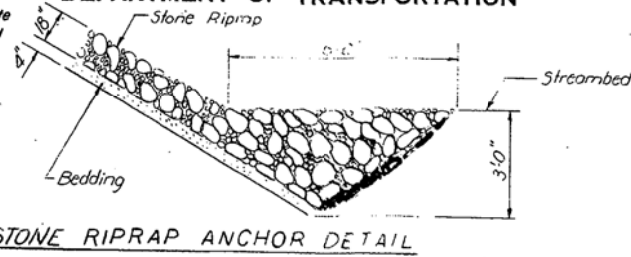


B.M. Top of Northwest wingwall, elevation 768.34

Existing Structure: *008-0004 The existing structure built in 1929 as SBI Rte. 27, Section 4B is a 58.3' Bk. to Bk. single span bridge. The existing structure has an out to out width of 26'-0" and is supported on transverse concrete T-beams which are supported on two concrete edge beams. The existing structure shall be removed and replaced with a new bridge. Stage construction shall be utilized so as to maintain one way traffic during reconstruction.

No salvage.

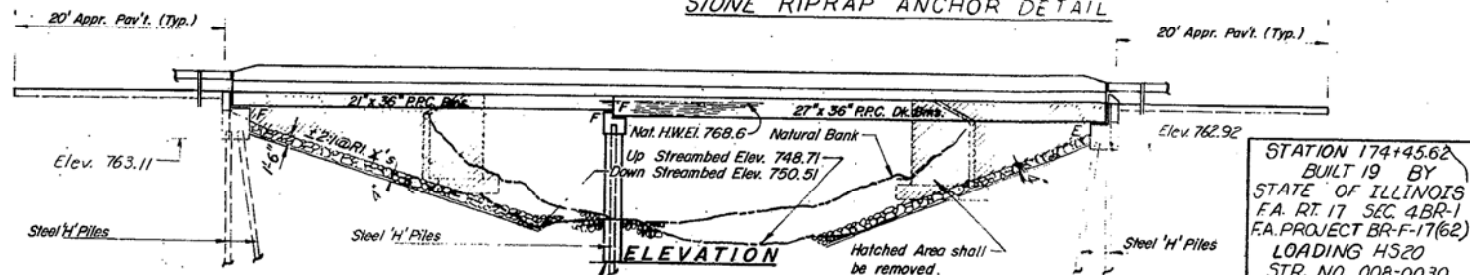
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
4BR-1		Carroll	22	11	12 SHEETS

GENERAL NOTES

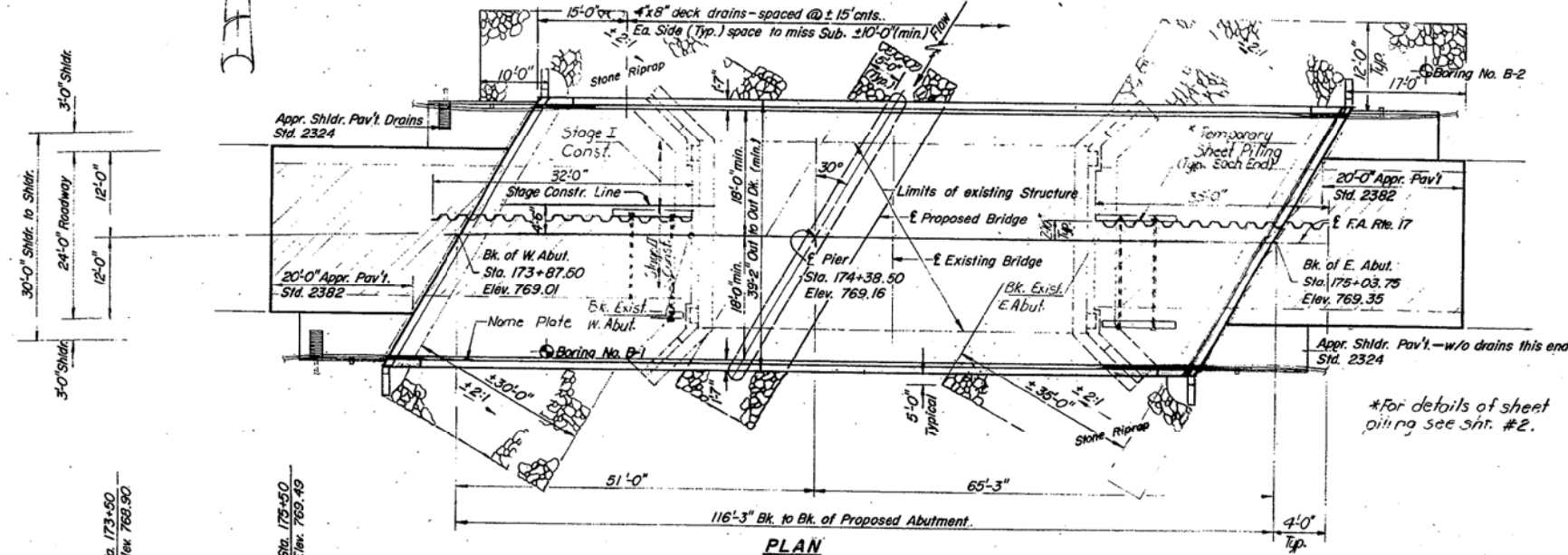
See Proposal for Boring Data.
The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, Grade 60.
Limits of Waterproofing Membrane System shall be from east end of deck beams to two feet beyond west end of deck beams and toe to toe of parapets as shown on sheet #8.
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
The contractor shall drive one steel HP8 x36 test pile in a permanent location of the west abutment and one steel HP10x42 test pile in a permanent location of the east abutment as directed by the Engineer before ordering the remainder of piles.
Layout of Stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.
Sheet Piling and Tieback anchorage shall be installed prior to Stage I Removal. Steel Rod Tiebacks shall be installed under Stage I Traffic Lane.
Sheet piling shall be removed after Stage II traffic lane is opened and prior to Stage II Construction. Cost of anchorage for sheet piling shall be incidental to Temporary Sheet Piling.



STATION 174+45.62
BUILT BY
STATE OF ILLINOIS
FA. RT. 17 SEC. 4BR-1
FA. PROJECT BR-F-17(62)
LOADING HS20
STR. NO. 008-0030

NAME PLATE
(See Std. 2113)

Note:
Cost of Pav't. Removal and Earth Excavation as indicated in hatched areas is incidental to the cost of Removal of Existing Structures.

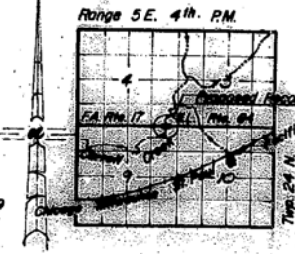


TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course, Class I	Tons	60		60
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		75	75
Cofferdam Excavation	Cu. Yd.		105	105
Cofferdams	Each		1	1
Protective Coat	Sq. Yd.	93		93
Class X Concrete	Cu. Yd.	38.9	1340	1729
Seal Coat Concrete	Cu. Yd.		58.6	58.6
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1919		1919
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2468		2468
Reinforcement Bars	Pound	1890	8100	9990
Reinforcement Bars (Epoxy Coated)	Pound	2100		2100
Steel Piles HP8x36	Lin. Ft.		660	660
Test Pile Steel HP8x36	Each		1	1
Steel Piles HP10x42	Lin. Ft.		168	168
Test Pile Steel HP10x42	Each		1	1
Name Plates	Each	1		1
Stone Riprap	Sq. Yd.		772	772
Temporary Bridge Rail	Lin. Ft.	113		113
Neoprene Expansion Joint 2"	Lin. Ft.	44		44
Portland Cement Mortar Jointing Course	Lin. Ft.	1350		1350
Waterproofing Membrane System	Sq. Yd.	458		458
Temporary Slab Support System	L. Sum		1	1
Temporary Sheet Piling	Sq. Ft.		1608	1608

DESIGN STRESSES

FIELD UNITS
 $f_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)
 $f_s = 20,000$ psi (Struct.)
 PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ psi
 $f_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" Strands)
 $f_{si} = 189,000$ psi (1/2" Strands)
 LOADING HS 20-44
 Design Specifications: 1977 AASHTO; 1978, 1979 1990 and 1981 Interim Specifications.
 Allow 25#/sq.ft. for future wearing surface.



GENERAL PLAN
 FA. RT. 17 Over CARROLL CREEK
 FA. RT. 17 ILL. RT. 64 SECTION 4BR-1
 CARROLL COUNTY
 Sta. 174+45.62

PROFILE GRADE

DESIGNED M. Blosdorf
 CHECKED Jim Kohout
 DRAWN R. Doty
 CHECKED K.

PLANNED James H. ...
 PREPARED ...
 APPROVED ...

WATERWAY INFORMATION

Drainage Area = 38.5 sq. mi. Low Grade El. 768.2 @ Sta. 172+00.00

Flood	Freq. Yr.	Q C.F.S.	Opening Exist. Prop.	Nat. H.W.E. Exist. Prop.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.
Design	50	4802	443 635	768.6 0.59 0.42	769.19 769.02	769.02
Base	100	5493	443 635	769.1 0.55 0.35	769.65 769.45	769.45
Overtopping	25	4081	---	635 768.1	---	768.51
Max. Calc.	500					

Revised: 3-17-82 R.D. Revised: 4-23-82 R.D.