

PIER 1 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	46'-10"	—
h1(E)	10	#5	20'-6"	—
h2(E)	10	#5	16'-7"	—
h3(E)	36	#5	46'-0"	—
n(E)	6	#5	5'-4"	⌌
n2(E)	90	#8	7'-3"	⌌
p(E)	30	#9	46'-8"	—
p1(E)	12	#8	47'-1"	↘
s(E)	210	#6	15'-4"	□
s1(E)	44	#6	8'-8"	□
s2(E)	70	#5	8'-6"	□
s3(E)	92	#6	18'-6"	□
s4(E)	92	#6	13'-2"	□
t1(E)	98	#8	11'-8"	—
t2(E)	98	#5	11'-8"	—
u(E)	28	#5	12'-10"	⌌
u1(E)	12	#5	10'-10"	⌌
v1(E)	90	#8	8'-5"	—
v14(E)	6	#5	7'-7"	—
w(E)	48	#5	48'-8"	—
* sp1(E)	6	#4	6'-8"	≡
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	31,532		
Concrete Structures	Cu. Yd.	260.4		
Structure Excavation	Cu. Yd.	392.9		
Concrete Sealer	Sq. Ft.	552		

PIER 2 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	46'-10"	—
h1(E)	10	#5	20'-6"	—
h2(E)	10	#5	16'-7"	—
h3(E)	36	#5	46'-0"	—
n(E)	6	#5	5'-4"	⌌
n2(E)	90	#8	7'-3"	⌌
p(E)	30	#9	46'-8"	—
p1(E)	12	#8	47'-1"	↘
s(E)	210	#6	15'-4"	□
s1(E)	44	#6	8'-8"	□
s2(E)	70	#5	8'-6"	□
s3(E)	92	#6	18'-6"	□
s4(E)	92	#6	13'-2"	□
t1(E)	98	#8	11'-8"	—
t2(E)	98	#5	11'-8"	—
u(E)	28	#5	12'-10"	⌌
u1(E)	12	#5	10'-10"	⌌
v2(E)	90	#8	11'-10"	—
v14(E)	6	#5	7'-7"	—
w(E)	48	#5	48'-8"	—
* sp2(E)	6	#4	10'-2"	≡
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	32,720		
Concrete Structures	Cu. Yd.	265.9		
Structure Excavation	Cu. Yd.	423.1		
Concrete Sealer	Sq. Ft.	552		

PIER 3 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	46'-10"	—
h1(E)	10	#5	20'-6"	—
h2(E)	10	#5	16'-7"	—
h3(E)	36	#5	46'-0"	—
n(E)	6	#5	5'-4"	⌌
n2(E)	90	#8	7'-3"	⌌
p(E)	30	#9	46'-8"	—
p1(E)	12	#8	47'-1"	↘
s(E)	210	#6	15'-4"	□
s1(E)	44	#6	8'-8"	□
s2(E)	70	#5	8'-6"	□
s3(E)	92	#6	18'-6"	□
s4(E)	92	#6	13'-2"	□
t1(E)	98	#8	11'-8"	—
t2(E)	98	#5	11'-8"	—
u(E)	28	#5	12'-10"	⌌
u1(E)	12	#5	10'-10"	⌌
v3(E)	90	#8	13'-11"	—
v14(E)	6	#5	7'-7"	—
w(E)	48	#5	48'-8"	—
* sp3(E)	6	#4	12'-4"	≡
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	33,443		
Concrete Structures	Cu. Yd.	269.3		
Structure Excavation	Cu. Yd.	332.4		

PIER 4 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	46'-10"	—
h1(E)	10	#5	20'-6"	—
h2(E)	10	#5	16'-7"	—
h3(E)	36	#5	46'-0"	—
n(E)	6	#5	5'-4"	⌌
n2(E)	90	#8	7'-3"	⌌
p(E)	30	#9	46'-8"	—
p1(E)	12	#8	47'-1"	↘
s(E)	210	#6	15'-4"	□
s1(E)	44	#6	8'-8"	□
s2(E)	70	#5	8'-6"	□
s3(E)	92	#6	18'-6"	□
s4(E)	92	#6	13'-2"	□
t1(E)	98	#8	11'-8"	—
t2(E)	98	#5	11'-8"	—
u(E)	28	#5	12'-10"	⌌
u1(E)	12	#5	10'-10"	⌌
v4(E)	90	#8	18'-5"	—
v14(E)	6	#5	7'-7"	—
w(E)	48	#5	48'-8"	—
* sp4(E)	6	#4	16'-10"	≡
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	34,996		
Concrete Structures	Cu. Yd.	276.4		
Structure Excavation	Cu. Yd.	483.6		

PIER 5 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	46'-10"	—
h1(E)	10	#5	20'-6"	—
h2(E)	10	#5	16'-7"	—
h3(E)	36	#5	46'-0"	—
n(E)	6	#5	5'-4"	⌌
n2(E)	90	#8	7'-3"	⌌
p(E)	30	#9	46'-8"	—
p1(E)	12	#8	47'-1"	↘
s(E)	210	#6	15'-4"	□
s1(E)	44	#6	8'-8"	□
s2(E)	70	#5	8'-6"	□
s3(E)	92	#6	18'-6"	□
s4(E)	92	#6	13'-2"	□
t1(E)	98	#8	11'-8"	—
t2(E)	98	#5	11'-8"	—
u(E)	28	#5	12'-10"	⌌
u1(E)	12	#5	10'-10"	⌌
v5(E)	90	#8	20'-5"	—
v14(E)	6	#5	7'-7"	—
w(E)	48	#5	48'-8"	—
* sp5(E)	6	#4	18'-9"	≡
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	35,671		
Concrete Structures	Cu. Yd.	277.0		
Structure Excavation	Cu. Yd.	423.1		

*Length is height of spiral.

Notes:

1. Work this sheet with Sheets S35-S43.
2. Work this sheet with Sheet S20 for bar splicer details.

EARTH TECH | AECOM

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION PIERS 1-5 REINFORCEMENT DETAILS FAP 330 US 12/45 (MANNHEIM RD.) OVER 500 LINE RR & FRANKLIN AVE. STRUCTURE NO. 016-2815 SECTION 465 VB-R-1 STA. 183+33.30 DATE 7/2009
NAME	DATE	
		COOK COUNTY DRAWN BY DEV CHECKED BY CLS