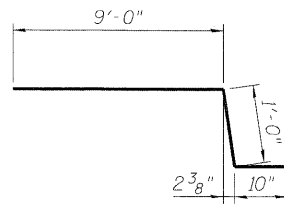
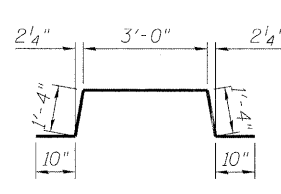


Bar	a	b
d21(E)	1'-0"	3'-10"
h11(E)	1'-0"	5'-8"
h15(E)	3'-6"	3'-6"
h16(E)	2'-11"	5'-7"
n(E)	1'-0"	8'-1"
n2(E)	1'-0"	7'-6"
n4(E)	1'-0"	6'-1"
v1(E)	4'-0"	5'-7"
v4(E)	1'-11"	6'-3"
v10(E)	1'-11"	4'-1"
v11(E)	1'-11"	3'-10"

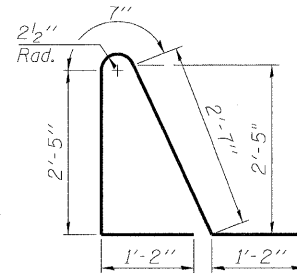
**BARS** *d*<sub>21</sub>(E), *h*<sub>11</sub>(E), *h*<sub>15</sub>(E), *h*<sub>16</sub>(E), *n*(E), *n*<sub>2</sub>(E), *n*<sub>4</sub>(E), *v*<sub>1</sub>(E), *v*<sub>4</sub>(E), *v*<sub>10</sub>(E), and *v*<sub>11</sub>(E)



**BAR** *c*<sub>21</sub>(E)



**BAR** *c*<sub>22</sub>(E)



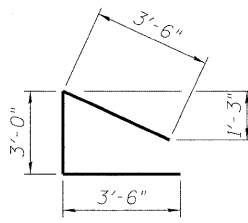
**BAR** *d*<sub>22</sub>(E)

**NORTH ABUTMENT  
BILL OF MATERIAL**

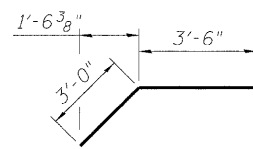
Bar	No.	Size	Length	Shape
<i>c</i> <sub>21</sub> (E)	2	#5	10'-10"	
<i>c</i> <sub>22</sub> (E)	2	#5	7'-4"	
<i>d</i> <sub>21</sub> (E)	4	#6	4'-10"	
<i>d</i> <sub>22</sub> (E)	2	#5	7'-11"	
<i>h</i> (E)	8	#6	40'-0"	
<i>h</i> <sub>1</sub> (E)	8	#6	38'-11"	
<i>h</i> <sub>2</sub> (E)	21	#6	19'-8"	
<i>h</i> <sub>3</sub> (E)	5	#6	7'-3"	
<i>h</i> <sub>4</sub> (E)	9	#6	10'-0"	
<i>h</i> <sub>5</sub> (E)	9	#6	6'-6"	
<i>h</i> <sub>6</sub> (E)	26	#5	22'-2"	
<i>h</i> <sub>7</sub> (E)	8	#5	9'-3"	
<i>h</i> <sub>8</sub> (E)	48	#5	29'-0"	
<i>h</i> <sub>9</sub> (E)	40	#5	6'-9"	
<i>h</i> <sub>10</sub> (E)	19	#5	4'-8"	
<i>h</i> <sub>11</sub> (E)	5	#6	6'-8"	
<i>h</i> <sub>12</sub> (E)	2	#6	37'-2"	
<i>h</i> <sub>13</sub> (E)	24	#6	29'-6"	
<i>h</i> <sub>14</sub> (E)	7	#6	7'-0"	
<i>h</i> <sub>15</sub> (E)	7	#6	7'-0"	
<i>h</i> <sub>16</sub> (E)	6	#5	8'-6"	
<i>h</i> <sub>17</sub> (E)	26	#5	29'-1"	
<i>n</i> (E)	287	#6	9'-1"	
<i>n</i> <sub>1</sub> (E)	30	#6	10'-1"	
<i>t</i> (E)	132	#6	5'-8"	
<i>t</i> <sub>1</sub> (E)	179	#6	6'-11"	
<i>v</i> (E)	91	#6	15'-7"	
<i>v</i> <sub>1</sub> (E)	12	#6	9'-7"	
<i>v</i> <sub>2</sub> (E)	92	#4	2'-11"	
<i>v</i> <sub>3</sub> (E)	92	#6	6'-3"	
<i>v</i> <sub>4</sub> (E)	80	#6	8'-2"	
<i>v</i> <sub>5</sub> (E)	62	#6	8'-3"	
<i>v</i> <sub>6</sub> (E)	61	#6	5'-11"	
<i>w</i> (E)	13	#6	31'-4"	
<i>w</i> <sub>1</sub> (E)	15	#6	40'-0"	
<i>w</i> <sub>2</sub> (E)	2	#6	10'-4"	
<i>w</i> <sub>3</sub> (E)	13	#6	33'-1"	
<i>w</i> <sub>4</sub> (E)	30	#6	28'-9"	
<i>w</i> <sub>5</sub> (E)	2	#6	7'-0"	
Structure Excavation	Cu. Yd.	835		
Concrete Structures	Cu. Yd.	257.1		
Concrete	Cu. Yd.	7.2		
Superstructure				
Concrete Encasement	Cu. Yd.	25.9		
Reinforcing Bars, Epoxy Coated	Pound	23,150		
Bar Splicers	Each	122		
Furnishing Steel Piles HP12x53	Foot	1,554		
Driving Piles	Foot	1,554		
Test Pile Steel HP12x53	Each	1		
Pile Shoes	Each	74		
Concrete Sealer	Sq. Ft.	1,193		
Geocomposite	Sq. Yd.	169		
Wall Drain				
Pipe Underdrains for Structures 4"	Foot	181		
Porous Granular Embankment, Special	Cu. Yd.	365		

**SOUTH ABUTMENT  
BILL OF MATERIAL**

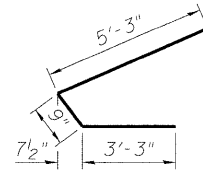
Bar	No.	Size	Length	Shape
<i>c</i> <sub>21</sub> (E)	2	#5	10'-10"	
<i>c</i> <sub>22</sub> (E)	2	#5	7'-4"	
<i>d</i> <sub>21</sub> (E)	4	#6	4'-10"	
<i>d</i> <sub>22</sub> (E)	2	#5	7'-11"	
<i>h</i> <sub>2</sub> (E)	16	#6	19'-8"	
<i>h</i> <sub>5</sub> (E)	5	#6	6'-6"	
<i>h</i> <sub>6</sub> (E)	26	#5	22'-2"	
<i>h</i> <sub>7</sub> (E)	6	#5	9'-3"	
<i>h</i> <sub>9</sub> (E)	32	#5	6'-9"	
<i>h</i> <sub>10</sub> (E)	19	#5	4'-8"	
<i>h</i> <sub>11</sub> (E)	5	#6	6'-8"	
<i>h</i> <sub>14</sub> (E)	7	#6	7'-0"	
<i>h</i> <sub>15</sub> (E)	7	#6	7'-0"	
<i>h</i> <sub>16</sub> (E)	8	#5	8'-6"	
<i>h</i> <sub>17</sub> (E)	26	#5	29'-1"	
<i>h</i> <sub>18</sub> (E)	22	#5	28'-8"	
<i>h</i> <sub>19</sub> (E)	18	#5	29'-5"	
<i>h</i> <sub>20</sub> (E)	24	#6	22'-11"	
<i>h</i> <sub>21</sub> (E)	5	#6	8'-10"	
<i>h</i> <sub>22</sub> (E)	16	#6	28'-4"	
<i>h</i> <sub>23</sub> (E)	5	#6	19'-3"	
<i>h</i> <sub>24</sub> (E)	5	#6	10'-2"	
<i>h</i> <sub>25</sub> (E)	2	#6	36'-9"	
<i>n</i> <sub>2</sub> (E)	85	#6	8'-6"	
<i>n</i> <sub>3</sub> (E)	29	#6	9'-1"	
<i>n</i> <sub>4</sub> (E)	204	#6	7'-1"	
<i>t</i> (E)	133	#6	5'-8"	
<i>t</i> <sub>1</sub> (E)	183	#6	6'-11"	
<i>v</i> <sub>2</sub> (E)	92	#4	2'-11"	
<i>v</i> <sub>3</sub> (E)	92	#6	6'-3"	
<i>v</i> <sub>4</sub> (E)	80	#6	8'-2"	
<i>v</i> <sub>7</sub> (E)	92	#6	12'-7"	
<i>v</i> <sub>8</sub> (E)	60	#6	8'-6"	
<i>v</i> <sub>9</sub> (E)	62	#6	5'-11"	
<i>v</i> <sub>10</sub> (E)	5	#6	6'-0"	
<i>v</i> <sub>11</sub> (E)	7	#6	5'-9"	
<i>w</i> <sub>2</sub> (E)	2	#6	10'-4"	
<i>w</i> <sub>5</sub> (E)	2	#6	7'-0"	
<i>w</i> <sub>6</sub> (E)	13	#6	32'-10"	
<i>w</i> <sub>7</sub> (E)	15	#6	41'-1"	
<i>w</i> <sub>8</sub> (E)	13	#6	32'-3"	
<i>w</i> <sub>9</sub> (E)	30	#6	28'-4"	
Structure Excavation	Cu. Yd.	737		
Concrete Structures	Cu. Yd.	219.3		
Concrete	Cu. Yd.	7.2		
Superstructure				
Concrete Encasement	Cu. Yd.	26.2		
Reinforcing Bars, Epoxy Coated	Pound	21,150		
Bar Splicers	Each	118		
Furnishing Steel Piles HP12x53	Foot	1,950		
Driving Piles	Foot	1,950		
Test Pile Steel HP12x53	Each	1		
Pile Shoes	Each	75		
Concrete Sealer	Sq. Ft.	1,004		
Geocomposite	Sq. Yd.	133		
Wall Drain				
Pipe Underdrains for Structures 4"	Foot	181		
Porous Granular Embankment, Special	Cu. Yd.	313		



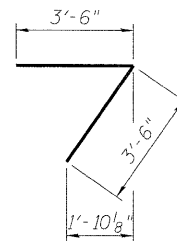
**BAR** *h*<sub>4</sub>(E)



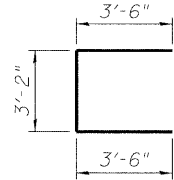
**BAR** *h*<sub>5</sub>(E)



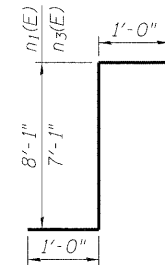
**BAR** *h*<sub>7</sub>(E)



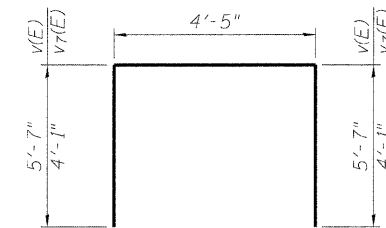
**BAR** *h*<sub>14</sub>(E)



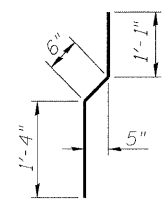
**BAR** *h*<sub>24</sub>(E)



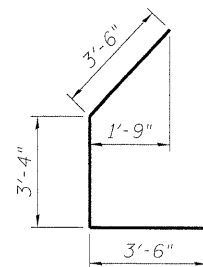
**BARS** *n*<sub>1</sub>(E) & *n*<sub>3</sub>(E)



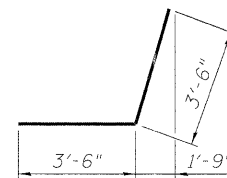
**BARS** *v*(E) & *v*<sub>7</sub>(E)



**BAR** *v*<sub>2</sub>(E)



**BAR** *w*<sub>2</sub>(E)



**BAR** *w*<sub>5</sub>(E)

Notes:

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

FOR INFORMATION ONLY **MACTEC**

FILE NAME =	USER NAME =	DESIGNED - JY	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ABUTMENT BILL OF MATERIAL STRUCTURE NO. 049-0199</b>	F.A.P. RTE. 330	SECTION 128R-2-F	COUNTY LAKE	TOTAL SHEETS 28	SHEET NO. 28	
#FILEL#		CHECKED - RMK	REVISED -			SHEET NO. 38 OF 43 SHEETS					
PLOT SCALE =		DRAWN - JY	REVISED -			ILLINOIS FED. AID PROJECT					
PLOT DATE = 12/20/2010		CHECKED - RMK	REVISED -			CONTRACT NO. 60P54					