

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RTE.	SECTION	COUNTY	TOTAL SHEETS
FAI 74	*	TAZEWELL	200/31
STA.	TO STA.		
190-15-1, 15-1HB, 15 W3-1			
			SHEET 1 OF 22

BENCH MARK: TOP OF WEST SIDE NORTH AVENUE, TOP OF METAL PLATE @ CURB (NEAR MIDDLE BRIDGE)  
STA. 397+28 @ I-74 ELEV. 739.91.

EXISTING STRUCTURE 090-045 THE EXISTING 4 SPAN, 30' WIDE FLANGE BRIDGE MEASURES APPROX. 123'-0" OVER THE ABUTMENTS. THIS STRUCTURE CARRIES FAU 6729 (MORTON AVE.) OVER I-74 AND WAS BUILT IN 1962. THE BRIDGE IS LOCATED ON A 700' VERTICAL CURVE WITH 4% GRADE AT APPROACHES, AND IS ON A 1" = 18' HORIZONTAL CURVE. THE EXISTING STRUCTURE WILL REMAIN IN SERVICE WHILE THE ACCESS RAMP AND NEW BRIDGE IS BEING BUILT. THE NEW BRIDGE IS 195' TO WEST OF THE OLD STRUCTURE. EXISTING BRIDGE WILL BE REMOVED AFTER COMPLETION OF NEW BRIDGE. REMOVAL OF EXISTING SLOPE WALLS OF EXISTING BRIDGE SHALL BE INCLUDED IN THE LUMP SUM PRICE.

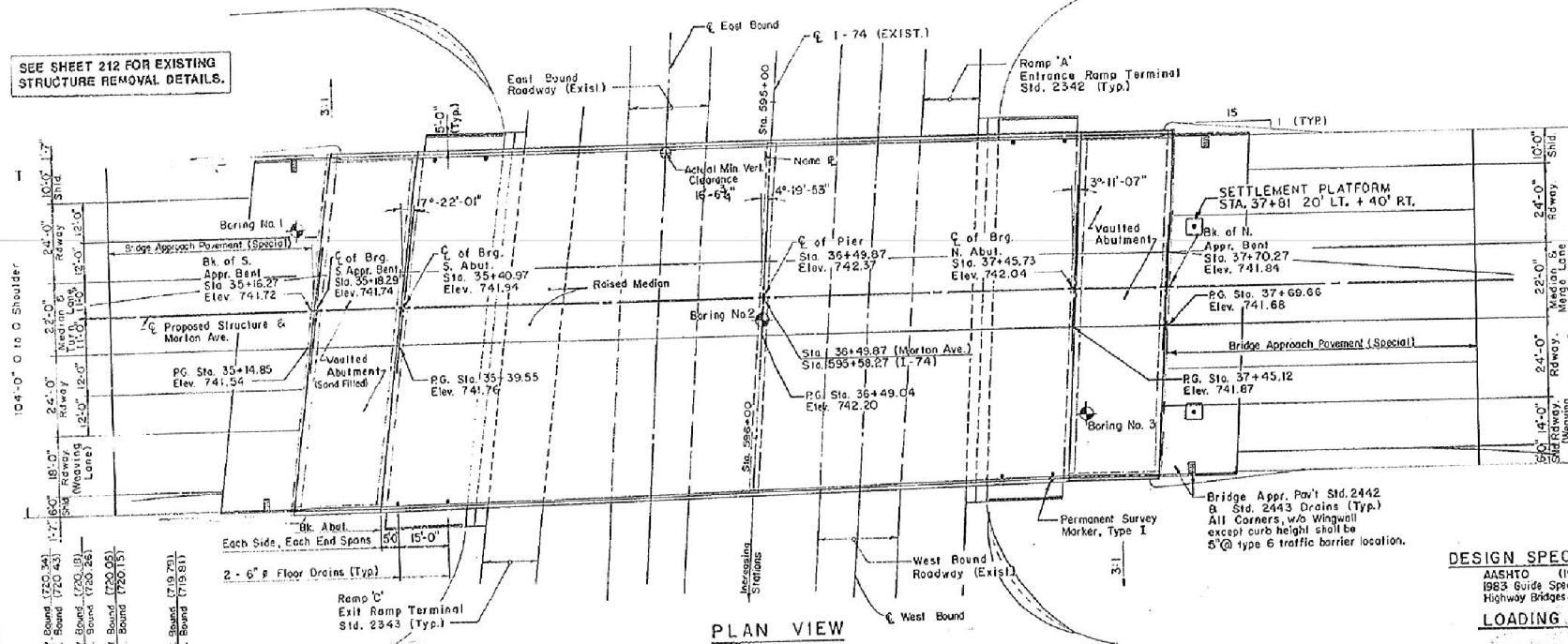
NO SALVAGE.

SEE SHEET 104 FOR SETTLEMENT PLATFORM QUANTITY AND DETAILS.

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SEE SHEET 212 FOR EXISTING STRUCTURE REMOVAL DETAILS.



PLAN VIEW

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.	1116	1116	
Sand Backfill	Cu. Yd.	760	760	
Floor Drains	Each	8	8	
Protective Coat	Sq. Yd.	3521	3521	
Class X Concrete	Cu. Yd.	6833	6833	
Structural Steel	L. Sum	1	1	
Stud Shear Connectors	Each	5916	5916	
Reinforcement Bars	Pound	18,500	18,500	
Reinforcement Bars (Epoxy Coated)	Pound	211,030	63,300	274,330
Concrete Piles	Ln. Ft.	8383	8383	
Test Piles Concrete	Each	2	2	
Slope Wall, 4"	Sq. Yd.	771	771	
Preformed Joint Seal, 4"	Ln. Ft.	212	212	
Elastomeric Bearing Assembly, Type I	Each	28	28	
Name Plates	Each	1	1	
Removal of Exist. Structure	L. Sum	1	1	
Class X Concrete Superstructure	Cu. Yd.	887.5	887.5	
Driving Concrete Piles	Ln. Ft.	8383	8383	
Permanent Survey Markers, Type I	Each	1	1	
Bridge Deck Grooving	Sq. Yd.	1746	1746	

DESIGN SPECIFICATIONS

AASHTO (1993, 84, 85, 86 & 87 Interim)  
1983 Guide Specifications for Seismic Design of Highway Bridges & Interiors Thru 1987.

LOADING HS 20-44

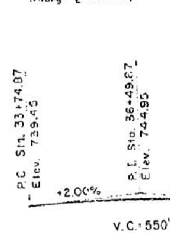
25 lbs/Sq Ft. Allowance for future wearing surface

DESIGN STRESSES

$f'_c = 3,500$  p.s.i.  
 $f_y = 60,000$  p.s.i. (Reinf.)  
 $f_y = 50,000$  p.s.i. (Struct. Sl.)  
 $f_y = 36,000$  p.s.i. (Struct. Sl.) (M.183)

PROFILE GRADE

FAI - Route 74 (Along Roadway)

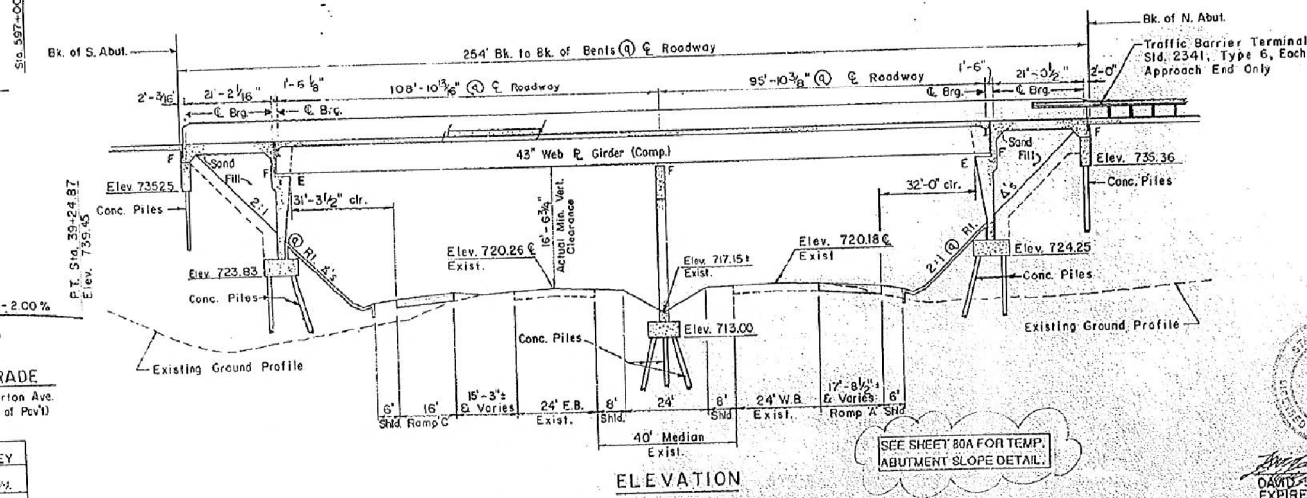


PROFILE GRADE

FAU 6729 - Morton Ave (along inside edge of Pav)

DESIGNED	L.L. VIELEY
CHECKED	J.L.M.
DRAWN	C.D. SNEEDEN
CHECKED	L.L.V.

R.A.N. CONSULTANTS INC.



ELEVATION

SEE SHEET 80A FOR TEMP. ABUTMENT SLOPE DETAIL.



LOCATION SKETCH

DATE: APRIL 1, 1992  
F.A.I. 74 & F.A.U. 6729  
SECTION 90-15-1-NB  
TAZEWELL COUNTY  
STATION 39+49.87

MORTON AVENUE OVER INTERSTATE 74  
GENERAL PLAN & ELEVATION  
STRUCTURE NO. 090-0145  
Revised 3-11-91 090-0141

FOR INFORMATION ONLY

FAI 74 (I-74) / FAU 6729 (MORTON AVE.)

**benesch**  
engineers · scientists · planners

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

FILE NAME =	USER NAME =	DESIGNED -	REVISIONS
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		MRB	-
		PRT	-
		MRB	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS  
STRUCTURE NO. 090-0141

SHEET NO. SD15 OF SD29 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90-14R(14HB-4,14,14HB)/BRJ	TAZEWELL	2433	2054
			CONTRACT NO. 68620	
ILLINOIS FED. AID PROJECT				

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