

FAS ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
188	*	LEE	22	15
ILLINOIS PROJECT BRS-188(121)				
* 08-00303-00-BR				

SCALE: 1"=10'

NO.	DATE	REVISION

DESIGNED BY	DB
DRAWN BY	BEH
CHECKED BY	SB
DATE	12/21/2012

**wendler**  
 wendler engineering solutions, inc.  
 GEOTECHNICAL SOLUTIONS  
 1100 S. WASHINGTON ST., SUITE 200  
 MARIETTA, GA 30067  
 (770) 428-2201  
 WES-PROFESSIONAL DESIGN FIRM NO. 154400004

ABUTMENTS OF INDIAN HEAD ROAD BRIDGE REPLACEMENT FOR LEE COUNTY HIGHWAY DEPARTMENT

SHEET TITLE

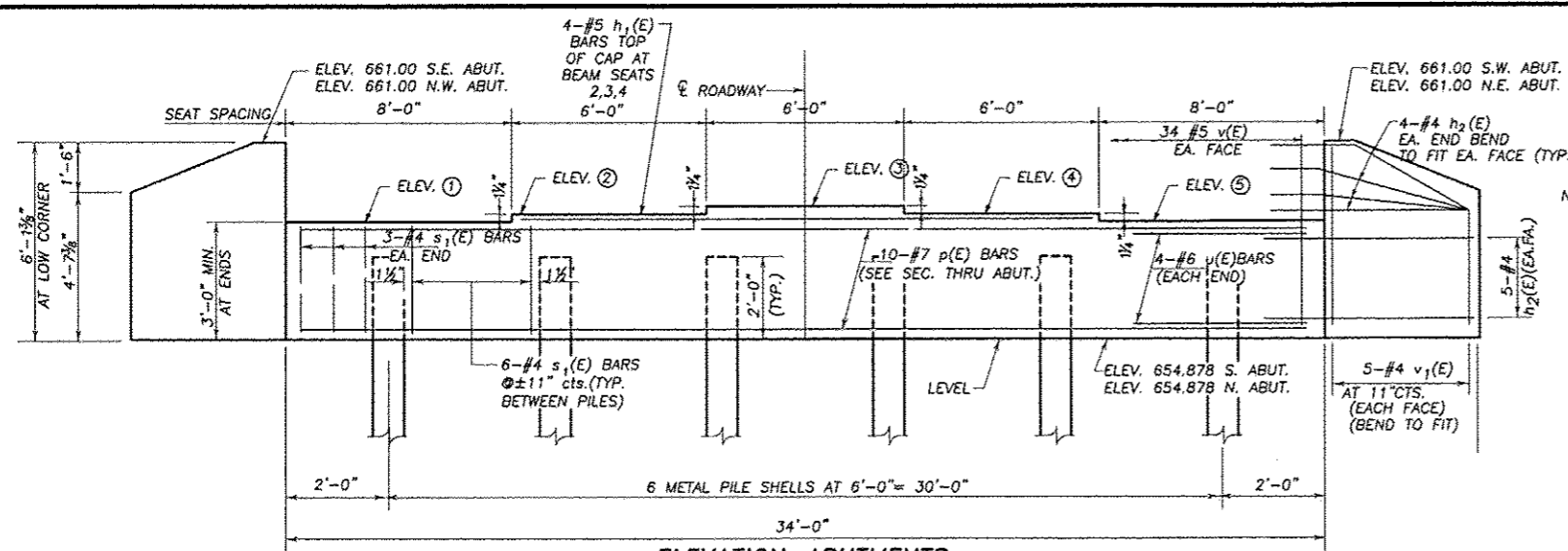
ABUTMENTS

JOB NUMBER  
2080334

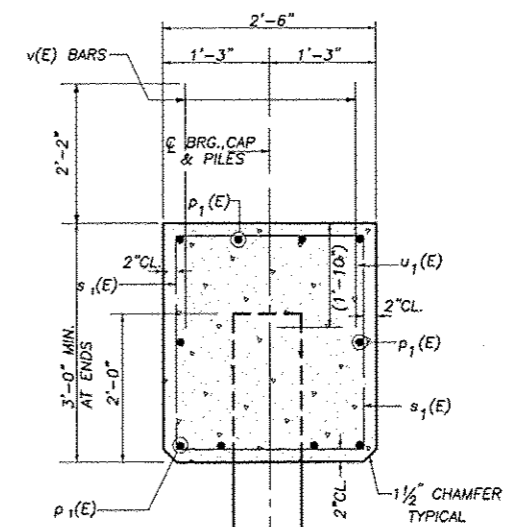
DATE  
12/13/2012

SHEET NO.

15 of 22

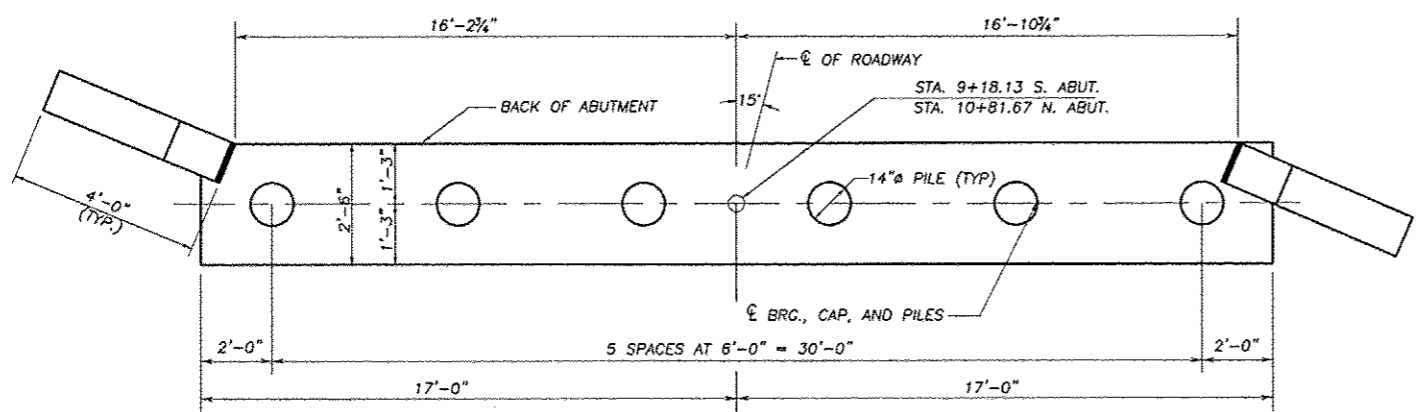


NOTE: WINGWALLS SHALL BE POURED WITH SUPERSTRUCTURE

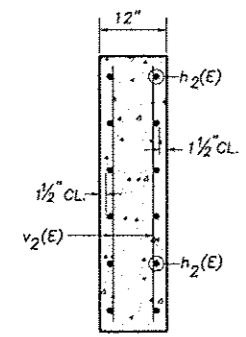


SEC. THRU ABUT.

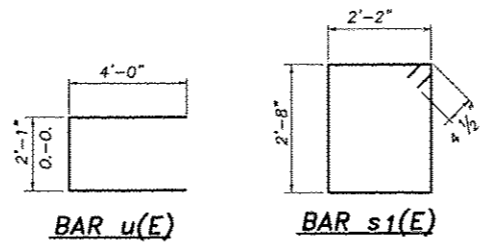
ELEVATION-ABUTMENTS  
 \* FOR CAP ELEVATIONS SEE TABLE BELOW



PLAN-ABUTMENTS



SECTION THRU WINGWALL



BAR u(E)

BAR s1(E)

LOCATION	ELEV.	1	2	3	4	5
SOUTH ABUT.	657.878	657.984	658.089	657.984	657.878	
NORTH ABUT.	657.878	657.984	658.089	657.984	657.878	
PIER 1	657.733	657.839	657.944	657.839	657.733	
PIER 2	657.733	657.839	657.944	657.839	657.733	

ELEVATION TOP OF ABUTMENTS

MIN. BAR LAP

- #4 1'-8"
- #5 2'-2"
- #6 2'-7"
- #7 3'-5"

PILE DATA-ABUTMENTS

TYPE METAL PILE SHELLS 14"Ø  
 NOMINAL REQUIRED BEARING 320K  
 FACTORED RESISTANCE AVAILABLE 177K  
 NO. REQUIRED 11+1 TEST PILE AT NORTH ABUTMENT  
 EST. LENGTH 44 FT S. ABUT, 40 FT N. ABUT.  
 MINIMUM 15 ft PENETRATION BELOW STREAMBED ELEVATION  
 METAL SHELL PILES SHALL BE ACCORDING TO ASTM A252 GRADE 3

BILL OF MATERIAL - 2 ABUTMENTS

BAR	NO.	SIZE	LENGTH	SHAPE
h <sub>1</sub> (E)	8	#5	17'-8"	—
h <sub>2</sub> (E)	72	#4	6'-0"	—
p(E)	20	#7	33'-8"	—
s <sub>1</sub> (E)	72	#4	10'-5"	□
u(E)	16	#6	10'-1"	U
v(E)	136	#4	4'-0"	—
v <sub>1</sub> (E)	40	#4	6'-2"	—
CONCRETE STRUCTURES			CU YD	21.2
REINFORCEMENT BARS, EPOXY CTD.			POUND	6168
FURNISHING METAL SHELL PILES 14"xØ.250"			FOOT	464
DRIVING PILES			FOOT	464
TEST PILE METAL SHELLS			EACH	1
STRUCTURE EXCAVATION			CU. YD.	74

BARS DESIGNATED (E) SHALL BE EPOXY COATED.

ABUTMENTS  
 SECTION 08-00303-00-BR  
 F.A.S. 188 (INDIAN HEAD RD.)  
 LEE COUNTY  
 S.N. 052-3413

DESIGNED:	DB
DRAWN:	BEH
CHECKED:	SB
DATE:	12/21/2012