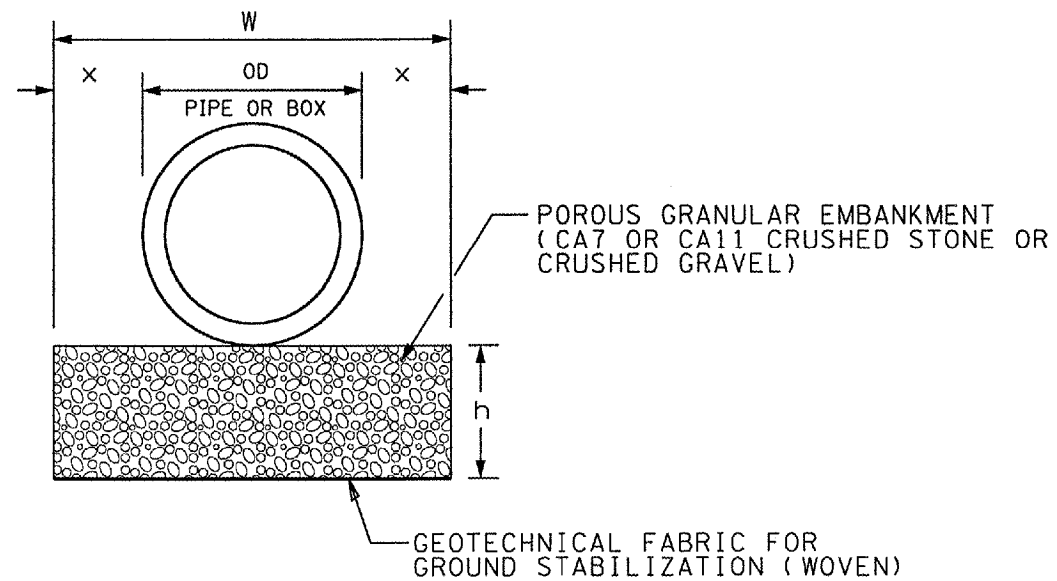
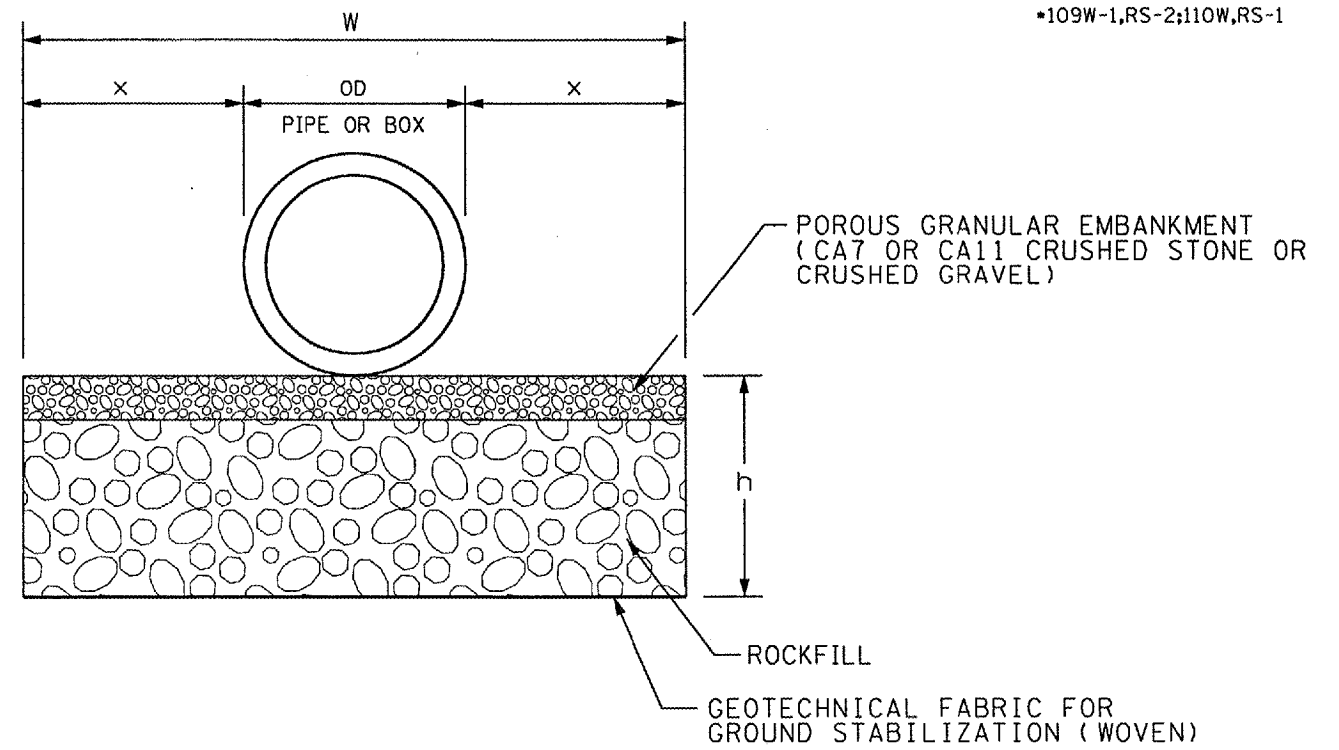


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315		EUCLID	324	127
FED. AID PROJECT				

*109W-1,RS-2;110W,RS-1



ALTERNATE I: FOR 12" TO 18" UNDERCUT



ALTERNATE II: FOR 18" TO 36" UNDERCUT

CULVERT LOCATION	TYPE	SIZE	UNDERCUT			
			DEPTH	WIDTH		
			h	x	OD	W
STA. 509+57.02	RCCP	30"	*4"	12"	37"	61"
STA. 515+13.83	RCCP	24"	18"	18"	30"	66"
STA. 525+40.71	RCCP	24"	12"	12"	30"	54"
STA. 532+50.00	RCCP	18"	*4"	9"	23"	41"
•• STA. 539+54.90	CIP BOX	8'X6'	6.5'	6.5'	9.0'	22.0'
STA. 547+35.20	RCCP	24"	*4"	9"	30"	48"
STA. 572+59.40	PRECAST	3'X2'	18"	18"	44"	80"
STA. 586+00.00	RCCP	48" JACKED				
STA. 601+79.18 LT	CIP BOX	10'X8'	5.5'	5.5'	11.3'	22.3'
STA. 601+79.18 RT	CIP BOX	10'X8'	3.5'	3.5'	11.3'	18.3'
STA. 613+37.60 LT	PRECAST	2'X2'	18"	18"	30"	66"
STA. 613+37.60 RT	PRECAST	2'X2'	12"	12"	30"	54"
STA. 618+84.60 LT & RT	PRECAST	2'X2'	18"	18"	30"	66"
STA. 627+05.00	RCCP	30" LINER				
STA. 641+33.80 LT & RT	PRECAST	2'X2'	*6"	9"	30"	48"
STA. 657+05.59 LT	CIP BOX	8'X8'	5.0'	5.0'	9.3'	19.3'
STA. 657+05.59 RT	CIP BOX	8'X8'	4.0'	4.0'	9.3'	17.3'

- MIN. UNDERCUT PER ARTICLE 540.06 OR 542.04
- SHALE LAYER MAY BE ENCOUNTERED WITHIN THE RECOMMENDED DEPTH OF UNDERCUT. IF ENCOUNTERED DURING THE UNDERCUT OPERATION, FURTHER UNDERCUT INTO THE SHALE LAYER IS NOT REQUIRED

GENERAL NOTES:

- Undercut if the Dynamic Cone Penetrometer tests indicate soil strength is less than 1 ton/sq ft.
- DEFINITIONS:
 OD = Outside Diameter or outside width of box culvert
 h = Depth of undercut (for precast box culverts, the upper 6" is included in the cost of culvert).
 x = h or min. width specified in Sec. 542.04, which ever is greater for pipe culverts.
 x = h or minimum 2 feet, which ever is greater for box culverts.
 W = Width of undercut = 2x + OD
- For undercuts greater than 36", use Alternate II with undercut treatments as directed by the District Geotechnical Engineer.

ILLINOIS DEPARTMENT OF TRANSPORTATION		
SPECIAL DETAIL SHEET		
UNSUITABLE EXCAVATION TREATMENT FOR CROSS ROAD CULVERTS		
SCALE: NOT DRAWN TO SCALE		DRAWN BY: CEM
DATE: 9-7-2007		CHECKED BY:

DATE	REVISIONS	BY