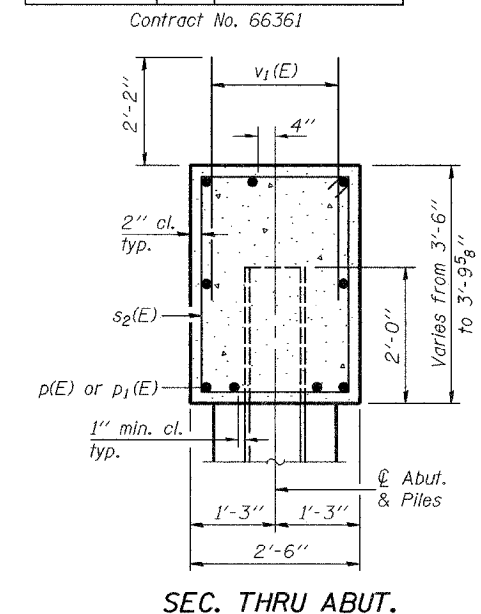


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 18
F.A.P. 698	IVBR	BUREAU	72	45	24 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		



Technical drawing of a bridge section showing the layout of beams, piles, and reinforcement bars. The drawing includes dimensions for the bridge width (37'-7" total), stage construction lengths (17'-6" Stage I, 20'-1" Stage II), and pile spacing (13'-0"). It also shows reinforcement details for beams and piles, including bar counts and spacing.

Dimensions and Layout:

- Overall Bridge Width: 37'-7"
- Stage I construction: 17'-6"
- Stage II construction: 20'-1"
- Pile spacing: 2 pile spaces at 6'-6" = 13'-0"
- Beam spacing: 5 beam spaces at 6'-6" = 32'-6"
- Beam 6 to Brg., Abut. & Piles: 1'-0" typ.
- Beam 1 to Brg., Abut. & Piles: 1'-0" typ.
- Beam 6 to Brg., Abut. & Piles: 1'-0" typ.
- Beam 1 to Brg., Abut. & Piles: 1'-0" typ.
- Beam 6 to Brg., Abut. & Piles: 1'-0" typ.
- Beam 1 to Brg., Abut. & Piles: 1'-0" typ.

Reinforcement Details:

- 40- #5 $v_1(E)$ bars at 12" cts. (19- Stage I; 21- Stage II)
- 5 beam spaces at 6'-6" = 32'-6"
- Stage const. ft. 3'-6"
- Bar splicers (E)
- Bk. N. Abut. Sta. 31+17.00
- 6- #5 $v_1(E)$ bars at 12" cts. Typ. btwn. beams except as noted
- 3- #5 $v_1(E)$ bars at 9 3/4" cts. Ea. end
- 3- #5 $v_1(E)$ bars at 6 1/4" cts.
- 5- #5 $v_1(E)$ bars at ±11" cts.
- 1" ϕ Anchor bolt, typ.

2'-0"

1'-0" 1'-0"

1/2" c/c

Welded wire fabric
6 x 6-W4.0 x W4.0
weighing 58#/100 sq. ft.
The cost of Excavation,
Concrete Encasement and
Reinforcement is included
with Furnishing Piles.
Forms for Encasement
may be omitted when soil
conditions permit.

HP12x63

SECTION A-A

3'-0" Concrete Enclosure

2'-0"

±10"

A

A

1. Place Furnished Excavation to Elev. 478.0.
2. Pre-core pile locations through Furnished Excavation using an 18" auger down to Elev. ± 460.0 and drive the piles. Cost included with Driving Piles.
3. Fill annulus up to the approximate top of rock elevation (± 467.0) with Class SI concrete. Dry loose sand shall be placed to fill the annulus from the top of the rock to Elev. 478.0. Cost included with Driving Piles.
4. Build the TMSE wall and place the Furnished Excavation behind the TMSE.
5. Construct the pile encasement as shown on plans.

1. Place Stage II Furnished Excavation to the bottom of the Abutment.
2. Pre-core pile locations through Furnished Excavation using an 18" auger down to Elev. ± 460.0 and drive the piles. Cost included with Driving Piles.
3. Fill annulus up to the approximate top of rock elevation (± 467.0) with Class SI concrete. Dry loose sand shall be placed to fill the annulus from the top of the rock to the bottom of the Abutment. Cost included with Driving Piles.
4. Construct the pile encasement as shown on plans.

Order $v_2(E)$ full length. Cut as shown and use remainder of bars in opposite face.

Bar	No.	Size	Length	Shape
h(E)	52	#5	10'-9"	————
p(E)	9	#7	17'-2"	————
p ₁ (E)	9	#7	19'-9"	————
s ₂ (E)	38	#5	11'-7"	
u(E)	8	#6	8'-1"	
v ₁ (E)	78	#5	4'-4"	————
v ₂ (E)	18	#5	11'-2"	————
Concrete Structures			Cu. Yd.	16.3
Reinforcement Bars, Epoxy Coated			Pound	2380
Structure Excavation			Cu. Yd.	84
Furnishing Steel Piles HP12x63			Foot	200
Pile Shoes			Each	6
Driving Piles			Foot	200
Test Pile Steel HP12x63			Each	1

F.A.P. RTE. 698 - SECTION 1VBR
BUREAU COUNTY
STATION 32+32.00
STRUCTURE NO. 006-0164

DESIGNED	RLT
CHECKED	PEC
DRAWN	h.t. duong
CHECKED	RLT/PEC

Jan 9, 2007

EXAMINED *Thomas J. Donagale*
ENGINEER OF BRIDGE DESIGN

PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES