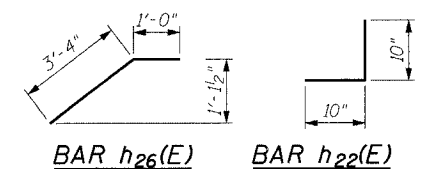
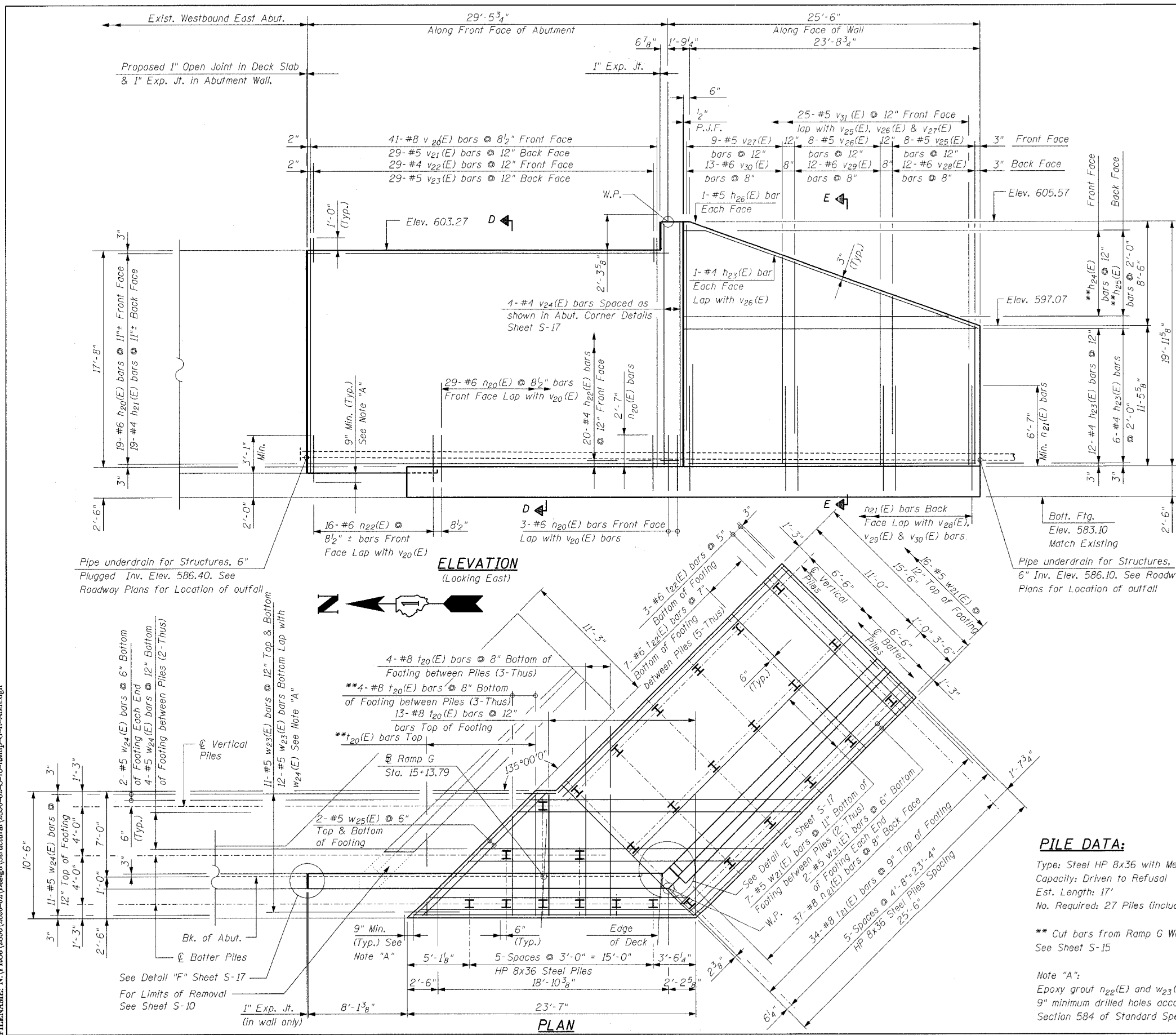


DATE: 12/20/05  
 FILENAME: N:\PROJ\2890\2890-02\Design\Structural\2890-02-S-16-Ramp-G-E-Abut.dgn

F.A.I. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80 99-10K, BY & AC-B	COOK	497	315
STA. TO STA.			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
Sheet S-16 of S-21 CONTRACT 80906			



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h20(E)	19	#6	29'-0"	
h21(E)	19	#4	29'-0"	
h22(E)	40	#4	1'-8"	J
h23(E)	40	#4	23'-10"	
h24(E)	7	#4	25'-6"	
h25(E)	4	#4	25'-0"	
h26(E)	4	#4	4'-4"	
h27(E)	19	#6	27'-7"	
h28(E)	19	#4	27'-7"	
n20(E)	62	#6	5'-6"	
n21(E)	70	#8	9'-9"	
n22(E)	32	#6	3'-10"	
v20(E)	74	#8	10'-0"	
v21(E)	68	#8	15'-0"	
v22(E)	76	#6	15'-0"	
v23(E)	80	#8	18'-8"	
v24(E)	57	#4	17'-4"	
v25(E)	57	#4	2'-0"	
v26(E)	57	#5	3'-9"	
v27(E)	8	#4	19'-8"	
v28(E)	16	#5	11'-1"	
v29(E)	16	#5	13'-11"	
v30(E)	24	#6	16'-9"	
v31(E)	24	#6	16'-9"	
v32(E)	26	#6	16'-9"	
v33(E)	50	#5	5'-0"	
w20(E)	23	#5	21'-10"	
w21(E)	68	#5	25'-0"	
w22(E)	4	#5	18'-0"	
w23(E)	46	#5	5'-0"	
w24(E)	23	#5	22'-10"	
w25(E)	4	#5	14'-3"	
Item	Unit	Quantity		
Concrete Structures	Cu. Yd.	171.8		
Reinforcement Bars, Epoxy Coated	Pound	23,640		
Furnishing Steel Piles HP8x36	Lin. Ft.	833		
Driving Steel Piles HP8x36	Lin. Ft.	833		
Test Piles Steel HP8x36	Lin. Ft.	2		
Metal Shoes	Each	49		
Structure Excavation	Cu. Yd.	320		
Pipe Underdrain for Structures, 6"	Lin. Ft.	110		
Geocomposite Wall Drain	Sq. Yd.	227		

**FIELD CUTTING DIAGRAM**

Order h24(E) & h25(E) full length. Cut as shown and use remainder of bars in Ramp G West Abutment.

Notes:  
 See Sheet S-17 for sections & details  
 Reinforcement bars designated (E) shall be epoxy coated.  
 Bars indicated thus 2 x 2-#5 etc. indicates 2 lines of bars with 2 lengths per line.  
 Minimum lap splices 1'-8" for #4 bars, 2'-2" for #5 bars, 2'-7" for #6 bars.

**PILE DATA:**

Type: Steel HP 8x36 with Metal Shoes.  
 Capacity: Driven to Refusal  
 Est. Length: 17'  
 No. Required: 27 Piles (includes 1-Test Pile)

\*\* Cut bars from Ramp G West Abutment. See Sheet S-15

Note "A":  
 Epoxy grout n22(E) and w23(E) bars in 9" minimum drilled holes according to Section 584 of Standard Specifications.

REVISIONS	
NAME	DATE

**Clorba Group, Inc.**  
 CONSULTING ENGINEERS  
 307 NORTH CUMBERLAND AVENUE - CHICAGO, ILLINOIS 60664 - (773) 776-4000

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 RAMP G EAST ABUTMENT  
 FAI-80 OVER WEST FRONTAGE ROAD  
 FAI-80 SECTION 99-1 (K, BY & AC-B)  
 WILL COUNTY  
 FAI-80 STA. 1931+99.35  
 STRUCTURE NO. 099-0042, 099-0043, 099-0308  
 SCALE: NONE DRAWN BY IMG  
 DATE: OCTOBER 2004 CHECKED BY GDW