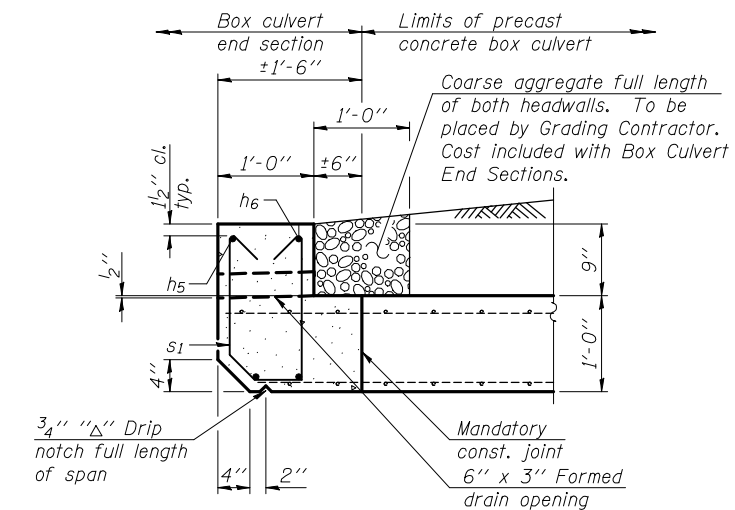
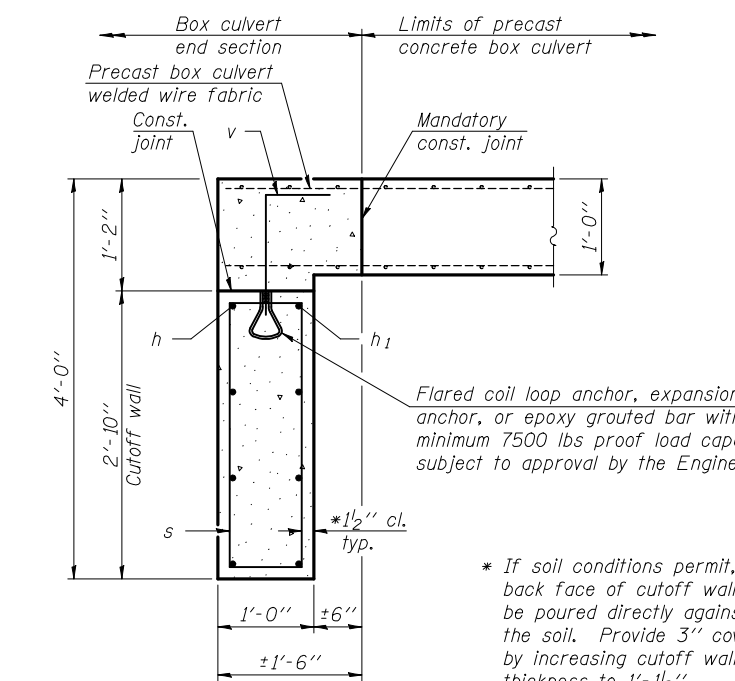


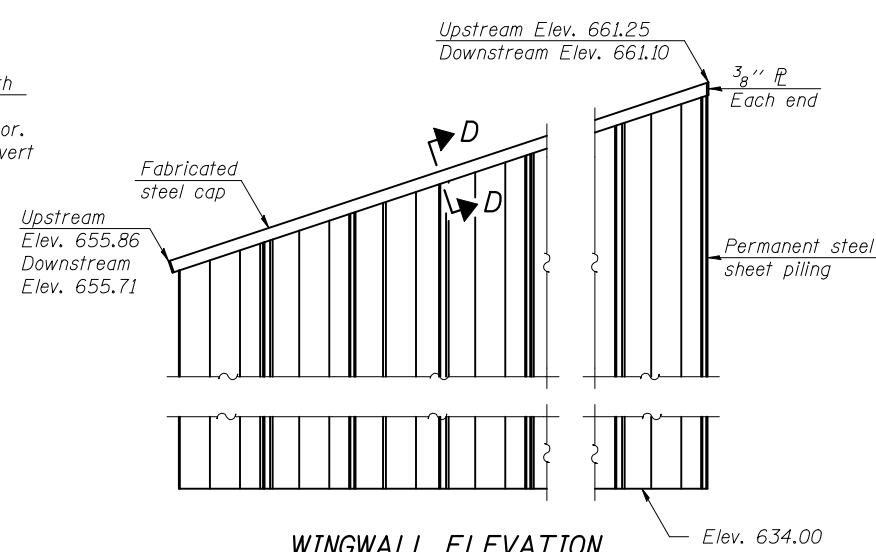
**SECTION B-B**  
(Downstream end)



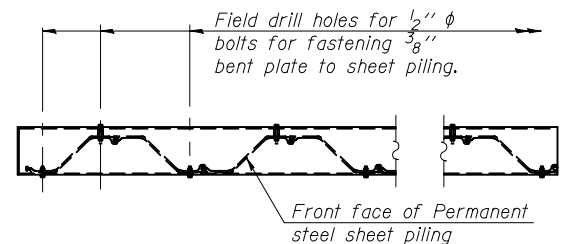
**SECTION B-B**  
(Upstream end)



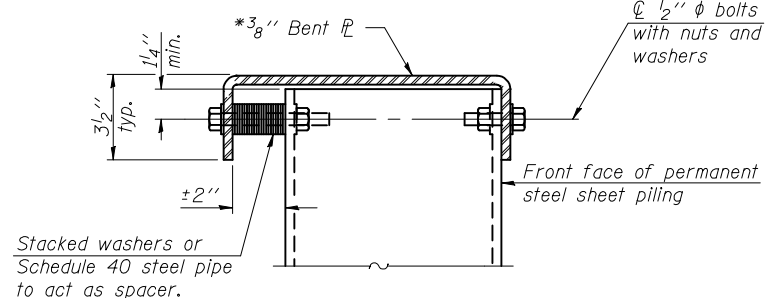
**SECTION C-C**



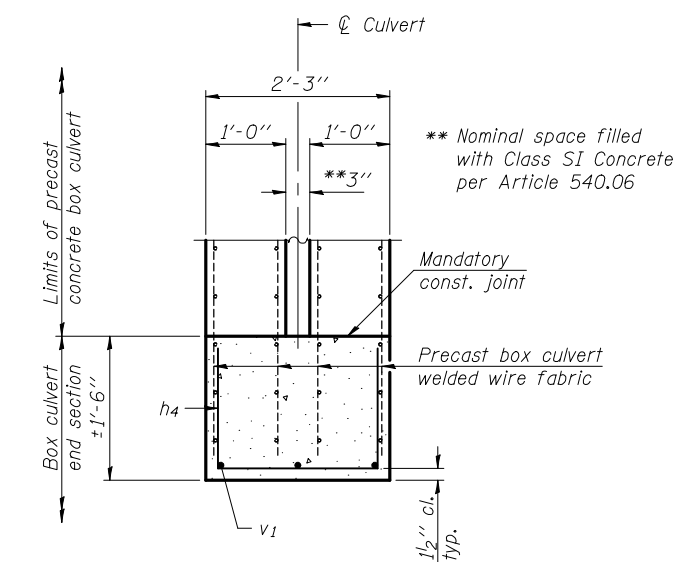
**WINGWALL ELEVATION**



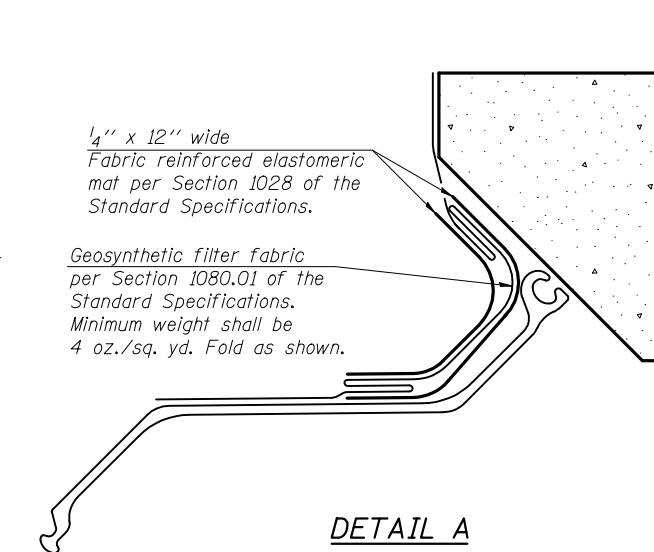
**WINGWALL PLAN**



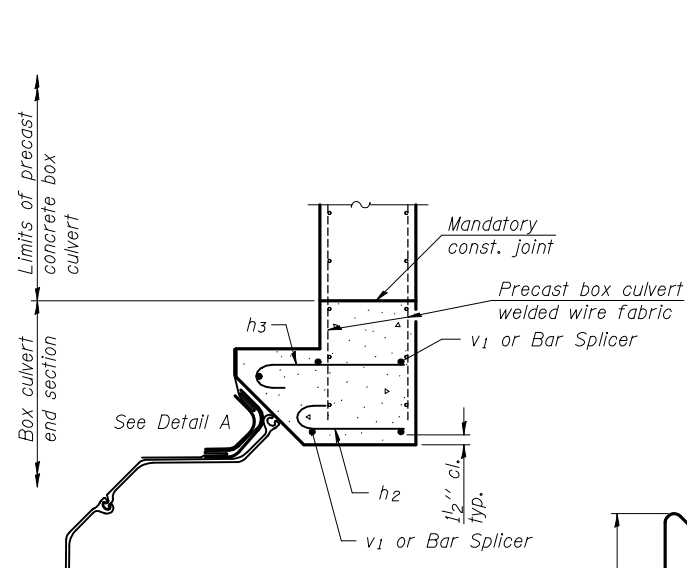
**SECTION D-D**  
\*AASHTO M270 Grade 50W



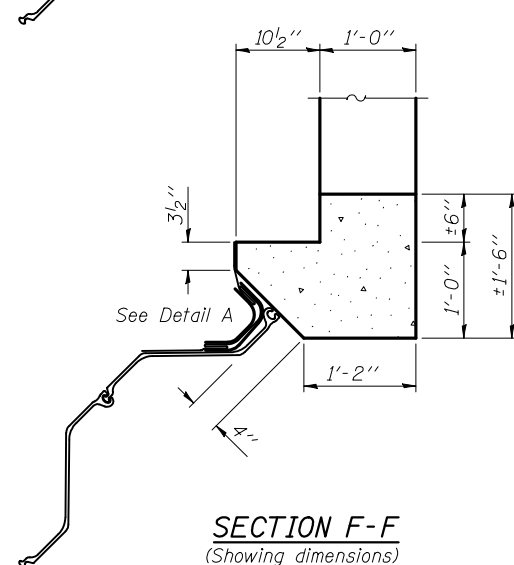
**SECTION E-E**



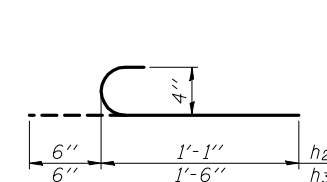
**DETAIL A**



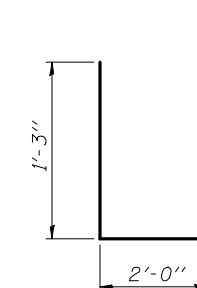
**SECTION F-F**  
(Showing reinforcement)



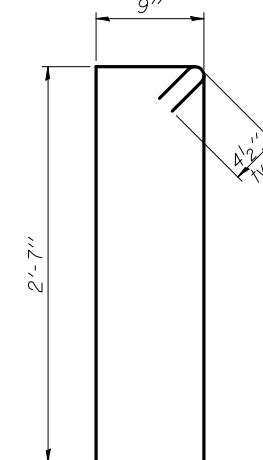
**SECTION F-F**  
(Showing dimensions)



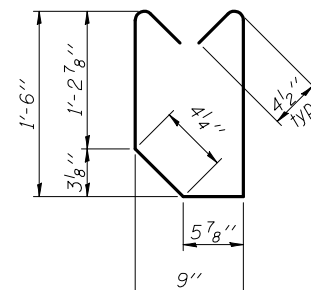
**BARS h<sub>2</sub> and h<sub>3</sub>**



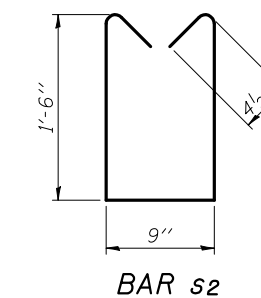
**BAR h<sub>4</sub>**



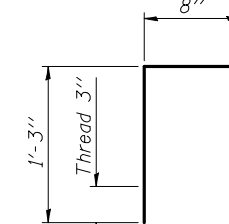
**BAR s**



**BAR s<sub>1</sub>**



**BAR s<sub>2</sub>**



**BAR v**

**ONE END SECTION BILL OF MATERIAL**  
(For information only)

Bar	No.	Size	Length	Shape
h	4	#5	28'-6"	—
h <sub>1</sub>	4	#5	29'-8"	—
h <sub>2</sub>	34	#4	1'-7"	U
h <sub>3</sub>	34	#4	2'-0"	U
h <sub>4</sub>	11	#4	4'-6"	U
h <sub>5</sub>	2	#6	28'-6"	—
h <sub>6</sub>	2	#6	29'-8"	—
s	27	#4	7'-5"	□
s <sub>1</sub>	27	#4	4'-4"	□
s <sub>2</sub>	27	#4	4'-6"	□
v	27	#5	1'-11"	—
v <sub>1</sub>	13	#5	11'-6"	—
Concrete Box Culverts			Cu. Yd.	10.1
Reinforcement Bars			Pound	960
Bar Splicers			Each	10
Permanent Steel Sheet Piling			Sq. Ft.	749

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. 3.

\*\* s<sub>1</sub> bar is to be placed on upstream end only. s<sub>2</sub> 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. Demagala*  
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. 074-2006

SHEET NO. 3 OF 5 SHEETS

F.A.S. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
1531 10B-1 & 11B-1 PIATT 88 30  
CONTRACT NO. 70458  
ILLINOIS FED. AID PROJECT