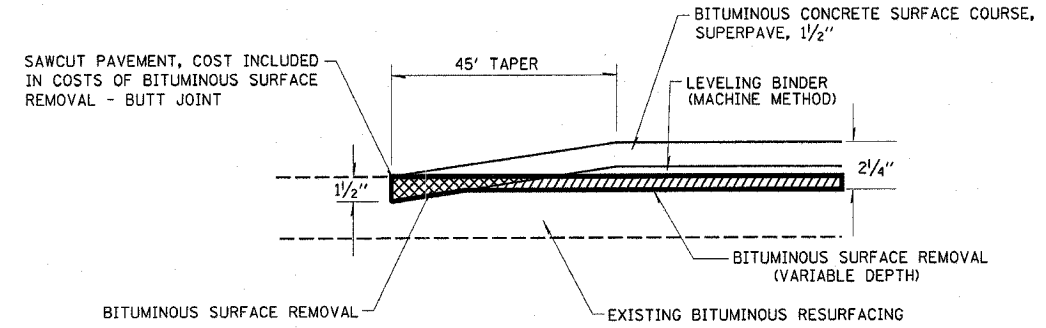
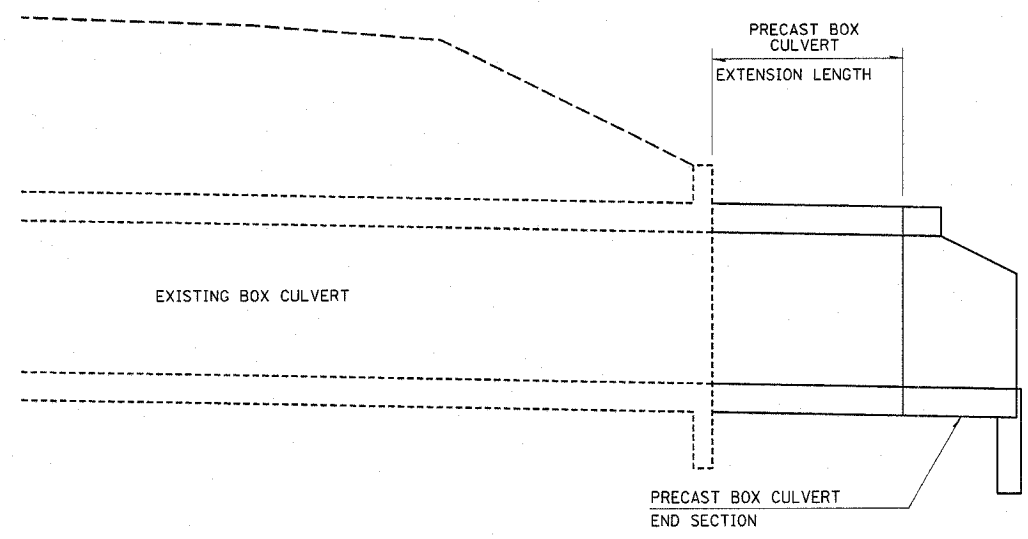


F.A.P. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
322	182 & 18Y, RS 282	MARION	222	109
STA.	TO STA.			
DOT DIST. NO. 7	ILLINOIS FED. AID PROJECT			
CONTRACT NO. 94700				

PRECAST BOX CULVERT EXTENSION
METHOD OF MEASUREMENT



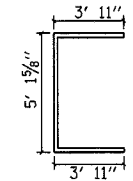
BITUMINOUS SURFACE REMOVAL - BUTT JOINT DETAIL
STATION LIMITS: 458+89.94 TO 459+29.94
538+10.00 TO 538+50.00
2299+65.70 TO 2300+05.70
1352+56.36 TO 1352+96.36

BITUMINOUS SURFACE REMOVAL - BUTT JOINT
 BITUMINOUS SURFACE REMOVAL VARIABLE DEPTH

"H" OR "S" FEET	NO. EXPAN. BOLTS PER SIDE			
	EXTEN. ≤ 15'	SPACE	EXTEN. > 15'	SPACING
2'	*	*	*	*
2'-6"	2	18"	2	18"
3'	2	24"	2	24"
4'	3	18"	3	18"
5'	4	16"	3	24"
6'	5	15"	4	20"
7'	5	18"	4	24"
8'	6	15"	5	21"
9'	6	19"	5	24"
10'	7	18"	6	21"
11'	8	17"	6	24"
12'	8	19"	7	22"

* NOTE: USE MINIMUM OF 1 EXPANSION BOLT AT EACH CORNER

EXPANSION BOLTS REQUIRED FOR CULVERT EXTENSIONS

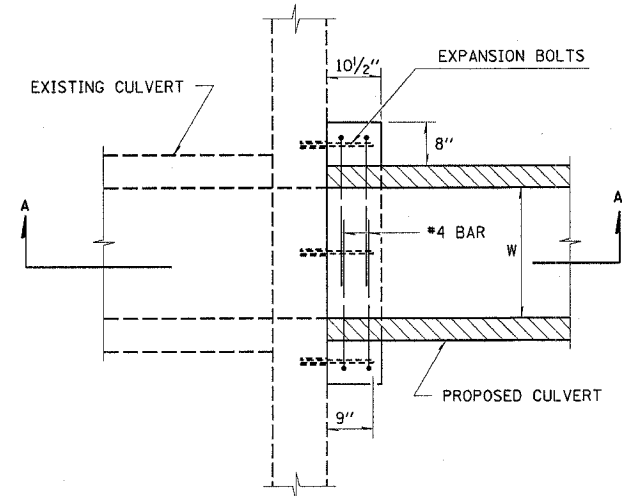


BILL OF MATERIAL

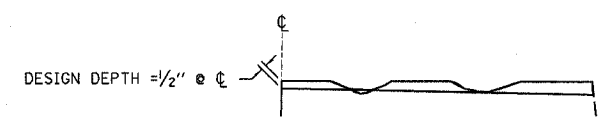
No.	Size	Length	Shape
8	#4	12'-11 5/8"	
Reinforcement Bars			Pound 70
Concrete Collar (Class SI Concrete)			Cu. Yd. 0.9
Expansion Bolts			Each 20

*FOR INFORMATION ONLY NOT A PAY ITEM

DETAIL OF CONCRETE COLLAR FOR BOX CULVERT EXTENSIONS



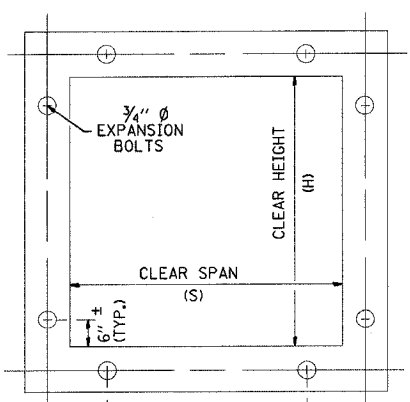
PLAN VIEW
(RIGHT ANGLE CULVERT)



NOTES:

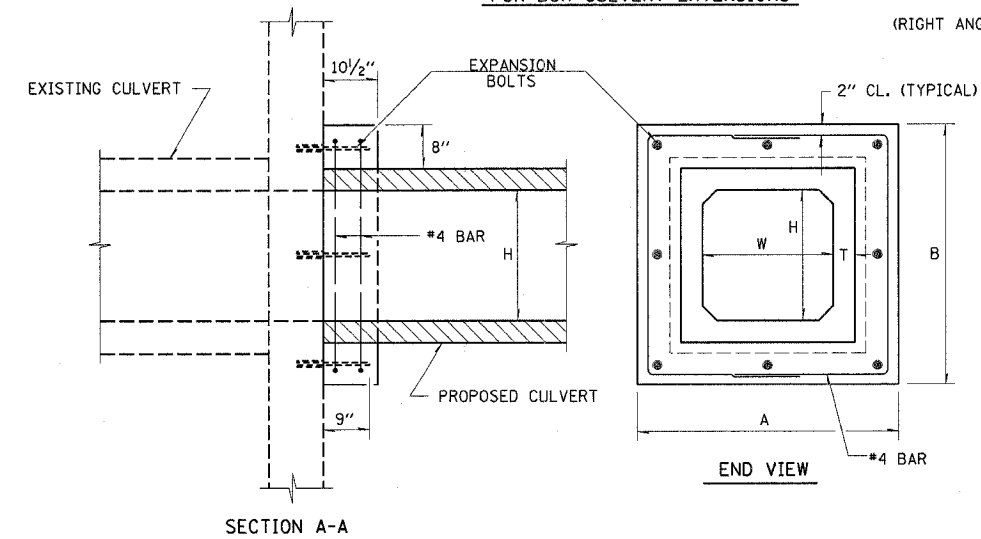
- MILLING SHALL BE DONE TO ATTAIN A 3/8" SLOPE IN CROWN SECTIONS
- EXISTING S.E. AND S.E. TRANSITIONS SHALL BE MAINTAINED UNLESS OTHERWISE SHOWN ON PLANS.
- MILLING TO THE BOTTOM OF WHEEL RUTS SHALL NOT BE NECESSARY UNLESS REQUIRED TO OBTAIN SLOPE OR THE DESIGN DEPTH AT CENTERLINE.
- THE AVERAGE DEPTH OF MILLING IS ESTIMATED TO BE 1/2" BUT MAY VARY IN ISOLATED LOCATIONS.

BITUMINOUS SURFACE REMOVAL (VARIABLE DEPTH) DETAIL

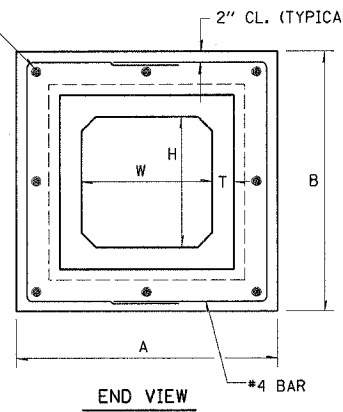


SEE TABLE FOR NO. OF EXPANSION BOLTS PER SIDE

CROSS SECTION THRU BARREL



SECTION A-A



END VIEW

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT EXTENSIONS AND MISCELLANEOUS DETAILS

SCALE: VERT. HORIZ. DATE

DRAWN BY CHECKED BY

REVISED 12/20/05