

SCDOT

EXCAVATION

SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

SECTION
203-000

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION
SUPPORT ENGINEER



E. Stangor
SIGNATURE
MARCH 3, 2008
DATE

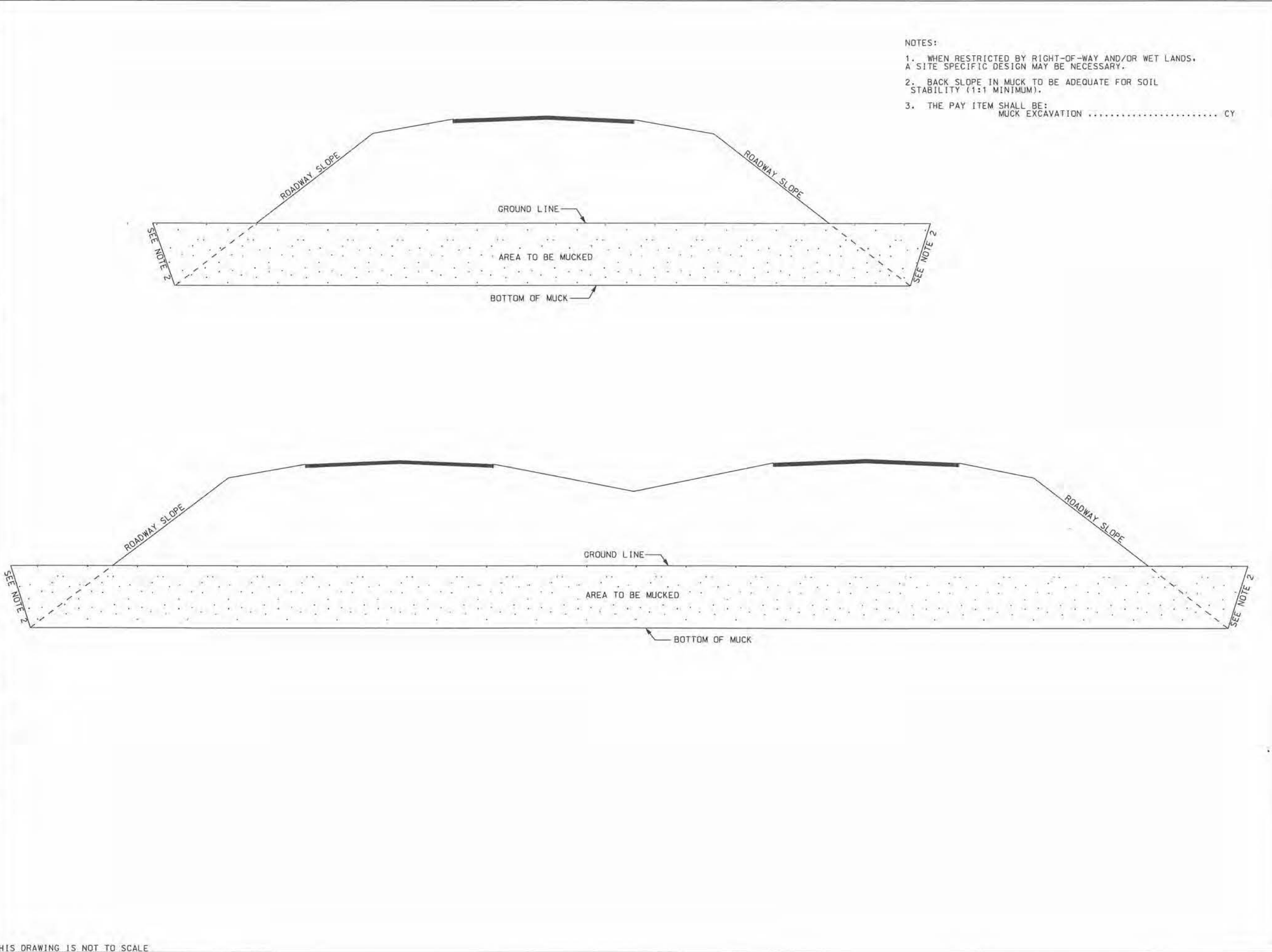
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955 PARK STREET
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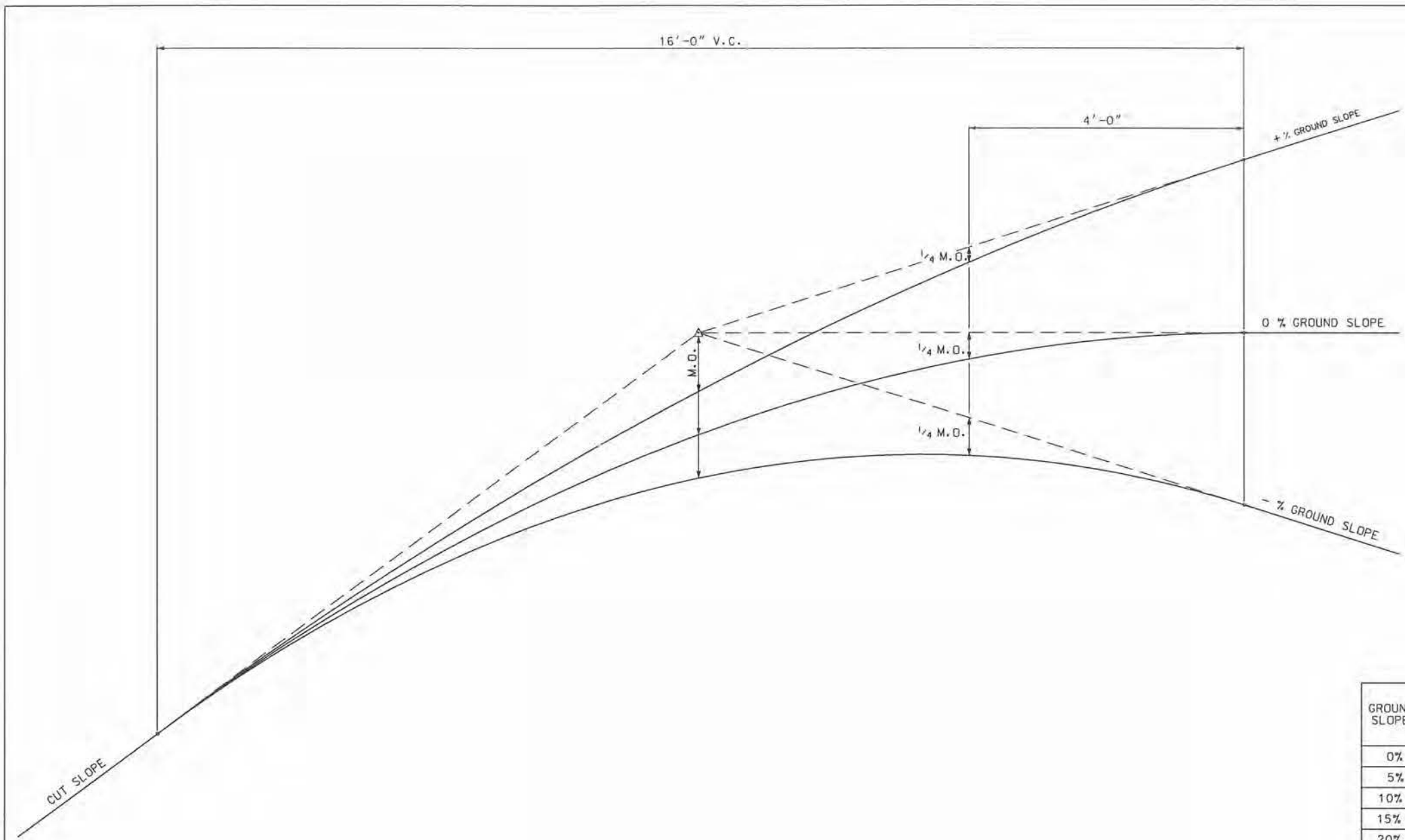
STANDARD DRAWING
EXCAVATION
(MUCK)

203-105-00

EFFECTIVE LETTING DATE



- NOTES:
1. WHEN RESTRICTED BY RIGHT-OF-WAY AND/OR WET LANDS, A SITE SPECIFIC DESIGN MAY BE NECESSARY.
 2. BACK SLOPE IN MUCK TO BE ADEQUATE FOR SOIL STABILITY (1:1 MINIMUM).
 3. THE PAY ITEM SHALL BE:
MUCK EXCAVATION CY



NOTE:
 ALL CUT SLOPES ARE TO BE ROUNDED TO BLEND IN WITH
 NATURAL GROUND LINE EXCEPT CUTS IN SOLID ROCK.
 USE THIS METHOD OF SLOPE ROUNDING ON FREEWAYS
 WHERE DESIGNATED ON PLANS.

GROUND SLOPE	CUT SLOPE					
	2:1			4:1		
	M.O.	1/4 M.O.	AREA(FT ²)	M.O.	1/4 M.O.	AREA(FT ²)
0%	1.00	0.25	5.33	0.50	0.12	2.67
5%	0.90	0.22	4.80	0.40	0.10	2.13
10%	0.80	0.20	4.27	0.30	0.07	1.60
15%	0.70	0.17	3.73	0.20	0.05	1.07
20%	0.60	0.15	3.20	0.10	0.02	0.53
25%	0.50	0.12	2.67			
30%	0.40	0.10	2.13			
-5%	1.10	0.27		0.60	0.15	
-10%	1.20	0.30		0.70	0.17	
-15%	1.30	0.32		0.80	0.20	
-20%	1.40	0.35		0.90	0.22	
-25%	1.50	0.37		1.00	0.25	
-30%	1.60	0.40		1.10	0.27	

THIS DRAWING IS NOT TO SCALE

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS
 SCDOT HIGHWAY DESIGN MANUAL

RELATED DRAWINGS & KEYWORDS

PRECONSTRUCTION
 SUPPORT ENGINEER



E. Blayh
 SIGNATURE

MARCH 3, 2008
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 ROOM 405
 COLUMBIA, SC 29201

STANDARD DRAWING

EXCAVATION
 (FLATTENING
 CUT SLOPES)

203-405-00
 EFFECTIVE LETTING DATE | MAY 2008

REFERENCES

NATIONAL DOCUMENTS
 AASHTO M 278
 AASHTO GEOMETRIC DESIGN
 AASHTO ROADSIDE DESIGN GUIDE

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS
 720-105-00

**PRECONSTRUCTION
 SUPPORT ENGINEER**



E. S. Earle
 SIGNATURE
 MARCH 3, 2008
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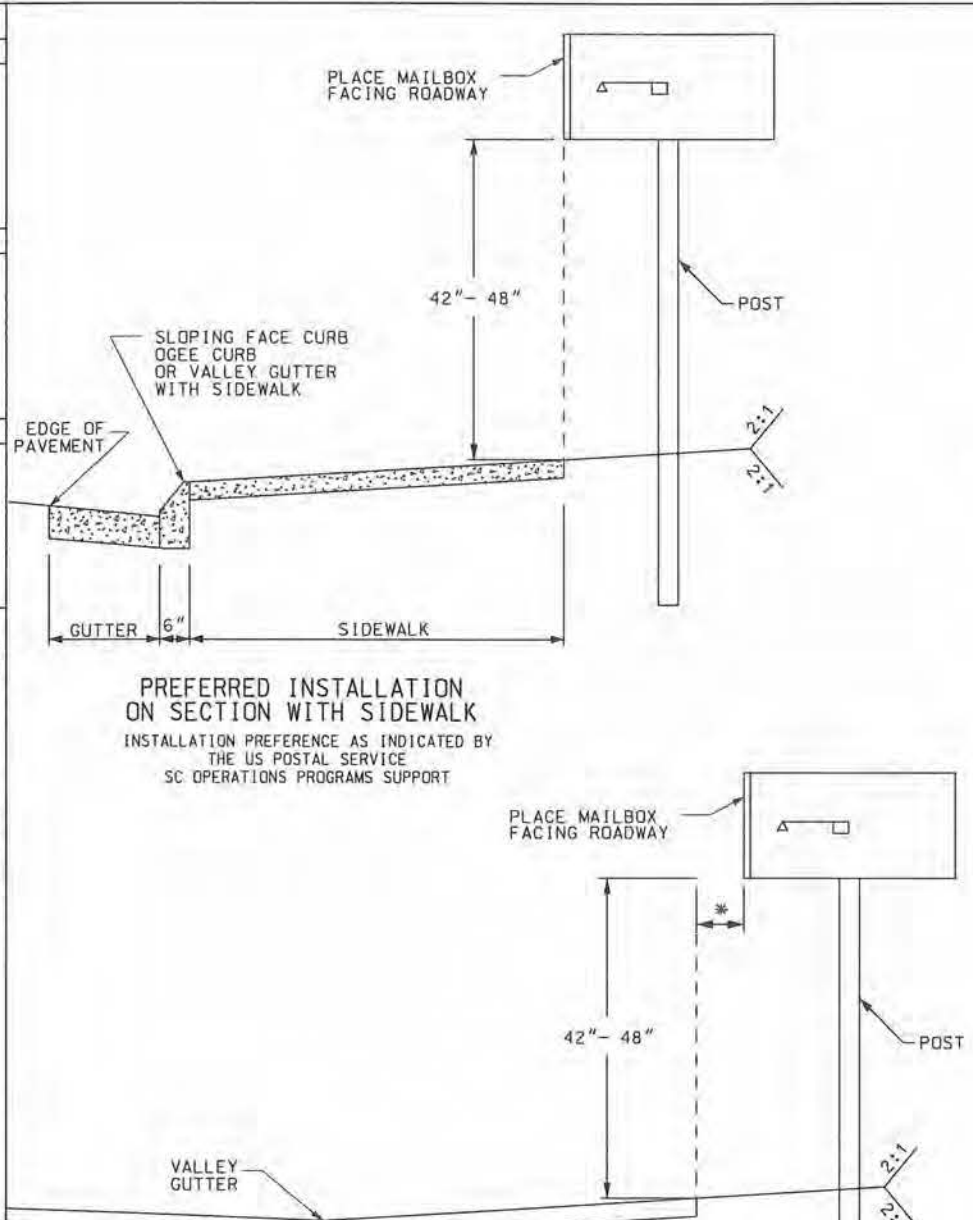
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 COLUMBIA, SC 29201

STANDARD DRAWING

EXCAVATION
 ASSOCIATED WORK
 (MAILBOX
 PLACEMENT)

203-905-00

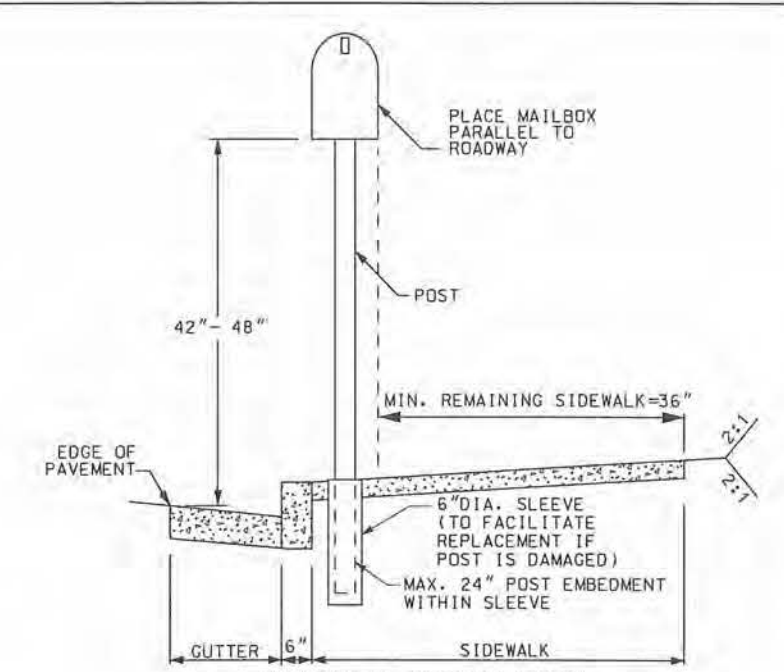
EFFECTIVE LETTING DATE: MAY 2008



**PREFERRED INSTALLATION
 ON SECTION WITH SIDEWALK**
 INSTALLATION PREFERENCE AS INDICATED BY
 THE US POSTAL SERVICE
 SC OPERATIONS PROGRAMS SUPPORT



**PREFERRED INSTALLATION
 ON VALLEY GUTTER SECTION**
 INSTALLATION PREFERENCE AS INDICATED BY
 THE US POSTAL SERVICE
 SC OPERATIONS PROGRAMS SUPPORT



**ALTERNATE INSTALLATION
 ON VERTICAL FACE CURB SECTION**
 WHEN SLOPING FACE/OGEE CURB CANNOT BE USED
 INSTALL MAILBOX AS SHOWN FOR VERTICAL FACE CURBS

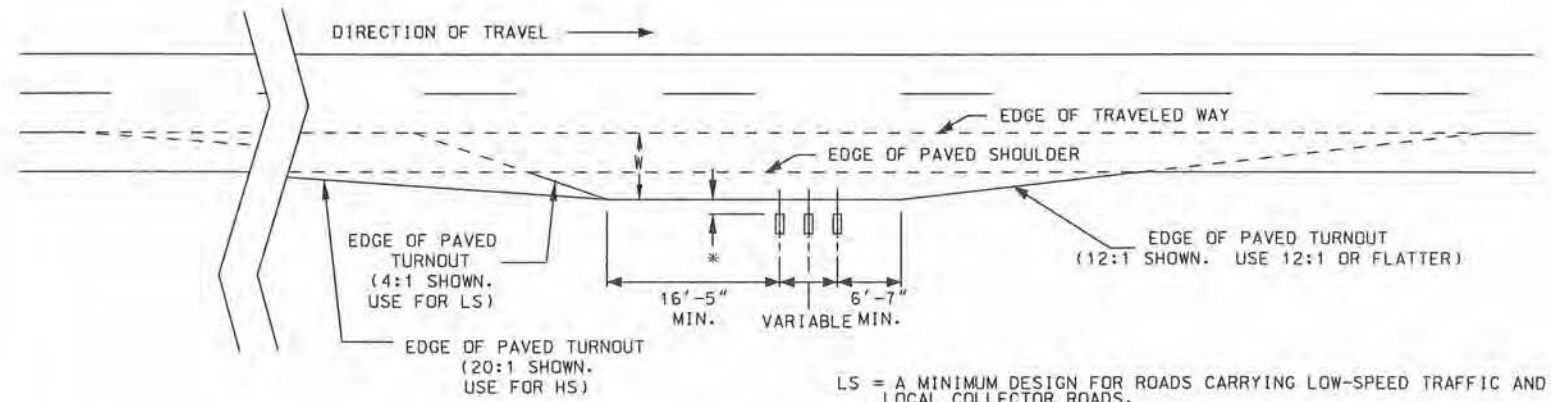
**TABLE 203-905A GUIDELINES FOR
 LATERAL PLACEMENT OF MAILBOXES**
 TAKEN FROM TABLE 11.1 - AASHTO ROADSIDE DESIGN GUIDE
 (LATEST EDITION)

HIGHWAY TYPE AND ADT (VPD)	W (FT)		* (IN)	
	PREFERRED	MINIMUM	PREFERRED	MINIMUM
RURAL HIGHWAY OVER 10,000	12	8		
RURAL HIGHWAY 1,500 TO 10,000	12	8	8 TO 12	0
RURAL HIGHWAY 400 TO 1,500	10	8		
RURAL ROAD UNDER 400	8	6		
RESIDENTIAL STREET WITHOUT CURB OR ALL-WEATHER SHOULDER	6	0	10 TO 12	10
CURBED RESIDENTIAL STREET	NOT APPLICABLE		8 TO 12	6

- NOTES:**
- MAILBOXES SHOULD MEET THE US POSTAL SERVICE REQUIREMENTS OF 39 CFR PART 111 (STANDARDS GOVERNING THE DESIGN OF CURBSIDE MAILBOXES). EXISTING MAILBOXES, MEETING THE US POSTAL SERVICE REQUIREMENTS, ARE TO BE RESET IN ACCORDANCE WITH AASHTO ROADSIDE DESIGN GUIDE (LATEST EDITION) AND THIS STANDARD DRAWING. IF EXISTING BOX DOES NOT MEET THESE REQUIREMENTS, THE PROPERTY OWNER SHOULD BE GIVEN THE OPPORTUNITY TO PURCHASE ANOTHER BOX OF THEIR CHOOSING, MEETING USPS REQUIREMENTS, PRIOR TO INSTALLATION.
 - IN GENERAL, THE PROPERTY OWNER IS RESPONSIBLE FOR ENSURING THAT THEIR MAILBOX IS IN COMPLIANCE WITH USPS REQUIREMENTS. ALL EXISTING MAILBOXES WILL BE RESET AS SHOWN EXCEPT IN THE MOST OBVIOUS NON-COMPLIANT CASES.
 - IN ACCORDANCE WITH SECTION 203 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, MAILBOXES ARE TO BE RESET BY THE CONTRACTOR AS REQUIRED BY CONSTRUCTION ACTIVITIES IN ORDER TO MAINTAIN CURRENT MAIL DELIVERY.
 - MAILBOXES WILL BE LOCATED ON THE RIGHT SIDE OF THE ROADWAY IN THE DIRECTION OF THE DELIVERY ROUTE EXCEPT ON ONE-WAY STREETS WHERE THEY MAY BE PLACED ON THE LEFT SIDE.
 - MAILBOXES SHOULD BE INSTALLED ON THE TRAILING SIDE OF THE DRIVEWAY A MINIMUM OF 20' FROM THE DRIVE. IF MAILBOXES CANNOT BE INSTALLED ON THE TRAILING SIDE OF THE DRIVEWAY, INSTALL ON THE LEADING SIDE OF THE DRIVEWAY, A MINIMUM OF 16' FROM THE DRIVE.
 - IF MORE THAN ONE MAILBOX IS TO BE INSTALLED AT A DRIVEWAY, DISTANCE BETWEEN POSTS SHALL BE EQUAL TO THE HEIGHT OF THE MAILBOX.
 - THE BOTTOM OF THE BOX SHALL BE SET AT AN ELEVATION BETWEEN 3.5' AND 4.0' ABOVE THE ROADWAY SURFACE.
 - WHEN MAILBOX IS PLACED IN A SIDEWALK, THE ORIENTATION OF THE MAILBOX WILL BE PARALLEL TO CENTERLINE OF THE ROADWAY TO ENABLE ACCESS TO THE BOX. THE BOX SHALL OPEN ON THE APPROACH SIDE AND THE SIDE OF THE BOX WILL EQUAL TO THE BACK OF CURB OR BACK OF VALLEY GUTTER.
 - WHEN A GRASS AREA IS BETWEEN THE BACK OF CURB OR VALLEY GUTTER AND THE SIDEWALK, THE MAILBOX WILL BE INSTALLED PERPENDICULAR TO THE ROADWAY, AS LONG AS THE MAILBOX DOES NOT OVER-HANG THE SIDEWALK. ALSO WHEN NO SIDEWALK IS PRESENT THE MAILBOX SHALL BE PLACED PERPENDICULAR TO THE ROADWAY.
 - A 6" SOIL TUBE MEETING SCHEDULE 40 AND THE REQUIREMENTS OF AASHTO M 278 SHALL BE USED. THE INSTALLATION OF THE SOIL TUBE SHALL BE FROM THE TOP OF THE SIDEWALK TO THE BOTTOM OF THE POST. BACK FILL VOID BETWEEN SOIL TUBE AND MAILBOX POST WITH SAND WITHIN 2" OF FINISHED GRADE AND SEAL WITH SILICONE CAULK.
 - WOOD POST SHOULD NOT BE SMALLER OR LARGER THAN RECOMMENDED. MAILBOX TO POST ATTACHMENT SHALL MEET THE REQUIREMENTS OF THE U.S. POSTAL SERVICE. NEWSPAPER RECEPTACLES ARE ALLOWED ON POST AS LONG AS NO INTERFERENCE IS ENCOUNTERED AND WILL BE INSTALLED PARALLEL TO THE MAILBOX ON THE FAR SIDE OF THE POST.
 - THERE ARE NO SEPARATE PAY ITEMS TO RESET MAILBOXES. COST IS INCLUDED IN THE COST OF OTHER WORK WITHOUT ADDITIONAL COMPENSATION.

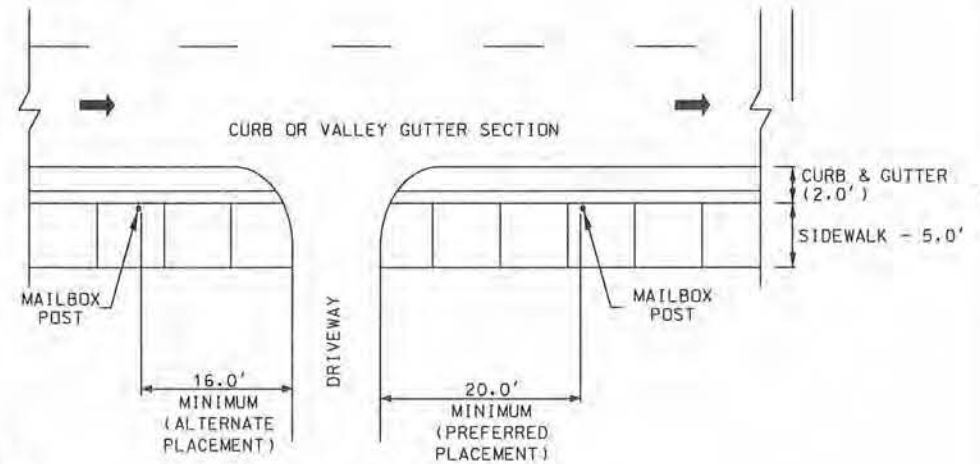
MAILBOX POST MATERIALS:

WOOD:	4" x 4" OR 4" DIA. NOMINAL DIMENSIONS
ALUMINUM:	1.5"-2.0" DIA.
GALVANIZED STEEL:	1.5"-2.0" DIA. (SCHEDULE 40 MAX.)



**RECOMMENDED MAILBOX TURNOUT
 NO CURB OR SIDEWALK**

LS = A MINIMUM DESIGN FOR ROADS CARRYING LOW-SPEED TRAFFIC AND FOR LOCAL COLLECTOR ROADS.
 HS = FOR ROADS CARRYING HIGH-SPEED TRAFFIC.
 W = SEE TABLE (GUIDELINES FOR LATERAL PLACEMENT OF MAILBOXES).
 * = SEE TABLE (GUIDELINES FOR LATERAL PLACEMENT OF MAILBOXES).



**PLAN VIEW WITH CURB
 OR VALLEY GUTTER SECTION**
 (CURB SECTION SHOWN)



EMBANKMENT
CONSTRUCTION



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COLUMBIA, SC 29201

STANDARD DRAWING

SECTION
205-000

REFERENCES

NATIONAL DOCUMENTS		
SCDOT DOCUMENTS		
RELATED DRAWINGS & KEYWORDS		

PRECONSTRUCTION SUPPORT ENGINEER



E. H. H. H.
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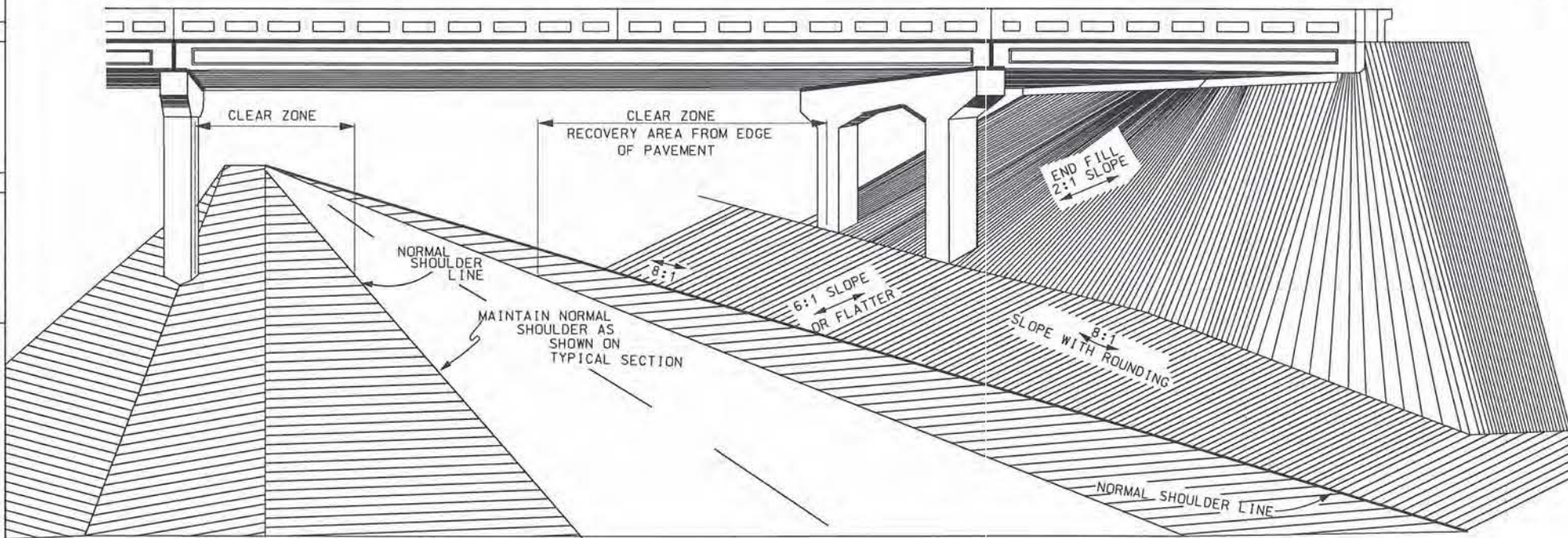
EMBANKMENT
(SAFETY GRADING AT UNDERPASS)

205-105-00

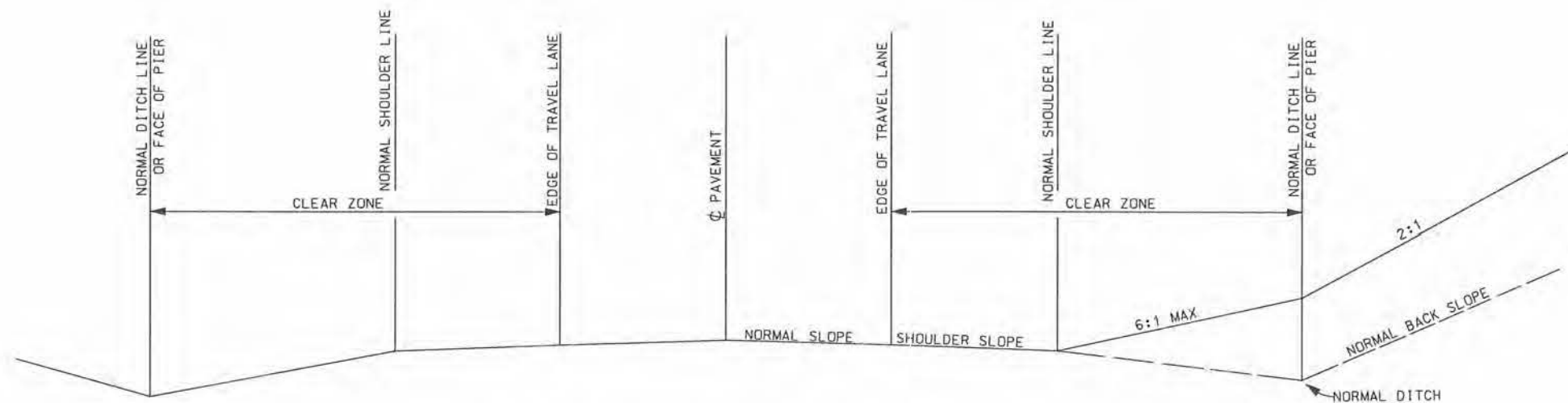
EFFECTIVE LETTING DATE | MAY 2008 | THIS DRAWING IS NOT TO SCALE

NOTES:

1. USE THIS SCHEME FOR GRADING AREA ON THE OUTSIDE OF THROUGH ROADWAY PAVEMENT AT UNDERPASS STRUCTURES EXCEPT WHEN THE STRUCTURE IS WITHIN THE CLEAR ZONE.
2. THE AVERAGE QUANTITY OF UNCLASSIFIED EXCAVATION INVOLVED IN THIS SAFETY GRADING BY FILLING THE NORMAL DITCH IS 300 CUBIC YARDS.

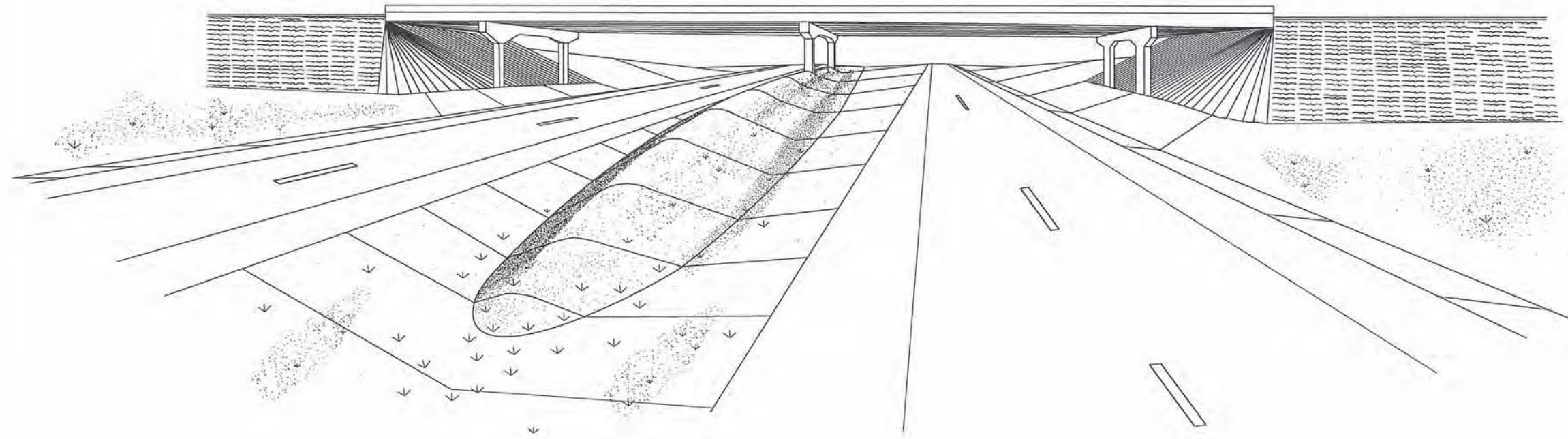


SAFETY GRADING AT UNDERPASS



TYPICAL SECTION FOR SAFETY GRADING

NOTES:
 1. THIS SHEET REPLACES STANDARD DRAWING 205-110-00.
 2. THIS DRAWING IS SHOWN FOR HISTORICAL PURPOSES ONLY AND REPRESENTS A GRADING SCHEME THAT MAY BE ENCOUNTERED WITHIN SCDOT RIGHTS OF WAY. WHEN EVALUATING EXISTING INFRASTRUCTURE, BRIDGE PIERS AND MISCELLANEOUS STRUCTURES WITH THIS GRADING SCHEME SHOULD BE RETROFITTED FOR MEDIAN OR ROADSIDE OBSTACLES WITH GUARDRAIL AS SHOWN IN SECTION 805 OF THIS STANDARD DRAWING BOOK.



MEDIAN EARTH MOUND AT STRUCTURE

[SHOULD BE RETROFITTED WITH GUARDRAIL]

THIS DRAWING IS NOT TO SCALE

REFERENCES		
NATIONAL DOCUMENTS		
SCDOT DOCUMENTS		
RELATED DRAWINGS & KEYWORDS		
MAINTENANCE ONLY		
THIS ITEM IS SHOWN FOR INFORMATION ONLY		
NOT FOR NEW CONSTRUCTION		
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1	3/2009	SDM GENERAL REVISIONS
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SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS OFFICE 955 PARK STREET ROOM 405 COLUMBIA, SC 29201		
MAINTENANCE ONLY		
EMBANKMENT (MEDIAN EARTH MOUND PROTECTION AT STRUCTURE)		
205-110-MO		
NOT FOR NEW CONSTRUCTION		

