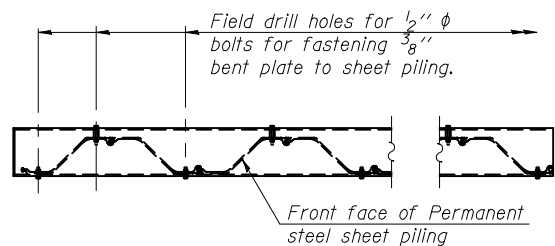
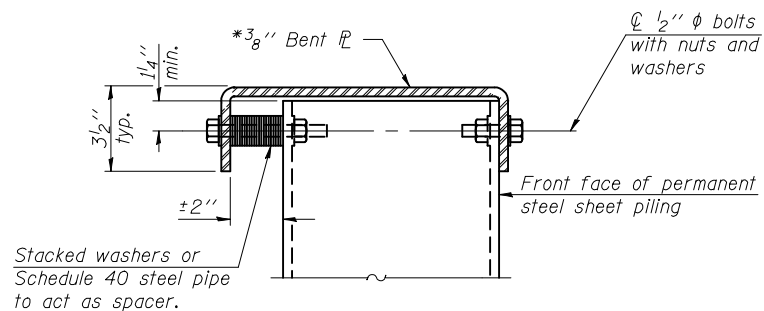


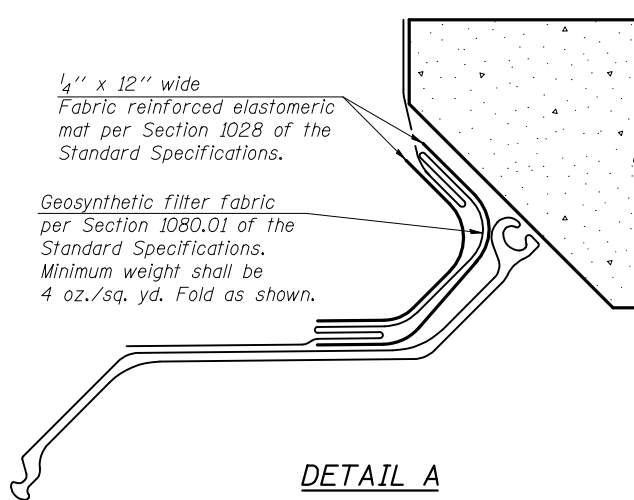
WINGWALL ELEVATION



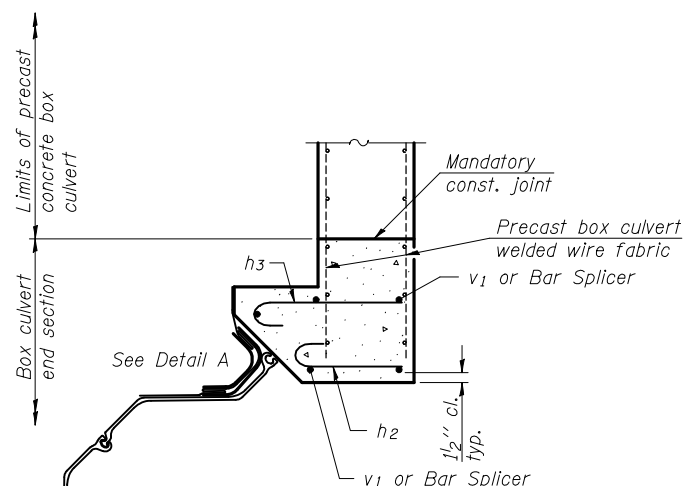
WINGWALL PLAN



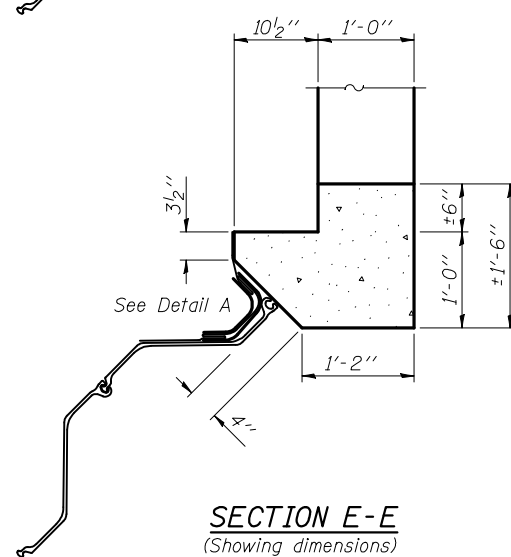
SECTION D-D
*AASHTO M270 Grade 50W



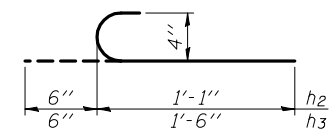
DETAIL A



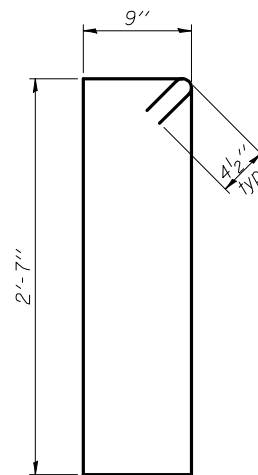
SECTION E-E
(Showing reinforcement)



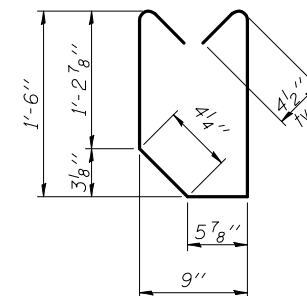
SECTION E-E
(Showing dimensions)



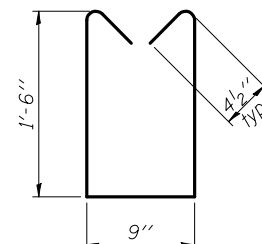
BARS h2 and h3



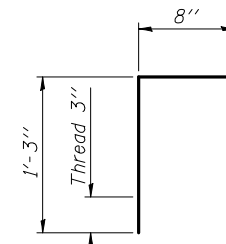
BAR s



BAR s1



BAR s2



BAR v

ONE END SECTION
BILL OF MATERIAL
(For information only)

Bar	No.	Size	Length	Shape
h	4	#5	14'-2"	—
h1	4	#5	15'-6"	—
h2	32	#4	1'-7"	C
h3	32	#4	2'-0"	C
h4	2	#6	14'-2"	—
h5	2	#6	15'-6"	—
s	12	#4	7'-5"	□
** s1	12	#4	4'-4"	□
** s2	12	#4	4'-6"	□
v	13	#5	1'-11"	—
v1	10	#5	10'-6"	—
Concrete Box Culverts		Cu. Yd.	5.2	
Reinforcement Bars		Pound	520	
Bar Splicers		Each	10	
Permanent Steel Sheet Piling		Sq. Ft.	753	

The cost of the fabricated steel cap, bolts, washers, geosynthetic filter fabric, and elastomeric mat shall be included in the cost of Box Culvert End Sections, Culvert No. 2.

** s1 bar is to be placed on upstream end only. s2 bar is to be placed on downstream end only.

DESIGNED - DAVID L. GREIFZU
CHECKED - MICHAEL D. ROLAPE
DRAWN - MICHAEL B. MOSSMAN
CHECKED - D.L.G. / M.D.R.

EXAMINED
PASSED

Thomas J. Domagala
ENGINEER OF BRIDGE DESIGN
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

DATE - DECEMBER 8, 2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 074-8606

SHEET NO. 3 OF 5 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1531	10B-1 & 11B-1	PIATT	88	25
				CONTRACT NO. 70458
ILLINOIS FED. AID PROJECT				