

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 301 (US 20)	SECTION (2HB-2)D	COUNTY WINNEBAGO	TOTAL SHEETS 107	SHEET NO. 54	SHEET NO. 32 43 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

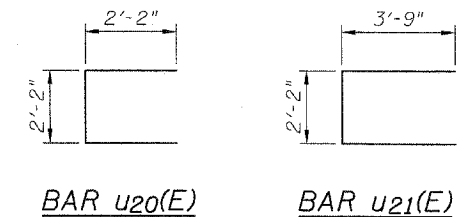
Contract #64B07

PIER 1  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h <sub>20</sub> (E)	3	#8	3'-6"	—
h <sub>21</sub> (E)	16	#5	13'-0"	—
h <sub>22</sub> (E)	16	#5	3'-4"	—
h <sub>23</sub> (E)	1	#5	10'-2"	—
h <sub>24</sub> (E)	1	#5	4'-11"	—
u <sub>20</sub> (E)	23	#5	6'-6"	U
u <sub>21</sub> (E)	42	#5	9'-8"	U
v <sub>20</sub> (E)	14	#5	24'-9"	V
v <sub>21</sub> (E)	18	#5	6'-9"	V
Structure Excavation		Cu. Yd.	18	
Concrete Structures		Cu. Yd.	17.5	
Reinforcement Bars, Epoxy Coated		Pound	1,380	
Furnishing - Piles, HP12x53		Foot	65	
Driving Piles		Foot	47	
Concrete Encasement		Cu. Yd.	0.4	
Concrete Sealer		Sq. Ft.	376	

For details of piles and Concrete Encasement, see sheet 38 of 43.

Concrete Sealer shall be applied to all exposed surfaces of new concrete for the pier.



MINIMUM BAR LAPS

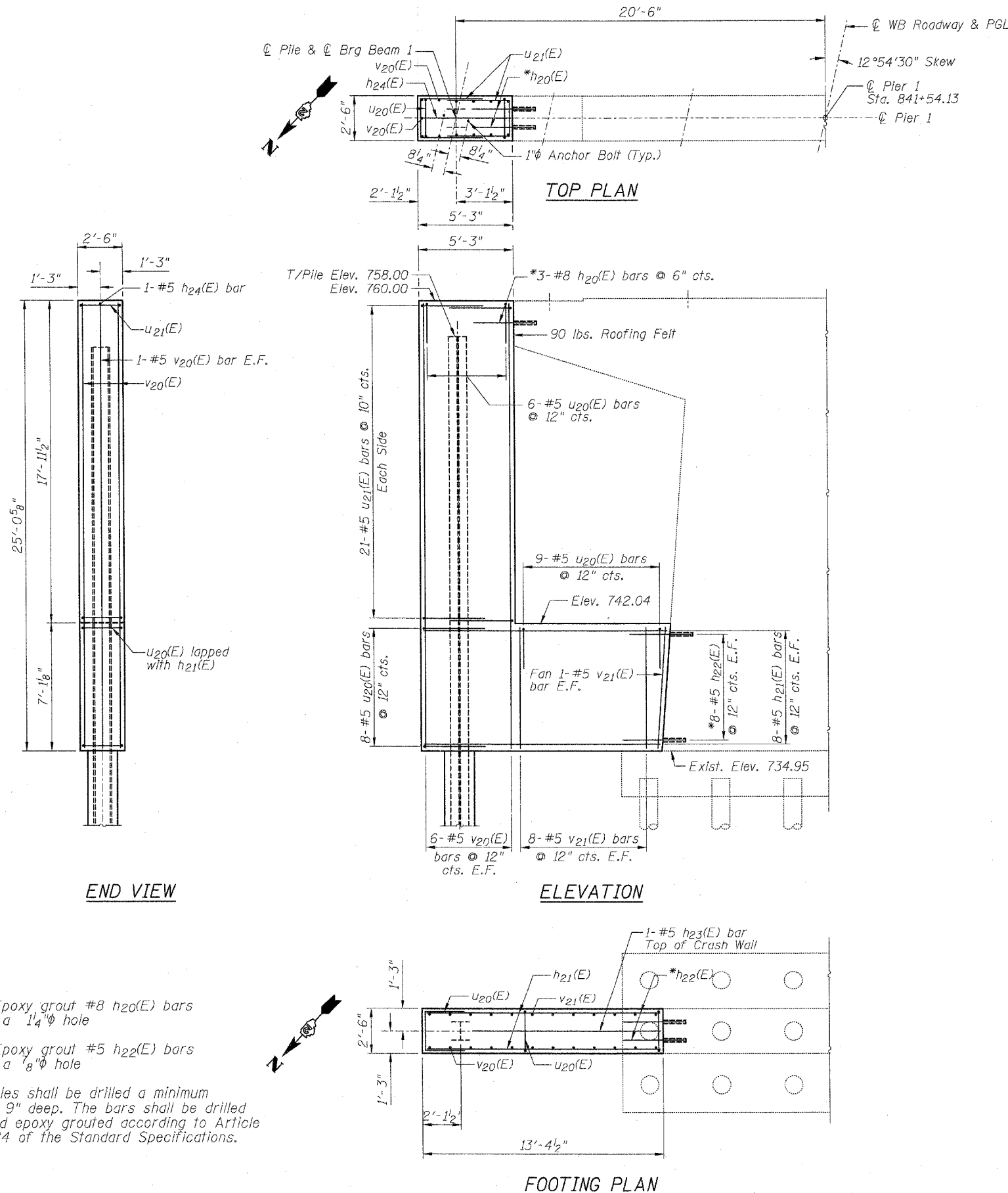
#5 Bars = 2'-2"

PILE DATA

Type: HP12x53  
Nominal Required Bearing: 418 kips  
Allowable Resistance Available: 139 kips  
Est. Length: 65'  
No. Production Piles: 1  
No. Test Piles: None

The Steel H-piles shall be according to AASHTO M270 Grade 50.

WESTBOUND PIER 1  
F.A.P. ROUTE 301 (US 20)  
OVER PRAIRIE ROAD  
SECTION (2HB-2)D  
WINNEBAGO COUNTY  
STATION 841+89.60  
STRUCTURE NO. 101-0051 (W.B.)  
STRUCTURE NO. 101-0052 (E.B.)



\*Epoxy grout #8 h<sub>20</sub>(E) bars in a 1 1/4"φ hole

\*Epoxy grout #5 h<sub>22</sub>(E) bars in a 3/8"φ hole

Holes shall be drilled a minimum of 9" deep. The bars shall be drilled and epoxy grouted according to Article 584 of the Standard Specifications.

DESIGNED	LAS
CHECKED	DAZ
DRAWN	SAW
CHECKED	LAS