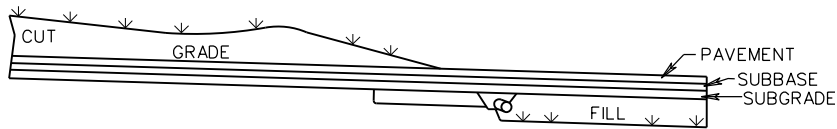
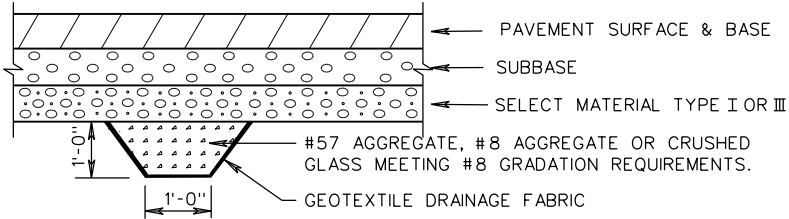


CD-1

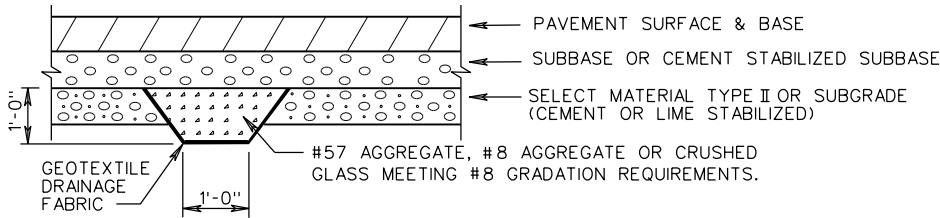


**CROSSDRAIN CD-1 AT LOWER END OF CUTS  
CENTER LINE SECTION  
(WITH TYPE 1 SELECT MATERIAL)**

**TRENCH PLACEMENT**



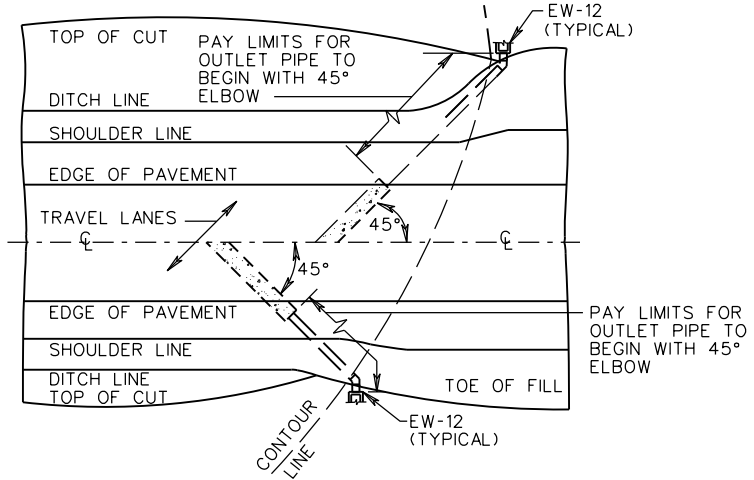
OR



**NON-PERFORATED OUTLET PIPE**

TYPE OF PIPE	CRUSHING STRENGTH			
	W.T.	4" NOM. DIAMETER	W.T.	6" NOM. DIAMETER
SMOOTH WALL PVC	.103		0.153	
SMOOTH WALL PE		70 PSI ***		70 PSI ***

\* WALL THICKNESS (MIN) - INCHES  
\*\*\* TESTED ACCORDING TO ASTM D-2412 AT 5% DEFLECTION.



**PLAN VIEW  
(PLACEMENT OF CD-1 CROSSDRAIN)**

**GENERAL NOTES**

- UNLESS SPECIFICALLY INDICATED, CROSSDRAIN WILL NOT BE LOCATED AT THIS POINT WHEN BOTH SUBBASE AND SUBGRADE ARE STABILIZED.
- TRENCH SHALL BE FILLED WITH AGGREGATE AND THOROUGHLY HAND TAMPED TO INSURE COMPACTNESS.
- OUTLET PIPE SHALL BEGIN AT THE EDGE OF THE TRAVEL LANE PAVEMENT AND SHALL BE PLACED ON A GRADE PARALLEL TO THE SHOULDER SLOPE 2% MIN. (3% DESIRABLE) GRADE.
- ON CURB AND GUTTER SECTIONS, WHERE IT IS IMPOSSIBLE TO OTHERWISE PROVIDE OUTLETS FOR CROSSDRAINS, THEY ARE TO BE LOCATED SO AS TO DRAIN INTO DROP INLETS OR MANHOLES.
- ON SUPERELEVATED SECTIONS, TRENCH IS TO BE UNDER ENTIRE PAVEMENT AREA WITH OUTLET PIPE ON LOW SIDE ONLY.
- INVERT ELEVATION AT OUTLET END OF OUTLET PIPE TO BE A MINIMUM OF 1'-0" ABOVE INVERT ELEVATION OF RECEIVING DRAINAGE DITCH OR STRUCTURE.
- ALL CONNECTIONS (ELBOWS, WYES, ETC.) WITHIN PAY LIMITS FOR OUTLET PIPE ARE TO BE OF THE SAME CRUSHING STRENGTH AS THE OUTLET PIPE.
- OUTLET PIPE TO BE SECURELY CONNECTED TO EW-12 OR OTHER DRAINAGE STRUCTURE.



ROAD AND BRIDGE STANDARDS

**STANDARD CROSSDRAIN  
(AT LOWER END OF CUTS)**

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION  
REFERENCE

232  
501  
701

SHEET 1 OF 1

REVISION DATE

108.04

07/16