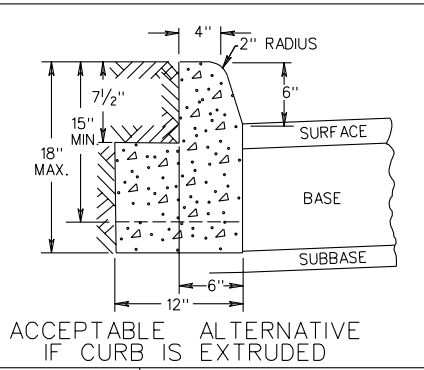
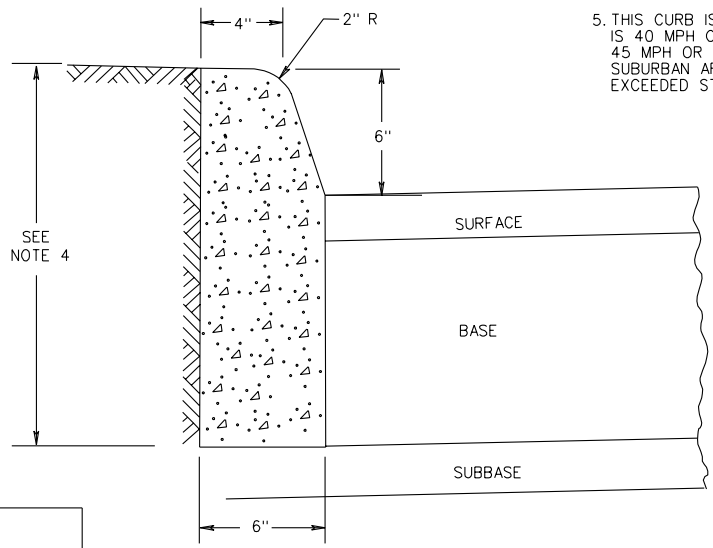


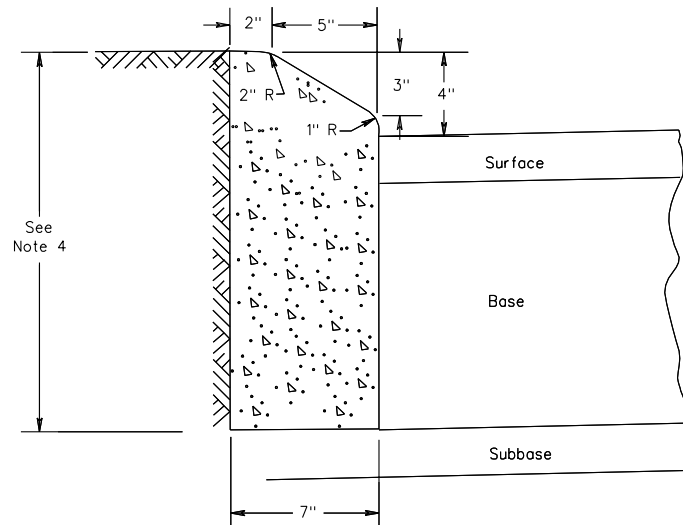
NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. CURB HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) WILL BE PAID FOR AS RADIAL CURB.
4. THE DEPTH OF CURB MAY BE REDUCED AS MUCH AS 3" (15" DEPTH) OR INCREASED AS MUCH AS 3" (21" DEPTH) IN ORDER THAT THE BOTTOM OF CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE. OTHERWISE THE DEPTH IS TO BE 18" AS SHOWN. NO ADJUSTMENT IN THE PRICE BID IS TO BE MADE FOR A DECREASE OR AN INCREASE IN DEPTH.
5. THIS CURB IS TO BE USED WHEN DESIGN SPEED IS 40 MPH OR LESS ON RURAL HIGHWAYS AND 45 MPH OR LESS IN DEVELOPED URBAN AND SUBURBAN AREAS. IF THESE DESIGN SPEEDS ARE EXCEEDED STANDARD CG-3 IS REQUIRED.



SPECIFICATION REFERENCE
105 502

STANDARD 6" CURB
VIRGINIA DEPARTMENT OF TRANSPORTATION



Notes:

1. This item may be precast or cast in place.
2. Concrete to be Class A3 if cast in place, 4000 PSI if precast.
3. Curb having a radius of 300 feet, or less (along face of curb) will be paid for as radial curb.
4. **The depth of curb may be reduced as much as 3" (13" depth) or increased as much as 3" (19" depth) in order that the bottom of curb will coincide with the top of a course of the pavement substructure.** Otherwise the depth is to be 16" as shown. No adjustment in the price bid is to be made for a decrease or an increase in depth.
5. This curb shall be used when design speed is greater than 40 MPH on Rural highways and 45 MPH in developed Urban and Suburban areas.
6. When this standard is to be tied into existing barrier curb, the transition is to be made within 10' or the change in standards made at regular openings.

STANDARD 4" CURB

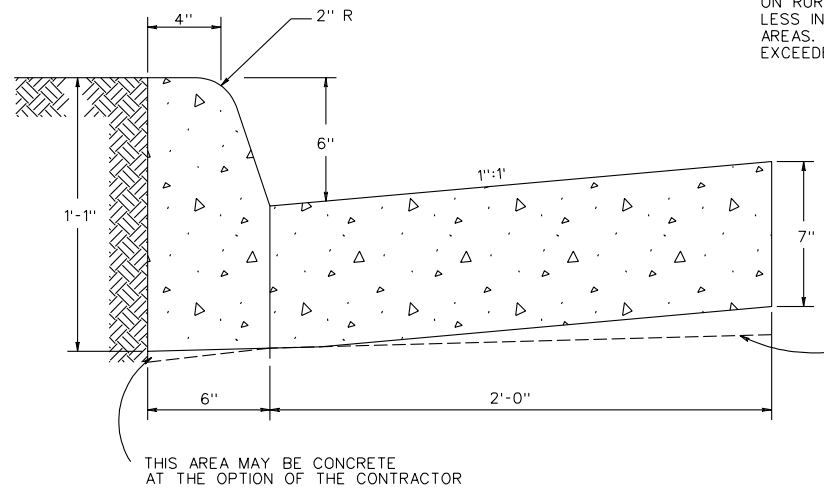
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

105
502

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) SHALL BE PAID FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER, THE BOTTOM OF THE CURB AND GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES AND TO THE DEPTH OF THE PAVEMENT.
5. THIS CURB MAY BE USED WHEN DESIGN SPEED IS 40 MPH OR LESS ON RURAL HIGHWAYS AND 45 MPH OR LESS IN DEVELOPED URBAN & SUBURBAN AREAS. IF THESE DESIGN SPEEDS ARE EXCEEDED STANDARD CG-7 IS REQUIRED.



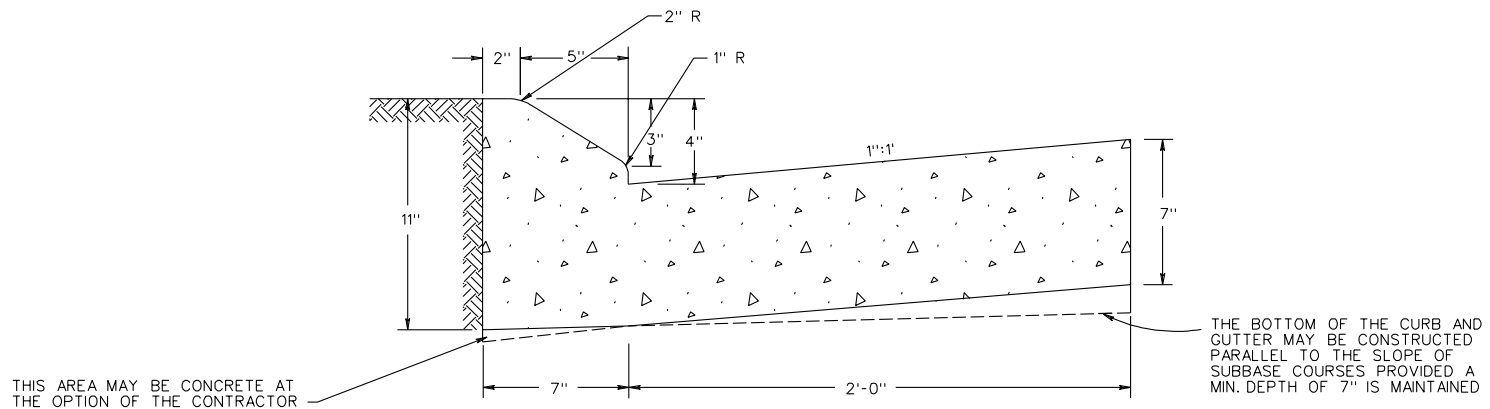
SPECIFICATION REFERENCE
105 502

COMBINATION 6" CURB & GUTTER

VIRGINIA DEPARTMENT OF TRANSPORTATION

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) SHALL BE PAID FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER, THE BOTTOM OF THE CURB AND GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES AND TO THE DEPTH OF THE PAVEMENT.
5. THIS CURB MAY BE USED WITH ANY DESIGN SPEED BUT IS REQUIRED WHEN DESIGN SPEED IS GREATER THAN 40 MPH ON RURAL HIGHWAYS AND 45 MPH IN DEVELOPED URBAN & SUBURBAN AREAS.
6. WHEN THIS STANDARD IS TO BE TIED INTO EXISTING BARRIER CURB, THE TRANSITION IS TO BE MADE WITHIN 10' OR THE CHANGE IN STANDARDS MADE AT REGULAR OPENINGS.
7. WHEN COMBINATION MOUNTABLE CURB AND GUTTER IS USED, THE STANDARD ENTRANCE GUTTERS OR STANDARD CONNECTION FOR STREET INTERSECTIONS ARE TO HAVE THE MOUNTABLE CURB CONFIGURATION INCORPORATED.

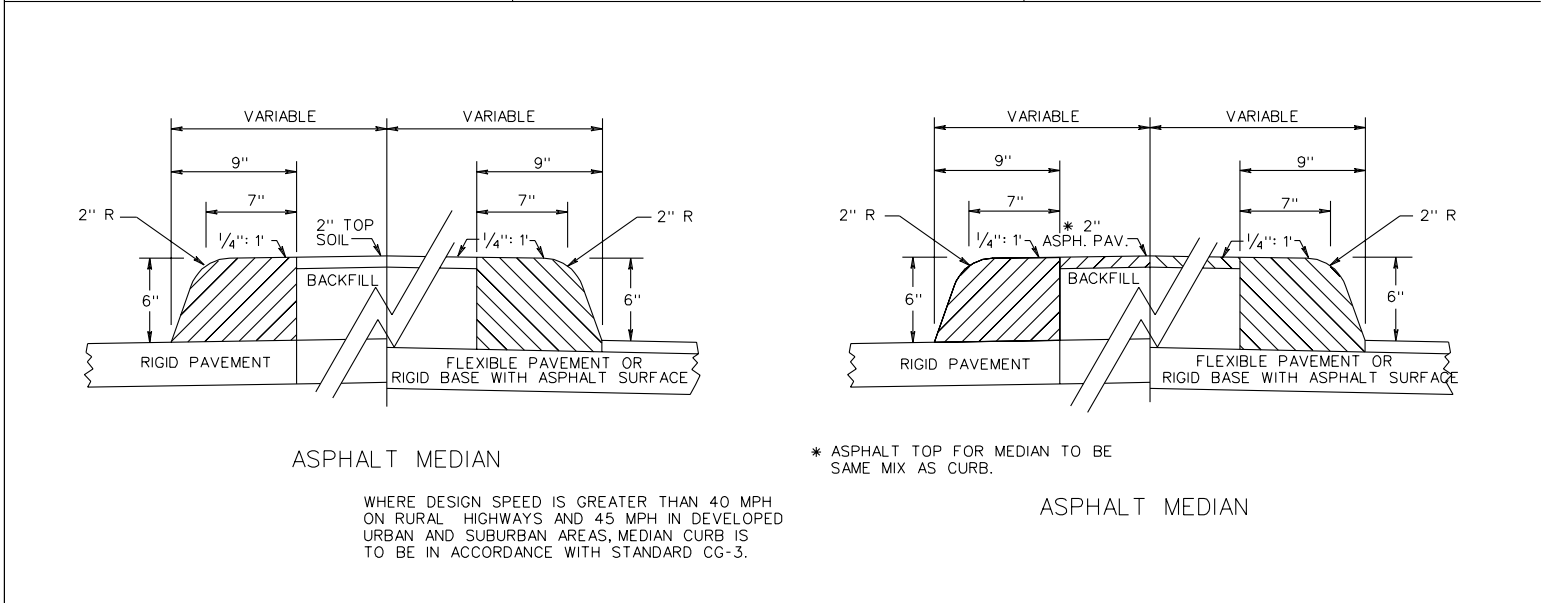
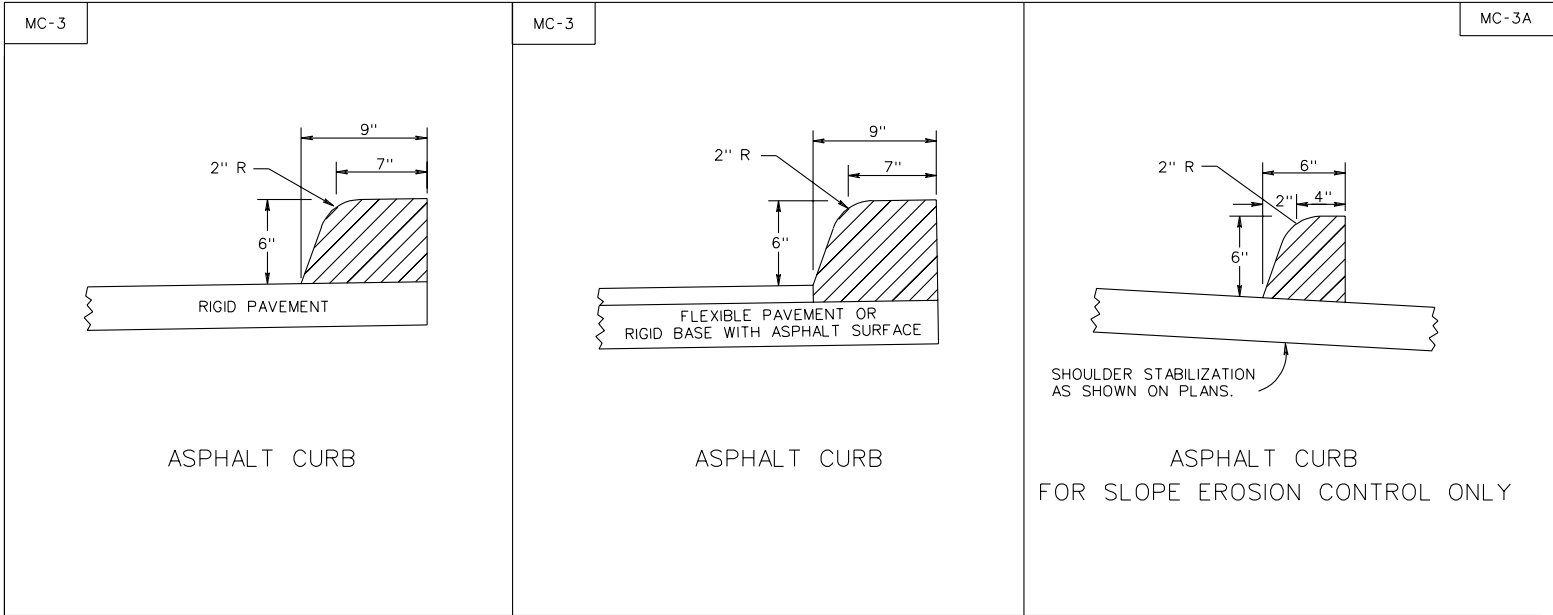


COMBINATION 4" CURB & GUTTER

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

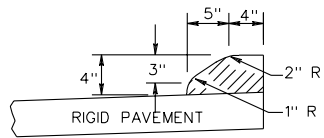
105
502



WHERE DESIGN SPEED IS GREATER THAN 40 MPH ON RURAL HIGHWAYS AND 45 MPH IN DEVELOPED URBAN AND SUBURBAN AREAS, MEDIAN CURB IS TO BE IN ACCORDANCE WITH STANDARD CG-3.

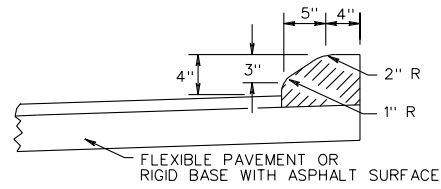
SPECIFICATION REFERENCE	ASPHALT CONCRETE CURB AND MEDIAN FOR TEMPORARY OR PERMANENT INSTALLATION
502	VIRGINIA DEPARTMENT OF TRANSPORTATION
	201.05

MC-3B



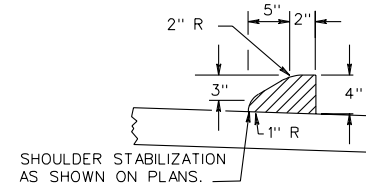
ASPHALT CURB

MC-3B



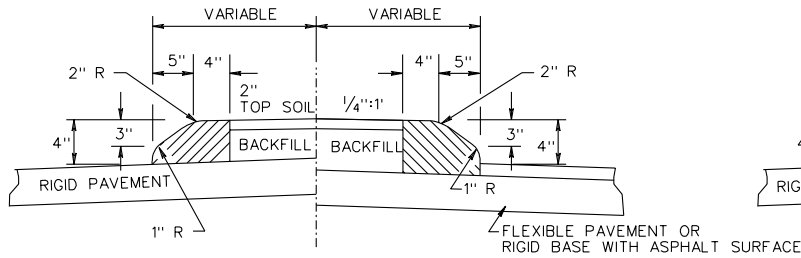
ASPHALT CURB

MC-3C

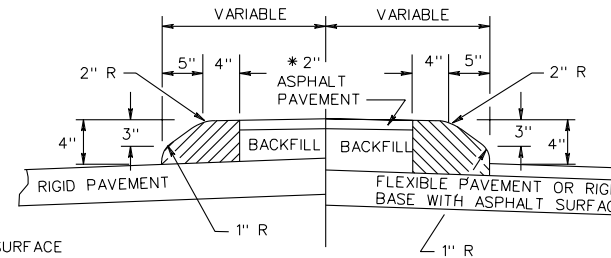


ASPHALT CURB FOR SLOPE EROSION CONTROL ONLY

MC-3B



ASPHALT MEDIAN



ASPHALT MEDIAN

* ASPHALT TOP FOR MEDIAN TO BE SAME MIX AS CURB.

STANDARD MC-3B TO BE USED WHERE DESIGN SPEED IS GREATER THAN 40 MPH ON RURAL HIGHWAYS AND 45 MPH IN DEVELOPED URBAN OR SUBURBAN AREAS.

ASPHALT CONCRETE CURB AND MEDIAN FOR TEMPORARY OR PERMANENT INSTALLATION

VIRGINIA DEPARTMENT OF TRANSPORTATION

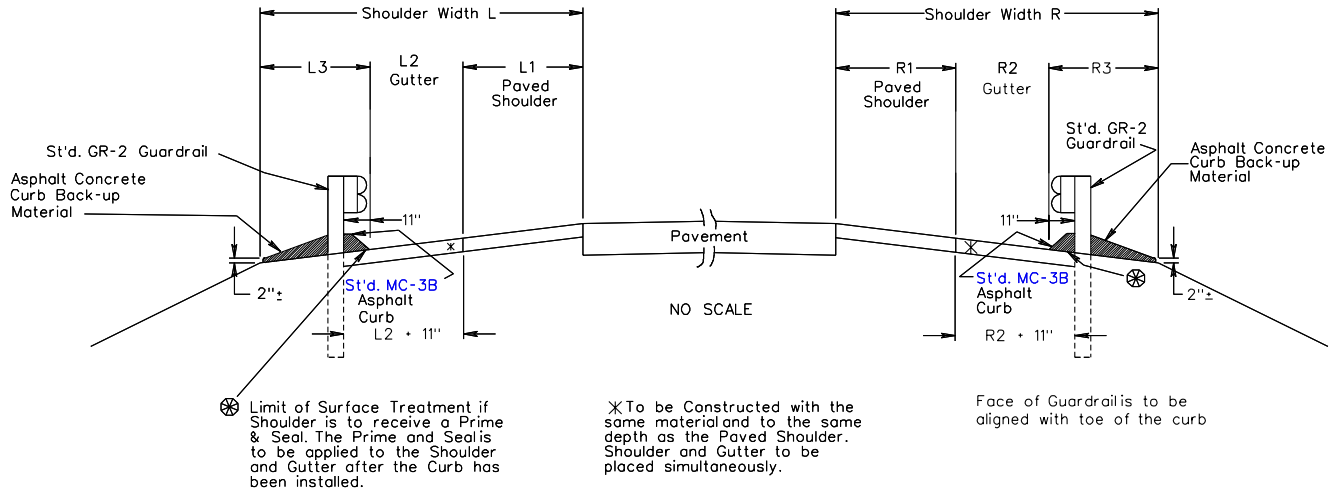
SPECIFICATION REFERENCE

502

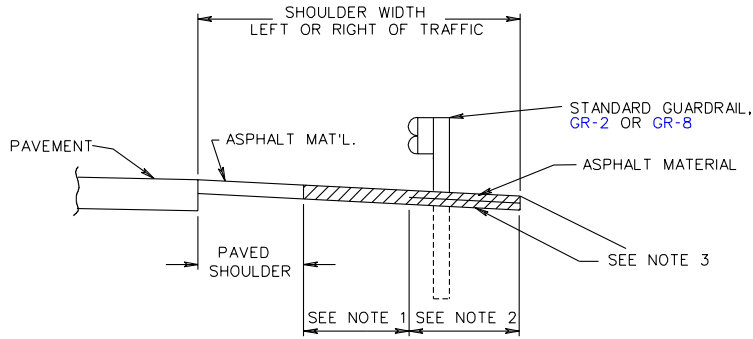
201.06

LEFT OF TRAFFIC			
Shoulder Width L	L1	L2	L3
15'	10'	2'	3'
15'	4'	8'	3'
15'	3'	9'	3'
13'	3'	7'	3'
12'	10'	—	2'
11'	3'	5'	3'
8'	4'	2'	2'
8'	3'	3'	2'

RIGHT OF TRAFFIC			
Shoulder Width R	R1	R2	R3
15'	10'	2'	3'
15'	6'	6'	3'
13'	6'	4'	3'
11'	6'	2'	3'
9'	6'	—	3'



ST'D. GR-2 & MC-3B (11") ASPHALT CURB INSTALLATION



RIGHT OF TRAFFIC			
SHOULDER WIDTH	R1	R2	R3
15'	10'	2'	3'
15'	6'	6'	3'
13'	6'	4'	3'
11'	6'	2'	3'
9'	6'	—	3'

ASPHALT PAVING UNDER GUARDRAIL
(FOR USE WHERE ASPHALT CURB IS NOT REQUIRED)

NOTES:

1. TO BE CONSTRUCTED WITH THE SAME MATERIAL AND TO THE SAME DEPTH AS THE PAVED SHOULDER.
2. TO BE CONSTRUCTED WITH THE SAME ASPHALT MATERIALS AS THE PAVED SHOULDER TO THE FOLLOWING DEPTHS:

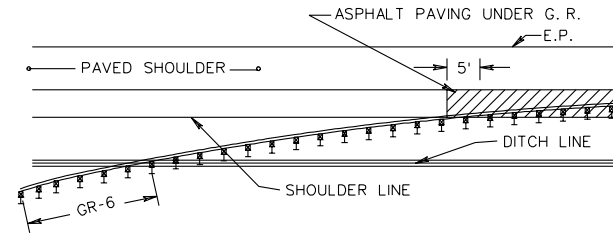
ALLOWABLE DEPTHS OF ASPHALT MATERIAL

IM-19.01A OR IM-19.0D	2" MIN.
BM-25.0	3" MIN.
BM-37.5	4" MIN.

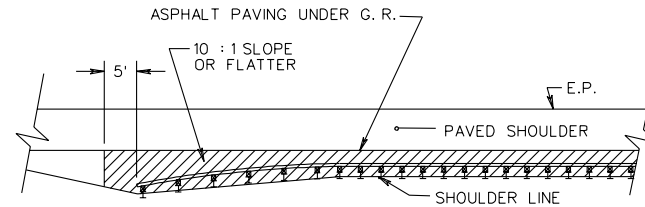
3. DEPTH OF ASPHALT MATERIAL MAY BE EXTENDED AT THE CONTRACTOR'S OPTION TO COINCIDE WITH THE BOTTOM OF THE PAVED SHOULDER COURSE AT NO INCREASE IN THE QUANTITY OF ASPHALT MATERIAL COMPUTED USING THE ABOVE SPECIFIED DEPTH.

ADDITIONAL 5 FEET ASPHALT PAVING BEYOND POINT WHERE GUARDRAIL CROSSES SHOULDER LINE.

FOR ADDITIONAL DESIGN AND PLACEMENT INFORMATION SEE SHEET 1 OF 2.

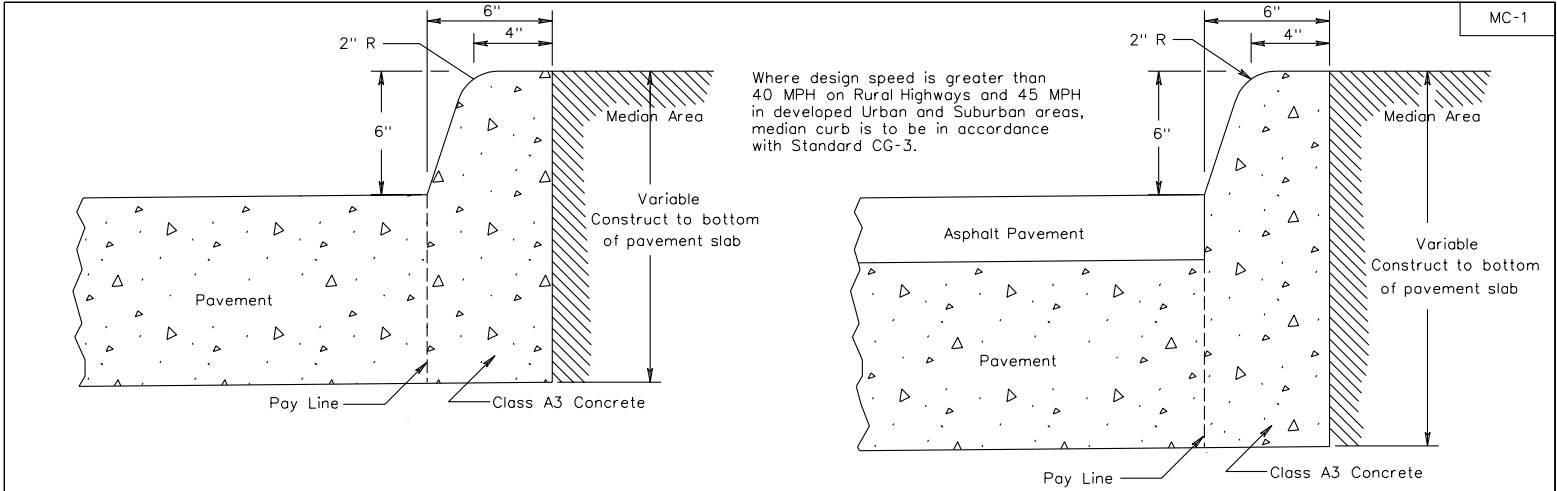


GR-6 TERMINAL



GR-7 & GR-9 TERMINALS

METHODS FOR BEGINNING & ENDING ASPHALT PAVING UNDER GUARDRAIL AND GUARDRAIL INSTALLATION SITE PREPARATION REQUIREMENTS FOR GR-7 AND GR-9. SEE STANDARD GR-SP FOR SPECIFIC SITE PREPARATION REQUIREMENTS.



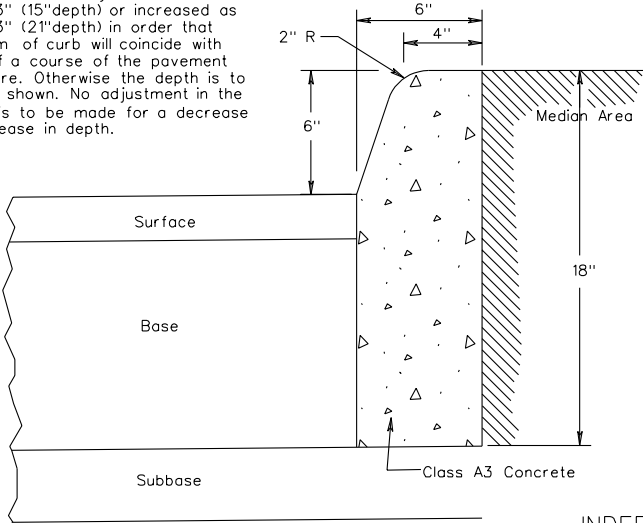
Where design speed is greater than 40 MPH on Rural Highways and 45 MPH in developed Urban and Suburban areas, median curb is to be in accordance with Standard CG-3.

FOR USE WITH CONCRETE PAVEMENT

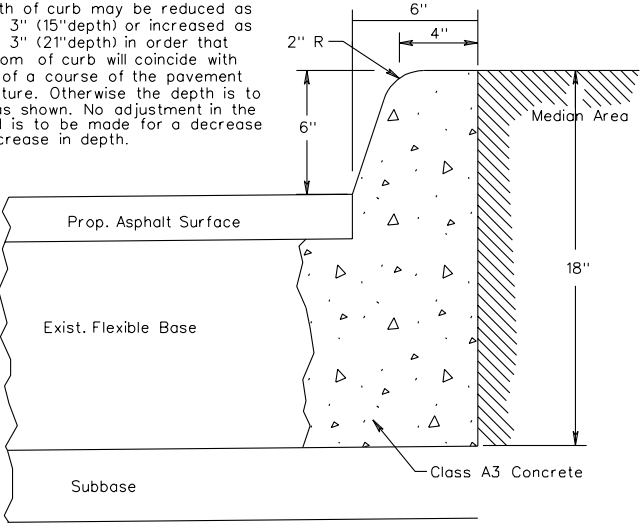
FOR USE WITH CONCRETE WITH ASPHALT TOP COURSE

INTEGRAL

The depth of curb may be reduced as much as 3" (15" depth) or increased as much as 3" (21" depth) in order that the bottom of curb will coincide with the top of a course of the pavement substructure. Otherwise the depth is to be 18" as shown. No adjustment in the price bid is to be made for a decrease or an increase in depth.



The depth of curb may be reduced as much as 3" (15" depth) or increased as much as 3" (21" depth) in order that the bottom of curb will coincide with the top of a course of the pavement substructure. Otherwise the depth is to be 18" as shown. No adjustment in the price bid is to be made for a decrease or an increase in depth.

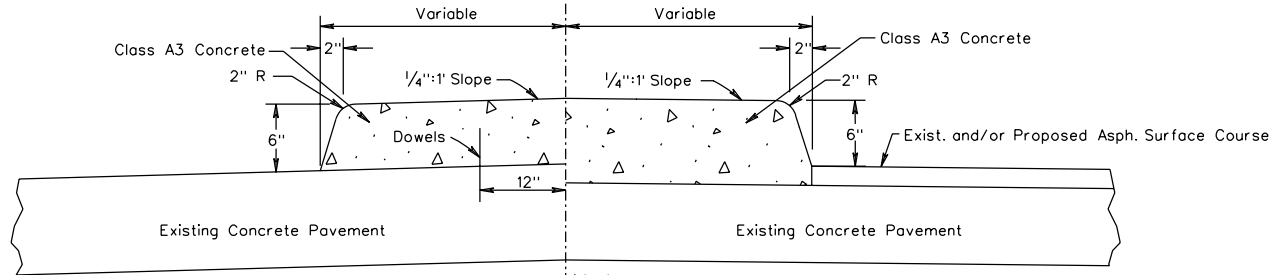


INDEPENDENT

SPECIFICATION REFERENCE	<p>CONCRETE MEDIAN CURB</p> <p>VIRGINIA DEPARTMENT OF TRANSPORTATION</p>	MC-1
502		202.01

HALF SECTION ON EXISTING CONCRETE PAVEMENT

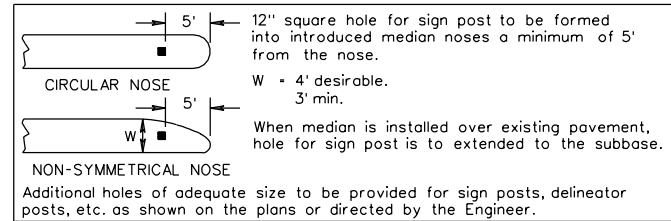
HALF SECTION ON EXISTING CONCRETE PAVEMENT WITH PROPOSED OR EXISTING ASPHALT PAVEMENT



Dowel spacing
Longitudinally at 2'-0"
c-c from nose to first
joint.

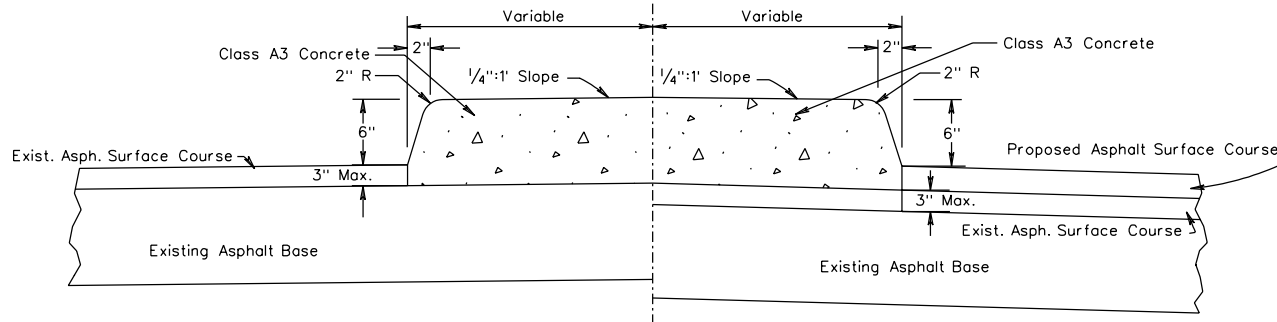
Where design speed is greater than
40 MPH on Rural Highways and 45 MPH
in developed Urban and Suburban areas,
median curb is to be in accordance
with Standard CG-3.

Note: Existing Asphalt Surface Course and Binder Course, if any, to be removed under median strip.



Note: Existing Asphalt Surface Course and Binder Course, if any, to be removed under median strip.

Note: Existing Asphalt Surface Course and Binder Course, if any, to be removed under median strip.



HALF SECTION ON EXISTING FLEXIBLE PAVE.

HALF SECTION ON EXISTING FLEXIBLE PAVE. TO BE RESURFACED

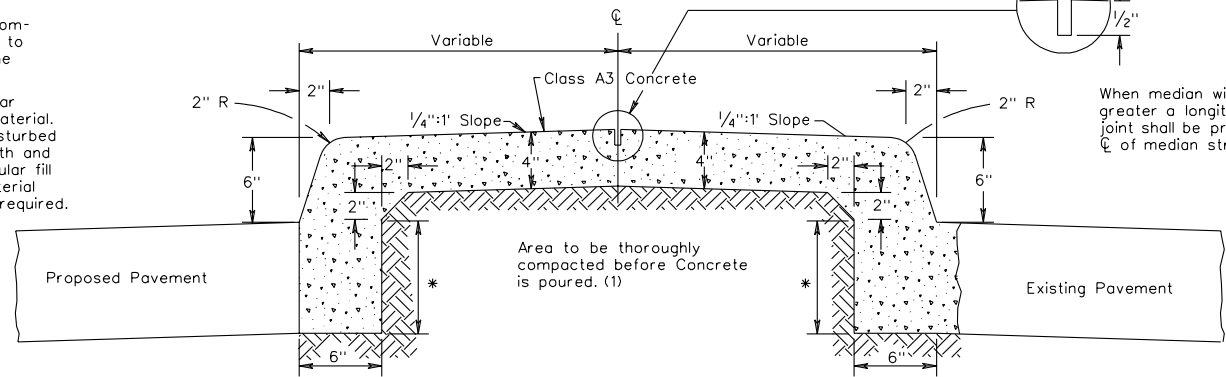
STANDARD SOLID CONCRETE RAISED MEDIAN STRIP

VIRGINIA DEPARTMENT OF TRANSPORTATION

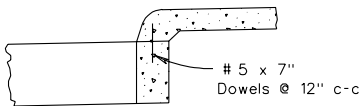
SPECIFICATION REFERENCE

502

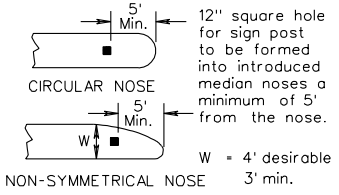
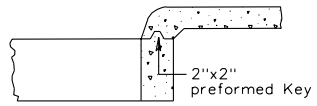
(1) Thoroughly compacted area to consist of the following:
 In Fills-Regular fill material.
 In Cuts-Undisturbed earth and regular fill material as required.



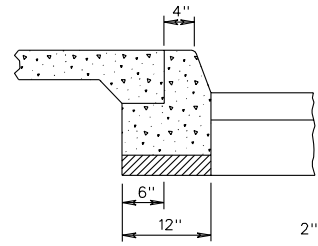
SUGGESTED CONSTRUCTION METHOD IF TOP SLAB IS POURED SEPARATELY



ALTERNATE CONSTRUCTION METHOD IF TOP SLAB IS POURED SEPARATELY



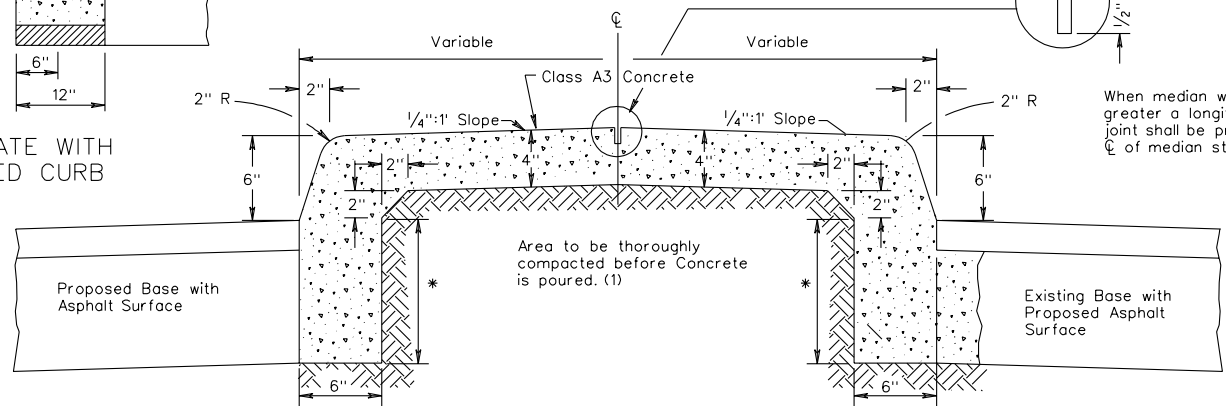
* The depth of curb may be reduced as much as 3" (9" depth) or increased as much as 3" (15" depth) in order that the bottom of curb will coincide with the top of a course of the pavement substructure. Otherwise the depth is to be 12" as shown. No adjustment in the price bid is to be made for a decrease or an increase in depth.



ALTERNATE WITH EXTRUDED CURB

Where design speed is greater than 40 MPH on Rural Highways and 45 MPH in developed Urban and Suburban areas, median curb is to be in accordance with Standard CG-3.

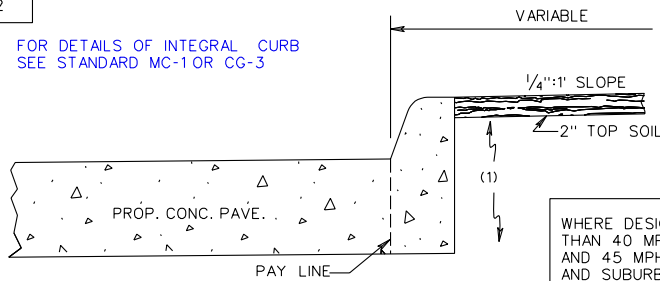
Additional holes of adequate size to be provided for sign posts, delineator posts, etc. as shown on the plans or directed by the Engineer.



SPECIFICATION REFERENCE	<h2 style="margin: 0;">STANDARD SOLID CONCRETE RAISED MEDIAN STRIP</h2> <p style="margin: 0;">VIRGINIA DEPARTMENT OF TRANSPORTATION</p>	202.03
502		

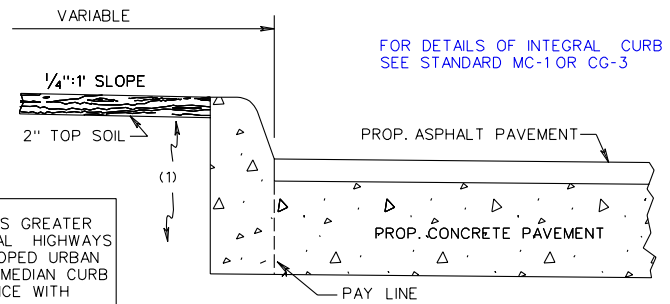
MS-2

FOR DETAILS OF INTEGRAL CURB
SEE STANDARD MC-1 OR CG-3



HALF SECTION WITH PROP.
CONCRETE PAVEMENT

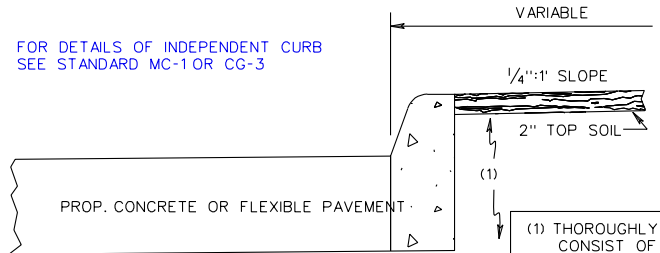
WHERE DESIGN SPEED IS GREATER
THAN 40 MPH ON RURAL HIGHWAYS
AND 45 MPH IN DEVELOPED URBAN
AND SUBURBAN AREAS, MEDIAN CURB
IS TO BE IN ACCORDANCE WITH
STANDARD CG-3.



HALF SECTION WITH PROP. CONCRETE
BASE WITH ASPHALT TOP

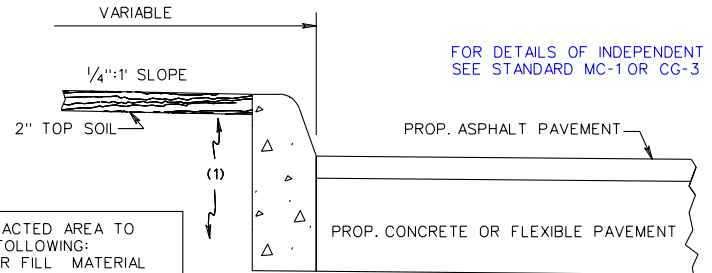
FOR DETAILS OF INTEGRAL CURB
SEE STANDARD MC-1 OR CG-3

FOR DETAILS OF INDEPENDENT CURB
SEE STANDARD MC-1 OR CG-3



HALF SECTION WITH PROP. CONCRETE
OR FLEXIBLE PAVEMENT

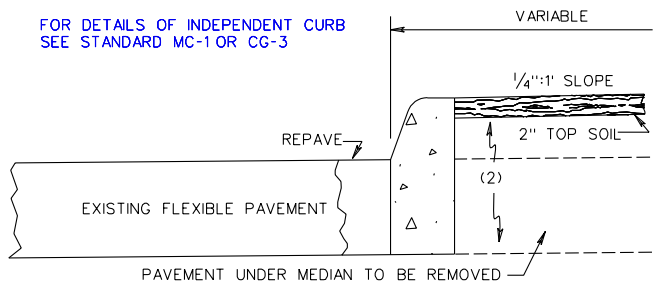
(1) THOROUGHLY COMPACTED AREA TO
CONSIST OF THE FOLLOWING:
IN FILLS - REGULAR FILL MATERIAL
IN CUTS - UNDISTURBED EARTH AND
REGULAR FILL MATERIAL,
AS REQUIRED.
(2) THOROUGHLY COMPACTED AREA TO
CONSIST OF REGULAR FILL MATERIAL.



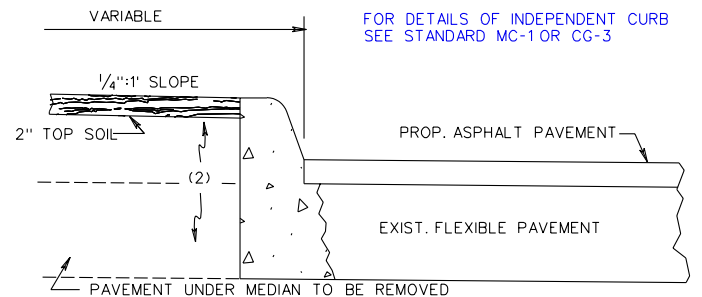
HALF SECTION WITH PROP. CONCRETE OR
FLEXIBLE BASE WITH ASPHALT TOP

FOR DETAILS OF INDEPENDENT CURB
SEE STANDARD MC-1 OR CG-3

FOR DETAILS OF INDEPENDENT CURB
SEE STANDARD MC-1 OR CG-3



HALF SECTION WITH EXISTING FLEXIBLE
PAVEMENT



HALF SECTION WITH EXIST. FLEXIBLE BASE
WITH ASPHALT TOP

FOR DETAILS OF INDEPENDENT CURB
SEE STANDARD MC-1 OR CG-3

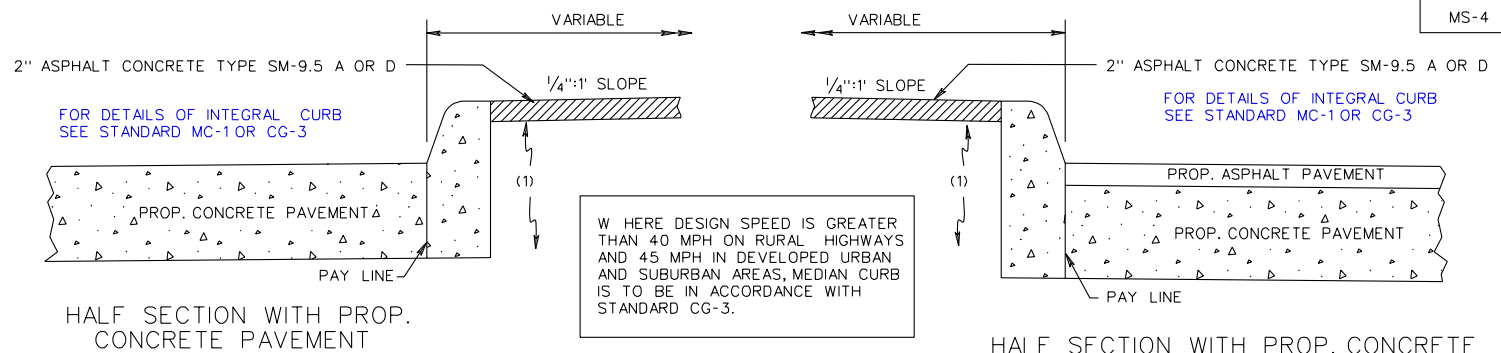
STANDARD RAISED GRASS MEDIAN STRIPS

VIRGINIA DEPARTMENT OF TRANSPORTATION

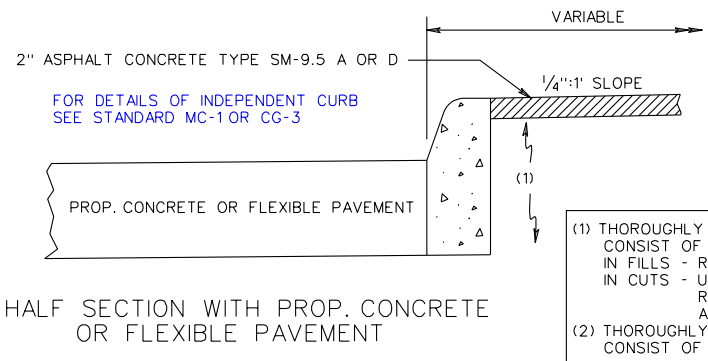
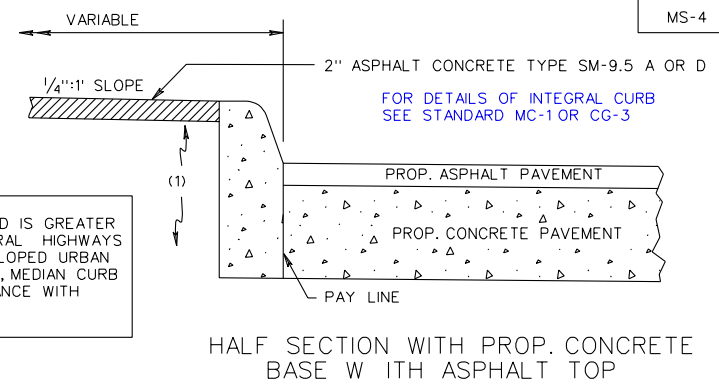
202.04

SPECIFICATION
REFERENCE

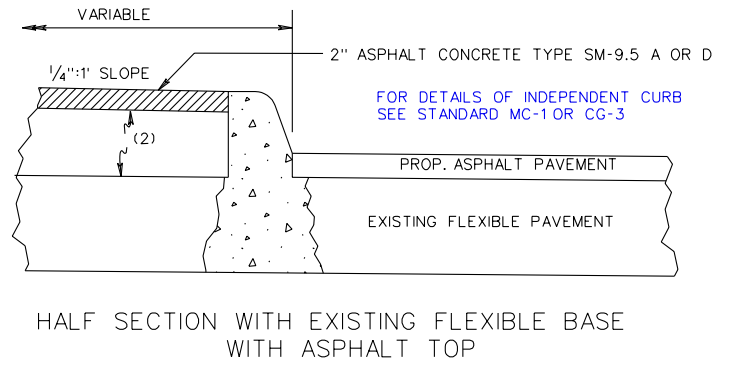
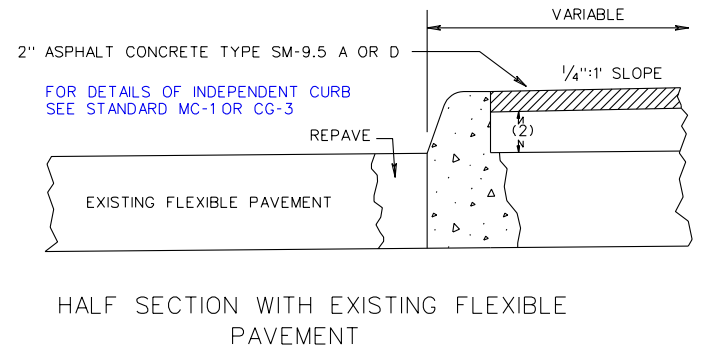
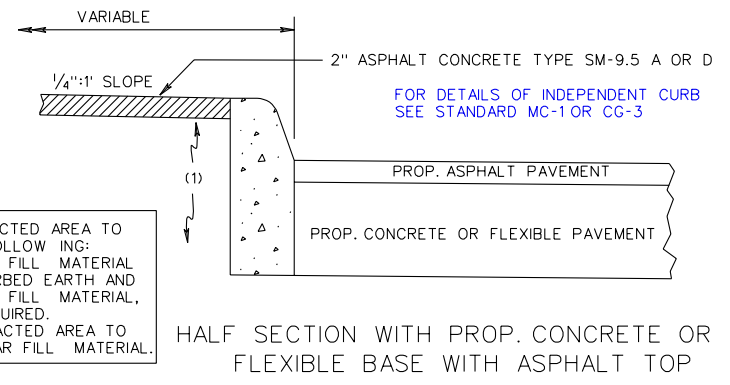
502



WHERE DESIGN SPEED IS GREATER THAN 40 MPH ON RURAL HIGHWAYS AND 45 MPH IN DEVELOPED URBAN AND SUBURBAN AREAS, MEDIAN CURB IS TO BE IN ACCORDANCE WITH STANDARD CG-3.



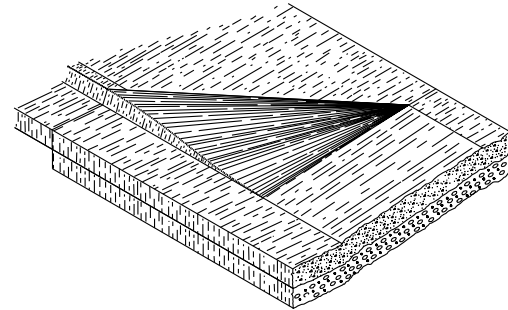
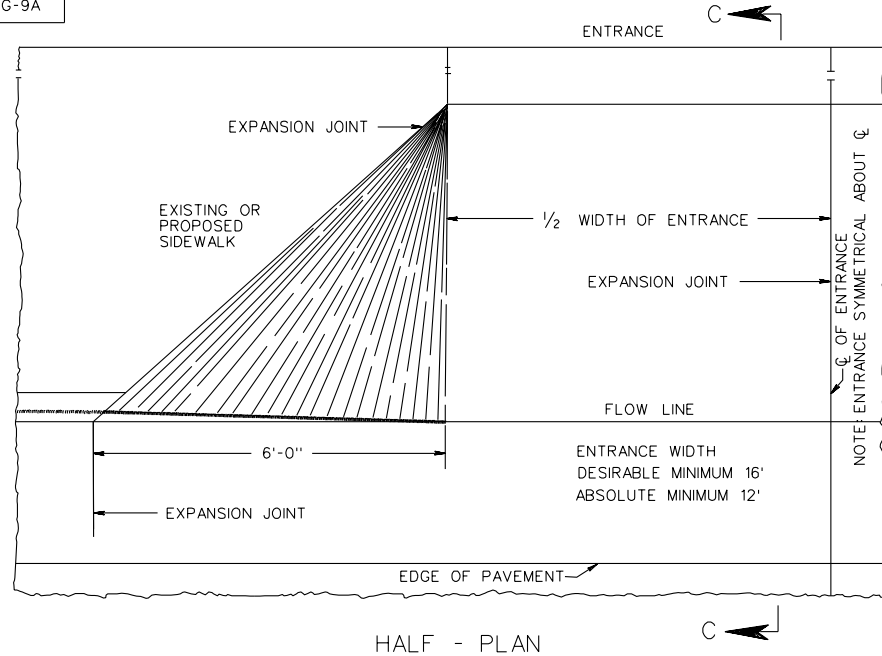
(1) THOROUGHLY COMPACTED AREA TO CONSIST OF THE FOLLOWING:
IN FILLS - REGULAR FILL MATERIAL
IN CUTS - UNDISTURBED EARTH AND REGULAR FILL MATERIAL, AS REQUIRED.
(2) THOROUGHLY COMPACTED AREA TO CONSIST OF REGULAR FILL MATERIAL.



NOTE: THE ASPHALT CONCRETE SURFACE SLAB IS TO CONFORM TO THE CURRENT ROAD & BRIDGE SPECIFICATIONS FOR SM-9.5 A OR D MATERIAL EXCEPT THAT THE MINIMUM BITUMEN CONTENT IS TO BE 6.5%.

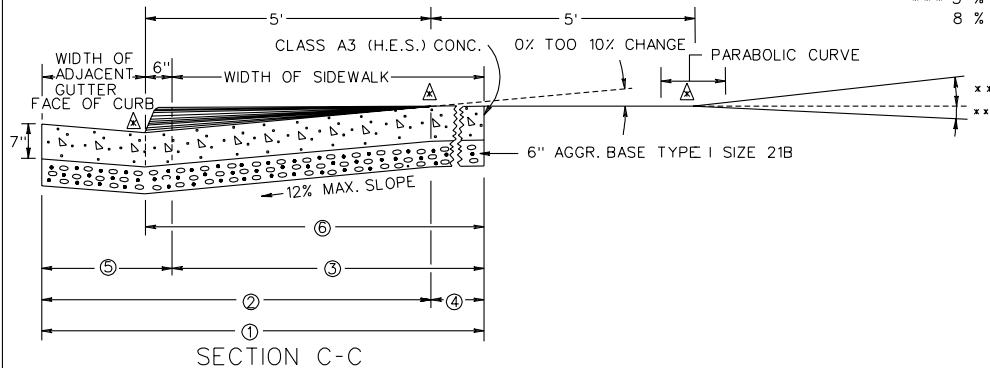
SPECIFICATION REFERENCE	<h2 style="margin: 0;">STANDARD RAISED ASPHALT MEDIAN WITH P.C. CONCRETE CURB</h2> <p style="margin: 0;">VIRGINIA DEPARTMENT OF TRANSPORTATION</p>	
502		202.05

CG-9A



ISOMETRIC VIEW

WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.



- xx 12 % MAXIMUM INCREASE IN SLOPE AT MINIMUM 10' INTERVALS
- xxx 3 % MAXIMUM DECREASE IN SLOPE FOR FIRST 10' INTERVAL AND 8 % MAXIMUM DECREASE FOR SUCCEEDING MINIMUM 10' INTERVALS

- ① FOR SIDEWALK, CURB AND GUTTER - BUILT CONCURRENTLY.
 - ② FOR INITIAL CURB AND GUTTER ONLY.
 - ③ FOR INITIAL SIDEWALK ONLY - 7" SIDEWALK TO BE DIPPED.
 - ④ FOR SIDEWALK ONLY - AFTER INTIAL CURB AND GUTTER.
 - ⑤ FOR CURB AND GUTTER ONLY - AFTER INITIAL SIDEWALK.
 - ⑥ FOR CURB AND SIDEWALK ONLY - WITHOUT GUTTER.
- ▲ INDICATES POINT OF GRADE CHANGE.

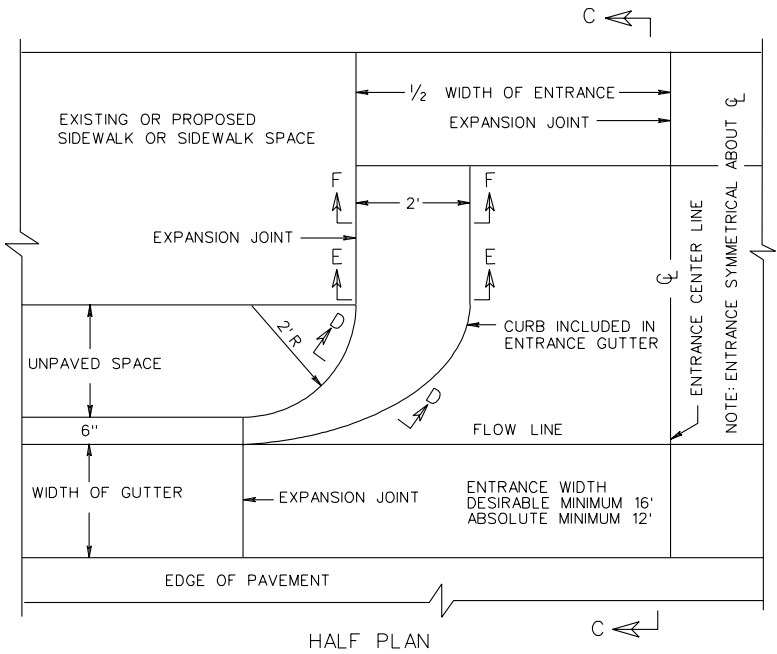
STANDARD ENTRANCE GUTTER WITH FLARED OPENING FOR USE ACROSS SIDEWALK

203.01

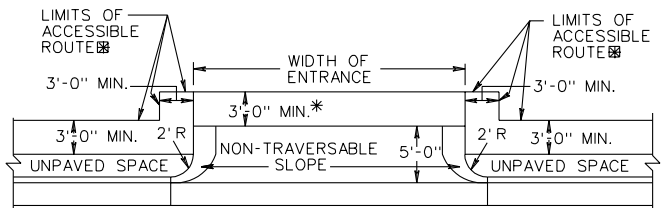
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

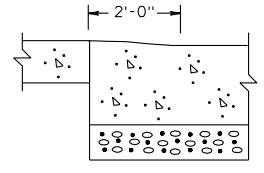
502



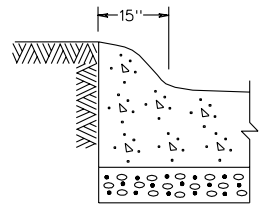
ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF ACCESSIBLE ROUTE EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF-WAY.



ACCESSIBLE ROUTE DETAIL



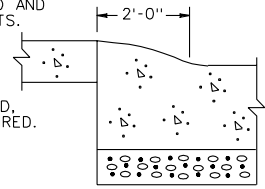
SECTION F-F



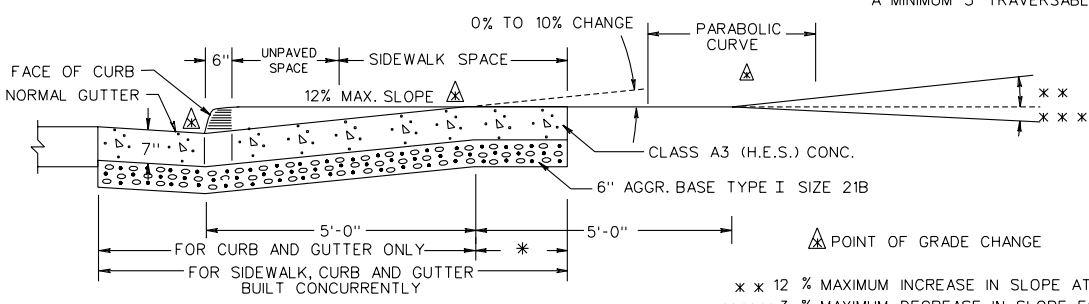
SECTION D-D

ACCESSIBLE ROUTE IS DEFINED AS A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PERSONS WITH MOBILITY IMPAIRMENTS.

* IF ACCESSIBLE ROUTES ARE BEING PROVIDED, A MINIMUM 3' TRAVERSABLE WIDTH IS REQUIRED.



SECTION E-E



SECTION C-C

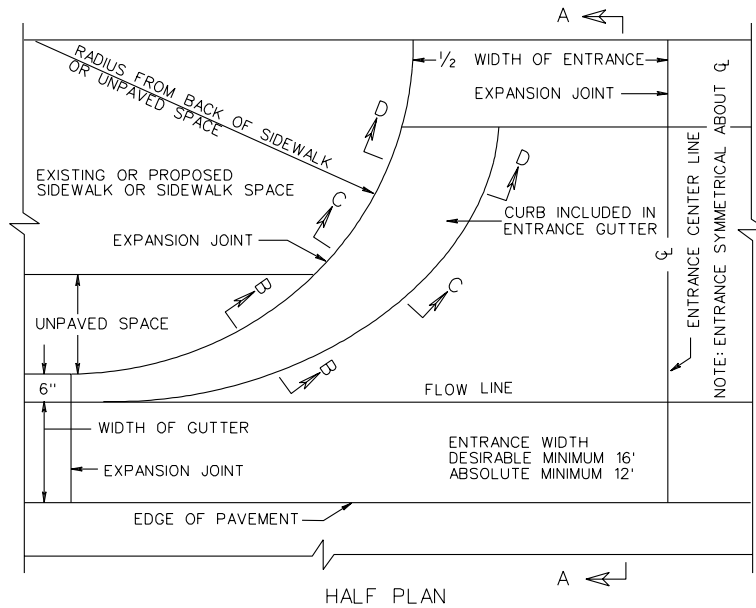
* * 12 % MAXIMUM INCREASE IN SLOPE AT MINIMUM 10' INTERVALS
 * * * 3 % MAXIMUM DECREASE IN SLOPE FOR FIRST 10' INTERVAL AND
 8 % MAXIMUM DECREASE FOR SUCCEEDING MINIMUM 10' INTERVALS

WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.

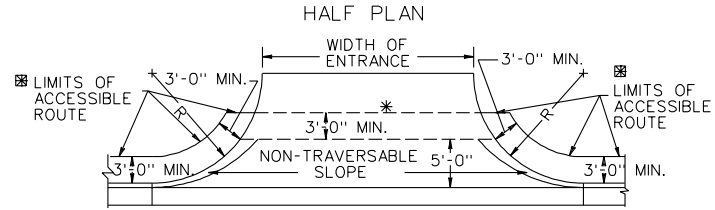
SPECIFICATION REFERENCE
502

STANDARD ENTRANCE GUTTER FOR USE WITH UNPAVED SPACE BETWEEN CURB & SIDEWALK

VIRGINIA DEPARTMENT OF TRANSPORTATION



HALF PLAN

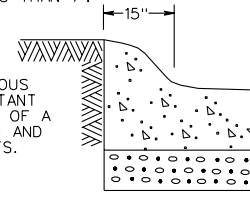


ACCESSIBLE ROUTE DETAIL

ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF ACCESSIBLE ROUTE * EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF-WAY.

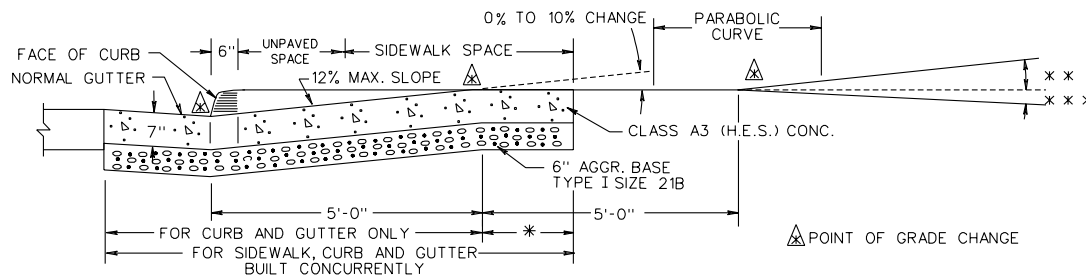
DETAIL TO BE USED WHEN THE COMBINED WIDTH OF UNPAVED SPACE AND SIDEWALK SPACE IS LESS THAN 7'.

* ACCESSIBLE ROUTE IS DEFINED AS A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PERSONS WITH MOBILITY IMPAIRMENTS.



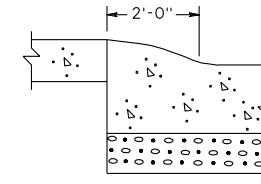
SECTION B-B

* IF ACCESSIBLE ROUTES ARE BEING PROVIDED, A MINIMUM 3' TRAVERSABLE WIDTH IS REQUIRED.

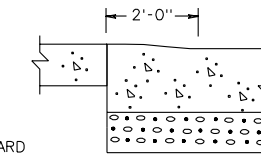


SECTION A-A

* * * 12 % MAXIMUM INCREASE IN SLOPE AT MINIMUM 10' INTERVALS
 * * * 3 % MAXIMUM DECREASE IN SLOPE FOR FIRST 10' INTERVAL AND
 8 % MAXIMUM DECREASE FOR SUCCEEDING MINIMUM 10' INTERVALS



SECTION C-C

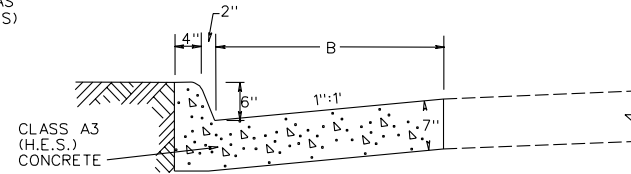
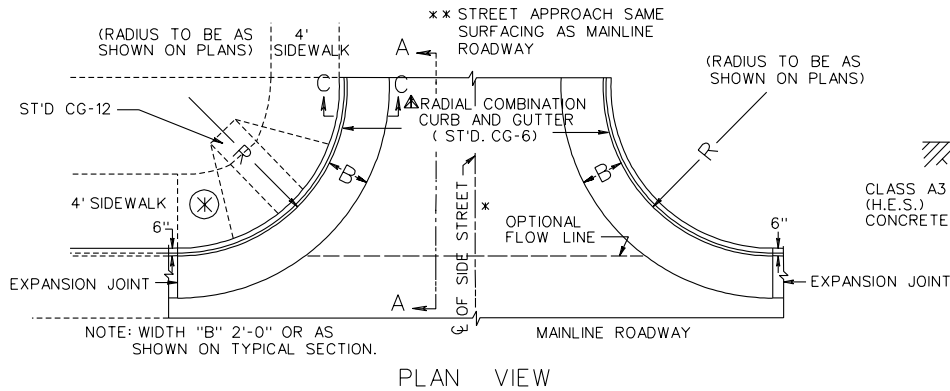


SECTION D-D

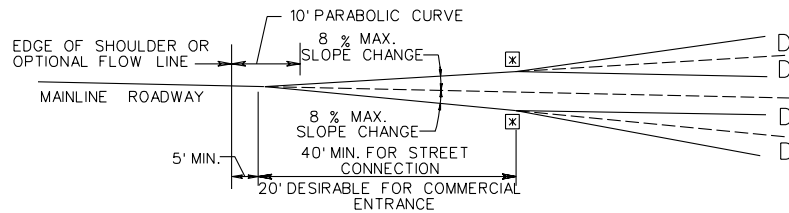
WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.

STANDARD ENTRANCE GUTTER

VIRGINIA DEPARTMENT OF TRANSPORTATION



SECTION C-C



SECTION A - A
GUIDELINES FOR GRADE CHANGE D

ENTRANCE VOLUME	DESIRABLE	MAXIMUM
HIGH (MORE THAN 1500 VPD)	0 %	3 %
MEDIUM (500-1500 VPD)	≤ 3 %	6 %
LOW (LESS THAN 500 VPD)	≤ 6 %	8 %

☒ CONSTRUCT GRADE CHANGES WITH A PARABOLIC CURVE.

⊗ WHEN THE ENTRANCE RADII CANNOT ACCOMMODATE THE TURNING REQUIREMENTS OF ANTICIPATED HEAVY TRUCK TRAFFIC, THE DEPTH FOR SIDEWALK & CURB RAMPS WITHIN THE LIMITS OF THE RADII SHOULD BE INCREASED TO 7".

WHEN ST'D. CG-11 IS USED FOR ENTRANCES BUILT IN CONJUNCTION WITH VDOT PROJECTS, PLEASE NOTE THE FOLLOWING:

✖✖ MAINLINE PAVEMENT SHALL BE CONSTRUCTED TO THE R/W LINE (EXCEPT ANY SUBGRADE STABILIZATION REQUIRED FOR MAINLINE PAVEMENT WHICH CAN BE OMITTED IN THE ENTRANCE.)

▲ RADIAL CURB OR COMBINATION CURB AND GUTTER SHALL NOT BE CONSTRUCTED BEYOND THE R/W LINE EXCEPT FOR REPLACEMENT PURPOSES.

WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.

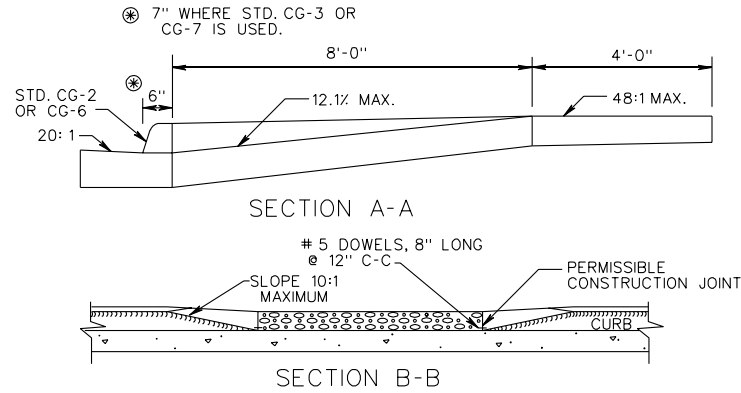
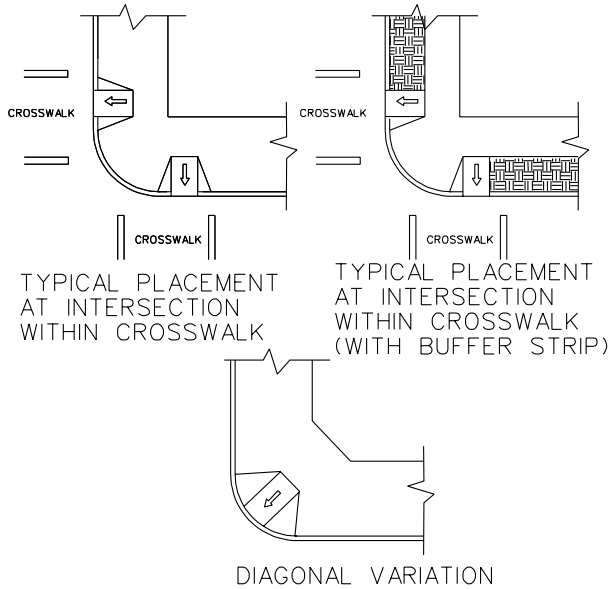
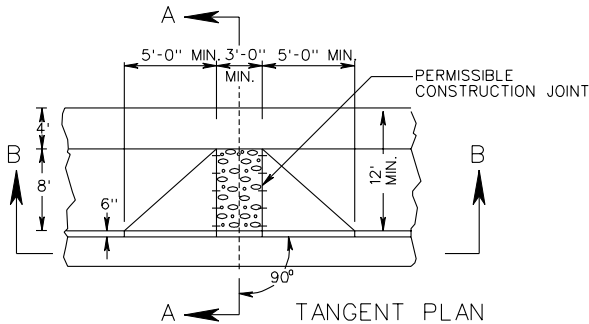
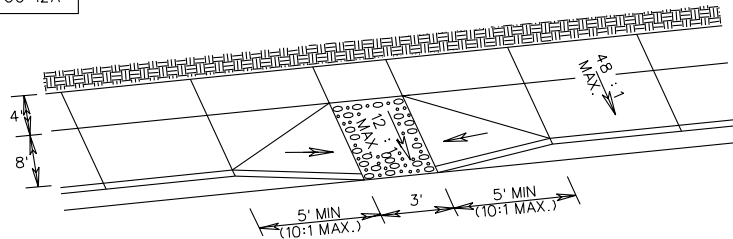
SEE STANDARD CG-12 FOR CURB RAMP DESIGN TO BE USED WITH THIS STANDARD.

✖ PLANS ARE TO INDICATE WHEN CONSTRUCTION OF A FLOW LINE IS REQUIRED TO PROVIDE POSITIVE DRAINAGE ACROSS THE ENTRANCE.

OPTIONAL FLOWLINE MAY REQUIRE WARPING OF A PORTION OF GUTTER TO PRECLUDE PONDING OF WATER.

REVISED 7/01

CG-12A



 LIMITS OF EXPOSED AGGREGATE SIDEWALK

ⓧ ACCESSIBLE ROUTE IS DEFINED AS A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PERSONS WITH MOBILITY IMPAIRMENTS.

NOTES :

- THIS DESIGN TO BE USED FOR CONSTRUCTION THAT INCORPORATES WIDER SIDEWALK. LANDING (48" WIDE) REQUIRED AT TOP OF CURB RAMP. MINIMUM CURB RAMP LENGTH 8" FOR NEW CONSTRUCTION, 6" FOR ALTERATIONS.
- CURB RAMP FLOOR TO BE CLASS A-3 CONCRETE (CLASS A-4 IF PRECAST) WITH SLIP RESISTANT INTEGRAL DETECTABLE WARNING SURFACE COVERING THE ENTIRE WIDTH OF THE RAMP FLOOR (RAMP FLOOR MAY BE PRECAST OR CAST IN PLACE). THE DETECTABLE WARNING SHALL BE PROVIDED BY AN EXPOSED AGGREGATE FINISH. RAMP SHALL NOT EXCEED A MAXIMUM SLOPE OF 12:1.
- SLOPING SIDES OF CURB RAMP MAY BE POURED MONOLITHICALLY WITH RAMP FLOOR OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
- IF RAMP FLOOR IS PRECAST, HOLES MUST BE PROVIDED FOR DOWEL BARS SO THAT ADJOINING FLARED SIDES CAN BE CAST IN PLACE AFTER PLACEMENT OF PRECAST RAMP FLOOR. PRECAST CONCRETE SHALL BE CLASS A-4.
- REQUIRED BARS ARE TO BE NO. 5 X 8" PLACED 1' CENTER TO CENTER ALONG BOTH SIDES OF THE RAMP FLOOR, MID-DEPTH OF RAMP FLOOR. MINIMUM CONCRETE COVER 1/2".
- CURB RAMPS WILL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICES FOR HYDRAULIC CEMENT CONCRETE SIDEWALK AND EXPOSED AGGREGATE SIDEWALK, COMPLETE-IN-PLACE.
- CURB/CURB AND GUTTER SLOPE TRANSITIONS ADJACENT TO CURB RAMPS ARE INCLUDED IN PAYMENT FOR CURB/CURB AND GUTTER.
- WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB AND CONFIGURATION.
- CURB RAMPS ARE TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- THEY ARE TO BE PROVIDED AT INTERSECTIONS WHEREVER AN ACCESSIBLE ROUTE ⓧ WITHIN THE RIGHT OF WAY OF A HIGHWAY FACILITY CROSSES A CURB REGARDLESS OF WHETHER SIDEWALK IS EXISTING, PROPOSED, OR NONEXISTENT. THEY MUST BE LOCATED WITHIN PEDESTRIAN CROSSWALKS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER, AND SHOULD NOT BE LOCATED BEHIND VEHICLE STOP LINES.
- EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. WILL ALSO AFFECT PLACEMENT.

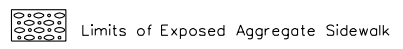
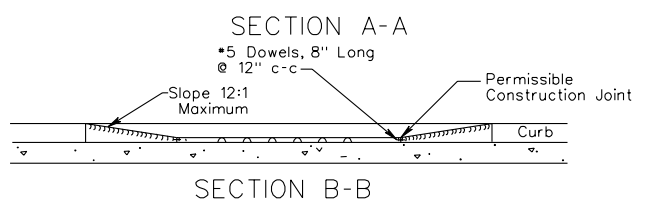
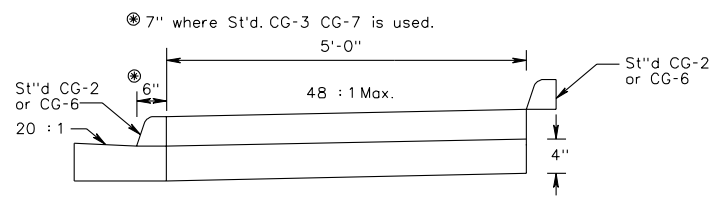
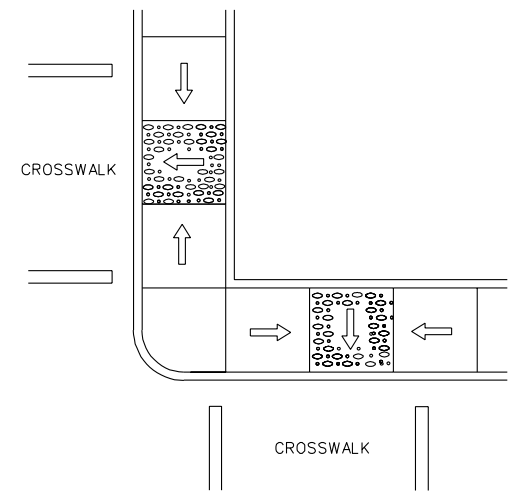
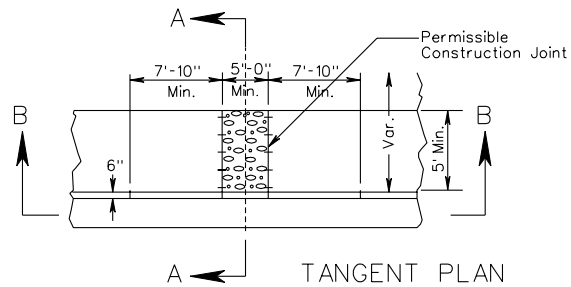
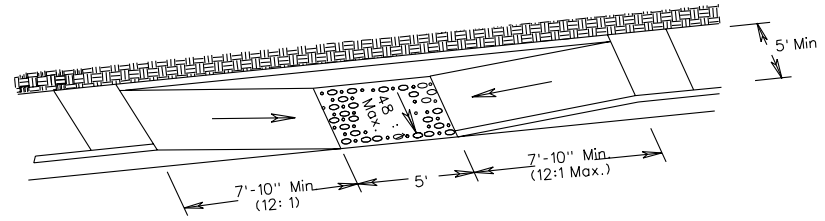
PERPENDICULAR CURB RAMP
(ACCESS FOR MOBILITY IMPAIRMENTS)

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION
REFERENCE

105
502

203.05



☐ Accessible route is defined as a continuous unobstructed, stable, firm and slip resistant path connecting all accessible elements of a facility that can be approached, entered and used by persons with mobility impairments.

NOTES :

This design incorporates a ramp floor at bottom of two sloping sides with 60" x 60" minimum dimensions. Placement of drainage structures is critical.

Curb ramp floor to be class A-3 Concrete (class A-4 if precast) with slip resistant integral detectable warning surface covering the entire width of the ramp floor (ramp floor may be precast or cast in place). The detectable warning shall be provided by an exposed aggregate finish. Ramp shall not exceed a maximum slope of 12:1.

Sloping sides of curb ramp may be poured monolithically with ramp floor or by using permissible construction joint with required bars.

If ramp floor is precast, holes must be provided for dowel bars so that adjoining flared sides can be cast in place after placement of precast ramp floor. Precast concrete shall be class A-4.

Required bars are to be No. 5 x 8" placed 1' center to center along both sides of the ramp floor, mid-depth of ramp floor. Minimum concrete cover 1/2".

Curb ramps will be measured and paid for at the contract unit prices for Hydraulic Cement Concrete Sidewalk and Exposed aggregate sidewalk, complete-in-place.

Curb/curb and gutter slope transitions adjacent to to curb ramps are included in payment for curb/curb and gutter.

When used in conjunction with Standard CG-3 or CG-7, the curb face on this Standard is to be adjusted to match the mountable curb and configuration.

Curb ramps are to be located as shown on the plans or as directed by the Engineer. They are to be provided at intersections wherever an accessible route ☐ within the right of way of a highway facility crosses a curb regardless of whether sidewalk is existing, proposed, or nonexistent. They must be located within pedestrian crosswalks as shown on plans or as directed by the Engineer, and should not be located behind vehicle stop lines. Existing light poles, fire hydrants, drop inlets, etc. will also affect placement.

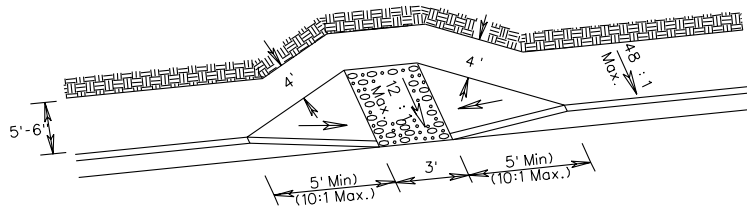
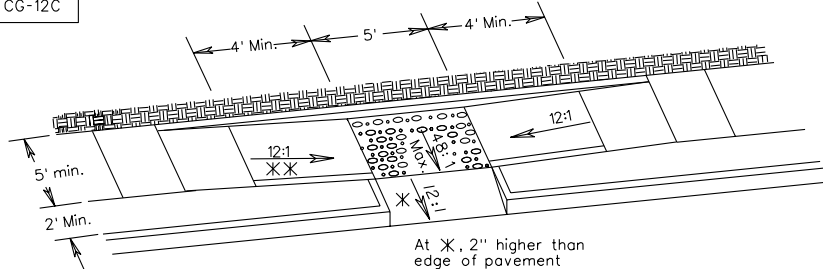
SPECIFICATION REFERENCE	
105 502	

PARALLEL CURB RAMP (ACCESS FOR MOBILITY IMPAIRMENTS)

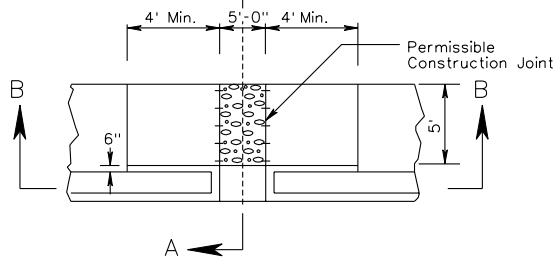
VIRGINIA DEPARTMENT OF TRANSPORTATION

REVISED 7/01

CG-12C

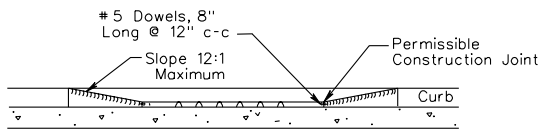


ALTERATIONS



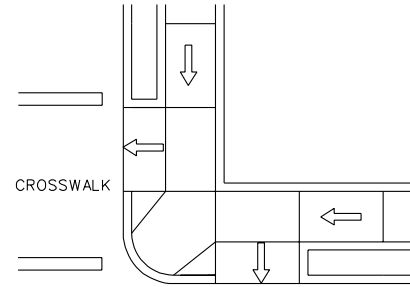
TANGENT PLAN

Limits of Exposed Aggregate Sidewalk

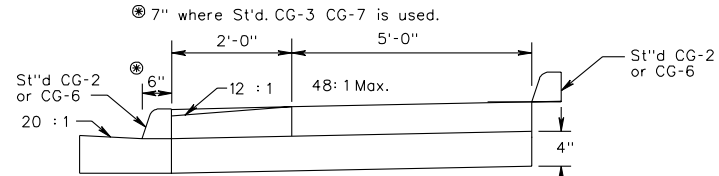


SECTION B-B

☒ Accessible route is defined as a continuous unobstructed, stable, firm and slip resistant path connecting all accessible elements of a facility that can be approached, entered and used by persons with mobility impairments.



TYPICAL PLACEMENT AT INTERSECTION WITH BUFFER STRIP



SECTION A-A

NOTES :

- This combined (parallel & perpendicular) design for alterations can be used with adjoining buffer strip landing at bottom of two sloping sides with 60" x 60" minimum dimensions. The short perpendicular run to the street can be protected by a landscaped setback or connected to the sidewalk with a warped surface.
- Curb ramp floor to be class A-3 Concrete (class A-4 if precast) with slip resistant integral detectable warning surface covering the entire width of the ramp floor (ramp floor may be precast or cast in place). The detectable warning shall be provided by an exposed aggregate finish. Ramp shall not exceed a maximum slope of 12:1.
- Sloping sides of curb ramp may be poured monolithically with ramp floor or by using permissible construction joint with required bars.
- If ramp floor is precast, holes must be provided for dowel bars so that adjoining flared sides can be cast in place after placement of precast ramp floor. Precast concrete shall be class A-4.
- Required bars are to be No. 5 x 8" placed 1' center to center along both sides of the ramp floor, mid-depth of ramp floor. Minimum concrete cover 1/2".
- Curb ramps will be measured and paid for at the contract unit prices for Hydraulic Cement Concrete Sidewalk and Exposed aggregate sidewalk, complete-in-place.
- Curb/curb and gutter slope transitions adjacent to curb ramps are included in payment for curb/curb and gutter.
- When used in conjunction with Standard CG-3 or CG-7, the curb face on this Standard is to be adjusted to match the mountable curb and configuration.
- Curb ramps are to be located as shown on the plans or as directed by the Engineer. They are to be provided at intersections wherever an accessible route ☒ within the right of way of a highway facility crosses a curb regardless of whether sidewalk is existing, proposed, or nonexistent. They must be located within pedestrian crosswalks as shown on plans or as directed by the Engineer, and should not be located behind vehicle stop lines. Existing light poles, fire hydrants, drop inlets, etc. will also affect placement.

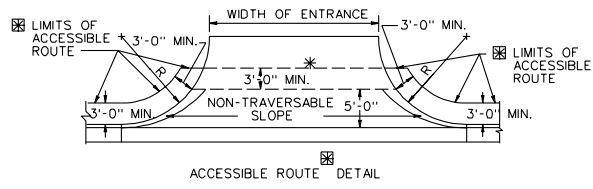
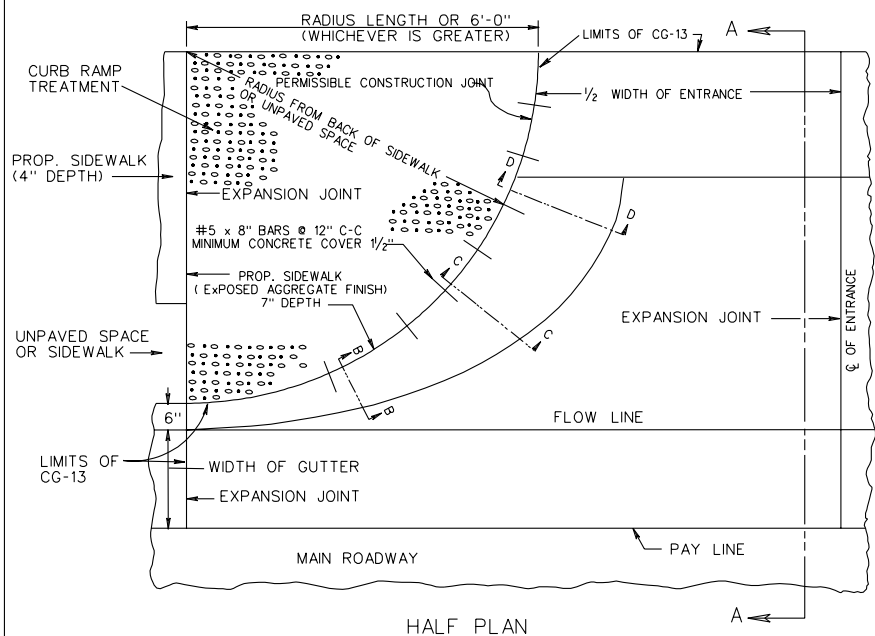
COMBINED (PARALLEL & PERPENDICULAR) CURB RAMP (ACCESS FOR MOBILITY IMPAIRMENTS)

SPECIFICATION REFERENCE

105 502

203.07

VIRGINIA DEPARTMENT OF TRANSPORTATION



ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF ACCESSIBLE ROUTE \square EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF-WAY.

DETAIL TO BE USED WHEN THE COMBINED WIDTH OF UNPAVED SPACE AND SIDEWALK SPACE IS LESS THAN 7'.

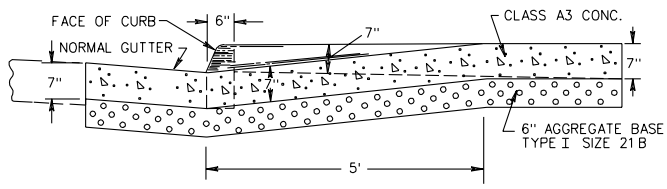
\square ACCESSIBLE ROUTE IS DEFINED AS A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PERSONS WITH MOBILITY IMPAIRMENTS.

* IF ACCESSIBLE ROUTES ARE BEING PROVIDED, A MINIMUM 3' TRAVERSABLE WIDTH IS REQUIRED.

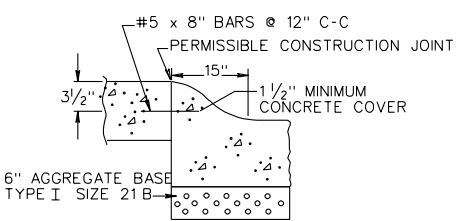


NOTES:

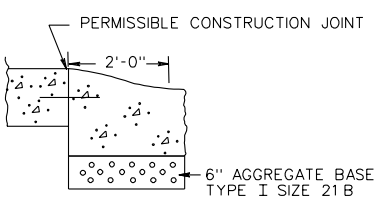
1. PROP. 7" SIDEWALK IS TO BE POURED MONOLITHICALLY WITH ENTRANCE OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
2. PROPOSED 7" SIDEWALK TO BE CLASS A-3 CONCRETE WITH EXPOSED AGGREGATE FINISH.
3. REQUIRED BARS ARE TO BE NO. 5x8" PLACED 1' CENTER TO CENTER ALONG BACK OF CURB, MID-DEPTH OF SIDEWALK. MINIMUM CONCRETE COVER 1/2".
4. ALL DETAILS AND DIMENSIONS NOT SHOWN ARE THE SAME AS STANDARD CG-9D.
5. THIS DESIGN MAY ALSO BE APPLIED TO OTHER ENTRANCE STANDARDS AS THE NEED ARISES.
6. WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.



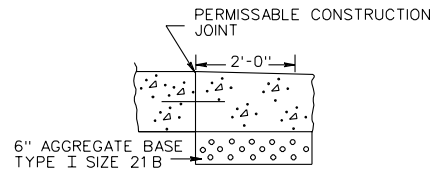
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

SPECIFICATION REFERENCE
502

COMMERCIAL ENTRANCE
(HEAVY TRUCK TRAFFIC ANTICIPATED)
VIRGINIA DEPARTMENT OF TRANSPORTATION