

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOTES:

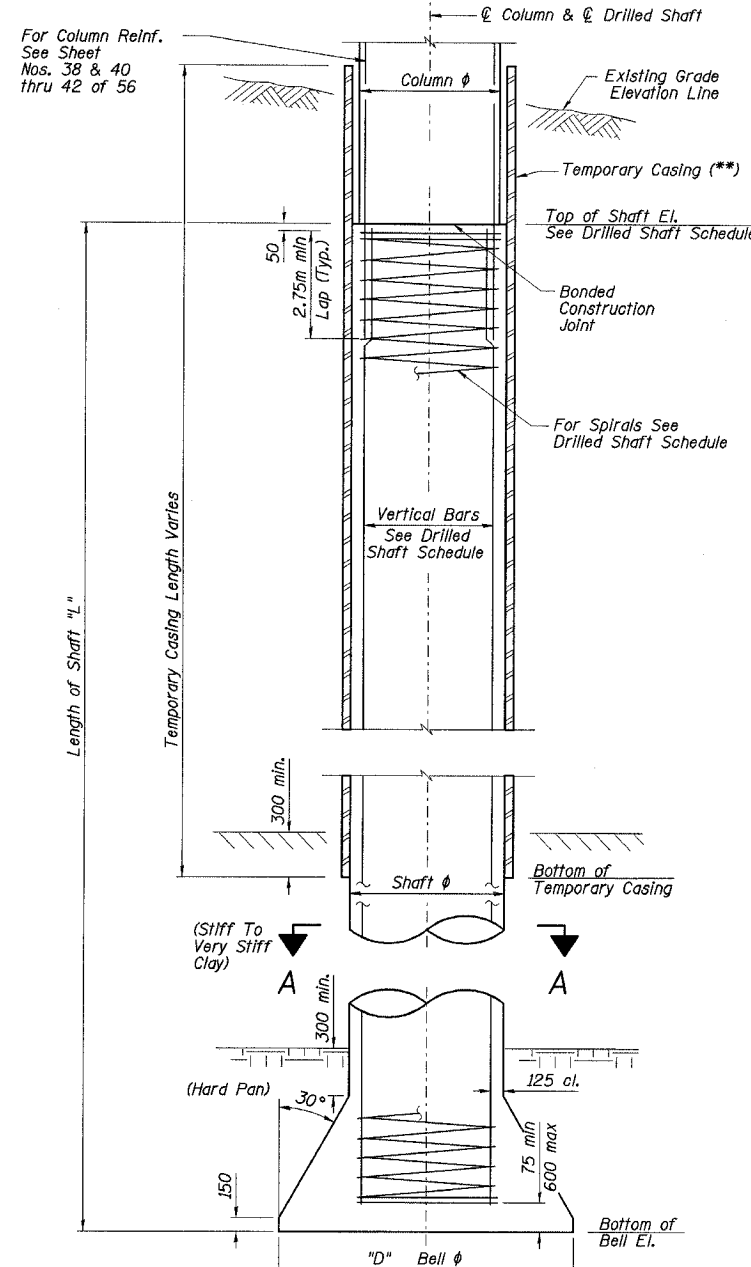
- Shafts shall be installed according to the IDOT Guide Bridge Special Provision for "Drilled Shafts"
 - Elevations, shaft lengths and reinforcement lengths shown are estimates and should be verified and adjusted in the field as directed by the Engineer.
 - Temporary casing, if utilized, shall be extracted so as not to disturb the shaft reinforcing cage or impair the structural integrity of the constructed shaft.
 - If field conditions dictate a shorter shaft length than shown, the Contractor shall cut the reinforcement bars to the required length or increase the cap length. If the shaft length is longer than indicated, the Contractor shall extend the reinforcement by providing additional reinforcement of equal size and lapping with the minimum lap length shown or increase the clearance at the bottom as indicated in the elevation view.
- Min. Lap Lengths:**
#35 2,640 m
#15 Spiral 770
- All dimensions are in millimeters (mm) unless otherwise noted.
 - The shaft and reinforcement shall be adjusted as required by the Engineer. Additional quantities furnished by the Contractor will be paid for at the unit price bid for the work.
 - At all locations where reinforcement bar laps are not in direct contact, the Contractor shall provide sufficient spacing between the vertical bars, equal to the size of the largest concrete aggregate plus 15mm.
 - See Sheet No. 4 of 56 for location of drilled shafts.
 - Work this drawing with drawings Sheet Nos. 4 & 38 thru 42 of 56.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 43
F. A. I. 80/94	*	COOK	870	653	56 SHEETS
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-			
0203.1 & 0312-708W-R-3		CONTRACT NO. 62108			

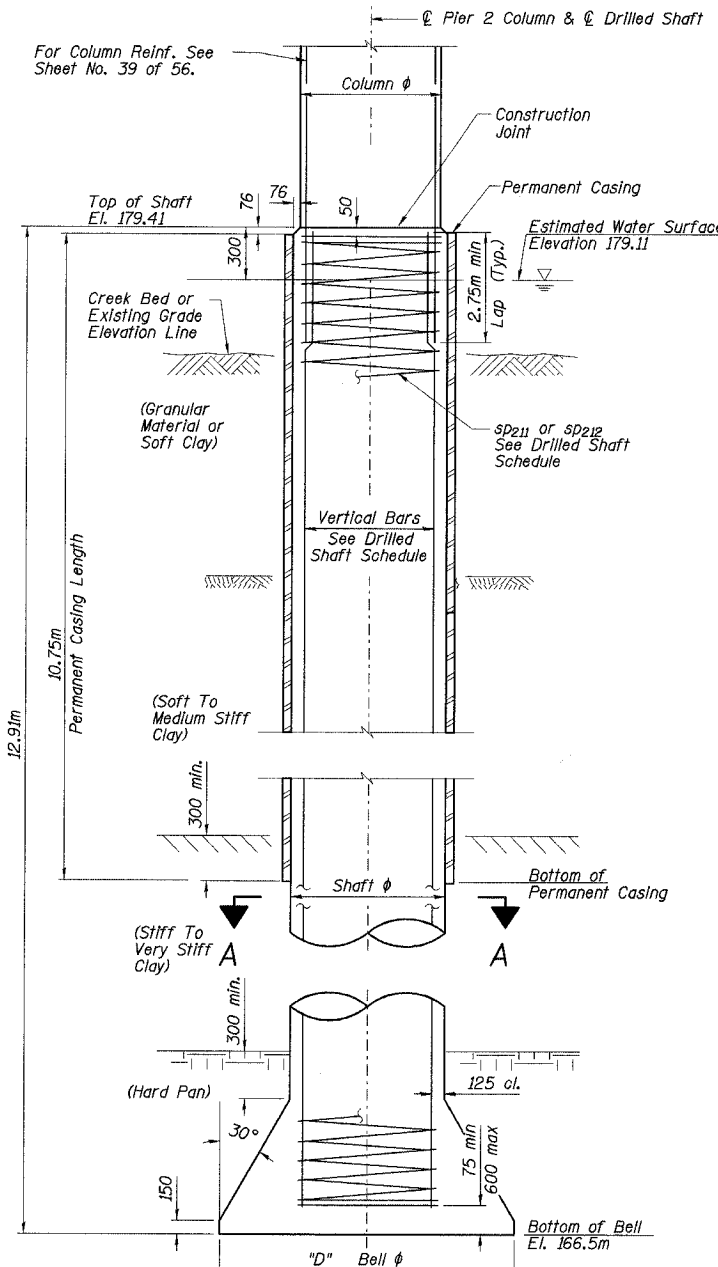
BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
SP111	1	#15	12.57	~
SP112	1	#15	12.22	~
SP211	2	#15	12.79	~
SP212	1	#15	12.79	~
SP311	2	#15	12.58	~
SP411	2	#15	13.58	~
SP511	2	#15	13.08	~
V111	20	#35	12.57	—
V112	20	#35	12.22	—
V211	68	#35	12.79	—
V311	40	#35	12.58	—
V411	40	#35	13.58	—
V511	40	#35	13.08	—
Drilled Shaft In Soil 1676mm		m	130.1	
Drilled Shaft In Soil 1981mm		m	12.9	
Permanent Casing		m	32.3	
Reinforcement Bars		kg	30340	

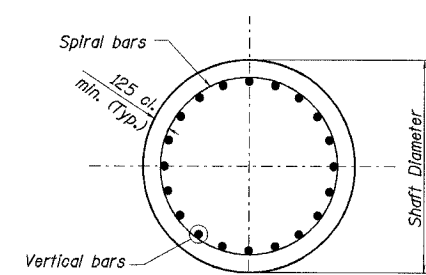
* Length is height of spiral.



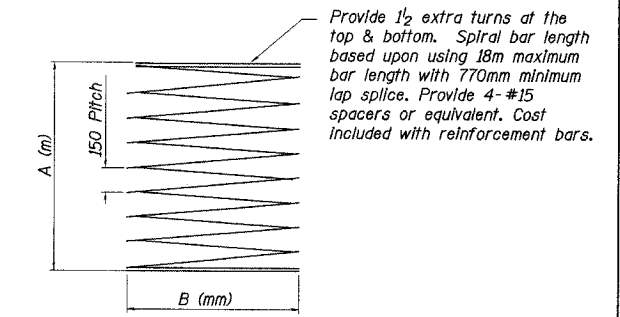
ELEVATION VIEW
(Piers 1, 3, 4 and 5)
See Drilled Shaft Schedule



ELEVATION VIEW
(Pier 2 Only)
See Drilled Shaft Schedule



SECTION A-A



SPIRAL BAR

DRILLED SHAFT SCHEDULE

LOCATION	Drilled Shaft No.	Shaft Dia. Size (m)	Bell Dia. Size (m)	Length (m)	Vertical Bars (per shaft)	Spiral Bars (per shaft)	Top of Shaft Elevation	Bot. of Bell Elevation	Allowable Bearing Pressure (kPa)	Proposed Grade Elevation	Concrete Per Drilled Shaft (cu.m)	Reinforcement Per Drilled Shaft (kg)	A (m)	B (mm)
Pier-1	DS11	1.676	3.2	12.69	20-#35 V111	SP111	179.19	166.5	720	179.49	32.1	2637	12.57	1426
	DS12	1.676	3.2	12.34	20-#35 V112	SP112	178.84	166.5	720	179.14	31.3	2563	12.22	1426
Pier-2	DS21	1.676	2.6	12.91	20-#35 V211	SP211	179.41	166.5	720	178.50	30.1	2683	12.79	1426
	DS22	1.981	3.96	12.91	28-#35 V212	SP212	179.41	166.5	720	176.69	47.8	3577	12.79	1731
Pier-3	DS23	1.676	2.6	12.91	20-#35 V211	SP211	179.41	166.5	720	178.50	30.1	2683	12.79	1426
	DS31	1.676	3.2	12.70	20-#35 V311	SP311	178.70	166.0	720	179.00	32.1	2639	12.58	1426
Pier-4	DS32	1.676	3.2	12.70	20-#35 V311	SP311	178.70	166.0	720	179.00	32.1	2639	12.58	1426
	DS41	1.676	3.2	13.70	20-#35 V411	SP411	179.70	166.0	720	180.00	34.3	2849	13.58	1426
Pier-5	DS42	1.676	3.2	13.70	20-#35 V411	SP411	179.70	166.0	720	180.00	34.3	2849	13.58	1426
	DS51	1.676	3.2	13.20	20-#35 V511	SP511	179.70	166.5	720	180.00	33.2	2744	13.08	1426
	DS52	1.676	3.2	13.20	20-#35 V511	SP511	179.70	166.5	720	180.00	33.2	2744	13.08	1426

DESIGNED	TFS
CHECKED	HDA
DRAWN	ALR
CHECKED	OD

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ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND
PIER DRILLED SHAFT
EB I-94 OVER THORN CREEK
F.A.I. 94 SECTION (0203.1 & 0312-708W) R-3
COOK COUNTY
STA. 20+509,000 STRUCTURE NO. 016-2807
DATE JUL 18, 2005
SCALE ---
HNTB