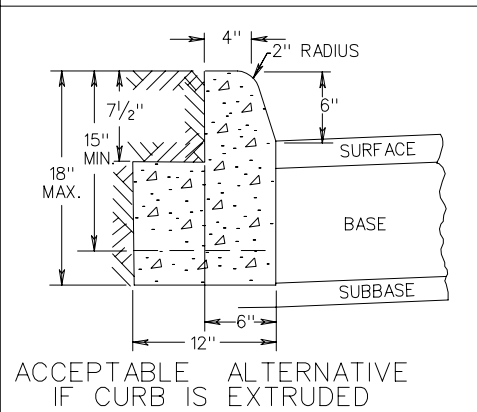
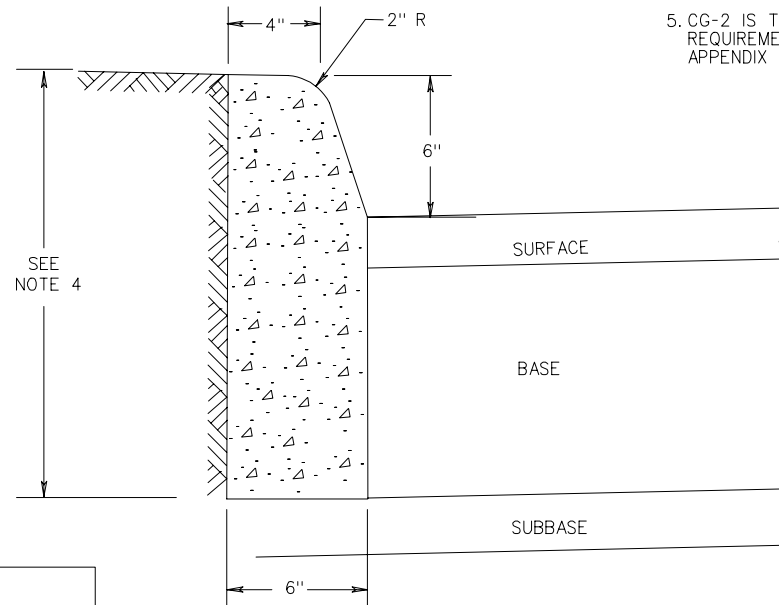


SECTION  
200

CURBS  
MEDIANS  
ENTRANCE GUTTERS

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. CG-2 IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CG-6 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL.



SPECIFICATION REFERENCE
105 502

## STANDARD 6" CURB

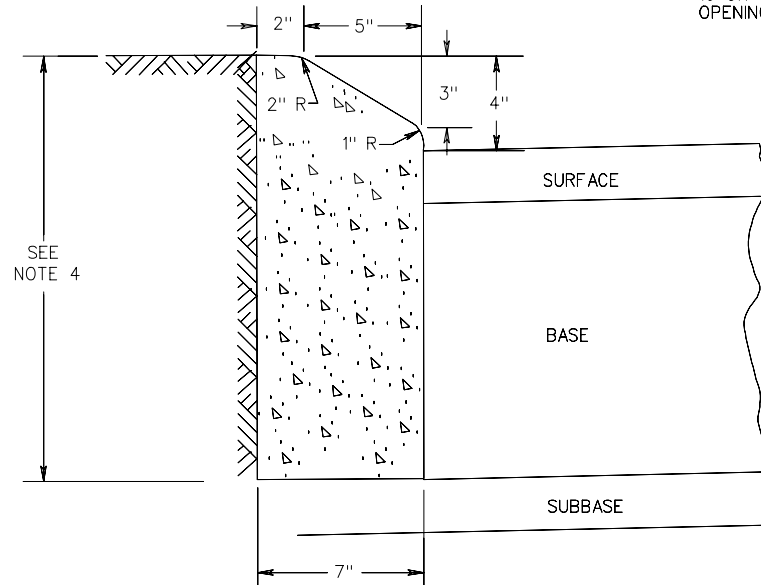
VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 9/06

201.01

## 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. CG-3 IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CG-7 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL.
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.



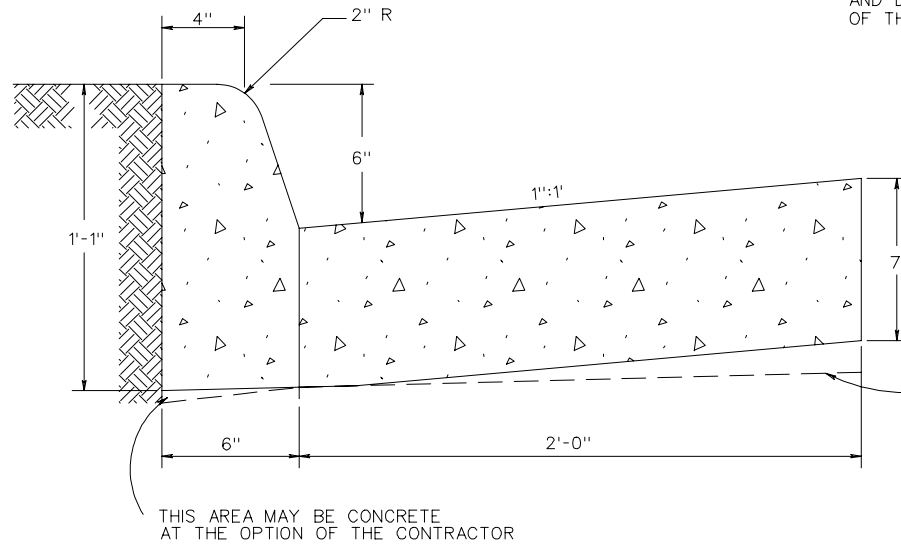
## STANDARD 4" CURB

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION  
REFERENCE105  
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 & GUTTER) 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. ALLOWABLE CRITERIA FOR THE USE OF CG-6 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL.



SPECIFICATION REFERENCE

105  
502

COMBINATION 6" CURB & GUTTER

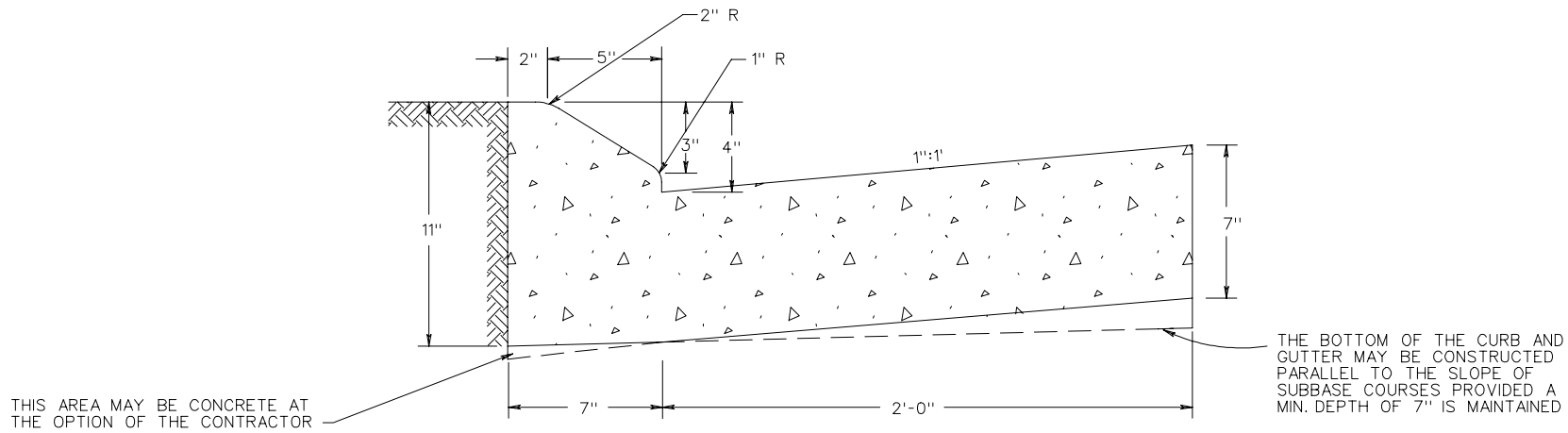
VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 9/06

201.03

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. ALLOWABLE CRITERIA FOR THE USE OF CG-7 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL.
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.



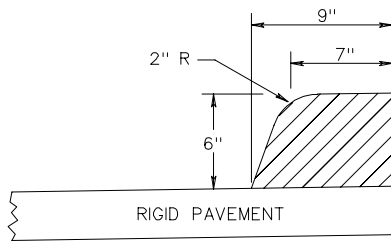
## COMBINATION 4" CURB & GUTTER

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

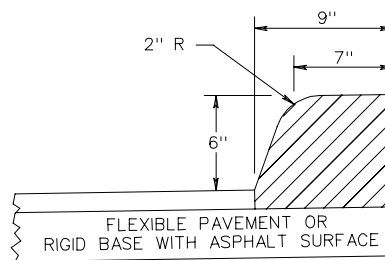
105  
502

MC-3



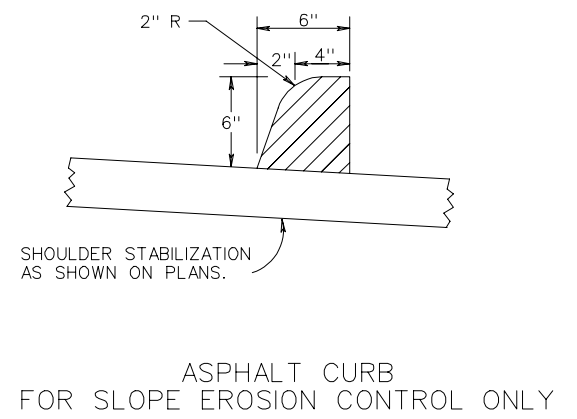
ASPHALT CURB

MC-3

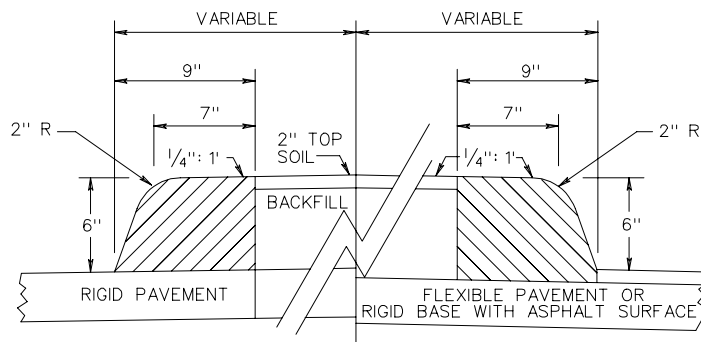


ASPHALT CURB

MC-3A

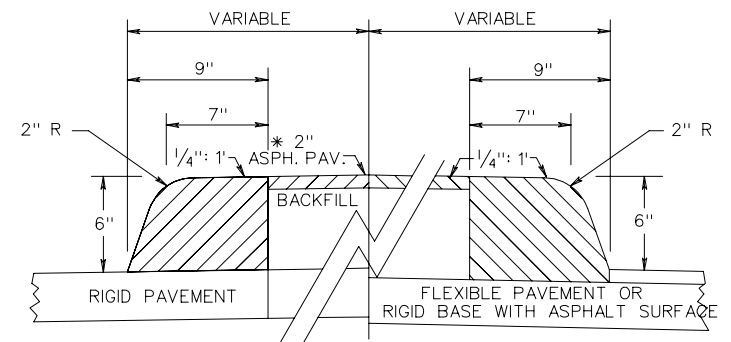


ASPHALT CURB FOR SLOPE EROSION CONTROL ONLY



ASPHALT MEDIAN

MC-3 AND MC-3A IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CG-6 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL.



ASPHALT MEDIAN

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

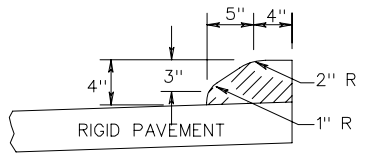
SPECIFICATION REFERENCE
502

## ASPHALT CONCRETE CURB AND MEDIAN FOR TEMPORARY OR PERMANENT INSTALLATION

VIRGINIA DEPARTMENT OF TRANSPORTATION

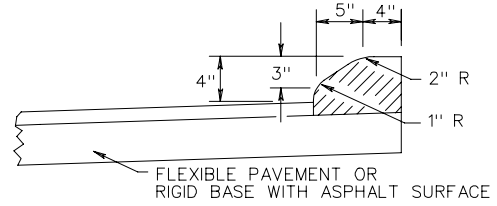
REV. 9/06  
201.05

MC-3B



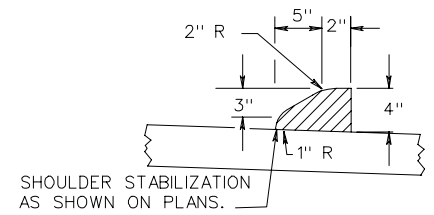
ASPHALT CURB

MC-3B



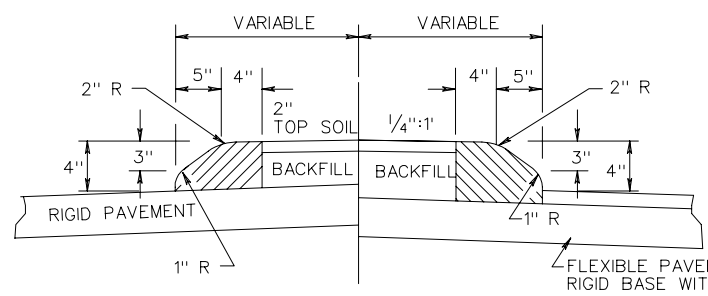
ASPHALT CURB

MC-3C

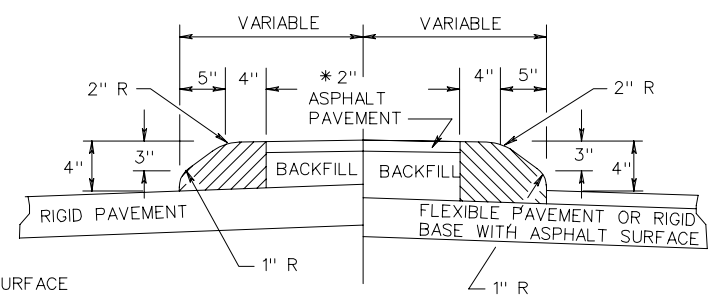


ASPHALT CURB FOR SLOPE EROSION CONTROL ONLY

MC-3B



ASPHALT MEDIAN



ASPHALT MEDIAN

MC-3B AND MC-3C IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CG-7 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL.

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

# ASPHALT CONCRETE CURB AND MEDIAN FOR TEMPORARY OR PERMANENT INSTALLATION

REV. 9/06  
201.06

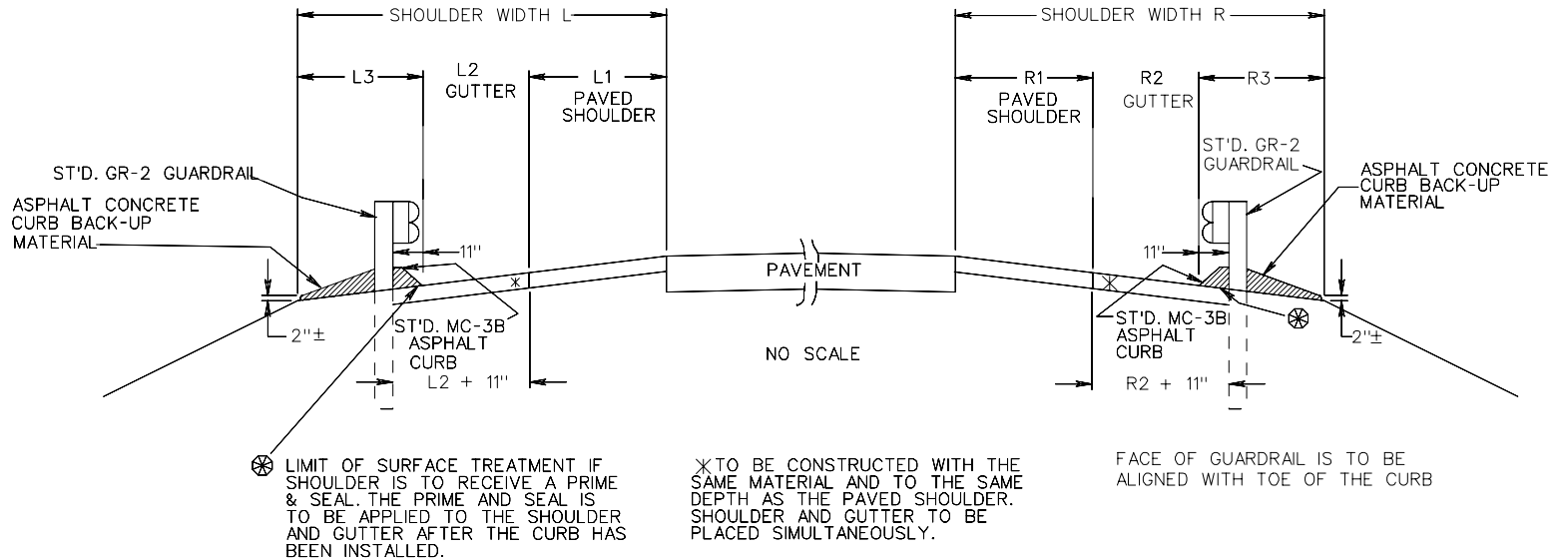
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

502

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'	8'	2'	3'
11'	6'	2'	3'
9'	6'	—	3'



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

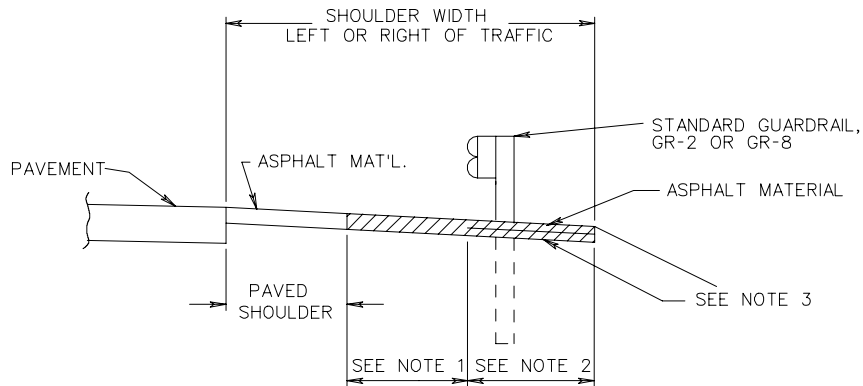
SPECIFICATION REFERENCE

105 502

ASPHALT CURB AND GUTTER & ASPHALT PAVING UNDER GUARDRAIL

VIRGINIA DEPARTMENT OF TRANSPORTATION





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:

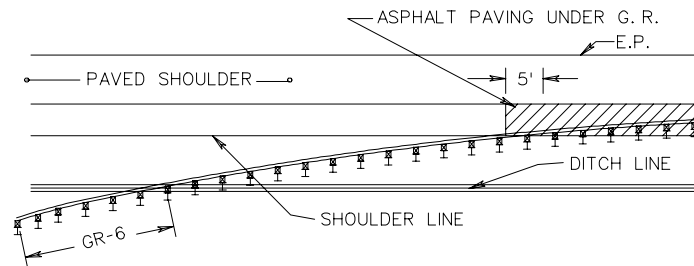
ALLOWABLE DEPTHS OF ASPHALT MATERIAL

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

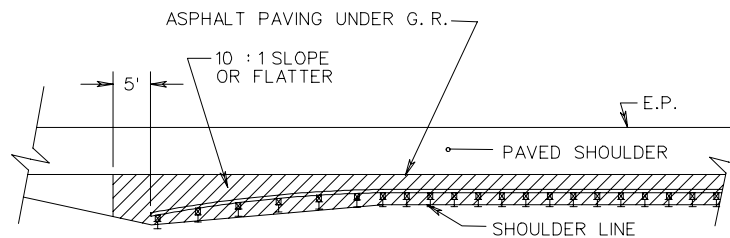
3. DEPTH OF ASPHALT MATERIAL MAY BE EXTENDED AT THE CONTRACTOR'S OPTION TO COINCIDE WITH THE BOTTOM OF THE PAVED SHOULDER COURSE AT NO INCREASE IN THE QUANTITY OF ASPHALT MATERIAL COMPUTED USING THE ABOVE SPECIFIED DEPTH.

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

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

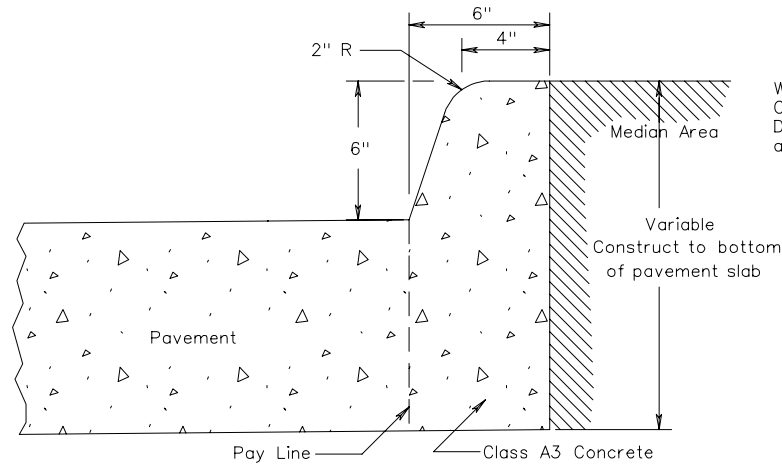


GR-6 TERMINAL



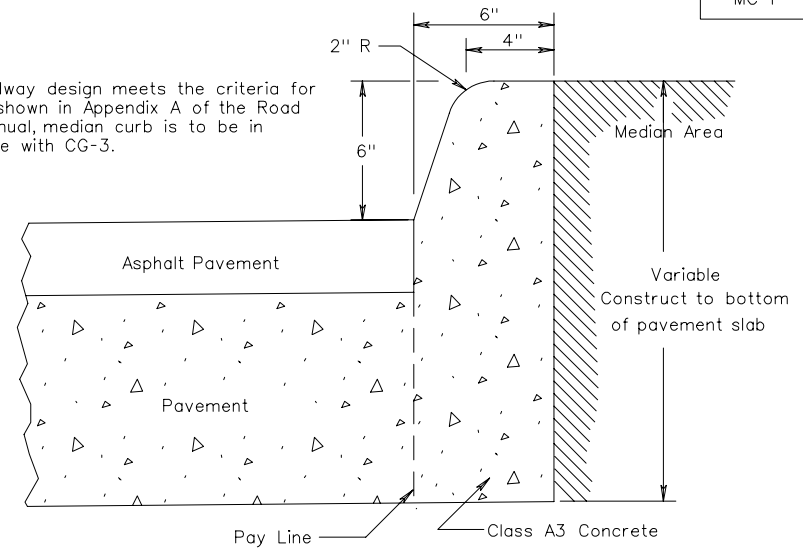
GR-7 & GR-9 TERMINALS

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.



FOR USE WITH CONCRETE PAVEMENT

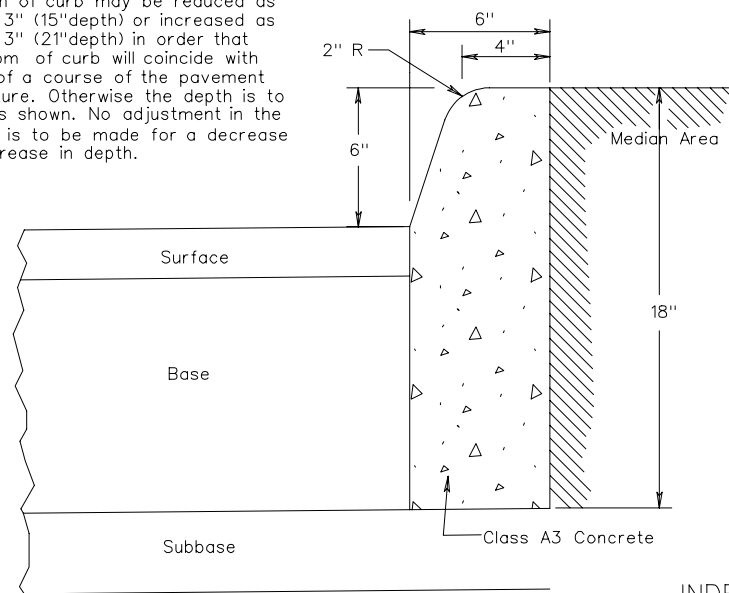
When roadway design meets the criteria for CG-7 as shown in Appendix A of the Road Design Manual, median curb is to be in accordance with CG-3.



FOR USE WITH CONCRETE WITH ASPHALT TOP COURSE

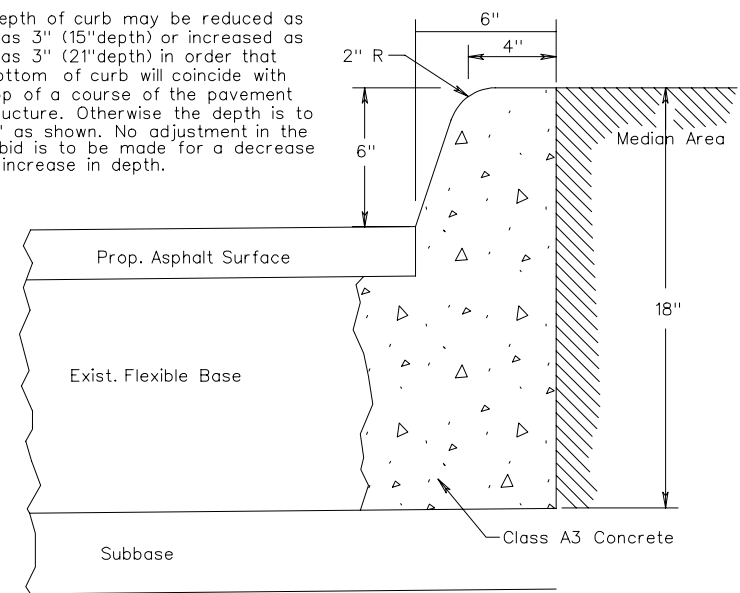
INTEGRAL

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.



INDEPENDENT

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.



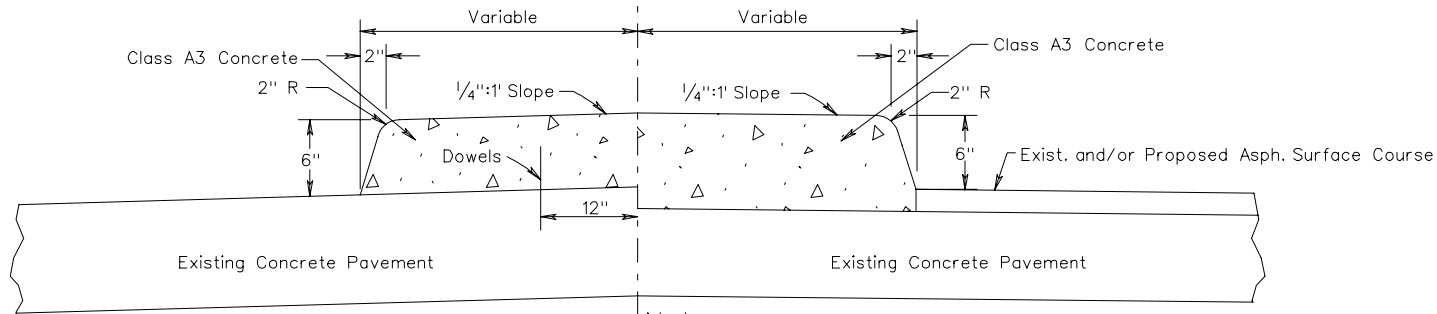
SPECIFICATION REFERENCE
502

## CONCRETE MEDIAN CURB

VIRGINIA DEPARTMENT OF TRANSPORTATION

HALF SECTION ON EXISTING CONCRETE PAVEMENT

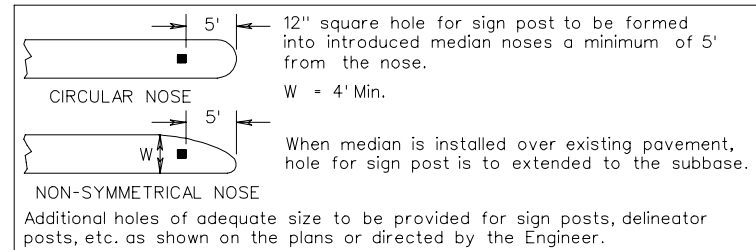
HALF SECTION ON EXISTING CONCRETE PAVEMENT WITH PROPOSED OR EXISTING ASPHALT PAVEMENT



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

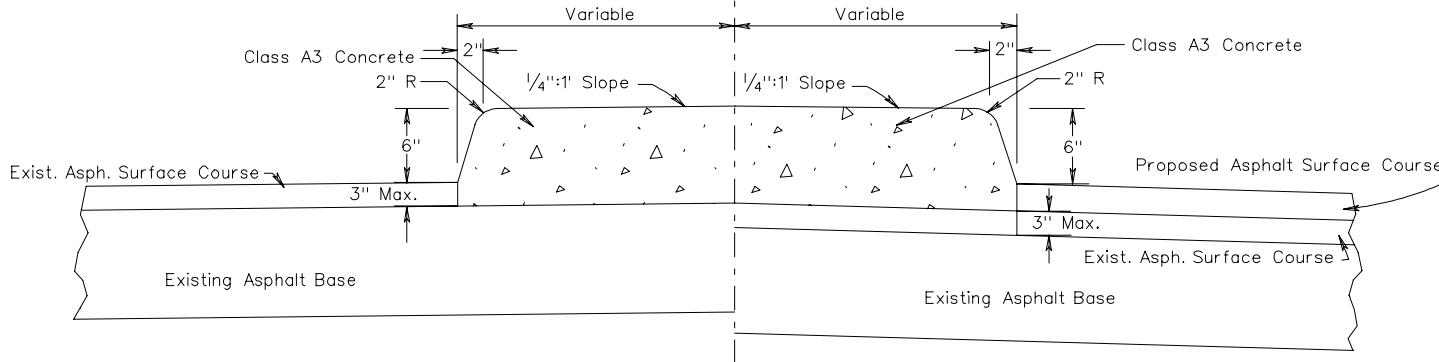
When roadway design meets the criteria for CG-7 as shown in Appendix A of the Roadway Design Manual, median curb is to be in accordance with CG-3.

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 PAVEMENT

HALF SECTION ON EXISTING FLEXIBLE PAVEMENT TO BE RESURFACED

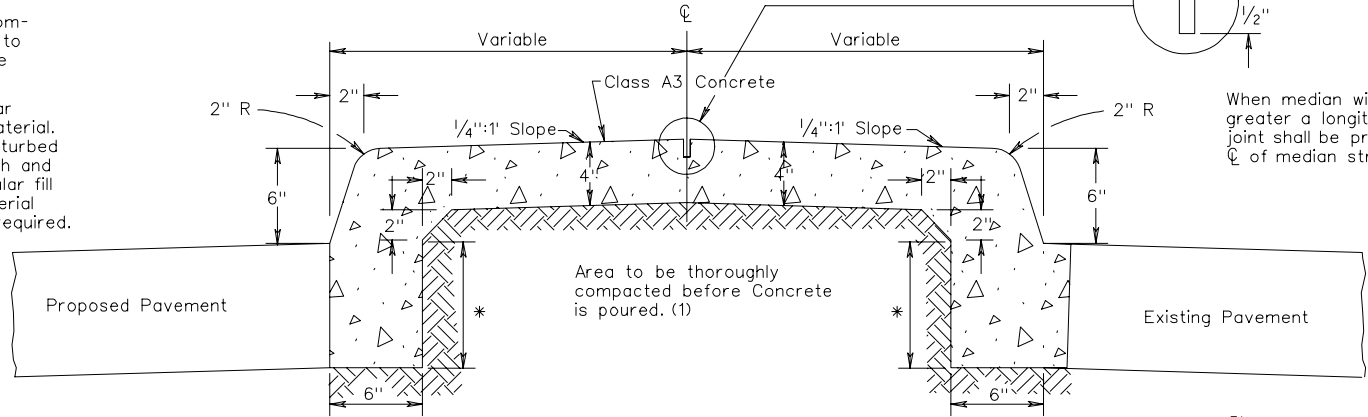
STANDARD SOLID CONCRETE RAISED MEDIAN STRIP

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

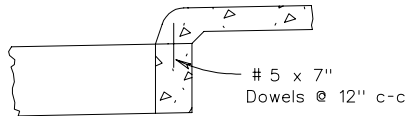
502

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

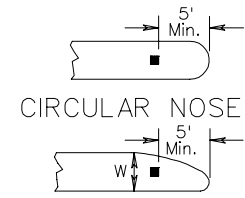
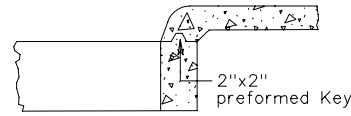


When median width is 3 feet or greater a longitudinal contraction joint shall be provided along  $\text{C}$  of median strip.

SUGGESTED CONSTRUCTION METHOD IF TOP SLAB IS POURED SEPARATELY



ALTERNATE CONSTRUCTION METHOD IF TOP SLAB IS POURED SEPARATELY



12" square hole for sign post to be formed into introduced median noses a minimum of 5' from the nose.

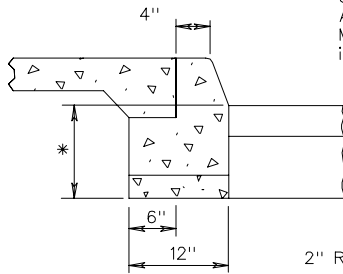
W = 4' Min.

NON-SYMMETRICAL NOSE

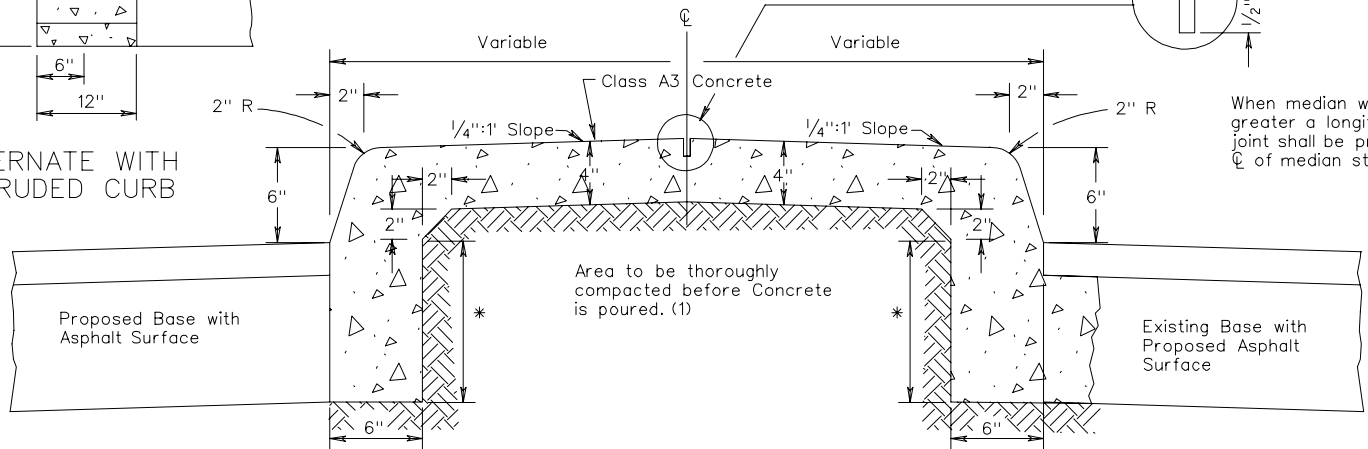
When roadway design meets the criteria for CG-7 as shown in Appendix A of the Road Design Manual, median curb is to be in accordance with Standard CG-3.

\* 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.

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



ALTERNATE WITH EXTRUDED CURB



When median width is 3 feet or greater a longitudinal contraction joint shall be provided along  $\text{C}$  of median strip.

SPECIFICATION REFERENCE

502

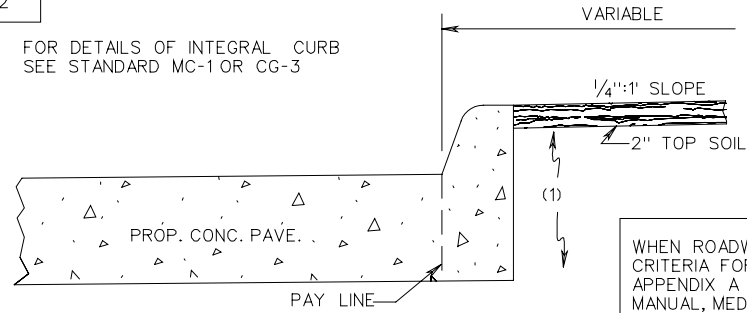
STANDARD SOLID CONCRETE RAISED MEDIAN STRIP

VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 9/06

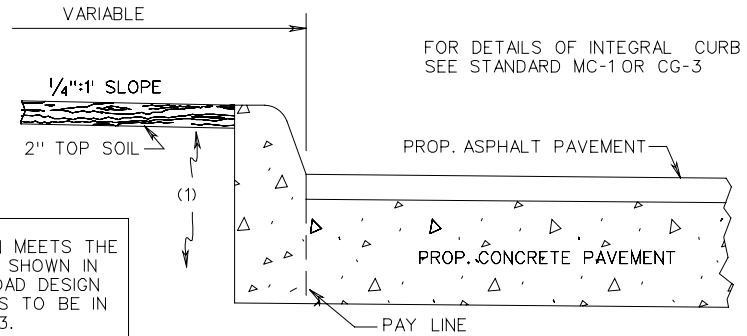
202.03

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



HALF SECTION WITH PROP.  
CONCRETE PAVEMENT

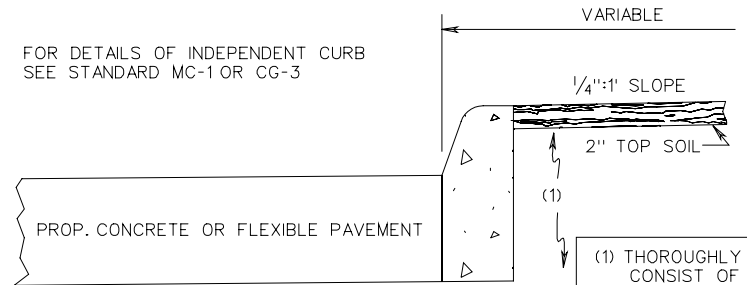
WHEN ROADWAY DESIGN MEETS THE  
CRITERIA FOR CG-7 AS SHOWN IN  
APPENDIX A OF THE ROAD DESIGN  
MANUAL, MEDIAN CURB IS TO BE IN  
ACCORDANCE WITH CG-3.



HALF SECTION WITH PROP. CONCRETE  
BASE WITH ASPHALT TOP

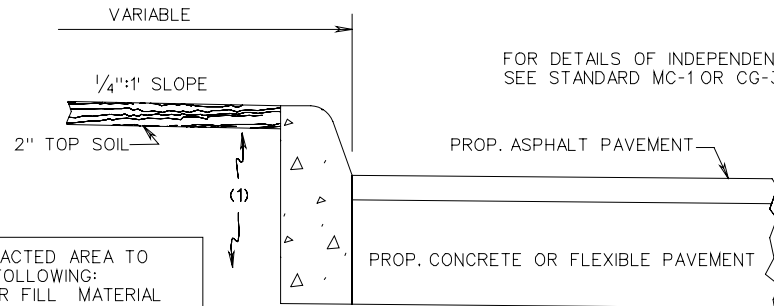
FOR DETAILS OF INTEGRAL CURB  
SEE STANDARD MC-1 OR CG-3

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



HALF SECTION WITH PROP. CONCRETE  
OR FLEXIBLE PAVEMENT

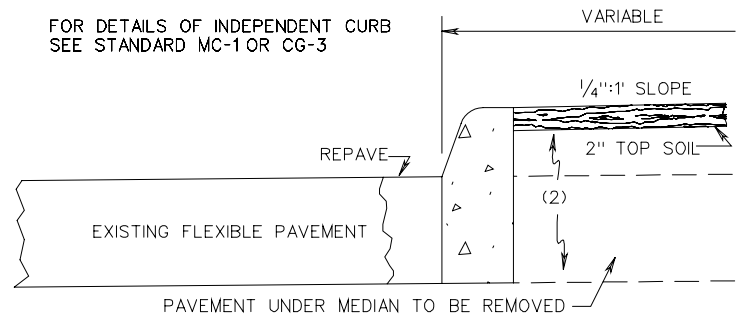
(1) THOROUGHLY COMPACTED AREA TO  
CONSIST OF THE FOLLOWING:  
IN FILLS - REGULAR FILL MATERIAL  
IN CUTS - UNDISTURBED EARTH AND  
REGULAR FILL MATERIAL,  
AS REQUIRED.  
(2) THOROUGHLY COMPACTED AREA TO  
CONSIST OF REGULAR FILL MATERIAL.



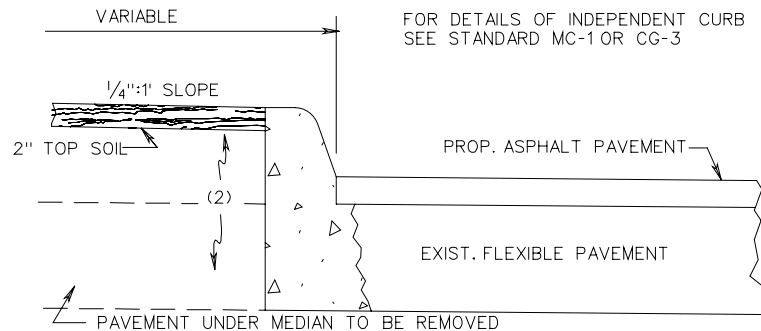
HALF SECTION WITH PROP. CONCRETE OR  
FLEXIBLE BASE WITH ASPHALT TOP

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

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



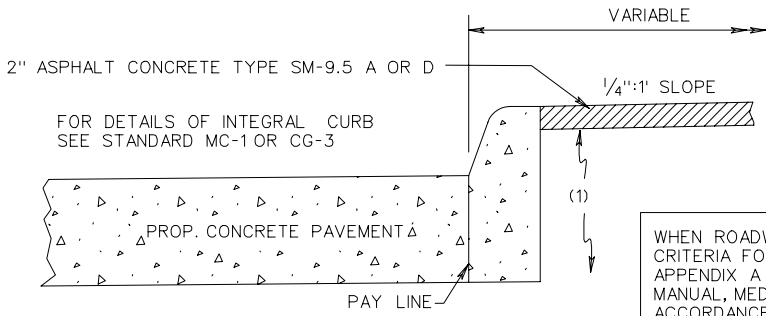
HALF SECTION WITH EXISTING FLEXIBLE PAVEMENT



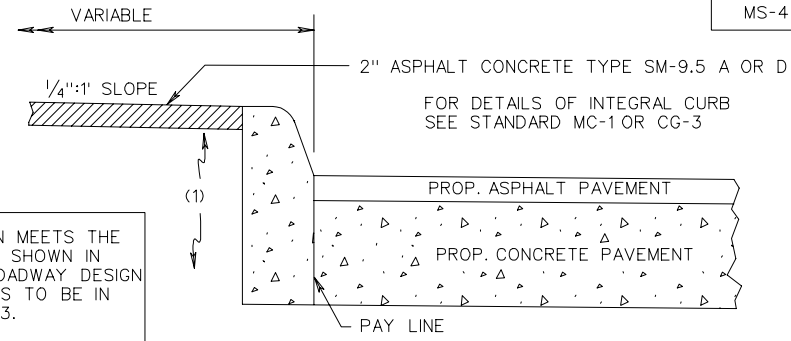
HALF SECTION WITH EXIST. FLEXIBLE BASE  
WITH ASPHALT TOP

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

# STANDARD RAISED GRASS MEDIAN STRIPS

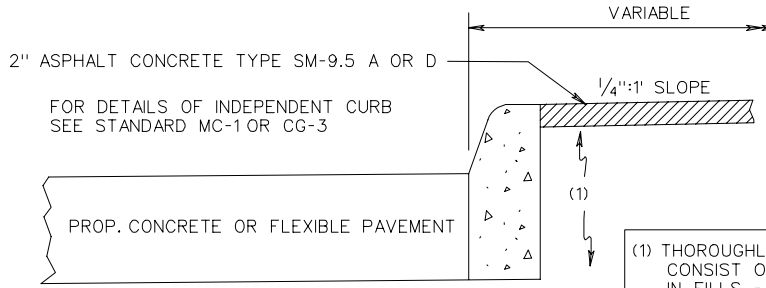


HALF SECTION WITH PROPOSED CONCRETE PAVEMENT

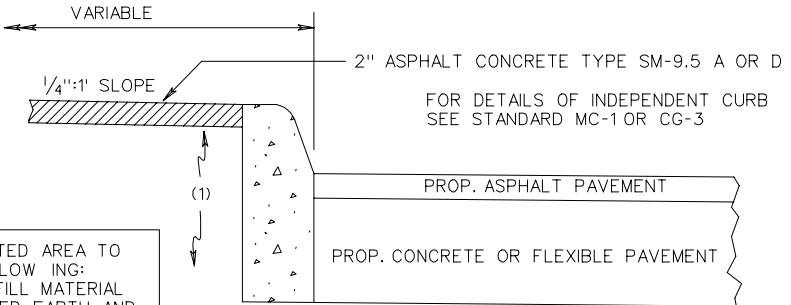


HALF SECTION WITH PROPOSED CONCRETE BASE WITH ASPHALT TOP

WHEN ROADWAY DESIGN MEETS THE CRITERIA FOR CG-7 AS SHOWN IN APPENDIX A OF THE ROADWAY DESIGN MANUAL, MEDIAN CURB IS TO BE IN ACCORDANCE WITH CG-3.

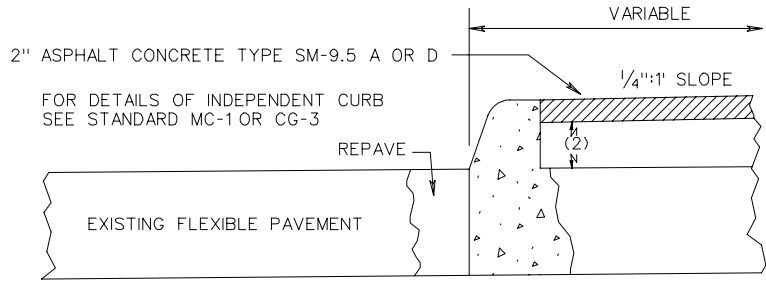


HALF SECTION WITH PROP. CONCRETE OR FLEXIBLE PAVEMENT

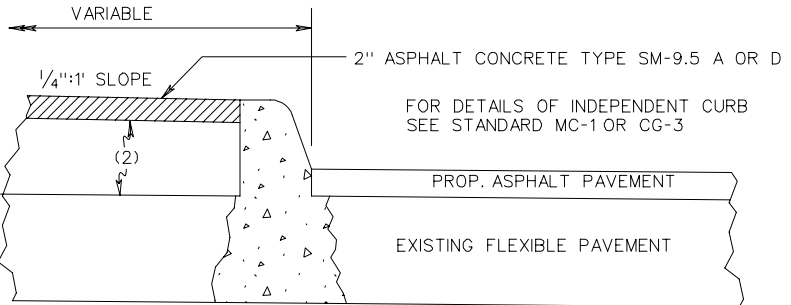


HALF SECTION WITH PROP. CONCRETE OR FLEXIBLE BASE WITH ASPHALT TOP

(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 EXISTING FLEXIBLE PAVEMENT



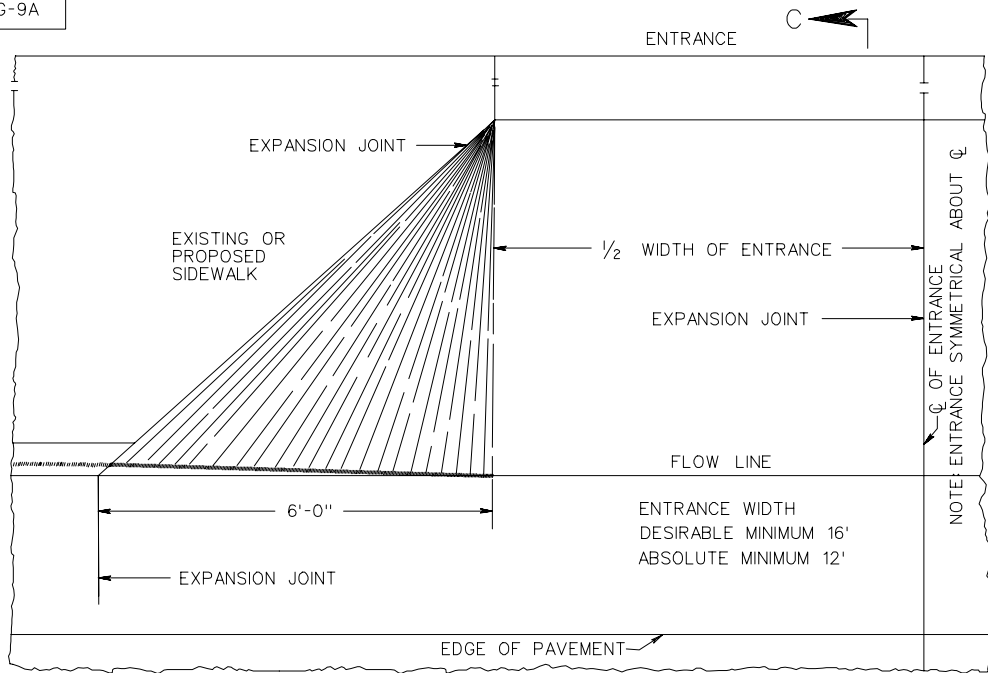
HALF SECTION WITH EXISTING FLEXIBLE BASE WITH ASPHALT TOP

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%.

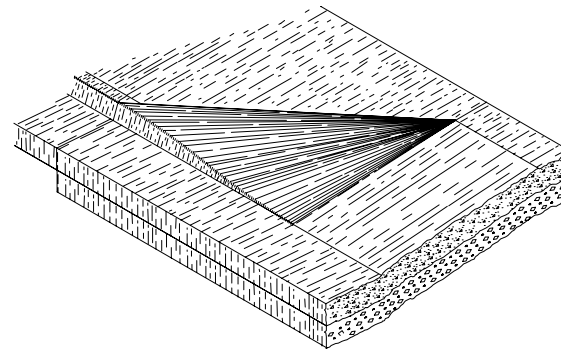
SPECIFICATION REFERENCE
502

# STANDARD RAISED ASPHALT MEDIAN WITH P.C. CONCRETE CURB

VIRGINIA DEPARTMENT OF TRANSPORTATION

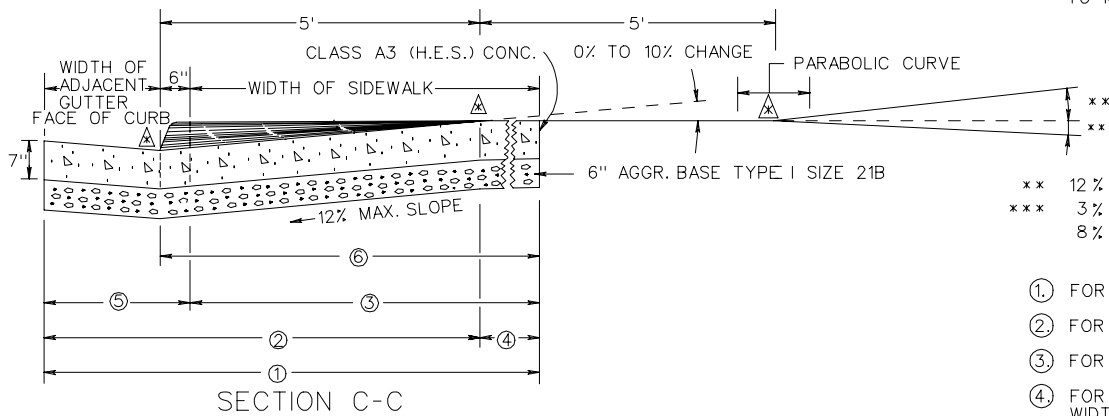


HALF - PLAN



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.



SECTION C-C

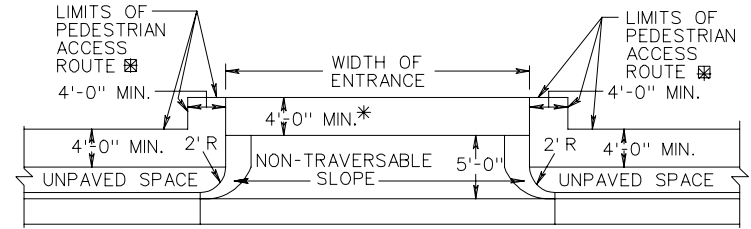
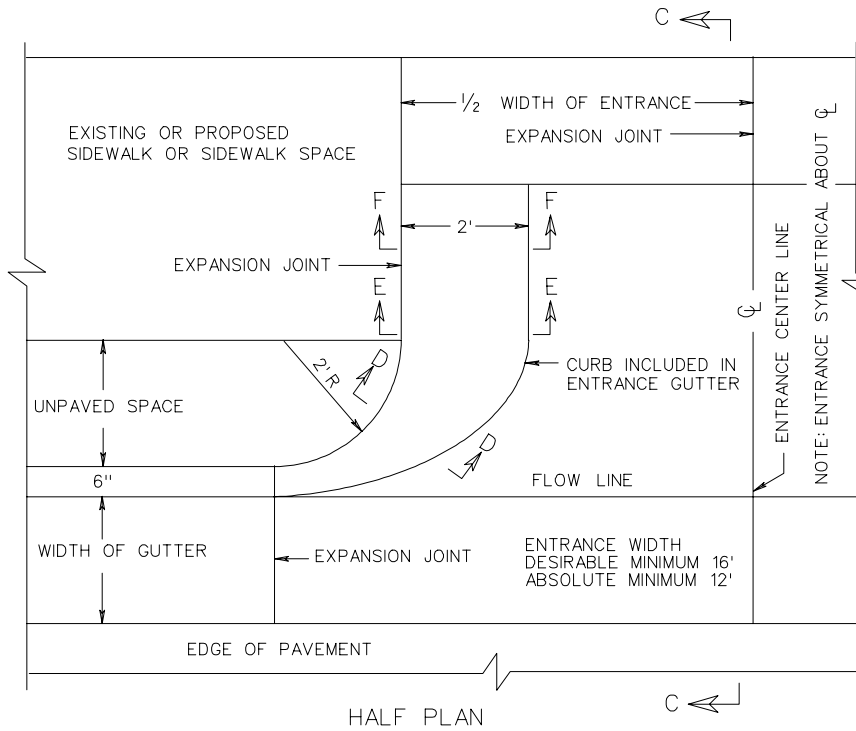
- \*\* 12% MAXIMUM INCREASE IN SLOPE AT MINIMUM 10' INTERVALS
- \*\*\* 3% MAXIMUM DECREASE IN SLOPE FOR FIRST 10' INTERVAL AND 8% MAXIMUM DECREASE FOR SUCCEEDING MINIMUM 10' INTERVALS

- 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 PEDESTRIAN ACCESS ROUTE - MINIMUM 4'-0" TRAVERSABLE WIDTH IS REQUIRED WITH A MAXIMUM 2% CROSS SLOPE.
- 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

SPECIFICATION REFERENCE

502

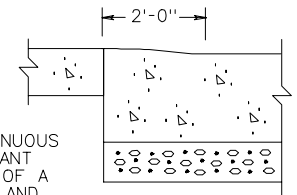


PEDESTRIAN ACCESS ROUTE DETAIL

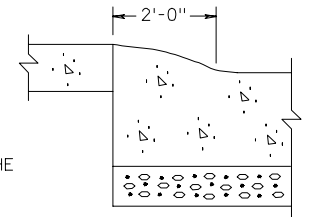
ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF PEDESTRIAN ACCESS ROUTE  $\boxtimes$  EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF-WAY.

$\boxtimes$  PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.

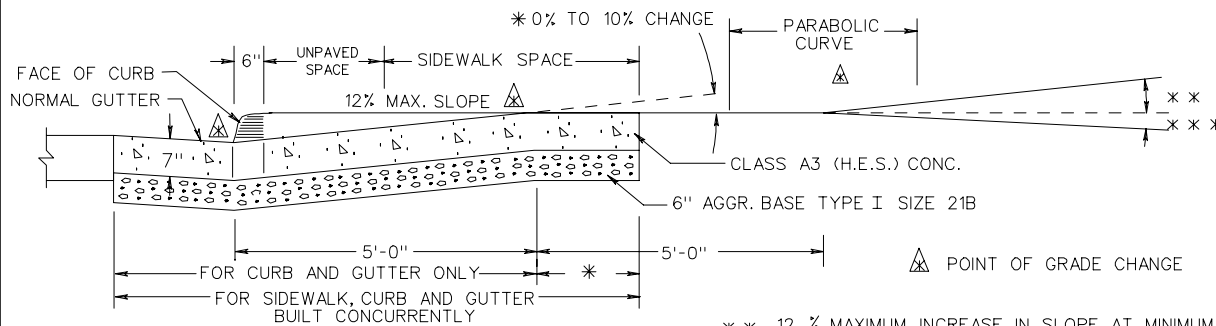
\* IF PEDESTRIAN ACCESS ROUTES  $\boxtimes$  ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH A MAX. 2% CROSS SLOPE.



SECTION F-F

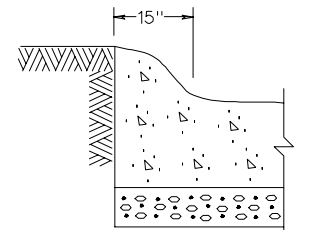


SECTION E-E



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



SECTION D-D

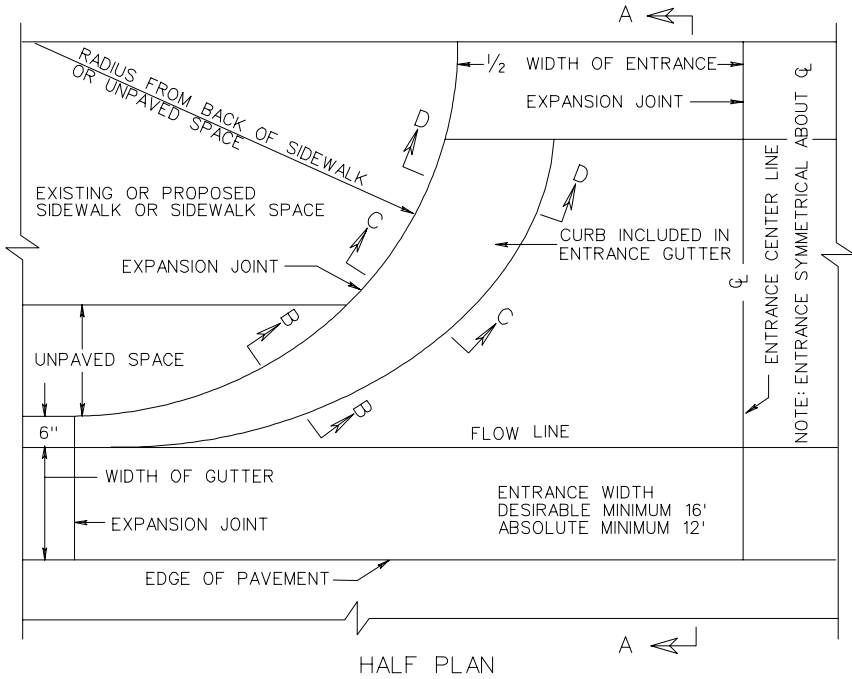
SPECIFICATION REFERENCE
502

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

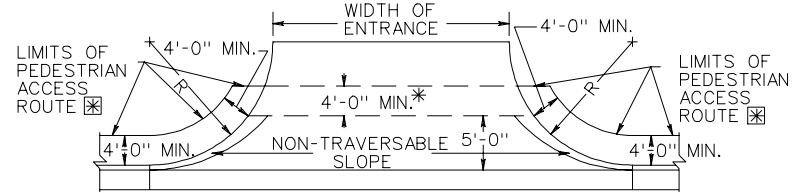
VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 2/06  
203.02





HALF PLAN



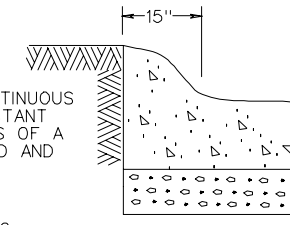
PEDESTRIAN ACCESS ROUTE DETAIL

ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF PEDESTRIAN ACCESS ROUTE  $\boxtimes$  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'.

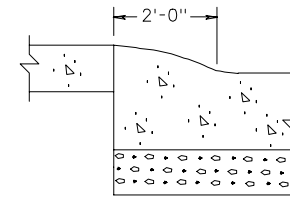
$\boxtimes$  PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.

\* IF PEDESTRIAN ACCESS ROUTES  $\boxtimes$  ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH A MAX. 2% CROSS SLOPE.

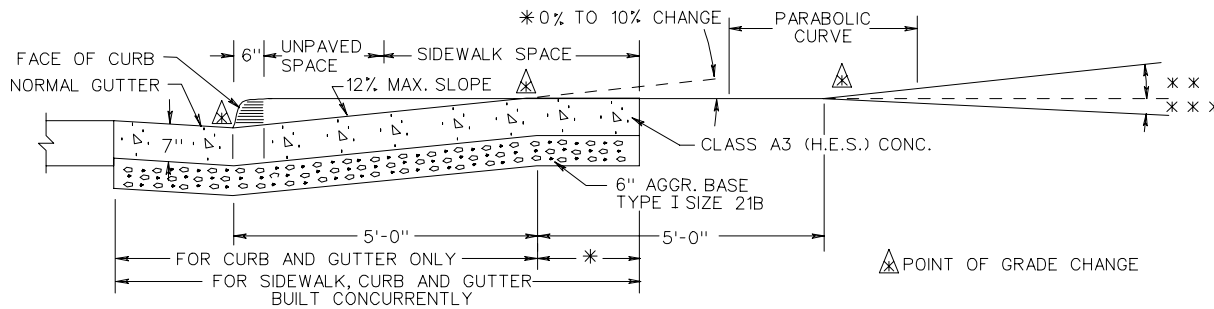


SECTION B-B

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.

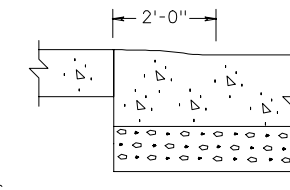


SECTION C-C



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



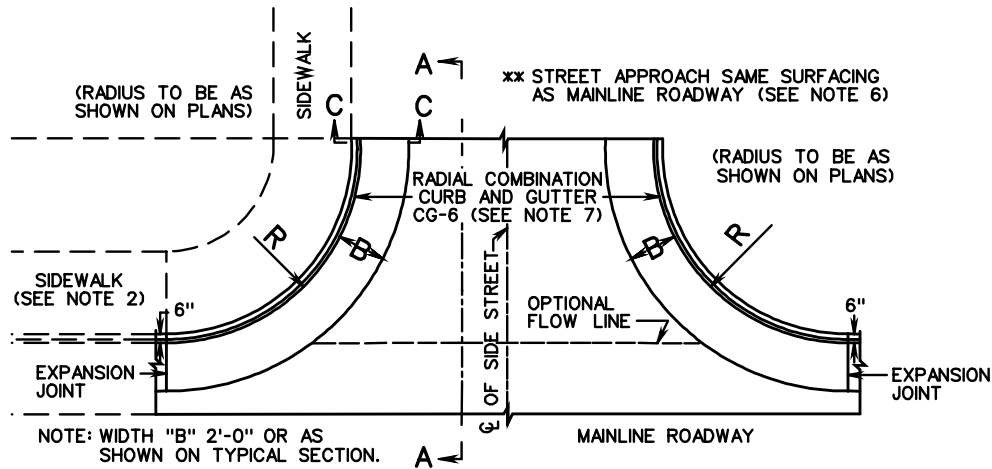
SECTION D-D

# STANDARD ENTRANCE GUTTER

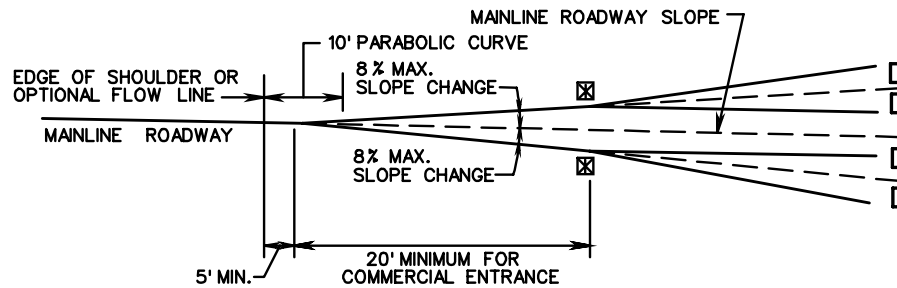
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

502

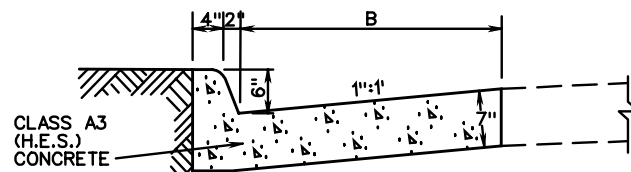


PLAN VIEW



☒ CONSTRUCT GRADE CHANGES WITH A PARABOLIC CURVE.

SECTION A - A



SECTION C-C

**GENERAL NOTES**

1. WHEN CG-11 IS USED FOR STREET CONNECTIONS, THE CONNECTION MUST BE DESIGNED IN ACCORDANCE WITH AASHTO POLICY AND THE APPLICABLE REQUIREMENTS OF THE VDOT ROAD DESIGN MANUAL, INCLUDING SIGHT DISTANCE REQUIREMENTS.
2. 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".
3. 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.
4. SEE STANDARD CG-12 FOR CURB RAMP DESIGN TO BE USED WITH THIS STANDARD.
5. OPTIONAL FLOWLINE MAY REQUIRE WARPING OF A PORTION OF GUTTER TO PRECLUDE PONDING OF WATER.

**ENTRANCE NOTES**

6. PLANS ARE TO INDICATE WHEN CONSTRUCTION OF A FLOW LINE IS REQUIRED TO PROVIDE POSITIVE DRAINAGE ACROSS THE ENTRANCE.
7. 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.)
8. RADIAL CURB OR COMBINATION CURB AND GUTTER SHALL NOT BE CONSTRUCTED BEYOND THE R/W LINE EXCEPT FOR REPLACEMENT PURPOSES.
9. THE DESIRABLE AND MAXIMUM ENTRANCE GRADE CHANGES "D" ARE LISTED IN THE ALLOWABLE ENTRANCE GRADE TABLE. THESE VALUES ARE NOT APPLICABLE TO STREET CONNECTIONS.

**ALLOWABLE ENTRANCE GRADE CHANGES**

ENTRANCE VOLUME		GRADE CHANGE "D"	
		DESIRABLE	MAXIMUM
HIGH	MORE THAN 1500 VPD	0 %	3 %
MEDIUM	500-1500 VPD	≤ 3 %	6 %
LOW	LESS THAN 500 VPD	≤ 6 %	8 %

NOTE: ALLOWABLE ENTRANCE GRADE TABLE IS NOT APPLICABLE TO STREET CONNECTIONS

SPECIFICATION REFERENCE

502

**METHOD OF TREATMENT-  
CONNECTION FOR STREET INTERSECTIONS  
AND COMMERCIAL ENTRANCES**

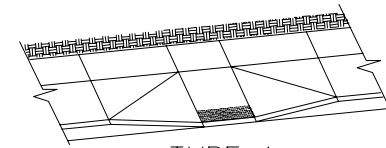
VIRGINIA DEPARTMENT OF TRANSPORTATION

REV 8/07

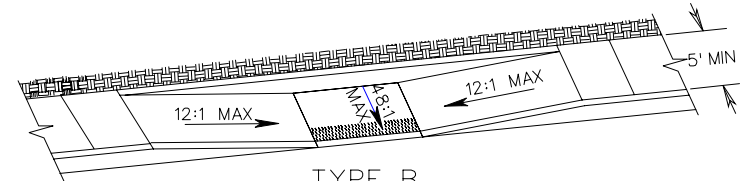
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GENERAL NOTES:

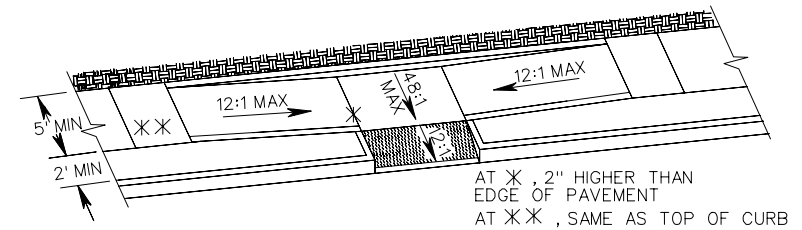
1. THE DETECTABLE WARNING SHALL BE PROVIDED BY TRUNCATED DOMES.
2. DETECTABLE WARNING TO BE CLASS A-3 CONCRETE (CLASS A-4 IF PRECAST) WITH SLIP RESISTANT INTEGRAL SURFACE COVERING THE FULL WIDTH OF THE RAMP FLOOR BY 2 FOOT IN LENGTH IN THE DIRECTION OF PEDESTRIAN TRAVEL. OTHER TYPES OF MATERIAL WITH THE TRUNCATED DOMES DETECTABLE WARNING MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
3. SLOPING SIDES OF CURB RAMP MAY BE POURED MONOLITHICALLY WITH RAMP FLOOR OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
4. 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.
5. 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".
6. CURB / CURB AND GUTTER SLOPE TRANSITIONS ADJACENT TO CURB RAMPS ARE INCLUDED IN PAYMENT FOR CURB / CURB AND GUTTER.
7. 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. ACCESSIBLE ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.
8. RAMPS MAY BE PLACED ON RADIAL OR TANGENTIAL SECTIONS PROVIDED THAT THE CURB OPENING IS PLACED WITHIN THE LIMITS OF THE CROSSWALK AND THAT THE SLOPE AT THE CONNECTION OF THE CURB OPENING IS PERPENDICULAR TO THE CURB.
9. TYPICAL CONCRETE SIDEWALK IS 4" THICK. WHEN THE ENTRANCE RADIICANNOT ACCOMMODATE THE TURNING REQUIREMENTS OF ANTICIPATED HEAVY TRUCK TRAFFIC, REFER TO STANDARD CG-13, COMMERCIAL ENTRANCE (HEAVY TRUCK TRAFFIC) FOR CONCRETE DEPTH.
10. WHEN CURB RAMPS ARE USED IN CONJUNCTION WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH



TYPE A  
PERPENDICULAR

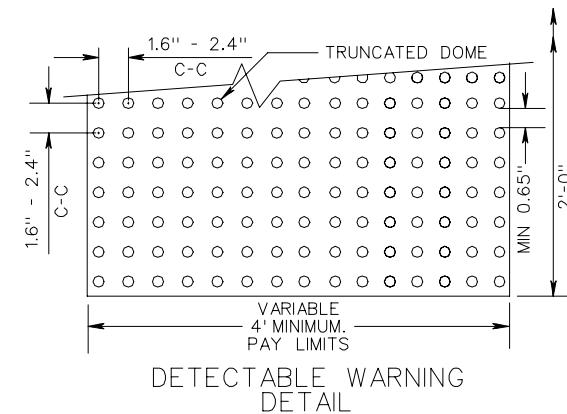
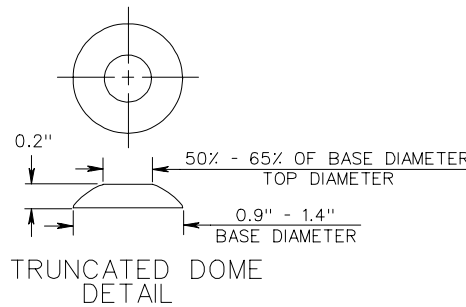


TYPE B  
PARALLEL



TYPE C  
PARALLEL & PERPENDICULAR

AT X , 2" HIGHER THAN  
EDGE OF PAVEMENT  
AT X\* , SAME AS TOP OF CURB



SHEET 1 OF 4

CG-12 DETECTABLE WARNING SURFACE

GENERAL NOTES

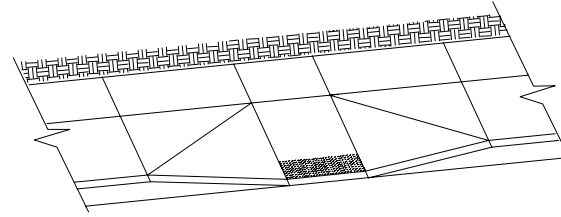
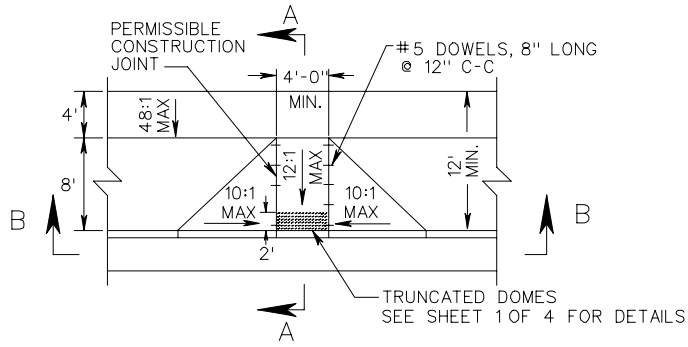
VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 7/05

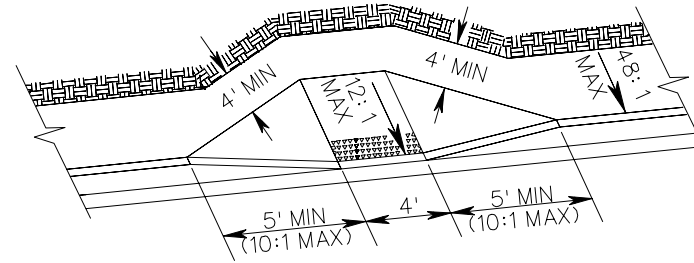
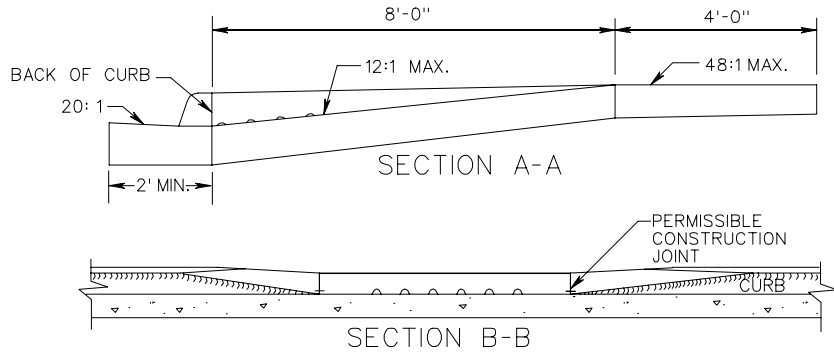
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SPECIFICATION  
REFERENCE

105  
502

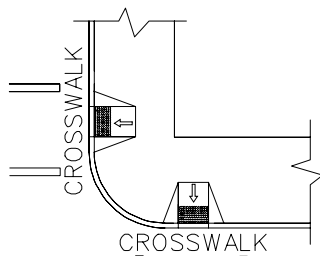


TYPICAL DESIGN



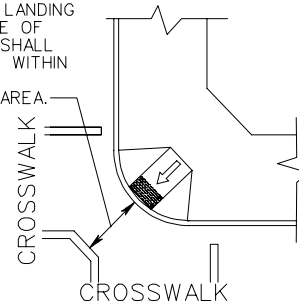
ALTERATIONS

NOTE: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 4.

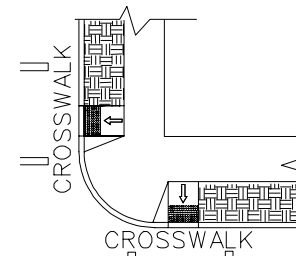


TYPICAL PLACEMENT AT INTERSECTION WITHIN CROSSWALK

A 4' SQUARE LANDING AREA OUTSIDE OF TRAVELWAY SHALL BE PROVIDED WITHIN THE MARKED CROSSWALK AREA.



DIAGONAL VARIATION



TYPICAL PLACEMENT AT INTERSECTION WITHIN CROSSWALK (WITH BUFFER STRIP)

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 FEET FOR NEW CONSTRUCTION, 6 FEET FOR ALTERATIONS.

SPECIFICATION REFERENCE

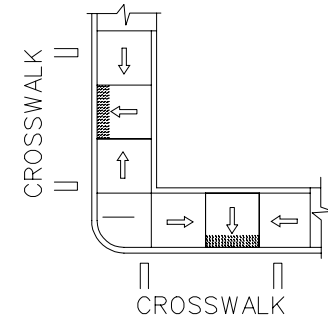
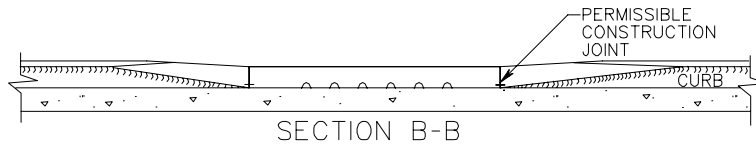
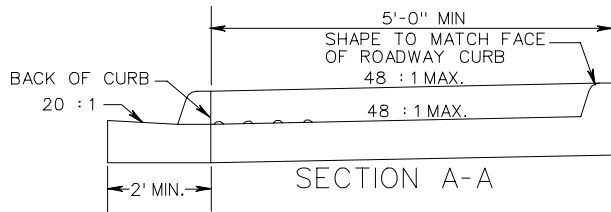
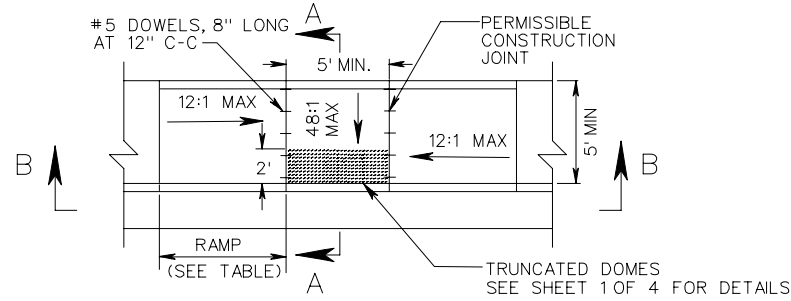
105  
502

CG-12 DETECTABLE WARNING SURFACE  
TYPE A (PERPENDICULAR) APPLICATION

VIRGINIA DEPARTMENT OF TRANSPORTATION

NEW 7/05

203.05A

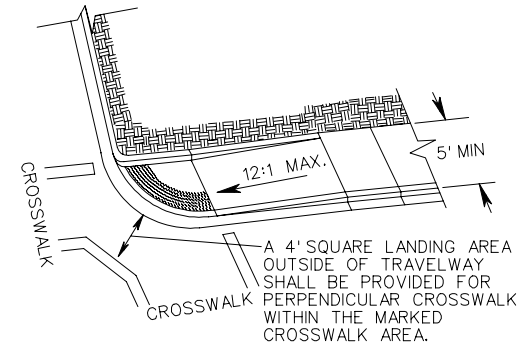


TYPICAL PLACEMENT AT INTERSECTION WITHIN CROSSWALK

NOTE: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 4.

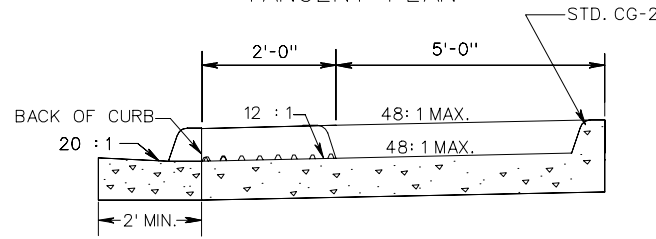
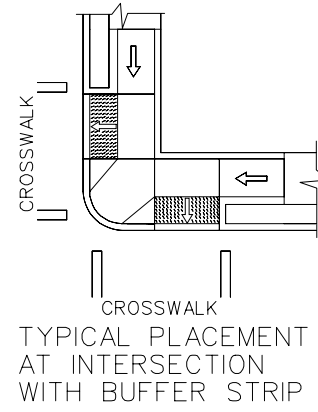
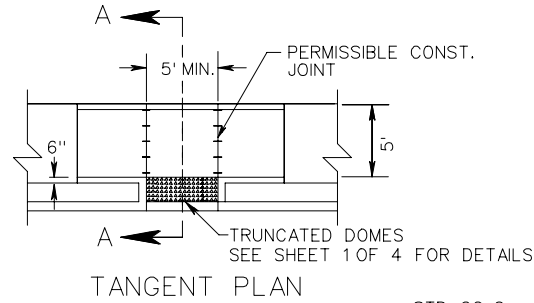
TYPE B PARALLEL APPLICATION		
ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	4	6
1	5	7
2	5	8
3	6	9
4	8	12
5	10	15
6	14	15

NOTE:  
THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.



SPECIFICATION REFERENCE
105 502

CG-12 DETECTABLE WARNING SURFACE  
TYPE B (PARALLEL) APPLICATION  
VIRGINIA DEPARTMENT OF TRANSPORTATION

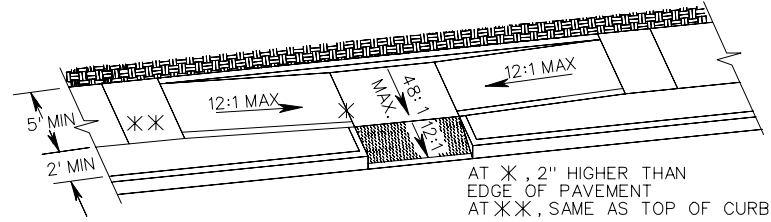


SECTION A-A

THE SELECTION OF CURB TYPE AND THE CONFIGURATION OF THE UTILITY STRIP MAY VARY TO MEET EXISTING FIELD CONDITIONS AND ROADWAY GEOMETRICS PROVIDING THE DIMINIONS AND SLOPES ARE AS NOTED.

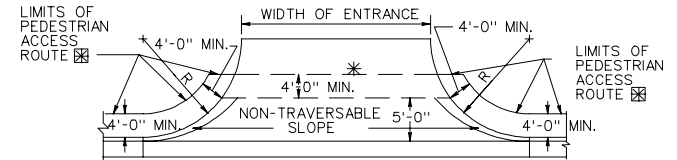
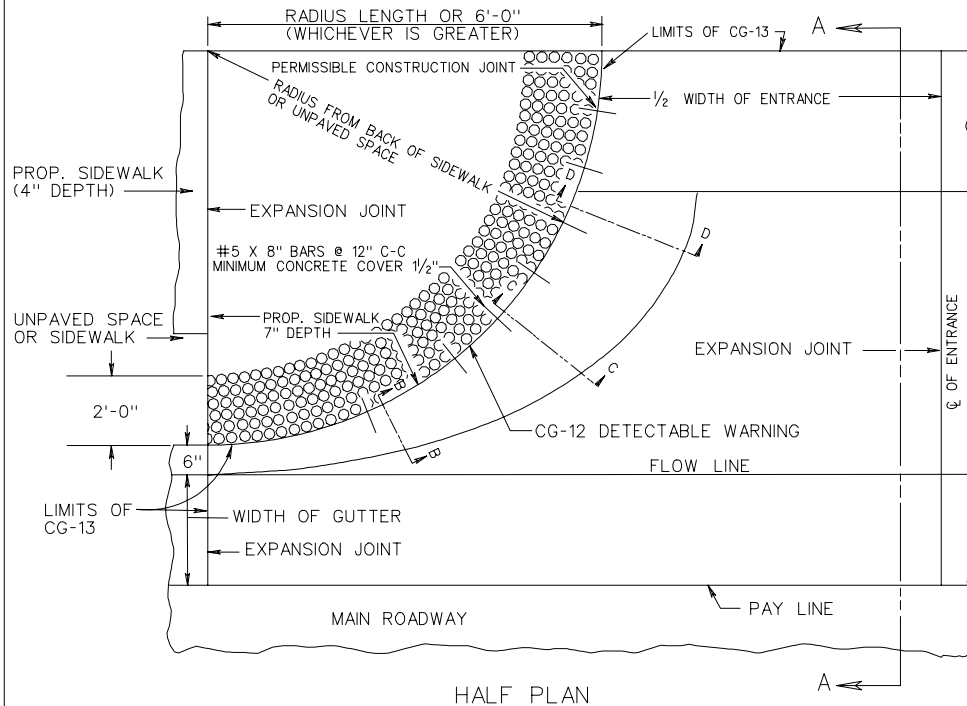
NOTE: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 4.

TYPE C PARALLEL & PERPENDICULAR APPLICATION		
ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	2	4
1	2	5
2	3	5
3	3	6
4	4	8
5	5	10
6	7	14
7	13	15
8	15	15



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" MIN. DIMENSIONS. THE SHORT PERPENDICULAR RUN TO THE STREET CAN BE PROTECTED BY A LANDSCAPED SETBACK OR CONNECTED TO THE SIDEWALK WITH A WARPED SURFACE.

NOTE:  
THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.



PEDESTRIAN ACCESS ROUTE DETAIL

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

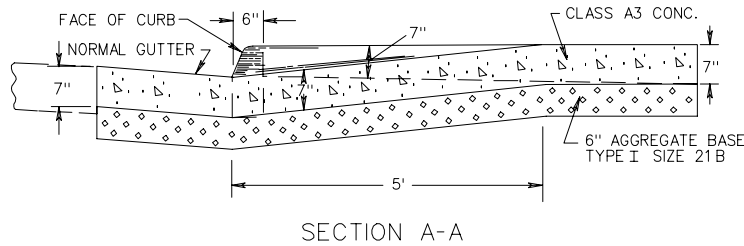
DETAIL TO BE USED WHEN THE COMBINED WIDTH OF UNPAVED SPACE AND SIDEWALK SPACE IS LESS THAN 7'.

PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.

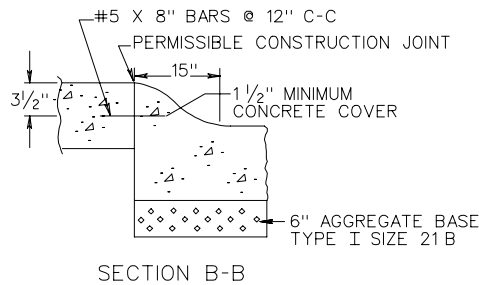
\* IF PEDESTRIAN ACCESS ROUTES ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH MAX. 2% CROSS SLOPE.

NOTES:

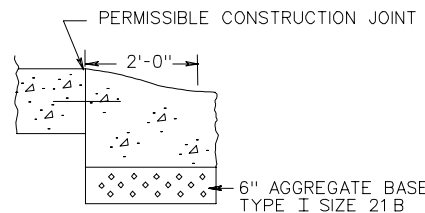
1. PROP. 7" SIDEWALK IS TO BE POURED MONOLITHICALLY WITH ENTRANCE OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
2. PROPOSED 7" SIDEWALK TO BE CLASS A-3 CONCRETE.
3. REQUIRED BARS ARE TO BE NO. 5X8" PLACED 1' CENTER TO CENTER ALONG BACK OF CURB, MID-DEPTH OF SIDEWALK. MINIMUM CONCRETE 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.
7. SEE INSERTABLE SHEET A59 FOR STANDARD CG-12 DETECTABLE WARNING DETAILS.



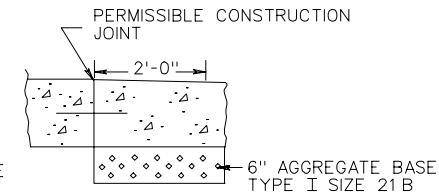
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

<p>SPECIFICATION REFERENCE</p> <p>502</p>	<p>COMMERCIAL ENTRANCE (HEAVY TRUCK TRAFFIC ANTICIPATED)</p> <p>VIRGINIA DEPARTMENT OF TRANSPORTATION</p>	<p>REV. 2/06 203.08</p>
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