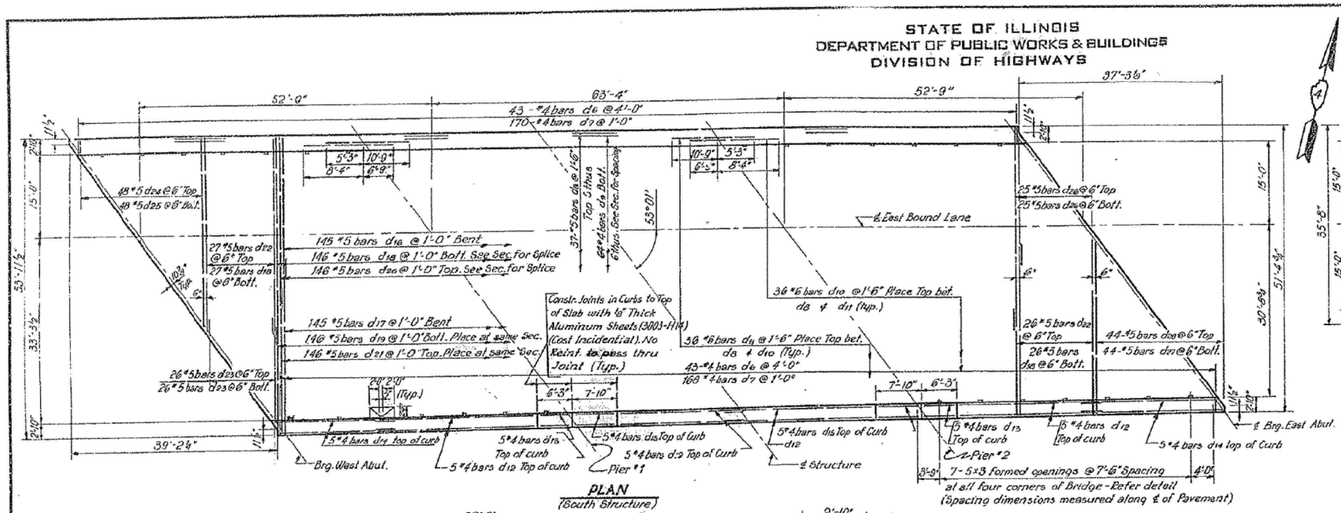
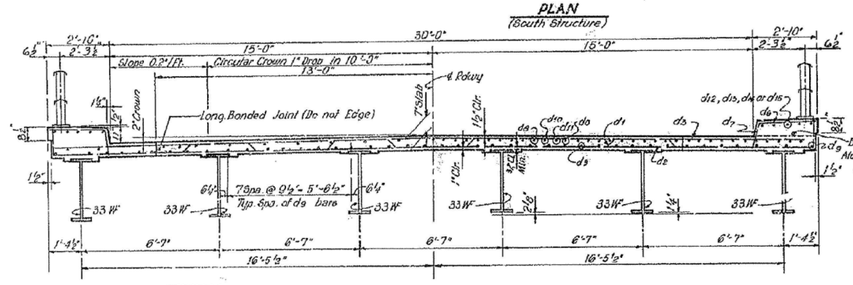
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	90-14HB-3 (14HB-4,14,14HVB)BR1	TAZEWELL	19	17

ROUTE No.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	Boundary -1448 -1449 -1450	TAZEWELL	89	46
FED. ROAD DIST. No. 7	ILLINOIS			



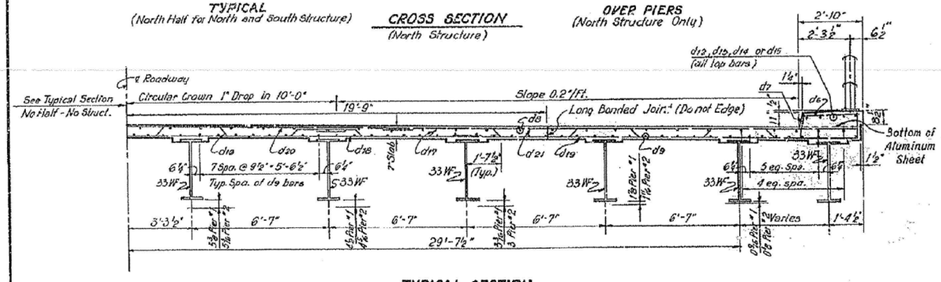
PLAN
(South Structure)



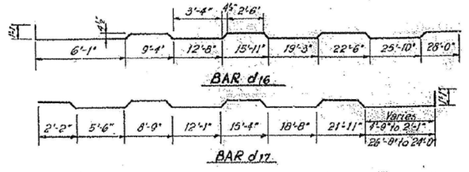
TYPICAL
(North Half for North and South Structure)

CROSS SECTION
(North Structure)

OVER PIERS
(North Structure Only)



TYPICAL SECTION
(For South Half - South Structure)



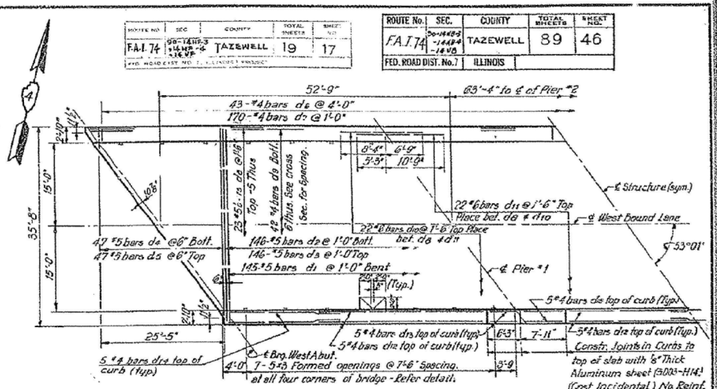
DESIGNED	E.L.
CHECKED	S.N.
DRAWN	S.F.M.
CHECKED	E.L.

EXAMINED
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED
ENGINEER OF DESIGN
APPROVED
CHIEF HIGHWAY ENGINEER

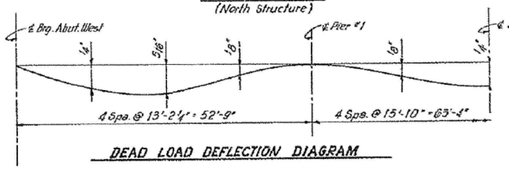
SUPERSTRUCTURE BILL OF MATERIAL FOR 2 STRUCTURES

BAR	NO.	SIZE	LENGTH	SHAPE	VARYS
d1	145	#5	38'-8"		
d2	146	#5	37'-4"		
d3	146	#5	35'-2"		
d4	94	#5	35'-1 to 2'-6"		8½"
d5	94	#5	34'-0 to 1'-5"		8½"
d6	172	#4	2'-6"		
d7	678	#4	1'-0"		
d8	300	#5	35'-2"		
d9	656	#4	29'-3"		
d10	118	#6	15'-1"		
d11	116	#6	16'-0"		
d12	80	#4	24'-1"		
d13	10	#4	5'-1"		
d14	40	#4	24'-8"		
d15	40	#4	7'-6"		
d16	145	#5	30'-3"		
d17	145	#5	28'-10" to 28'-2"		+
d18	198	#5	35'-10"		
d19	148	#5	27'-8" to 18'-8"		+
d20	146	#5	31'-2"		
d21	146	#5	29'-6" to 20'-10"		+
d22	53	#5	34'-9"		
d23	52	#5	19'-8" to 2'-6"		8"
d24	48	#5	34'-9" to 3'-0"		6"
d25	48	#5	35'-5" to 4'-1"		8"
d26	50	#5	17'-0" to 2'-0"		7½"
d27	44	#5	35'-5" to 4'-1"		8¾"
d28	44	#5	34'-9" to 3'-0"		8½"
Class X Concrete			Cu. Yds.		397.1
Reinforcement Bars			Lbs.		86400
Structural Steel			Lbs.		446,516

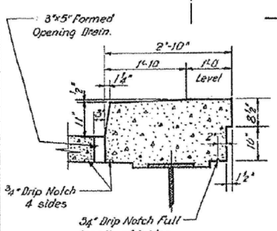
NOTE:
+ Vary sets of 9 bars by 2"



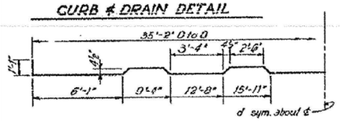
HALF PLAN
(North Structure)



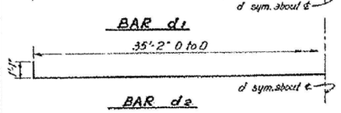
DEAD LOAD DEFLECTION DIAGRAM



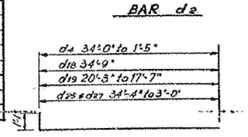
CURB & DRAIN DETAIL



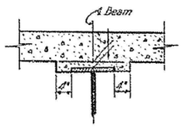
BAR d1



BAR d2



BARS d4, d18, d19, d25 & d27



METHOD TO DETERMINE FILLET HEIGHTS - "f"

After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at intervals not to exceed 10 ft. From these elevations subtract the increment of deflection for these points, determined from the D.L. deflection diagram. The elevations so attained subtracted from the theoretical grade elevations, minus floor thickness, equals the fillet heights above top of beam.

SUPERSTRUCTURE
F.A.I. ROUTE 74 SECTION 90-14VB

F.A.I. ROUTE 74 OVER PENNA RAILROAD
STATION 550+24.84
TAZEWELL COUNTY

WARREN AND VAN PRAAG, INC.
CONSULTING ENGINEERS - DECATUR, ILLINOIS

7 OF 10

FOR INFORMATION ONLY

benesch
engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10056

FILE NAME = xxxxxxx_68620_18_exist7.dgn	USER NAME = mbecker	DESIGNED - MFB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS 7 OF 11 STRUCTURE 090-0014 / 0015 REMOVAL
		CHECKED - MRB	REVISED -		
	PLOT SCALE =	DRAWN - MFB	REVISED -		SHEET NO. SR18 OF SR22 SHEETS
	PLOT DATE = 7/16/2012	CHECKED - MRB	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90-(14R;(14HB-4,14,14HVB)BR1	TAZEWELL	2433	2086
		CONTRACT NO. 68620		
	ILLINOIS FED. AID PROJECT			

7/16/2012 7:46:07 AM X:\100005\10056_Engineering_Documents_Phase_II\174over RR\Final\xxxxxxx_68620_18_exist7.dgn