

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P.	05-00130-00-BR	WILL	41	17
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	
CONTRACT NO. 83889				

SHEET NO. 5  
OF 23 SHEETS

(\*\*\*) Note: The MSE wall supplier shall design the abutment soil reinforcement to resist a horizontal force of 1.5 Kips/ft. of abutment.

**BILL OF MATERIAL**

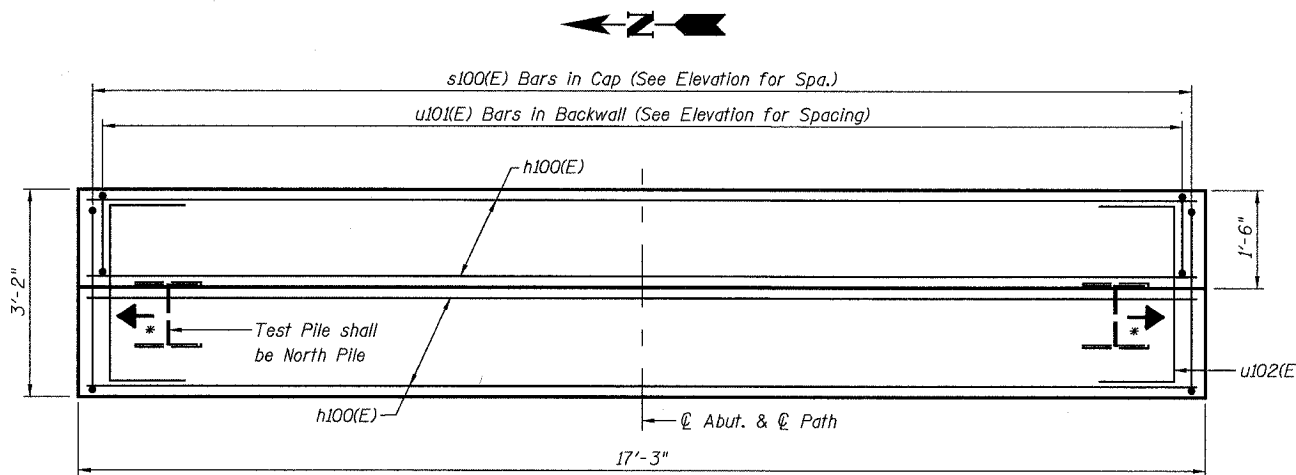
Bar	No.	Size	Length	Shape
h100(E)	48	#7	16'-11"	—
s100(E)	38	#5	12'-11"	□
u10(E)	38	#5	11'-10"	□
u102(E)	16	#5	7'-1"	□

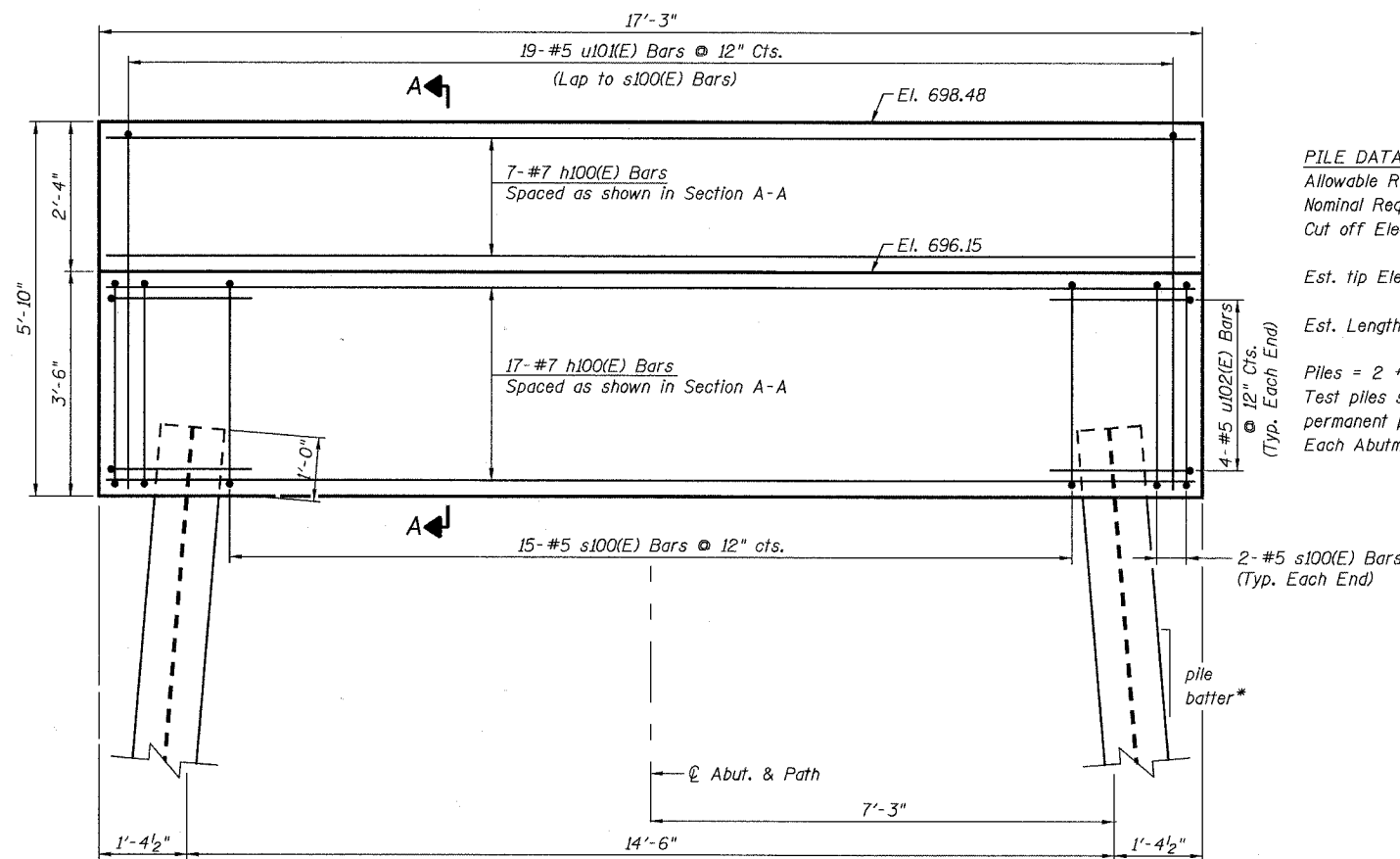
Pay Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Lbs.	2,770
Concrete Structures	Cu. Yd.	18.7
Concrete Sealer	Sq. Ft.	185
Pile Shoes	Each	4
Driving Piles	Foot	105
Furnishing Steel Piles, HP 12x53	Foot	105
Test Pile Steel HP 12x53	Each	2

Reinforcement Bars designated (E) shall be Epoxy Coated.

\*\* Note: Piles shall be driven prior to placement of the reinforced select fill and coated with coal tar epoxy from the bottom of the select fill to 1" above the base of the abutment. The cost of the coal tar epoxy coating shall be included with the cost of "Furnishing Steel Piles, HP12x53"



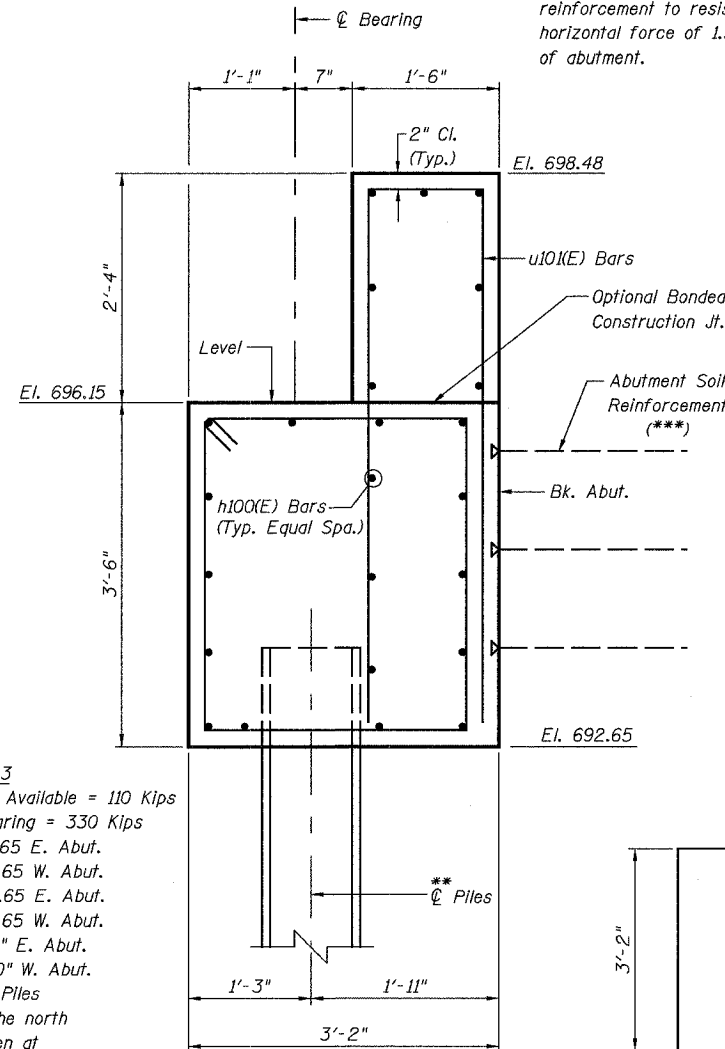
**ABUTMENT PLAN**  
(East Abutment Shown, West Abutment Similar)



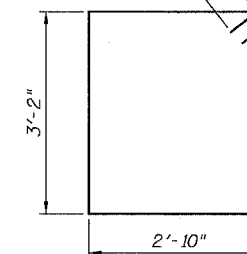
**ABUTMENT ELEVATION**  
(East Abutment shown and West Abutment similar)

\*14:12V pile batter @ East Abutment  
04:12V pile batter @ West Abutment

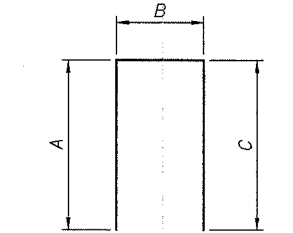
**PILE DATA: HP12X53**  
Allowable Resistance Available = 110 Kips  
Nominal Required Bearing = 330 Kips  
Cut off Elev. = 693.65 E. Abut.  
693.65 W. Abut.  
Est. tip Elev. = 643.65 E. Abut.  
638.65 W. Abut.  
Est. Length = 50'-0" E. Abut.  
55'-0" W. Abut.  
Piles = 2 + 2 Test Piles  
Test piles shall be the north permanent piles driven at Each Abutment.



**SECTION A-A**  
(C.I.P. coping not shown for clarity, see MSE Wall drawings for details)



**BAR s100(E)**



**BARS u10(E) & u102(E)**

Bar	A	B	C
u10(E)	5'-4"	1'-2"	5'-4"
u102(E)	2'-2"	2'-9"	2'-2"

**NOTES:**

- Space reinforcement in cap to miss anchor bolts.
- All edges shall have standard 3/4" chamfers except as noted.
- For Anchor Bolt Details see sheet 9. Truss fabricator shall determine size and location of anchor bolts. Cost included with PEDESTRIAN TRUSS SUPERSTRUCTURE.
- There shall be no splicing of longitudinal bars. Bars shall be ordered full length.
- See Sheet 4 for Superstructure Reaction Tables.

Legend:  
E.F. = Each Face  
N.F. = Near Face  
F.F. = Far Face

→ Arrow denotes direction of pile batter if applicable.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**ABUTMENT DETAILS**

ROUTE 59 PEDESTRIAN BRIDGE  
CITY OF NAPERVILLE, WILL COUNTY

F.A.P. RTE. SECTION: 05-00130-00-BR  
STATION 113+02.46 STRUCTURE NO. 099-6002  
SCALE: N.T.S. DATE: 12/8/2006

**URS**  
100 South Wacker Drive,  
Suite 500  
Chicago, IL 60606  
(312) 939-1000

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DESIGNED	MDS
CHECKED	JPB
DRAWN	MDS
CHECKED	JPB