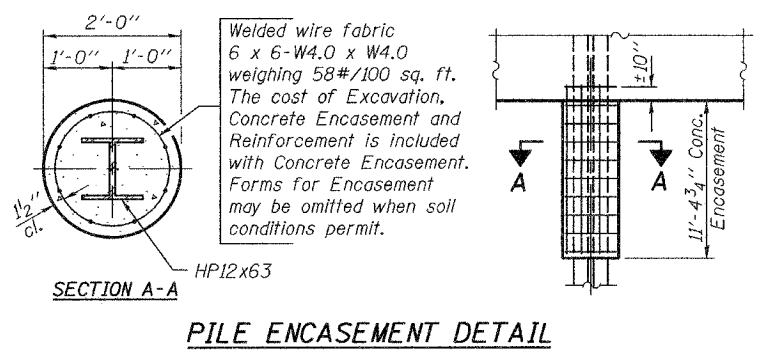


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 314	108BR-1	MADISON	123	48
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

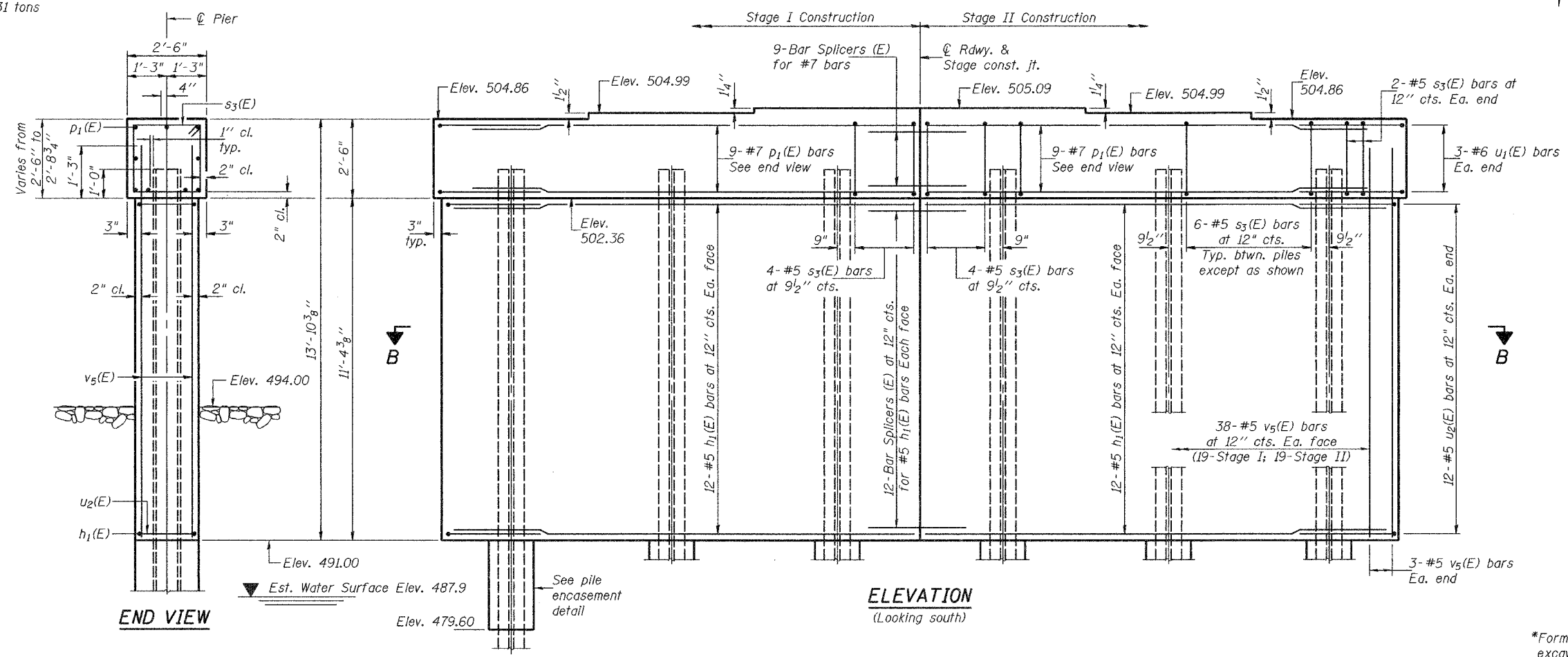
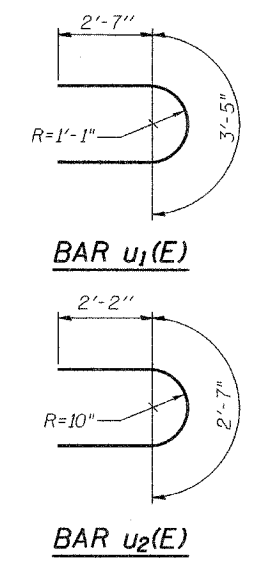
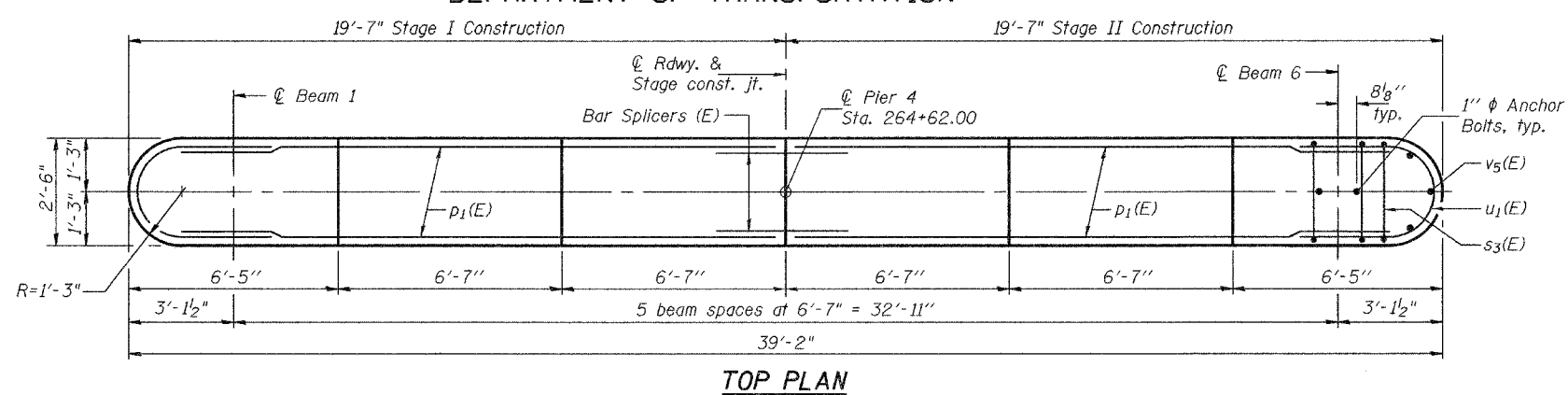
SHEET NO. 20
29 SHEETS

Contract #76454



PILE DATA

Type: Steel HP12x63 w/metal shoes
Nominal Required Bearing: 497 tons
Nominal Design Capacity: 331 tons
Est. Length: 102 feet



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	48	#5	18'-2"	—
p ₁ (E)	18	#7	18'-2"	—
s ₃ (E)	36	#5	9'-7"	□
u ₁ (E)	6	#6	8'-7"	U
u ₂ (E)	24	#5	6'-11"	U
v ₅ (E)	82	#5	12'-5"	—
Concrete Structures			Cu. Yd.	41.6
Reinforcement Bars, Epoxy Coated			Pound	3250
Structure Excavation			Cu. Yd.	28.4
Furnishing Steel			Foot	612
Piles HP12x63			Foot	612
Driving Steel Piles			Each	6
Metal Shoes			Each	1
Underwater Structure Excavation Protection, Location 2			Each	1
Concrete Encasement			Cu. Yd.	7.7

Reinforcement Bars designated (E) shall be epoxy coated.

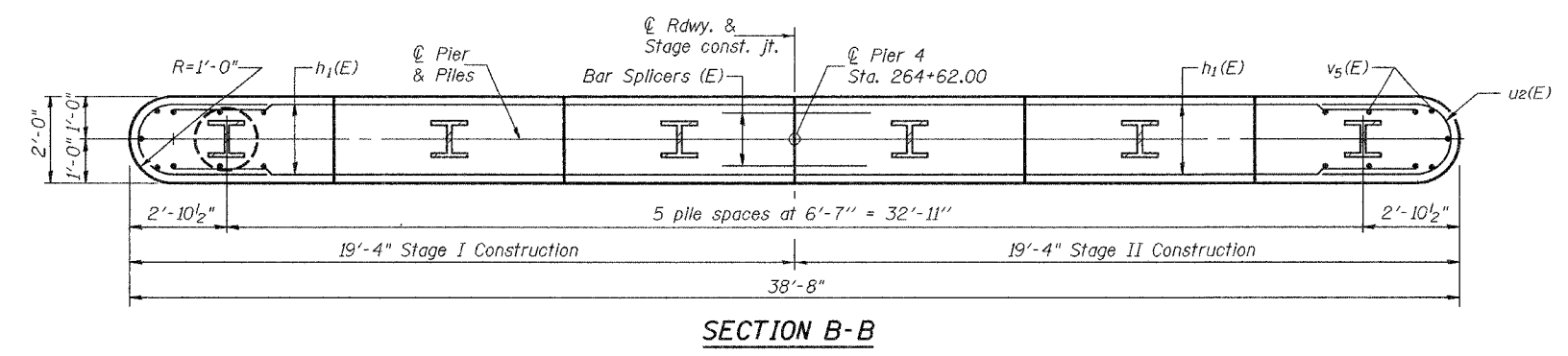
BAR s₃(E)

Notes: Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For bar splicer details, see sheet 21 of 29.
For anchor bolt installation details, see sheet 14 of 29.

*Forms shall be placed below Elevation 491.00 after excavation for pier walls. Reinforcement and Concrete Encasement shall be poured underwater into forms. The cost of Concrete Encasement, Reinforcement, form excavation and furnishing and placing forms is included with Concrete Encasement. If a portion of the pier wall is under water, concrete shall be trimmed under water into forms according to Article 503.08 of the Standard Specifications. Concrete shall be trimmed to an Elevation 1'-0" above water level at the time of construction.

DESIGNED	Curt M. Evoy
CHECKED	Tom L. Kurtenbach
DRAWN	h.t. duong
CHECKED	CME/TLK

November 17, 2005
EXAMINED *Thomas J. Donagale*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES



PIER 4
F.A.P. RTE. 314 - SEC. 108BR-1
MADISON COUNTY
STATION 263+51
STRUCTURE NO. 060-0334