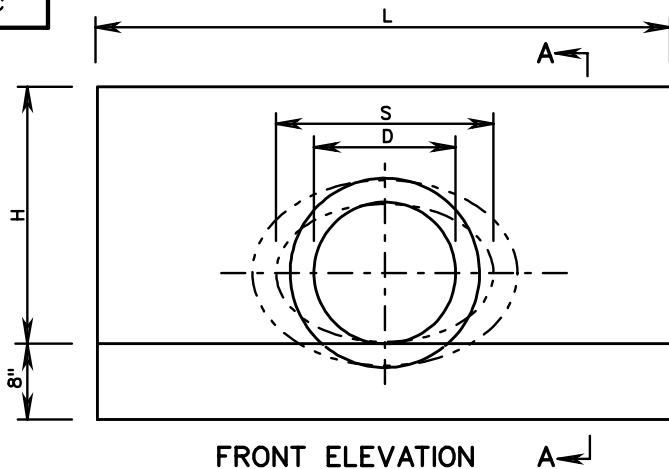
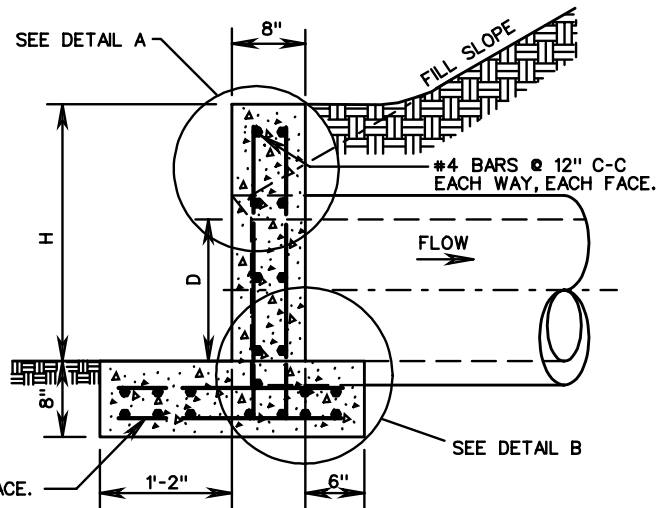


EW-1, 1 APC



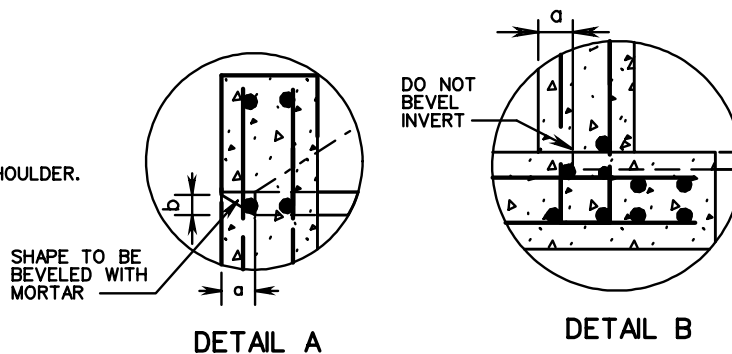
FRONT ELEVATION



SECTION A-A

NOTES:

1. CONCRETE TO BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH.
2. IF PIPE IS TO BE SKEWED THE OPENING WILL BE ADJUSTED TO ACCOMMODATE ANGLES UP TO 45°.
3. REINFORCING STEEL IN ACCORDANCE WITH ASTM A-615 (REINFORCING BARS).
4. PIPE OPENINGS IN PRECAST DRAINAGE UNITS SHALL NOT EXCEED 4 INCHES AT ANY GIVEN POINT BETWEEN THE PIPE AND THE PRECAST UNIT.
5. DIMENSIONS SHOWN ARE MINIMUM. ACTUAL MEASUREMENTS MAY VARY WITH MANUFACTURER'S TOLERANCE.
6. IN NO CASE SHALL TOP OF ENDWALL PROJECT ABOVE FILL SLOPE, DITCH SLOPE, OR SHOULDER.
7. HEADWALL TO BE BEVELED IN ALL AREAS EXCEPT WHERE A CONFLICT WITH INVERT OR WINGWALL OCCUR.
8. BEVEL EDGE IS REQUIRED ON THE HEADWALL AT THE INLET END OF THE CULVERT. HEADWALL AT OUTLET END MAY BE EITHER SQUARE EDGE OR BEVELED.
9. 3/4" CHAMFER MAY BE PROVIDED ON ALL EDGES AT MANUFACTURER'S OPTION.



DETAIL A

DETAIL B

EW-1PC

EW-1APC

ENDWALL FOR CIRCULAR PIPE

DIAMETER OF PIPE CULVERT

	12"	15"	18"	21" OR 24"	27" OR 30"	33" OR 36"
D	12"	15"	18"	21" OR 24"	27" OR 30"	33" OR 36"
H	2'-0"	2'-3"	2'-6"	3'-2"	3'-10"	4'-4"
L	4'-0"	5'-0"	6'-0"	8'-0"	10'-0"	12'-0"
a	0'-1 1/4"	0'-1 3/4"	0'-2"	0'-2 1/2"	0'-3 1/4"	0'-3 3/4"
b	0'-1"	0'-1 1/4"	0'-1 1/2"	0'-2"	0'-2 1/2"	0'-3"

ENDWALL FOR ELLIPTICAL PIPE

SIZE OF ELLIPTICAL PIPE CULVERT (SPAN x RISE)

S x D	23" x 14"	30" x 19"	34" x 22"	38" x 24"	42" x 27"	45" x 29"	49" x 32"	53" x 34"
S x D	23" x 14"	30" x 19"	34" x 22"	38" x 24"	42" x 27"	45" x 29"	49" x 32"	53" x 34"
H	1'-10"	2'-4"	2'-7"	2'-9"	3'-1"	3'-3"	3'-6"	3'-8"
L	5'-5"	7'-2"	8'-6"	9'-2"	10'-2"	10'-11"	12'-1"	12'-11"
a	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"



ROAD AND BRIDGE STANDARDS

PRECAST ENDWALL FOR PIPE CULVERTS

12" - 36" CIRCULAR AND 23" x 14" - 53" x 34" ELLIPTICAL PIPES

SPECIFICATION REFERENCE

SHEET 1 OF 1

REVISION DATE

101.02

VIRGINIA DEPARTMENT OF TRANSPORTATION

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