

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
HIGHWAY PLANS

DAY LABOR PROJECT 14F908
F.A.P. 322 (US 51)
JACKSON COUNTY
SN 039-0052
KEYWAY REPAIR

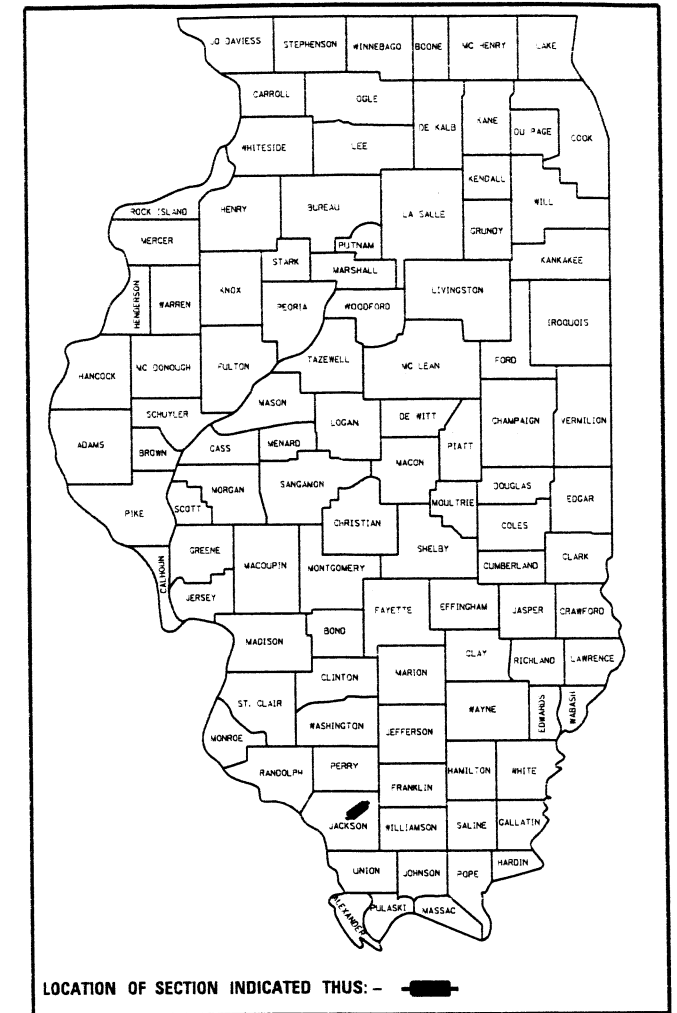
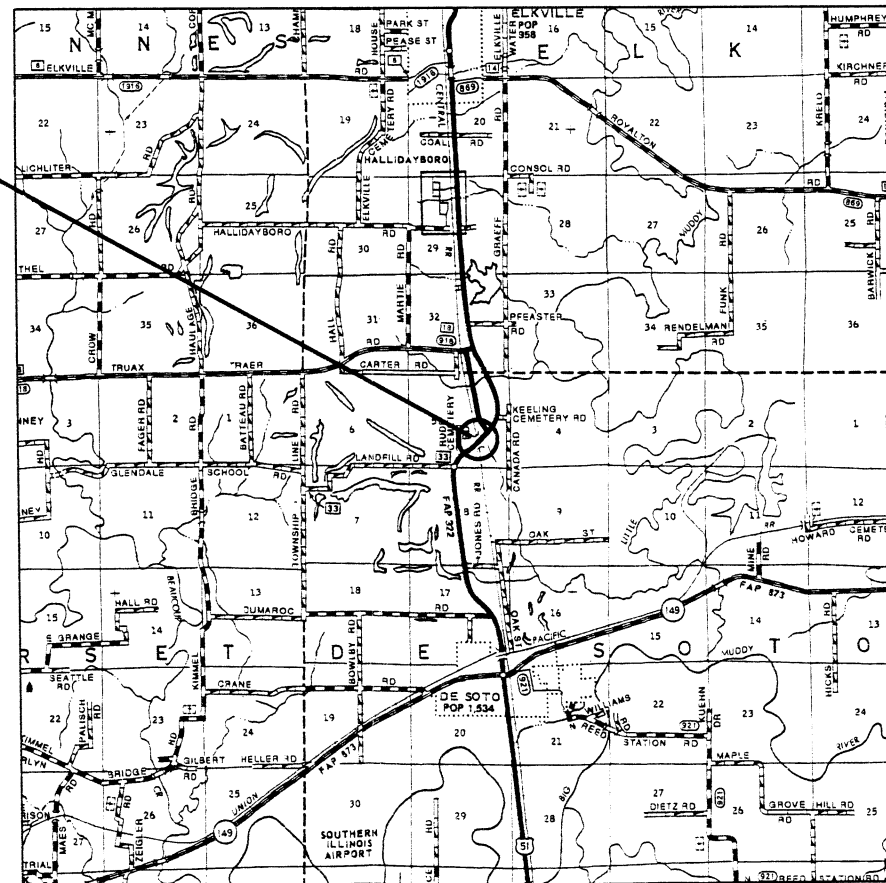
FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA

U.S. 51 SN 039-0052
2011 ADT = 5800 WITH 5% TRUCKS

TOWNSHIP
DE SOTO

PROJECT LOCATION
STRUCTURE NO. 039-0052
US 51/IC RR

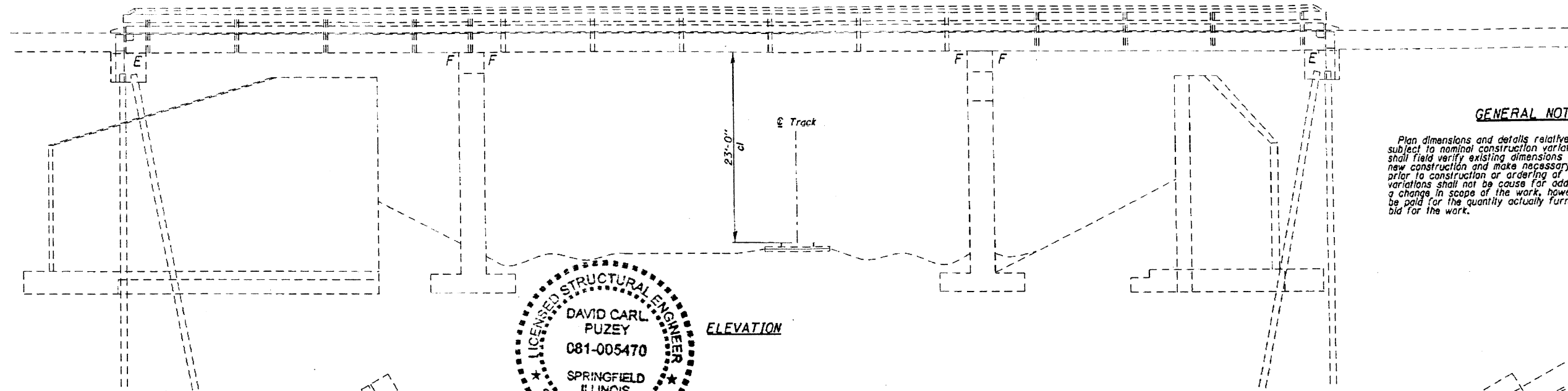


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Prepared By: *Carrie Nelson*
DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By: *Karl Kelly*
DISTRICT OPERATIONS ENGINEER
Examined By: *Karl Kelly*
DISTRICT PROJECT IMPLEMENTATION ENGINEER
Approved: *Jeffrey L. Kern* 8/13/13
REGIONAL ENGINEER DATE

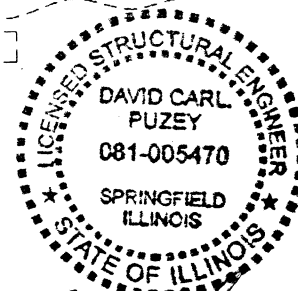
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

039-0052



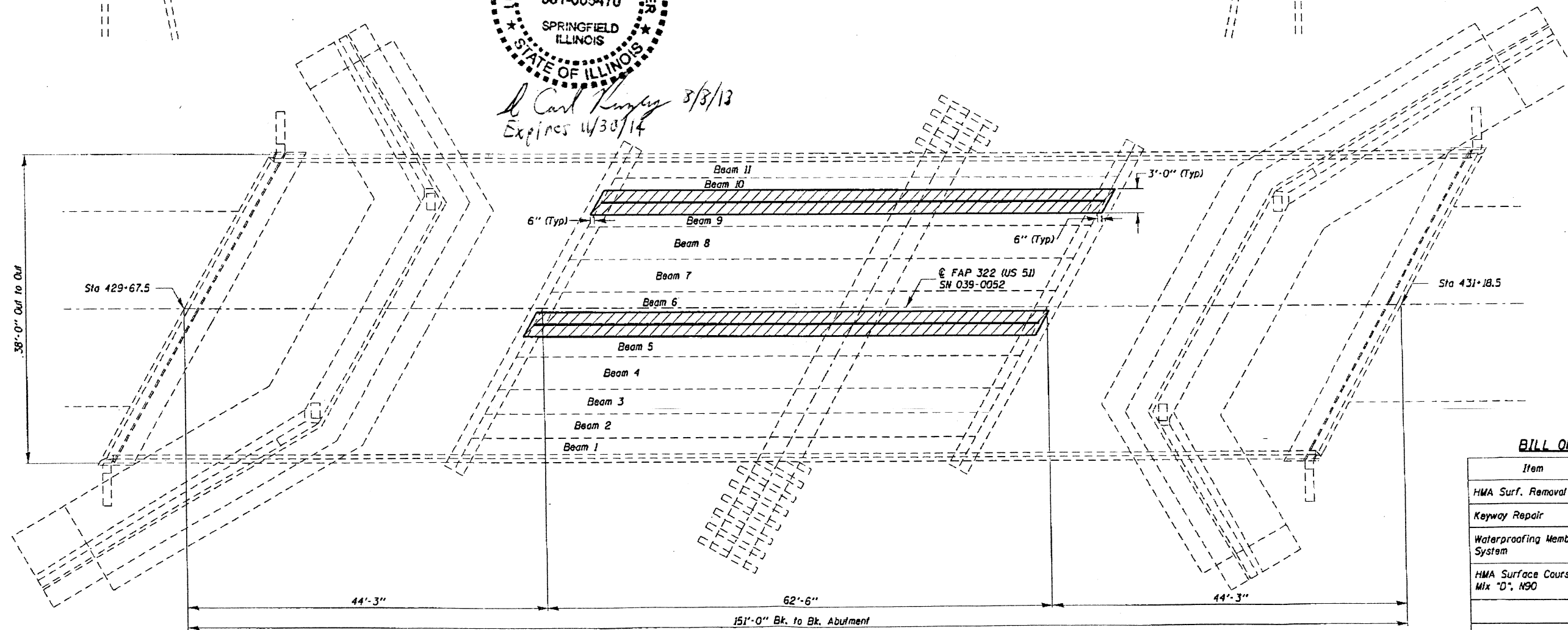
GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



ELEVATION

David Carl Puzey 3/8/13
Expires 11/30/14



BILL OF MATERIAL

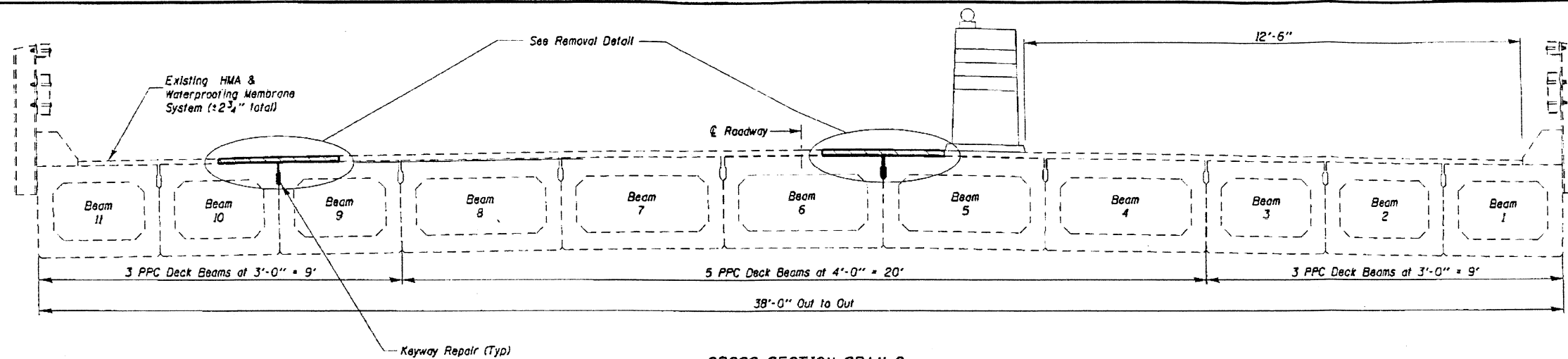
Item	Unit	Total
HMA Surf. Removal (Deck)	Sq Yd	43
Keyway Repair	Ft	125
Waterproofing Membrane System	Sq Yd	43
HMA Surface Course, Mix "D", N90	Ton	6

Bituminous Concrete Surface Removal

Keyway Repair

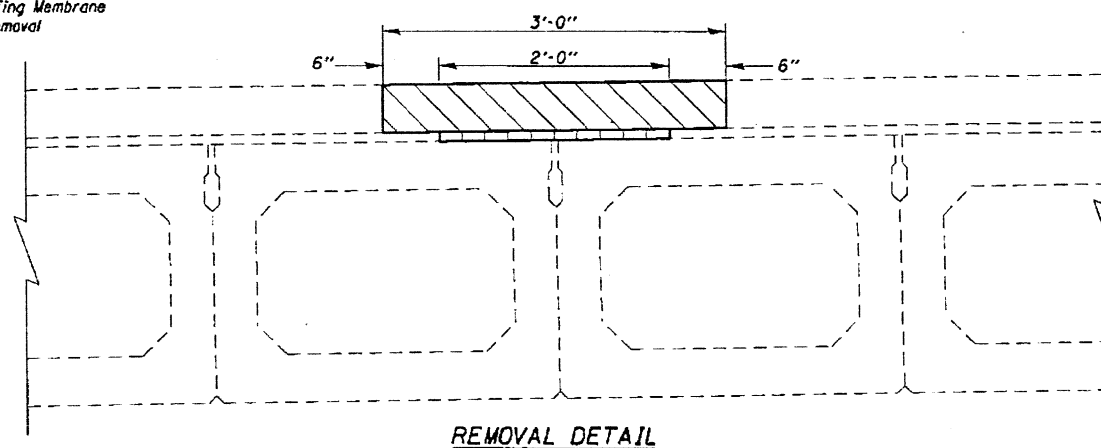
PLAN

FILE NAME =	USER NAME = walkarra	DESIGNED - RAW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
at\pwwork\pwwork\walkarra\08351885\keyway.dgn		DRAWN -	REVISED -		SN 039-0052 (US 51 OVER IC RR)				322	DLBR FY14 KEYWAY REP	JACKSON	7	6
PLOT SCALE = 1/4" = 1' - 0"		CHECKED - SC	REVISED -		SCALE: 1" = 10'								
PLOT DATE = 8/6/2013		DATE -	REVISED -		SHEET 1 OF 2 SHEETS STA. TO STA.				ILLINOIS FED. AID PROJECT				

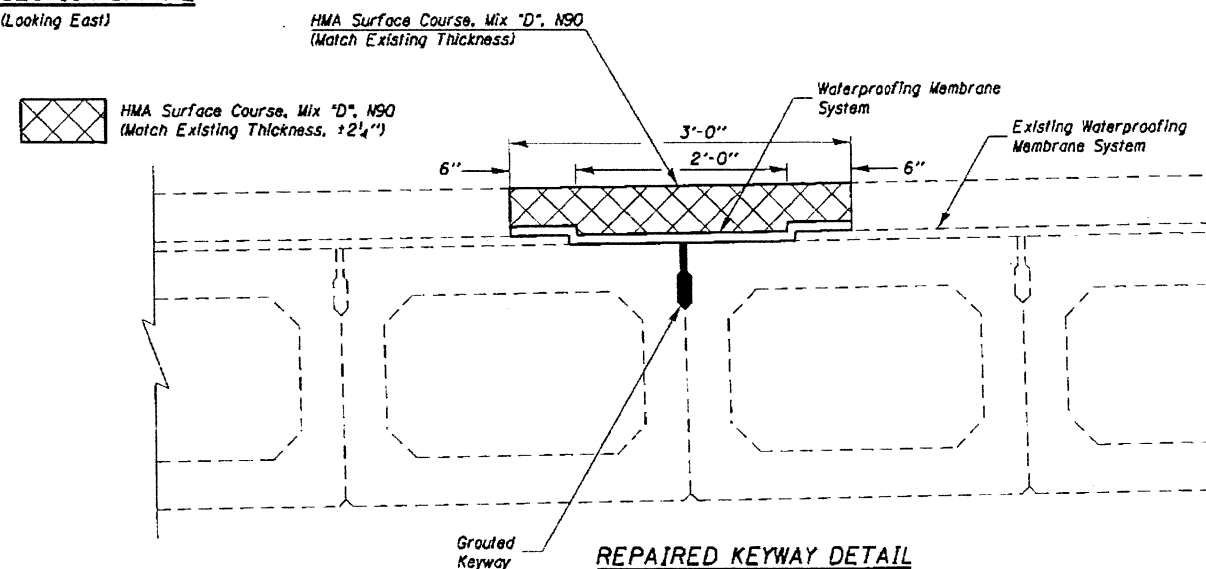


CROSS SECTION SPAN 2
(Looking East)

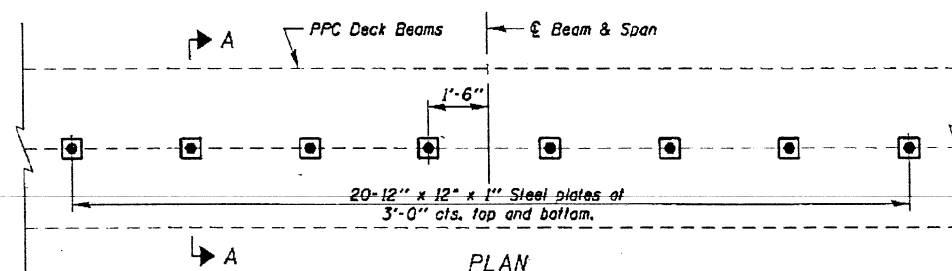
HMA Surface Removal (Deck)
 Waterproofing Membrane System Removal



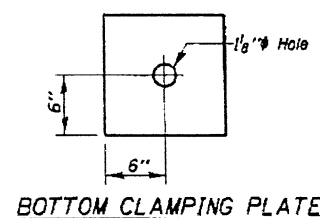
REMOVAL DETAIL



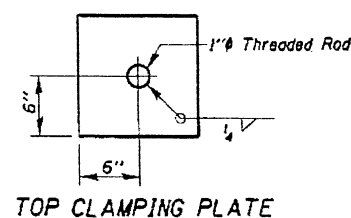
REPAIRED KEYWAY DETAIL



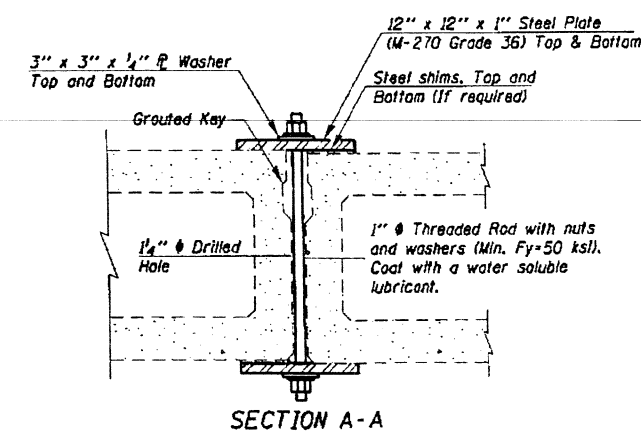
SHEAR KEY CLAMPING DETAILS
(Cost Included With Keyway Repair)



BOTTOM CLAMPING PLATE



TOP CLAMPING PLATE



SECTION A-A

Note: After grout has cured in accordance with Manufacturer's Printed Instructions as specified in the Keyway Repair Specification all clamping assemblies will be removed from the structure.

FILE NAME =	USER NAME = wolkarra	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REPAIR DETAILS SN 039-0052	SCALE:	SHEET 2 OF 2 SHEETS	STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
al\pw_work\pilot\wolkarra\8251885\keyway.dgn		DRAWN -	REVISED -						322	DLBR FY14 KEYWAY REP	JACKSON	7	7
PLOT SCALE = 3/8" = 1' - 0"		CHECKED -	REVISED -										
PLOT DATE = 8/7/2013		DATE -	REVISED -										
ILLINOIS FED. AID PROJECT													

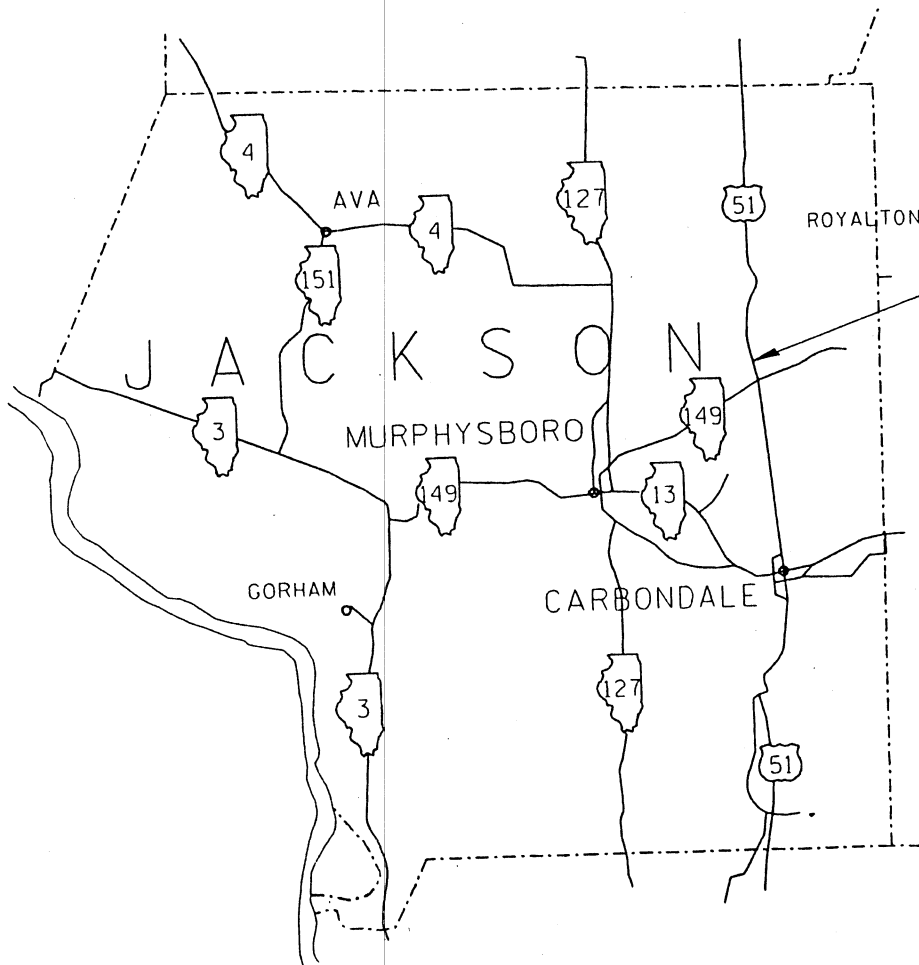
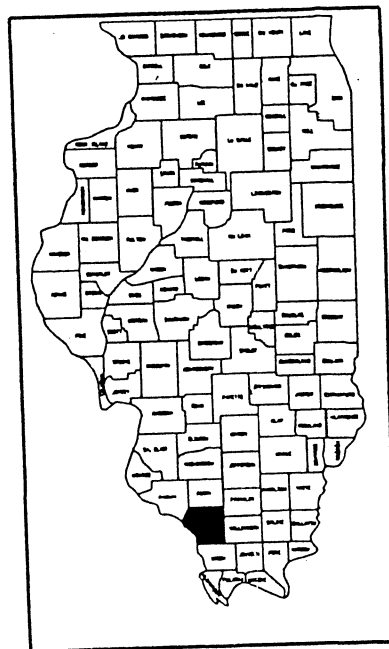
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS
DISTRICT 9**

**U.S. ROUTE 51
BRIDGE RAIL REPAIR
JACKSON COUNTY**

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 51	•	JACKSON	6	1
FED. ROAD DIST. NO. 7 ILLINOIS DAY LABOR				

•BRIDGE RAIL REPAIR



Improvement Location
039-0052
Bridge Rail Repair

Desoto Township
Inventory Rating HS 21.2
Operating Rating HS 33.9
2003 ADT = 6600

PREPARED BY:	<i>Jim Smothers</i>	DISTRICT OPERATIONS ENGINEER
EXAMINED BY:	<i>Carrie Nelson</i>	DISTRICT PROGRAM DEVELOPMENT ENGINEER
EXAMINED BY:	<i>Joseph Legier</i>	DISTRICT PROJECT IMPLEMENTATION ENGINEER
APPROVED:	<i>June 16</i>	20 <i>05</i>
	<i>May Pami</i>	DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

FOR INDEX OF SHEETS, SEE SHEET NO. 2.
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3.

JULIE 1-800-892-0123

DAY LABOR PROJECT FY05 ADD

71

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 51	•	JACKSON	6	2
FED. ROAD DIST. NO. 7	ILLINOIS	DAY LABOR		
•BRIDGE RAIL REPAIR				

INDEX OF SHEETS

- 1 Title Sheet and Signatures
- 2 Index of Sheets, Standards, General Notes
- 3 Summary of Quantities
- 4 Elevation
- 5, 6 Repair Details

STANDARDS

701201

702001

GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work. However, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All bolts, nuts, washers and hardware required for installation of the railing are included in Furnishing and Erecting Steel Railing, and will not be paid for separately.

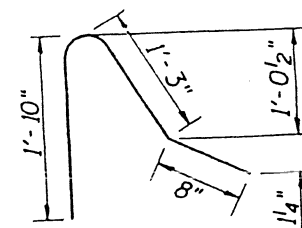
The two rails shall be removed and replaced one at a time. At least one rail shall be in place at all times. Rail removal and replacement shall be completed in one day.

The Contractor shall contact the local Track Supervisor to determine the need for a railroad flagger prior to the start of the work. The Local Train Master can be reached at (618) 457-3423.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 51	•	JACKSON	6	3
FED. ROAD DIST. NO. 7	ILLINOIS	DAY LABOR		
•BRIDGE RAIL REPAIR				

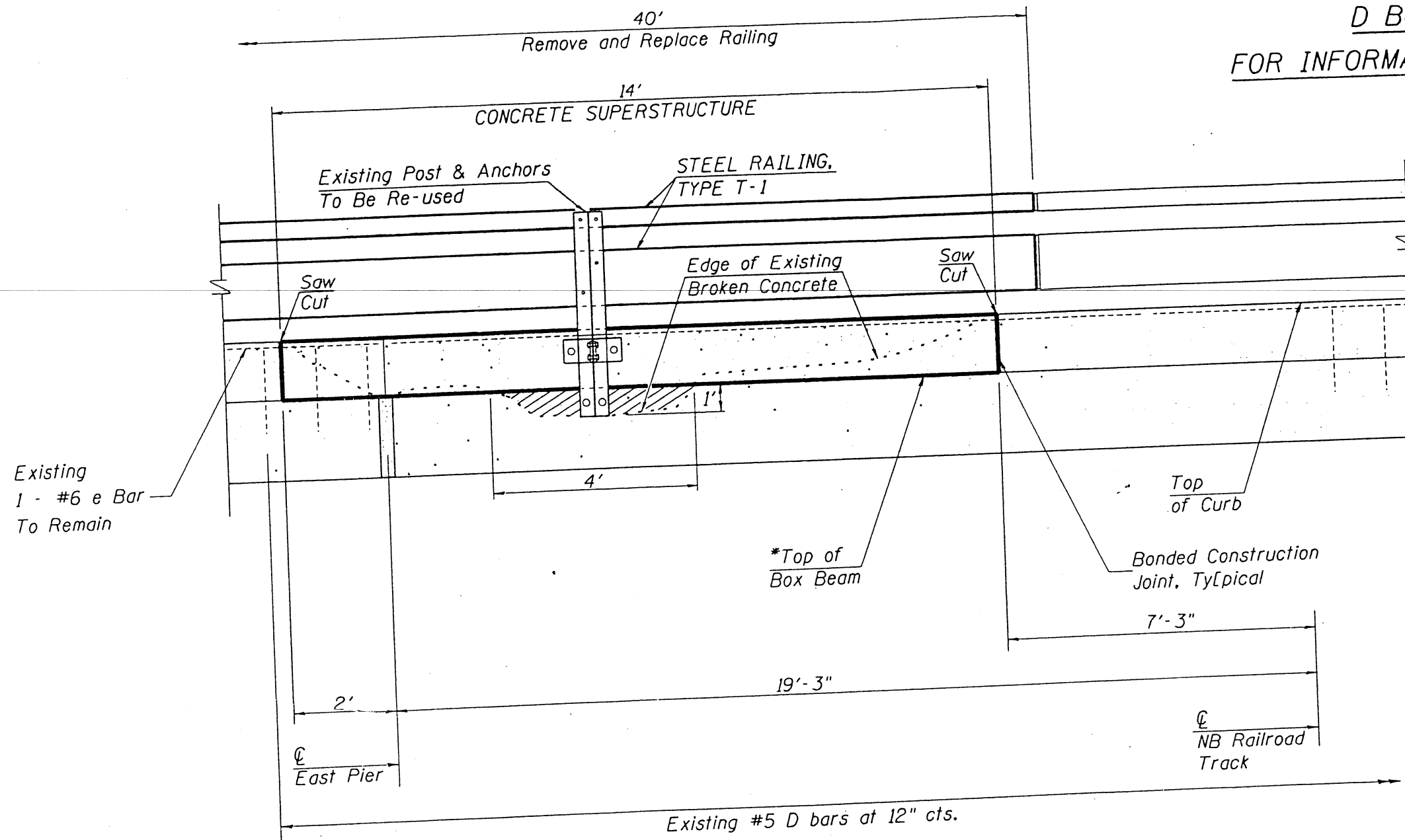
SUMMARY OF QUANTITIES

CODE NO	ITEM DESCRIPTION	UNIT	QUANTITY
50102400	CONCRETE REMOVAL	CU. YD.	0.5
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	0.5
50900577	FURNISHING AND ERECTING STEEL RAILING	FOOT	40
67100100	MOBILIZATION	L. SUM	1
70100450	TRAFFIC CONTROL & PROTECTION, STANDARD 701201	L. SUM	1
X0953300	BRIDGE RAIL REMOVAL	FOOT	40
X0321259	POLYMER MODIFIED PORTLAND CEMENT MORTAR	CU. FT.	0.5



D Bar

FOR INFORMATION ONLY



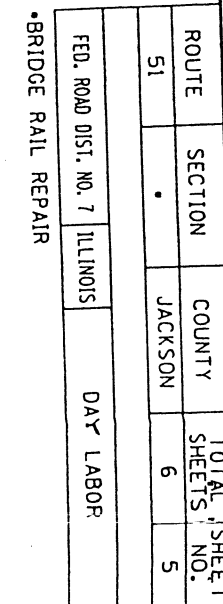
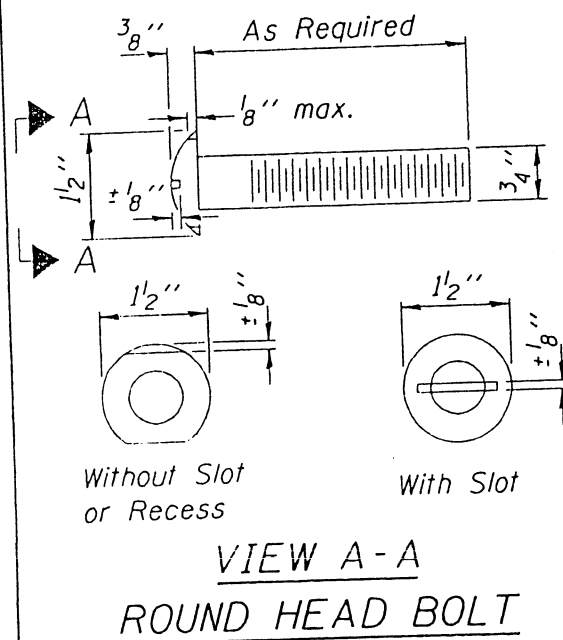
ELEVATION

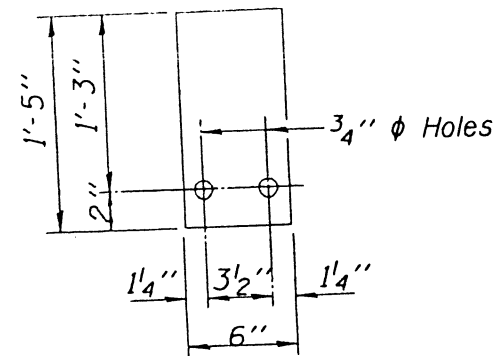
-  POLYMER MODIFIED PORTLAND CEMENT MORTAR
-  CONCRETE REMOVAL AND CONCRETE SUPERSTRUCTURE

*Contractor must ensure that no damage is done to the top of the PPC deck beams while doing concrete removal.

NOTE: Existing reinforcement which extends into the removal area shall be cleaned, straightened, and incorporated into new construction. Any reinforcement that are damaged shall be replaced with an approved bar splicer or anchorage system.

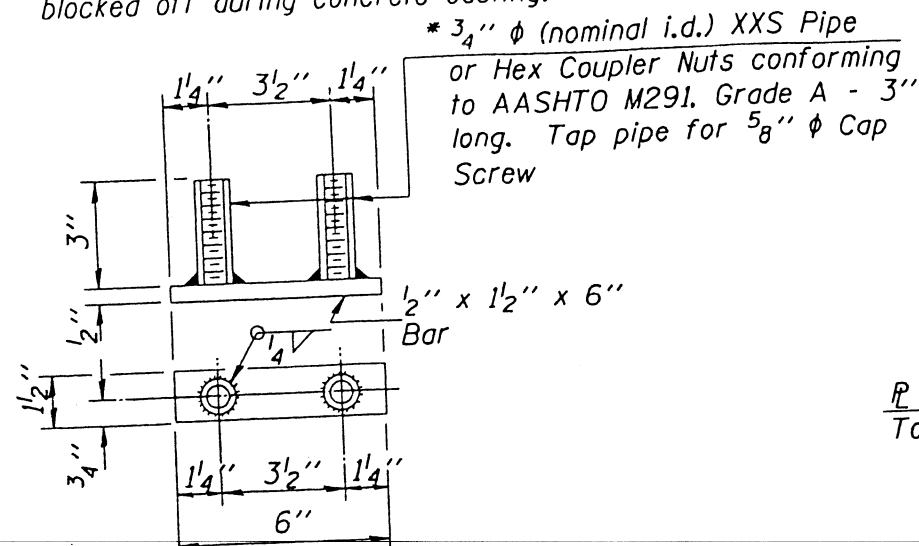
• BRIDGE RAIL REPAIR				
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
51		JACKSON	6	4
FED. ROAD DIST. NO. 7		ILLINOIS	DAY LABOR	



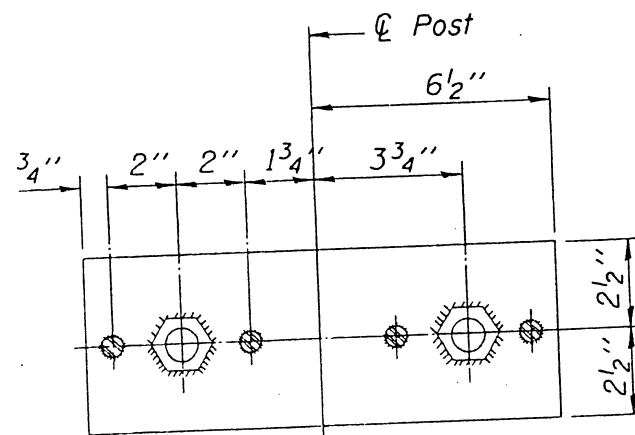


1/4" SHIM PLATE
FOR INFORMATION ONLY

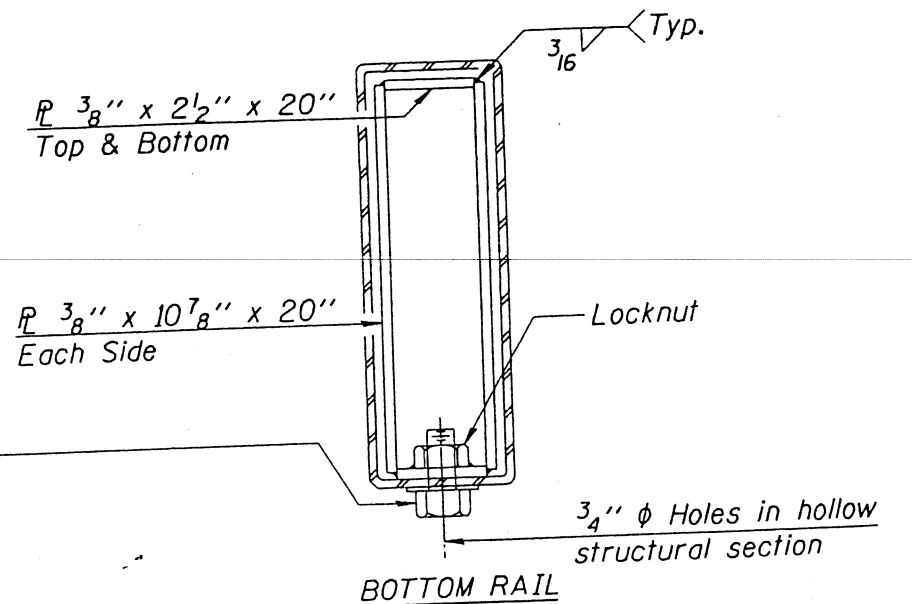
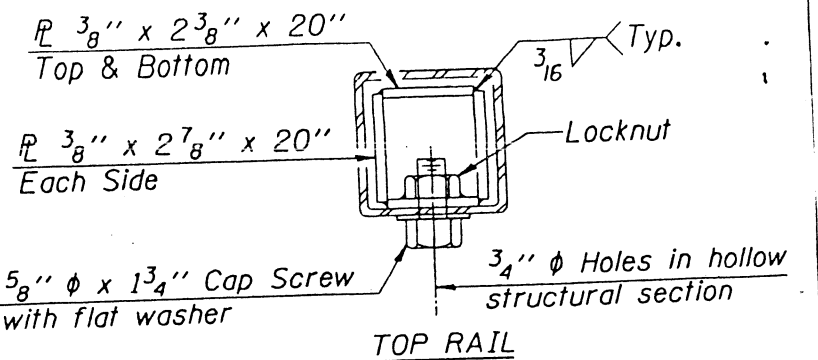
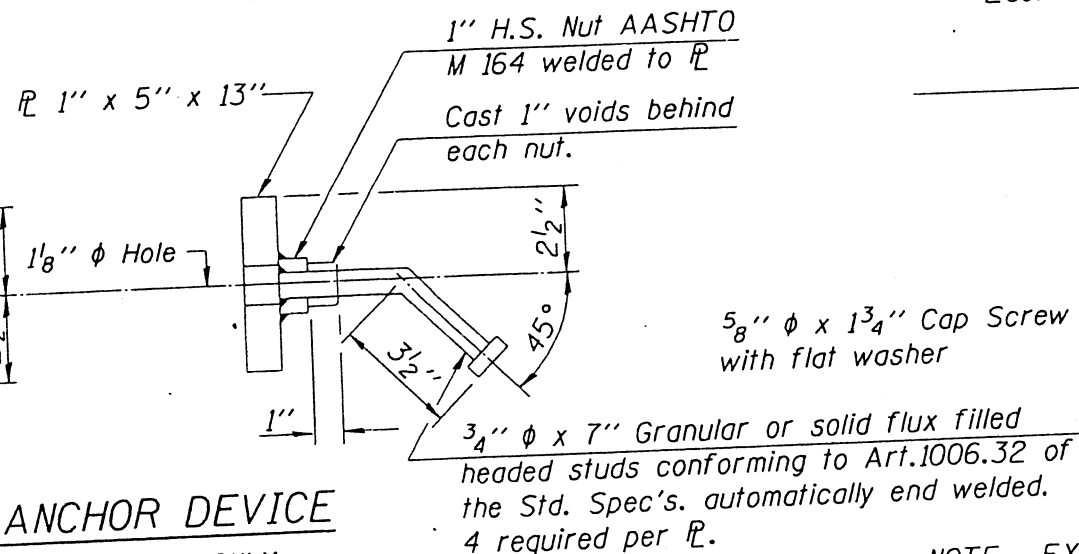
* Threaded areas shall be plugged or blocked off during concrete casting.



BOTTOM ANCHOR DEVICE
FOR INFORMATION ONLY

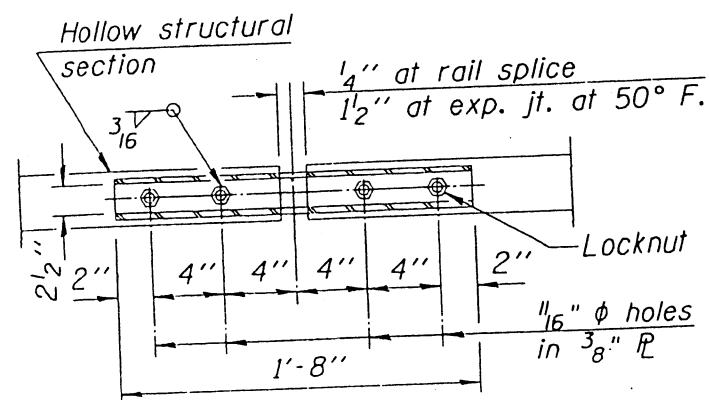


TOP ANCHOR DEVICE
FOR INFORMATION ONLY



SECTIONS AT RAIL SPLICE
FOR INFORMATION ONLY

NOTE: EXISTING SPLICE PLATES AND ANCHORS TO BE RE-USED.



PLAN-BOTT. SPLICE PLATE
TYPICAL
FOR INFORMATION ONLY

Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs of 0° F. Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164. All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232. Any existing 1/4" x 6" x 1'-5" galvanized steel shims shall be re-used to align rail between adjacent spans.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
51		JACKSON	6	6
FED. ROAD DIST. NO. 7	ILLINOIS	DAY LABOR		

•BRIDGE RAIL REPAIR

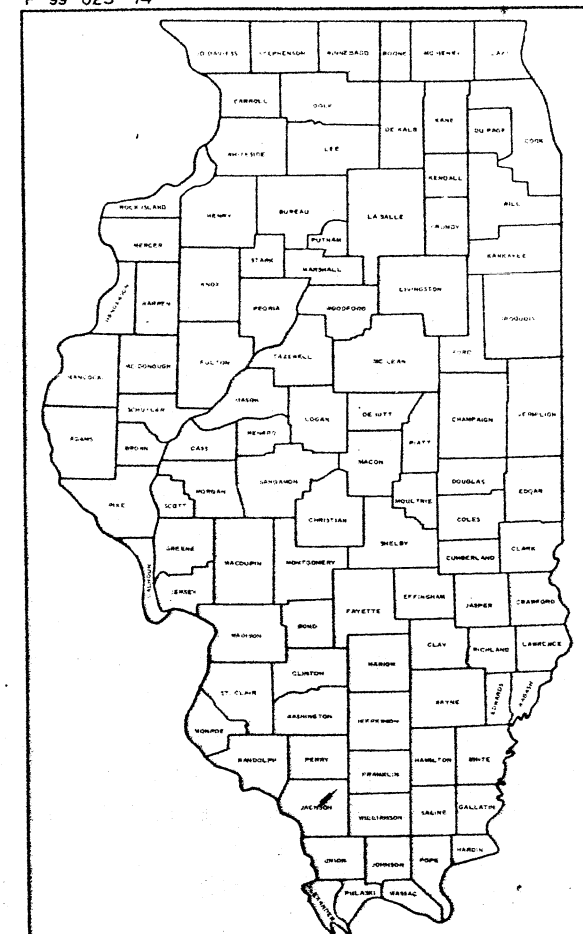
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

F.A. ROUTE 718 (U.S. 51)
PROJECT BR-F-718 (12)
SECTION 3VB-2
JACKSON COUNTY
C-99-079-79

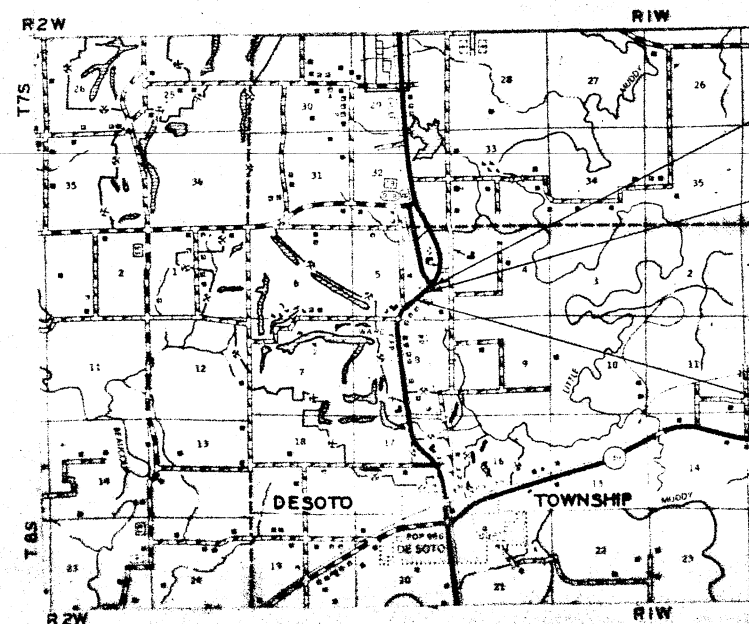
ROUTE	SECTION	COUNTY	TOTAL SHEETS
FA 718	3VB-2	JACKSON	35
F.H.A. REG. 4	ILLINOIS	PROJECT BR-F-718(12)	1

P-99-023-74



LOCATION OF SECTION INDICATED THUS: —

INDEX OF SHEETS - SHEET NO. 4
SUMMARY OF QUANTITIES - SHEET NO. 3



PROPOSED IMPROVEMENT ENDS
STA. 435+00

PROPOSED STRUCTURE - STA. 430+42.72
OPEN ABUTMENT DECK BEAM BRIDGE
SPANS: 2 AT 44'-3"; 1 AT 62'-6"
LENGTH BK-BK. OF ABUTMENTS = 151'-0"

PROPOSED IMPROVEMENT BEGINS
STA. 426+00

SCALE
0 1 MI. 2 MI.

NET LENGTH - ROADWAY = 749.0 FT. = 0.142 MI.
NET LENGTH - BRIDGE = 151.0 FT. = 0.029 MI.
PROJECT LENGTH = 900.0 FT. = 0.171 MI.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
SUBMITTED	October 13, 1981
EXAMINED	Dec 11, 1981
PASSED	Dec 11, 1981
APPROVED	Dec 11, 1981
J. F. Newton DISTRICT ENGINEER William ENGINEER OF PLANS AND CONTRACTS Thomas R. Brigid ENGINEER OF DESIGN [Signature] DIRECTOR, DIVISION OF HIGHWAYS	

9-111

No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. C. P. A. 718	3VB-2	Jackson	35	22
FED. ROAD DIST. NO. 7		ILL. NO. 18	FED. A. D. PROJECT-	

SHEET NO. /
14 SHEETS

GENERAL NOTES

See Proposal for Boring Data.

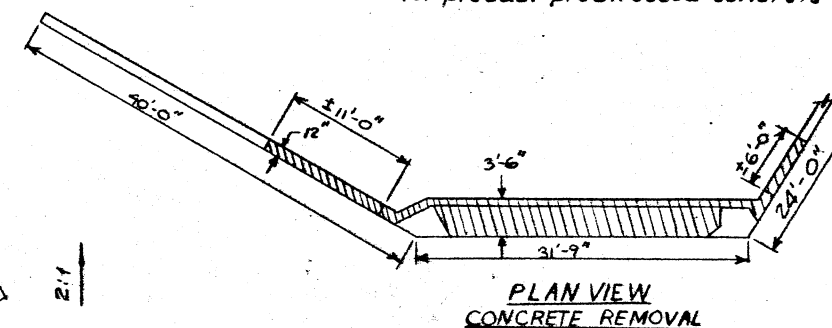
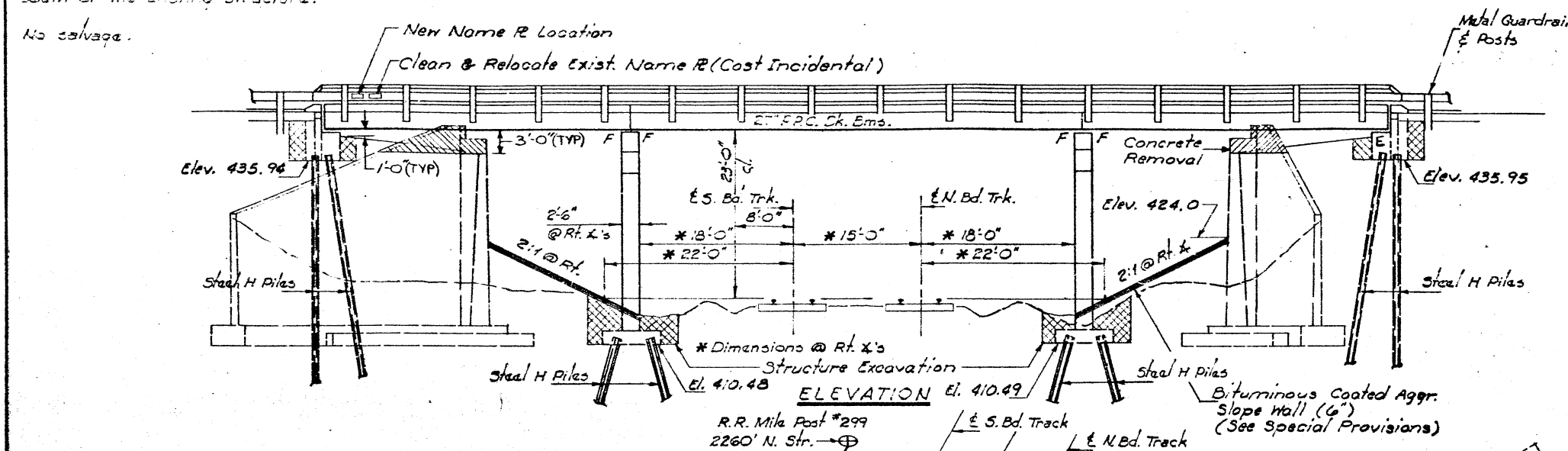
The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specification except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of $\frac{1}{4}$ ".

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

Reinforcement Bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-53 Grade 60.

The contractor shall drive two (2) HPBx36 steel test piles in a permanent location, one each at Pier #1 and East Abutment as directed by the Engineer before ordering the remainder of the piles.

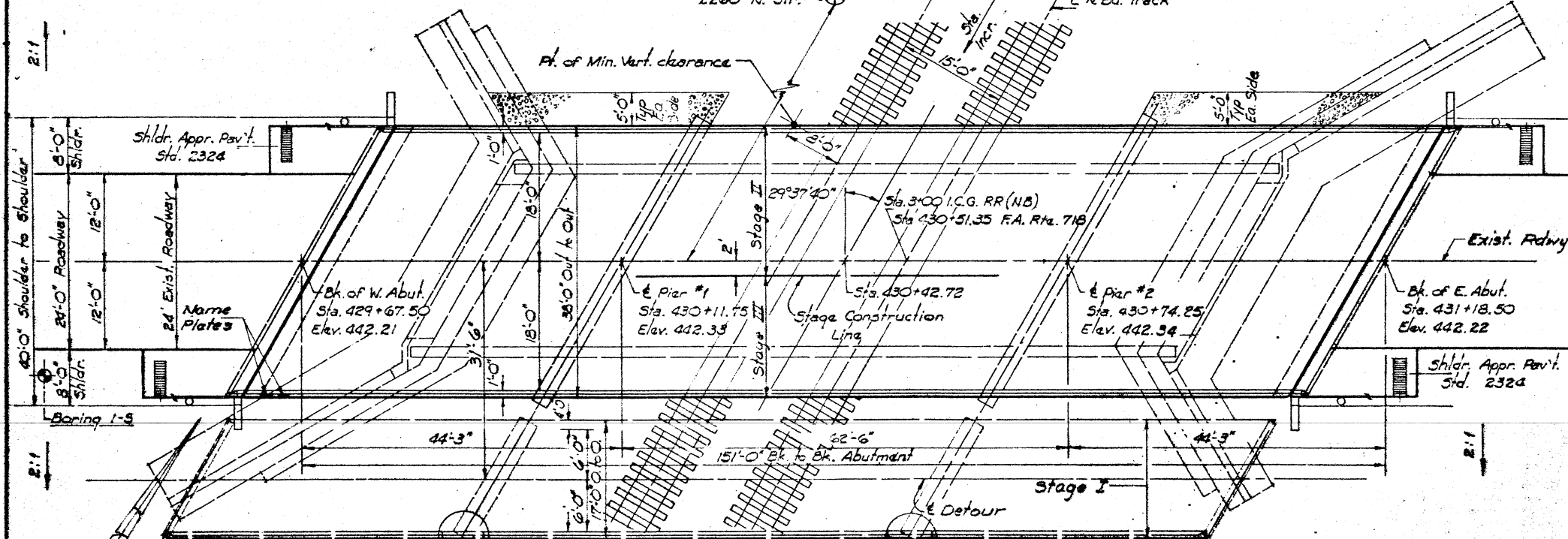
A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Conc. Surf. Cse. Cl. I	Tons	76		76
Structure Excavation	Cu. Yds.		270	270
Waterproofing Membrane Sys.	Sq. Yds.	593		593
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	5589		5589
Class X Concrete	Cu. Yds.	11.5	236.4	247.9
Reinforcement Bars	Lbs.	750	19,310	20,060
Neoprene Expansion Joint (27")	Lin. Ft.	86		86
Removal of Exst. Superstructure	Each	1		1
Concrete Removal	Cu. Yds.		30	30
Protective Coat	Sq. Yds.	50		50
Steel Piles (HP 8 x 36)	Lin. Ft.		746	746
Test Piles (Steel HP 8 x 36)	Each		2	2
Name Plates	Each	1		1
Steel Railing Type T-1	Lin. Ft.	296		296
Temporary Bridge Rail	Lin. Ft.	148		148
Portland Cement Mortar	Lin. Ft.	1454		1454
Fairing Course				
* Bituminous Coated Aggr. Slope Wall (6)	Sq. Yds.		290	290
Pavement Removal	Sq. Yds.		129	129
P.C.C. Pavement (10")	Sq. Yds.		21	21
Pavement Fabric	Sq. Yds.		21	21
Temporary Bridge Complete	Each		1	1

*** See Special Provisions
Δ = Roadway Items



STA. 430+42.72
BUILT 19 BY
STATE OF ILLINOIS
F.A.R.T. 718 SEC. 3VB-2
F.A. PROJ. BR-F-718(12)
LOADING HS20
STR. NO. **

****Structure Number
to be supplied by
District.**

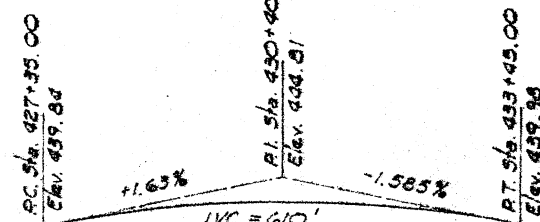
NAME PLATE

See Std. 2113

DESIGNED *Marion Dierckx*
CHECKED *James H. Peters*
J. SCHNEIDER
DRAWN *James*
CHECKED *Marion Dierckx*

EXAMINED *[Signature]*
PASSED
APPROVED

PLAN 8 See Detail "A"
 0 Sht. #2



PROFILE GRADE F.A. 718
(@ Roadway Top
of Class I)

DESIGN STRESSES

Boring 2-9  FIELD UNITS
fc = 3,500 psi
fy = 60,000 psi

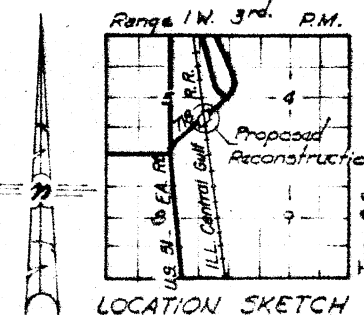
PRECAST PRESTRESSED UNITS

$R_c = 5,000 \text{ psi}$
 $R_{ci} = 4,000 \text{ psi}$
 $R_s = 270,000 \text{ psi (1/2" } \phi \text{ strands)}$
 $R_{si} = 189,000 \text{ psi (1/2" } \phi \text{ strands)}$

LOADING H5 20-44

Allow 25"/sq. ft. for future wearing surface.

Design Specifications: 1977 AASHTO; 1978, 1979 and 1980 Interim Specifications.

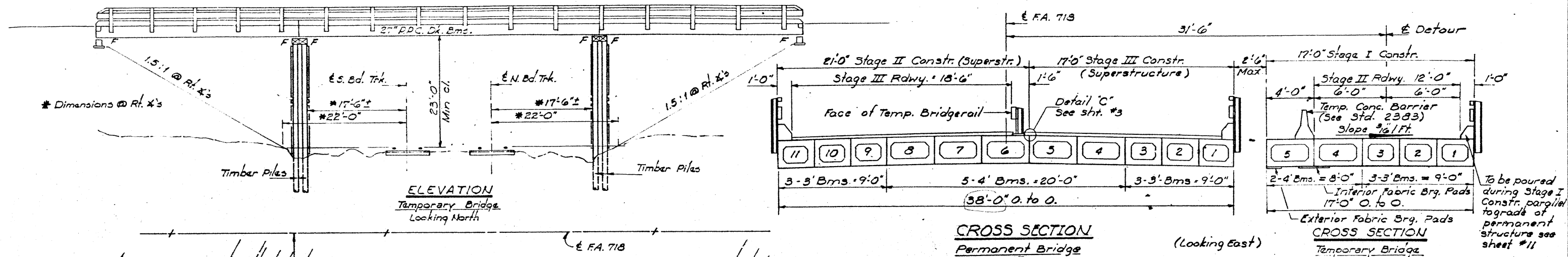


GENERAL PLAN

F.A. Rte. 718 Over ILL. CENTRAL GULF R.R.
F.A. Rte. 718 (U.S. 51) Section 3VB-2
JACKSON COUNTY
Sta. 430+42.72

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	14 SHEETS
FA 718	3VB-2	Jackson	35	23	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



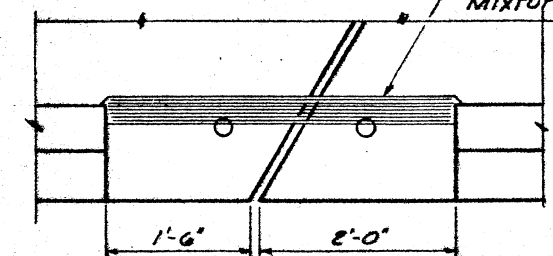
CROSS SECTION
Permanent Bridge
LE

(Looking East)

STAGE CONSTRUCTION DETAILS

Construction Sequence

- Stage I: Build temporary bridge utilizing beams 1 thru 5, numbered as shown above. Maintain traffic over existing structure.
- Stage II: Permanent Br. - Build substructure. Construct Stage II part of the mainline superstructure utilizing beams numbered 6 thru 11, as shown above. Divert traffic over the completed part of the mainline structure.
- Stage III: Complete remaining part of the permanent superstructure by utilizing beams 1 thru 5 (and Type T-1 Rail) from temporary bridge. Dismantle temporary bridge.
- Wrap #2 & #3 bars with felt paper and build temp. curb out of Bituminous Mixture.



DETAIL A

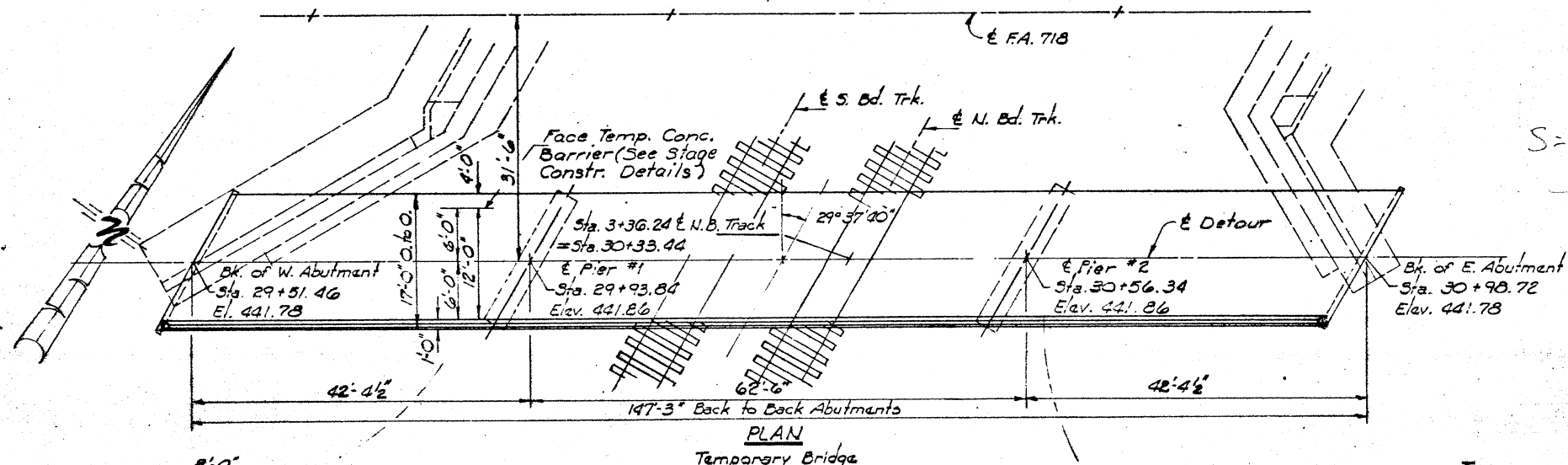
Notes:

The longitudinal shear keys in temporary bridge only, shall be packed with a very dry mortar consisting of a 2:1 mix of sand and portland cement.

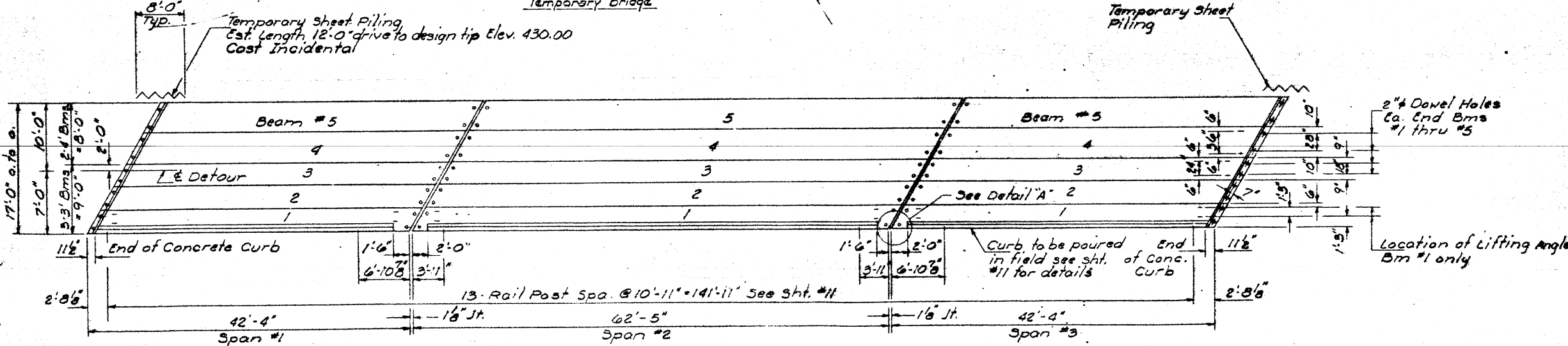
See Sht. #4 for notes concerning transverse tie rod assemblies, except that setting the threads and filling outside pockets with grout shall not be req'd for the Temp. Br.

After beams in temporary bridge are erected, aligned and transverse ties are in place, thread Std. 1" bolts full thread (1 1/2") into lifting angle inserts, tighten snugly.

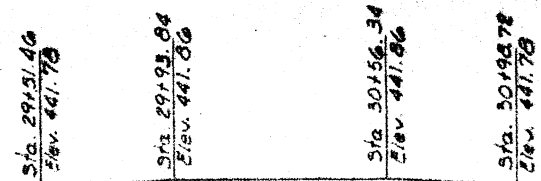
Temporary Steel Sheet Piling shall be provided at locations indicated on the plans and shall meet the approval of the Engineer.



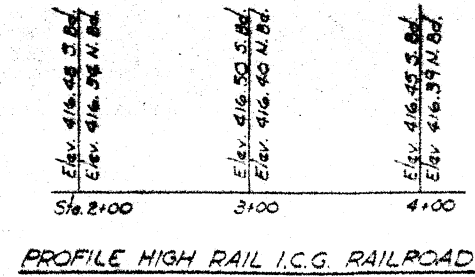
PLAN
Temporary Bridge



FRAMING PLAN



PROFILE GRADE
(E Detour)



PROFILE HIGH RAIL I.C.G. RAILROAD

DESIGNED	Wanda Lindley
CHECKED	Wanda Lindley
DRAWN	pas
CHECKED	Wanda Lindley

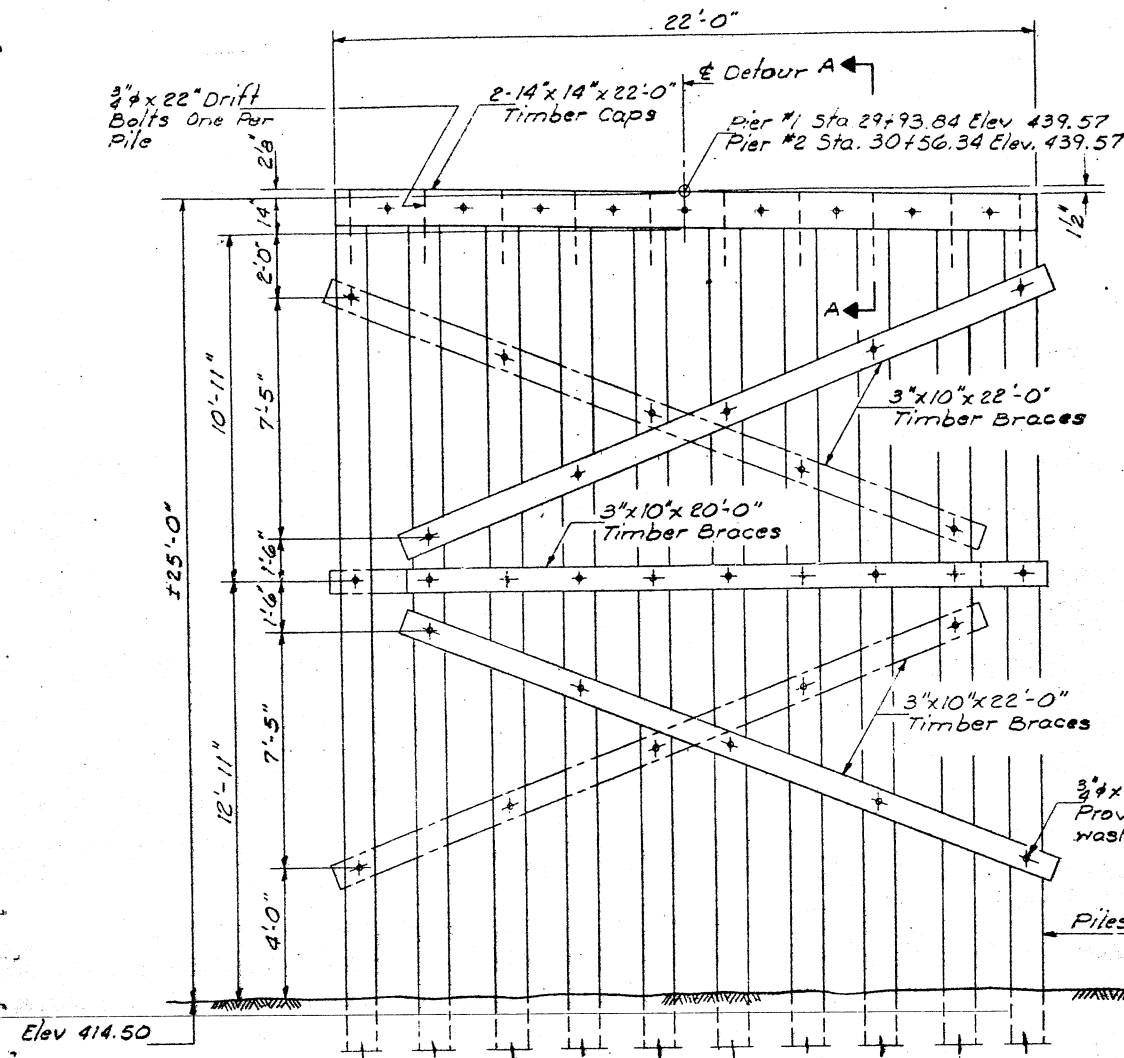
EXAMINED	Wanda Lindley
PASSED	
APPROVED	

TEMPORARY BRIDGE
FA. Rte. 718 Over ILL. CENTRAL GULF R.R.
FA. Rte. 718 (U.S. 51) Section 3VB-2
JACKSON COUNTY
Sta. 430+42.72

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R. 718	3VB-2	Jackson	35	24
P.E. 718				

SHEET NO. 3
14 SHEETS

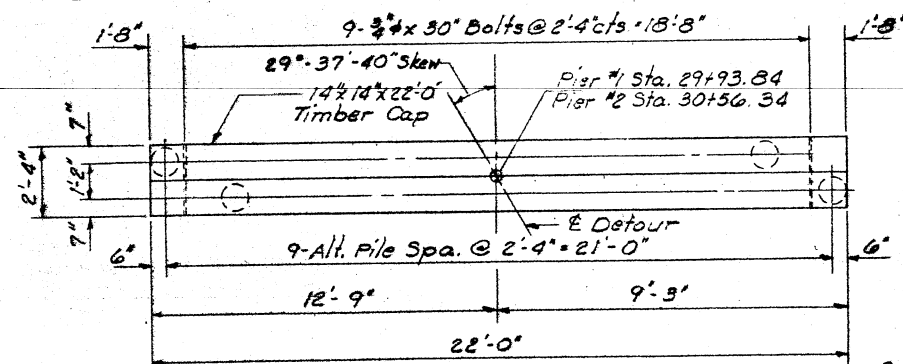


PILE DATA

Type: Untreated Timber Piles (12" Dia.)
Capacity: Drive to ± 15 Tons (Do not overdrive)
Est. Length: 37 Ft.
No. Req'd: 10 - Pier #1
10 - Pier #2

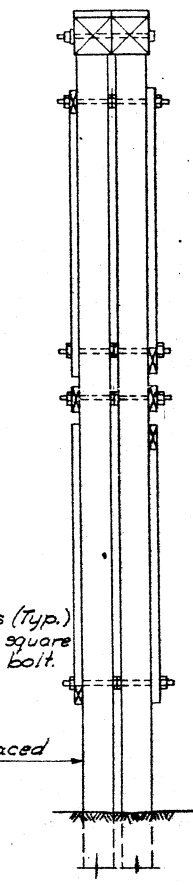
ELEVATION

(Pier)
(Looking East)

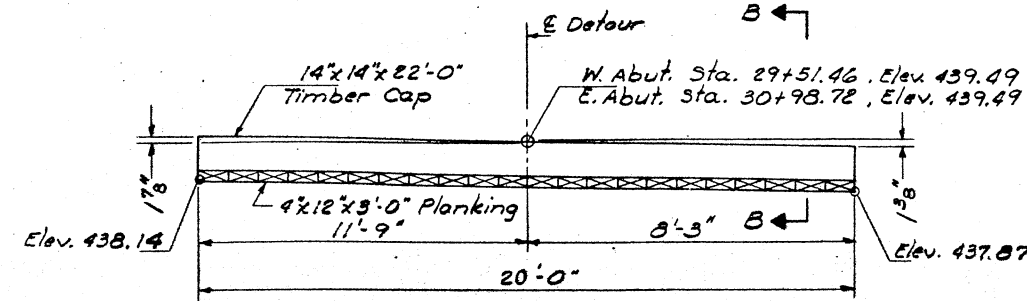


PLAN

Countersink Drift Bolts to provide smooth bearing surface

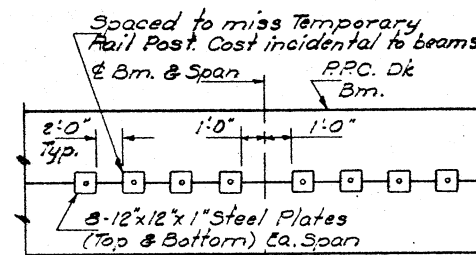


END VIEW

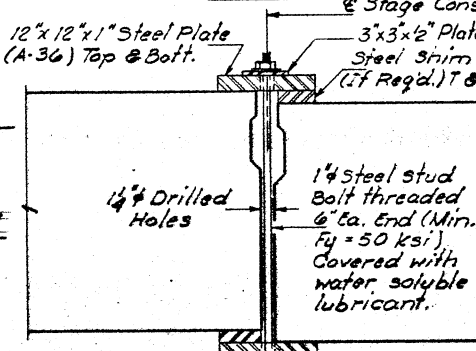


ELEVATION

W. Abut. - Looking East
E. Abut. - Looking East

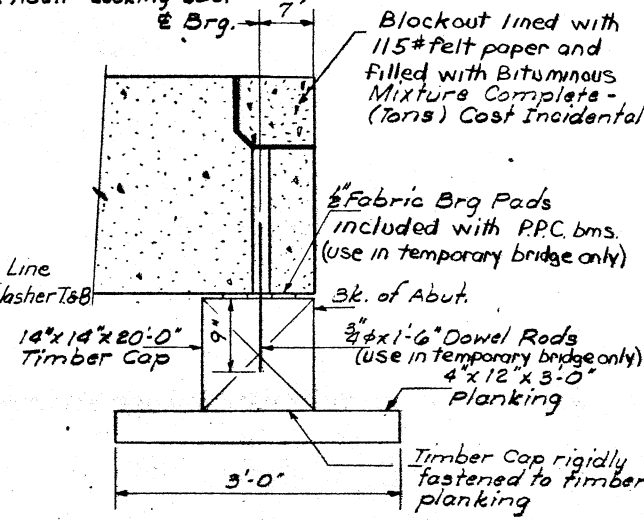


PLAN



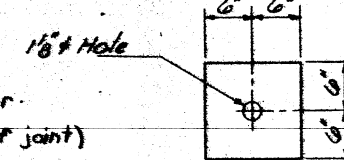
SECTION A-A

At Rt. 63



SECTION B-B

Allowable Soil Bearing Pressure = 1.25 Ton/Sq. Ft.



12" x 12" x 1" STEEL PLATE

Note: Key at Stage Construction Line shall be the last key way to be grouted, and after traffic has been redirected as far as possible from the Stage Construction Line. (See Special Provisions for Stage Construction P.P.C. Deck Beams).

* BILL OF MATERIAL

ITEM	UNIT	TOTALS
Untreated Timber 14"x14"	FBM	2091.
" " 3"x10"	FBM	640.
" " 4"x12"	FBM	480.
Untreated Piles 30"-45"	Lin. Ft.	740.
Hardware	Lbs	285.
Bit. Mixture Complete	Tons	1.8
Temporary sheet piling	Sq. Ft.	192

* for information only

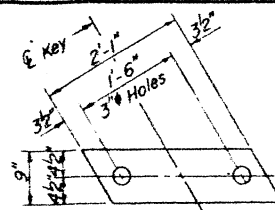
SUBSTRUCTURE
TEMPORARY BRIDGE
I.A. RT. 718 - SEC. 3VB-2
JACKSON COUNTY
STA. 430+42.72

DESIGNED: Alexander Bieda
CHECKED: Kenneth Patton
A.S.
DRAWN: J. SCHNEIDER
CHECKED: Alexander Bieda

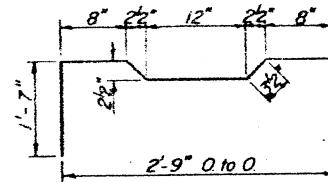
EXAMINED: [Signature]
PASSED: [Signature]
APPROVED: [Signature]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGN NO.	SECTION	COUNT	TOTAL SHEETS	SHEET NO.
718	3VB-2	Jackson	35	27
SHEET NO. 6				
14 SHEETS				

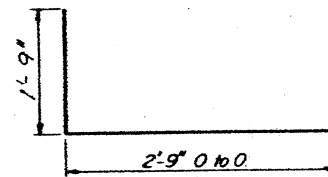


FABRIC BEARING PAD
(Interior)

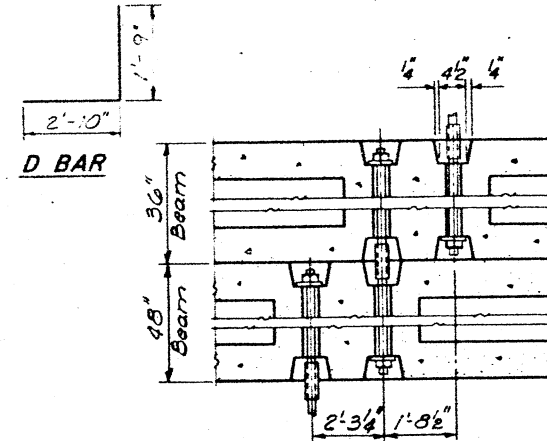


A1 BAR

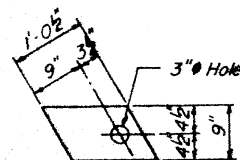
D BAR



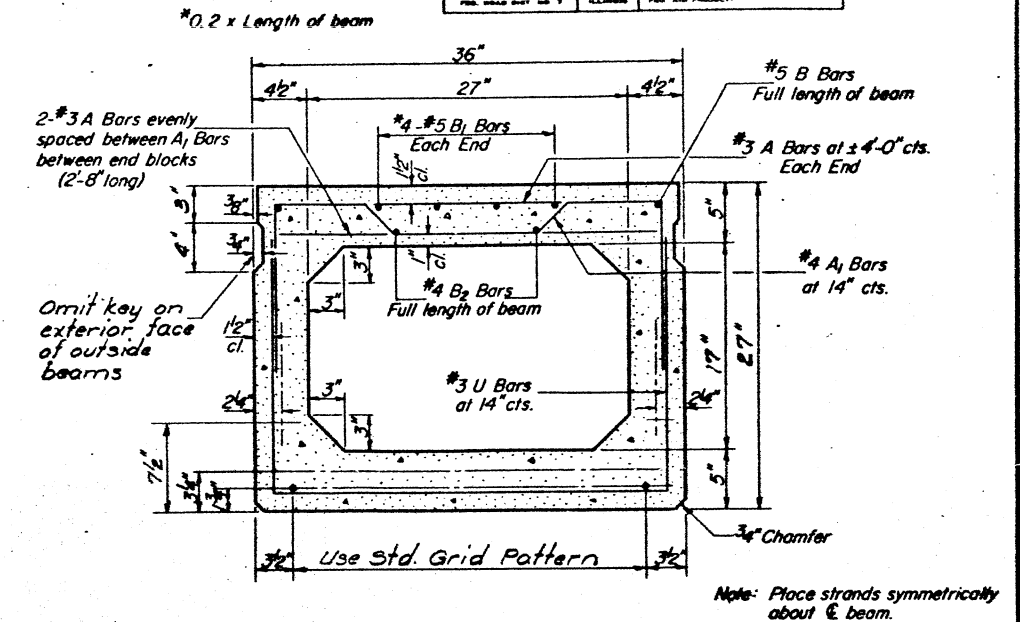
U & U1 BARS



TYPICAL TRANSVERSE TIE ASSEMBLY

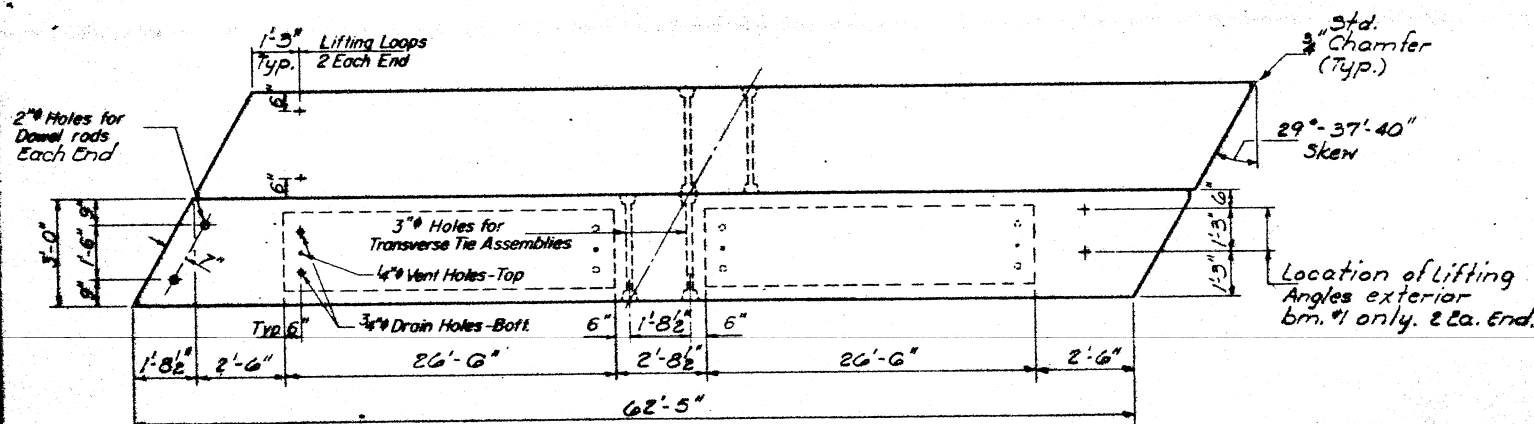


FABRIC BEARING PAD
(Exterior)

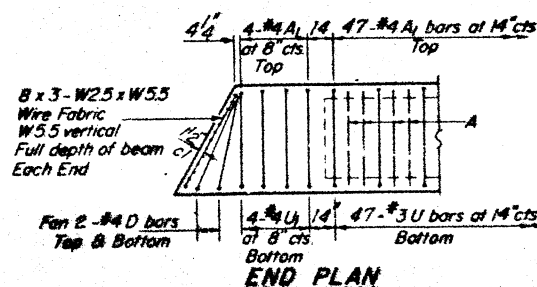


TYPICAL SECTION

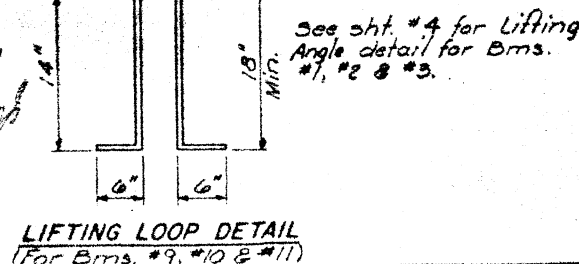
16-1/2" Strands Each Strand Stressed to 28,900 Lbs.
3-Strands 1-3/4" up, 6-Strands 3/4" up, 2-Strands 7/8" up



PLAN



END PLAN



LIFTING LOOP DETAIL
(For Brms. #9, #10 & #11)

NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq in. Lifting loops shall be 5/8" diameter, 6 x 25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 33,000 lbs. or 2-1/2" 270 ksi strands, as shown. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Reinforcement bars shall conform to AASHTO: M-31 or M-53, Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. For Superstructure Details & Cross Section see sht. #8. For Section thru Curb see sht. #4. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the keyway.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
1	1	1/2"	62'-5"	Rectangular
2	1	1/2"	26'-0"	Rectangular
3	1	1/2"	26'-0"	Rectangular
4	1	1/2"	26'-0"	Rectangular
5	1	1/2"	26'-0"	Rectangular
6	1	1/2"	26'-0"	Rectangular
7	1	1/2"	26'-0"	Rectangular
8	1	1/2"	26'-0"	Rectangular
9	1	1/2"	26'-0"	Rectangular
10	1	1/2"	26'-0"	Rectangular
11	1	1/2"	26'-0"	Rectangular
12	1	1/2"	26'-0"	Rectangular
13	1	1/2"	26'-0"	Rectangular
14	1	1/2"	26'-0"	Rectangular
15	1	1/2"	26'-0"	Rectangular
16	1	1/2"	26'-0"	Rectangular
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95	1	1/2"	26'-0"	Rectangular
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97	1	1/2"	26'-0"	Rectangular
98	1	1/2"	26'-0"	Rectangular
99	1	1/2"	26'-0"	Rectangular
100	1	1/2"	26'-0"	Rectangular

** Includes 562 Sq. Ft. to be used on Temporary Bridge.

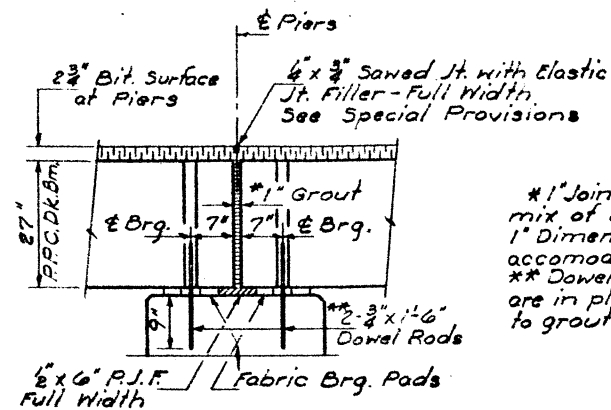
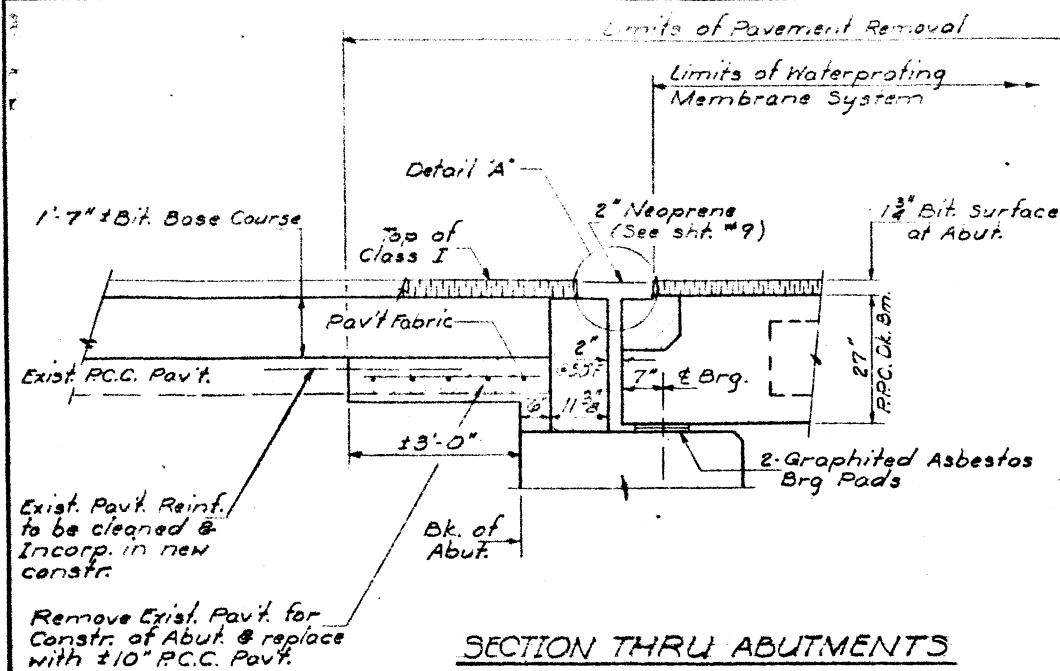
SUPERSTRUCTURE-SPAN 2
F.A. RT. 718 SEC. 3VB-2
JACKSON COUNTY
STA. 430+42.72

DESIGNED	Myron A. Ludtke
CHECKED	Myron A. Ludtke
DRAWN	J. SCHNEIDER
CHECKED	Myron A. Ludtke

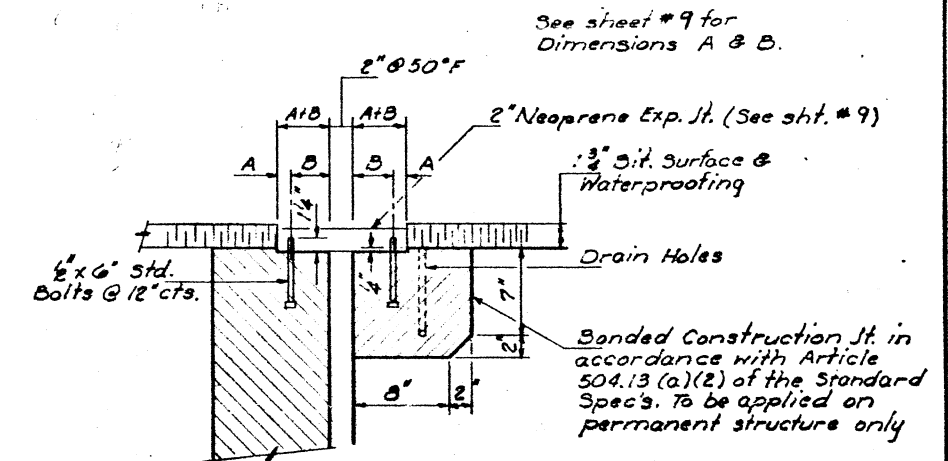
EXAMINED	Myron A. Ludtke
PASSED	Myron A. Ludtke
APPROVED	Myron A. Ludtke
DIRECTOR OF HIGHWAYS	Myron A. Ludtke

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
718	3VB-2	Jackson	35	29
SHEET NO. 8				
14 SHEETS				

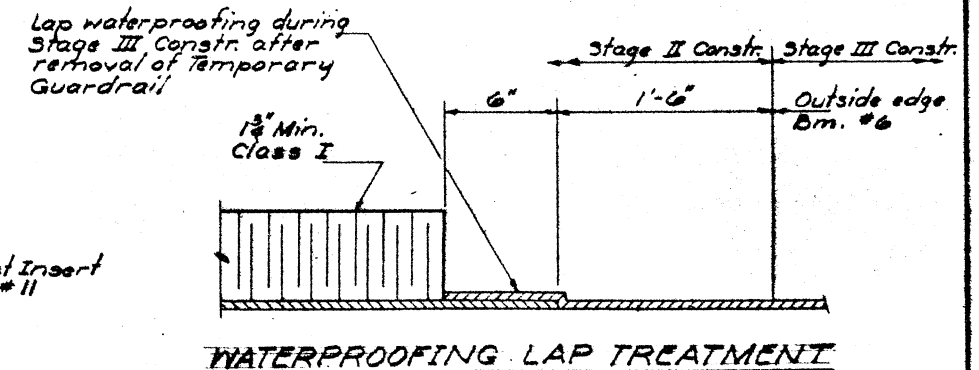
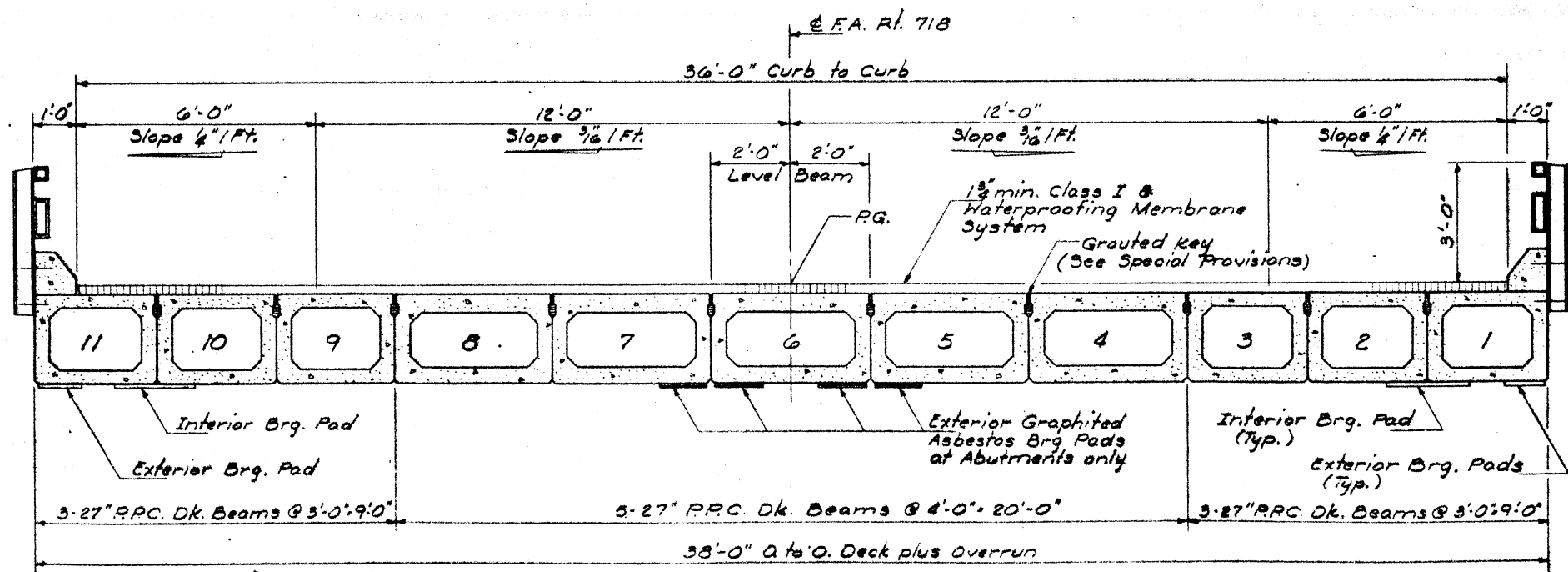


* 1" Joint shall be packed with a very dry mix of 2:1 sand and P.C. mortar.
1" Dimension may vary plus or minus to accommodate tolerance in beam lengths.
** Dowel Rods to be grouted after beams are in place and allowed to cure prior to grouting the shear keys.



NOTE: Dimensions are at right angles.
Hatched areas to be poured after beams have been erected and joints grouted.
Ends of beams shall be aligned at the expansion joints. Any linear variation in the beam lengths shall be placed at the fixed joint.
See End of Beam Details sheets #4 & #5 for reinforcement.

Hatched Area Quantities:
on the beam are billed with superstructure sht. #4
on the abutment are billed with abutment shts #12 & #13



DESIGNED Alexander Dindig
CHECKED Kenneth Patton
AS
DRAWN J. SCHNEIDER
CHECKED Alexander Dindig

EXAMINED
PASSED
APPROVED

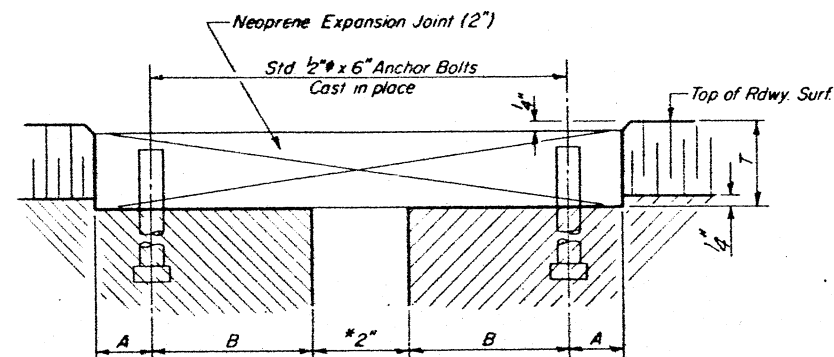
SUPERSTRUCTURE DETAILS
F.A. RT. 718 SEC. 3VB-2
JACKSON COUNTY
STA. 430+42.72

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
718	3VB-2	JACKSON	35	30
SHEET NO. 9 14 SHEETS				

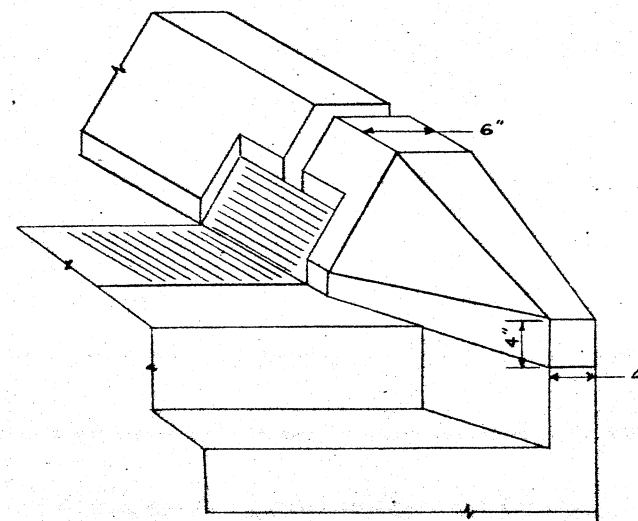
ALTERNATE NEOPRENE EXPANSION JOINTS (2")
(See Special Provisions)

Model	Supplier	Blockout Dimensions
TRANSFLEX, MODEL 200A	General Tire Company	$T = 1\frac{13}{16}"$, $A = \frac{7}{8}"$, $B = 3\frac{5}{16}"$
FEL-SPAN, MODEL T-30 Set joint seal 15g at 50°F.	Fel-Pro Building Products Inc.	$T = 1\frac{3}{4}"$, $A = 2"$, $B = 2\frac{13}{16}"$
WABO ELASTODAM, TYPE 300 Set joint seal 15g at 50°F.	Watson Bowman Associates, Inc.	$T = 1\frac{3}{4}"$, $A = 2"$, $B = 2\frac{13}{16}"$
WABO ALU-STRIP, TYPE III S300 Set joint seal 12" at 50°F. Permitted for up to 50° skew.	Watson Bowman Associates, Inc.	$T = 1\frac{3}{4}"$, $A = 1\frac{3}{8}"$, $B = 2\frac{3}{4}"$
LOW PROFILE ONFLEX-25 Set joint seal 12" at 50°F. Roadway bolt channel shall be filled with approved grout. Permitted for up to 50° skew.	Structural Accessories, Inc.	$T = 1\frac{3}{4}"$, $A = 1\frac{3}{8}"$, $B = 2\frac{3}{8}"$

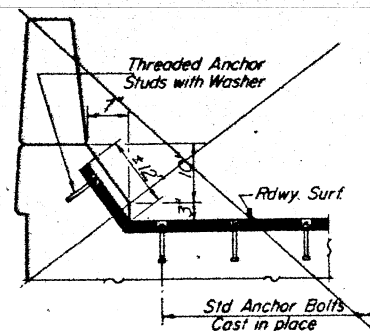


CROSS SECTION
At 50°F
Dimensions are at right angles.

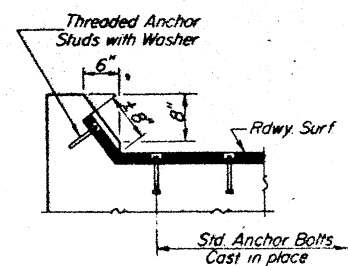
NOTE:
Joint openings shall be adjusted in accordance with Article 503.07(c) of the Std Spec's. when the deck is poured at an ambient temperature other than 50°F.



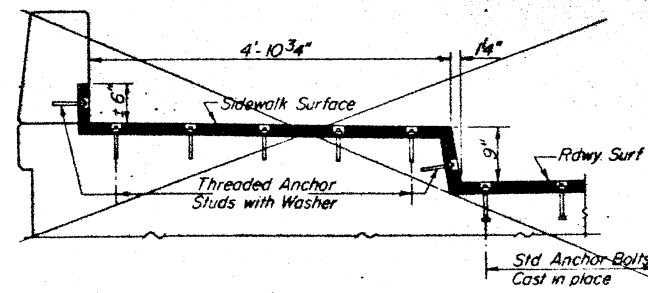
CURB & EXP. JT. DETAIL @ ABUTS



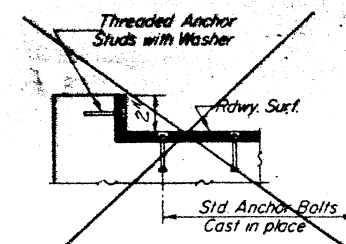
AT CURBS



TYPICAL END TREATMENTS



AT SIDEWALK



DESIGNED	Wendy A. Duda
CHECKED	Wendy A. Duda
DRAWN	J. SCHNEIDER
CHECKED	Wendy A. Duda

EXAMINED	July 16, 1981
PASSED	
APPROVED	
DIRECTOR OF HIGHWAYS	

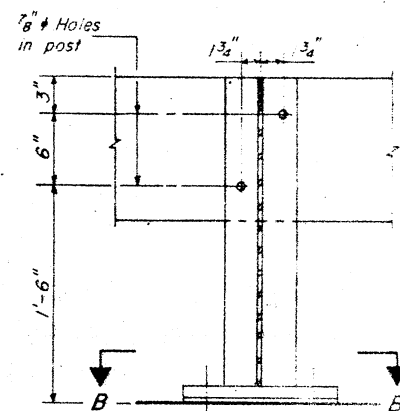
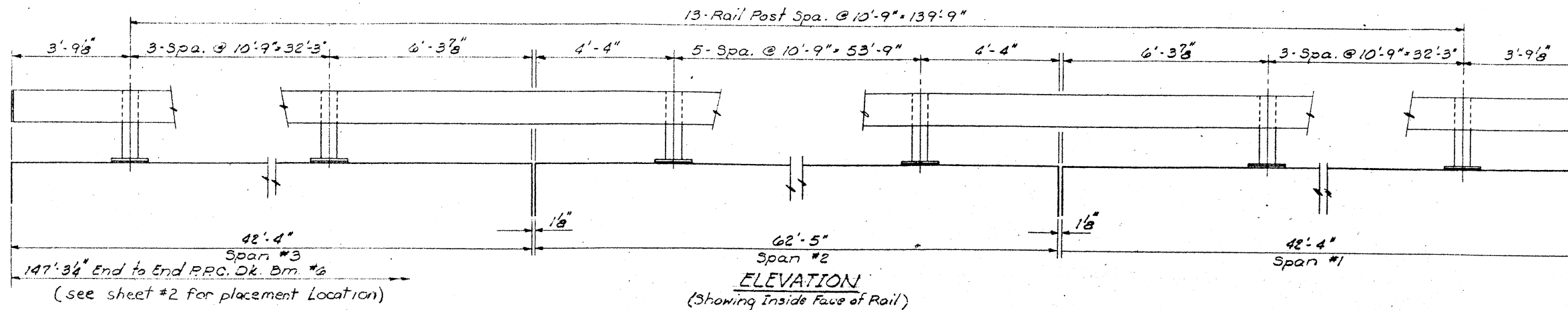
NEOPRENE EXPANSION JOINTS (2")
FOR EXPANSION LENGTH OF DECK = 0 to 160 ft.

E.A. RT 718 SEC. 3VB-2
JACKSON COUNTY
STA. 430+42.72

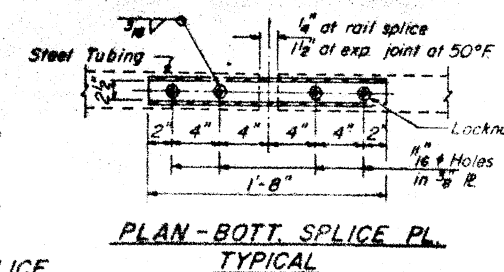
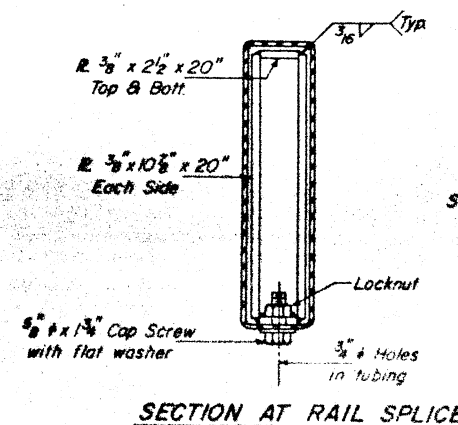
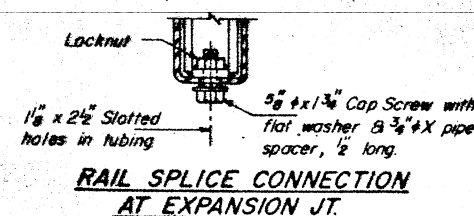
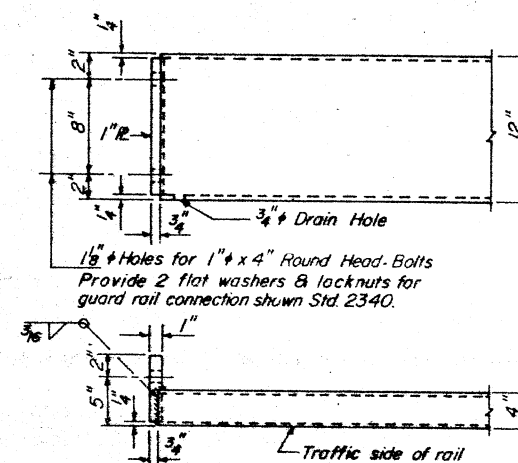
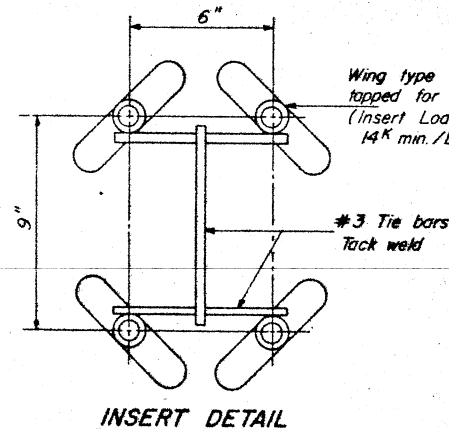
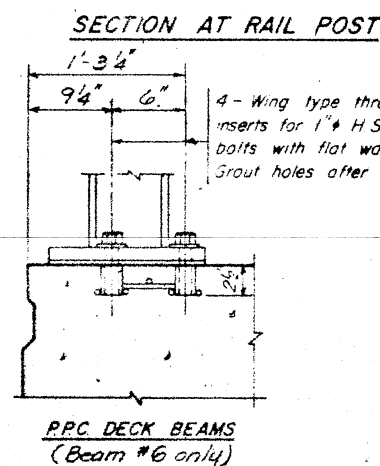
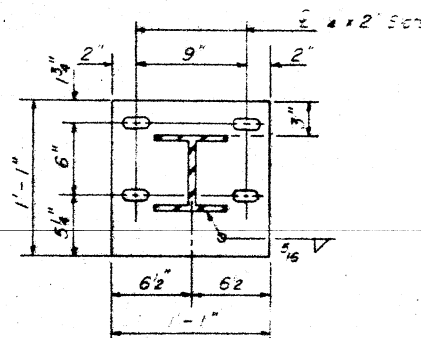
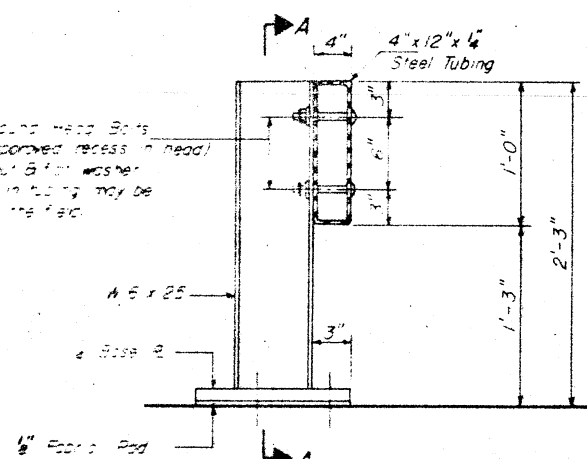
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RT. 718	3VB-2	Jackson	35	31
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SHEET NO. 10
14 SHEETS



2-3/4" x 6" Round Head Bolts
with 3/4" x 6" flat washer
in head
8" Holes in post may be
drilled in the field



NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B Structural Steel Tubing.

All other steel shapes and plates shall conform to the requirements of AASHTO M-183 except posts shall conform to AASHTO M-223 Grade 50.

Bolts, cap screws, and nuts shall conform to the requirement of ASTM designation A-307 except for high strength bolts, threaded rods, nuts and washers noted which shall conform to AASHTO M-164.

The bridge rail shall receive one shop coat of a steel prime paint. The 1" high strength bolts or threaded rods used to connect the railposts shall be tightened in accordance with Article 507.04(g)(3) of the Standard Specification.

See Special Provisions for Temporary Bridge Rail.

BILL OF MATERIAL

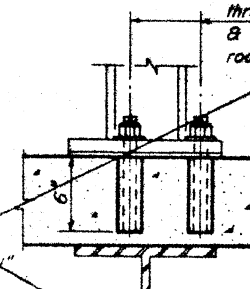
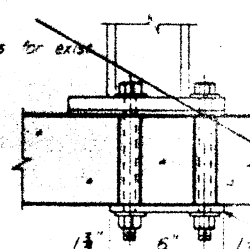
Item	Unit	Quantity
Temporary Bridge Rail	Lin. Ft.	143

TEMPORARY BRIDGE RAIL
F.A. RT. 718 SEC. 3VB-2
JACKSON COUNTY
STA. 430+42.72

DESIGNED *Alexander Dushoff*
CHECKED *Kenneth Patton Stutler*
DRAWN *J. SCHNELLER*
CHECKED *Alexander Dushoff*

EXAMINED *John W. 10/91*
PASSED
APPROVED

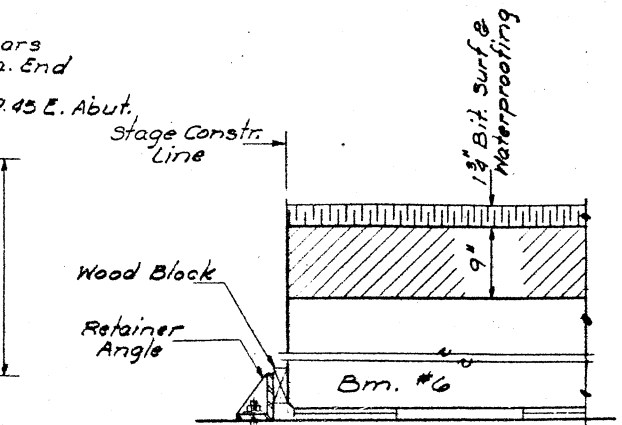
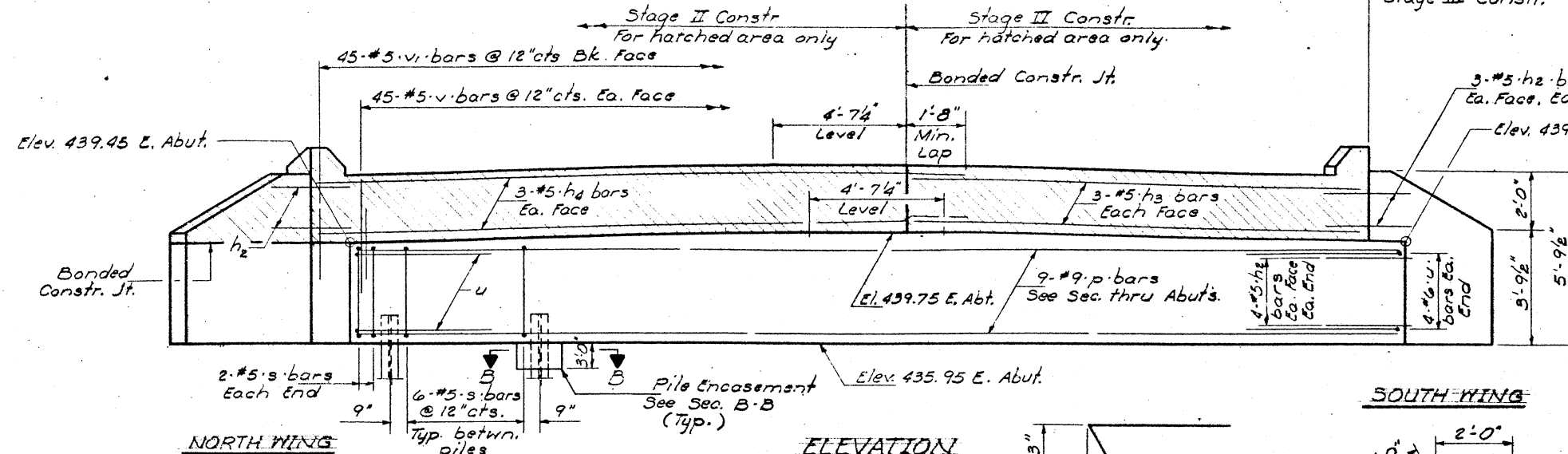
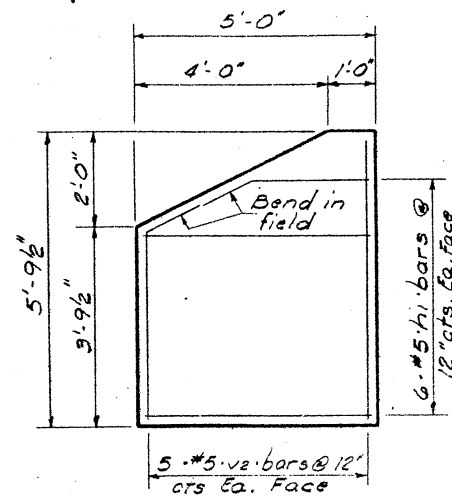
*Drilled holes for existing deck



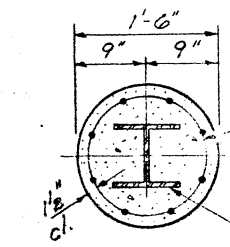
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S. 718	3VB-2	Jackson	35	33
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 12
14 SHEETS

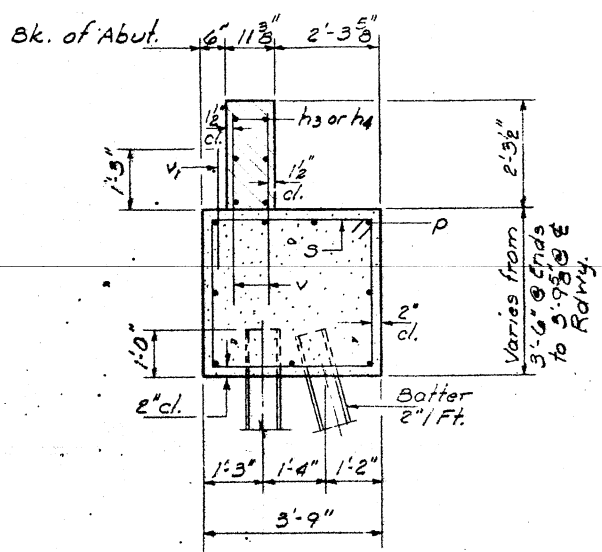


WINGWALL ELEVATION

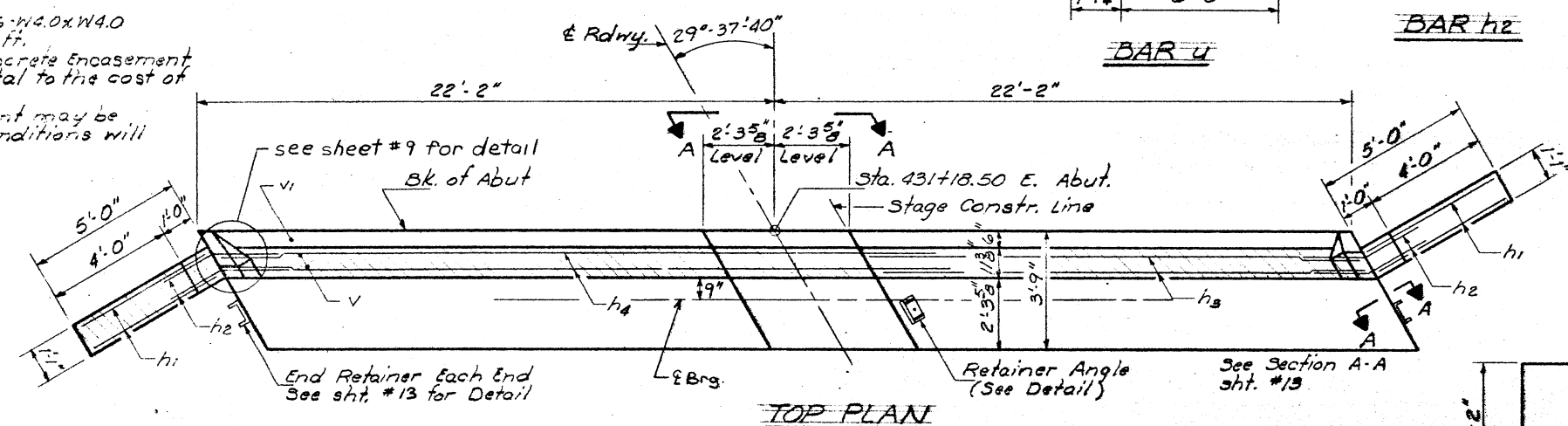


Weided wire fabric 6x6-W4.0xW4.0 weighting 58*/100 sq. ft. The cost of Class X Concrete Encasement and Reinf. is incidental to the cost of furnishing piles. Forms for encasement may be omitted when soil conditions will permit.

SECTION 3-3



SEC. THRU ABUT'S



PILE DATA

Type Steel (HP 8x36)
Capacity Drive to Refusal
Est. Length 35 Ft.
No. Req'd. 6 + 1 Test Pile

NOTES:
Hatched area to be poured after beams are in place.
All edges shall have standard 3/4" chamfer.

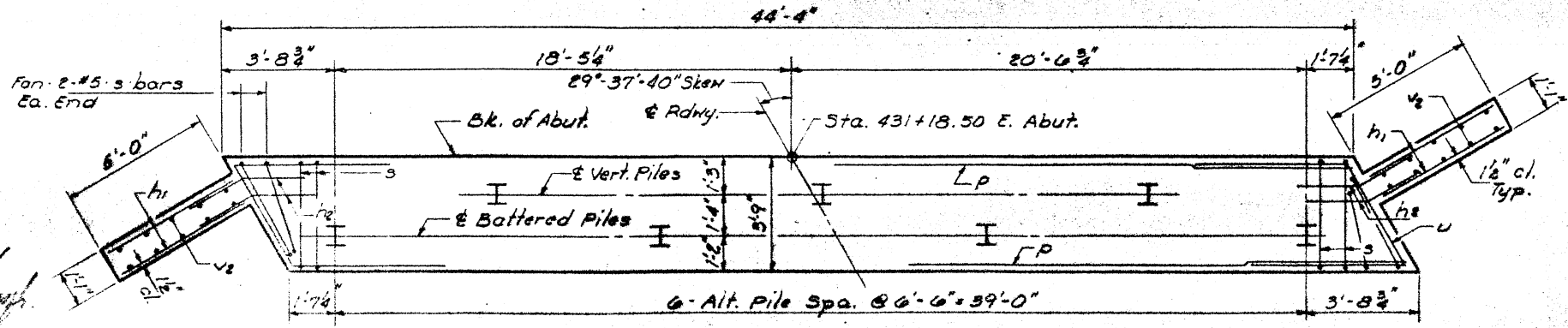
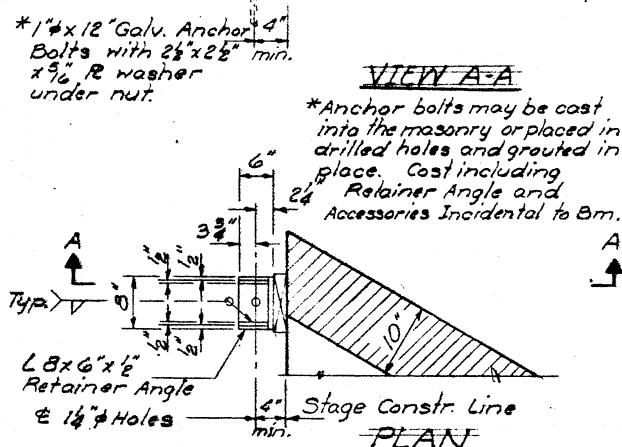


FIG. PLAN



NOTE: After block-outs are poured and cured during Stage II Constr. the retainer angles and anchor bolts shall be removed.

BILL OF MATERIAL

BAR	No.	SIZE	LENGTH	SHAPE
h1	24	#5	4'-9"	—
h2	28	#5	4'-0"	—
h3	6	#5	19'-9"	—
h4	6	#5	26'-0"	—
p	9	#9	44'-0"	—
s	44	#5	14'-0"	□
u	8	#6	15'-6"	□
v	90	#5	4'-0"	—
vi	45	#5	2'-6"	—
ve	20	#5	5'-0"	—
Class X Concrete				Cu. Yds. 28.2
Reinforcement Bars				Lbs. 3290.
Steel Piles (HP 8x36)				Lin. Ft. 210.
Test Piles (Steel HP 8x36)				Each 1

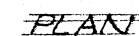
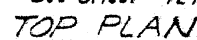
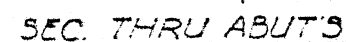
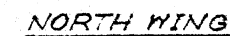
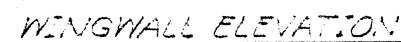
EAST ABUTMENT
F.A. RT. 718 SEC. 3VB-2
JACKSON COUNTY
STA. 430+42.72

DESIGNED Alexander Luchko
CHECKED Kenneth A. Scheller
DRAWN J. SCHNELLER
CHECKED Alexander Luchko

EXAMINED
PASSED
APPROVED

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
718	3VB-2	Jackson	35	34
FED. ROAD DIST. NO. 7		COUNTY	FED. AID PROJECT	

SHEET NO. 13
14 SHEETS



BAR	No	SIZE	LENGTH	SHAPE
#1	24	#5	4'-9"	—
#2	28	#5	4'-0"	—
#3	6	#5	19'-9"	—
#4	6	#5	26'-0"	—
0	9	#9	44'-0"	—
3	44	#5	14'-0"	□
U	8	#6	15'-6"	□
V	90	#5	4'-0"	—
V1	45	#5	2'-6"	—
V2	20	#5	5'-0"	—
Class Y Concrete			Cu.Yds.	28.2
Reinforcement Bars			Lbs.	3290.
Steel Piles (4" 8 x 36)			Lin Ft.	266.

3'-8"

3'-5"

BAR 5



WEST ABUTMENT
F.A. RT. 718 SEC. 3VB-2
JACKSON COUNTY
STA. 430+42.72

DESIGNED Alexander Lindholm
CHECKED Kenneth Patton Hunt
A.S.
DRAWN J. SCHVETTER
CHECKED Alexander Lindholm

July 1951
EXAMINED
PASSED
APPROVED

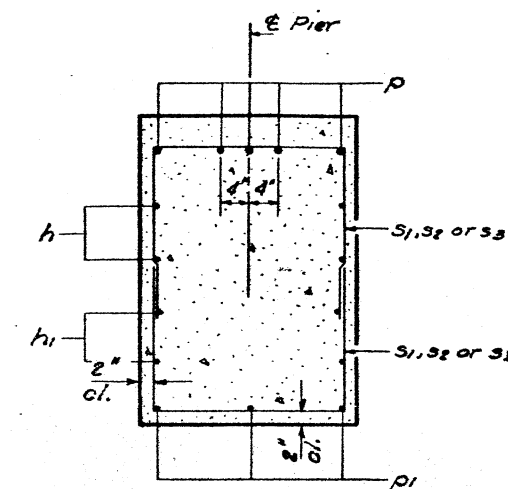
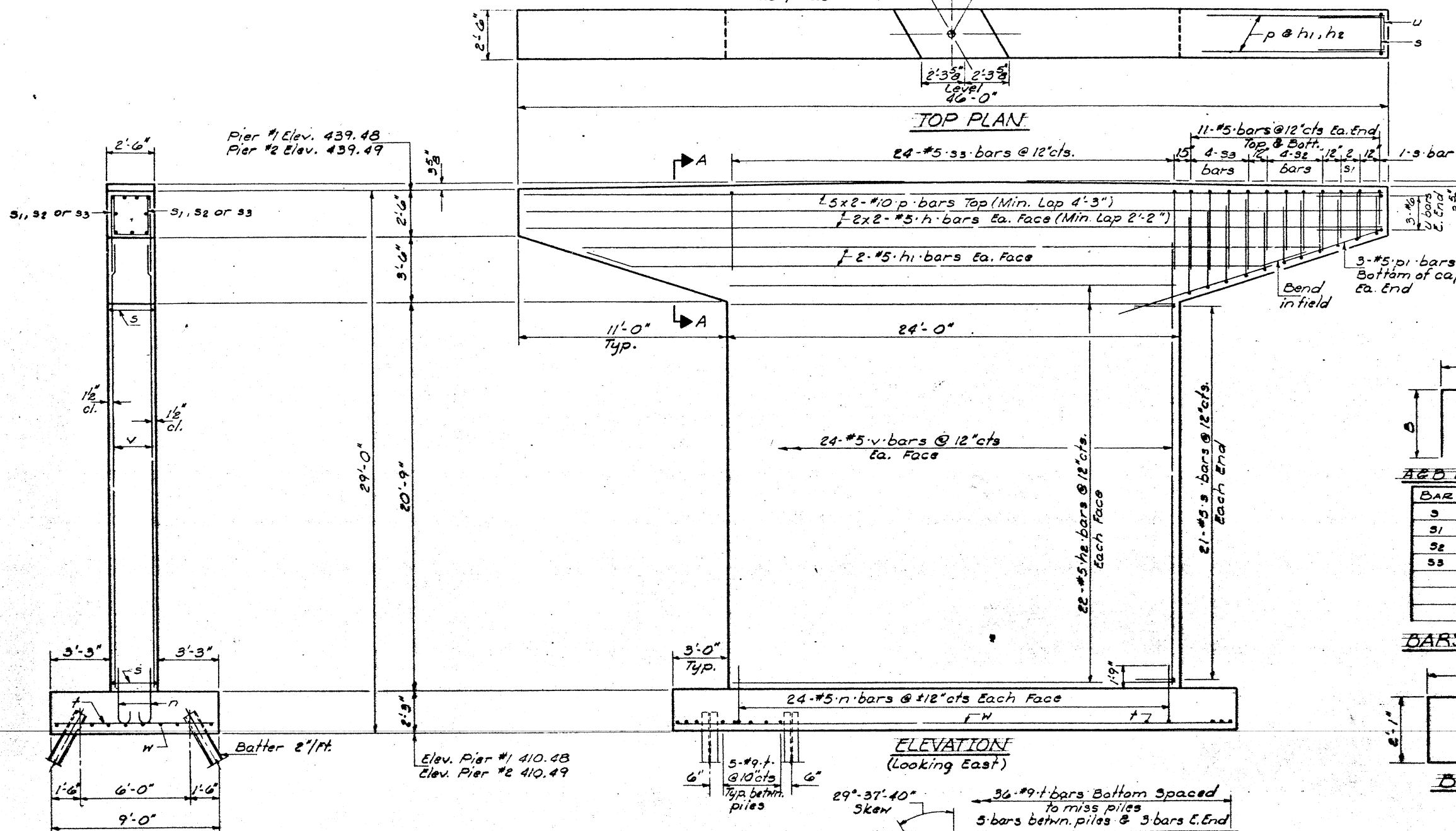
- NOTES:
- Space reinforcement in cap to miss dowel rods.
 - All edges shall have standard 3" chamfers except as noted.
 - Bars indicated thus 5x2-#5...etc., indicate 5 lines of bars with 2 lengths per line.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

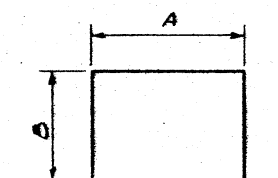
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
718	3VB-2	Jackson	35	35

SHEET NO. 14
14 SHEETS

29° 37' 40" Skew
Pier #1 Sta. 430+11.75, Elev. 439.78
Pier #2 Sta. 430+74.25, Elev. 439.79
Symm. about $\bar{E}$ except as noted



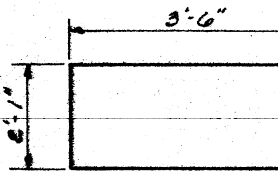
SECTION A-A



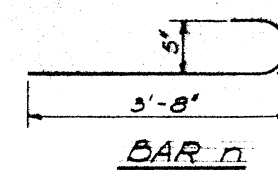
A & B DIMENSIONS

BAR	A	B
5	2'-2"	2'-2"
51	2'-2"	2'-6"
52	2'-2"	3'-2"
53	2'-2"	4'-0"

BAR 51, 52 & 53



BAR U



BAR N

BILL OF MATERIAL

BAR	No.	SIZE	LENGTH	SHAPE
h	16	#5	25'-0"	—
h1	8	#5	36'-0"	—
h2	88	#5	23'-9"	—
n	96	#5	4'-3"	—
p	20	#10	25'-0"	—
pi	12	#5	14'-0"	—
s	92	#5	6'-6"	□
51	16	#5	7'-2"	□
52	32	#5	8'-6"	□
53	80	#5	10'-2"	□
t	72	#9	8'-9"	—
u	12	#6	9'-1"	□
v	96	#5	24'-0"	—
w	16	#5	29'-9"	—
Class X Concrete Cu. Yds.				180.
Reinforcement Bars Lbs.				12730.
Steel Piles (HP 8 x 36) Lin. Ft.				270.
Test Piles (Steel) Each				1

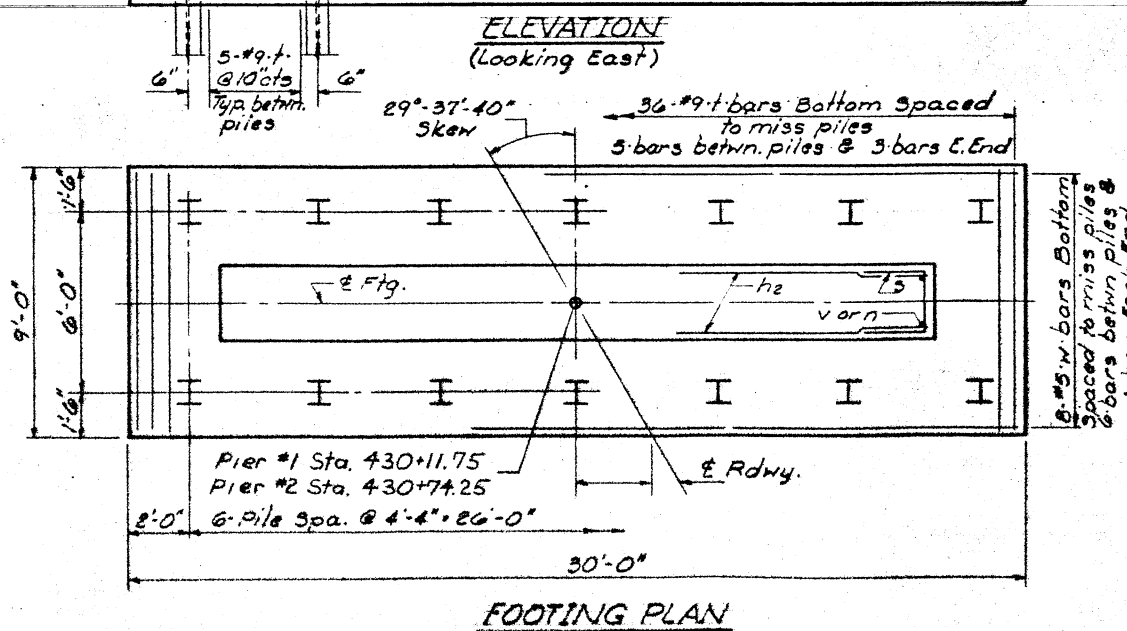
END VIEW

PILE DATA

Type HP 8 x 36
Capacity Drive to refusal
Est. Length 10 Ft.
No. Req'd. 13+1, Test Pile - Pier #1
14 Pier #2

DESIGNED *Alexander Lindley*
CHECKED *James R. Patterson*
DRAWN J. SCHNEIDER
CHECKED *Alexander Lindley*

EXAMINED *James R. Patterson*
PASSED
APPROVED



FOOTING PLAN

PIERS #1 & #2
F.A. RT. 718 SEC. 3VB-2
JACKSON COUNTY
STA. 430+42.72