

B.M. No G-1 Railroad spike in 30" Sycamore Tree, 300' Rt. of Sta. 1069+50, El. 425.06

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

| | | | | |
|-------------|---------|-----------|--------------|-----------|
| PROJECT NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 64 | 82-88 | ST. CLAIR | 107 | 49 |
| SHEET NO. 1 | | | | |

GENERAL NOTES

Calculated wt. of Structural Steel = 276,920 lbs.
Slope Wall shall be reinforced with welded wire fabric, 6x6 mesh, weighing 58# per 100 sq. ft.
Layout of slope walls may be varied to suit ground conditions in the field as directed by the Engineer.
All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
Fasteners shall be high strength bolts. Bolts 3/4" open holes 1 1/8" unless otherwise noted.
Anchor bolts shall be set before bolting diaphragms over supports.
The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.
The Contractor shall drive one concrete test pile in a permanent location at each Pier and at the East Abutment as directed by the Engineer before ordering the remainder of piles.

The Contractor shall drive the piles to the capacity on the page and to the following minimum elevations:
El. of W. Abutments - El. 382.0
Pier 1 - El. 385.0
Pier 2 - El. 383.0

STATION 162+21
BUILT 197 BY
STATE OF ILLINOIS
F.A.I. RT 64 SEC. 82-88
F.A. PROJ. 1-64-1(50)
LOADING HS 20 & ALT.

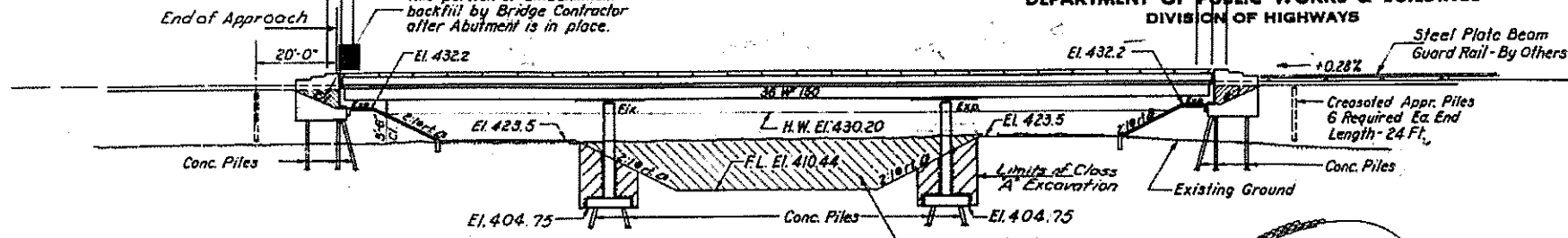
NAME PLATE LETTERING
See Standard 2113-1

TOTAL BILL OF MATERIAL

| Item | Unit | Super | Sub | Total |
|-----------------------------------|----------|-------|-------|-------|
| Class A Concrete | Cu. Yds. | | 270.6 | 270.6 |
| Class A Excavation for Structures | Cu. Yds. | | 530 | 530 |
| Structural Steel | Lump Sum | L.S. | | L.S. |
| Aluminum Railing | Lin. Ft. | 441 | | 441 |
| Class X Concrete | Cu. Yds. | 252.0 | 92.8 | 344.8 |
| Reinforcement Bars | Lbs. | 71000 | 21600 | 92600 |
| Crested Piles (20.1' + 38') | Lin Ft. | | 288 | 288 |
| Concrete Piles | Lin Ft. | | 1762 | 1762 |
| Test Piles (Concrete) | Each | | 3 | 3 |
| Name Plates | Each | 1 | | 1 |
| Stone Riprap | Sq. Yds. | | 1240 | 1240 |
| Slope Wall (6") | Sq. Yds. | | 454 | 454 |
| Protective Coat | Sq. Yds. | 1132 | | 1132 |
| Bridge Seat Sealant | Lump Sum | L.S. | | L.S. |

* Includes excavation for Slope Walls.
** Applied at Abutments.
FIELD WELDING OF CONSTRUCTION ACCESSORIES TO THE BOTTOM FLANGES OR FOR A DISTANCE OF 1/2 OF THE SPAN EACH WAY FROM PIER SUPPORTS ON THE TOP FLANGES OF BEAMS OR GIRDERS WILL NOT BE PERMITTED. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

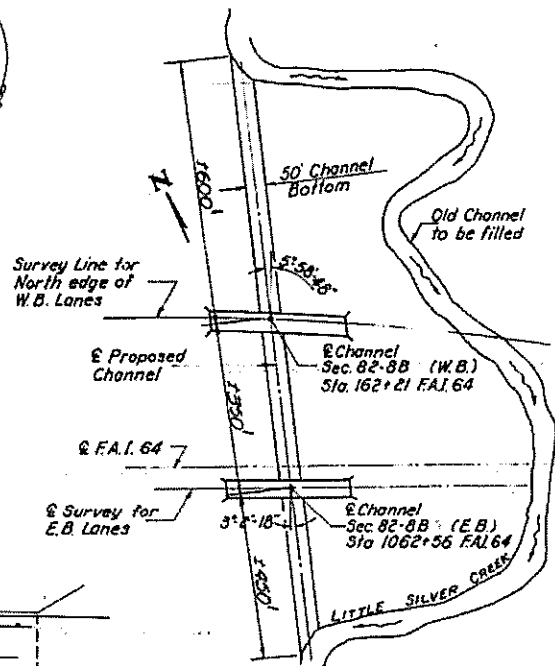
PROJ. 1-64-1(50)17
GENERAL PLAN & ELEVATION
LITTLE SILVER CREEK
F.A.I. RT 64 SEC. 82-88 (NB)
ST. CLAIR COUNTY
STA. 162+21



ELEVATION

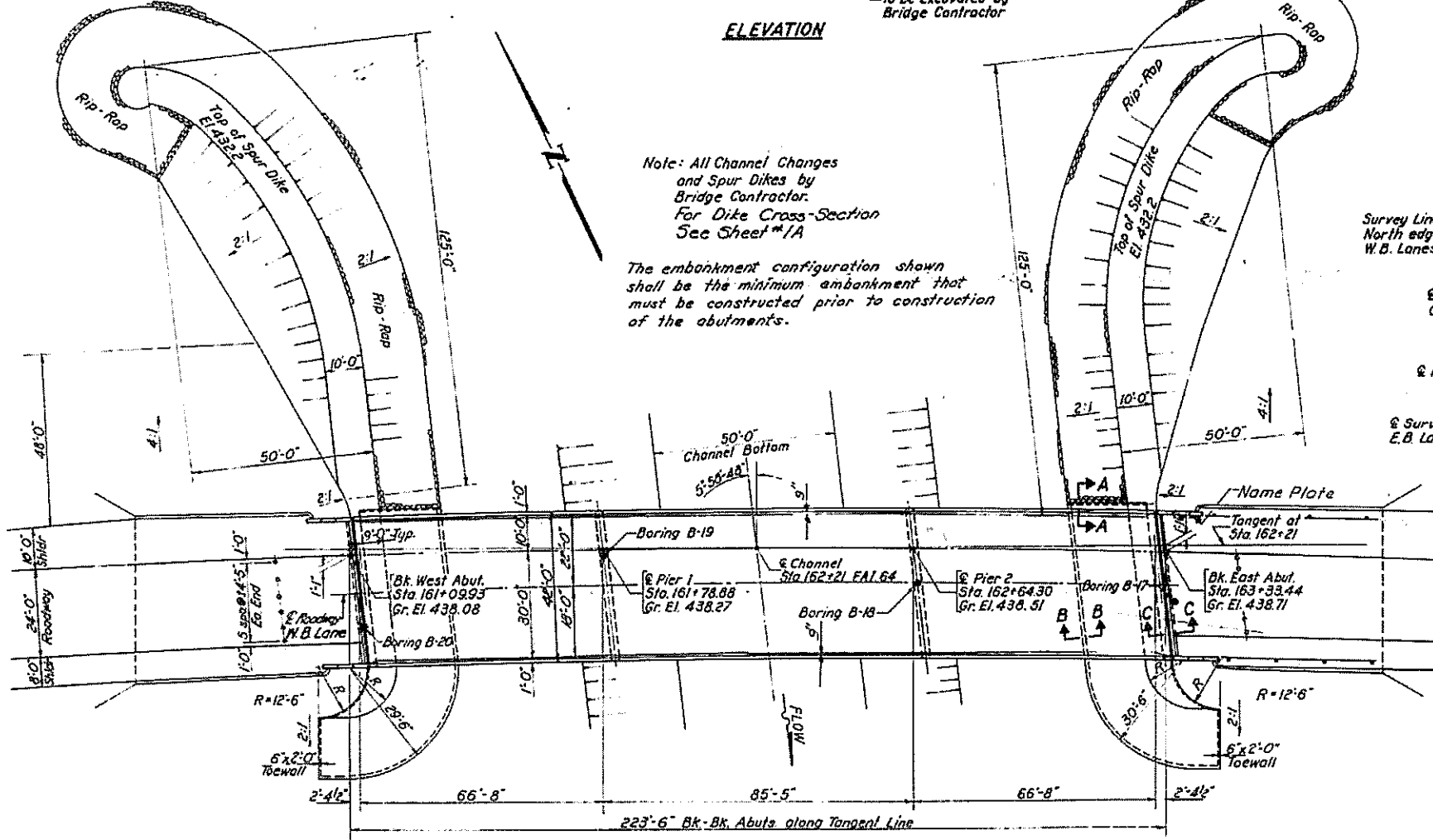
Note: All Channel Changes and Spur Dikes by Bridge Contractor after Abutment is in place.
This portion of Embankment backfill by Bridge Contractor after Abutment is in place.

Note: All Channel Changes and Spur Dikes by Bridge Contractor. For Dike Cross-Section See Sheet #1/A.
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.



PROPOSED CHANNEL CHANGE

Note: Piles shall be jacked if necessary to reach minimum tip elevations shown.



PLAN

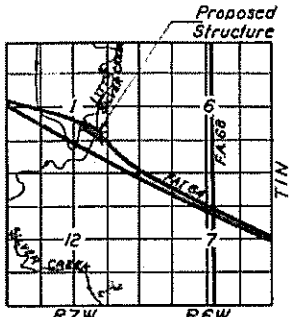
WATERWAY INFORMATION

Drainage Area --- (Total) 249,700 Acres
Character --- Rolling, Wooded, Cultivated
Required Opening --- (50 Yr. Flood):
Silver Creek --- 3,240 Sq. Ft.
Little Silver Creek --- 2,160 Sq. Ft.
Total Req'd. Opening --- 5,400 Sq. Ft.
Proposed Opening:
Silver Creek --- 3,240 Sq. Ft.
Little Silver Creek --- 2,160 Sq. Ft.
Total Prop. Opening --- 5,400 Sq. Ft.
Ordinary Water Elevation --- 416.0
Low Water Elevation --- 412.5
Design Frequency Discharge: Little Silver Creek, Q₅₀ 9600 cfs

DESIGN STRESSES

f_c = 1400 psi. Super & Sub
f_s = 20,000 psi. Reinf.
f_s = 20,000 psi. Struct.
v_c = 75 psi. Flgs.
n = 10
Allowable 1/4 Defl. = L/1000 Non-Composite

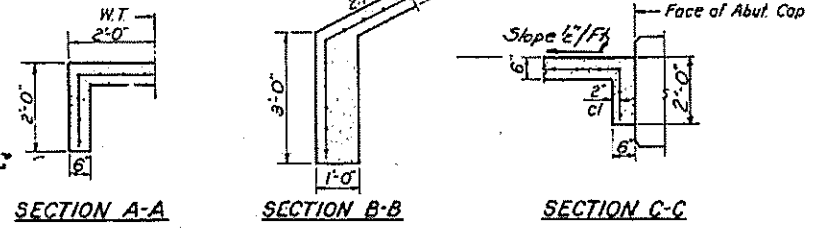
LOADING HS 20-44 & ALT.



LOCATION PLAN

CURVE DATA

Δ = 18°19'08" RI D = 1°00'00"
R = 5729.58' T = 923.83'
L = 1831.89' E = 74.00'
S.E. = 0.028 Ft. per Ft.
S.E. Attained Sta. 166+46.39 to Sta. 168+46.39
Crown removed.



DESIGNED R. Bradford Jr.
CHECKED R. Kowart
DRAWN J.L. Armstrong
CHECKED RK

EXAMINED
PASSED
APPROVED

Rev. 11-10-66 R.B. Jr. Added Guard Rail to E. Approach. Changed Class X Conc. 3374 to 340.3 & 581.7 to 584.6 Cu. Yds. Changed Reinf. Bars 59,980; 19,030 & 79,010 to 64,110; 19,790 & 83,900 Lbs.

Rev. 8-21-67 Changed Cl. X Conc., Cu. Yds., Super from 844.3 to 853.5 & Total from 584.6 to 593.6. Reinf. Bars Lbs., Super from 64,110 to 68,460 & Total from 83,900 to 88,250. S.D. Rev. 7-13-70 Rod. G.K.

| | | | | | | | | | |
|-----------|-----------|----------|---------|---|----------------------------------|---------|-----------|--------------------|-----------|
| FILE NAME | USER NAME | DESIGNED | REVISOR | EXISTING STRUCTURE DETAILS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| #FILE# | | DRAWN | REVISOR | STRUCTURE NO. 082-0188 | 64 | 82-88-P | ST. CLAIR | 29 | 21 |
| | | CHECKED | REVISOR | SCALE: N/A | SHEET NO. OF SHEETS STA. TO STA. | | | CONTRACT NO. 76663 | |
| | | DATE | REVISOR | FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT | | | | | |

FOR INFORMATION ONLY