

1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. For Concrete Encasement details, see sheet 21 of 22.

cap.ails.

1" ϕ Anchor Bolts
See sheet 14 of 22

23'-1 1/2"

29'-6 1/2"

52'-8" o. to o.

Stage II Construction

Stage I Construction

21° Skew

IL Rte. 8, Structure & Beam 4

Beam 7

7-#7 p₄(E) bars

7'-4 5/8"

3'-2 1/2"

7-#7 p₃(E) bars

Pier & Piles

Beam 1

7'-9 1/2"

6'-6 1/2"

3 Spaces at 7'-8" = 23'-0"

6 Brg. Spaces at 7'-8 1/8" cts. = 46'-0 3/4"

3'-3 5/8"

3'-3 5/8"

2 Spaces at 7'-8" = 15'-4"

7'-9 1/2"

6'-6 1/2"

3 Spaces at 7'-8" = 23'-0"

3'-3 5/8"

7'-4"

IL Rte. 8

Sta. 380+83.25

s₅(E)

u₃(E)

s₅(E)

Seat Spacing

2'-6"

1'-3"

1'-3"

[illegible]

ELEVATION
(Looking North)

Overall length: 52'-2"

Dimensions from left to right:

- 22'-10 1/2"
- 29'-3 1/2"

Construction stages:

- Stage II Construction
- Stage I Construction
- Stage Const. Joint

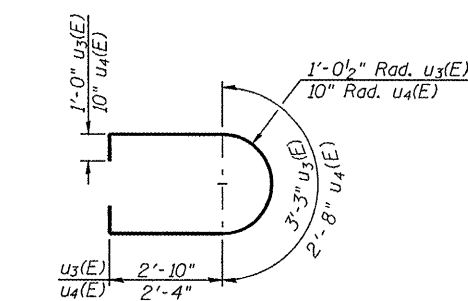
Dimensions and features:

- Left pier: R=1'-0", 2'-0", 1'-0", 1'-0"
- Dimensions: 7'-4 5/8", 4'-5 1/2", 3'-2 1/2"
- Angles: 21° Skew
- Labels: h₂(E) v₄(E), h₁(E), v₄(E), u₄(E)
- Centerline: IL Rte. 8, Sta. 380+83.25
- Right pier: Pier & Piles

Notes:

- If a pier encasement may be Concrete Article to an end at the
- Length splicer contract type, no longer

END VIEW



A diagram of a square with side length $2'-2''$. A dimension line indicates a distance of $5\frac{1}{2}''$ from the top-left corner to a point on the top edge.

Diagram of a T-section with dimensions: flange width 1'-8", flange thickness 8", and web height 4".

$$BAR\ s_7(E)$$

Est. Water Surface
Elev. 477.9

Ground Line
Elev. ± 475.5

om of Wall
473.96

* 5- #5 s₅(E) bars at 10" cts.

If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

Length of reinforcement based on mechanical splicer utilizing butt connections. If the contractor elects to use another connection type, no additional payment shall be made for longer bar requirements.

Bar	No.	Size	Length	Shape
$h_1(E)$	12	#5	27'-10"	—
$h_2(E)$	12	#5	21'-5"	—
$h_3(E)$	6	#5	27'-0"	—
$h_4(E)$	6	#5	18'-6"	—
$p_3(E)$	7	#7	27'-10"	—
$p_4(E)$	7	#7	21'-5"	—
$p_5(E)$	3	#5	6'-2"	—
$s_5(E)$	51	#5	9'-7"	□
$s_6(E)$	7	#5	6'-6"	U
$s_7(E)$	162	#4	27'-10"	U
$u_3(E)$	8	#6	10'-11"	U
$u_4(E)$	12	#5	9'-0"	U
$u_5(E)$	6	#5	7'-4"	U
$v_4(E)$	108	#5	10'-6"	—
Concrete Structures			Cu. Yd.	45.4
Concrete Encasement			Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated			Pound	3970
Furnishing Steel Piles, HP 12x53			Foot	488
Driving Piles			Foot	488
Underwater Structure Excavation Protection - Location 1			Each	1
Mechanical Splice			Each	18

Type: Steel HP 12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 210 kips
Est. Length: 61 Ft.
No. Production Piles: 8

LE LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: TBP	Checked By: KMH	Drawn By: TB
Date: 05/20/09	File: 072-0927.dgn	

22 SHEETS

22 SHEETS

TOTAL SHEETS	SHEE NO.
49	30

FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT
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