



Minimum Bar Laps	
Bar	Lap
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#8	6'-9"
#9	8'-7"
#10	10'-10"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h500(E)	4	#5	38'-4"	—
h501(E)	4	#5	36'-2"	—
h502(E)	8	#5	19'-8"	—
h503(E)	4	#5	6'-10"	—
h504(E)	4	#5	11'-3"	—
h505(E)	13	#6	33'-7"	—
h506(E)	13	#6	37'-8"	—
h507(E)	38	#5	33'-7"	—
h508(E)	38	#5	37'-8"	—
p500(E)	5	#7	31'-11"	—
p501(E)	5	#7	29'-9"	—
p502(E)	14	#9	38'-7"	—
p503(E)	14	#9	36'-5"	—
p504(E)	10	#7	11'-9"	—
s500(E)	127	#5	13'-7"	□
s501(E)	56	#5	9'-0"	□
s502(E)	84	#4	9'-0"	□
s503(E)	292	#6	26'-6"	□
sp500	12	#4	77'-6"	⌘
u500(E)	10	#6	10'-4"	□
u501(E)	61	#5	4'-4"	□
u502(E)	42	#6	11'-2"	□
v500(E)	96	#8	13'-4"	⌘
v501	336	#10	44'-0"	—
v502(E)	168	#10	18'-3"	—
Structure Excavation		Cu. Yd.	182	
Concrete Structures		Cu. Yd.	260.3	
Reinforcement Bars		Pound	74,050	
Reinforcement Bars, Epoxy Coated		Pound	41,410	
Permanent Casing		Foot	149	
Drilled Shaft in Soil		Cu. Yd.	318.5	
Drilled Shaft in Rock		Cu. Yd.	9.4	
Concrete Sealer		Sq. Ft.	4957	

Bars indicated thus 1x15 etc., indicates 1 line of bars with 15 lengths per line.

Notes:
 Apply concrete sealer to all exposed concrete surfaces of the pier.
 * The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.
 ** Length is height of spiral.
 *** Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.

4/3/15 9:59 PM 0161716-60W26-S068-Pier-4_Details.dgn



USER NAME = rlschultz	DESIGNED - JRM	REVISED
PLOT SCALE = 0:1.0000 ' / in.	CHECKED - MDS	REVISED
PLOT DATE = 9/15/2013	DRAWN - RLS	REVISED
	CHECKED - JRM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4 DETAILS
STRUCTURE NO. 016-1716

SHEET NO. S2-68 OF S2-81 SHEETS

F.A.U. RT.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3730	2013-008R	COOK	559	428
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				