

# FOR INFORMATION ONLY

## LOCATION 4 Structure Numbers 081-0122 & 0123

### GENERAL NOTES:

- Reinforcement bars shall be lapped 24 diameters unless otherwise shown.
- Field connections shall be bolted using high strength bolts. Bolts  $\frac{3}{4}$ "  $\phi$ , open holes  $1\frac{1}{8}$ "  $\phi$ , unless otherwise noted.
- The basic lead Silico Chromate paint system shall be used for shop and field painting of structural steel.
- Field welding of construction accessories will not be permitted to the bottom or flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the engineer.
- Anchor bolts shall be set before bolting diaphragms over supports.
- Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh weighing 58# per 100 sq.ft.

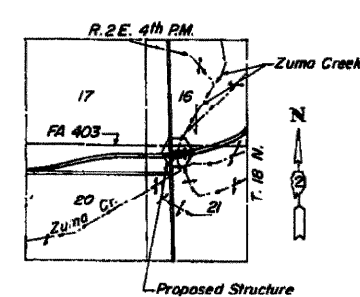
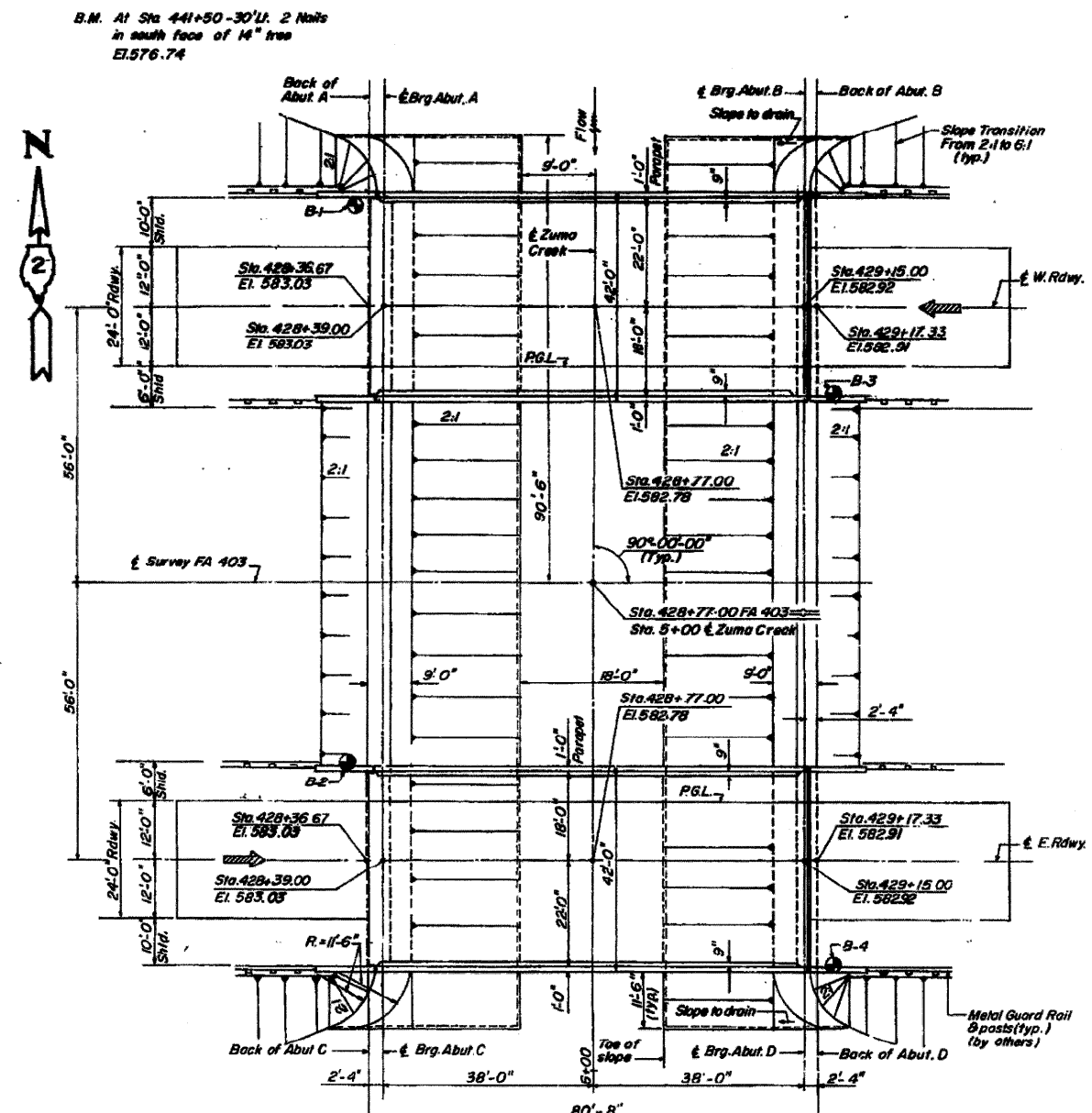
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
- The contractor shall drive two steel test piles in a permanent location, one each of the Abut. 'A' and Abut. 'D' as directed by the engineer before ordering the remainder of the piles.
- Layout of slope walls may be varied in the field to suit ground conditions as directed by the engineer.
- The concrete rail section above the mandatory const. joint at the top of the slab shall be constructed of class X concrete, except the aggregates shall conform to the requirements of handral concrete.
- Protective coat shall not be applied to surfaces to which waterproofing membrane is applied.

The main load carrying member components subject to the Supplemental Requirements for Notch Toughness are the flanges, webs, and splice plates of the steel girders or wide flange beams. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $\pm \frac{1}{8}$  inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two  $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

### TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER STRUCT.	SUB STRUCT.	TOTAL
Protective coat	Sq. Yds	122	—	122
Class X Concrete	Cu Yds.	203.6	182	385.6
Structural Steel	L. Sum	0.11	—	0.11
Aluminum Railing	Lin. Ft.	308	—	308
Reinforcement bars	Lbs.	44,740	15,360	60,100
Stud Shear connectors	Each	2988	—	2988
Steel Piles HP8 x 36	Lin. Ft.	—	714	714
Test Piles HP8 x 36	Each	—	2	2
Name Plates	Each	1	—	1
Slope Wall (6")	Sq. Yds.	—	877	877
Bit. Conc. Surface course, Class I	Tons	56.0	—	56.0
Waterproofing Mem. System	Sq. Yds.	670	—	670
Preformed Jt. Sealer 2 $\frac{1}{2}$ "	Lin. Ft.	84	—	84
Permanent Bench Mark	Each	1	—	1

\* Calculated weight of structural steel = 183,080 Lbs.



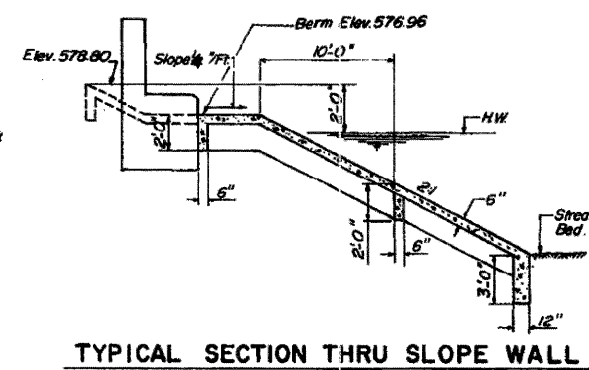
LOCATION MAP

### WATERWAY INFORMATION

Drainage Area	7680 Acres
Character	Hilly
Proposed Opening	450 Sq. Ft.
Proposed Opening	450 Sq. Ft.
Bottom Channel	El. 563.7
Q (50)	2600 c.f.s.

### NOTES:

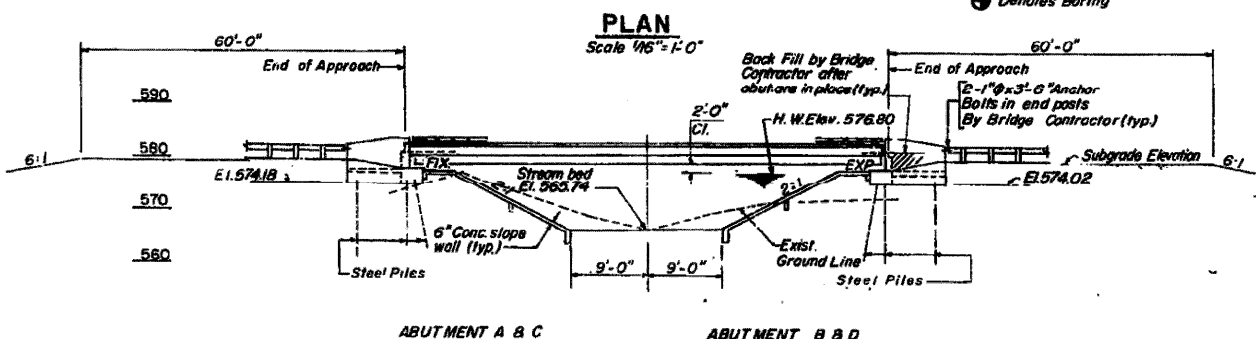
- DESIGN LOADING: HS 20-44 And Allowance For 25 RSF Future Wearing Surface
- DESIGN STRESSES:
  - $f_c = 1400$  P.S.I. Except As follows:
  - $f_c = 1200$  P.S.I. For Deck Slab
  - $f_c = 1000$  P.S.I. For Conc. In Contact With Earth
  - $f_s = 27,000$  P.S.I. (AASHTO A223) Grade 50
  - $f_s = 20,000$  P.S.I. Reinforcement Steel
  - $f_v = 75$  P.S.I. Allowable Shear in Footings
  - $f_s = 50,000$  p.s.i. (Structural Steel) AASHTO M193
  - $n = 7.0$
  - Allowable Live Load Deflection =  $L/1200$  (Composite)
- DESIGN SPECIFICATIONS: AASHTO 1969 As Applicable



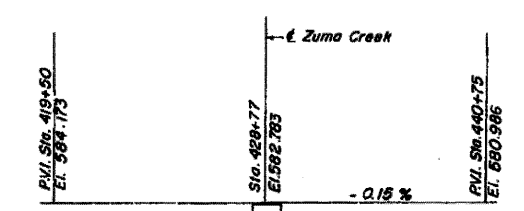
TYPICAL SECTION THRU SLOPE WALL

STATION 428 + 77.00  
 BUILT BY  
 STATE OF ILLINOIS  
 FA 403 SECTION 161-1B-1  
 FA PROJ. EBRF-403-1(T)  
 LOADING HS 20

NAME PLATE  
 SEE STD. 2113



ELEVATION  
 Scale: 1/16" = 1'-0"



PROFILE FA 403 ALONG PROFILE GRADE LINE

APPROVED  
 [Signature]

GENERAL PLAN & ELEVATION  
 FA 403 SECTION 161-1B-1  
 FA 403 OVER ZUMA CREEK  
 ROCK ISLAND COUNTY

\* FAI ROUTES 74 & 88 STATION 428 + 77.00  
 \*\* D2 BRIDGE PAINTING 2008-1