLY LOCATED AT THE PROPERTY LINE, THE SIDEWALK SHALL BE 15' WIDE HAVING A 5' WIDE BY 5' LONG OR (BY VARIABLE OR CONTINUOUS LENGTH) SPACE FOR TREE PLANTINGS.
3. OBSTRUCTIONS IN THE SIDEWALK THAT VIOLATE THE CLEAR WALKING SURFACE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" OF 1990 WILL NOT BE ALLOWED.
4. TOP OF CURB (LOW SIDE) ELEVATION = FLOWLINE (HIGH SIDE) ELEVATION – 0.67' (FOR 6" CURB HEIGHT).
5. THIS STANDARD PROVIDES TWO OR THREE TRAVEL LANES IN EACH DIRECTION.
6. WHEN A TRAFFIC BARRIER IS WARRANTED INCREASE THE RIGHT OF WAY TO ALLOW THE TRAFFIC BARRIER TO BE PLACED OUTSIDE OF THE SIDEWALK.

APPROVED JAN 5 / 96 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION COMMERCIAL/INDUSTRIAL DUAL ROAD 120' RIGHT OF WAY STANDARD NO. MC-219.04

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

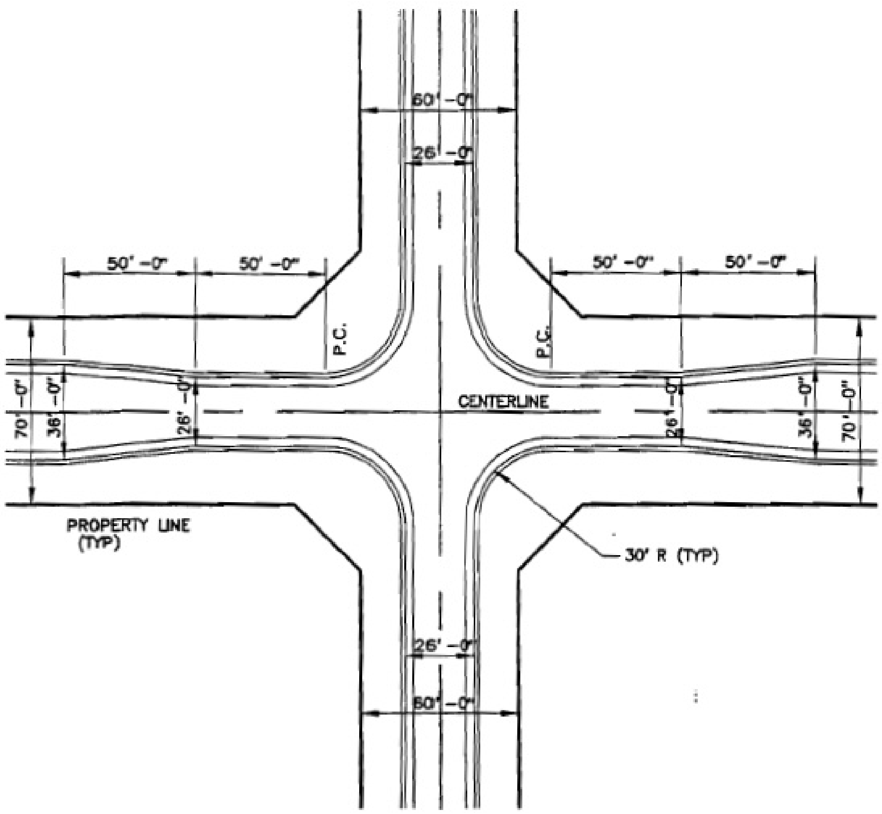
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

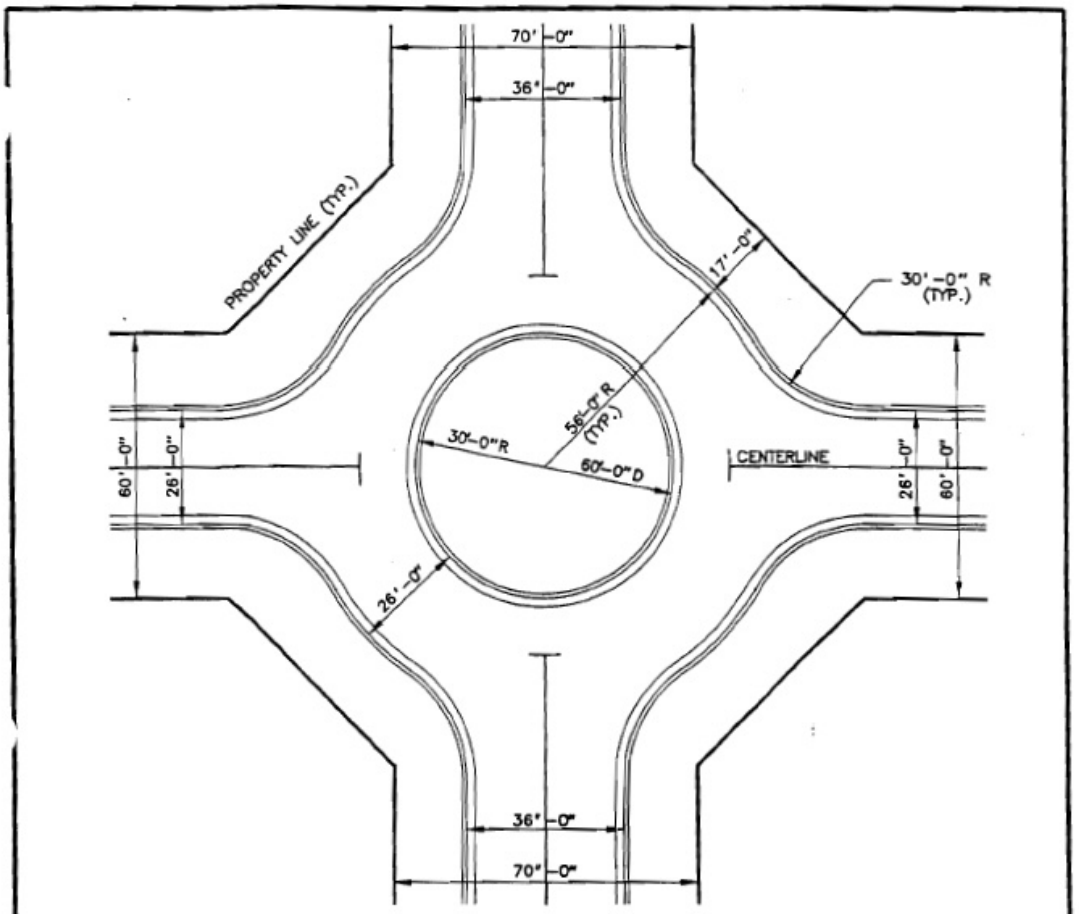
1. THIS STANDARD MAY BE USED ONLY WITH PRIOR APPROVAL OF MCDOT AT THE PRELIMINARY PLAN STAGE.
2. THE NEAREST POINT OF ANY DRIVEWAY APRON EXTENSION SHALL NOT BE LOCATED WITHIN 25' OF THE POINT OF CURVATURE OF THE CURB AND GUTTER AT THE INTERSECTION.
3. THIS STANDARD IS APPLICABLE TO THE INTERSECTION OF TERTIARY, SECONDARY OR PRIMARY RESIDENTIAL ROADS WITH PRIMARY RESIDENTIAL ROADS.
4. PARKING WILL NOT BE ALLOWED WITHIN THE TAPERED AND NARROWED PORTION OF THE PRIMARY ROAD.
5. STREET TREE PLANTINGS SHALL BE DONE IN ACCORDANCE WITH MCDOT STANDARD MC-830.01.
6. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE ROAD STANDARDS AND STANDARD MC-112.01 FOR RESIDENTIAL SIDEWALK RAMPS.

APPROVED JAN 5/96 (DATE)	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		TRAFFIC CONTROL INTERSECTION RESIDENTIAL ROADS
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. 221.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. THIS STANDARD MAY BE USED ONLY WITH THE PRIOR APPROVAL OF MCDOT AT THE PRELIMINARY PLAN STAGE.
2. THIS STANDARD IS APPLICABLE TO INTERSECTIONS OF TERTIARY, SECONDARY AND PRIMARY ROADS WITH OTHER TERTIARY, SECONDARY OR PRIMARY ROADS. IT IS NOT APPLICABLE TO ROADS WITHOUT CURB AND GUTTER.
3. THE NEAREST POINT OF ANY DRIVEWAY APRON EXTENSIONS SHALL NOT BE LOCATED WITHIN 25' OF THE POINT OF CURVATURE OF CURB AND GUTTER AT THE INTERSECTION.
4. MCDOT STANDARD MC-100.01 CURB AND GUTTER MUST BE USED WITHIN THE LIMITS OF THE CIRCLE. INSIDE RADIUS AND OUTSIDE RADIUS TO THE POINT OF CURVATURE OF CURB AND GUTTER ON THE CONNECTING STREETS. USE A 1% MINIMUM GUTTER GRADE EXCEPT AROUND THE ISLAND.
5. STREET TREE PLANTINGS SHALL BE IN ACCORDANCE WITH MCDOT STANDARD MC-830.01.
6. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE ROAD STANDARDS AND STANDARD MC-112.01 FOR RESIDENTIAL SIDEWALK RAMPS. THE SIDEWALK SHALL EXTEND ALONG THE INTERSECTION TRUNCATION, ONE FOOT FROM THE PROPERTY LINE. SIDEWALK RAMPS (8 TOTAL) SHALL BE LOCATED AT THE END OF EACH CURB TANGENT ON EACH LEG OF THE INTERSECTION.

APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL CIRCLE RESIDENTIAL ROADS

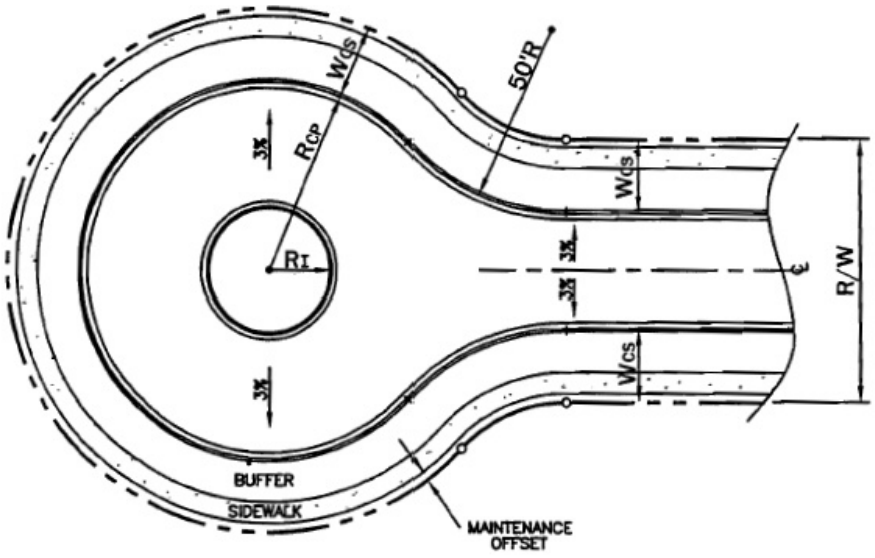
STANDARD NO. MC-221.02

P:\MDTSTD\MC22. 6-24-94 05:30 am EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



ROADWAY CLASSIFICATIONS	RADIUS OF ISLAND (R_I)	RADIUS OF CUL-DE-SAC PAVING (R_{cp})
PRIMARY, SECONDARY, TERTIARY RESIDENTIAL STREETS	15'	45'
COMMERCIAL, INDUSTRIAL, BUSINESS DISTRICT STREETS	24'	60'

ALL DIMENSIONS TO "FACE" OF CURB (8" FROM BACK OF CURB)

GENERAL NOTES

1. THE WIDTH FROM FACE OF CURB TO RIGHT-OF-WAY LINE (W_{cs}) SPECIFIED ON THE APPROACH ROAD STANDARD SHALL BE MAINTAINED AROUND ENTIRE CUL-DE-SAC. WIDTHS AND LATERAL LOCATIONS OF CURBSIDE ELEMENTS SUCH AS SIDEWALKS, SHALL ALSO BE MAINTAINED.
2. A 90' DIAMETER (R_{cp}=45') PAVED CUL-DE-SAC IS MINIMUM REQUIRED BY FIRE SAFETY CODE – APPARATUS ACCESS REGULATIONS.
3. CURB AND GUTTER ON CENTER ISLAND TO BE MC-101.01 WITH SPILLED GUTTER.
4. PAVING SECTION AND THICKNESS WITHIN CUL-DE-SAC SHALL CONFORM TO THE SAME PAVING SECTION AS THE APPROACH ROAD.
5. CENTER ISLAND TO BE MOUNDED TO DRAIN AT 2% MIN. GRADE AND STABILIZED WITH SOD OR LOW-GROWING LANDSCAPE MATERIAL (NO TREES).
6. PROVIDE 1% MINIMUM FLOWLINE GRADE. TOP OF CURB ELEVATIONS ARE REQUIRED ON PLANS FOR CURB AT INTERVALS NOT TO EXCEED 50 FEET.

APPROVED _____ DATE

_____
DIRECTOR, DEPARTMENT OF TRANSPORTATION

_____
CHIEF, DIVISION OF TRANSPORTATION ENGINEERING

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

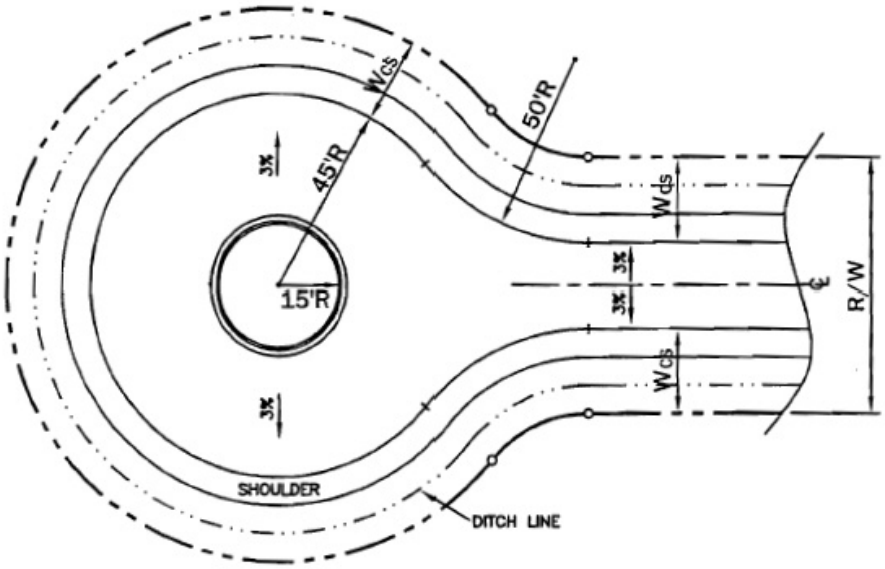
CUL-DE-SAC
CURB AND GUTTER ROADS

STANDARD NO. MC-222.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



ISLAND DIMENSIONS TO "FACE" OF CURB (8" FROM BACK OF CURB)

GENERAL NOTES

1. THE WIDTH FROM EDGE OF PAVEMENT TO RIGHT-OF-WAY LINE (W_{cs}) SPECIFIED ON THE APPROACH ROAD STANDARD SHALL BE MAINTAINED AROUND ENTIRE CUL-DE-SAC. WIDTHS AND LATERAL LOCATIONS OF CURBSIDE ELEMENTS SUCH AS SHOULDERS, DITCH LINES, SIDEWALKS, AND PUBLIC IMPROVEMENT EASEMENTS SHALL BE MAINTAINED.
2. A 90' DIAMETER PAVED CUL-DE-SAC IS MINIMUM AS REQUIRED BY THE CURRENT FIRE SAFETY CODE - APPARATUS ACCESS REGULATIONS.
3. CURB AND GUTTER ON CENTER ISLAND TO BE MC-101.01 WITH SPILLED GUTTER.
4. PAVING SECTION AND THICKNESS WITHIN CUL-DE-SAC SHALL CONFORM TO THE SAME PAVING SECTION AS THE APPROACH ROAD.
5. CENTER ISLAND TO BE MOUNDED TO DRAIN AT 2% MIN. GRADE AND STABILIZED WITH SOD OR LOW-GROWING LANDSCAPE MATERIAL (NO TREES).
6. PROVIDE 2% MINIMUM DITCH GRADE. EDGE OF PAVEMENT AND DITCH ELEVATIONS ARE REQUIRED ON PLANS AT INTERVALS NOT TO EXCEED 50 FEET.
7. THIS STANDARD MAY BE USED ON PRIMARY, SECONDARY, AND TERTIARY RESIDENTIAL STREETS ONLY.

APPROVED _____ DATE

DIRECTOR, DEPARTMENT OF TRANSPORTATION

CHIEF, DIVISION OF TRANSPORTATION ENGINEERING

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

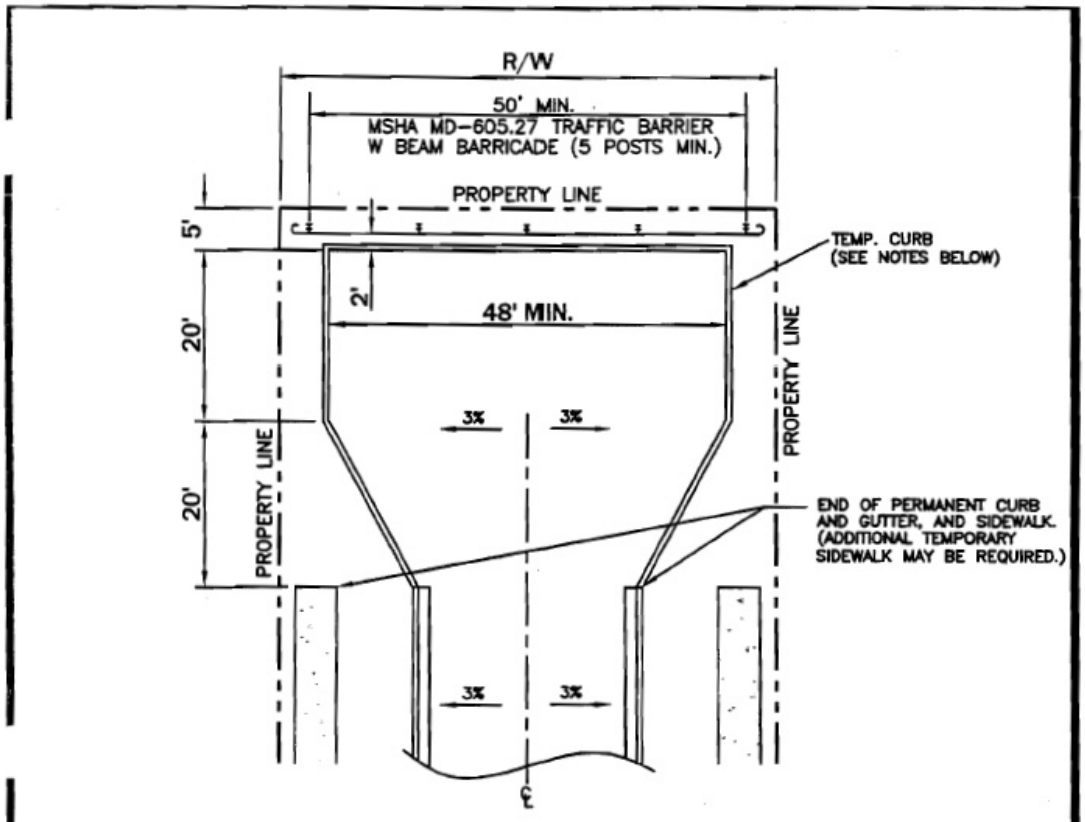
CUL-DE-SAC OPEN SECTION ROADS

STANDARD NO. MC-222.02

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. RIGHT-OF-WAY WIDTH SHALL BE AS SPECIFIED ON THE APPROACH ROAD STANDARD.
2. FOR DEAD END ROADWAYS LONGER THAN 150', REFER TO CURRENT FIRE SAFETY CODE – APPARATUS ACCESS REGULATIONS FOR ADDITIONAL TURNAROUND REQUIREMENTS.
3. ADDITIONAL SLOPE, DRAINAGE, AND PUBLIC IMPROVEMENT EASEMENT MAY BE REQUIRED.
4. PAVING SECTION AND THICKNESS WITHIN TURNAROUND SHALL CONFORM TO THE SAME ROADWAY PAVING SECTION AS THE APPROACH ROAD.
5. STANDARD MD-800.01 BARRICADE POSTS (12 POSTS MIN.) MAY BE SUBSTITUTED FOR W BEAM BARRICADE SUBJECT TO PLAN APPROVAL.
6. THE INSTALLATION OF DRIVEWAY APRONS WITHIN THE LIMITS OF THE TURNAROUND SHALL BE SUBJECT TO PLAN APPROVAL.
7. TEMPORARY CURB PER MC-103.01 SHALL BE INSTALLED OR OMITTED AS REQUIRED TO PROVIDE POSITIVE DRAINAGE SUBJECT TO PLAN APPROVAL.
8. WHERE TEMPORARY CURB IS NOT USED, CURB AND GUTTER END TREATMENTS SHALL CONFORM TO MC-220.01.

APPROVED _____ DATE

_____
DIRECTOR, DEPARTMENT OF TRANSPORTATION

_____
CHIEF, DIVISION OF TRANSPORTATION ENGINEERING

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

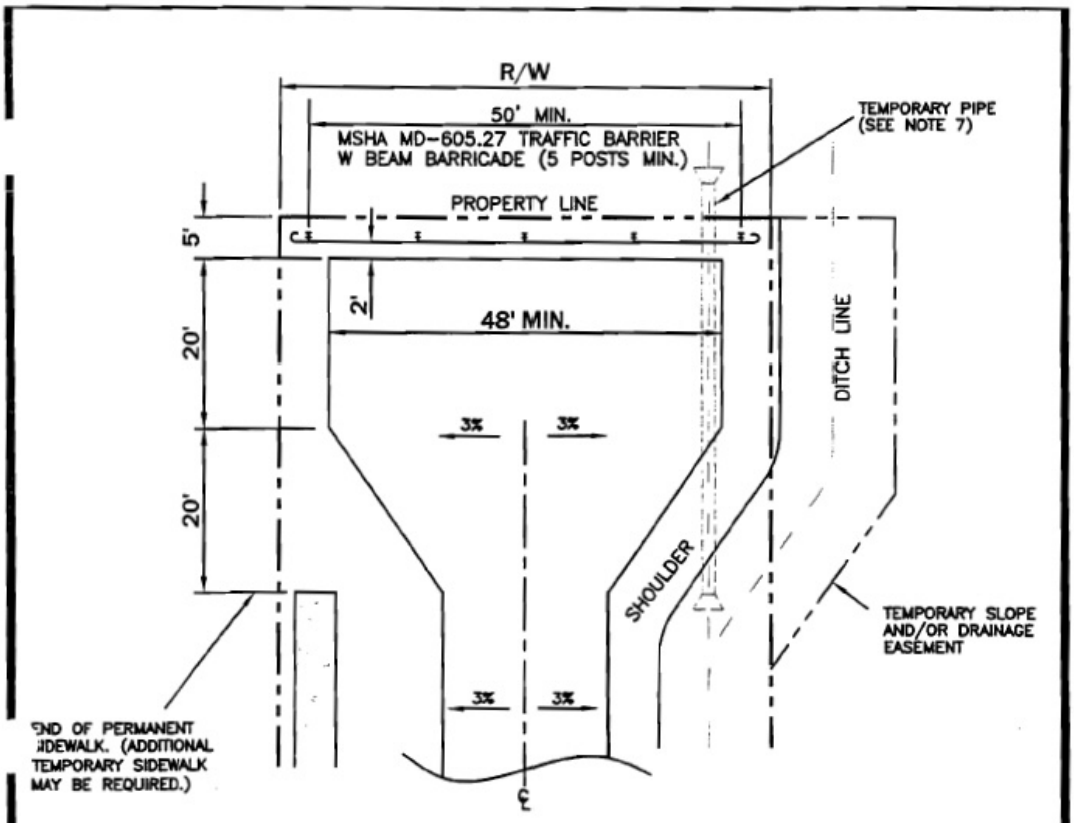
TEMPORARY TURNAROUND
CURB AND GUTTER ROADS

STANDARD NO. MC-223.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. RIGHT-OF-WAY WIDTH IS AS SPECIFIED ON THE APPROACH ROAD STANDARD. THE WIDTH AND LOCATION FROM EDGE OF PAVEMENT TO CURBSIDE ELEMENTS SUCH AS SHOULDERS, DITCH LINES, AND PUBLIC IMPROVEMENT EASEMENTS SHALL BE AS SPECIFIED ON APPROACH ROAD STANDARD.
2. FOR DEAD END ROADWAYS LONGER THAN 150', REFER TO CURRENT FIRE SAFETY CODE – APPARATUS ACCESS REGULATIONS FOR ADDITIONAL TURNAROUND REQUIREMENTS.
3. ADDITIONAL SLOPE, DRAINAGE, AND PUBLIC IMPROVEMENT EASEMENT MAY BE REQUIRED.
4. PAVING SECTION AND THICKNESS WITHIN TURNAROUND SHALL CONFORM TO THE SAME PAVING SECTION AS THE APPROACH ROAD.
5. STANDARD MD-800.01 BARRICADE POSTS (12 POSTS MIN.) MAY BE SUBSTITUTED FOR W BEAM BARRICADE SUBJECT TO PLAN APPROVAL.
6. THE INSTALLATION OF DRIVEWAY APRONS WITHIN THE LIMITS OF THE TURNAROUND SHALL BE SUBJECT TO PLAN APPROVAL.
7. TEMPORARY PIPE SHALL BE USED WHERE DITCH CANNOT BE WARPED AROUND TURNAROUND DUE TO RIGHT-OF-WAY LIMITATIONS AND SHALL MEET THE REQUIREMENTS OF STANDARD MC-301.03

APPROVED _____ DATE

_____
DIRECTOR, DEPARTMENT OF TRANSPORTATION

_____
CHIEF, DIVISION OF TRANSPORTATION ENGINEERING

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

TEMPORARY TURNAROUND
OPEN SECTION ROADS

STANDARD NO. MC-223.02

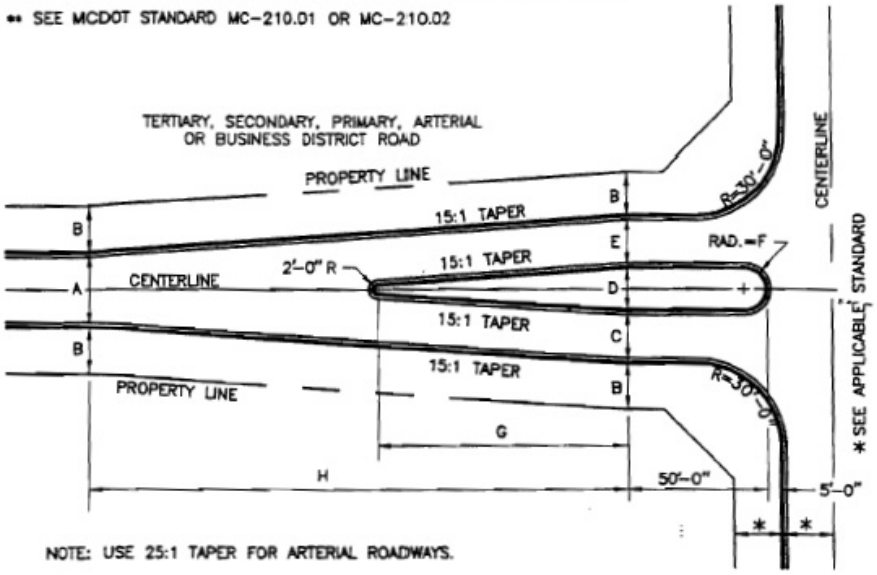
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	

ROADWAY CLASSIFICATION	A	B	C	D	E	F	G	H
TERTIARY	26'-0"	**	18'-0"	12'-0"	18'-0"	6'-0"	60'-0"	165'-0"
SECONDARY	26'-0"	17'-0"	18'-0"	16'-0"	18'-0"	8'-0"	90'-0"	195'-0"
PRIMARY	36'-0"	17'-0"	26'-0"	20'-0"	18'-0"	10'-0"	120'-0"	270'-0"
ARTERIAL	50'-0"	15'-0"	26'-0"	20'-0"	24'-0"	10'-0"	200'-0"	275'-0"
BUSINESS	50'-0"	15'-0"	26'-0"	20'-0"	24'-0"	10'-0"	120'-0"	165'-0"

** SEE MCDOT STANDARD MC-210.01 OR MC-210.02



NOTE: USE 25:1 TAPER FOR ARTERIAL ROADWAYS.

GENERAL NOTES

1. THIS STANDARD IS APPLICABLE TO INTERSECTIONS OF TERTIARY, SECONDARY, PRIMARY, ARTERIAL OR BUSINESS DISTRICT ROADS WITH OTHER ROADS HAVING THE SAME OR HIGHER CLASSIFICATION.
2. IN ALL CASES, THE MEDIAN SHALL BE CONSTRUCTED WITH MCDOT STANDARD MC-100.01 CONCRETE CURB AND GUTTER.
3. STREET TREE PLANTINGS SHALL BE IN ACCORDANCE WITH MCDOT STANDARD MC-700.01.
4. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE ROAD AND SIDEWALK RAMP STANDARDS. THE SIDEWALK SHALL EXTEND ALONG THE INTERSECTION TRUNCATION, ONE FOOT FROM THE PROPERTY LINE.
5. WHERE EITHER ROAD IS OPEN SECTION, REFER TO THOSE APPLICABLE STANDARDS. THE FINAL CONFIGURATION FOR OPEN SECTION ROADS SHALL BE SUBJECT TO MCDOT APPROVAL ON A CASE BY CASE BASIS.

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APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

MONUMENTAL ENTRANCE

STANDARD NO. MC-224.01

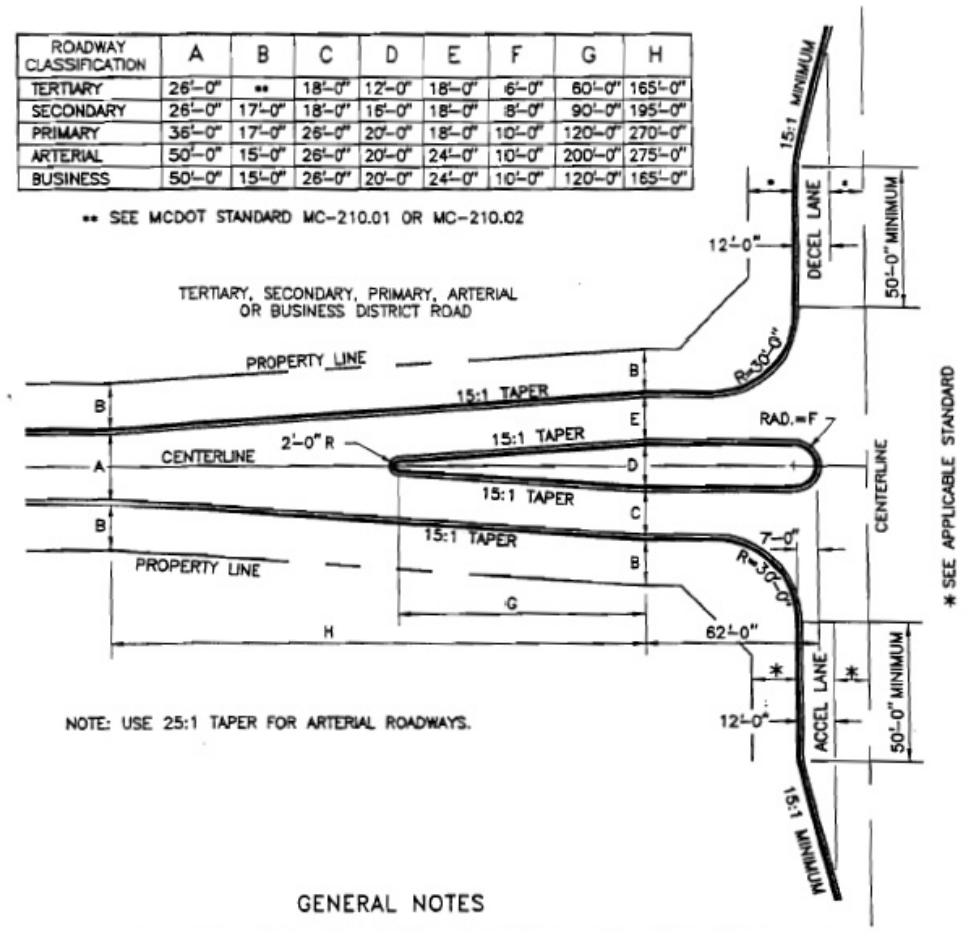
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	

ROADWAY CLASSIFICATION	A	B	C	D	E	F	G	H
TERTIARY	26'-0"	**	18'-0"	12'-0"	18'-0"	6'-0"	60'-0"	165'-0"
SECONDARY	26'-0"	17'-0"	18'-0"	16'-0"	18'-0"	8'-0"	90'-0"	195'-0"
PRIMARY	36'-0"	17'-0"	26'-0"	20'-0"	18'-0"	10'-0"	120'-0"	270'-0"
ARTERIAL	50'-0"	15'-0"	26'-0"	20'-0"	24'-0"	10'-0"	200'-0"	275'-0"
BUSINESS	50'-0"	15'-0"	26'-0"	20'-0"	24'-0"	10'-0"	120'-0"	165'-0"

** SEE MCDOT STANDARD MC-210.01 OR MC-210.02



NOTE: USE 25:1 TAPER FOR ARTERIAL ROADWAYS.

GENERAL NOTES

1. THIS STANDARD IS APPLICABLE TO INTERSECTIONS OF TERTIARY, SECONDARY, PRIMARY, ARTERIAL OR BUSINESS DISTRICT ROADS WITH OTHER ROADS HAVING THE SAME OR HIGHER CLASSIFICATION.
2. IN ALL CASES, THE MEDIAN SHALL BE CONSTRUCTED WITH MCDOT STANDARD MC-100.01 CONCRETE CURB AND GUTTER.
3. STREET TREE PLANTINGS SHALL BE IN ACCORDANCE WITH MCDOT STANDARD MC-700.01
4. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE ROAD AND SIDEWALK RAMP STANDARDS. THE SIDEWALK SHALL EXTEND ALONG THE INTERSECTION TRUNCATION, ONE FOOT FROM THE PROPERTY LINE.
5. WHERE EITHER ROAD IS OPEN SECTION, REFER TO THE OTHER APPLICABLE STANDARDS. THE FINAL CONFIGURATION FOR OPEN SECTION ROADS SHALL BE SUBJECT TO MCDOT APPROVAL ON A CASE BY CASE BASIS.
6. THE USE OF ACCELERATION/DECELERATION LANES AND THEIR APPROPRIATE LENGTH SHALL BE DETERMINED BY THE DIVISION OF TRAFFIC ENGINEERING ON A CASE BY CASE BASIS.

APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

MONUMENTAL ENTRANCE WITH ACCEL./DECEL. LANES

STANDARD NO. MC-224.02

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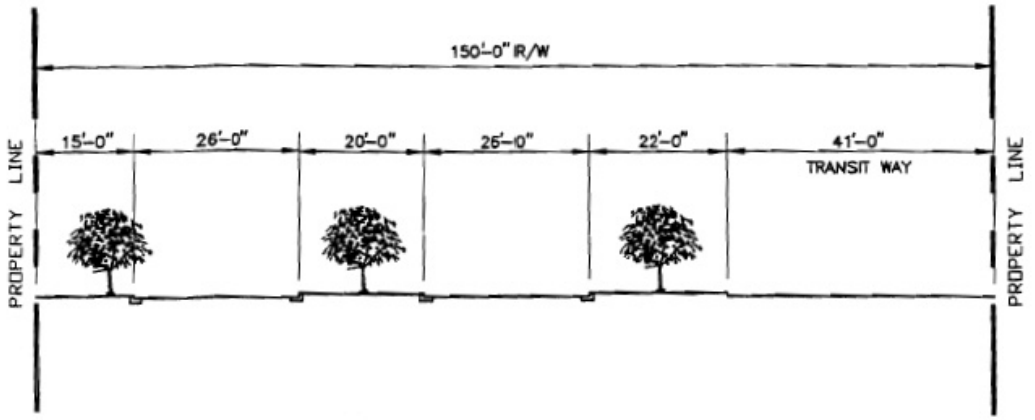
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



EDGE TRANSIT WAY

NOTES:

1. TRANSIT WAY DESIGNATED FOR EXCLUSIVE USE BY TRANSIT INCLUDING HEAVY OR LIGHT RAIL VEHICLES AND BUSES.

APPROVED JAN 5/95 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION EDGE – TRANSIT WAY 150' RIGHT OF WAY STANDARD NO. MC-225.01

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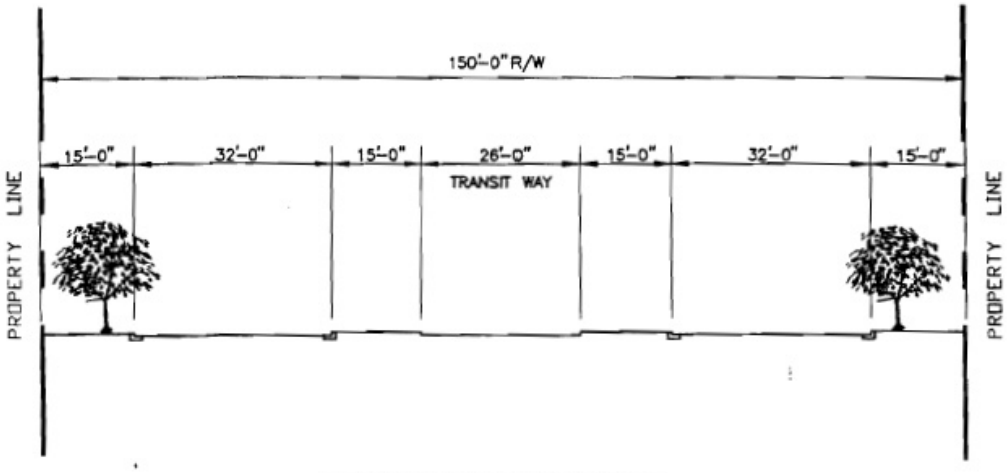
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



MEDIAN TRANSIT WAY

NOTES:

1. TRANSIT WAY DESIGNATED FOR EXCLUSIVE USE BY TRANSIT INCLUDING HEAVY OR LIGHT RAIL VEHICLES AND BUSES.

APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

MEDIAN TRANSIT WAY
150' RIGHT OF WAY

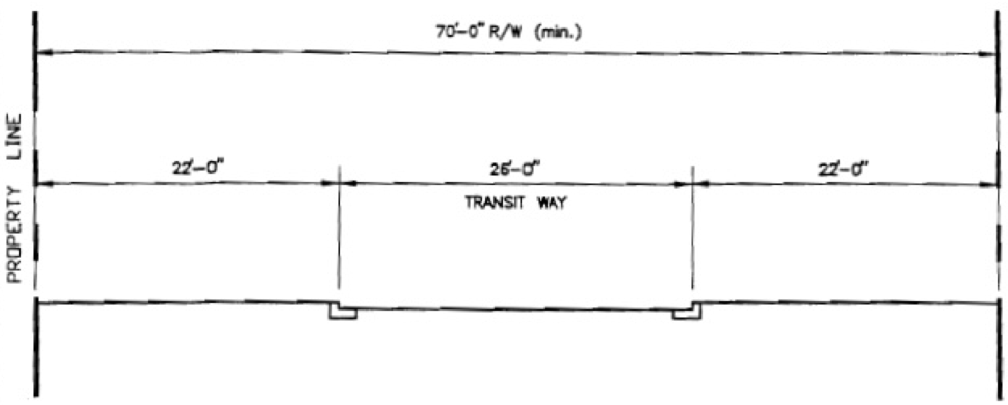
STANDARD NO. MC-225.02

P:\DOTSTD\MC225. 2-5-96 10:15:30 am EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



EXCLUSIVE TRANSIT WAY

NOTES:

1. TRANSIT WAY DESIGNATED FOR EXCLUSIVE USE BY TRANSIT INCLUDING HEAVY OR LIGHT RAIL VEHICLES AND BUSES.

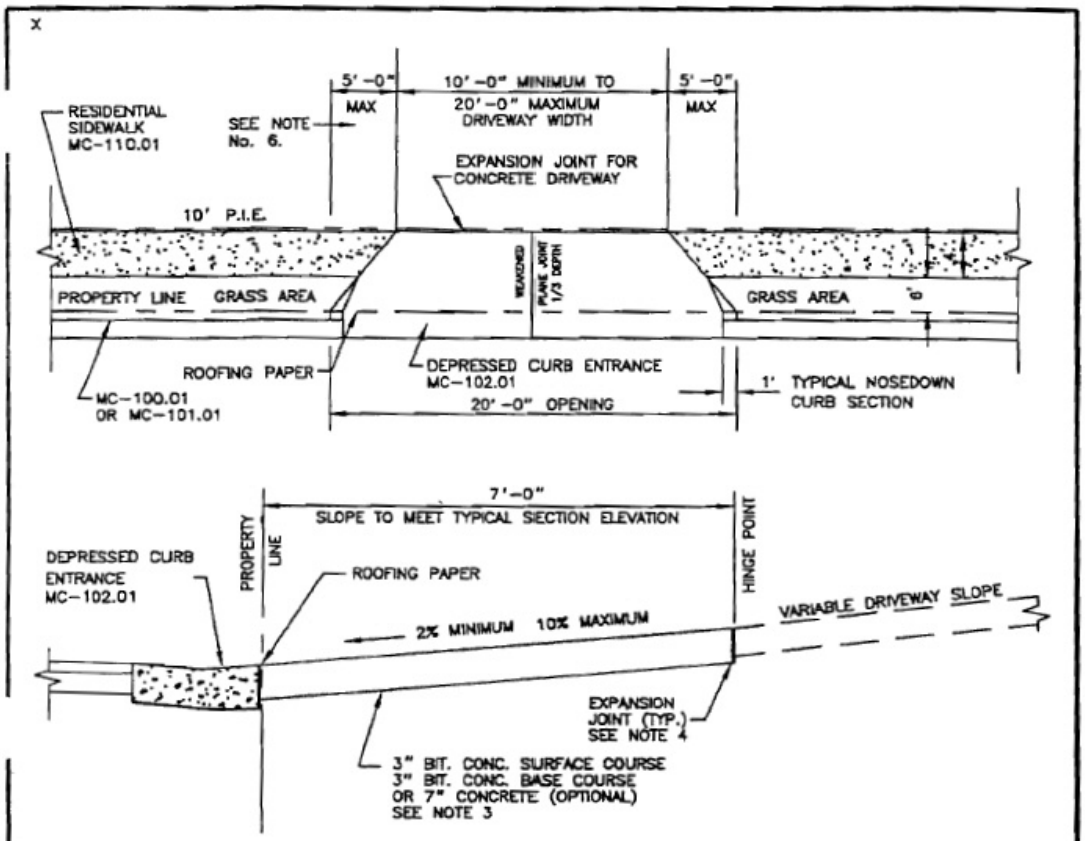
P:\30TSTD\MC2... 12-5-94 10:15:30 am EST

APPROVED JAN 5/96 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		EXCLUSIVE TRANSIT WAY 70' RIGHT OF WAY
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC-225.03

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

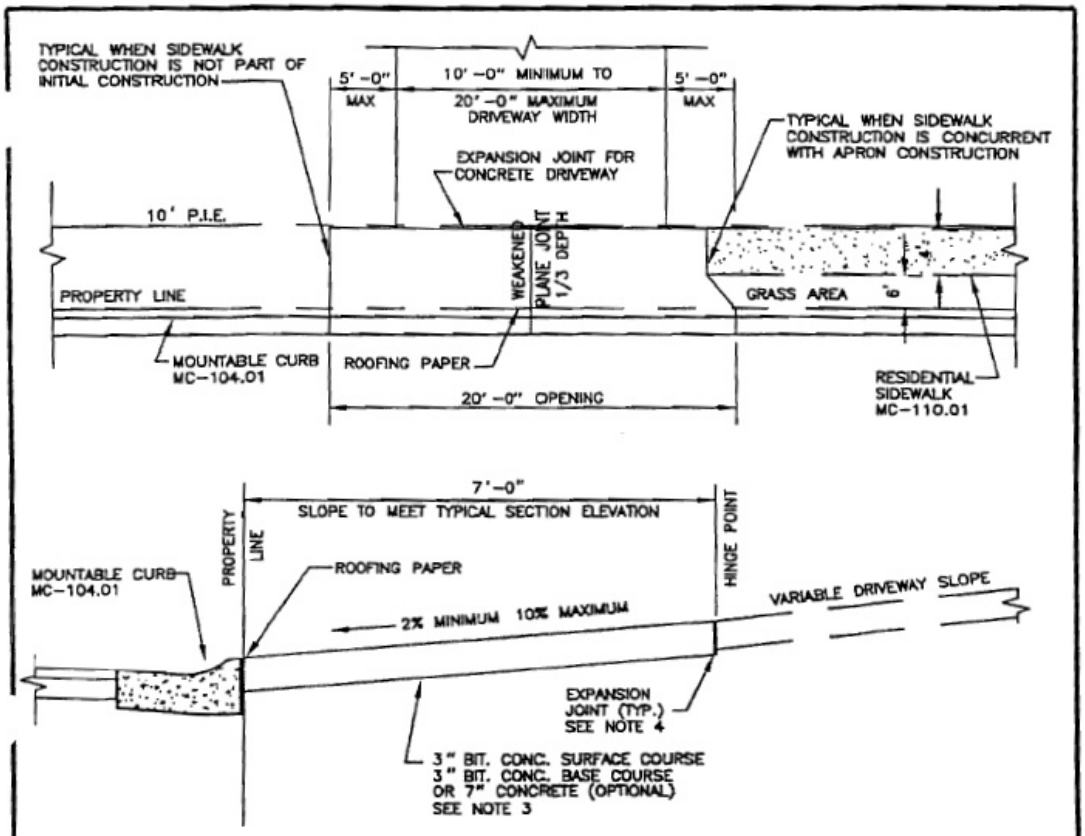
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. DRIVEWAY APRON TO BE MAINTAINED BY PROPERTY OWNER.
3. CONCRETE APRONS SHALL BE USED WHEN CONCRETE SIDEWALK IS CONSTRUCTED.
4. CONCRETE APRONS SHALL BE SEVEN INCH MINIMUM THICKNESS WITH EXPANSION/CONTRACTION JOINTS PER MC-301.01.
5. THIS STANDARD SHALL BE USED WITH MC-101.01 OR MC-102.01 CURB AND GUTTER ONLY.
6. WINGS CAN VARY 0' TO 5', HOWEVER THEY MUST BE SYMETRICAL ON BOTH SIDES.
7. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON- STAINING TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. ⚠1

APPROVED 14 APR '06 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.	⚠1 ASTM-C920 4/2006	TERTIARY DRIVEWAY
CHIEF, DIV. OF CAP. DEV.		STANDARD NO. MC-300.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

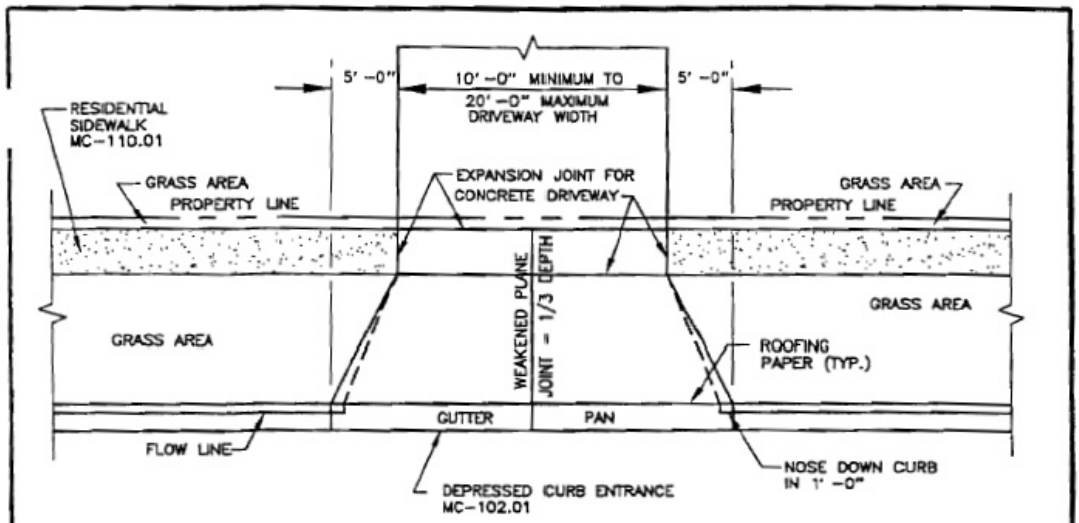
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. DRIVEWAY AND DRIVEWAY APRON TO BE MAINTAINED BY PROPERTY OWNER.
3. CONCRETE APRONS SHALL BE USED WHEN CONCRETE SIDEWALK IS CONSTRUCTED.
4. CONCRETE APRONS SHALL BE SEVEN INCH MINIMUM THICKNESS WITH EXPANSION/CONTRACTION JOINTS PER MC-301.01.
5. THIS STANDARD SHALL BE USED WITH MC-104.01 MOUNTABLE CURB ONLY.
6. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON- STAINING, TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. ⚠1

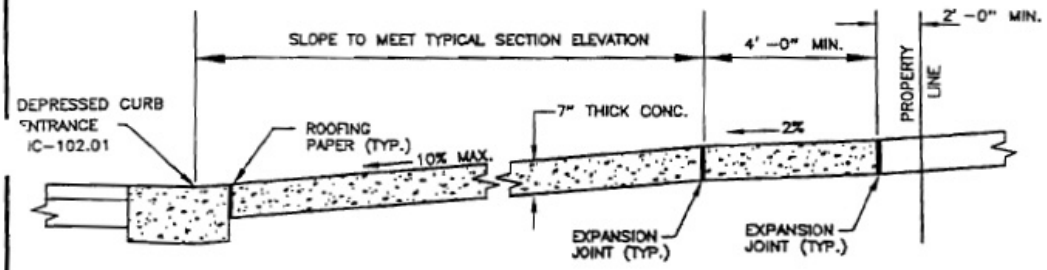
APPROVED 14 APR 06 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.	⚠1 ASTM-C920 4/2006	TERTIARY DRIVEWAY WITH MOUNTABLE CURB
for CHIEF, DIV. OF CAP. DEV.		STANDARD NO. MC-300.02

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	





GENERAL NOTES

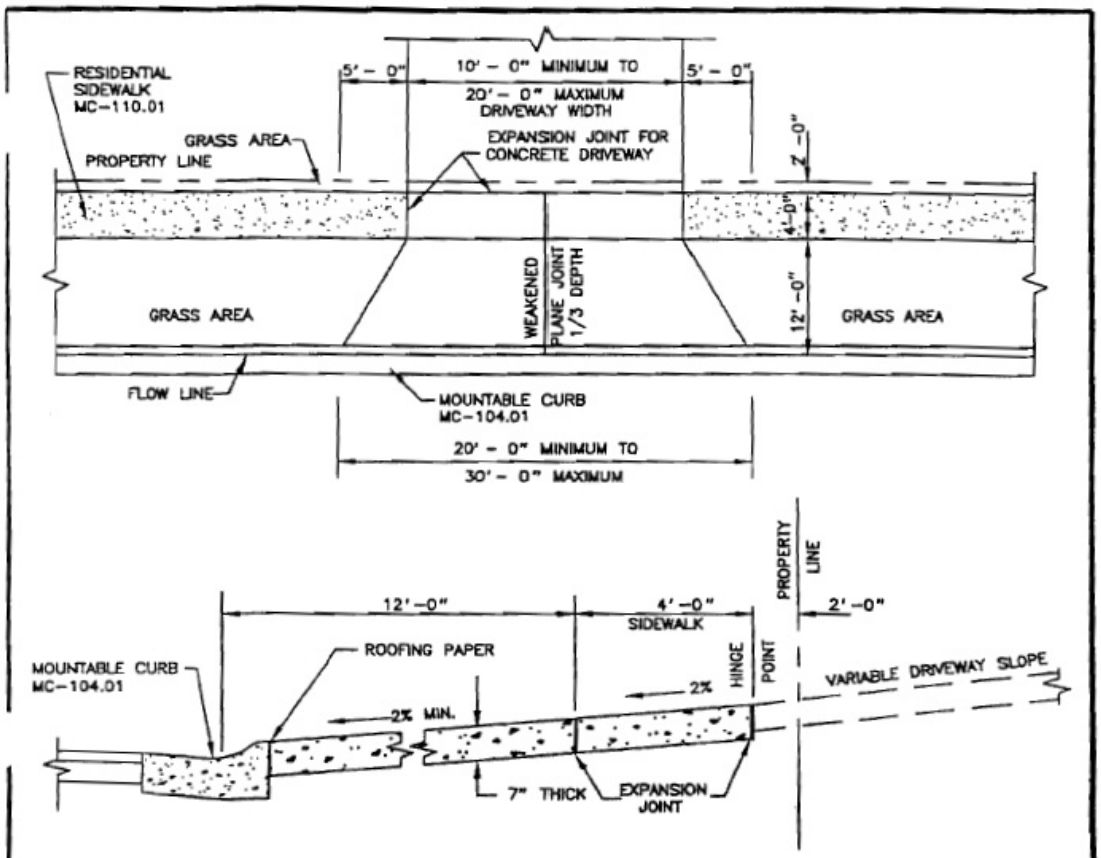
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. DRIVEWAY AND DRIVEWAY APRON TO BE MAINTAINED BY PROPERTY OWNER.
3. PROVIDE WEAKENED PLANE JOINTS AT MAXIMUM INTERVALS OF 15'.
4. THE EXPANSION JOINTS SHALL BE PLACED AT LOCATIONS SHOWN.
5. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT, COMPLYING WITH ASTM-C920. (1)

APPROVED 14 APR '06 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.	(1) ASTM-C920 4/2006	RESIDENTIAL DRIVEWAY
for CHIEF, DIV. OF CAP. DEV.		STANDARD NO. MC-301.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

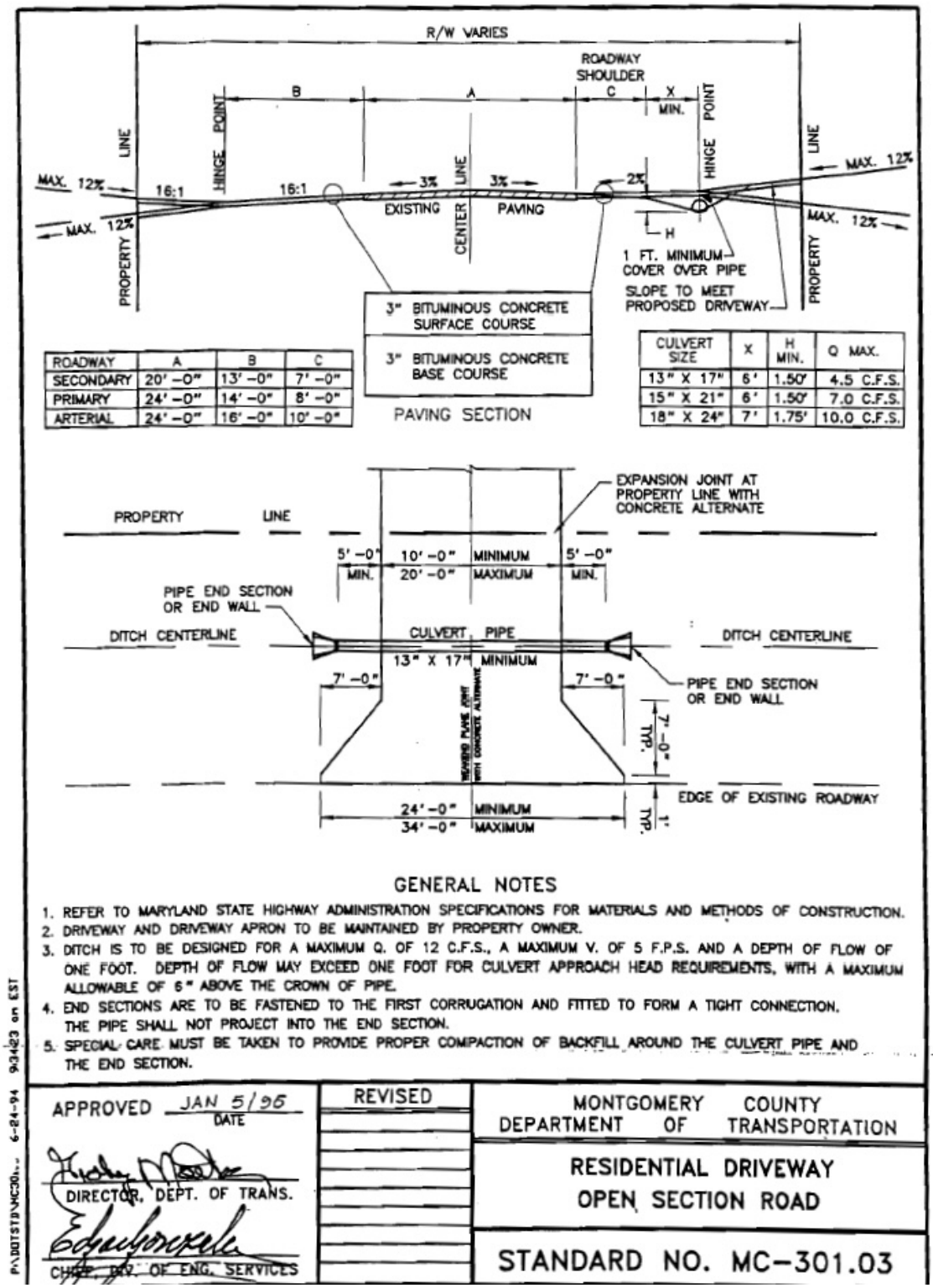
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. DRIVEWAY AND DRIVEWAY APRON TO BE MAINTAINED BY PROPERTY OWNER.
3. REFER TO MC-301.01 FOR DETAILS ON EXPANSION/CONTRACTION JOINTS.
4. THIS STANDARD SHALL BE USED WITH MC-104.01 MOUNTABLE CURB ON SECONDARY CUL-DE-SACS ONLY.
5. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT, COMPLYING WITH ASTM-C920. (1)

APPROVED 14 APR '06 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.	(1) ASTM-C920 4/2006	RESIDENTIAL DRIVEWAY WITH MOUNTABLE CURB
for CHIEF, DIV. OF CAP. DEV.		STANDARD NO. MC-301.02

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



ROADWAY	A	B	C
SECONDARY	20'-0"	13'-0"	7'-0"
PRIMARY	24'-0"	14'-0"	8'-0"
ARTERIAL	24'-0"	16'-0"	10'-0"

CULVERT SIZE	X	H MIN.	Q MAX.
13" X 17"	6'	1.50'	4.5 C.F.S.
15" X 21"	6'	1.50'	7.0 C.F.S.
18" X 24"	7'	1.75'	10.0 C.F.S.

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. DRIVEWAY AND DRIVEWAY APRON TO BE MAINTAINED BY PROPERTY OWNER.
3. DITCH IS TO BE DESIGNED FOR A MAXIMUM Q. OF 12 C.F.S., A MAXIMUM V. OF 5 F.P.S. AND A DEPTH OF FLOW OF ONE FOOT. DEPTH OF FLOW MAY EXCEED ONE FOOT FOR CULVERT APPROACH HEAD REQUIREMENTS, WITH A MAXIMUM ALLOWABLE OF 6" ABOVE THE CROWN OF PIPE.
4. END SECTIONS ARE TO BE FASTENED TO THE FIRST CORRUGATION AND FITTED TO FORM A TIGHT CONNECTION. THE PIPE SHALL NOT PROJECT INTO THE END SECTION.
5. SPECIAL CARE MUST BE TAKEN TO PROVIDE PROPER COMPACTION OF BACKFILL AROUND THE CULVERT PIPE AND THE END SECTION.

APPROVED JAN 5/95
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

RESIDENTIAL DRIVEWAY OPEN SECTION ROAD

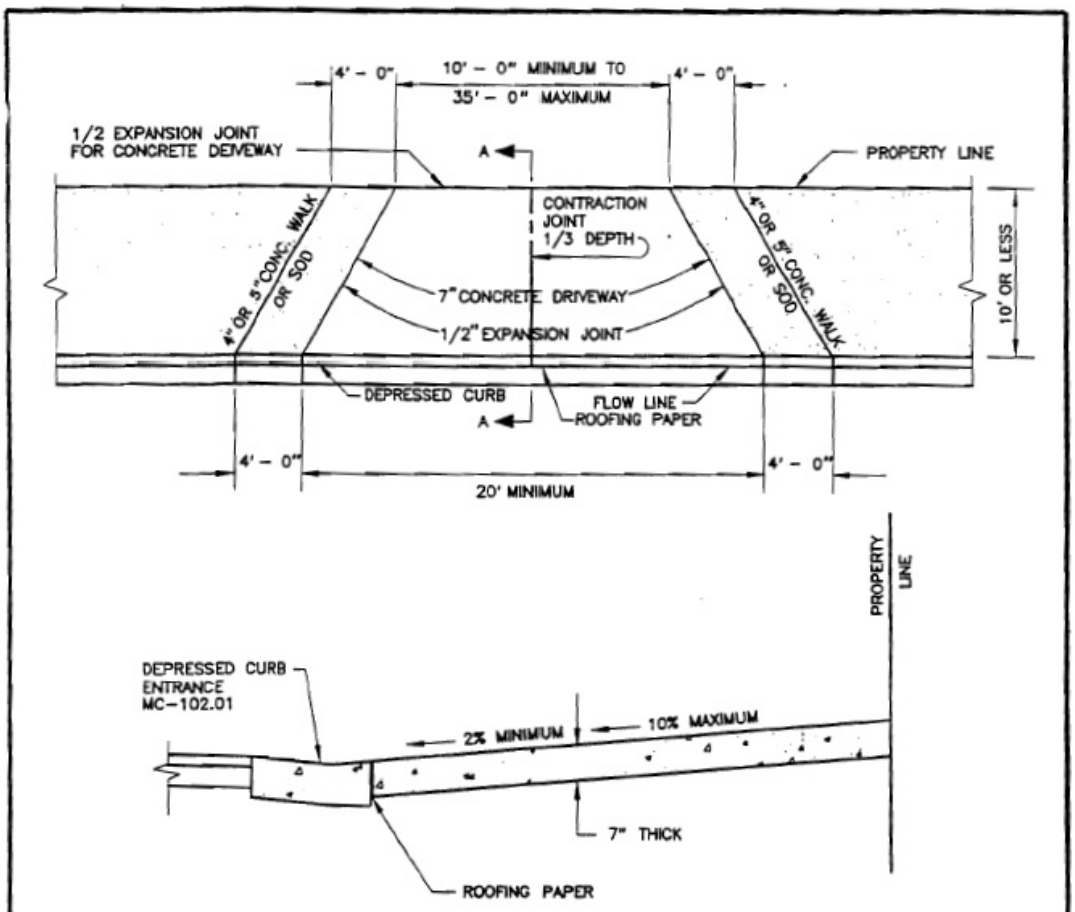
STANDARD NO. MC-301.03

P:\DOTSTD\MC30... 6-24-94 9:34:23 am EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



SECTION A – A

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. DRIVEWAY AND DRIVEWAY APRON TO BE MAINTAINED BY PROPERTY OWNER.
3. ALL DRIVEWAYS DEPRESSED 2" AT PROPERTY LINE WHEN USING 8" CURB.
4. PROVIDE WEAKENED PLANE JOINTS AT MAXIMUM INTERVALS OF 15'.

APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

RESIDENTIAL DRIVEWAY
LIMITED WIDTH

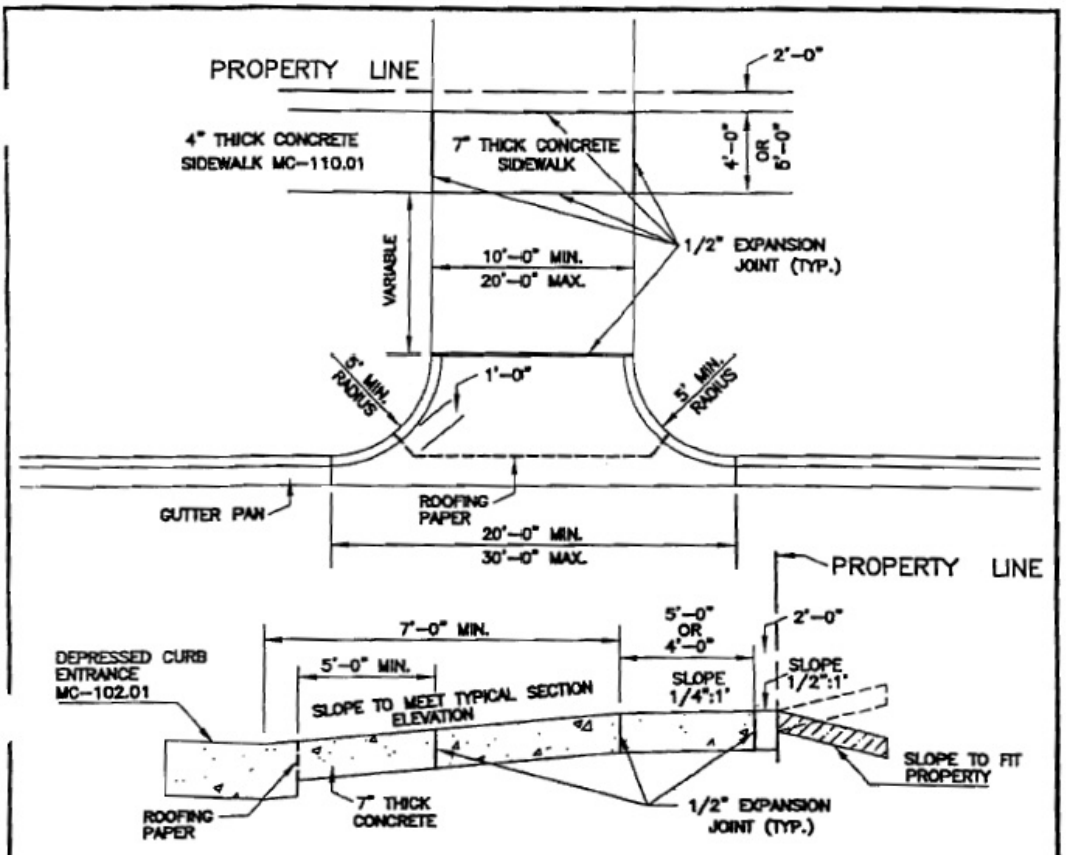
STANDARD NO. MC-301.04

P:\DOTSTD\MC301. 6-24-94 93607 on EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

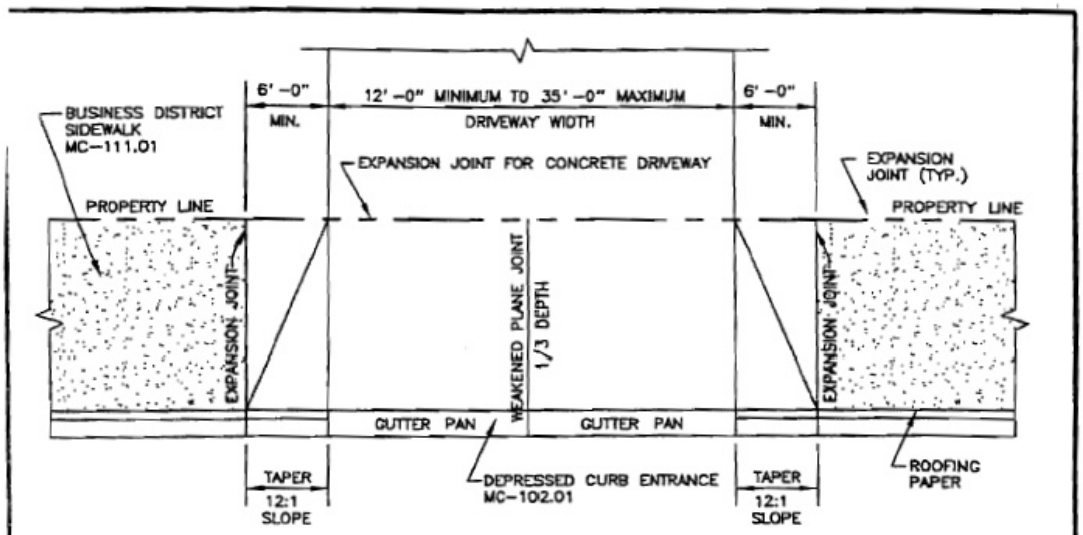
1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. DRIVEWAY AND DRIVEWAY APRON TO BE MAINTAINED BY PROPERTY OWNER.
3. THE EXPANSION JOINTS SHALL BE PLACED AT LOCATIONS SHOWN.
4. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C920. (1)

APPROVED 14 Apr '06 DATE DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION for CHIEF, DIV. OF CAP. DEV.	REVISED RENAMED 04-27-2005 (1) ASTM-C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION RESIDENTIAL DRIVEWAY WITH CURB RADIUS STANDARD NO. MC-301.05

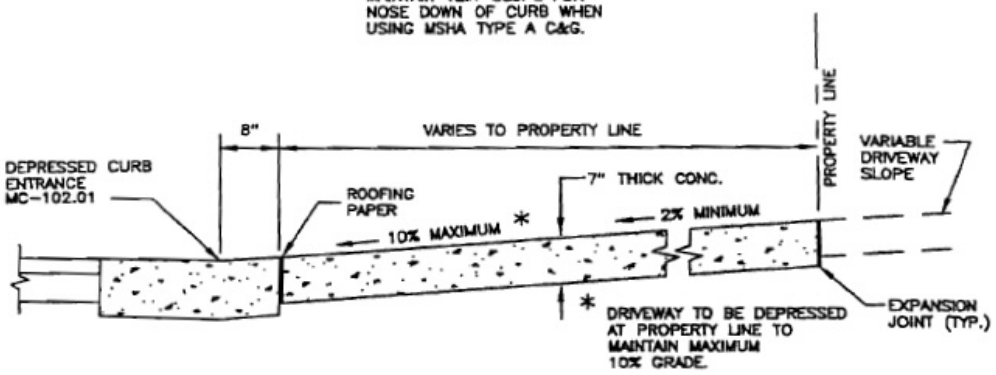
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



NOTE:
MAINTAIN 12:1 SLOPE FOR NOSE DOWN OF CURB WHEN USING MSHA TYPE A C&G.



GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. DRIVEWAY APRON TO BE MAINTAINED BY MCDOT DIVISION OF PUBLIC WORKS.
3. PROVIDE WEAKENED PLANE JOINTS AT MAXIMUM INTERVALS OF 15'.
4. THE EXPANSION JOINTS SHALL BE PLACED AT LOCATIONS SHOWN.
5. EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT, COMPLYING WITH ASTM-C920. ⚠

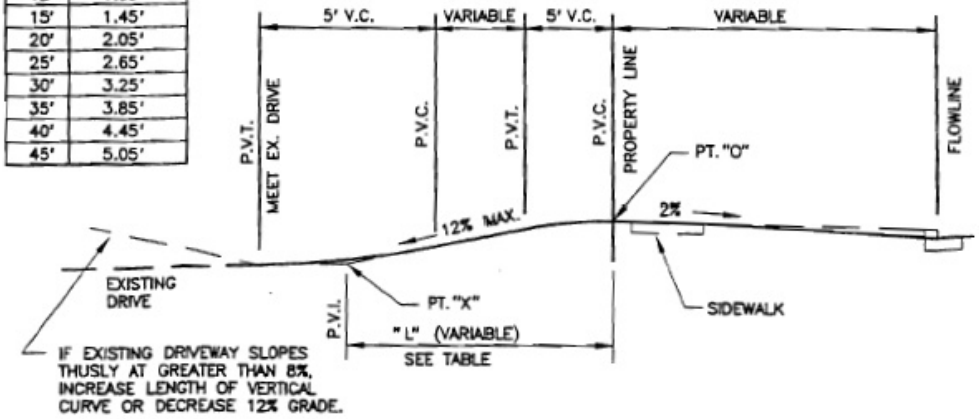
APPROVED 14 APR '06 DATE DIRECTOR, DEPT. OF TRANS. for CHIEF, DIV. OF CAP. DEV.	REVISED ⚠ ASTM-C920 4/2006	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION COMMERCIAL DRIVEWAY STANDARD NO. MC-302.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

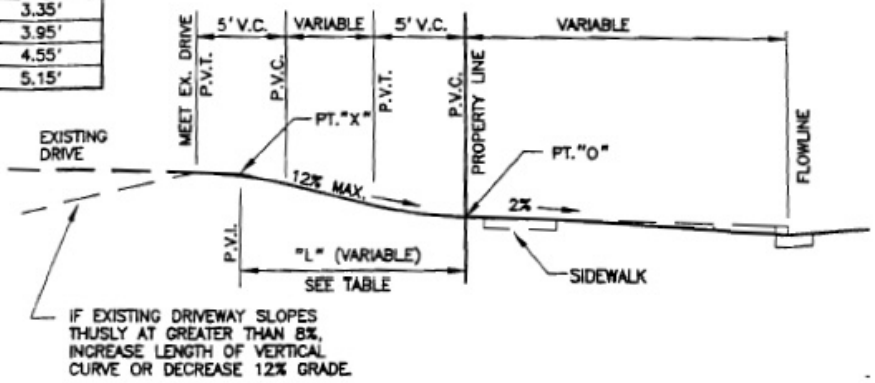
Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	

L	DIFF. IN ELEV. BTWN. PT. "O" AND PT. "X"
10'	0.85'
12'	1.09'
15'	1.45'
20'	2.05'
25'	2.65'
30'	3.25'
35'	3.85'
40'	4.45'
45'	5.05'



L	DIFF. IN ELEV. BTWN. PT. "O" AND PT. "X"
10'	0.95'
12'	1.19'
15'	1.55'
20'	2.15'
25'	2.75'
30'	3.35'
35'	3.95'
40'	4.55'
45'	5.15'



APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

METHODS OF TRANSITIONING DRIVEWAYS

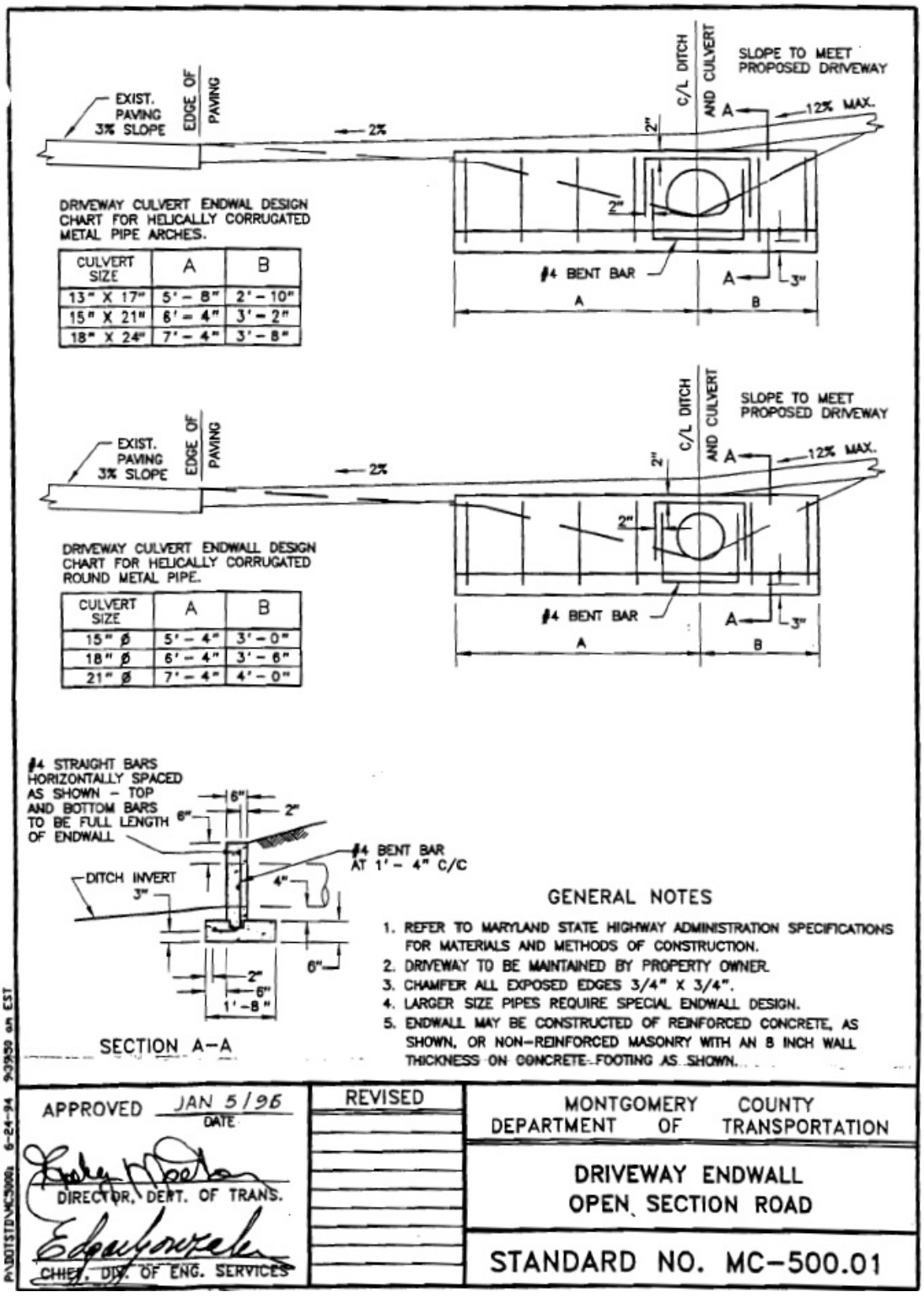
STANDARD NO. MC-303.01

P:\DOTSTD\MC303001 9-29-95 6:46:22 am EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



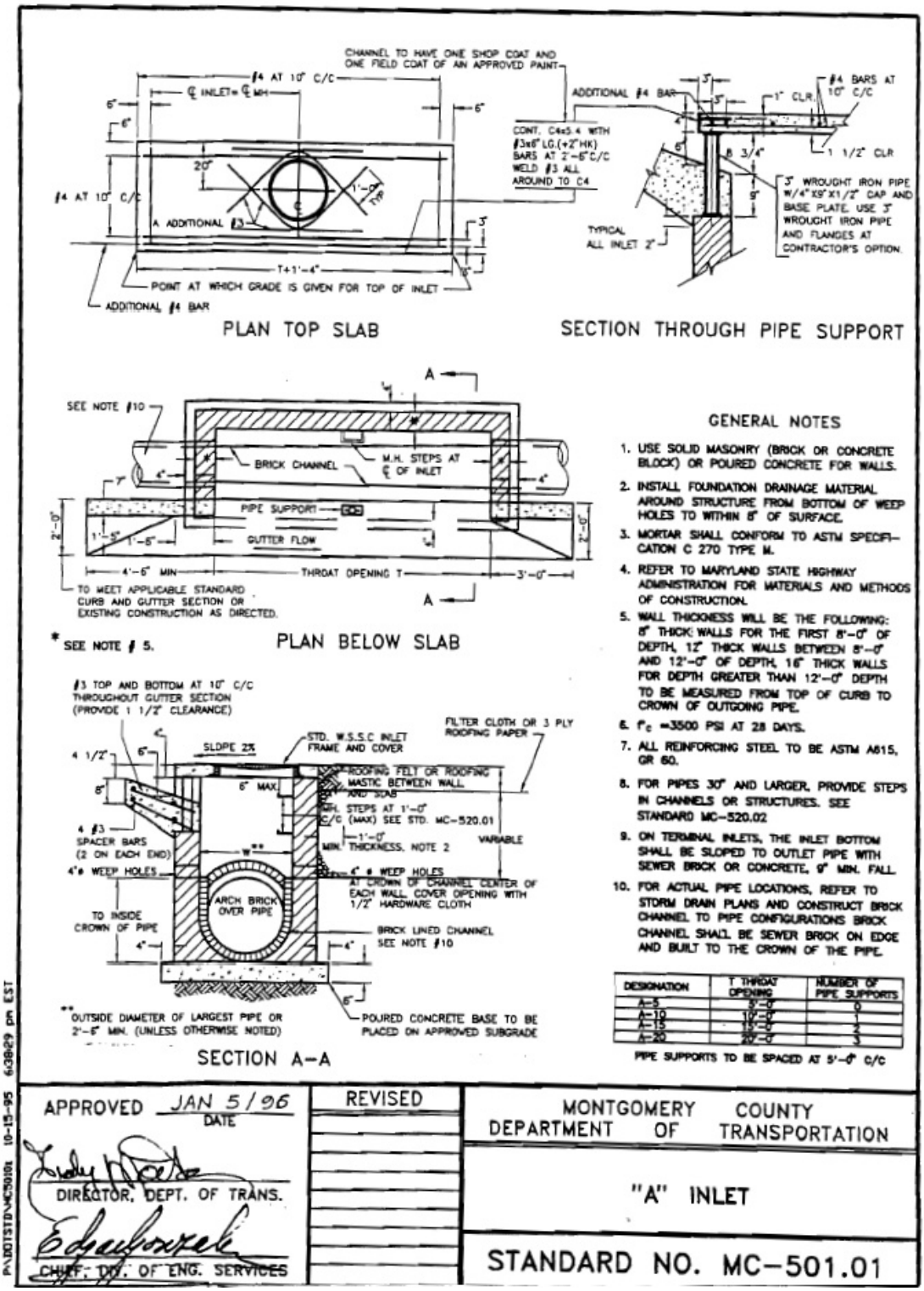
CULVERT SIZE	A	B
13" X 17"	5'-8"	2'-10"
15" X 21"	6'-4"	3'-2"
18" X 24"	7'-4"	3'-8"

CULVERT SIZE	A	B
15" ø	5'-4"	3'-0"
18" ø	6'-4"	3'-6"
21" ø	7'-4"	4'-0"

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

1. USE SOLID MASONRY (BRICK OR CONCRETE BLOCK) OR POURED CONCRETE FOR WALLS.
2. INSTALL FOUNDATION DRAINAGE MATERIAL AROUND STRUCTURE FROM BOTTOM OF WEEP HOLES TO WITHIN 8" OF SURFACE.
3. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C 270 TYPE M.
4. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR MATERIALS AND METHODS OF CONSTRUCTION.
5. WALL THICKNESS WILL BE THE FOLLOWING: 8" THICK WALLS FOR THE FIRST 8'-0" OF DEPTH, 12" THICK WALLS BETWEEN 8'-0" AND 12'-0" OF DEPTH, 16" THICK WALLS FOR DEPTH GREATER THAN 12'-0" DEPTH TO BE MEASURED FROM TOP OF CURB TO CROWN OF OUTGOING PIPE.
6. f'_c =3500 PSI AT 28 DAYS.
7. ALL REINFORCING STEEL TO BE ASTM A615, GR 60.
8. FOR PIPES 30" AND LARGER, PROVIDE STEPS IN CHANNELS OR STRUCTURES. SEE STANDARD MC-520.02
9. ON TERMINAL INLETS, THE INLET BOTTOM SHALL BE SLOPED TO OUTLET PIPE WITH SEWER BRICK OR CONCRETE, 0" MIN. FALL.
10. FOR ACTUAL PIPE LOCATIONS, REFER TO STORM DRAIN PLANS AND CONSTRUCT BRICK CHANNEL TO PIPE CONFIGURATIONS BRICK CHANNEL SHALL BE SEWER BRICK ON EDGE AND BUILT TO THE CROWN OF THE PIPE.

DESIGNATION	T THROAT OPENING	NUMBER OF PIPE SUPPORTS
A-5	5'-0"	0
A-10	10'-0"	1
A-15	15'-0"	2
A-20	20'-0"	3

PIPE SUPPORTS TO BE SPACED AT 5'-0" C/C

APPROVED JAN 5 / 96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

"A" INLET

STANDARD NO. MC-501.01

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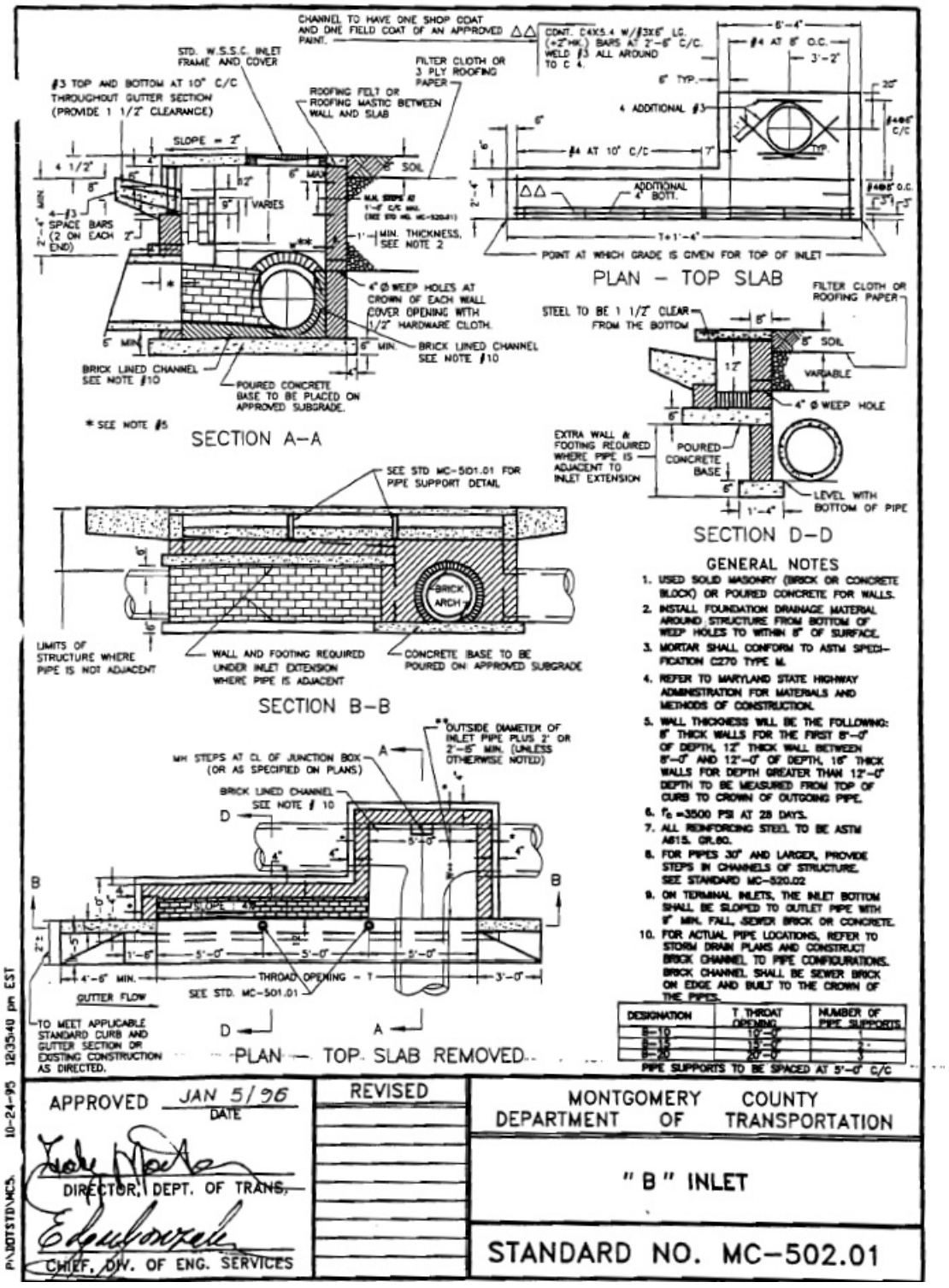
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

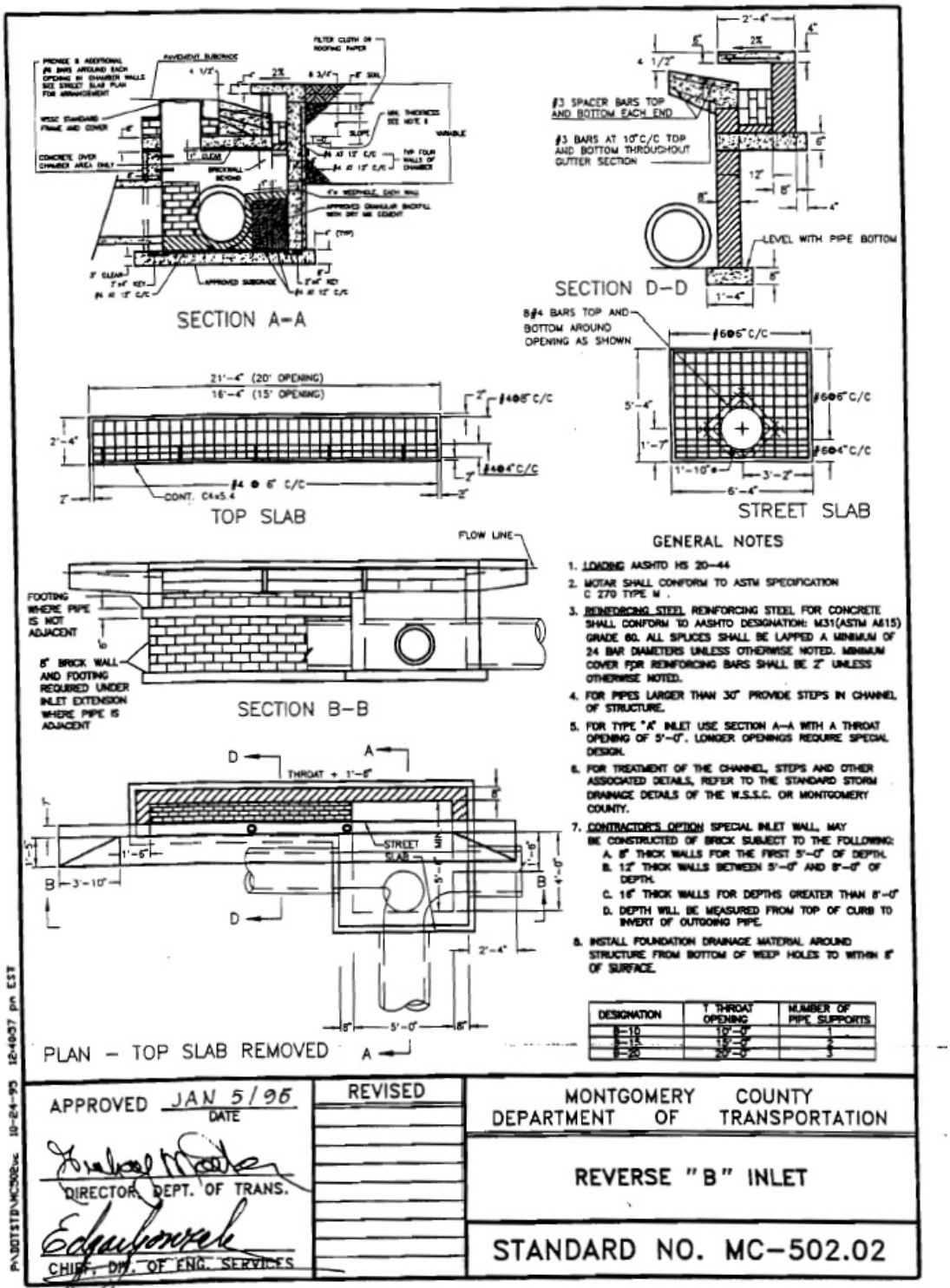
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
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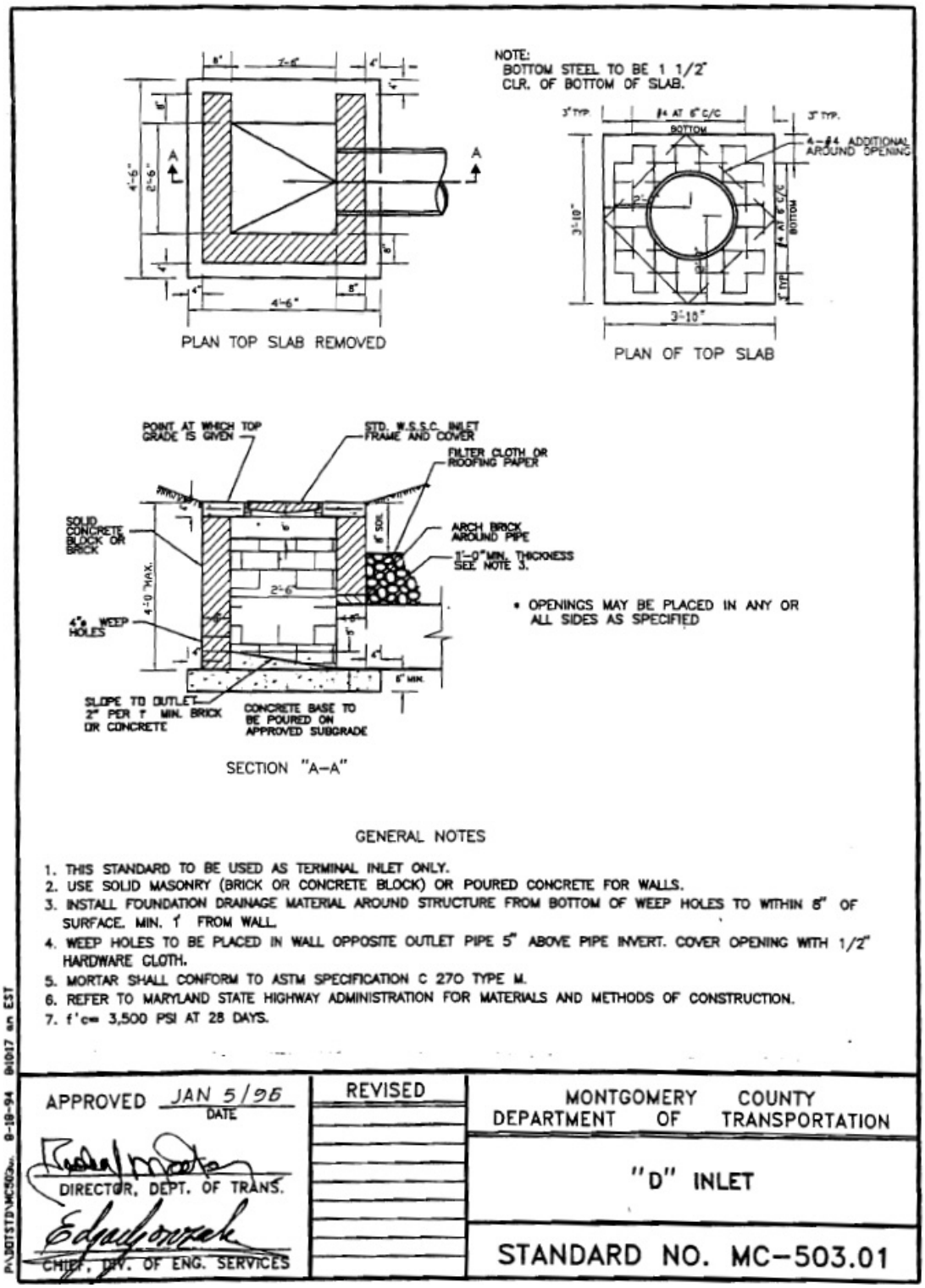
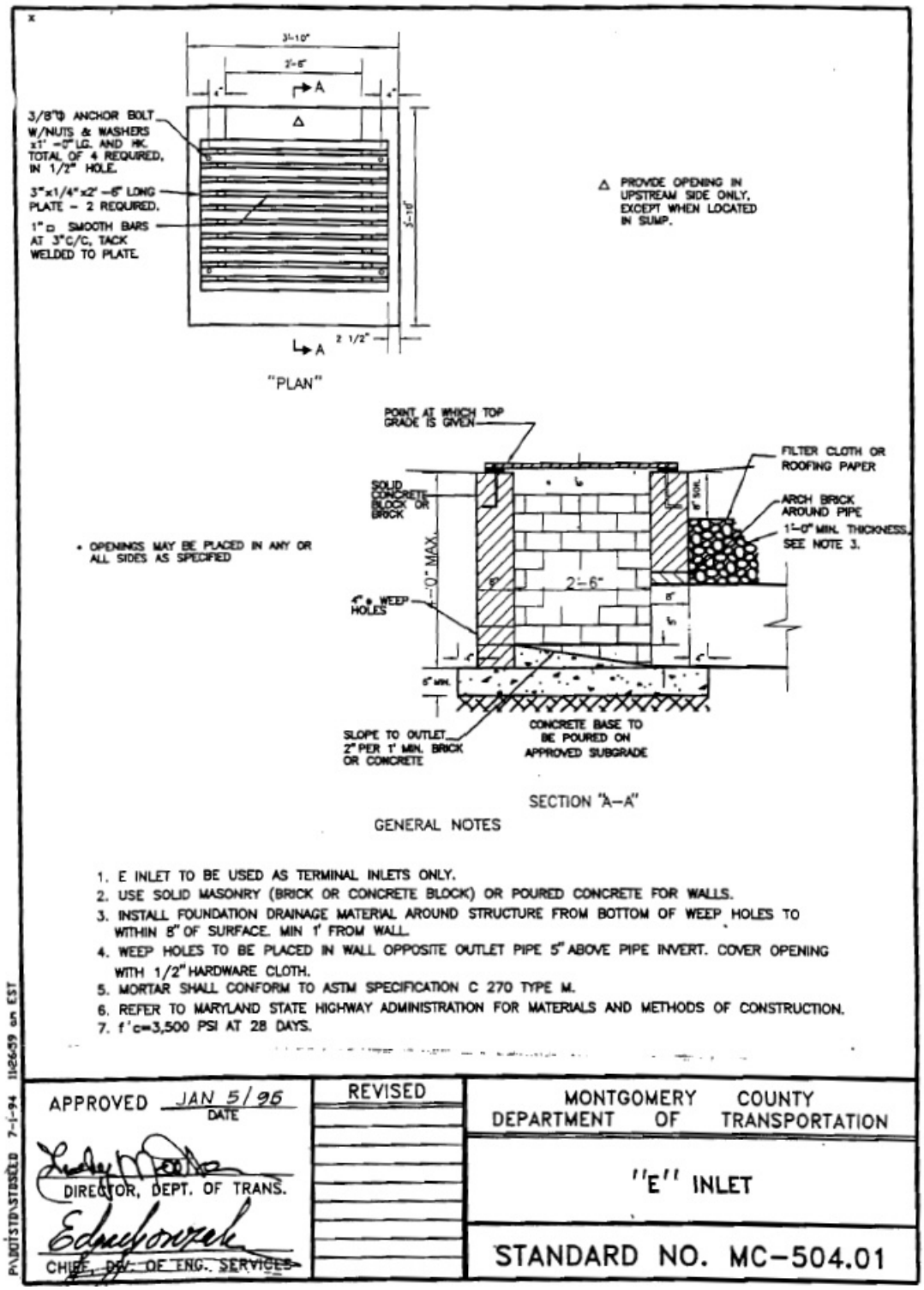
Originating Department Department of Transportation	**Effective Date**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



GENERAL NOTES

1. E INLET TO BE USED AS TERMINAL INLETS ONLY.
2. USE SOLID MASONRY (BRICK OR CONCRETE BLOCK) OR POURED CONCRETE FOR WALLS.
3. INSTALL FOUNDATION DRAINAGE MATERIAL AROUND STRUCTURE FROM BOTTOM OF WEEP HOLES TO WITHIN 8" OF SURFACE. MIN 1' FROM WALL.
4. WEEP HOLES TO BE PLACED IN WALL OPPOSITE OUTLET PIPE 5" ABOVE PIPE INVERT. COVER OPENING WITH 1/2" HARDWARE CLOTH.
5. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C 270 TYPE M.
6. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR MATERIALS AND METHODS OF CONSTRUCTION.
7. f'c=3,500 PSI AT 28 DAYS.

APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

"E" INLET

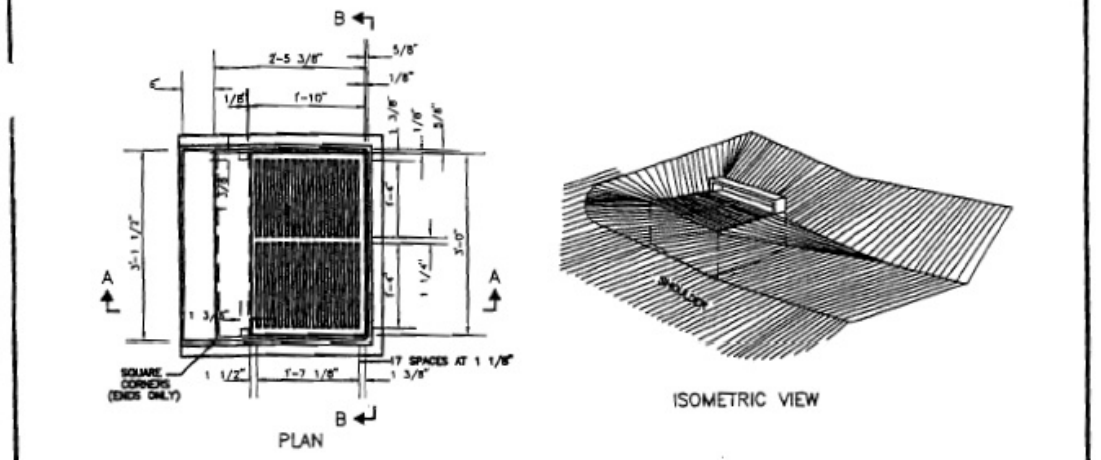
STANDARD NO. MC-504.01

P:\DOT\STD\STDSOLD 7-1-94 112659 on EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

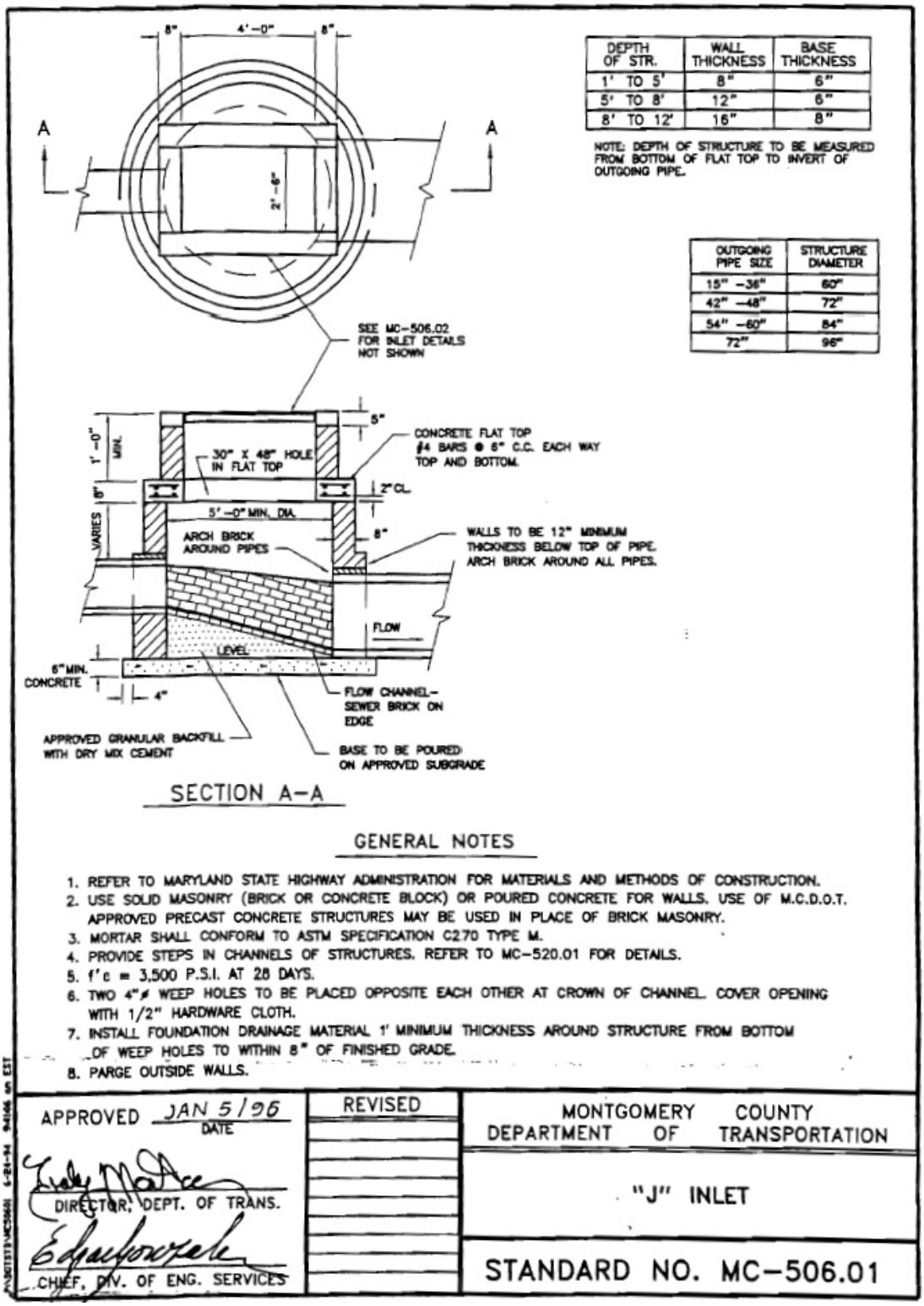
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

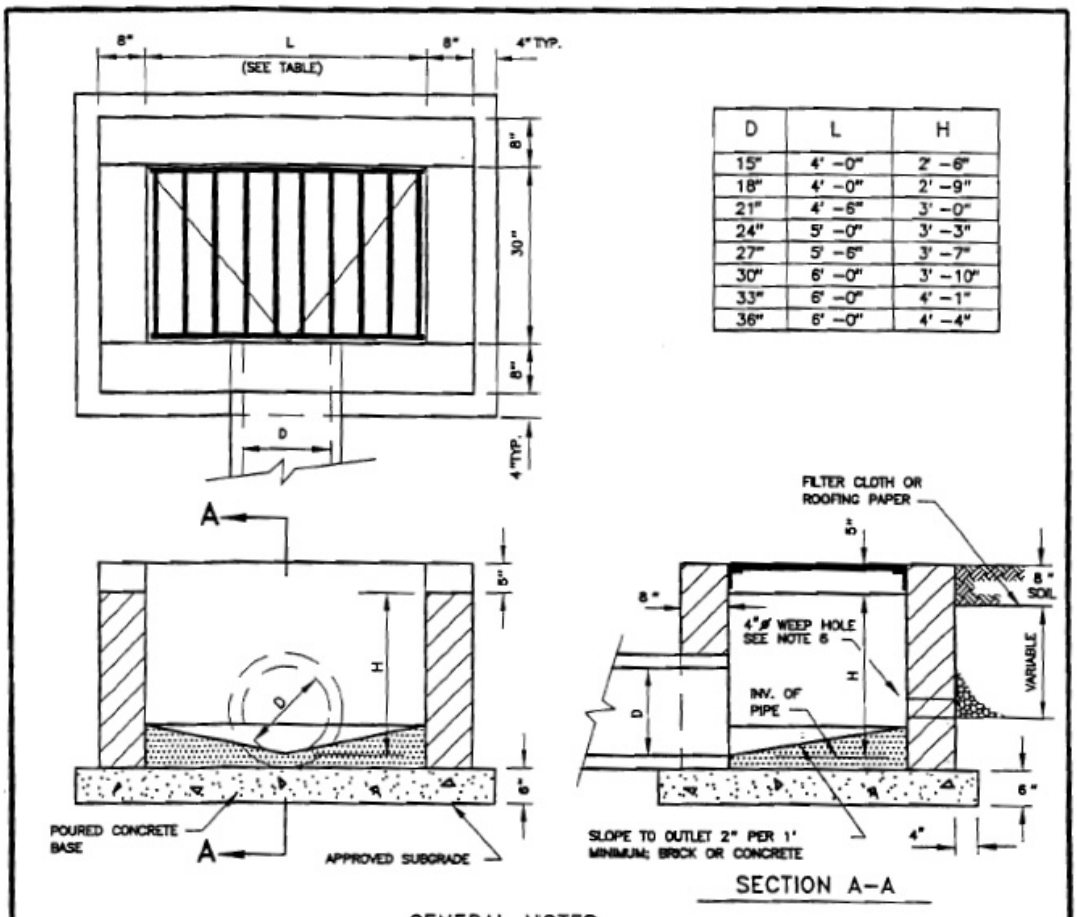
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



D	L	H
15"	4' -0"	2' -6"
18"	4' -0"	2' -9"
21"	4' -6"	3' -0"
24"	5' -0"	3' -3"
27"	5' -6"	3' -7"
30"	6' -0"	3' -10"
33"	6' -0"	4' -1"
36"	6' -0"	4' -4"

SECTION A-A

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. PROVIDE GRATE PER M.S.H.A. STD. NO. MD-377.02 MODIFIED WITH BARS 3" O.C.; TACK WELD IN PLACE.
3. CONSTRUCTION TO BE OF CONCRETE OR BRICK MASONRY.
4. STEEL VERTICAL 1/2" ø BARS, 6" C.C., HORIZONTAL 1/2" ø BARS, 6" C.C.; BOTTOM 1/2" ø BARS 6" C.C. EACH WALL, 2" MIN. COVER. (WITH CONCRETE CONSTRUCTION)
5. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270 TYPE M.
6. WEEP HOLES TO BE PLACED IN WALL OPPOSITE OUTLET PIPE 5" ABOVE PIPE INVERT. COVER OPENING WITH 1/2" HARDWARE CLOTH. INSTALL FOUNDATION DRAINAGE MATERIAL AROUND STRUCTURE FROM BOTTOM OF WEEP HOLES TO WITHIN 8" OF SURFACE FOR A THICKNESS OF 12" MINIMUM.
7. BRICK SHALL CONFORM TO AASHTO DESIGNATION M-114 GRADE SW.
8. f'c = 3500 PSI AT 28 DAYS.
9. PARGE OUTSIDE WALLS.

APPROVED JAN 5 '96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

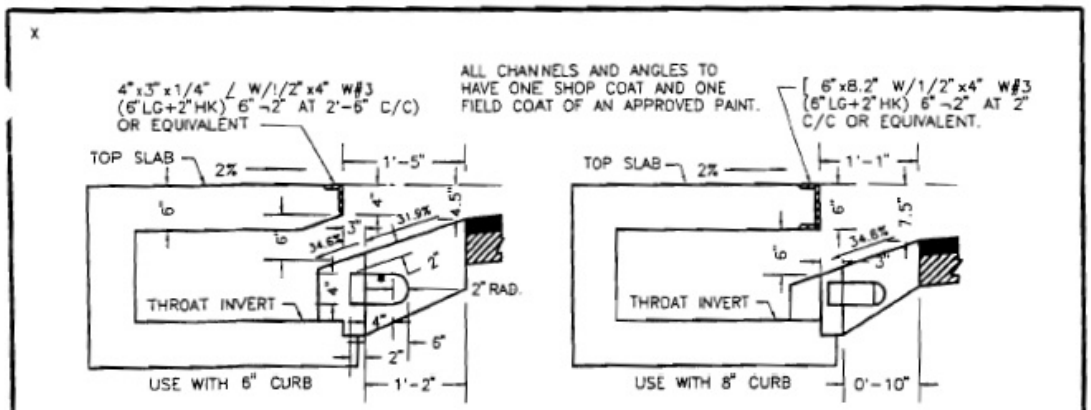
"J" INLET
AS A TERMINUS

STANDARD NO. MC-506.02

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



THROAT SECTION DETAIL

*5/8" DIAMETER DEFORMED STEEL BARS 8" LONG WITH 2" RADIUS AT 30" CENTERS.

GENERAL NOTES

THROAT SECTION NOTES:

1. THE THROAT INVERT SHALL SLOPE A MINIMUM OF 1.5% TO THE PIPE CHAMBER WITH A 2" MINIMUM DEPTH AT THE CHAMBER OPENING AND A 5" MAXIMUM DEPTH AT THE FAR END, USING MSHA MIX NO. 2 CONCRETE.
2. A 4" GUTTER PAN DEPRESSION SHALL BE REQUIRED FOR THE FULL LENGTH OF THE THROAT SECTION.
3. THE GUTTER PAN MAY BE PRECAST OR CAST IN PLACE.
4. THE TOP SLAB SHALL BE 4" MINIMUM THICK WITH A 6" HIGH CURB; AND 6" MINIMUM THICK WITH AN 8" HIGH CURB. SUPPORT POSTS AT 5' O.C. ARE REQUIRED WITH 4" THICK TOP SLAB.

PIPE CHAMBER NOTES:

5. MAINTAIN A MINIMUM 12" CLEARANCE BETWEEN TOP OF BENCH AND BOTTOM OF FLATTOP OR EXTEND BENCH TO BOTTOM OF FLATTOP.
6. STRUCTURE OPENINGS SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 2" MINIMUM-5" MAXIMUM FOR PIPES UP THROUGH 36", AND 3" MINIMUM-6" MAXIMUM FOR PIPES 42" AND GREATER.
7. THE INVERT ON TERMINAL STRUCTURES SHALL SLOPE TO THE OUTLET A MINIMUM OF 2" PER 12". ON THROUGH STRUCTURES, A FORMED CHANNEL SHALL BE REQUIRED.
8. 6" DIAMETER KNOCKOUTS SHALL BE CAST INTO EACH END OF THE STRUCTURE FOR POSSIBLE UNDERDRAIN CONNECTIONS. 4" DIAMETER WEEPHOLE KNOCKOUTS SHALL BE CAST INTO THE FRONT AND BACK OF THE STRUCTURE, ONE PER FACE. LOCATE INVERT OF KNOCKOUT AT CROWN OF HIGHEST CHANNEL.
9. A MINIMUM OF 3.5' IS REQUIRED BETWEEN THE OUTLET PIPE INVERT AND THE FLATTOP.

NOTES FOR BOTH:

10. INVERTS SHALL BE PAVED WITH SEWER BRICK OR CONCRETE.
11. THE MANUFACTURER'S NAME AND DATE OF MANUFACTURE SHALL BE LOCATED ON THE INSIDE OF ALL STRUCTURE COMPONENTS.
12. THE MCDOT MATERIALS LAB SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF FABRICATION.
13. THREE (3) NOTARIZED CERTIFICATIONS OF SPECIFICATIONS WILL BE REQUIRED FOR ALL SHIPMENTS.
14. CONCRETE TO BE f'c=3500 PSI AT 28 DAYS.
15. STEPS WILL NOT BE PERMITTED IN THE FLATTOP.
16. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270 TYPE M AND WILL BE USED TO SEAL LIFT HOLES, THROAT SECTION TO PIPE CHAMBER, AND SEAL AROUND ALL PIPE CONNECTIONS.
17. OTHER SPECIFIED COMBINATIONS OF CONCRETE AND STEEL PROVIDING THE SAME OVERALL STRUCTURAL STRENGTH AS MCDOT STD.MC-501.01 AND MC-502.01 WILL BE CONSIDERED FOR APPROVAL ON A CASE BY CASE BASIS.
18. ADJUSTMENT OF THE THROAT SECTION TO THE PIPE CHAMBER SHALL BE LIMITED TO THREE (3) COURSES OF BRICK TOTALLING 8 INCHES IN THICKNESS INCLUDING PORTLAND CEMENT JOINTS. PRECAST ADJUSTMENT RINGS WILL BE REQUIRED IN COMBINATION WITH BRICK TO MEET THE MAXIMUM OF THREE COURSES.

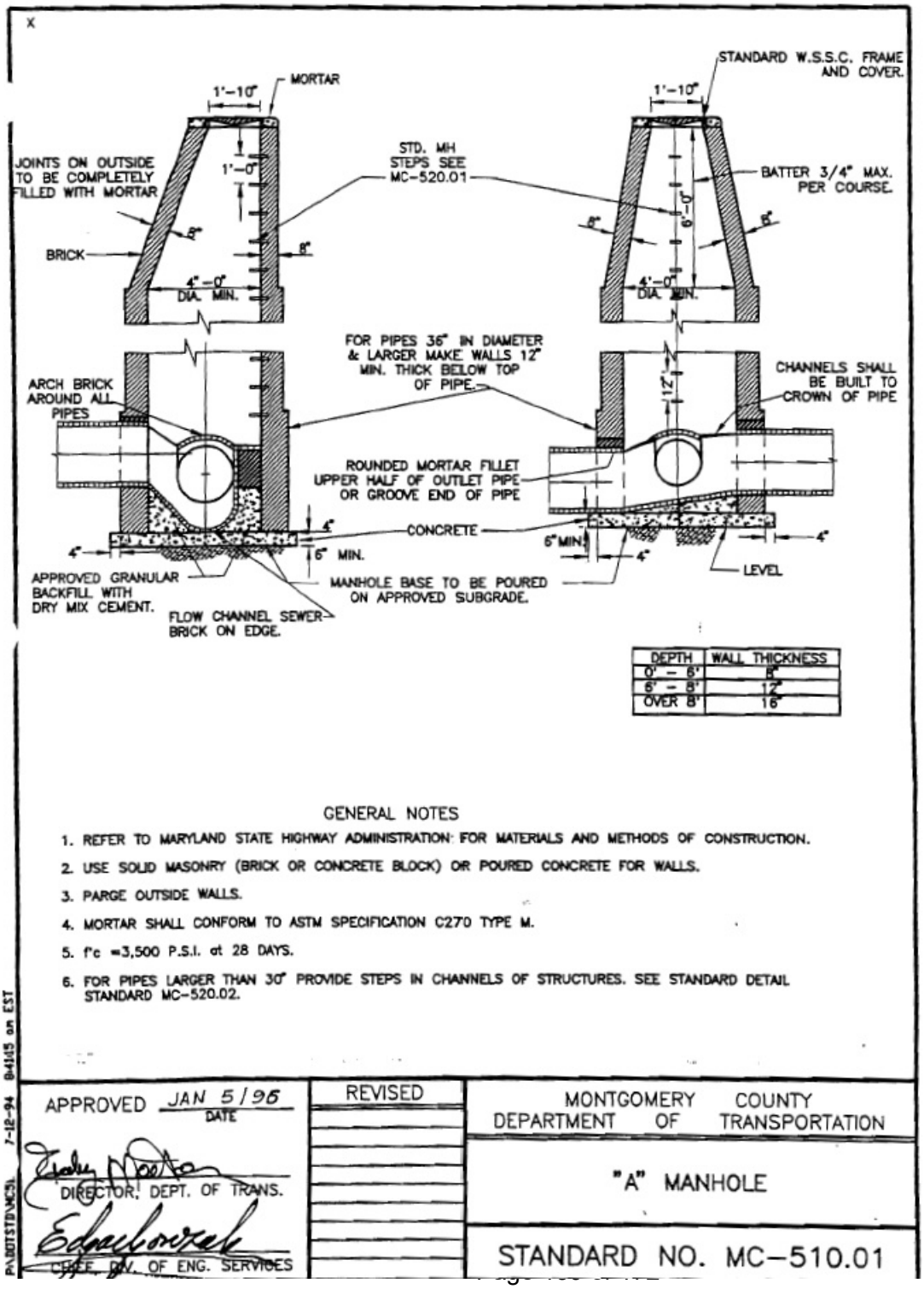
APPROVED JAN 5 '96 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		PRECAST CURB INLET GUIDELINES
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC-507.01

P:\DOT\STD\ST056... 6-24-94 11:900 pm EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



DEPTH	WALL THICKNESS
0' - 6'	8"
6' - 8'	12"
OVER 8'	16"

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. USE SOLID MASONRY (BRICK OR CONCRETE BLOCK) OR POURED CONCRETE FOR WALLS.
3. PARGE OUTSIDE WALLS.
4. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270 TYPE M.
5. f'c =3,500 P.S.I. at 28 DAYS.
6. FOR PIPES LARGER THAN 30" PROVIDE STEPS IN CHANNELS OF STRUCTURES. SEE STANDARD DETAIL STANDARD MC-520.02.

APPROVED JAN 5/95 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

"A" MANHOLE

STANDARD NO. MC-510.01

7-12-94 8:41:15 am EST
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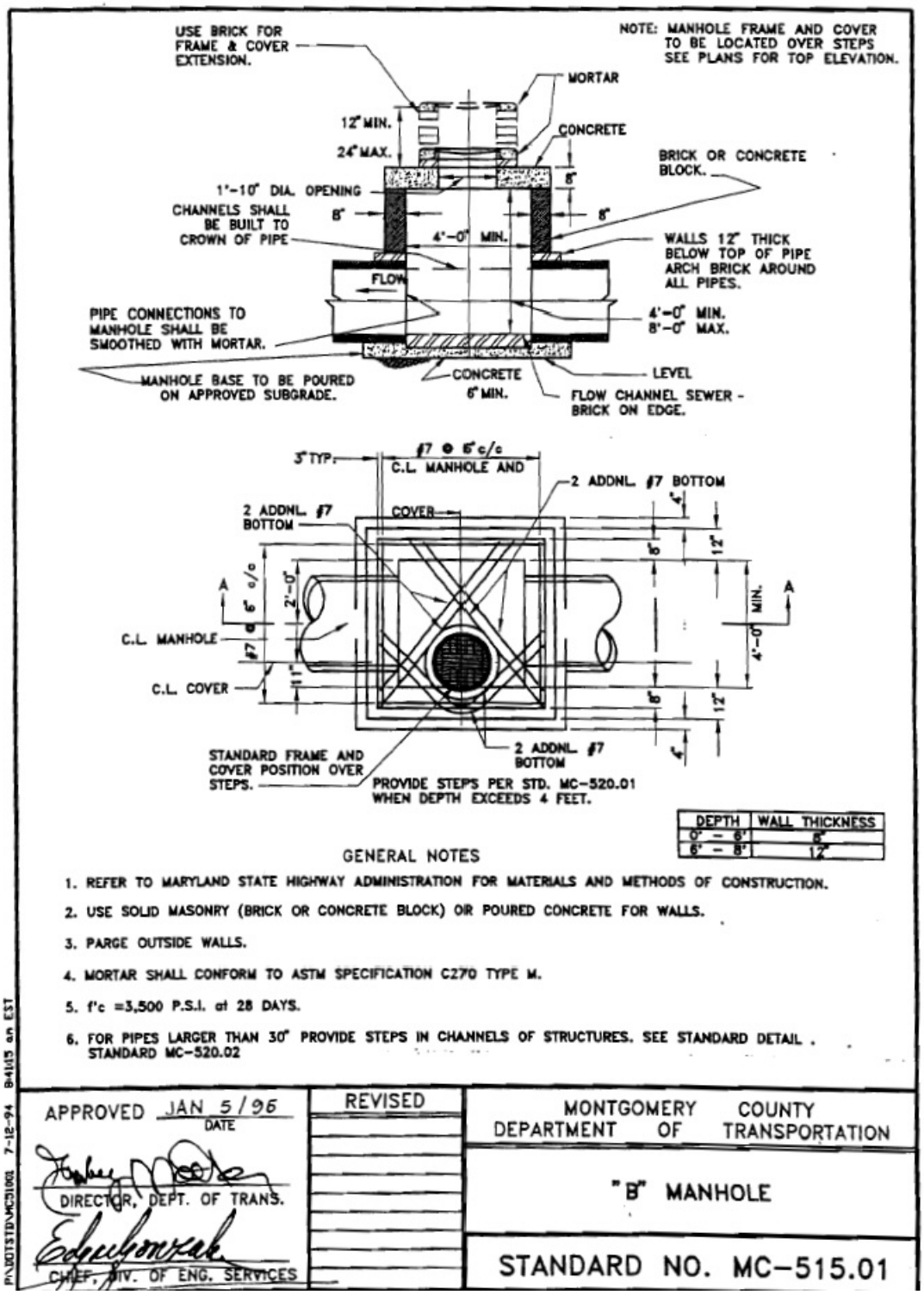
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



DEPTH	WALL THICKNESS
0" - 6'	8"
6' - 8'	12"

GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. USE SOLID MASONRY (BRICK OR CONCRETE BLOCK) OR POURED CONCRETE FOR WALLS.
3. PARGE OUTSIDE WALLS.
4. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270 TYPE M.
5. f'c =3,500 P.S.I. at 28 DAYS.
6. FOR PIPES LARGER THAN 30" PROVIDE STEPS IN CHANNELS OF STRUCTURES. SEE STANDARD DETAIL . STANDARD MC-520.02

P:\DOTSTD\MC515101 7-12-94 8:41:15 am EST

APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

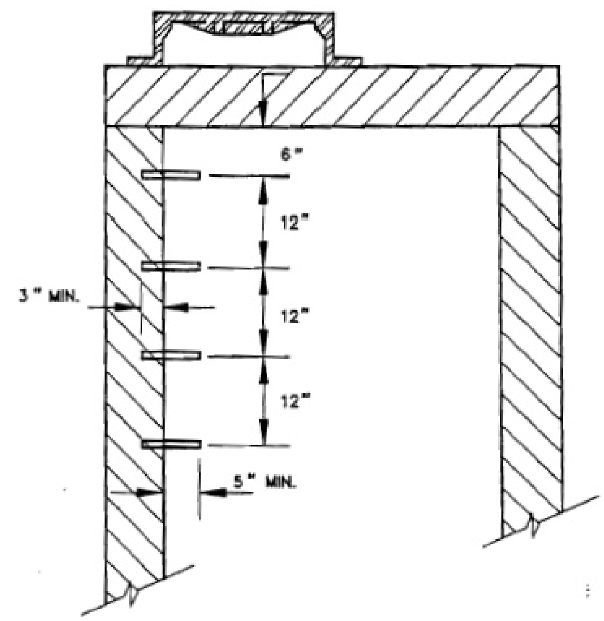
"B" MANHOLE

STANDARD NO. MC-515.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	Effective Date



GENERAL NOTES

1. STEPS ARE TO BE MADE OF: (1) CAST IRON, 1 INCH SQUARE ; (2) 3/8 INCH STEEL ROD EMBEDDED IN POLYPROPYLENE PLASTIC ; OR (3) ALUMINUM ALLOY, 7/8 INCH BY 13/16 INCH WITH A MINIMUM EMBEDMENT OF 3 INCHES, A MINIMUM PROJECTION OF 5 INCHES, AND A MINIMUM WIDTH OF 10 INCHES.
2. STEPS SHALL BE PLACED IN VERTICAL ALIGNMENT, 12 INCHES APART, AND SHALL ALIGN WITH THE COVER OPENING.
3. STEPS ARE NOT REQUIRED IN STRUCTURES LESS THAN 4 FEET IN DEPTH.

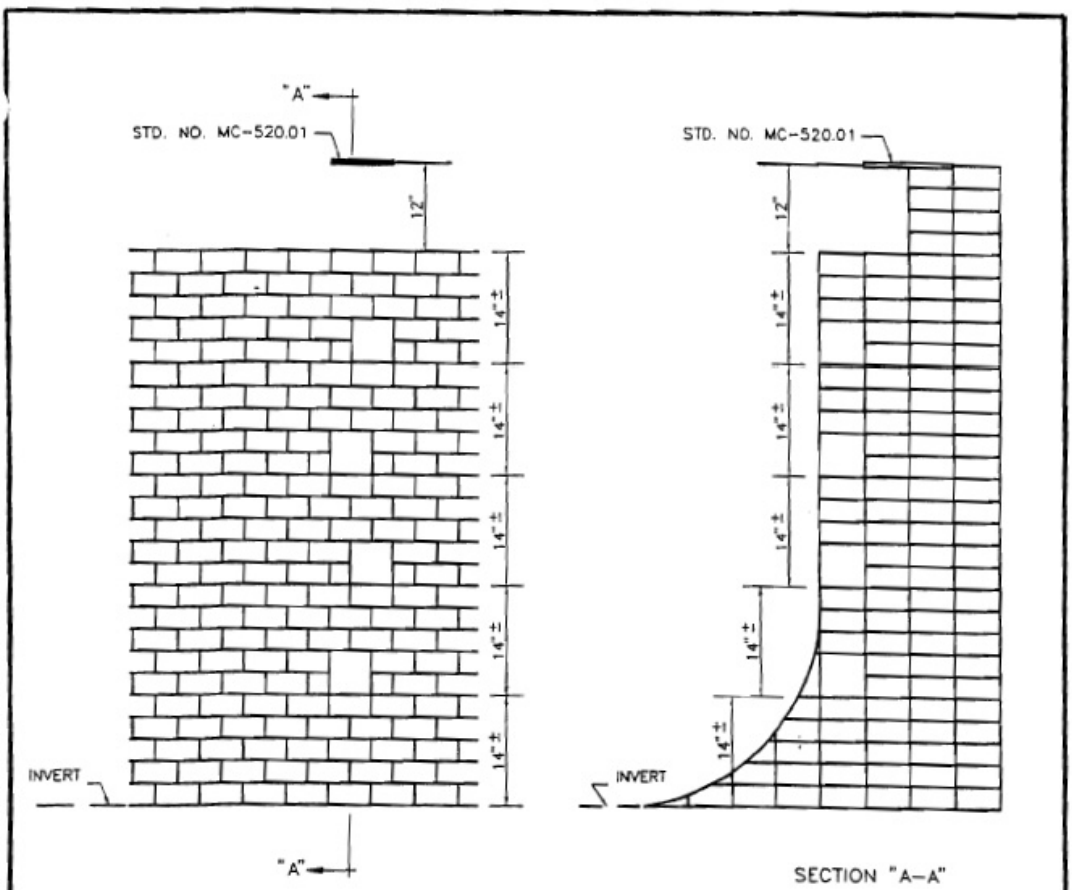
P:\DOTSTD\STD53A 6-24-94 10:37 pm EST

APPROVED JAN 5/95 DATE	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		MANHOLE AND INLET STEPS
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC–520.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. PROVIDE STEP BY LEAVING A 2-BRICK SPACE OUT OF CHANNEL AS SHOWN. STEP TO HAVE A MINIMUM DEPTH OF 4 INCHES.
2. FOR CHANNELS OF PIPES 30 INCHES OR LARGER.

PADOTSTDVSTD53B 6-24-94 15820 pm EST

APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

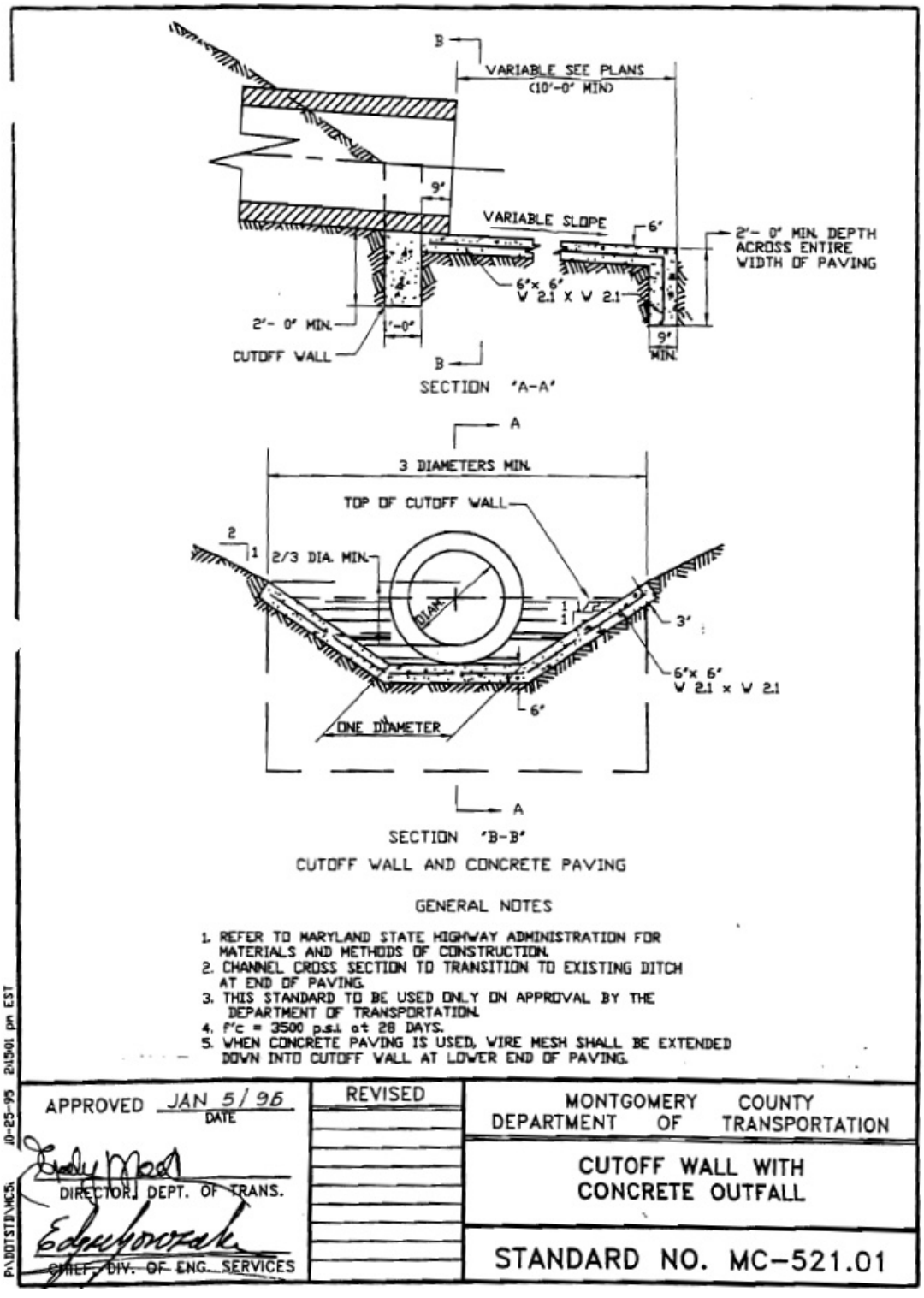
MANHOLE AND INLET STEPS IN CHANNELS

STANDARD NO. MC-520.02

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. CHANNEL CROSS SECTION TO TRANSITION TO EXISTING DITCH AT END OF PAVING.
3. THIS STANDARD TO BE USED ONLY ON APPROVAL BY THE DEPARTMENT OF TRANSPORTATION.
4. f'c = 3500 p.s.i. at 28 DAYS.
5. WHEN CONCRETE PAVING IS USED, WIRE MESH SHALL BE EXTENDED DOWN INTO CUTOFF WALL AT LOWER END OF PAVING.

10-25-95 21:01 pm EST

P:\DOTSTD\MC5\

APPROVED JAN 5/96 (DATE)

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

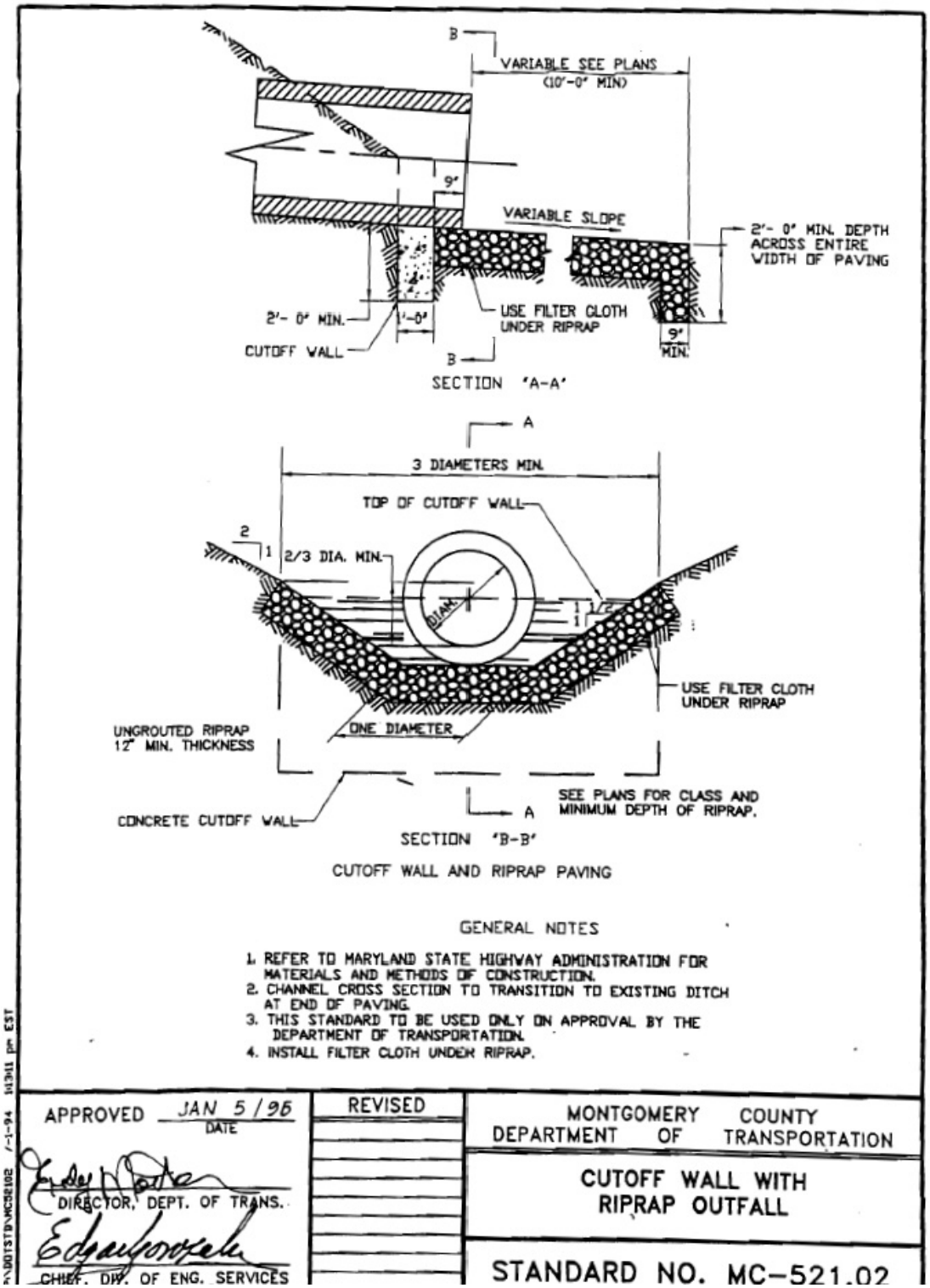
CUTOFF WALL WITH CONCRETE OUTFALL

STANDARD NO. MC-521.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

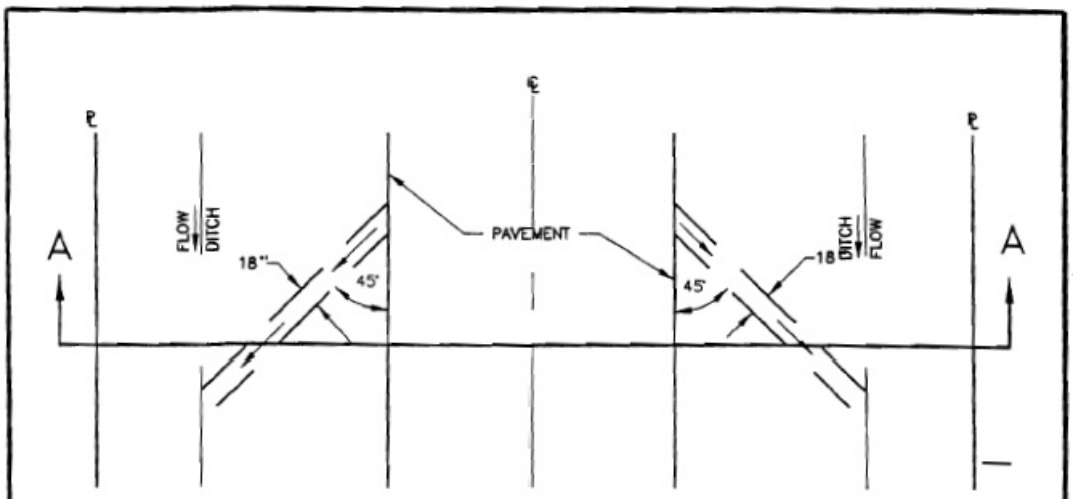
Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



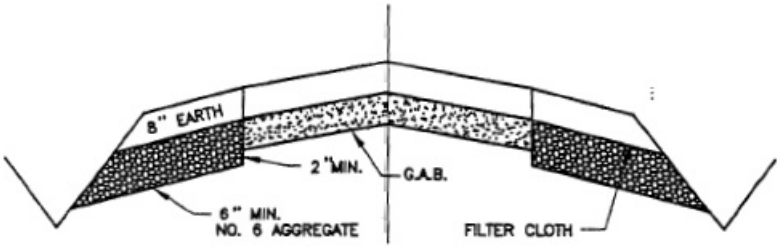
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



PLAN



SECTION A – A

GENERAL NOTES

1. MINIMUM SLOPE OF UNDERDRAIN = 1/4 INCH PER FOOT.
2. AGGREGATE IN TRENCH SHALL BE MSHA NO. 6 AGGREGATE, SPECIFICATIONS ARTICLE 20.02.
3. FOR CONSTRUCTION METHODS AND SPACING INTERVALS SEE MCDOT SPECIFICATIONS – 1981 SUBGRADE DRAINS FOR OPEN SECTION ROADWAYS.

APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

SUBGRADE DRAINS
OPEN SECTION ROADWAYS

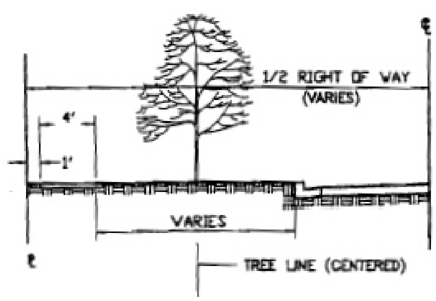
STANDARD NO. MC-525.01

P:\MDOT\STD\MC525D1 9-29-95 7:46:06 am EST

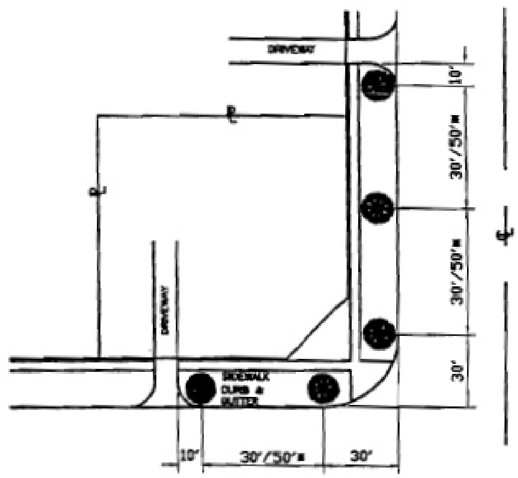
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



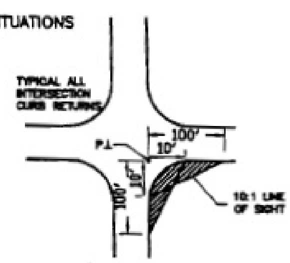
PROFILE VIEW
NO SCALE



PLAN VIEW
NO SCALE

NOTES

1. THE DIMENSIONS SHOWN HERE ARE TYPICAL AND MAY BE MODIFIED IN SPECIFIC SITUATIONS BY THE DEPARTMENT OF TRANSPORTATION.
2. TREES ARE TO BE LOCATED WITH THE FOLLOWING MINIMUM CLEARANCES:
   a. 5' FROM WATER MAIN
   b. 5' FROM GAS BOX
   c. 5' FROM INLET OR MH
   d. 10' FROM FIRE HYDRANT
   e. 15' FROM STREET LIGHT
3. * MINOR TREE SPACING 30' (±5')O.C. MIN.
4. * MAJOR TREE SPACING 50' (±5')O.C. MIN.
5. SHADE TREES TO BE 1 1/2" MINIMUM CALIPER 10' MINIMUM HEIGHT.
6. FLOWERING TREES TO BE 3/4" MINIMUM CALIPER 6' MINIMUM HEIGHT.
7. SPECIES TO BE AS APPROVED BY THE MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION.
8. SEE STANDARD NO. MC-702.01 FOR PLANTING DETAILS.
9. NO TREE IS PERMITTED IF GREENSPACE IS LESS THAN 6'.
10. NO TREE IS PERMITTED WITHIN LIMIT OF SIGHT.



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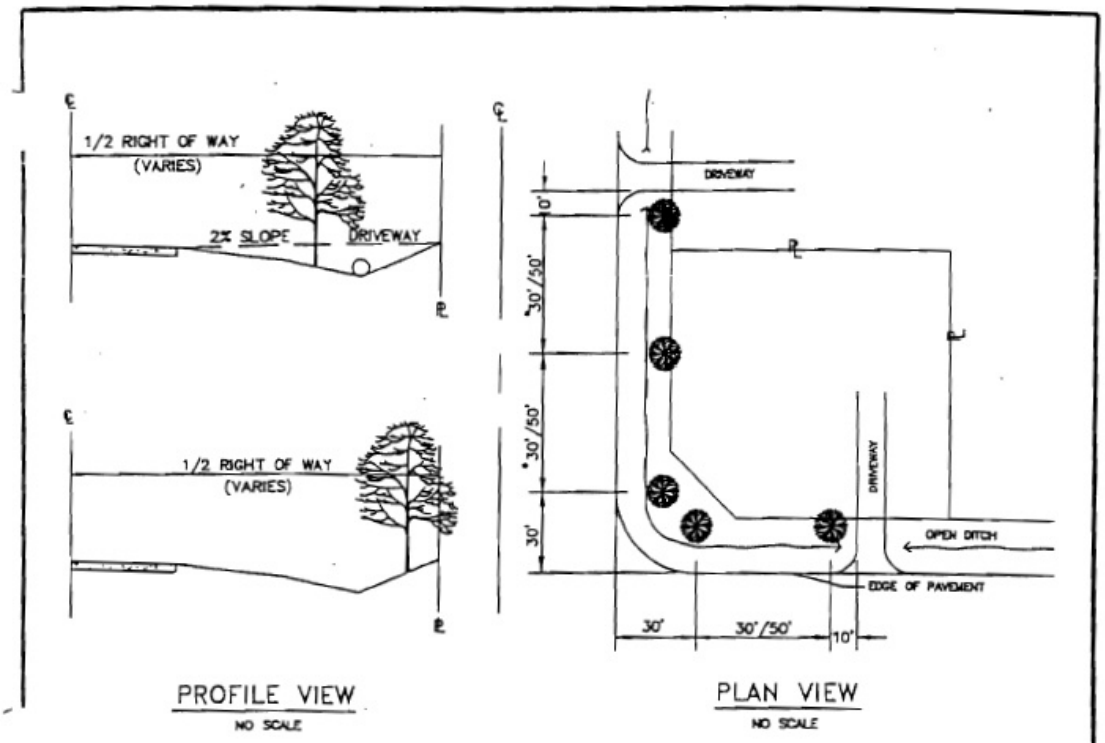
APPROVED JAN 5/96 (DATE)	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		TREE LOCATIONS CLOSED SECTION ROADS
CHIEF, DIV. OF ENG. SERVICES		STANDARD NO. MC-700.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	



PROFILE VIEW
NO SCALE

PLAN VIEW
NO SCALE

NOTES

1. THE DIMENSIONS SHOWN HERE ARE TYPICAL AND MAY BE MODIFIED IN SPECIFIC SITUATIONS BY THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
2. TREES ARE TO BE LOCATED WITH THE FOLLOWING MINIMUM CLEARANCES:
   a. 5' FROM WATER MAIN
   b. 5' FROM GAS BOX
   c. 5' FROM INLET OR MH
   d. 10' FROM FIRE HYDRANT
   e. 15' FROM STREET LIGHT
*3. MINOR TREE SPACING 30' (±5') O.C. MIN.
*4. MAJOR TREE SPACING 50' (±5') O.C. MIN.
   TREES TO BE PLATED UNDER STANDARD NO. MC-703.02 ARE TO BE SPACED 50' (+5') O.C.
5. SHADE TREES TO BE 1 1/2 " MINIMUM CALIPER 10' MINIMUM HEIGHT.
6. FLOWERING TREES TO BE 1 1/2" MINIMUM CALIPER 6' MINIMUM HEIGHT.
7. SPECIES TO BE AS APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
8. SEE STANDARD NO. MC-702.01 FOR PLANTING DETAILS.
9. NO TREE IS PERMITTED IF GREENSPACE IS LESS THAN 6'.
10. NO TREE IS PERMITTED WITHIN LIMIT OF SIGHT.
11. TREE PLANTINGS (IN THE PROFILE VIEW) ARE TO BE LOCATED IN ACCORDANCE WITH THE APPROPRIATE OPEN SECTION ROADWAY STANDARD.

APPROVED 11 July 2025
DATE
DIRECTOR, DPWT

REVISED

MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

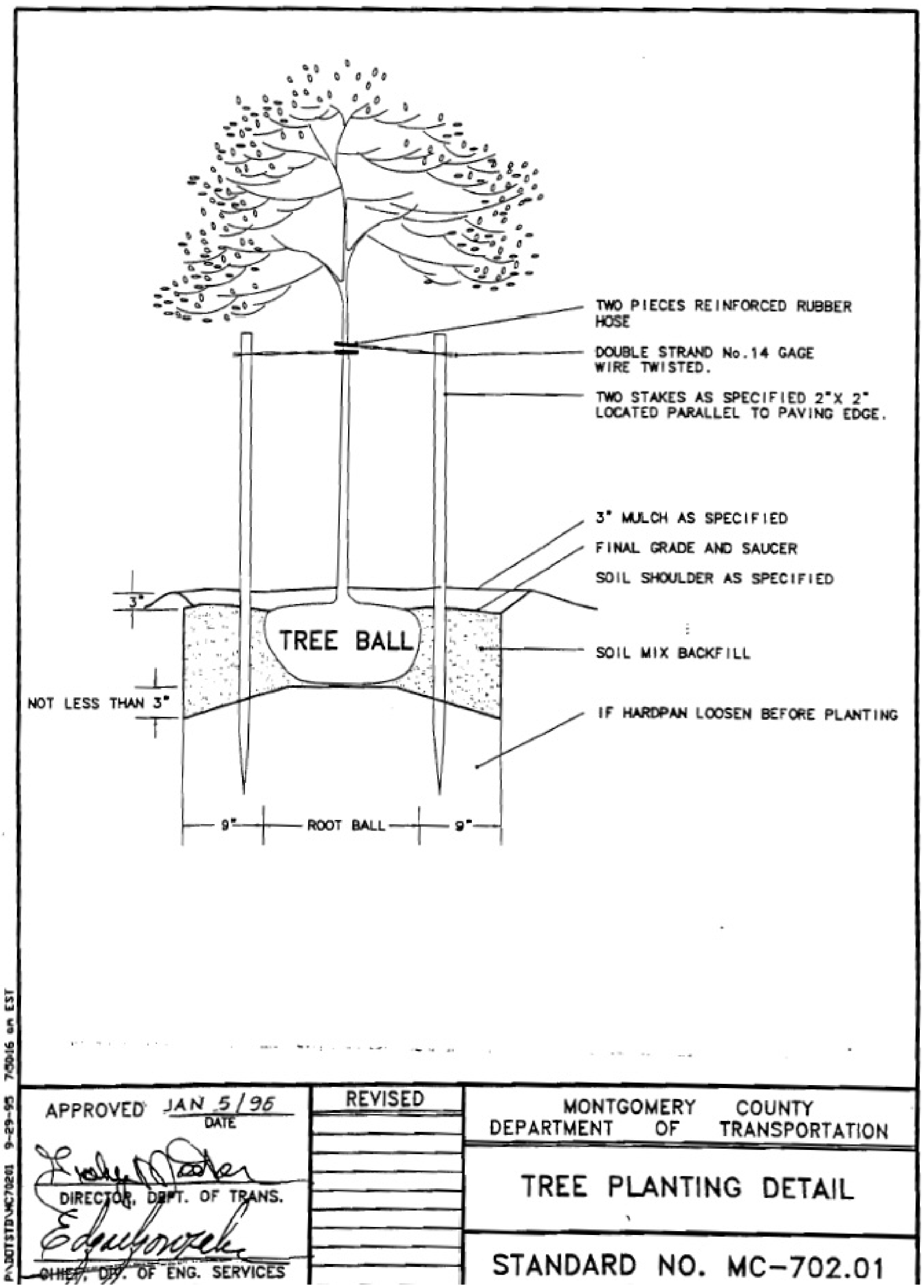
TREE LOCATIONS
OPEN SECTION ROADS

STANDARD NO. MC-701.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	Effective Date



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	Effective Date

MAJOR TREES:

Acceptable major trees shall be 8' to 10' tall and have a minimum caliper of 1 1/2" measured 6" above ground level. They shall be branched at a point approximately 60% of the total height of the tree above ground. Larger size trees are acceptable but must conform to American Standards for nursery stock.

Acer saccharum (Sugar Maple)
Carpinus betulus (European Hornbeam)
Cladrastis lutea (Yellowwood)
Fagus sylvatica (European Beech)
Ginkgo biloba (Male Grafted Ginkgo)
Fraximus Pennsylvanica Marshall (Marshall Seedless Ash)
Gleditsia triacanthos inermis (Thornless Honeylocust)
Quercus alba (White Oak)
Quercus borealis (Red Oak)
Quercus phellos (Willow Oak)
Tilia cordata (Little Leaf Linden)
Tilia tomentosa (Silver Linden)
Zelkova serrata (Village Green Zelkova)

MINOR TREES:

Acceptable major trees shall be a minimum of 6' tall and have a minimum caliper of 3/4" measured 6" above ground level. They shall be branched at a point approximately 60% of the total height of the tree above ground. Larger size trees are acceptable but must conform to American Standards for nursery stock.

Acer campestre (Hedge Maple)
Acer ginnala (Amur Maple)
Carpinus caroliniana (American Hornbeam)
Cercis canadensis (Redbud)
Cornus florida (White Flowering Dogwood)
Cornus florida rubra (Red Flowering Dogwood)
Cornus kousa (Kousa Dogwood)
Crataegus phaenopyrum (Washington Hawthorn)
Crataegus mouis (Downey Hawthorn)
Koelreuteria paniculata (Golden Rain-tree)
Ostrya virginiana (Ironwood)
Prunus serrulata 'Kwanzan' (Kwanzan Double PinkFlowering Cherry)
Prunus yodensis (Yoshino Cherry-White)
Pyrus calleryana (Callery Pear-Aristocrat Pear)
Pyrus calleryana (Callery Pear-Redspire Pear)
Sophora japonica (Chinese Scholartree)

OTHER SPECIES:

Considered by request.

P:\SDTSTD\MC703\... 9-29-95 7:52:27 am EST

APPROVED JAN 5 / 96 DATE [signature] DIRECTOR, DEPT. OF TRANS. [signature] ~~CHIEF, DIV. OF ENG. SERVICES~~	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION APPROVED TREE VARIETY LIST STANDARD NO. MC-703.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	

THESE TREE SPECIES ARE INTENDED FOR USE WITH THOSE OPEN SECTION ROADWAY STANDARDS WITH SIDEWALKS (AND BIKEPATHS, AS APPROPRIATE). THE NUMBERS OF THOSE SPECIFIC STANDARDS ARE MC-210.05, MC-211.03, MC-212.04, MC-212.05, MC-213.04, AND MC-217.04.

APPROVED TREE SPECIES LIST

Acceptable trees shall have a minimum caliper of 11/2" measured six inches (6") above ground level. They shall be branched a minimum of five feet above ground. Larger size trees are acceptable but must conform to American Standards for Nursery Stock. Trees designated for a specific roadway section may be planted in another roadway section provided a root barrier is installed as needed to protect sidwalks and paths.

TERTIARY ROADWAY

Koelreuteria paniculata	(Golden Rain Tree)	Quercus coccinea	(Scarlet Oak)
Pyrus calleryana "Aristocrat"	(Aristocrat Pear)	Quercus prinus	(Chestnut Oak)
Pyrus calleryana "Redspire"	(Redspire Pear)	Tilia tomentosa	(Silver Linden)
Sophora japonica	(Scholartree)	Tilia cordata	(Little Leaf Linden)
Ginkgo biloba	(Ginkgo – male)		

SECONDARY ROADWAY

Koelreuteria paniculata	(Golden Rain Tree)	Nyssa sylvatica	(Blackgum)
Pyrus calleryana "Aristocrat"	(Aristocrat Pear)	Quercus prinus	(Chestnut Oak)
Pyrus calleryana "Redspire"	(Redspire Pear)	Quercus coccinea	(Scarlet Oak)
Sophora japonica	(Scholartree)	Tilia cordata	(Little Leaf Linden)
Tilia tomentosa	(Silver Linden)		
Ginkgo biloba	(Ginkgo – male)		

PRIMARY ROADWAY

Acer nigrum	(Black Maple)	Celtis occidentalis	(Hackberry)
Acer saccharum	(Sugar Maple)	Ginkgo biloba	(Ginkgo – male)
Fraxinus pennsylvanica	(Green Ash)	Nyssa sylvatica	(Blackgum)
Koelreuteria paniculata	(Golden Rain Tree)	Platanus x acerifolia	(London Planetree)
Pyrus calleryana "Redspire"	(Redspire Pear)	Quercus acutissima	(Saw Toothed Oak)
Quercus coccinea	(Scarlet Oak)	Quercus prinus	(Chestnut Oak)
Quercus rubra	(Northern Red Oak)	Quercus shumardii	(Shumard Oak)
Pyrus calleryana "Aristocrat"	(Aristocrat Pear)	Tilia tomentosa	(Silver Linden)
Sophora japonica	(Scholartree)	Tilia cordata	(Little Leaf Linden)
Ulmus hybrids	(Hybrid Elms)	Zelkova serrata	(Japanese Zelkova)

ARTERIAL ROADWAY

Gleditsia triacanthos var. inermis	(Thornless Honeylocust)	Ginkgo biloba	(Ginkgo – male)
Quercus phellos	(Willow Oak)	Quercus coccinea	(Scarlet Oak)
Quercus rubra	(Northern Red Oak)	Quercus prinus	(Chestnut Oak)
Tilia tomentosa	(Silver Linden)	Tilia cordata	(Little Leaf Linden)

APPROVED 11 July 2000 DATE

DIRECTOR, DPWT

REVISED

MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

APPROVED TREE SPECIES LIST

STANDARD NO. MC-703.02

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department	**Effective Date**
Department of Transportation	

Allowable Greenspace Plantings

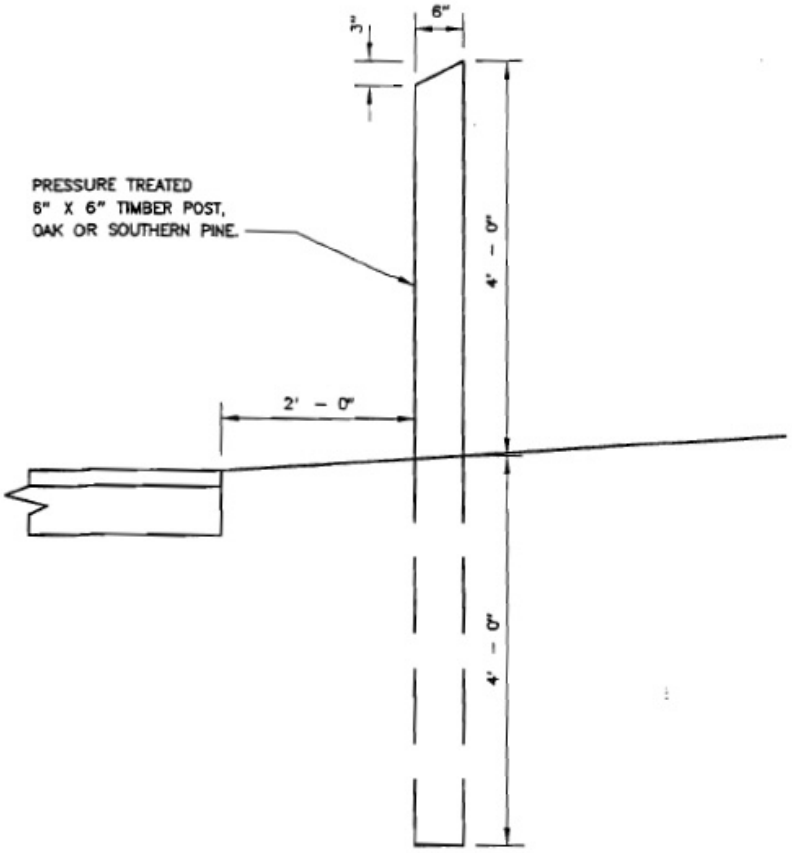
1. Plants installed on the County right-of-way cannot block vehicle operator sight distances along roadways or impede the use of public sidewalks.
2. Plantings must not cause erosion of the soil on the right-of-way. All exposed soil must be protected from erosion by mulch, erosion control fabric or other such means.
3. All resident or community installed plantings under this standard are the maintenance responsibility of the resident or community.
4. Weeds as defined in Chapter 58 of the County code, noxious or otherwise, are not permitted.
5. Invasive plants are not permitted. Invasives are plants which by their growth habits or origin:
   - are aggressive in their growth requiring repeated containment efforts through the growing season; examples include but are not limited to; English ivy, kudzu, porcelain berry, purple loosestrife, ailanthus
   - have no native or natural control mechanism,
   - suppress the growth of other plants, especially natives, by chemical, aggressive growth, shading, or other means,
   - spread rapidly,
   - are listed by the U. S. Department of Agriculture as invasive.
6. Acceptable plants may be ornamental grasses, flowers, herbaceous perennials or woody plants which at maturity will not exceed a height of 18" without the need for pruning.
7. No vegetable plantings are permitted.
8. Under Maryland State law, plantings allowed under these guidelines can not be located within 15' of fire hydrants, for other items appearing in the right-of-way such as: utility meters, sewer clean outs, etc., a minimum of 3' is to be kept free of plantings.
9. The planting design must provide for access across the right-of-way from the edge of pavement to the sidewalk where sidewalks are present. Access paths must be at least 36" wide and should occur at least every 25' and can be by flagstone, brick, mulched path or other suitable means.
10. On closed section roads, plant material should not be located so as to impede people from opening doors of vehicles parked at the edge of pavement or curb line.
11. Plantings must not impede drainage flows on open section roads. Plantings are allowed only on the house side of the drainage swale and a minimum 2' wide zone along the drainage path at the bottom of drainage swales must be kept clear of all plant material.
12. Any plant material installed on the County right-of-way by residents will not be replaced by the Department of Public Works and Transportation if damaged as a result of County maintenance activities. To minimize the potential for damage resulting from maintenance activities plantings should not be located within 1' of the edge of pavement on open section roads, the back edge of curb on closed section roads, or the sidewalk if present.
13. All parts of plants located on the right-of-way (other than trees) must be kept within the confines of the planting area.
14. Plantings must allow for natural drainage of surface water flows across the right-of-way and must not cause ponding of water on either the public sidewalk or adjacent properties.
15. The County assumes no liability for any adverse consequences resulting from privately installed plantings located on the public right-of-way.

APPROVED 7/29/03 DATE DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION CHIEF, DIV. OF ENG. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION ALLOWABLE GREENSPACE PLANTINGS STANDARD NO. MC-704.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. THIS STANDARD IS INTENDED TO BE USED FOR REPLACEMENT OF EXISTING WOODEN POSTS.
3. BARRICADE POST IS TO BE PLACED IN AN AUGERED HOLE SPACED 5 FEET ON CENTER.
4. REFLECTORIZED METAL PLATE TO BE FASTENED 6 INCHES BELOW THE TOP FACE (FRONT SIDE) OF THE POST (4" MIN. WIDTH, 70 SQ. IN. MINIMUM AREA) USING GALVANIZED SCREWS.

APPROVED JAN 5/96 DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

BARRICADE POST

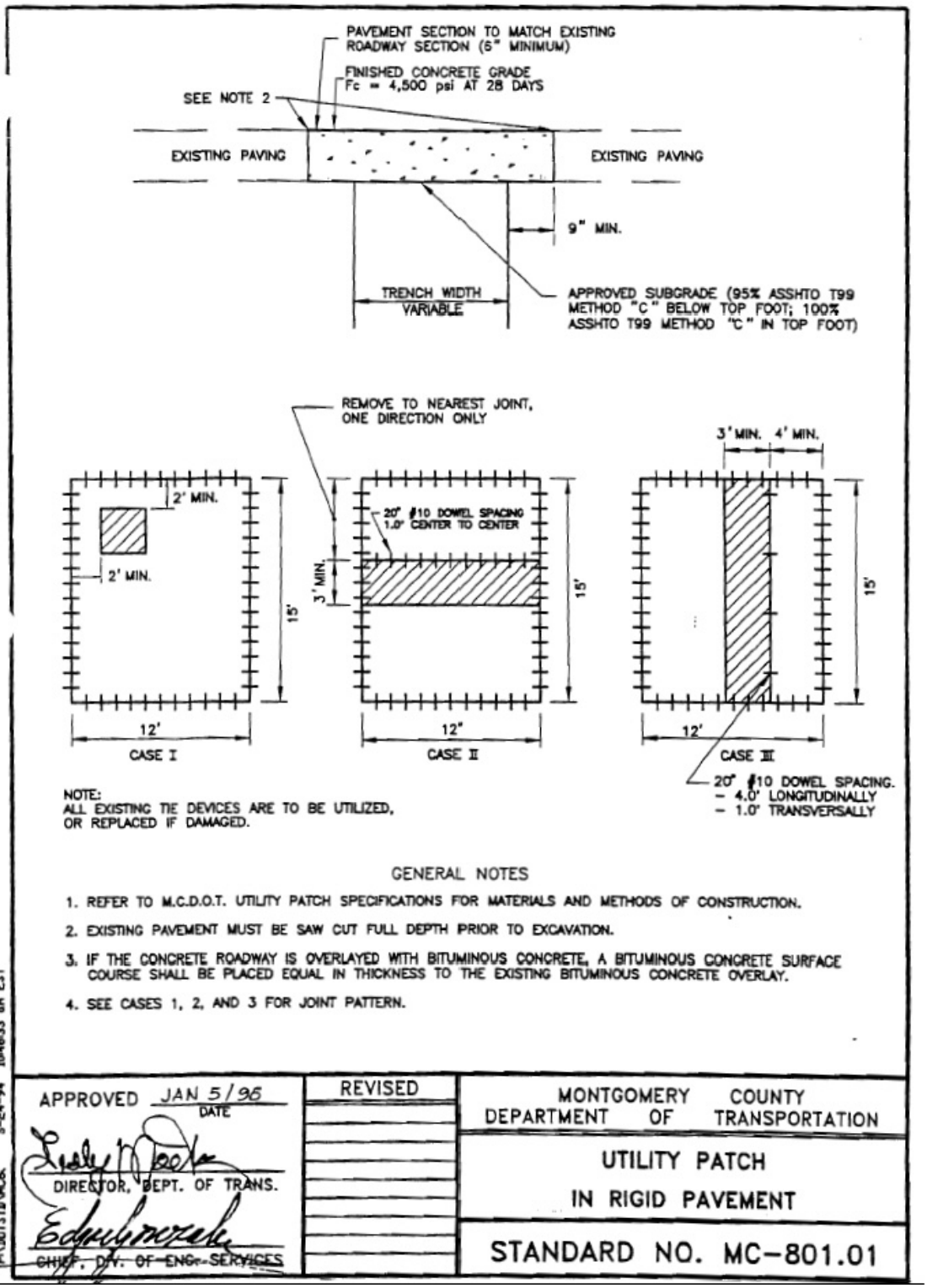
STANDARD NO. MC-800.01

P:\DOTSTD\MC800. 9-24-94 9:44:21 am EST

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



GENERAL NOTES

1. REFER TO M.C.D.O.T. UTILITY PATCH SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
2. EXISTING PAVEMENT MUST BE SAW CUT FULL DEPTH PRIOR TO EXCAVATION.
3. IF THE CONCRETE ROADWAY IS OVERLAYED WITH BITUMINOUS CONCRETE, A BITUMINOUS CONCRETE SURFACE COURSE SHALL BE PLACED EQUAL IN THICKNESS TO THE EXISTING BITUMINOUS CONCRETE OVERLAY.
4. SEE CASES 1, 2, AND 3 FOR JOINT PATTERN.

APPROVED JAN 5/95 DATE DIRECTOR, DEPT. OF TRANS. CHIEF, DIV. OF ENGR. SERVICES	REVISED	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION UTILITY PATCH IN RIGID PAVEMENT STANDARD NO. MC-801.01

3-24-94 10:48:33 am EST
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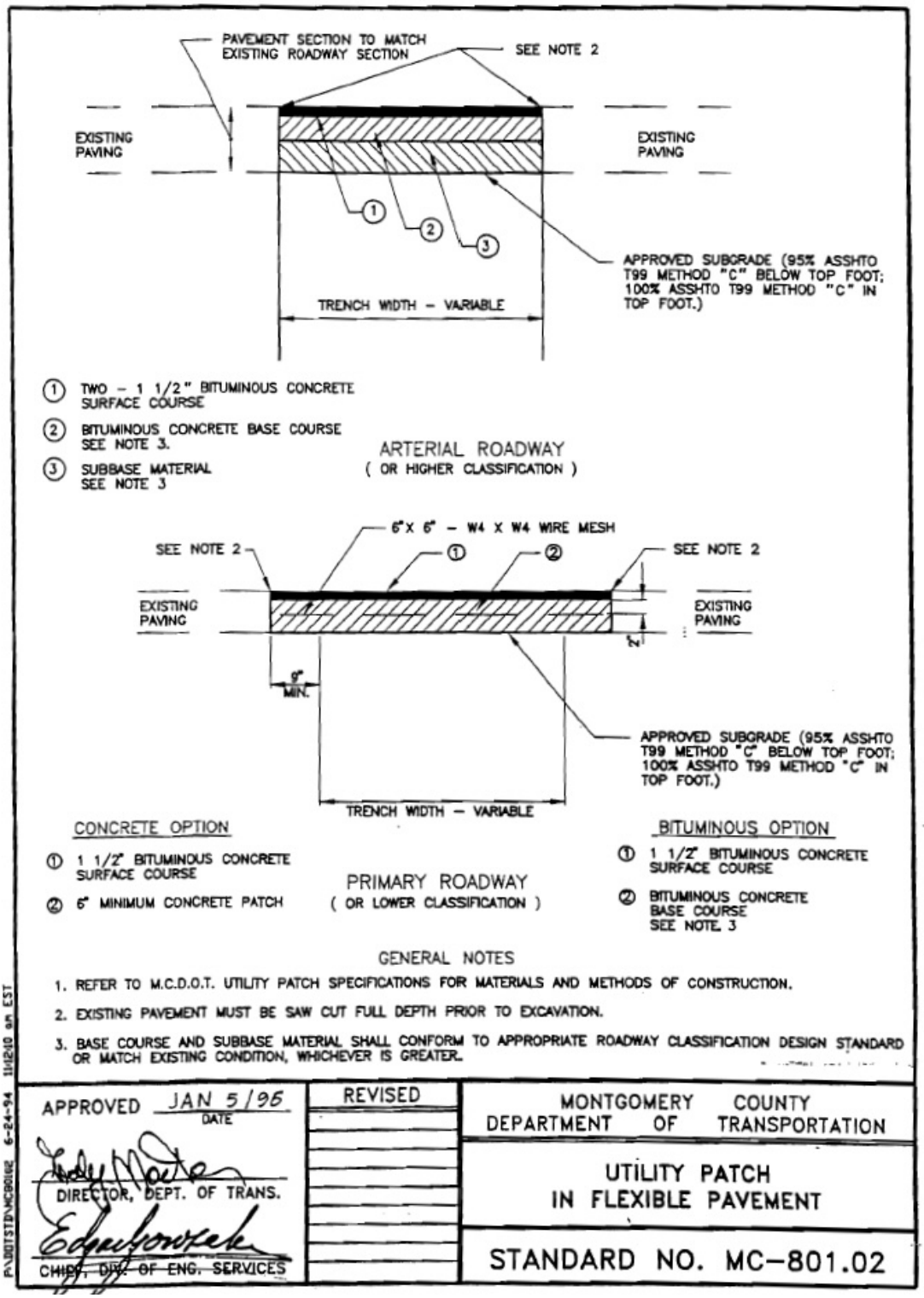
MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Adoption of Context Sensitive Road Design Standards - Repeal	025-25
Originating Department Department of Transportation	**Effective Date**



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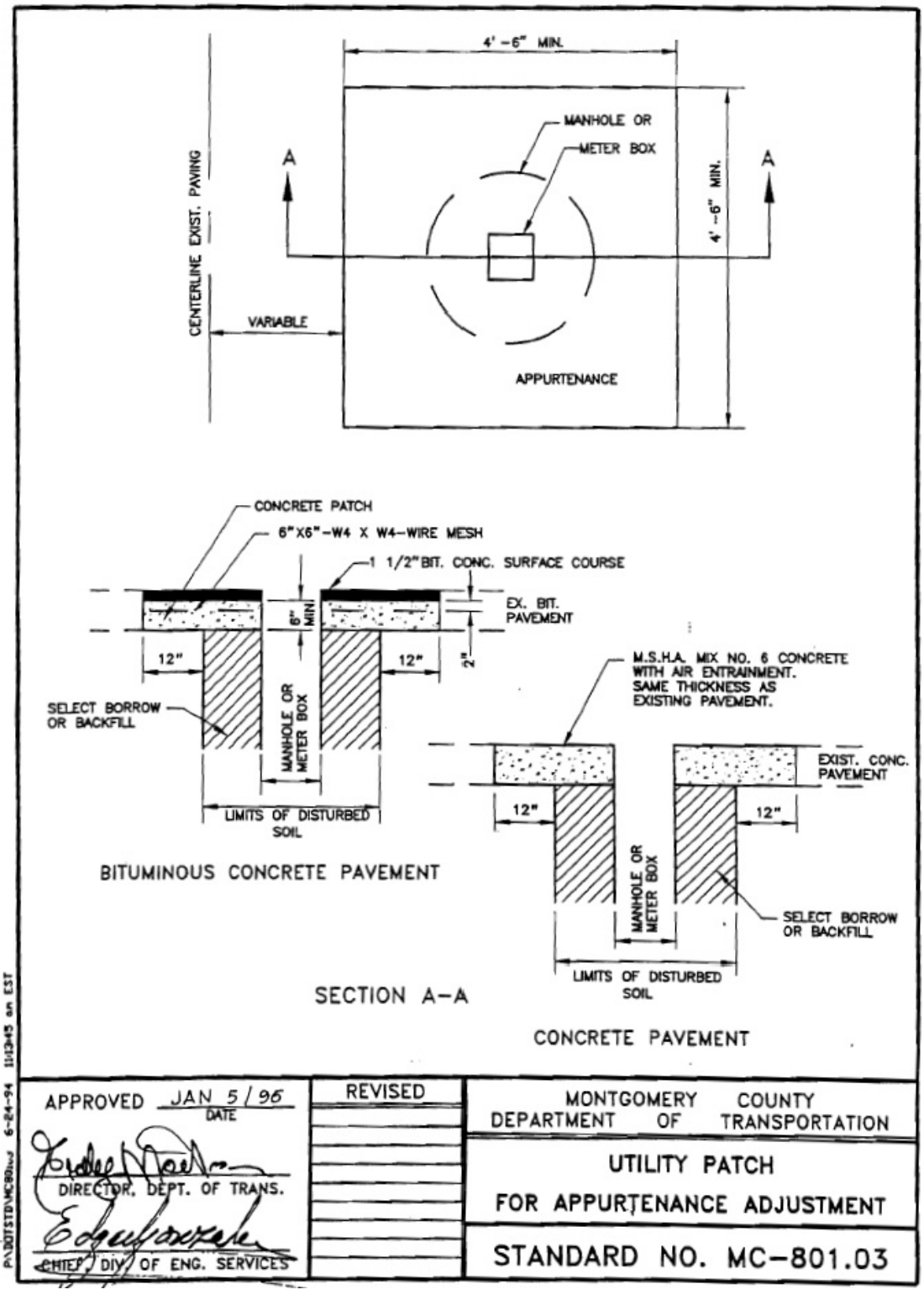

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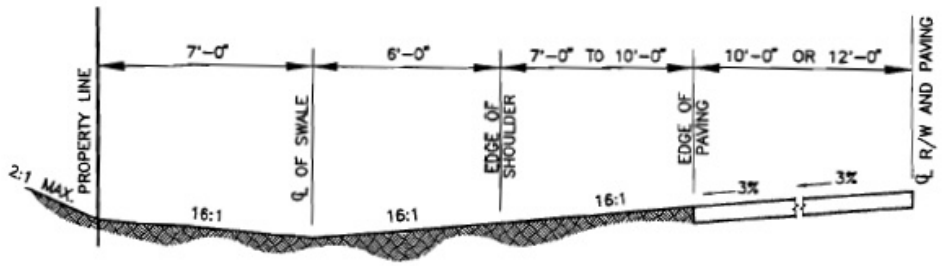

SWALE CAPACITY AT 4" DEPTH		
SLOPE (%)	Q MAX. (c.f.s.)	VELOCITY(F.P.S.)
2.0	2.3	1.3
2.5	2.5	1.4
3.0	2.7	1.6
3.5	3.0	1.7
4.0	3.2	1.8
4.5	3.4	1.9
5.0	3.6	2.0
5.5	3.7	2.1
6.0	3.9	2.2
6.5	4.1	2.3
7.0	4.2	2.4
7.5	4.4	2.4
8.0	4.5	2.5
8.5	4.6	2.6
9.0	4.8	2.7
9.5	4.9	2.8
10.0	5.0	2.8

NOTE :
THIS STANDARD MAY BE USED ALONG OPEN SECTION ROADS ONLY WHERE FLOW QUANTITIES ARE EQUAL TO OR LESS THAN INDICATED, AND ONLY UPON SPECIFIC DOT APPROVAL CONSIDERING POTENTIAL FOR FLOODING. IT MAY NOT BE USED IN RESIDENTIAL AREAS.

P:\EDITSTD\MC810D1 -12-94 90233 on EST

APPROVED JAN 5/96
DATE

DIRECTOR, DEPT. OF TRANS.

CHIEF, DIV. OF ENG. SERVICES

REVISED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

SWALE SECTION

STANDARD NO. MC-810.01

MONTGOMERY COUNTY EXECUTIVE REGULATION

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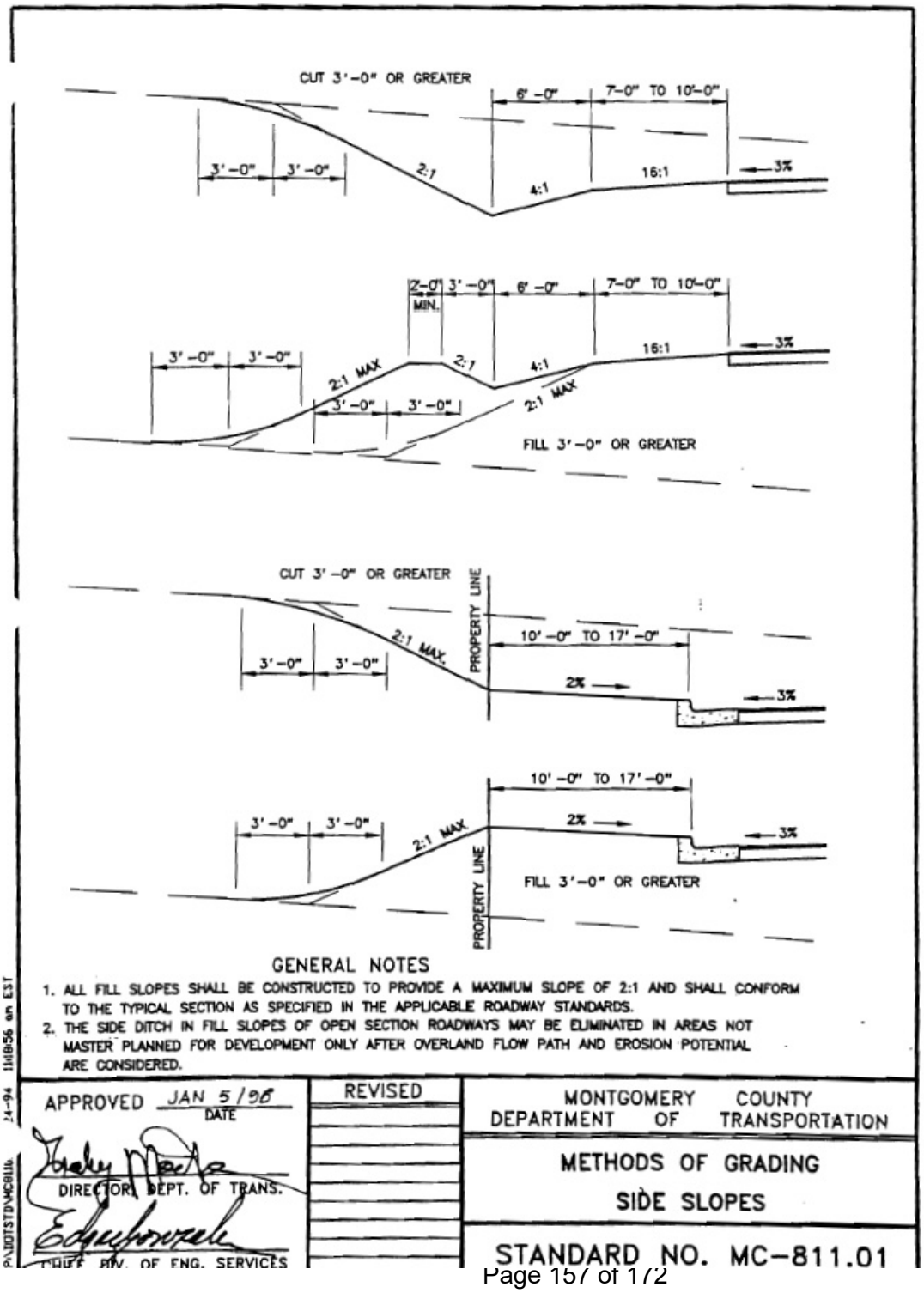

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Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

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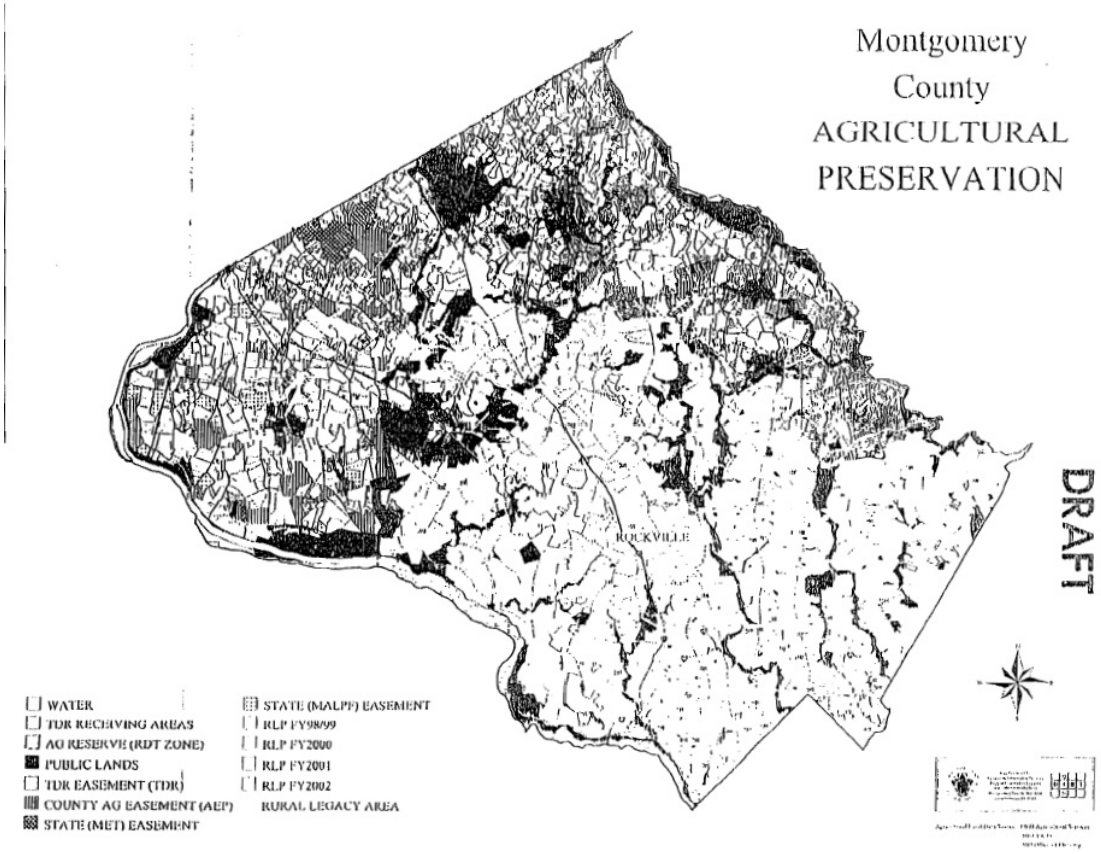
Appendix A



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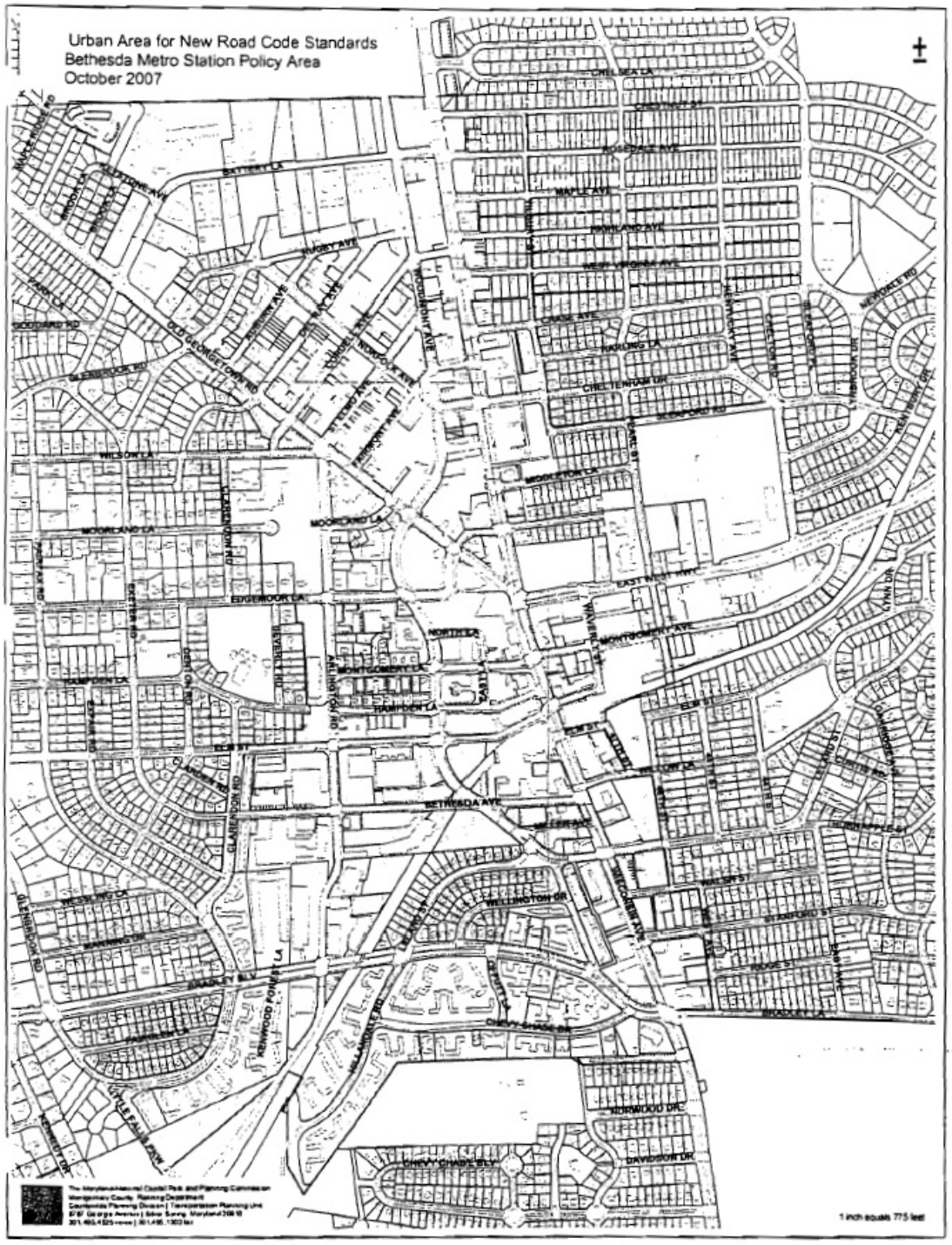

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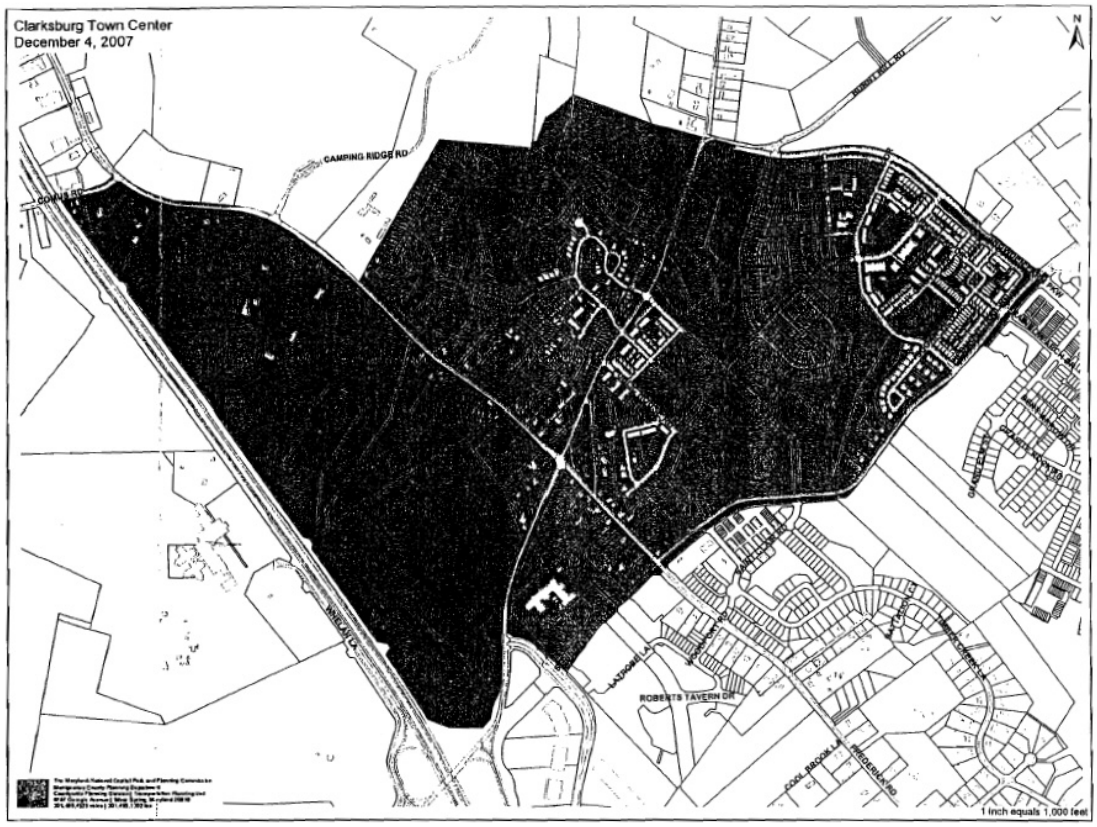

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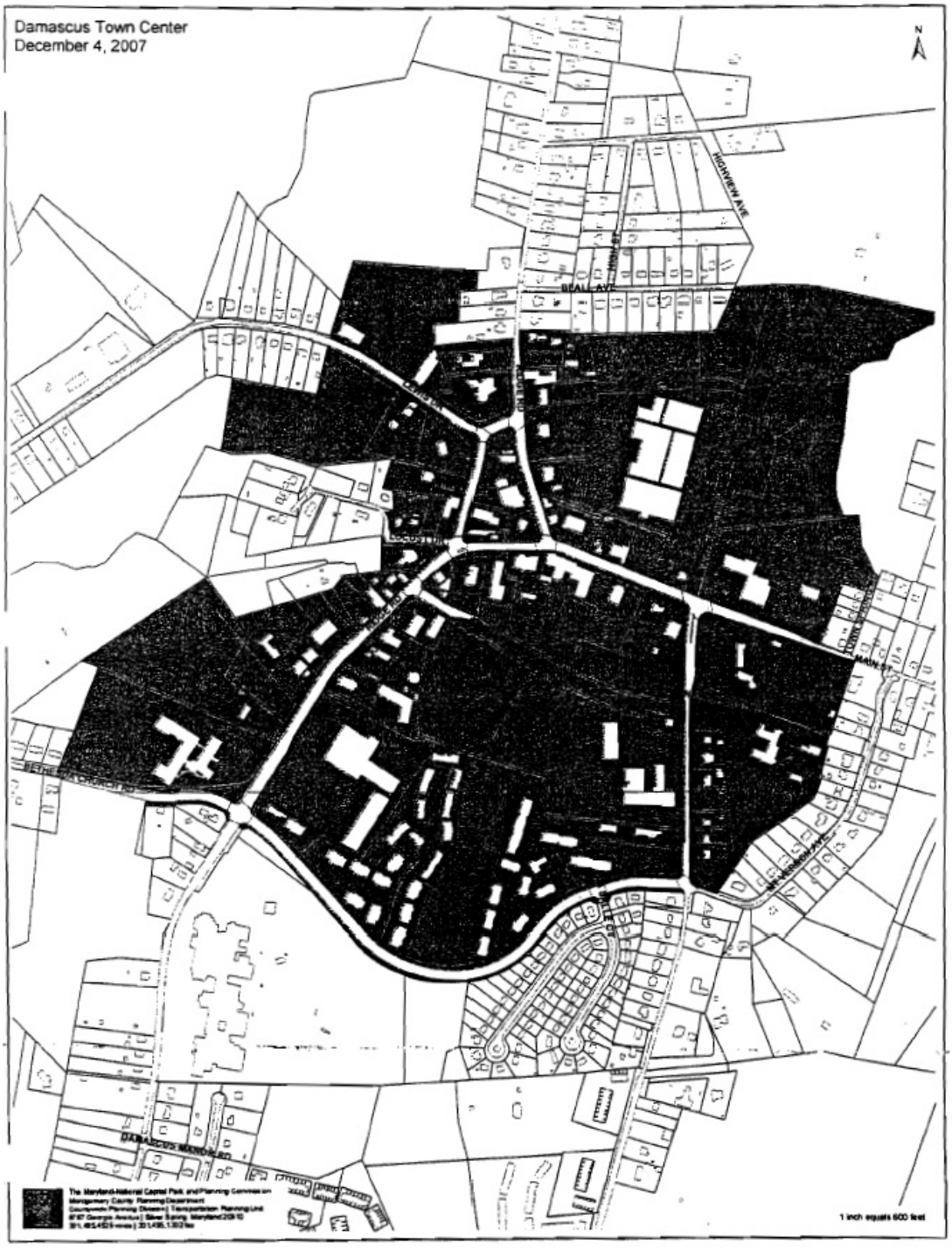

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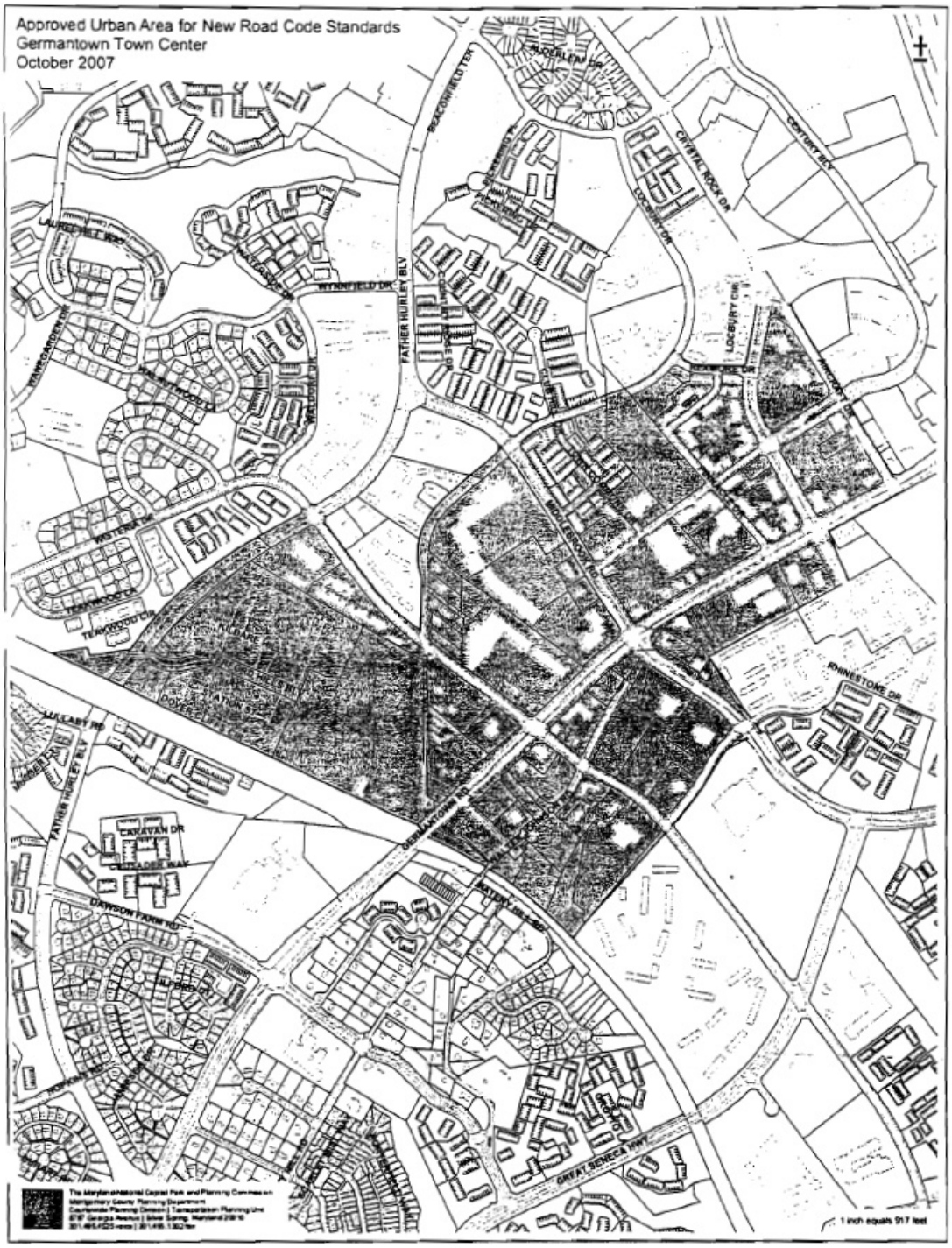

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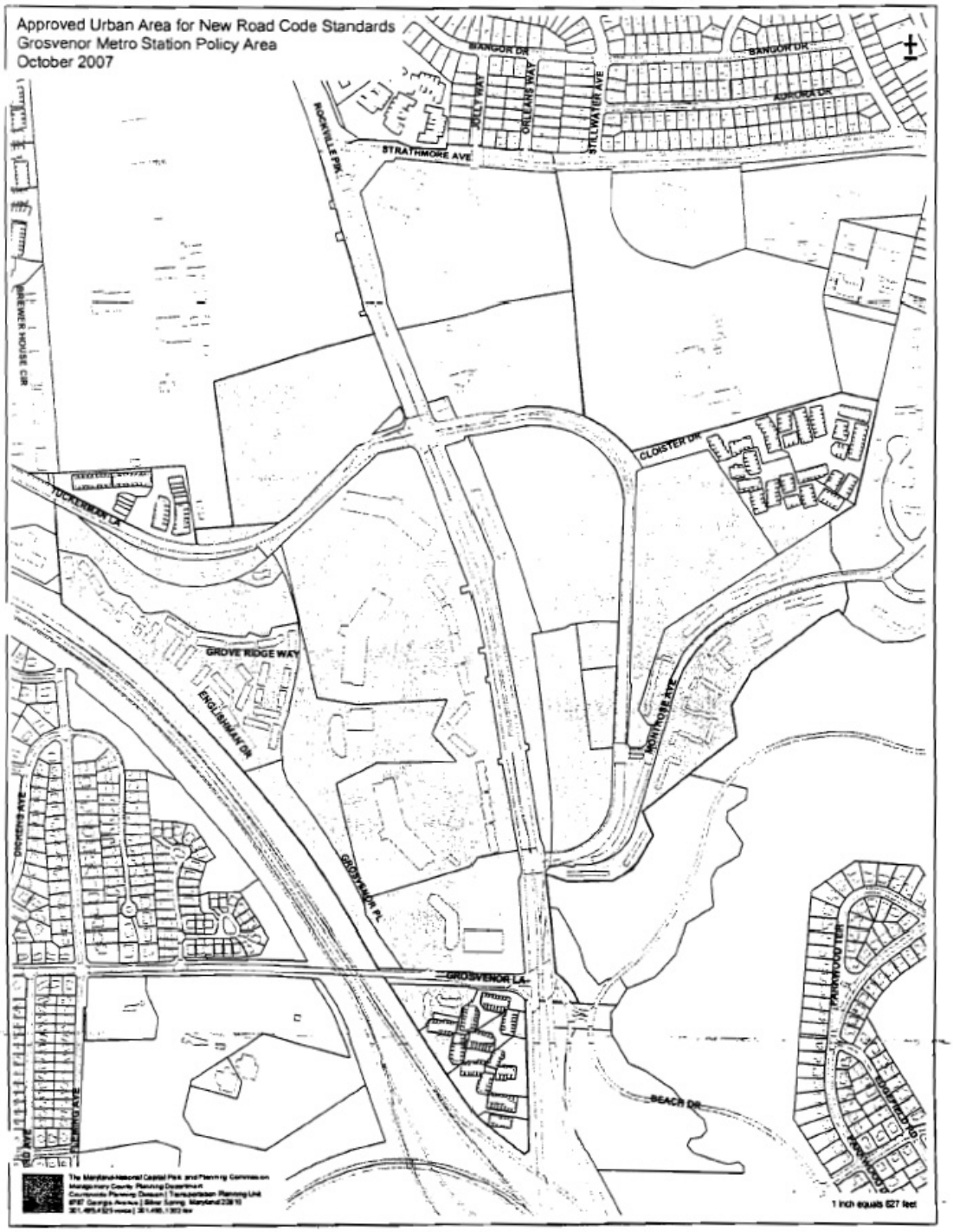

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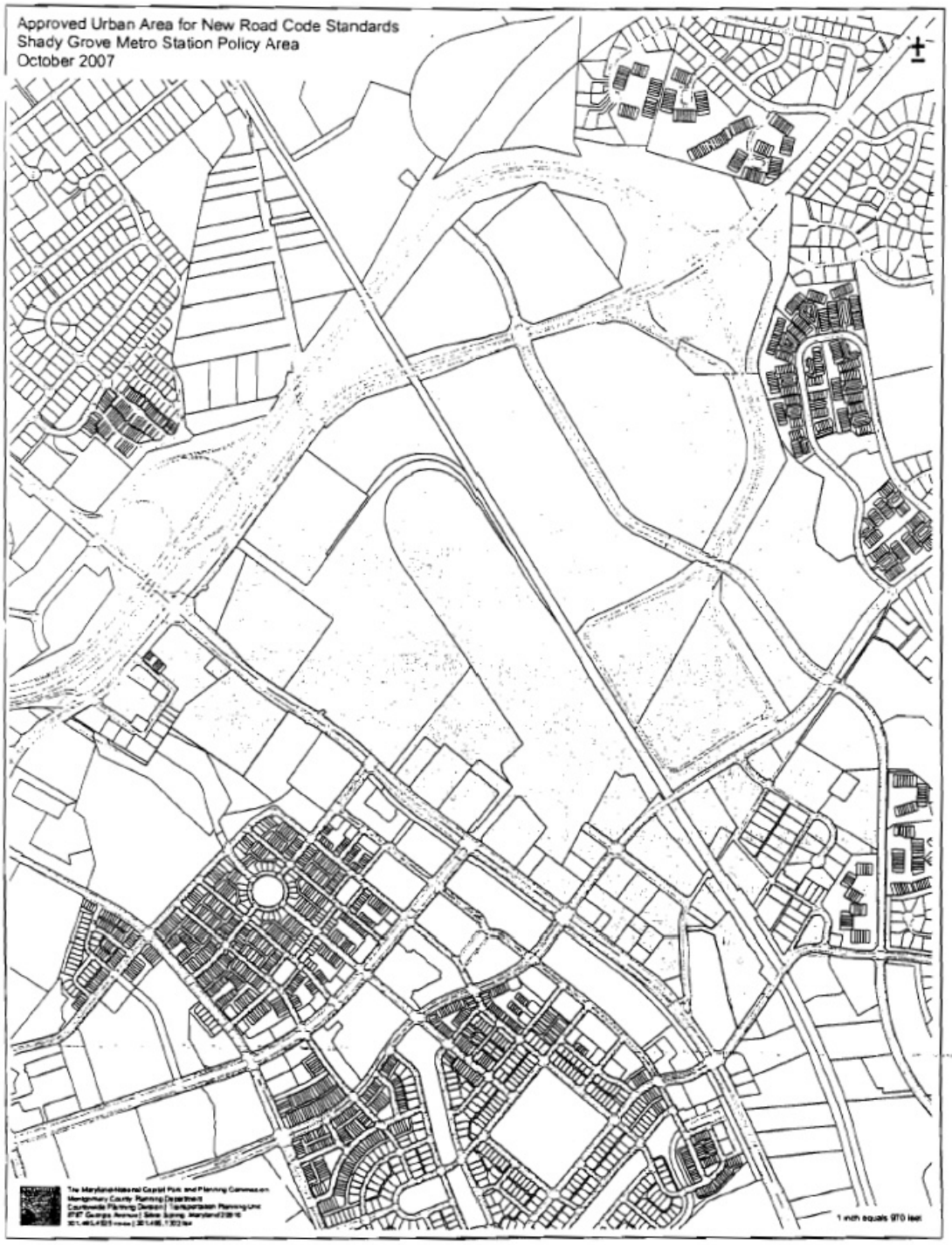

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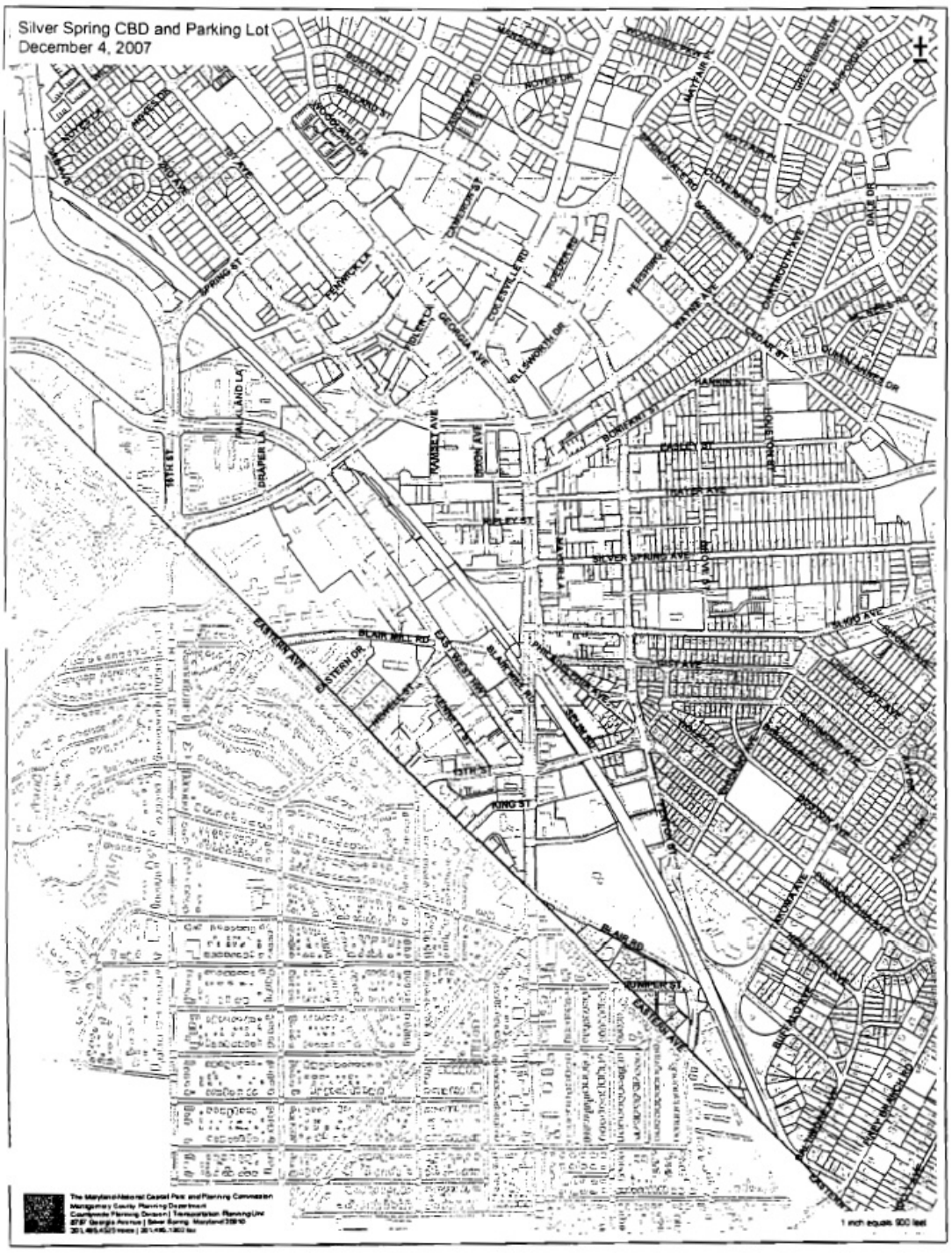

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Department of Transportation	

Approved:

Marc Elrich, County Executive — Date

APPROVED AS TO FORM AND LEGALITY
OFFICE OF THE COUNTY ATTORNEY

Assistant County Attorney — Sep 15, 2025
Date