

Registrar of Regulations	Date/Time filed with Registrar of Regulations
<i>AUTHORIZATION TO FILE DOCUMENTS INCORPORATED BY REFERENCE BY DESCRIPTION</i>	

① Agency: <u>Virginia Department of Transportation</u>	
② Regulation Numbers: <u>N/A</u> <u>24 VAC 30-72</u> Title of Regulation: <u>Access Management Regulations: Principal Arterials</u>	
③ Effective Date of Regulation: <u>December 2011</u>	
④ Name of Document Incorporated by Reference: <u>VDOT's Road & Bridge Standards, 2008, revised 2011</u>	
⑤ Attach a summary of the document incorporated by reference, including publication date and a copy of the cover page. <u>See attachments</u>	
⑥ Document available for inspection at the following location: <u>Va. Dept. of Transportation</u> <u>Location & Design Division</u> <u>1401 E. Broad St.</u> <u>Richmond, Va. 23219</u> <u>http://www.virginiadot.org/business/locdes/road-and-bridge-standards.asp</u>	⑦ Copy of referenced document may be procured from: <u>Va. Dept. of Transportation</u> <u>Location & Design Engineer</u> <u>1401 E. Broad St.</u> <u>Richmond, Va. 23219</u> <u>http://www.virginiadot.org/business/locdes/2008 road and bridge standards.asp</u>
⑧ Exemptions Claimed (Specific Reference): Administrative Process Act <u>N/A -see 8/10/93 OAG letter</u> Virginia Register Act <u>N/A -see 8/10/93 OAG letter</u> Virginia Code Commission Regulations <u>§ 3.3 (B) (1) - exceeds 500 pages in length; generally available to the public</u>	
Request submitted by: <u>Jo Anne P. Maxwell</u> <u>Agency Regulatory Coordinator</u> <u>11/28/11</u> <u>Title</u> <u>Date</u>	
Approved: <u>Jane D. Chaffin, Registrar of Regulations</u> <u>Date</u>	



COMMONWEALTH of VIRGINIA

Stephen D. Rosenthal
Attorney General

Office of the Attorney General
Richmond 23219

Supreme Court Building
101 North Eighth Street
Richmond, Virginia 23219
804 - 786 - 2071

August 10, 1993

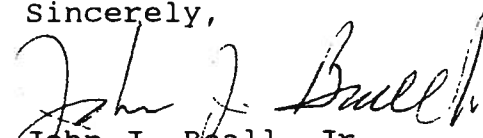
Mr. David L. Roberts
Management Services
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

Dear Mr. Roberts:

Here is my analysis of the filing requirement with the Registrar. The exemptions noted, in some instances, might not survive a strong challenge, but are defensible. I recognize the Registrar may allow only a listing, in lieu of filing. That might work for Speed limits and Weight limits reductions.

With respect to the Department of Rail and Public Transportation, the Rail Corridor Preservation and Industrial Rail Access both need to be filed, but are exempt from APA public hearing process per § 9-6.14:4.1B(4). I imagine that the Transit side have some documents, too, but have not been called upon to review them.

Sincerely,


John J. Beall, Jr.
Senior Assistant Attorney General

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Attachment

Location and Design

1. Road Design Manual, Vols. 1 & 2
2. Location & Design Instructional & Information Memoranda
3. Drainage Manual
4. Post-construction Manual
5. Public Involvement Policy & Procedures Manual
6. Road and Bridge Standards, Vols. 1 & 2*
7. CADD Users' Manual
8. Survey Manual
9. Consultant's Guide for Fee Proposal
10. ~~Procedures Manual for Procurement of Professional Services~~

~~All documents except Chapters 2, 3, 4, 9, 10 and 11 of the Procedures Manual for Procurement of Professional Services (Document 10) are internal, instructional documents.~~ The noted chapters, however, are close to having the "effect of law" and should be filed with the Registrar. The chapters, however, are exempt from APA per § 9-6.14:4.1B(2). See Chapters 2-4, 9-11.

SUMMARY OF DOCUMENT INCORPORATED BY REFERENCE

VDOT'S ROAD & BRIDGE STANDARDS

VDOT'S *Road & Bridge Standards*, Volumes I and II, contain technical civil engineering drawings, charts, and tables for use by road designers, contractors, and others involved in highway construction and maintenance operations. Although the cover page shows a publication date of 2008, both volumes are assessed for updates periodically, with individual plan sheets and errata memos issued as needed. Volume I contains drawings and data referring to topics such as drainage item details, curb, median, and entrance gutters, guardrail markers, and miscellaneous design tables. Volume II contains drawings and data referring to topics such as box culverts, bridge construction, landscaping, traffic control devices, and utilities. Tables of Contents and sample pages are attached for each volume. The total number of pages for both volumes is approximately 770 pages.

COMMONWEALTH OF VIRGINIA



2008

ROAD AND BRIDGE STANDARDS VOLUME I

STANDARD	TITLE	PAGE
EW-1, 1A	STANDARD ENDWALL FOR PIPE CULVERTS 12" - 36" CIRCULAR AND 23" X 14" - 53" X 34" ELLIPTICAL PIPES	101.01
EW-1PC, 1APC	PRECAST ENDWALL FOR PIPE CULVERTS 12" - 36" CIRCULAR AND 23" X 14" - 53" X 34" ELLIPTICAL PIPES	101.02
EW-2, 2A	STANDARD ENDWALL FOR PIPE CULVERTS 42" - 96" CIRCULAR AND 60" X 38" - 106" X 68" ELLIPTICAL PIPES	101.03
	STANDARD ENDWALL FOR PIPE CULVERTS 42" - 96" CIRCULAR	101.04
	STANDARD ENDWALL FOR PIPE CULVERTS 60" X 38" - 106" X 68" ELLIPTICAL PIPES	101.05
EW-2PC	PRECAST ENDWALL FOR 42" - 96" CIRCULAR PIPE CULVERTS	101.06
EW-2APC	PRECAST ENDWALL FOR 60" X 38" - 106" X 68" ELLIPTICAL PIPE CULVERTS	101.07
EW-2S	STANDARD ENDWALLS FOR 42" - 96" PIPE CULVERTS 30 AND 45 DEGREE SKEWS	101.08
	STANDARD ENDWALLS FOR 42" - 96" PIPE CULVERTS 30 AND 45 DEGREE SKEWS	101.09
EW-2SPC	PRECAST ENDWALLS FOR PIPE CULVERTS 42" - 96" PIPE 30 AND 45 DEGREE SKEW	101.10
EW-6	ENDWALL FOR MULTIPLE PIPE CULVERTS 12" - 36" PIPES	101.11
EW-6PC	PRECAST ENDWALLS FOR MULTIPLE PIPE CULVERTS 12" - 36" PIPE	101.12
EW-6S	ENDWALLS FOR MULTIPLE PIPE CULVERTS 12" - 36" PIPE 30 DEGREE SKEW	101.13
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EW-6SPC	PRECAST ENDWALLS FOR MULTIPLE PIPE CULVERTS 12" - 36" PIPE 30 DEGREE SKEW	101.15
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EW-7	ENDWALLS FOR MULTIPLE PIPE CULVERTS 42" - 96" PIPE	101.17
EW-7PC	PRECAST ENDWALLS FOR MULTIPLE PIPE CULVERTS 42" - 96" PIPE	101.18
EW-7S	ENDWALLS FOR MULTIPLE PIPE CULVERTS 42" - 96" PIPE 30 DEGREE SKEW	101.19
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EW-9	ENDWALLS FOR PIPE ARCHES 13" - 38" RISE	101.22
EW-9PC	PRECAST ENDWALLS FOR PIPE ARCHES 13" - 38" RISE	101.23
EW-10	ENDWALLS FOR MULTIPLE PIPE ARCHES 13" - 38" RISE	101.24
EW-10PC	PRECAST ENDWALLS FOR MULTIPLE PIPE ARCHES 13" - 38" RISE	101.25
EW-11	PIPE ENDWALL WITH LOAD-CARRYING GRATE FOR 12" - 60" PIPES	101.26
	PIPE ENDWALL WITH LOAD-CARRYING GRATE FOR 12" - 60" PIPES	101.27
	PIPE ENDWALL WITH LOAD-CARRYING GRATE FOR 12" - 60" PIPES	101.28
EW-11A	PIPE ENDWALL WITH LOAD-CARRYING GRATE FOR 12" - 24" PIPES	101.29
	PIPE ENDWALL WITH LOAD-CARRYING GRATE FOR 12" - 24" PIPES	101.30
EW-11APC	PRECAST PIPE ENDWALL WITH LOAD-CARRYING GRATE FOR 12" - 24" PIPES	101.31
EW-12	ENDWALL FOR PIPE UNDERDRAIN	101.32

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ES-1A	FLARED END-SECTION FOR 23" X 14" TO 53" X 34" ELLIPTICAL CONCRETE PIPE CULVERTS	102.02
ES-2	FLARED END-SECTION FOR 12" - 60" CORRUGATED PIPE CULVERTS	102.03
ES-3	FLARED END-SECTION FOR METAL PIPE ARCHES 13" - 47" RISE	102.04
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T-DI-7	STANDARD PRECAST TOP UNITS	103.07
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DI-2AA, 2BB, 2CC	STANDARD CURB DROP INLET 12" - 24" PIPE: DEPTH (H) 9' TO 20'	104.04
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DI-4AA, 4BB, 4CC	STANDARD CURB DROP INLET 36" - 48" PIPE: DEPTH (H) 8' TO 20'	104.17
DI-4D, 4E, 4F	STANDARD CURB DROP INLET (WITH UTILITY SPACE) 36" - 48" PIPE: MAXIMUM DEPTH (H) 8'	104.18
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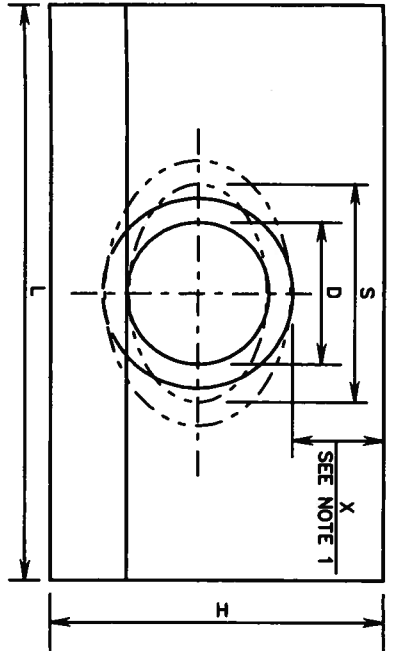
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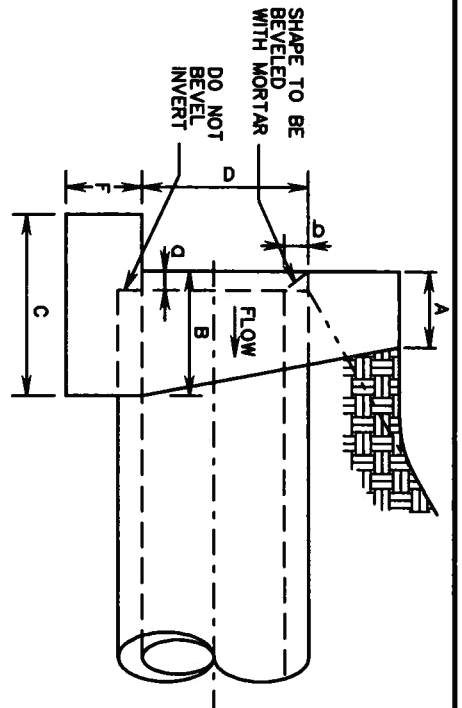
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NOTES:

1. "X" MAY BE REDUCED UNTIL "X" REACHES A MINIMUM OF 4" WHERE ENDWALL WOULD PROTRUDE ABOVE SHOULDER LINE. IN NO CASE SHALL TOP OF ENDWALL PROJECT ABOVE FILL SLOPE, DITCH SLOPE, OR SHOULDER.
2. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
3. ALL CAST IN PLACE CONCRETE TO BE CLASS A3, FOR PRECAST SEE SHEET 101.02.
4. THIS STANDARD TO BE USED WITH STRAIGHT CROSSINGS AND ALL SKEWS TO 45°.
5. HEADWALL TO BE BEVELED IN ALL AREAS EXCEPT WHERE A CONFLICT WITH INVERT OR WINGWALLS OCCUR



6. BEVEL EDGE IS REQUIRED ON THE HEADWALL AT THE INLET END OF THE CULVERT (WHERE THE FLOW ENTERS THE CULVERT).
7. HEADWALL AT THE OUTLET END OF THE CULVERT MAY BE EITHER SQUARE EDGE OR BEVEL EDGE.
8. ON SHALLOW FILLS WHERE ENDWALLS ARE 1' OR LESS BELOW SHOULDER LINE, THE TOP OF THE ENDWALL SHALL BE CONSTRUCTED PARALLEL TO THE GRADE OF THE ROAD.
9. 3/4" CHAMFER MAY BE PROVIDED ON ALL EDGES AT MANUFACTURER'S OPTION.

ENDWALL FOR CIRCULAR PIPE

EW-1

DIAMETER OF PIPE CULVERT					
	12"	15"	18"	21" OR 24"	27" OR 30" 33" OR 36"
A	0'-6"	0'-8"	0'-9"	0'-11"	1'-0"
B	0'-11"	1'-1"	1'-3"	1'-6"	1'-9"
C	1'-4"	1'-7"	1'-9"	2'-2"	2'-6"
D	1'-0"	1'-3"	1'-6"	2'-0"	2'-6"
F	0'-6"	0'-8"	0'-9"	0'-9"	0'-9"
H	2'-3"	2'-11"	3'-2"	3'-9"	4'-3"
L	4'-0"	5'-0"	6'-0"	8'-0"	10'-0"
Q	0'-1/4"	0'-1/4"	0'-2"	0'-2 1/2"	0'-3 3/4"
b	0'-1"	0'-1 1/4"	0'-1 1/2"	0'-2"	0'-2 1/2"
CUBIC YARDS OF CONCRETE					
CONC. PIPE	0.241	0.492	0.697	1.319	2.067
C.M. PIPE	0.257	0.521	0.739	1.398	2.198
					3.145

ENDWALL FOR ELLIPTICAL PIPE

EW-1A

SIZE OF ELLIPTICAL PIPE CULVERT (SPAN x RISE)									
	23"x14"	30"x19"	34"x22"	38"x24"	42"x27"	45"x29"	49"x32"	53"x34"	
A	0'-8"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-0"	
B	1'-2"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	1'-11"	1'-11"	
C	1'-8"	1'-11"	2'-1"	2'-4"	2'-5"	2'-7"	2'-8"	2'-9"	
D	1'-2"	1'-7"	1'-10"	2'-0"	2'-3"	2'-5"	2'-8"	2'-10"	
F	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	
H	2'-10"	3'-3"	3'-7"	3'-9"	4'-0"	4'-2"	4'-5"	4'-7"	
L	5'-5"	7'-2"	8'-6"	9'-2"	10'-2"	10'-11"	12'-1"	12'-11"	
S	1'-11"	2'-6"	2'-10"	3'-2"	3'-6"	3'-9"	4'-1"	4'-5"	
Q	0'-2 1/2"	0'-3 1/4"	0'-3 1/2"	0'-4"	0'-4 1/2"	0'-4 3/4"	0'-5"	0'-5 1/2"	
b	0'-2"	0'-2 1/2"	0'-2 3/4"	0'-3"	0'-3 1/2"	0'-3 3/4"	0'-4"	0'-4 1/2"	
CUBIC YARDS OF CONCRETE									
CONC. PIPE	0.502	0.855	1.236	1.500	1.811	2.101	2.512	2.801	

SPECIFICATION REFERENCE

105
302

STANDARD ENDWALL FOR PIPE CULVERTS 12" - 36" CIRCULAR AND 23" x 14" - 53" x 34" ELLIPTICAL PIPES

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