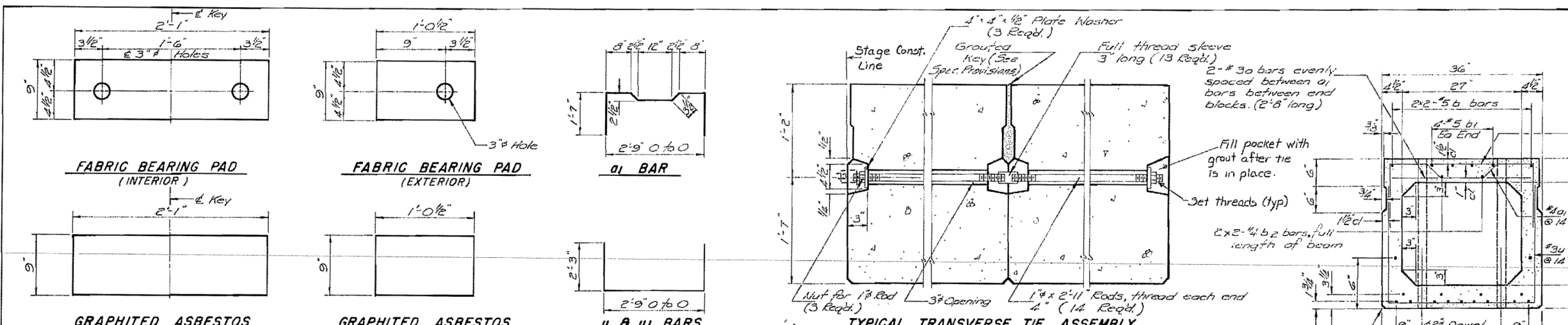


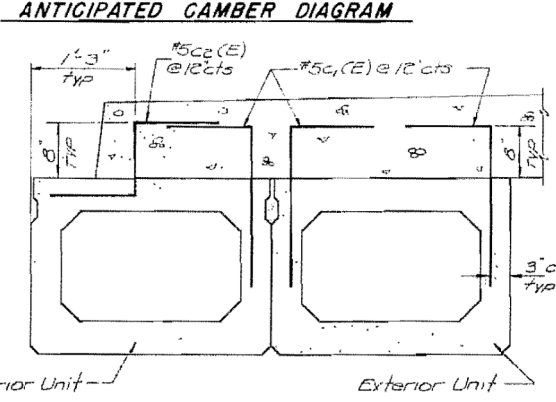
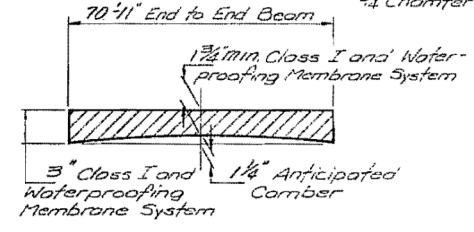
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 18	103-D-BR	JO DAVIESS	27	15

SHEET 7 OF 15 SHEETS



Note: Omit longitudinal shear key on exterior face of exterior deck beams.

Note: Place strands symmetrically about E beam. 16-#2 + 5 strands. Each strand stressed to 28,900 lbs. 5-Strands 1-3/4" up, 6-Strands 3/4" up, 2-Strands 6" up from Bottom of beam.



NOTE: Vary spacing of C1(E) and C2(E) bars at drain locations to provide minimum 1'-2" either side of drain. See sheet 3 for drain spacing.

NOTES
 Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq in. Lifting loops shall be 3/4" diameter, 6 x 25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 46,000 lbs. or 3-1/2" - 270 ksi strands. After beams have been erected, holes for the dowel anchors shall be drilled into the substructure (1 1/4") and the anchor dowels shall be grouted in place & cured 24 hrs (min) prior to grouting keyways. Reinforcement bars shall conform to AASHTO M-31 or M-53, Grade 60. Cost of reinforcement and accessories cast into the beam, of bearing pads, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

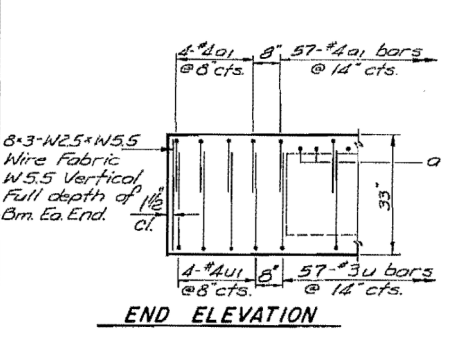
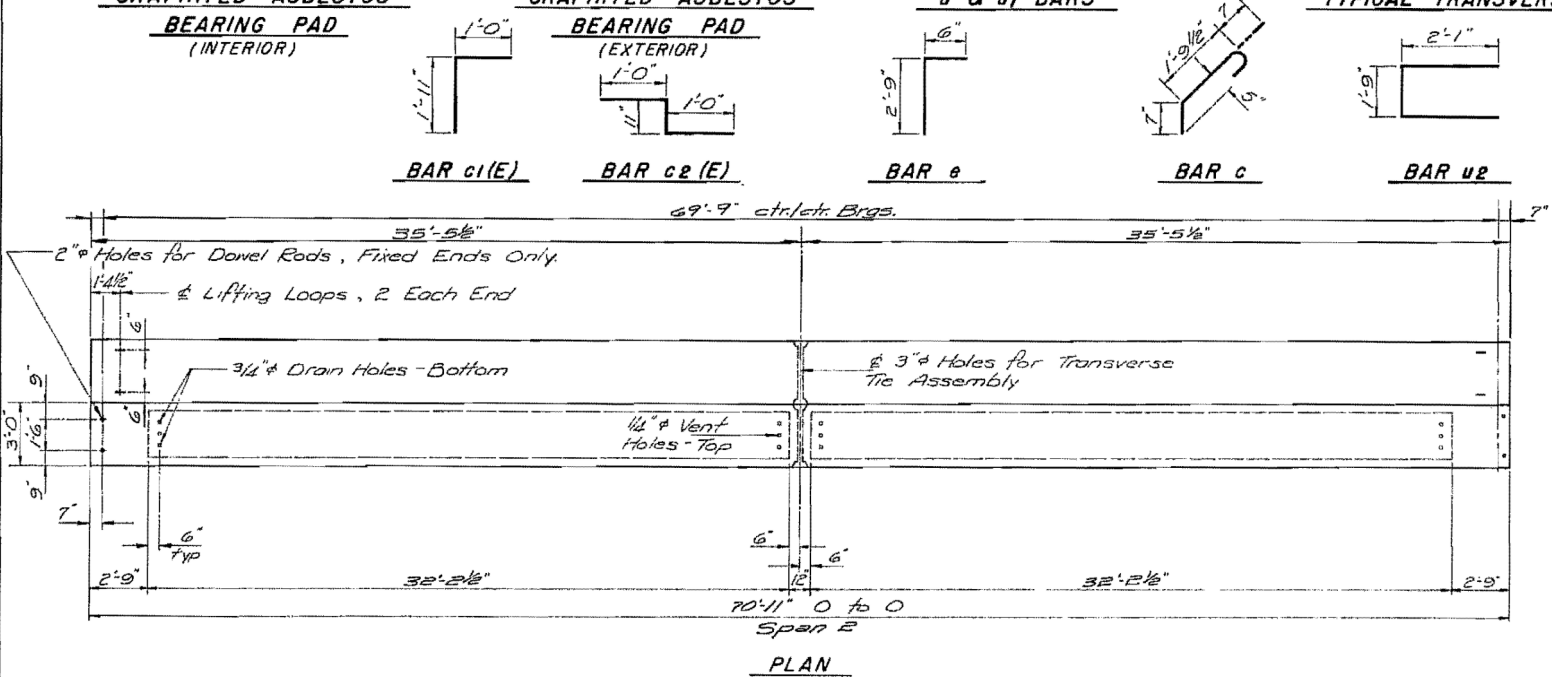
The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. ** BAR C1(E) REQUIRED FOR EXTERIOR SIDEWALK UNITS. BARS DESIGNATED (E) ARE TO BE EPOXY COATED. SEE SPECIAL PROVISIONS. * BARS C1(E) & C2(E) REQUIRED FOR INTERIOR SIDEWALK UNITS.
 Lifting Loops shall be burned off after deck beams have been erected.
 Keyway surfaces shall be cleaned to remove oil or other bond breaking material prior to shipment of beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.
 An equal substitution of low-relaxation strands for the stress-relieved strands will be permitted.

For Information Only:
ONE BEAM
BILL OF MATERIAL

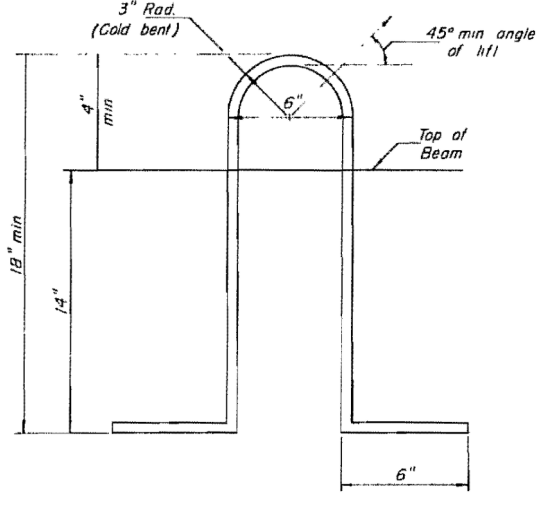
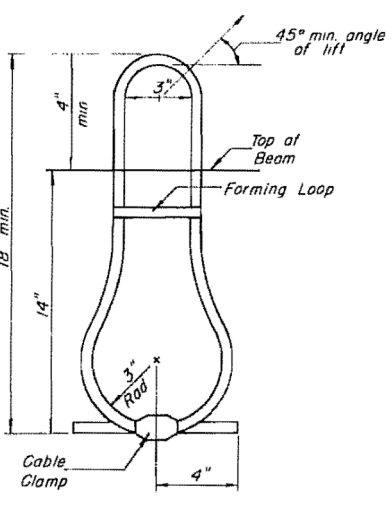
BAR	NO.	SIZE	LENGTH	SHAPE
O	12	#3	2'-8"	
O1	68	#4	6'-1"	
b	4	#5	38'-3"	
D1	8	#5	14'-3"	
D2	4	#4	38'-3"	
C1(E)	71*	#5	2'-11"	
C2(E)	71*	#5	2'-11"	
U	57	#3	7'-3"	LJ
U1	8	#4	7'-3"	LJ
CLASS X CONCRETE		CU YD	11.5	
REINFORCEMENT BARS		POUND	840	
REINFORCEMENT BARS (E)		POUND	430	
WEIGHT OF BEAM		POUND	46,590	

SPAN 2
DETAILS PRECAST PRESTRESSED CONCRETE DECK BEAMS

F.A. RTE. 18 OVER APPLE RIVER
 SECTION 103-D-BR
 JO DAVIESS COUNTY
 STATION 259+08.20



DESIGNED:	V. S. N.
CHECKED:	D. H. G.
DRAWN:	R. A. W.
CHECKED:	K. L. F.



Design firm no. 184001036



USER NAME = dheber1ing	DESIGNED -	REVISED -
FILE NAME = 0430028-64E08.dgn	CHECKED -	REVISED -
PLOT SCALE = 0:2.00000 '1' / in.	DRAWN -	REVISED -
PLOT DATE = 8/5/2013	CHECKED -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
 STRUCTURE NO. 043-0080
 SHEET NO. 53 OF 60 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-4	JO DAVIESS	159	103

CONTRACT NO. 64E08
 ILLINOIS FED. AID PROJECT

H. M. B. G. NO. 19307 0028