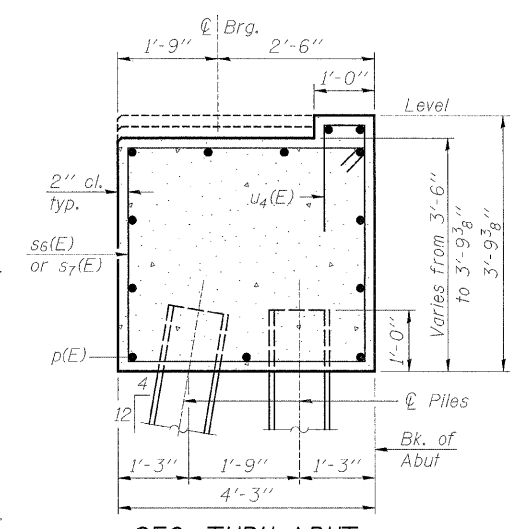
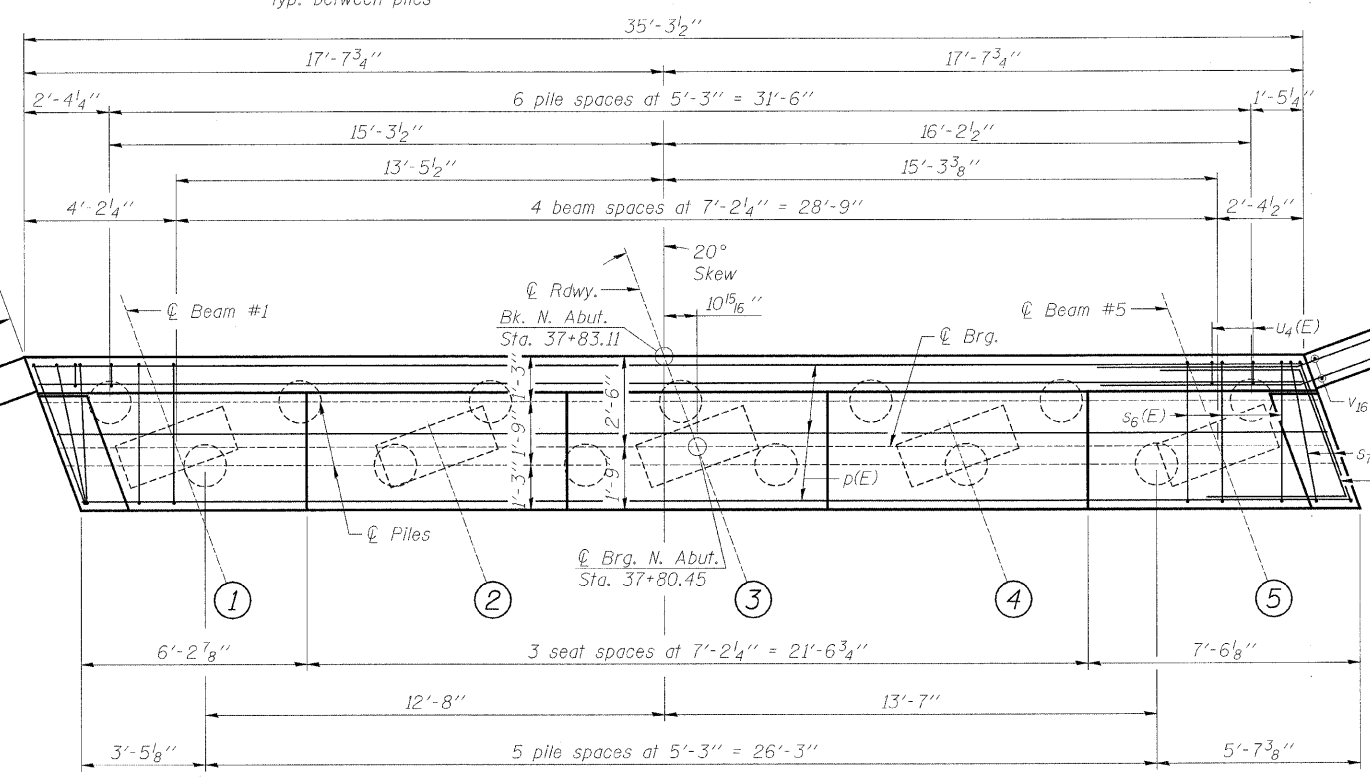


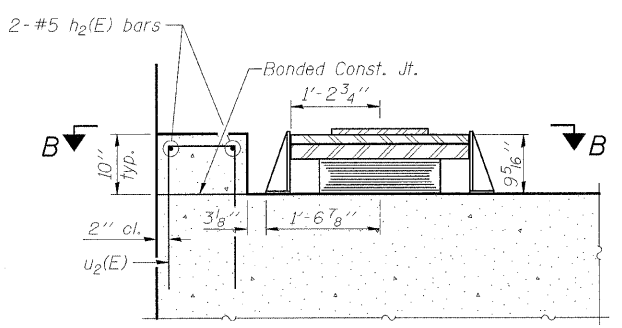
ELEVATION
(Looking North)



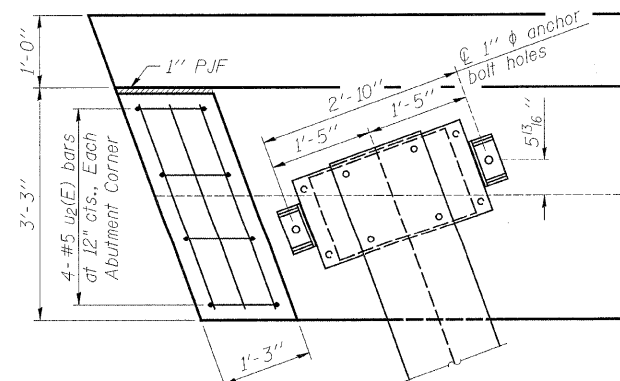
SEC. THRU ABUT.



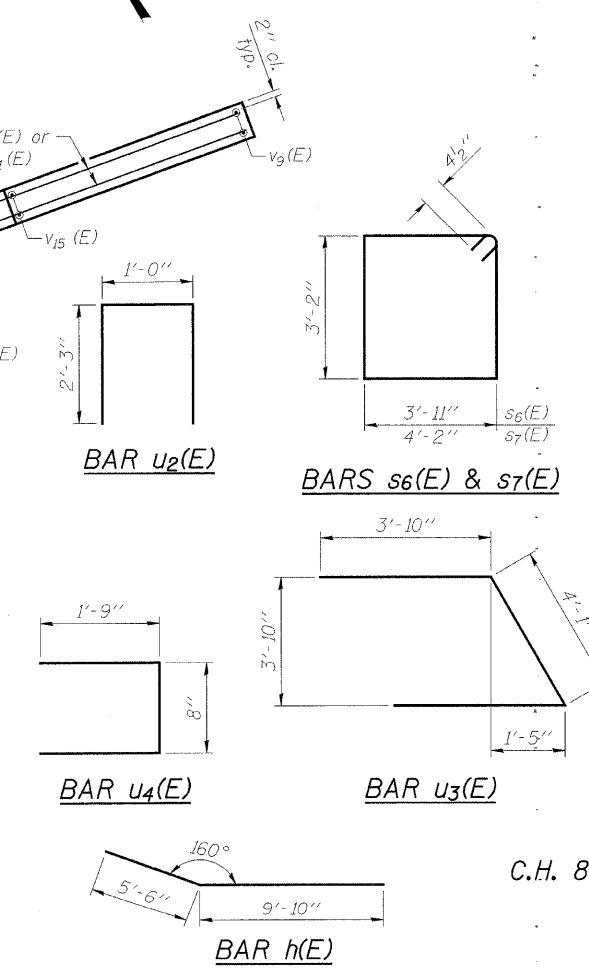
PLAN



ELEVATION



SECTION B-B



BAR u2(E)

BARS s6(E) & s7(E)

BAR u4(E)

BAR u3(E)

BAR h(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	28	#8	15'-4"	
h1(E)	36	#4	10'-6"	
h2(E)	4	#5	3'-0"	
p(E)	13	#7	34'-11"	
s6(E)	26	#4	14'-11"	
s7(E)	4	#4	15'-5"	
u2(E)	8	#5	5'-6"	
u3(E)	8	#6	11'-9"	
u4(E)	36	#4	4'-2"	
v9(E)	4	#4	7'-2"	
v10(E)	4	#4	7'-8"	
v11(E)	4	#4	8'-2"	
v12(E)	4	#4	8'-8"	
v13(E)	4	#4	9'-2"	
v14(E)	4	#4	9'-8"	
v15(E)	4	#4	10'-2"	
v16(E)	16	#4	10'-7"	
Porous Granular Embankment	Ton		257	
Structure Excavation	Cu. Yd.		32	
Concrete Structures	Cu. Yd.		27.3	
Reinforcement Bars, Epoxy Coated	Pound		3,200	
Furnishing Metal Shell Piles 14" x 0.312"	Foot		480	
Driving Piles	Foot		480	
Test Pile Metal Shells	Each		1	
Geocomposite Wall Drain	Sq. Yd.		59	
Pipe Underdrains for Structures 4"	Foot		108	

NOTES:

For pile details, see Structural sheet 28B of 33B.
Pour steps monolithically with cap.

NORTH ABUTMENT DETAILS
C.H. 8 OVER IOWA INTERSTATE RAILROAD
& THE HENNEPIN CANAL
STATION 36+00
S.N. 006-3247
WHA #1066D05

STRUCTURAL SHEET NO. 24B OF 33B SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	188	05-00195-00-BR	BUREAU	127	90
CONTRACT NO. 87380					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BRS-0188(118)					

FILE NAME = s:\stewar\1066D05\Bureau\Drawings\1066D05\North Abutment.dgn

PILE DATA

Type: Metal Shell - 14 in. dia. x 0.312 in. walls
Nominal Required Bearing: 507 k
Factored Resistance Available: 279 k
Est. Length: 40'
No. Production Piles: 12
No. Test Piles: 1