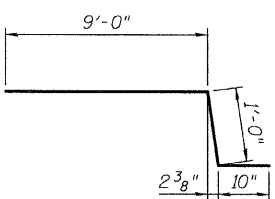
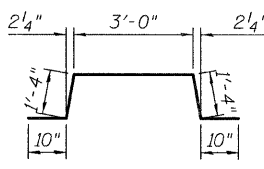


BARS $d_{21}(E)$, $h_{11}(E)$, $n(E)$, $n_2(E)$, $n_4(E)$, $v_1(E)$, $v_4(E)$, $v_{10}(E)$, and $v_{11}(E)$

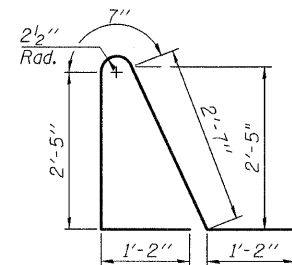
Bar	a	b
$d_{21}(E)$	1'-0"	3'-10"
$h_{11}(E)$	1'-0"	5'-8"
$n(E)$	1'-0"	8'-1"
$n_2(E)$	1'-0"	7'-6"
$n_4(E)$	1'-0"	6'-1"
$v_1(E)$	4'-0"	5'-7"
$v_4(E)$	1'-11"	6'-3"
$v_{10}(E)$	1'-11"	4'-1"
$v_{11}(E)$	1'-11"	3'-10"



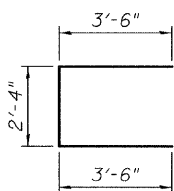
BAR $c_{21}(E)$



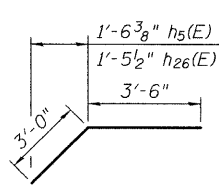
BAR $c_{22}(E)$



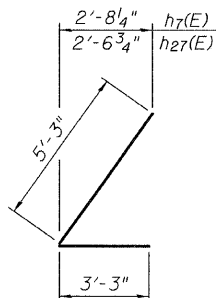
BAR $d_{22}(E)$



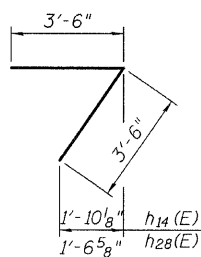
BAR $h_4(E)$



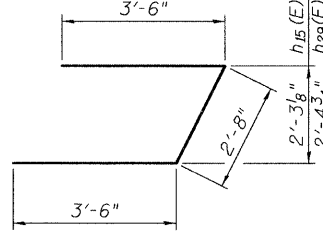
BARS $h_5(E)$ & $h_{26}(E)$



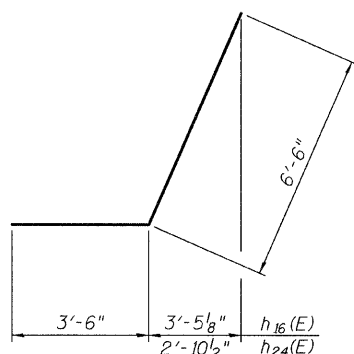
BARS $h_7(E)$ & $h_{27}(E)$



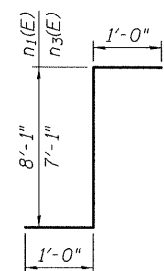
BARS $h_{14}(E)$ & $h_{28}(E)$



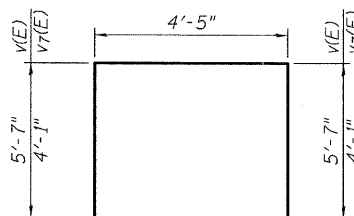
BARS $h_{15}(E)$ & $h_{29}(E)$



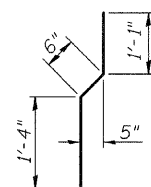
BARS $h_{16}(E)$ & $h_{24}(E)$



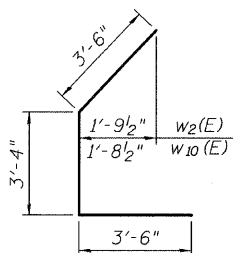
BARS $n_1(E)$ & $n_3(E)$



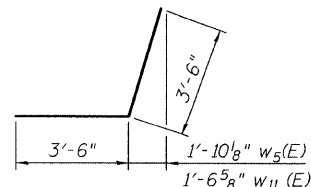
BARS $v(E)$ & $v_7(E)$



BAR $v_2(E)$



BARS $w_2(E)$ & $w_{10}(E)$



BARS $w_5(E)$ & $w_{11}(E)$

Notes:

- For details of Bar Splicers, see sheet 39 of 43.
- For details of Piles and Concrete Encasement, see sheet 40 of 43.

**NORTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$c_{21}(E)$	2	#5	10'-10"	
$c_{22}(E)$	2	#5	7'-4"	
$d_{21}(E)$	4	#6	4'-10"	
$d_{22}(E)$	2	#5	7'-11"	
$h(E)$	8	#6	40'-0"	
$h_1(E)$	8	#6	38'-11"	
$h_2(E)$	21	#6	19'-8"	
$h_3(E)$	5	#6	7'-3"	
$h_4(E)$	9	#6	9'-4"	
$h_5(E)$	9	#6	6'-6"	
$h_6(E)$	26	#5	22'-2"	
$h_7(E)$	8	#5	8'-6"	
$h_8(E)$	26	#5	28'-9"	
$h_9(E)$	40	#5	6'-9"	
$h_{10}(E)$	19	#5	4'-8"	
$h_{11}(E)$	5	#6	6'-8"	
$h_{12}(E)$	2	#6	37'-2"	
$h_{13}(E)$	24	#6	29'-6"	
$h_{14}(E)$	7	#6	7'-0"	
$h_{15}(E)$	7	#6	9'-8"	
$h_{16}(E)$	6	#5	10'-0"	
$h_{17}(E)$	26	#5	29'-1"	
$h_{30}(E)$	22	#5	29'-3"	
$n(E)$	289	#6	9'-1"	
$n_1(E)$	29	#6	10'-1"	
$t(E)$	134	#6	5'-8"	
$t_1(E)$	179	#6	6'-11"	
$v(E)$	91	#6	15'-7"	
$v_1(E)$	13	#6	9'-7"	
$v_2(E)$	92	#4	2'-11"	
$v_3(E)$	92	#6	6'-3"	
$v_4(E)$	80	#6	8'-2"	
$v_5(E)$	63	#6	8'-3"	
$v_6(E)$	62	#6	5'-11"	
$w(E)$	13	#6	31'-3"	
$w_1(E)$	15	#6	40'-0"	
$w_2(E)$	2	#6	10'-4"	
$w_3(E)$	13	#6	34'-3"	
$w_4(E)$	30	#6	28'-9"	
$w_5(E)$	2	#6	7'-0"	
Structure Excavation		Cu. Yd.	835	
Concrete Structures		Cu. Yd.	257.1	
Concrete		Cu. Yd.	7.2	
Superstructure				
Reinforcing Bars, Epoxy Coated		Pound	23,260	
Bar Splicers		Each	122	
Furnishing Metal Shell Piles 14" x 0.250"		Foot	1,110	
Driving Piles		Foot	1,110	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	74	
Concrete Sealer		Sq. Ft.	1,193	
Geocomposite		Sq. Yd.	130	
Wall Drain				
* Pipe Underdrains for Structures 4"		Foot	181	
* Porous Granular Embankment, Special		Cu. Yd.	175	

* Special Provision

**SOUTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$c_{21}(E)$	2	#5	10'-10"	
$c_{22}(E)$	2	#5	7'-4"	
$d_{21}(E)$	4	#6	4'-10"	
$d_{22}(E)$	2	#5	7'-11"	
$h_2(E)$	16	#6	19'-8"	
$h_4(E)$	5	#6	9'-4"	
$h_6(E)$	26	#5	22'-2"	
$h_9(E)$	32	#5	6'-9"	
$h_{10}(E)$	19	#5	4'-8"	
$h_{11}(E)$	5	#6	6'-8"	
$h_{17}(E)$	26	#5	29'-1"	
$h_{18}(E)$	22	#5	28'-7"	
$h_{19}(E)$	18	#5	29'-4"	
$h_{20}(E)$	24	#6	22'-11"	
$h_{21}(E)$	5	#6	8'-10"	
$h_{22}(E)$	16	#6	28'-4"	
$h_{23}(E)$	5	#6	19'-3"	
$h_{24}(E)$	8	#5	10'-0"	
$h_{25}(E)$	2	#6	36'-9"	
$h_{26}(E)$	5	#6	6'-6"	
$h_{27}(E)$	6	#5	8'-6"	
$h_{28}(E)$	7	#6	7'-0"	
$h_{29}(E)$	7	#6	9'-8"	
$n_2(E)$	87	#6	8'-6"	
$n_3(E)$	29	#6	9'-1"	
$n_4(E)$	204	#6	7'-1"	
$t(E)$	135	#6	5'-8"	
$t_1(E)$	183	#6	6'-11"	
$v_2(E)$	92	#4	2'-11"	
$v_3(E)$	92	#6	6'-3"	
$v_4(E)$	80	#6	8'-2"	
$v_7(E)$	92	#6	12'-7"	
$v_8(E)$	60	#6	8'-6"	
$v_9(E)$	63	#6	5'-11"	
$v_{10}(E)$	7	#6	6'-0"	
$v_{11}(E)$	7	#6	5'-9"	
$w_6(E)$	13	#6	33'-3"	
$w_7(E)$	15	#6	41'-1"	
$w_8(E)$	13	#6	32'-0"	
$w_9(E)$	30	#6	28'-4"	
$w_{10}(E)$	2	#6	10'-4"	
$w_{11}(E)$	2	#6	7'-0"	
Structure Excavation		Cu. Yd.	737	
Concrete Structures		Cu. Yd.	219.3	
Concrete		Cu. Yd.	7.2	
Superstructure				
Reinforcing Bars, Epoxy Coated		Pound	21,250	
Bar Splicers		Each	118	
Furnishing Metal Shell Piles 14" x 0.250"		Foot	1,425	
Driving Piles		Foot	1,425	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	75	
Concrete Sealer		Sq. Ft.	1,004	
Geocomposite		Sq. Yd.	96	
Wall Drain				
* Pipe Underdrains for Structures 4"		Foot	181	
* Porous Granular Embankment, Special		Cu. Yd.	129	

* Special Provision

FILE NAME = 8498199-62953-038-AbutBOM.dgn
PLOT SCALE =
PLOT DATE = 12/28/2018

DESIGNED	REVISIONS
JY	-
RMK	-
JY	-
RMK	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT BILL OF MATERIAL
STRUCTURE NO. 049-0199**
SHEET NO. 38 OF 43 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	128R-3	LAKE	518	280

CONTRACT NO. 60953
ILLINOIS FED. AID PROJECT

MACTEC