

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	545	336
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET SD- 21
OF 34 SHEETS

Contract # 63074

BILL OF MATERIAL

(Stage 1)

Bar	No.	Size	Length	Shape
h(E)	32	#7	14'-3"	
p1(E)	10	#7	16'-6"	
p2(E)	10	#7	27'-3"	
p3(E)	2	#7	24'-3"	
s5(E)	16	#4	13'-9"	
s6(E)	27	#4	14'-5"	
u(E)	6	#6	7'-3"	
v1(E)	80	#5	4'-4"	
v3(E)	11	#5	15'-3"	
Concrete Structures	Cu. Yd.	21.7		
Reinforcement Bars, Epoxy Coated	Pound	2,940		
Furnishing Steel Piles, HP12x53	Foot	264		
Driving Piles	Foot	264		
Test Pile Steel, HP12x53	Each	1		
Pile Shoes	Each	5		
Concrete Encasement	Cu. Yd.	1.8		
Bar Splicers	Each	8		

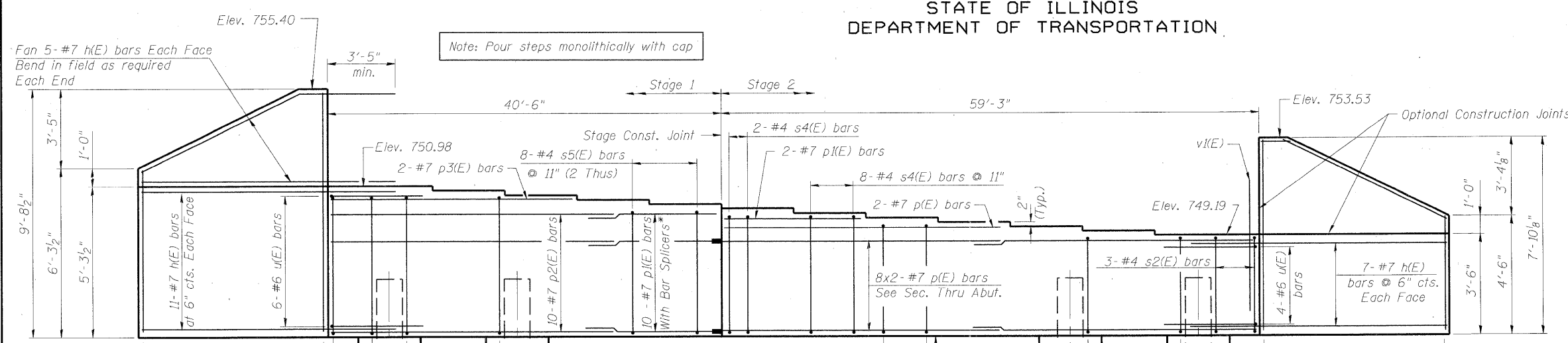
BILL OF MATERIAL

(Stage 2)

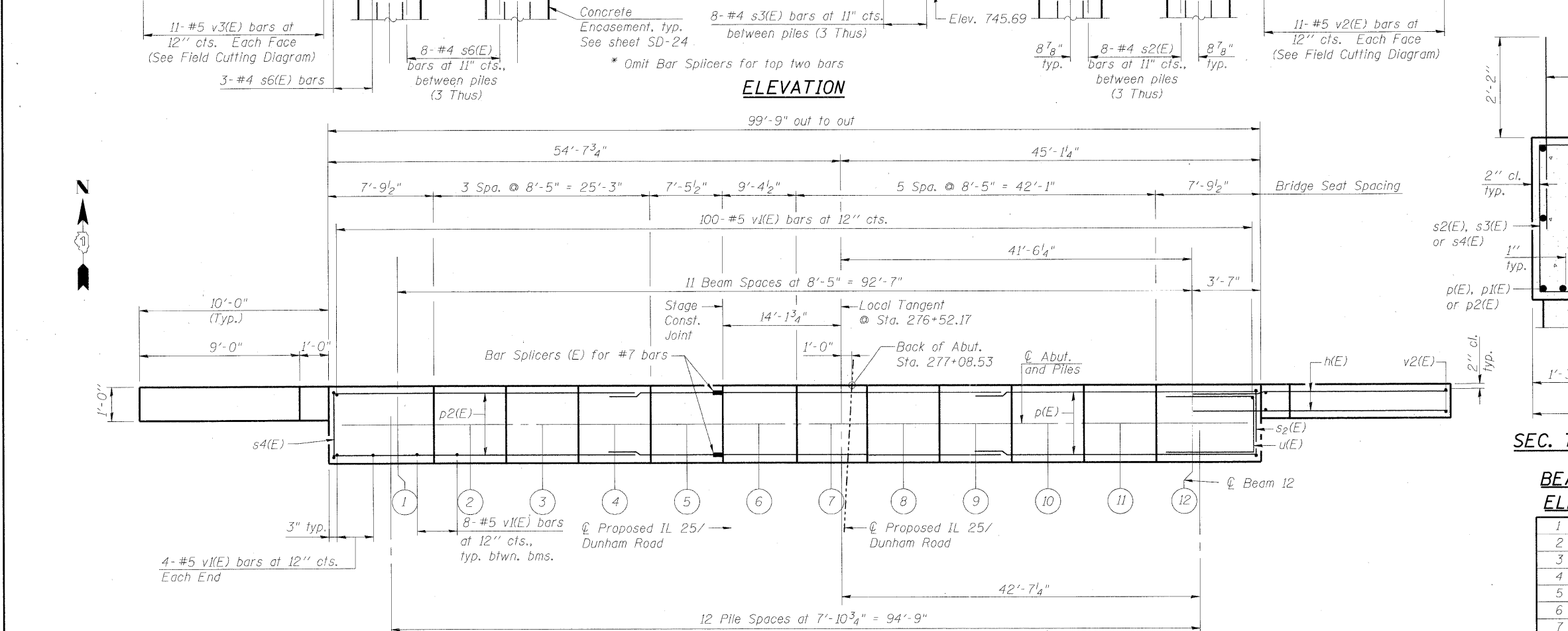
Bar	No.	Size	Length	Shape
h(E)	24	#7	14'-3"	
p(E)	18	#7	31'-3"	
p1(E)	2	#7	16'-6"	
s2(E)	27	#4	11'-5"	
s3(E)	24	#4	12'-5"	
s4(E)	10	#4	13'-1"	
u(E)	4	#6	7'-3"	
v1(E)	116	#5	4'-4"	
v2(E)	11	#5	11'-7"	
Concrete Structures	Cu. Yd.	24.3		
Reinforcement Bars, Epoxy Coated	Pound	3,110		
Furnishing Steel Piles, HP12x53	Foot	528		
Driving Piles	Foot	528		
Pile Shoes	Each	8		
Concrete Encasement	Cu. Yd.	2.8		

For details of Bar Splicers, see sheet SD-26.
For details of piles and Concrete Encasement, see sheet SD-24.

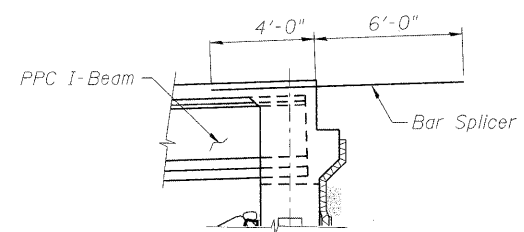
NORTH ABUTMENT-PLAN AND ELEVATION
IL 25/DUNHAM ROAD OVER THE
EAST BRANCH OF BREWSTER CREEK
F.A.P. 360 - SEC. 06-00214-15-BR
KANE COUNTY
STATION 276+36.96
STRUCTURE NO. 045-2032



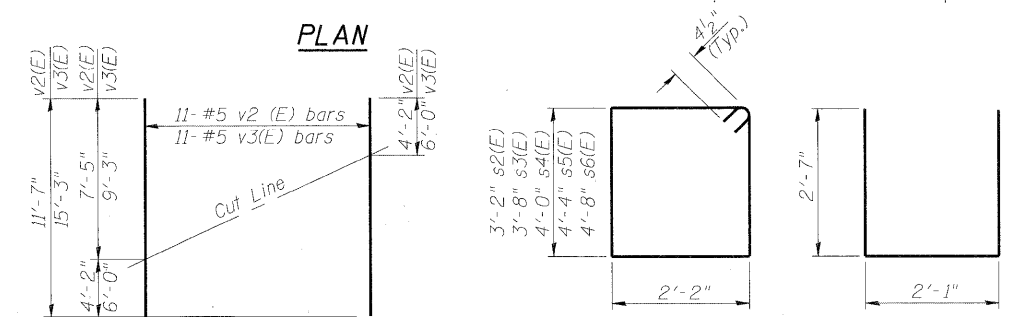
ELEVATION



PLAN



SECTION AT ABUTMENT



BARS v2(E) & v3(E)
FIELD CUTTING DIAGRAM

Order v2(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.

BARS s2(E) Thru s6(E) BAR u(E)

PILE DATA

Type: HP12x53
Nominal Required Bearing: 288 kips
Allowable Resistance Available: 96 kips
Est. Length: 66.0 Feet
No. Production Piles: 12
No. Test Piles: 1

Piles shall be driven through 1'-6" diameter precored holes extending to elevation 737.0 according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.

BEAM SEAT ELEVATION

	Elevation
1	750.98
2	750.82
3	750.65
4	750.49
5	750.33
6	750.17
7	750.00
8	749.84
9	749.68
10	749.52
11	749.35
12	749.19

DESIGNED	AAY
CHECKED	AJK
DRAWN	VH
CHECKED	DMC

benesch
alfred benesch & company
Engineers - Surveyors - Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450
Job # 3944