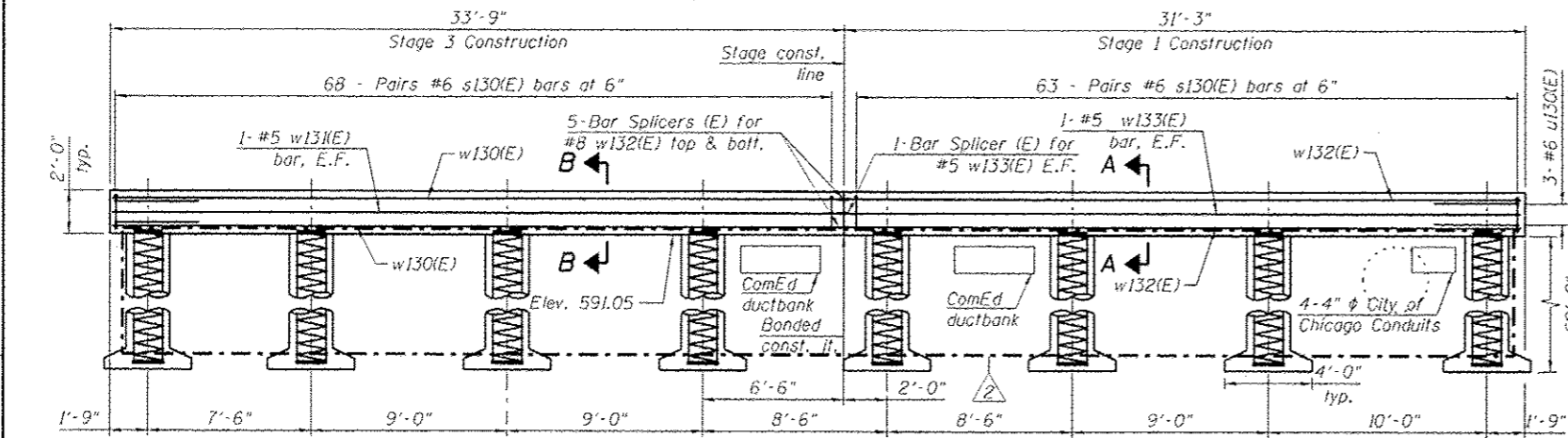
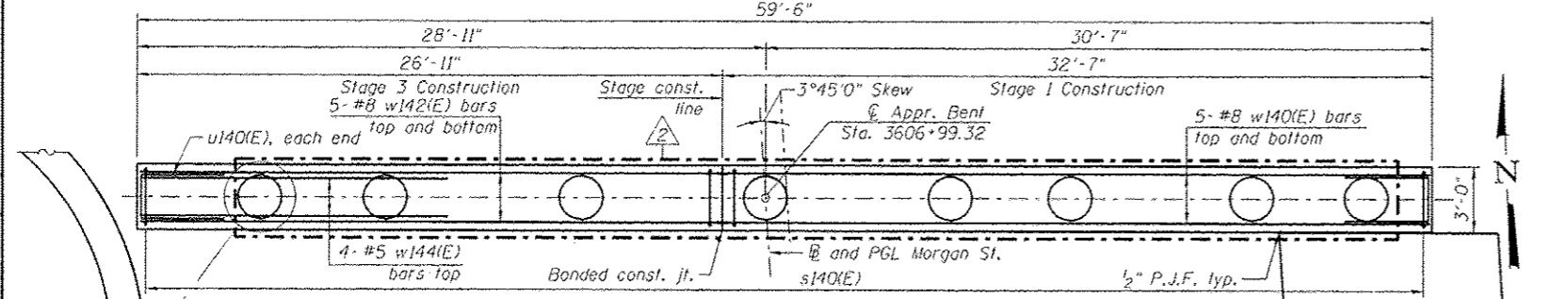


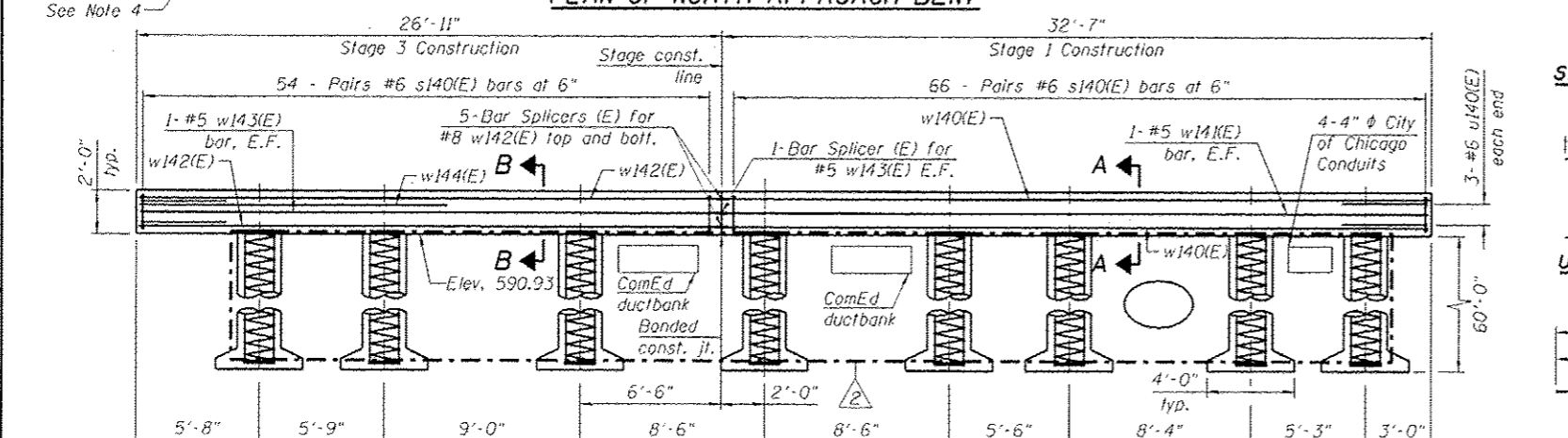
PLAN OF SOUTH APPROACH BENT



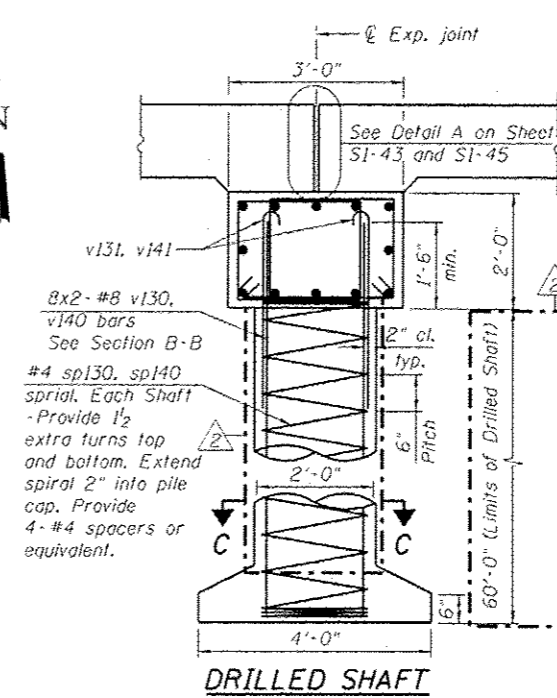
ELEVATION
(Looking North)



PLAN OF NORTH APPROACH BENT



ELEVATION
(Looking North)



DRILLED SHAFT

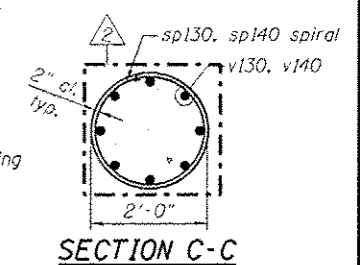
Minimum Bar Laps	
Bar	Lap
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#8	6'-9"

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Bars indicated thus, 8x2-#5 etc., indicates 8 lines of bars with 2 lengths per line.
3. All edges shall have standard 3/4" chamfer.
4. Installation of drilled shaft requires coring through existing Northwest wingwall footing. Additional costs included in Drilled Shaft in Soil.
5. Spirals are measured vertically.

SECTION A-A

SECTION B-B



SECTION C-C

BILL OF MATERIAL

South Approach Bent

Bar	No.	Size	Length	Shape
w130(E)	10	#8	33'-6"	—
w131(E)	2	#5	33'-6"	—
w132(E)	10	#8	31'-0"	—
w133(E)	2	#5	31'-0"	—
s130(E)	262	#6	8'-8"	□
sp130	8	#4	60'-2"	—
u130(E)	6	#6	10'-3"	—
v130	128	#8	34'-2"	—
v131	64	#8	9'-5"	—
Structure Excavation		Cu Yd	34	
Concrete Structures		Cu Yd	14.4	
Reinforcement Bars		Pound	16,753	
Reinforcement Bars, Epoxy Coated		Pound	5,360	
Drilled Shaft in Soil		Cu Yd	56	

BILL OF MATERIAL

North Approach Bent

Bar	No.	Size	Length	Shape
w140(E)	10	#8	32'-4"	—
w141(E)	2	#5	32'-4"	—
w142(E)	10	#8	26'-8"	—
w143(E)	2	#5	26'-8"	—
w144(E)	4	#8	14'-0"	—
s140(E)	240	#6	8'-8"	□
sp140	8	#4	60'-2"	—
u140(E)	6	#6	10'-3"	—
v140	128	#8	34'-2"	—
v141	64	#8	9'-5"	—
Structure Excavation		Cu Yd	31	
Concrete Structures		Cu Yd	13.2	
Reinforcement Bars		Pound	16,753	
Reinforcement Bars, Epoxy Coated		Pound	5,070	
Drilled Shaft in Soil		Cu Yd	56	

HBM
INCORPORATED GROUP, INC.
CONSULTING & DESIGN
INSPECTION & TESTING
RESEARCH & TESTING

4415 WEST HARRISON ST.
SUITE 231
MILLSTON, IL 60162
PHONE: (708) 238-0900
FAX: (708) 238-0901

0161709-B0W25-547-PileBent.dgn
USER NAME: lisa.kalleman
PLOT SCALE: 8/10" = 1'-0"
PLOT DATE: 7/30/2013

DESIGNED - MAF, MWM
DRAWN - MWM, HH
CHECKED - MI, MAI
DATE - 6/17/2013

REVISED - 07/19/2013 MI, WM
REVISED - 07/30/2013 MI, LAB
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH AND NORTH APPROACH PILE BENT SUPPORT
STRUCTURE NO. 016-1709

SCALE: SHEET S1-47 OF 51 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-00TR	COOK	317	191

CONTRACT NO. 60W25
ILLINOIS FED. AID PROJECT