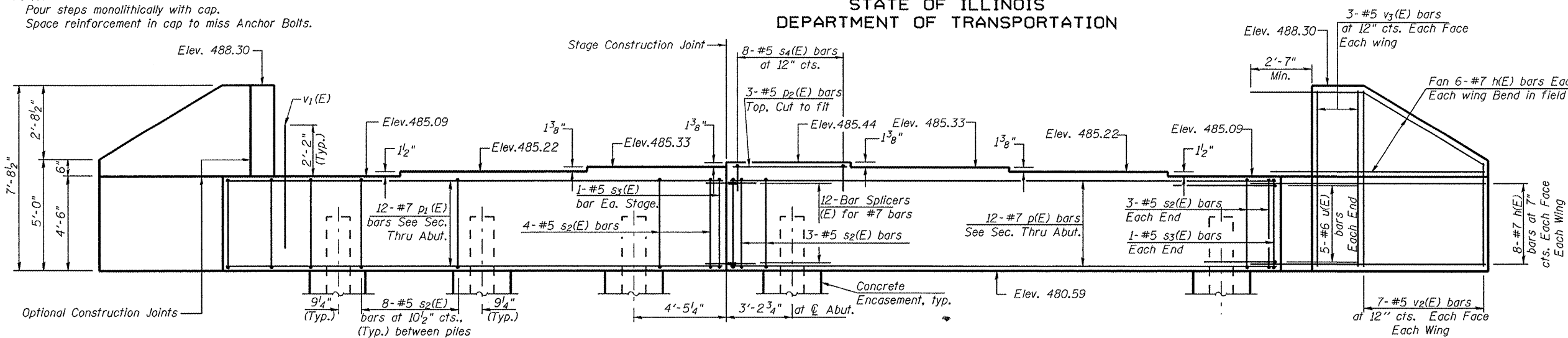
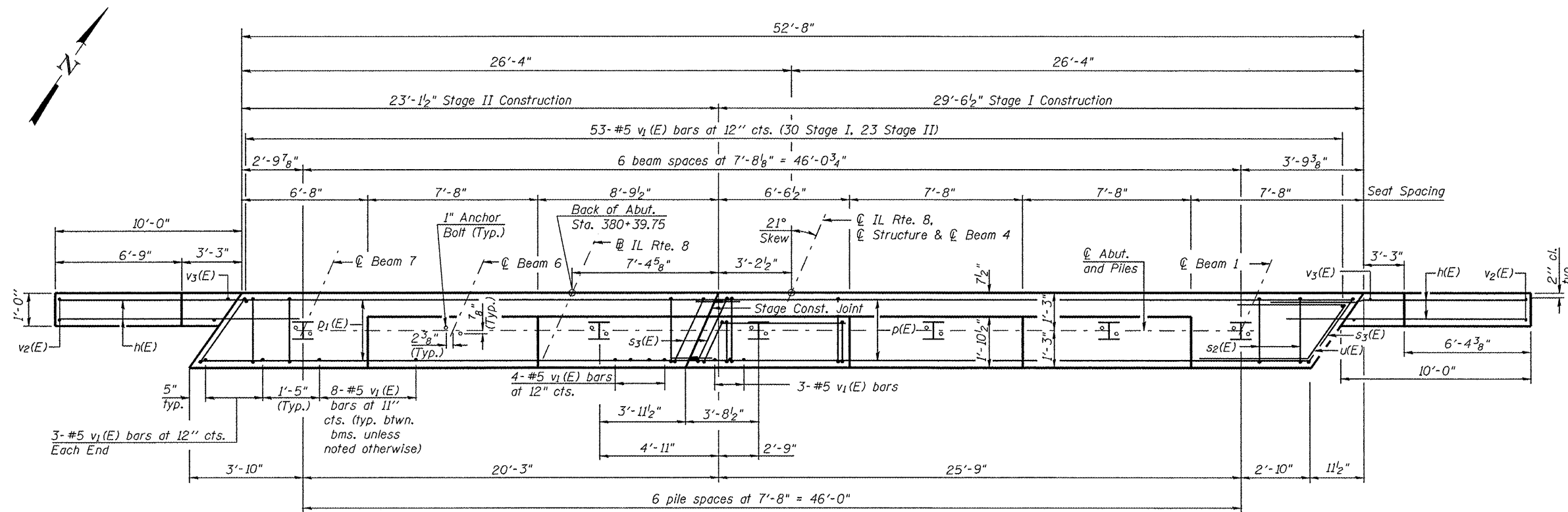


Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss Anchor Bolts.

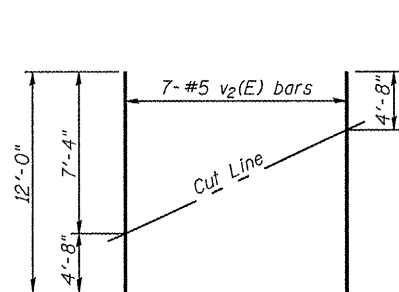
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Looking North)

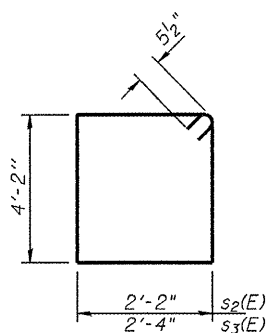


PLAN

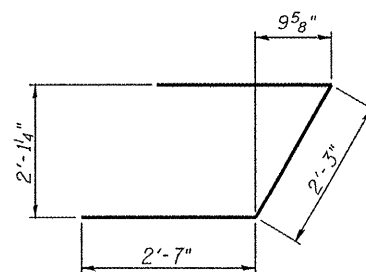
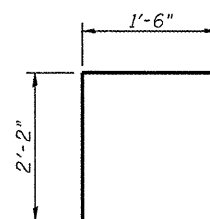


FIELD CUTTING DIAGRAM

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



BARS $s_2(E)$ & $s_3(E)$


$$BAR \cup (E)$$

$$BAR\ s_4(E)$$

PILE DATA

Type: Steel HP12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 210 kips
Est. Length: 61 ft
No. Production Piles: 7

The diagram illustrates the front elevation of a bridge abutment and its associated pile cap. Key features and dimensions include:

- Overall Dimensions:**
 - Total height: 4'-6"
 - Total width: 2'-6"
- Abutment Structure:**
 - Back of Abutment: Indicated by a vertical line on the left.
 - Height from back face to top of pile cap: 2'-2"
 - Width of abutment body: 2'-0"
 - Top thickness: 2" cl. typ.
- Pile Cap Details:**
 - Height from bottom of abutment to top of pile cap: 2'-0"
 - Bottom width: 2'-6"
 - Internal reinforcement: Shown as vertical bars with cross-sections labeled $s_2(E)$ or $s_3(E)$, and horizontal bars labeled $p(E)$ or $p_1(E)$.
 - Reinforcement spacing: 1' typical.
- External Forces and Components:**
 - Horizontal force at top: $v_1(E)$
 - Vertical force at top: $p_2(E)$
 - Force at side of pile cap: $s_4(E)$
 - Centerline of abutment and piles: Indicated by a dashed line at the base.
 - Dimensions from centerline to abutment faces: 1'-3" on each side.

SEC. THRU ABUT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h(E)$	56	#7	13'-0"	—
$p(E)$	12	#7	29'-3"	—
$p_1(E)$	12	#7	22'-10"	—
$p_2(E)$	3	#5	7'-1"	—
$s_2(E)$	53	#5	13'-7"	□
$s_3(E)$	4	#5	13'-11"	□
$s_4(E)$	8	#5	5'-10"	□
$u(E)$	10	#6	7'-5"	⌋
$v_1(E)$	106	#5	4'-4"	—
$v_2(E)$	14	#5	12'-0"	—
$v_3(E)$	12	#5	7'-4"	—
Structure Excavation			Cu. Yd.	153
Concrete Structures			Cu. Yd.	27.5
Reinforcement Bars, Epoxy Coated			Pound	4510
Furnishing Steel Piles HP12x53			Foot	427
Driving Piles			Foot	427
Concrete Encasement			Cu. Yd.	2.5

For details of Bar Splicers, see sheet 19 of 22.
For details of piles and Concrete Encasement,
see sheet 21 of 22.
For Drainage details, see sheet 2 of 22.

NORTH ABUTMENT
STRUCTURE NO. 072-0227

 LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 15 22 SHEETS	F.A.U RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
		6658	(ZC-15D-BR)BR		PEORIA	49	28
		CONTRACT NO. 68478					
Designed By: TBP Drawn By: TBP	Checked By: KWH Elected: 08/27/91	FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		