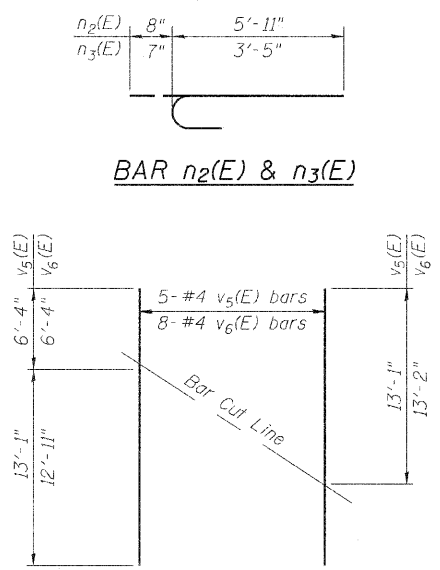
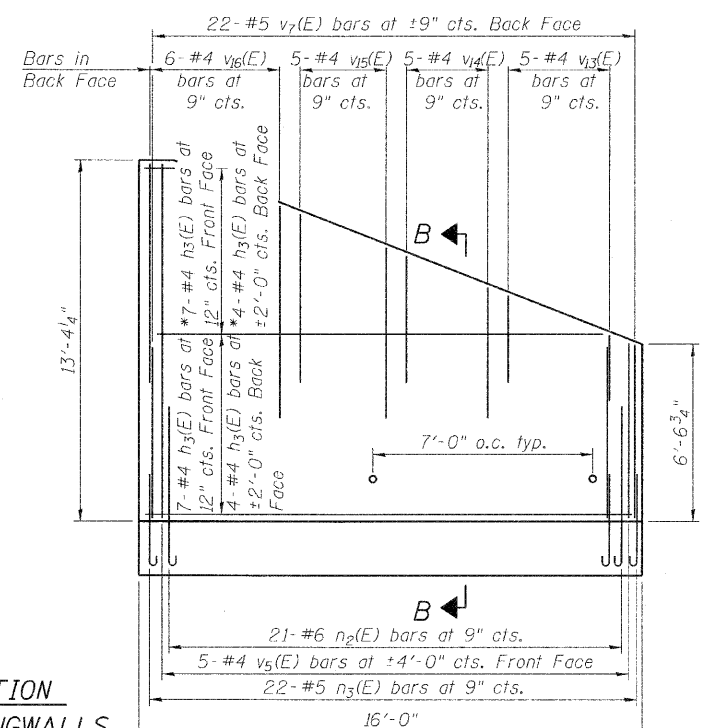
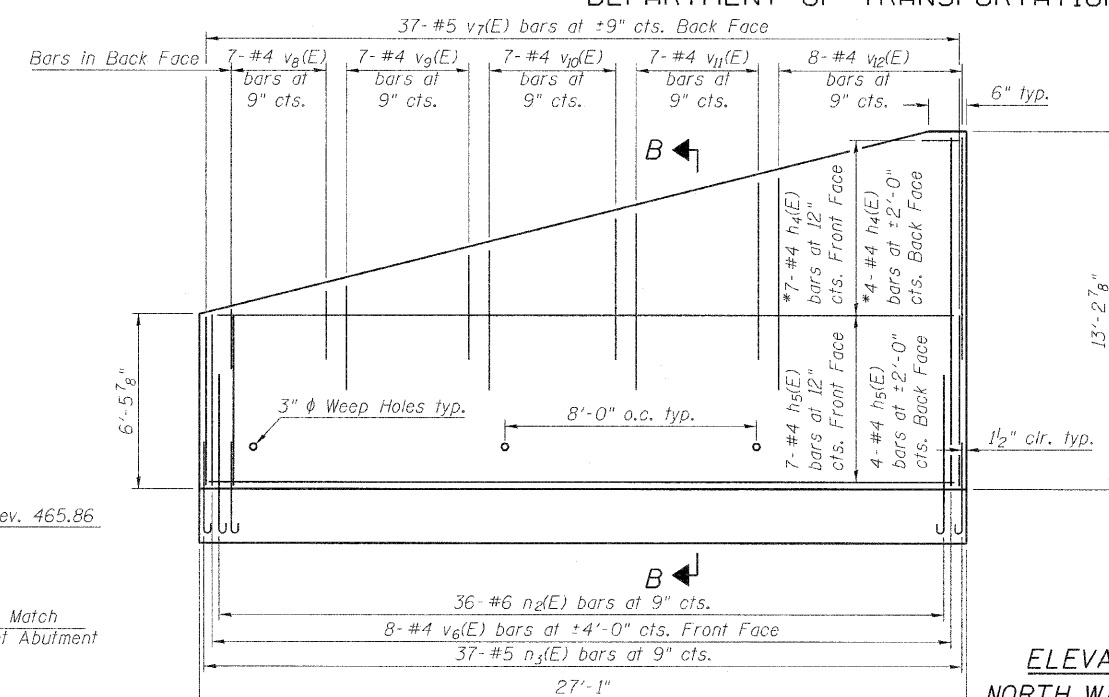
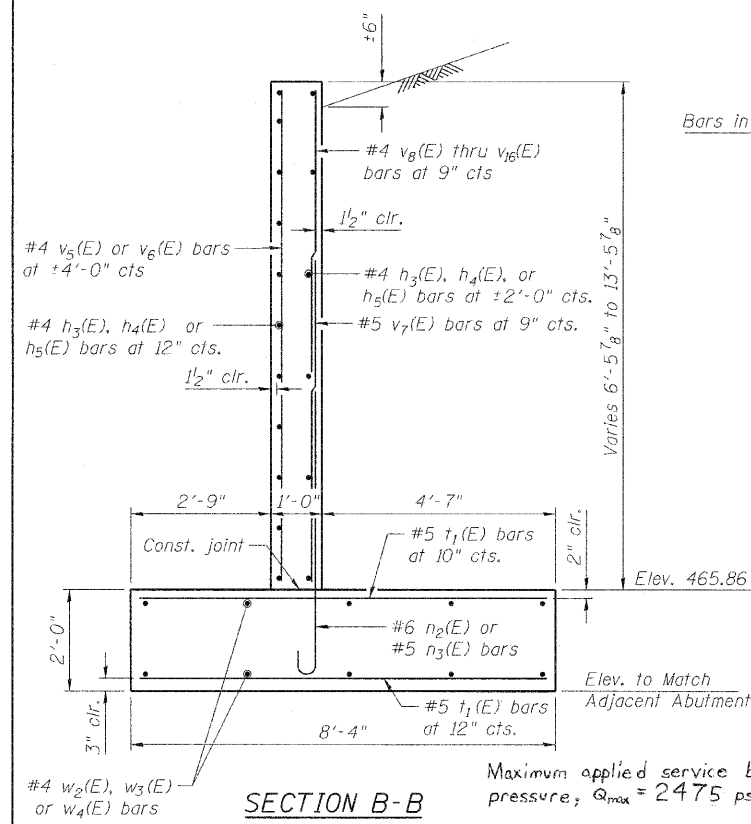


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



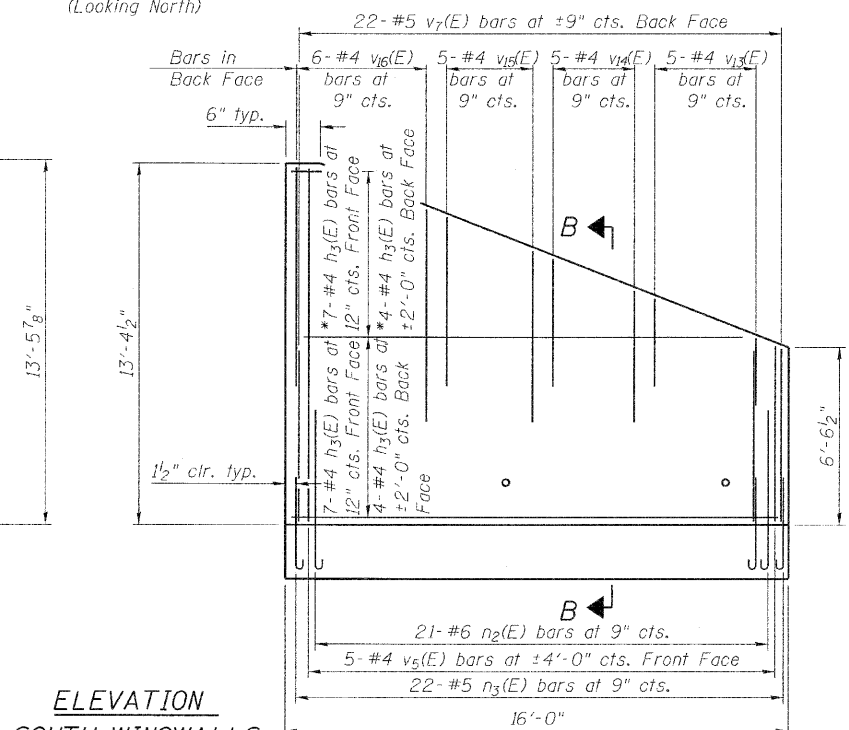
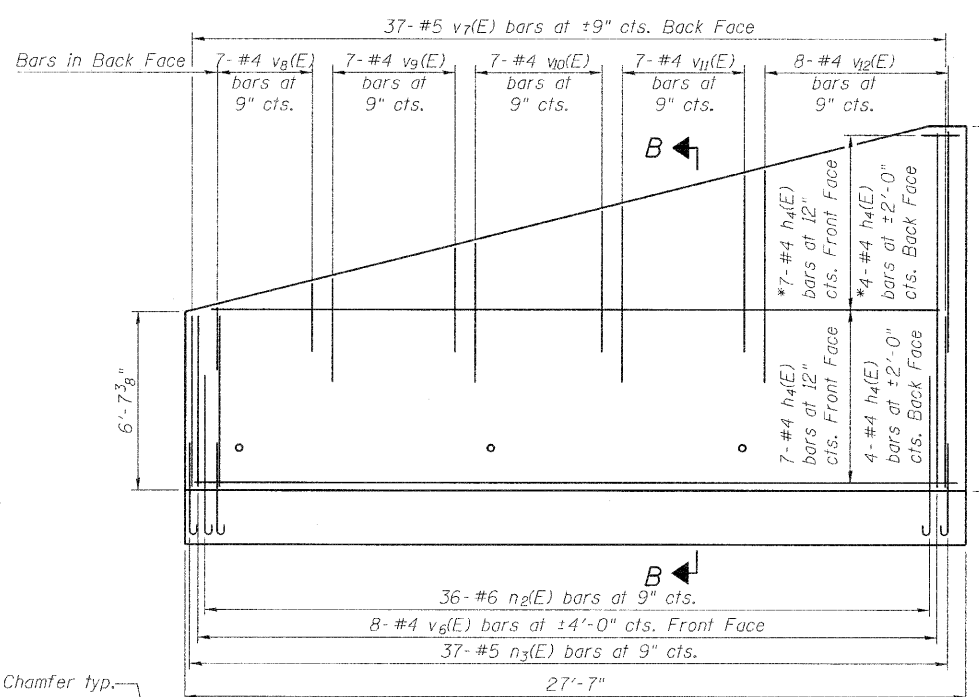
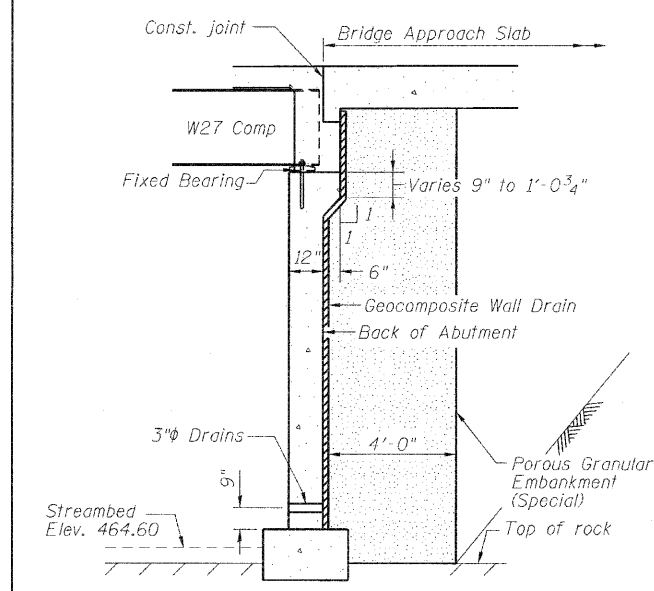
**BAR CUT DIAGRAM**  
Use half of the cut bars in one wingwall and the remaining bars in the opposite corner wingwall.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h_3(E)$	33	#4	15'-9"	—
$h_4(E)$	22	#4	27'-4"	—
$h_5(E)$	11	#4	26'-10"	—
$n_2(E)$	114	#6	6'-7"	U
$n_3(E)$	118	#5	4'-0"	U
$v_5(E)$	5	#4	19'-5"	—
$v_6(E)$	8	#4	19'-3"	—
$v_7(E)$	118	#5	6'-3"	—
$v_8(E)$	14	#4	2'-10"	—
$v_9(E)$	14	#4	4'-2"	—
$v_{10}(E)$	14	#4	5'-6"	—
$v_{11}(E)$	14	#4	6'-10"	—
$v_{12}(E)$	16	#4	8'-3"	—
$v_{13}(E)$	10	#4	3'-1"	—
$v_{14}(E)$	10	#4	4'-9"	—
$v_{15}(E)$	10	#4	6'-5"	—
$v_{16}(E)$	12	#4	8'-2"	—
Concrete Structures		Cu. Yd.	90.7	
Reinforcement Bars, Epoxy Coated		Pound	3,930	
Structure Excavation		Cu. Yd.	141	
Rock Excavation for Structures		Cu. Yd.	103	

Notes:  
Bars designated  $t_1(E)$ ,  $w_2(E)$ ,  $w_3(E)$ , and  $w_4(E)$  are billed on sheets 14 and 15 of 20.  
Stagger spacings of  $n_2(E)$  and  $n_3(E)$  bars.  
Lap  $v_8(E)$  thru  $v_{16}(E)$  bars with  $v_7(E)$  bars.  
Lap  $v_7(E)$  bars with  $n_3(E)$  bars.

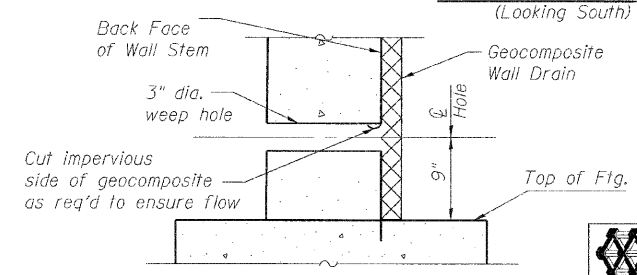
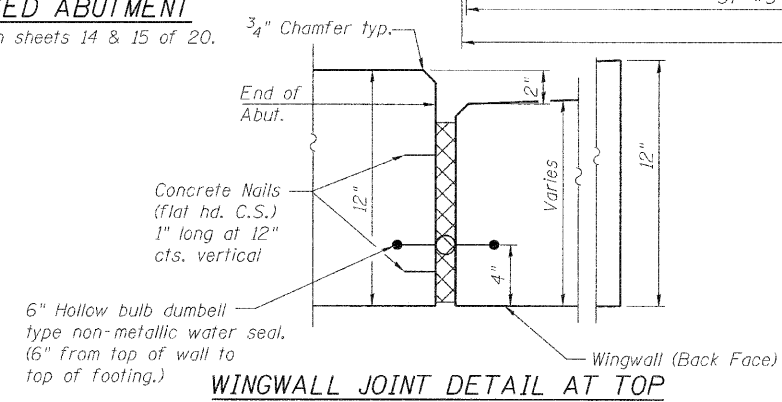
**ABUTMENT DETAILS  
STRUCTURE NO. 050-0250**



**SECTION THRU CLOSED ABUTMENT**  
Abutment quantities are billed on sheets 14 & 15 of 20.

**MIN. BAR LAP**  
#4 bar = 1'-4"  
#5 bar = 1'-8"

DESIGNED CMF
CHECKED TMM
DRAWN RNH
CHECKED TMM



\* Order  $h_3(E)$  and  $h_4(E)$  bars full length. Cut bars to fit skew in top of wingwall and use the remaining bars in the opposite corner wingwall.

**McDonough-Whitlow, P.C.**  
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138 East Wood Street  
Hillsboro, IL 62049  
Phone: 217.532.9233  
Fax: 217.532.6300  
PROFESSIONAL DESIGN NO. 184-002754

SHEET NO. 16 20 SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1279	6R, B	LASALLE	190	118
CONTRACT NO.				66547	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					