

REVISED ON 7/05

DI-7,7A,7B

DETAILS OF CONCRETE COVER AND GRATE

NOTES

- GRATE A IS TO BE USED WHEN INLET IS LOCATED IN MEDIAN OR OTHER AREAS NOT NORMALLY SUBJECT TO TRAFFIC.
- GRATE B IS TO BE USED WHEN INLET IS LOCATED ON SHOULDER OR OTHER AREAS SUBJECT TO TRAFFIC.
- FOR DETAILS OF LOAD CARRYING GRATE (GRATE B), SEE T-DI-7, SHEET 103.08.
- CONCRETE COVER AND GRATE ARE TO BE FURNISHED AS A SINGLE UNIT. OUTSIDE DIMENSIONS OF GRATE TO BE 3'-4" X 2'-11 1/4" (GRATE A) OR 3'-4" X 2'-11 1/2" (GRATE B).
- ALTERNATE METHODS OF ANCHORING ANGLE IRON WILL BE ACCEPTABLE IF APPROVED BY THE ENGINEER.
- GRATE AND COLLAR ARE TO BE GALVANIZED.
- CONCRETE COVER MAY BE PRECAST OR CAST IN PLACE.
- CONCRETE TO BE CLASS A3 IF CAST IN PLACE. 4000 PSI IF PRECAST.
- GRATE BARS TO BE PARALLEL TO DITCH FLOW.

CONCRETE CLASS A3	REINFORCING STEEL
0.423 C. Y.	63 LBS.

GRATE TYPE	MAXIMUM DIMENSION	
	A	B
I	1 1/2"	3"
III	1"	1"

DETAILS OF GUTTER AND METHOD OF PLACEMENT

- NOTES**
- DI-7 NO GUTTERS.
DI-7A NO GUTTER IN ONE DIRECTION.
DI-7B GUTTER IN BOTH DIRECTIONS.
 - JOINTS BETWEEN GUTTERS AND CONCRETE COVER ARE TO BE DOWELED WITH #4 X 8" SMOOTH RODS @ APPROX. 12" C-C TO PREVENT SETTLEMENT. IN LIEU OF DOWELS A 2" X 4" NOTCH MAY BE PROVIDED.
SEE STANDARD T-DI-3, 4 ALTERNATE DESIGN.
 - VARIABLE 2:1 OR FLATTER.
 - DITCH GRADE MUST BE ADJUSTED TO MEET DIFFERENCE IN ELEVATION. SEE LONGITUDINAL SECTION.
 - IF DEPTH (D) BECOMES LESS THEN 4", LENGTH OF WINGS ARE TO BE EXTENDED AS DIRECTED BY THE ENGINEER.
 - CURTAIN WALL TO BE LOCATED AT THE END OF THE PAVED DITCH SECTIONS OF THE DI-7A & DI-7B THAT ARE NOT ABUTTED BY OTHER DRAINAGE.
 - IF NORMAL DITCH GRADE IS TOO FLAT TO ALLOW FOR ADJUSTED GRADE TO INLET, A SPECIAL GUTTER DETAIL WILL BE REQUIRED ON PLANS.

APPROXIMATE QUANTITIES

CONCRETE CLASS A3	DI-7	DI-7A	DI-7B
(CU. YDS.)	NONE	1.211	2.148

LONGITUDINAL SECTION (WHEN INLET IS LOCATED ABOVE NORMAL DITCH GRADE) SEE NOTE 8.

SHEET 2 OF 3

STANDARD MEDIAN DROP INLET 12" TO 42" PIPE

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

241
503