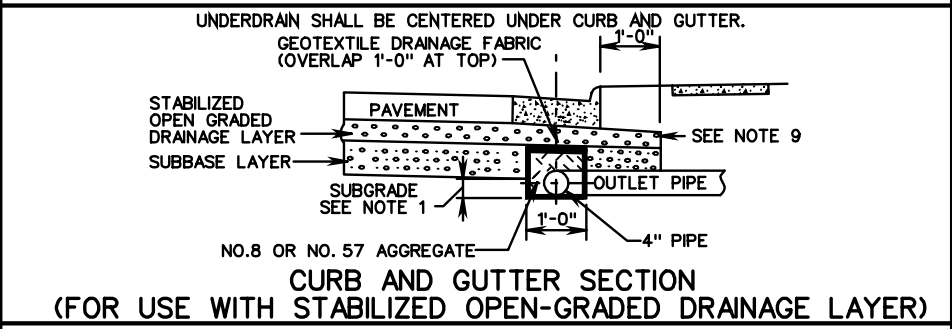


**PAVED SHOULDER SECTION  
(FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER)**



**CURB AND GUTTER SECTION  
(FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER)**

**NOTES:**

1. 4" MINIMUM, PROVIDED ATTAINING MINIMUM 4" OF AGGREGATE ON TOP OF PIPE.
2. WHERE THE LONGITUDINAL PERFORATED PIPE ALIGNS WITH A DRAINAGE STRUCTURE (DROP INLET, MANHOLE, ETC.), A NON-PERFORATED OUTLET PIPE IS NOT REQUIRED. INSTEAD, THE PERFORATED PIPE IS TO BE CONNECTED DIRECTLY TO THE DRAINAGE STRUCTURE. WHERE THE LONGITUDINAL PERFORATED PIPE IS CONTINUOUS, IT SHALL BE CONNECTED TO EACH SIDE OF THE DRAINAGE STRUCTURE.
3. INVERT ELEVATION AT OUTLET END OF OUTLET PIPE TO BE A MINIMUM OF 1'-0" ABOVE INVERT ELEVATION OF RECEIVING DRAINAGE DITCH OR STRUCTURE.
4. ALL CONNECTIONS (ELBOWS, WYES, ETC.) WITHIN PAY LIMITS FOR OUTLET PIPE ARE TO BE OF THE SAME CRUSHING STRENGTH AS THE OUTLET PIPE.
5. OUTLET PIPES ARE TO BE INSTALLED ON 2% MIN. (3% DESIRABLE) GRADE AND LOCATED EVERY 350' MAXIMUM OR AS NOTED ON PLANS.
6. OUTLET PIPE TO BE SECURELY CONNECTED TO EW-12 OR OTHER DRAINAGE STRUCTURE.
7. WITHIN THE LIMITS OF A COMMERCIAL ENTRANCE, NON-PERFORATED PIPE SHALL BE UTILIZED IN LIEU OF PERFORATED PIPE.
8. THE LENGTH OF PIPE BETWEEN THE WYE CONNECTION AND THE EW-12 SHALL BE LIMITED TO NO MORE THAN 1'-0" TO PERMIT CAMERA INSPECTION OF THE MAIN LINE IN EITHER DIRECTION.
9. IN SITUATIONS WHEN FULL DEPTH OF STABILIZED OPEN-GRADED MATERIAL CANNOT BE MAINTAINED UNDER CURB AND GUTTER, NO. 21B AGGREGATE SHALL BE USED UNDER CURB AND GUTTER. NO. 21B AGGREGATE MAY ALSO BE USED FROM TOP OF STABILIZED OPEN-GRADED MATERIAL LAYER AND CURB AND GUTTER.

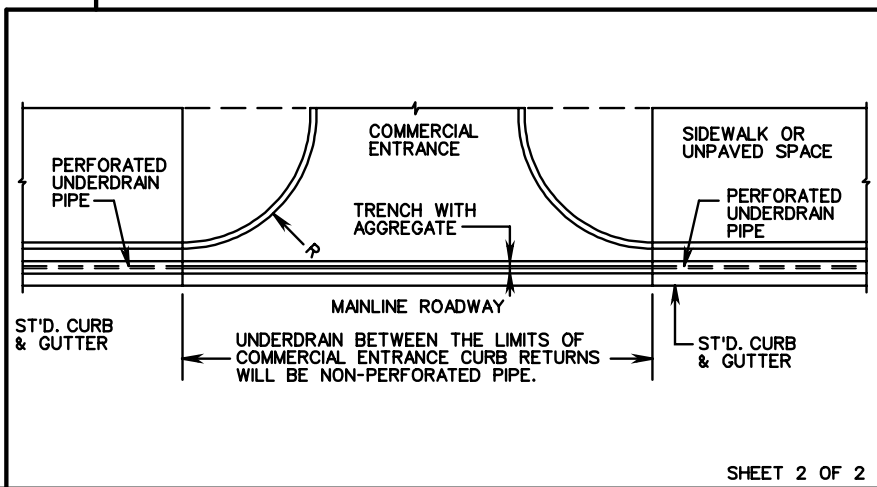
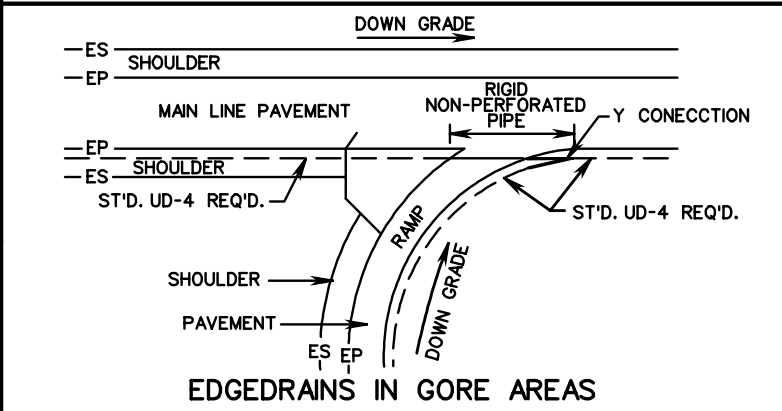
**LONGITUDINAL PERFORATED PIPE**

TYPE OF PIPE	CRUSHING STRENGTH	
	W.T. 4" NOM. DIAMETER	
SMOOTH WALL PVC	.103	
CORRUGATED PE		AASHTO M-252

**NON-PERFORATED OUTLET PIPE FOR USE UNDER COMMERCIAL ENTRANCES AND FOR OUTLETS**

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

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



SPECIFICATION REFERENCE
240
258
501
701

**STANDARD PAVEMENT EDGEDRAIN**

VIRGINIA DEPARTMENT OF TRANSPORTATION