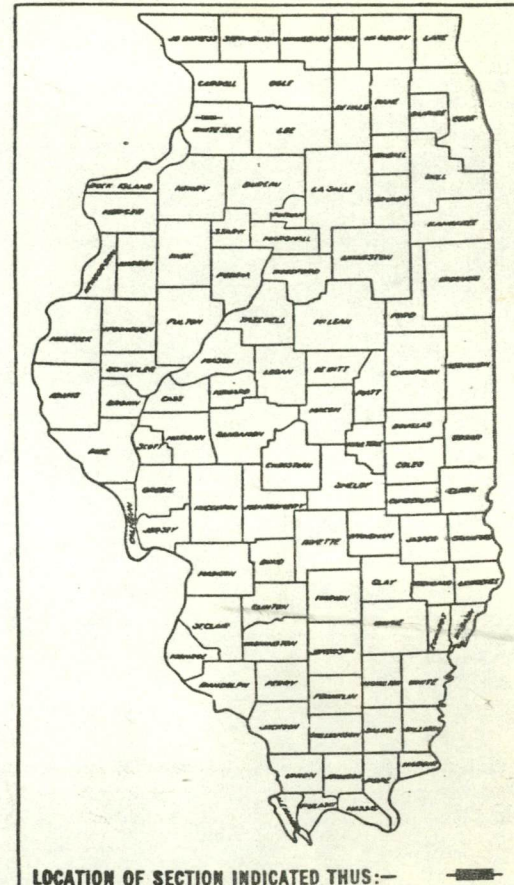


STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY**

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. ROUTE 25 U.S. ROUTE 30	17R-IVBR	WHITESIDE	47	1
ILLINOIS		PROJECT BHF-25 (50)		

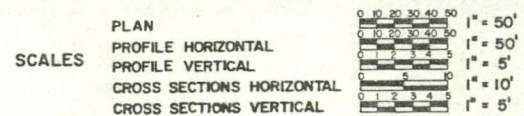
P-92-083-84

P-92-083-84



SHEET NO. INDEX OF SHEETS

- 1 COVER SHEET
- 2-3 SUMMARY OF QUANTITIES
- 4-6 TYPICAL SECTIONS
- 7 GENERAL NOTES
- 8 SCHEDULE OF QUANTITIES
- 9 BITUMINOUS SCHEDULE
- 10-12 PLAN AND PROFILE SHEETS
- 13 STAGING DETAILS
- 14 TYPE E INLET BOX
- 15 MEDIAN INLET (2250), SPECIAL
- 16 TYPICAL PAVEMENT MARKINGS
- 17 GUARD RAIL REFLECTORS & SHOULDER DRAINS WITH COLLAR AT SHOULDER
- 18-40 BRIDGE PLANS
- 41-47 CROSS SECTIONS



F.A. ROUTE 25 (U.S. ROUTE 30)
 SECTION 17R - IVBR
 PROJECT BHF-25 (50)
 WHITESIDE COUNTY

C-92-087-89

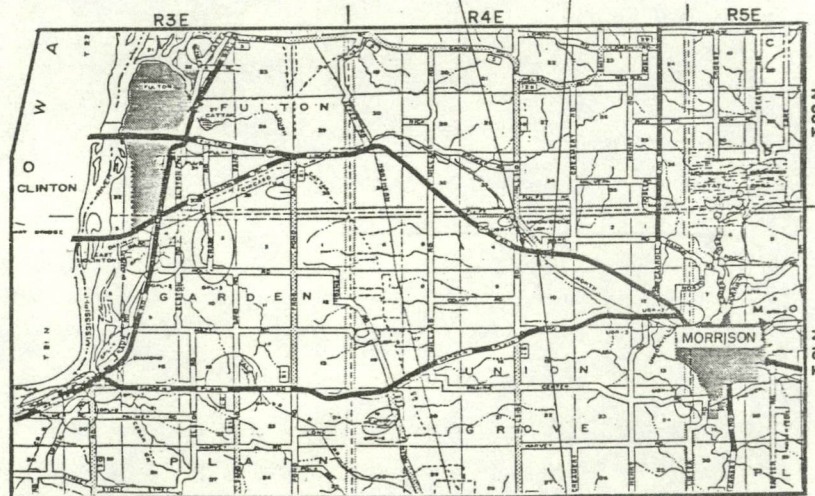
STANDARDS

- 2113-2 NAME PLATE FOR BRIDGES
- 2130-9 CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
- 2135 PERMANENT SURVEY MARKERS
- 2228-4 METAL END SECTION FOR PIPE CULVERTS
- 2230-5 STEEL PLATE BEAM GUARDRAIL
- 2239-7 WIDENING AND SHOULDERS FOR PAVEMENT RESURFACING
- 2298-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
- 2299-10 DESIGN OF TRAFFIC CONTROL DEVICES
- 2300-3 FLAGMAN TRAFFIC CONTROL SIGN
- 2302-5 DESIGN APPLICATION OF TRAFFIC CONTROL DEVICES
- 2304-7 DESIGN APPLICATION OF TRAFFIC CONTROL DEVICES
- 2306-6 DESIGN APPLICATION OF TRAFFIC CONTROL DEVICES
- 2308-5 DESIGN APPLICATION OF TRAFFIC CONTROL DEVICES
- 2311-8 DESIGN APPLICATION OF TRAFFIC CONTROL DEVICES
- 2311-8 BITUMINOUS CURB AND CONCRETE INLET FOR BITUMINOUS SHOULDER
- 2322-3 BRIDGE APPROACH SHOULDER PAVEMENT
- 2324-6 SUB-SURFACE DRAINS
- 2327-11 TRAFFIC BARRIER TERMINAL, TYPE I AND IA
- 2336-4 TRAFFIC BARRIER TERMINAL, TYPE 6
- 2341-1 TEMPORARY CONCRETE BARRIER
- 2383-1 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
- 2409-1 CLASS C AND D PATCHES
- 2427 DELINEATORS
- 2149-11 TEMPORARY EROSION CONTROL SYSTEMS
- 2381 BRIDGE APPROACH PAVEMENT
- 2382-2

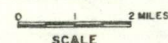
DESIGN DESIGNATION
 1075(09)-MAJOR-3.4(B-20)

BEGIN PROJECT SECTION 17R-IVBR STA. 106 + 00

END PROJECT SECTION 17R-IVBR STA. 138 + 00



LOCATION MAP



STRUCTURE
 STA. 117 + 45.41 - STA. 120 + 08.45
 (S.N. 098-0005)

NET LENGTH OF PROJECT = 3200 LIN. FT. = 0.606 MILE

"CALL J.U.L.I.E.
 BEFORE YOU DIG"
 800-892-0123
 UNION GROVE TSP
 SECTION 3

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED January 30, 1989

EXAMINED February 10, 1989

PASSED February 10, 1989

APPROVED February 10, 1989

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

DISTRICT 2-DIXON

2-160

098-0005 980005

098-0005

PROJECT ENGINEER CLIFF RUGH SQUAD LEADER PAT WARKINS

BENCH MARK: Standard Disc Stamped R47-1934 on Bridge No. 245 0.4 Mile Northwest Along the Chicago & North Western Transportation Co. from the Station of Union Grove, 9 feet Northeast of the Centerline of the Northeast Track, Near the Center of the top of the North Concrete Retaining Wall, and Level with the Track.

EXISTING STRUCTURE: 3-Span Continuous Steel I-Beam Structure Built in 1949 as FA. Route 25, Section 17 R-1, 17R-1VB & 17R-1VF. 2-77'-3 1/2" End Spans and 1-100'-0" Center Span. 26'-0" Back to Back of Spill through Abutments on Piles. 2-Intermediate Piers on Piles. 34'-4" Out-to-Out Width of Structure. 28'-0" Roadway Width.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGN SPECIFICATIONS

A.A.S.H.T.O. 1983 Standard Specification for Highway Bridges & 1984, 1985 & 1986 Interims Specifications. Standard Specifications for Road & Bridge Construction, State of Illinois (Adopted July 1, 1988).

DESIGN STRESSES

Structural Steel: $f_s = 20,000$ psi (M183)
Concrete: $f_c = 3,500$ psi
Reinforcement: $f_y = 60,000$ psi

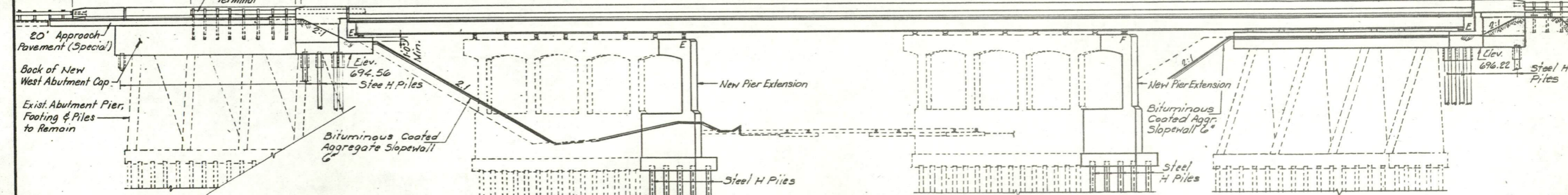
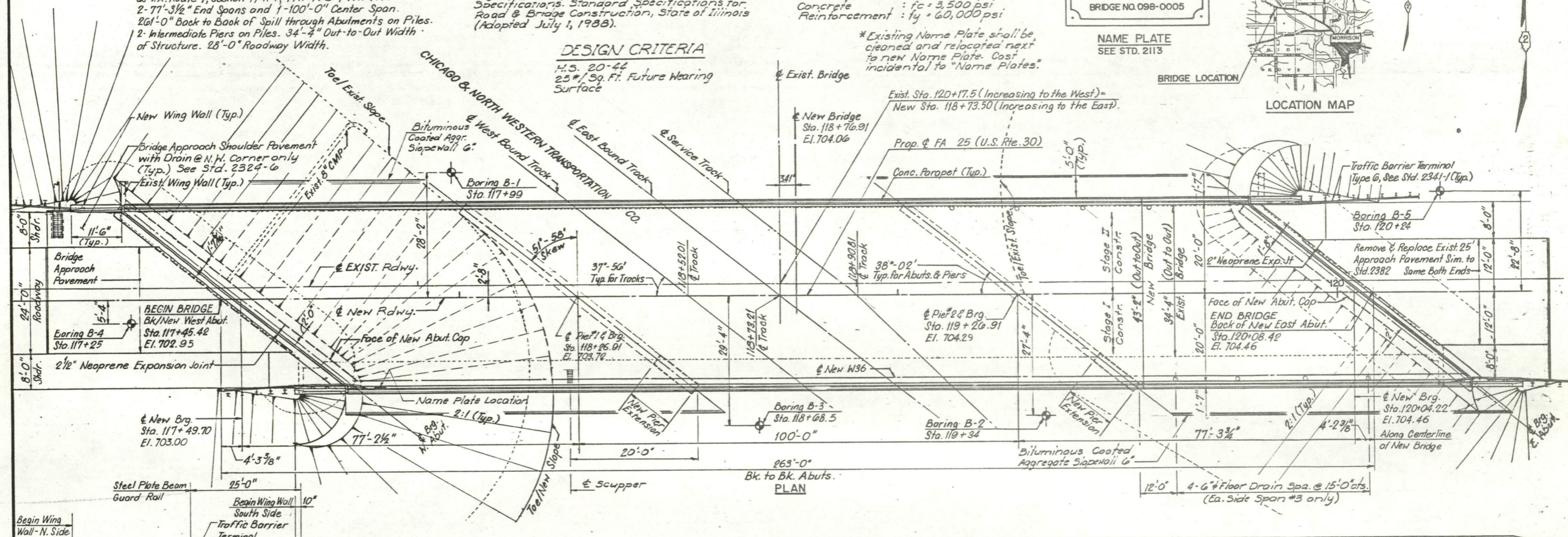
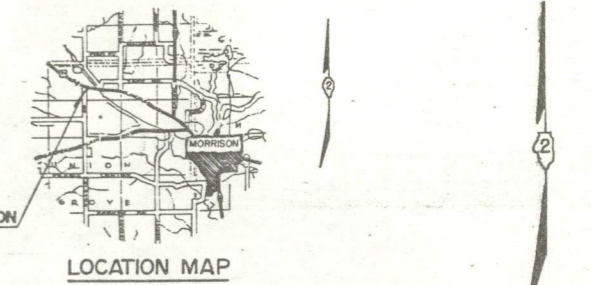
* Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost incidental to "Name Plates."

DESIGN CRITERIA

H.S. 20-44
2.5" / Sq. Ft. Future Wearing Surface

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FA ROUTE 25 (U.S. ROUTE 30)	17R-1VBR	WHITESIDE	47	18	23 SHEETS
FED. ROAD DIV. NO.	ILLINOIS	PROJECT NO. P-92-083-84			

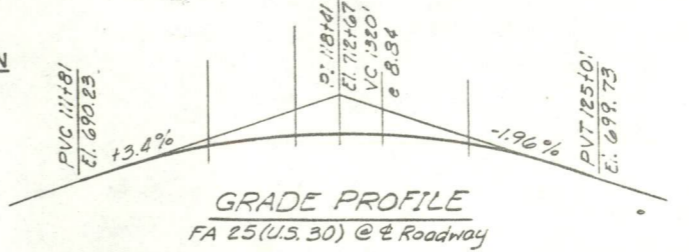
STATION 118+73.21
REBUILT 198 BY
STATE OF ILLINOIS
FA 25, SEC. 17R-1VBR
FA PROJ. BHF-25 (50)
LOADING HS-20
BRIDGE NO. 098-0005



CURVE DATA

$\Delta = 3^{\circ}00'00''$
 $D = 0^{\circ}29'49''$
 $L = 603.55$
 $R = 11526.91$
 $T = 301.84$
 $E = 3.95$
PC = Sta. 111+38.117
PI = Sta. 114+59.957
PT = Sta. 117+41.667
S.E. = Stationed Sta. 116+75.00 to Sta. 118+75.00
S.E. = 0.0156%

ELEVATION



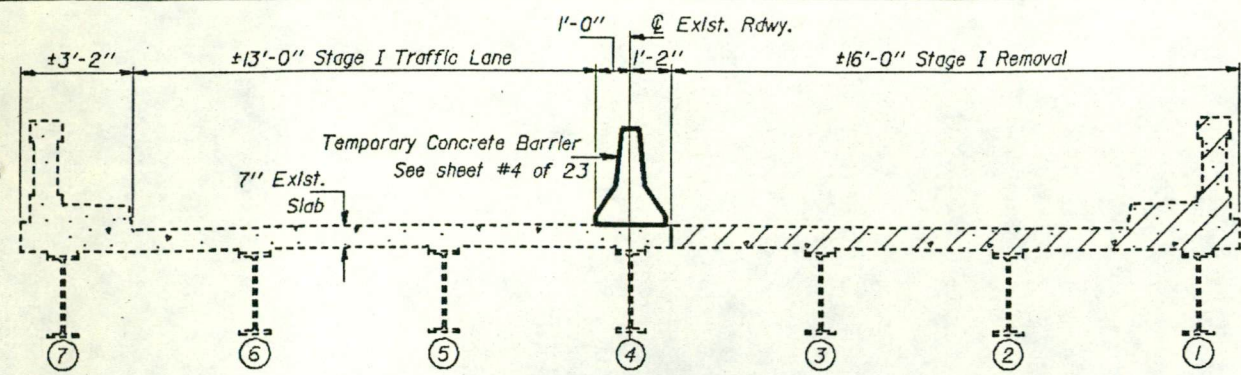
DESIGNED: M. R. Ahnelt
CHECKED: Patrick M. P...
DRAWN: JFS
CHECKED: PMP GRA

February 8, 1989
EXAMINED: Gray J. Laska
PASSED: James J. Fayburn
APPROVED: [Signature]

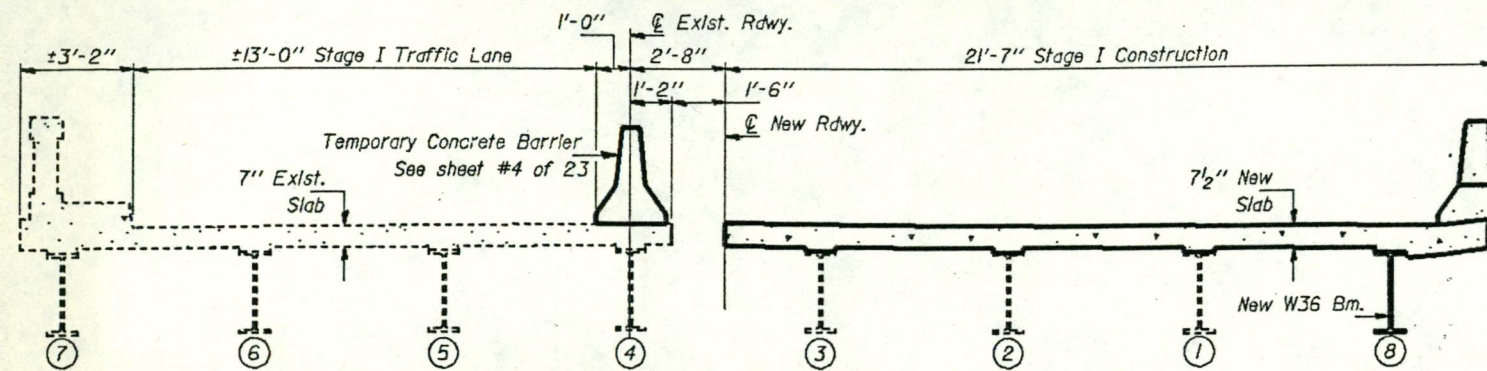


GENERAL PLAN AND ELEVATION
F.A.25 (U.S.30) SEC. 17R-1VBR
WHITESIDE COUNTY
STA. 118+76.91
S.N. 098-0005

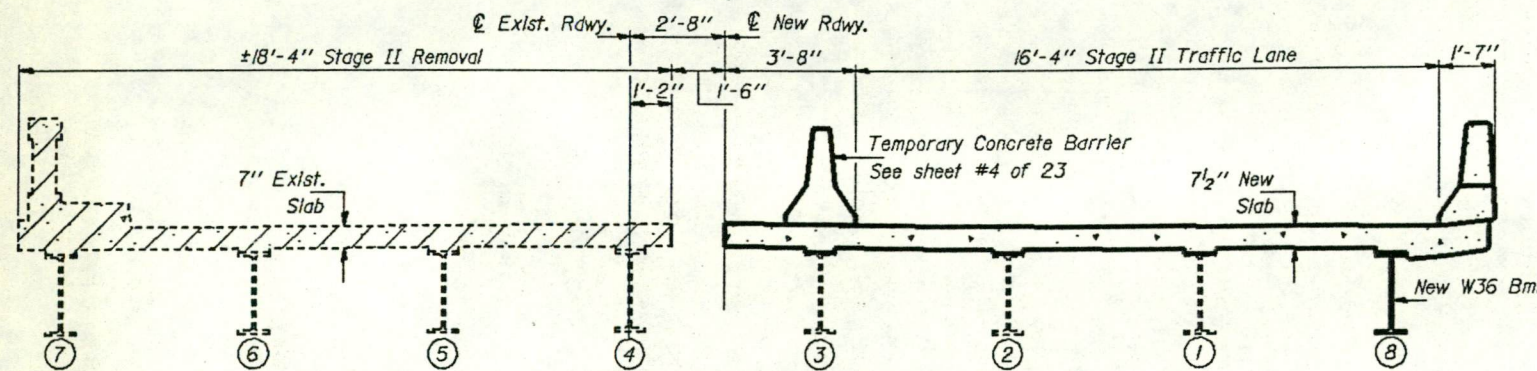
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



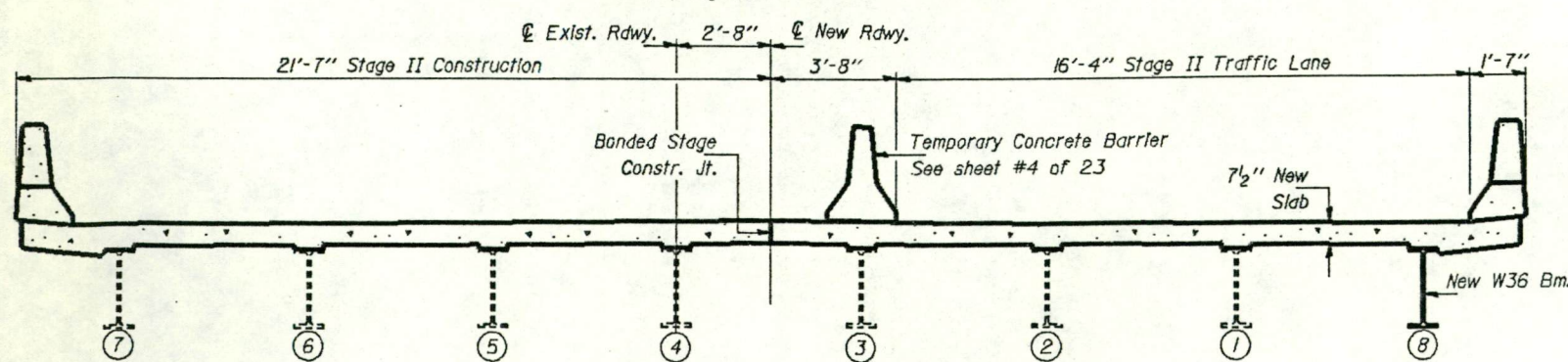
STAGE I REMOVAL
(Looking East)



STAGE I CONSTRUCTION
(Looking East)



STAGE II REMOVAL
(Looking East)



STAGE II CONSTRUCTION
(Looking East)

GENERAL NOTES

See Proposal for Boring Data.
Fasteners shall be high strength bolts. Bolts 7/8"φ, open holes 15/16"φ, unless otherwise noted.
Calculated weight of Structural Steel = 61,750 Lbs.
All contact surfaces of joints for the diaphragms shall be free of paint or lacquer.
Field welding of construction accessories will not be permitted to the bottom flange of beams 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.
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material of the wide flange beams.
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
Shoulder transition to wingwall shall be shaped with broken concrete. Cost incidental.
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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,080 lbs., and 3/4"φ x 12" hooked bolts.
The new bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 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.

The concrete, for bridge floors finished in accordance with Article 503.15 of the Standard Specifications, shall be placed and compacted parallel to the skew in uniform increments along centerline of the bridge. The finishing machine, when required, shall be set parallel to the skew for striking off and screeding the concrete.
The contractor shall drive two (2) Steel (HP10x42) test piles in a permanent location, one (1) at the West Abutment and one (1) at the East Abutment, as directed by the Engineer before ordering the remainder of piles.
The three coat lead and chromate free alkyd paint system shall be used for field painting of Existing Structural Steel. The color of the final finish coat shall be Interstate Green.
The three coat lead and chromate free alkyd paint system shall be used for shop and field painting of New Structural Steel. The color of the final finish coat shall be Interstate Green.
The existing structural steel shall be cleaned by Method I.
After the removal of the existing slab, the contractor shall determine the elevations of the top of the existing beams #1 thru #7 at the C Brg. at the East and West Abutments. The contractor shall then verify the seat elevations of the new East and West Abutment caps by subtracting the beam depth and the appropriate bearing and shim thicknesses as detailed on sheets #15 & #16 of 23 from the elevations of the top of the existing beams. The Engineer shall be notified of any discrepancies.
Bridge Seat Sealer shall be applied to seat area of the Abutments. Est. quantity = 368 Sq. Ft.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Concrete Deck	Each	1		1
Drainage Scuppers	Each	1		1
Floor Drains (6"φ)	Each	8		8
Protective Coat	Sq. Yds.	229		229
Class X Concrete Superstructure	Cu. Yds.	339.0		339.0
Class X Concrete	Cu. Yds.		183.6	183.6
Structural Steel	L.S.	1		1
Name Plates	Each	1		1
Neoprene Expansion Joint (2")	Lin. Ft.	66		66
Neoprene Expansion Joint (2 1/2")	Lin. Ft.	66		66
Steel Piles HP8x36	Lin. Ft.		678	678
Steel Piles HP10x42	Lin. Ft.		565	565
Test Piles Steel HP10x42	Each		2	2
Expansion Bolts (3/4"φ)	Each		44	44
Elastomeric Bearing Assembly, Type II	Each	16		16
Reinforcement Bars	Pounds		6,690	6,690
Reinforcement Bars (Epoxy Coated)	Pounds	72,040	14,740	86,780
Bituminous Coated Aggregate Slapewall (6")	Sq. Yds.		970	970
Rivet Removal and High Strength Bolt Replacement	Each	3,472		3,472
Structural Steel Removal	Pounds			22,390
Structural Steel Repair	Pounds	13,810		13,810
Cleaning and Painting Steel Bridge	L.S.	1		1
Structure Excavation	Cu. Yds.		305	305
Stud Shear Connectors	Each	4,005		4,005
Concrete Removal	Cu. Yds.		66	66
Removal of Existing Bearings	Each	7		7
Jacking and Cribbing	Each	2		2
Bridge Seat Sealer	L.S.	1		1

* Approximate Weight of existing Structural Steel to be painted is 204 tons.

DESIGNED *Al. R. Abauch*
CHECKED *Patrick M. ...*
DRAWN *DH*
CHECKED *GRA*

February 8, 1989
EXAMINED *Greg O. ...*
PASSED *James J. ...*
APPROVED _____
DIRECTOR OF HIGHWAYS

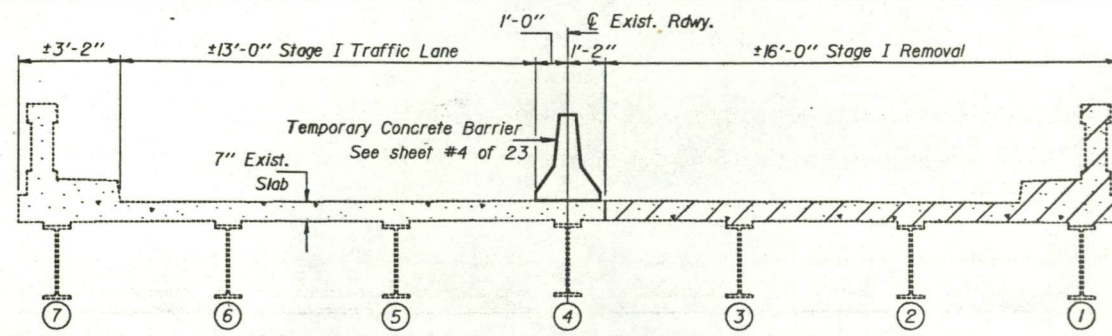
Notes: Hatched area indicates "Removal of Existing Superstructure".
Cost of removal of existing concrete handrail is incidental to "Removal of Existing Superstructure".
For quantity of "Temporary Concrete Barrier" see Roadway Plans.
The Contractor will be required to mark on top of the concrete deck the locations of the top flange of all the steel beams or girders, prior to any removal of the bridge concrete deck. Saw cutting directly over the top of the beam or girder flanges is not permitted.

(AS REVISED 6-9-89 G.R.A.)

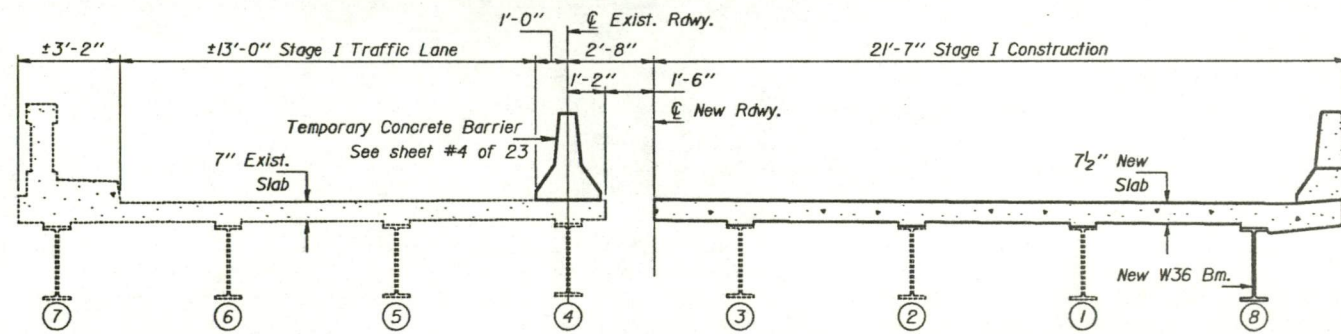
STAGE CONSTRUCTION DETAILS
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

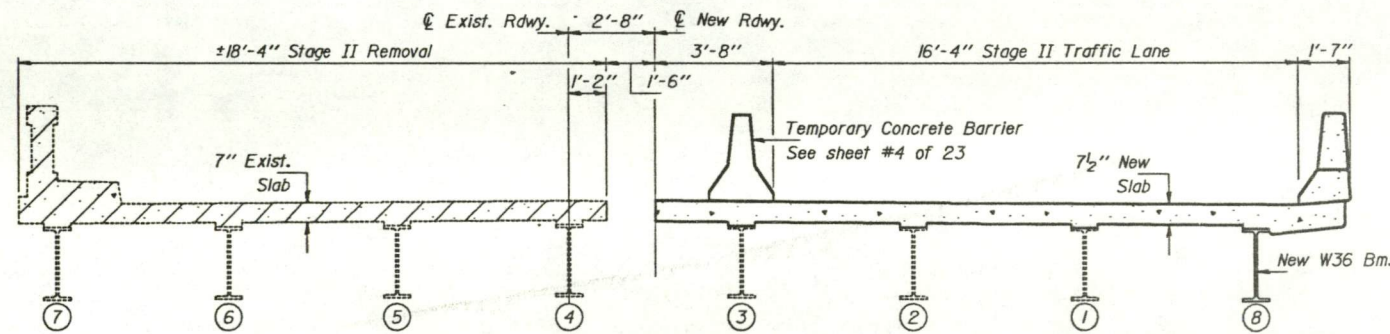
ROUTE NO.	SECTION	QUANTITY	DATE	SHEET	SHEET NO. 2
172-14BR	WHITESIDE	47	19		23 SHEETS
P.A. 25					
FED. ROAD DIST. NO. 7					



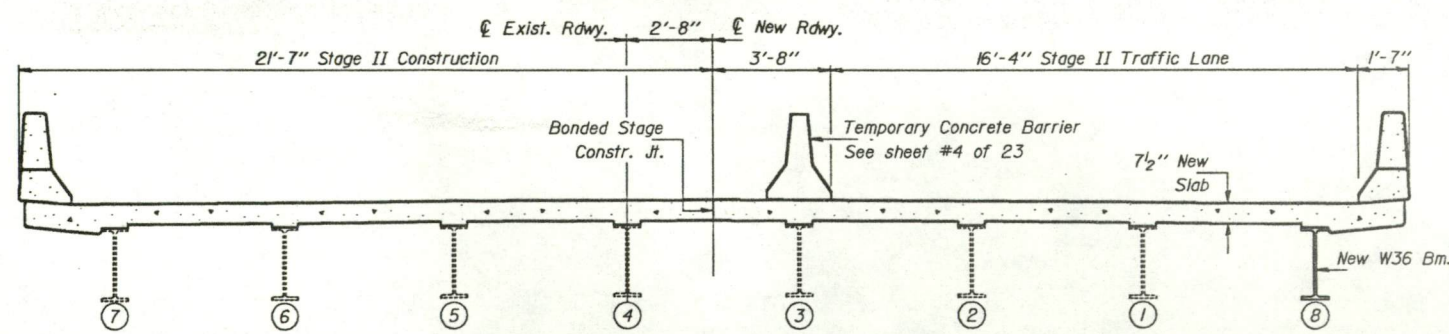
STAGE I REMOVAL
(Looking East)



STAGE I CONSTRUCTION
(Looking East)



STAGE II REMOVAL
(Looking East)



STAGE II CONSTRUCTION
(Looking East)

DESIGNED *W.R. O'Connell*
CHECKED *Patrick M. Brown*
DRAWN *John F. Schneller Jr.*
CHECKED *G.R.A. P.M.P.*

February 8 1979
EXAMINED *Greg J. Kasper*
PASSED *James J. Kasper*
APPROVED _____
DIRECTOR OF HIGHWAYS

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TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Concrete Deck	Each	1		1
Drainage Scuppers	Each	1		1
Floor Drains (6"φ)	Each	8		8
Protective Coat	Sq. Yds.	229		229
Class X Concrete Superstructure	Cu. Yds.	339.0		339.0
Class X Concrete	Cu. Yds.		183.6	183.6
Structural Steel	L.S.	1		1
Name Plates	Each	1		1
Neoprene Expansion Joint (2")	Lin. Ft.	66		66
Neoprene Expansion Joint (2 1/2")	Lin. Ft.	66		66
Steel Piles HP8x36	Lin. Ft.		678	678
Steel Piles HP10x42	Lin. Ft.		565	565
Test Piles Steel HP10x42	Each		2	2
Expansion Bolts (3/4"φ)	Each		44	44
Elastomeric Bearing Assembly, Type II	Each	16		16
Reinforcement Bars	Pounds		6,690	6,690
Reinforcement Bars (Epoxy Coated)	Pounds	71,130	14,740	85,870
Bituminous Coated Aggregate Slopewall (5")	Sq. Yds.		970	970
Rivet Removal and High Strength Bolt Replacement	Each	3,472		3,472
Structural Steel Removal	Pounds			22,390
Structural Steel Repair	Pounds	13,810		13,810
Cleaning and Painting Steel Bridge	L.S.	1		1
Structure Excavation	Cu. Yds.		305	305
Stud Shear Connectors	Each	4,005		4,005
Concrete Removal	Cu. Yds.		66	66
Removal of Existing Bearings	Each	7		7
Jacking and Cribbing	Each	2		2
Bridge Seat Sealer	L.S.	1		1

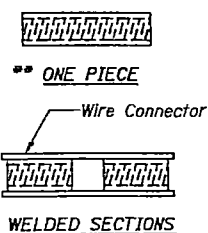
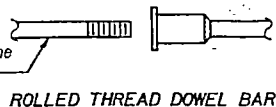
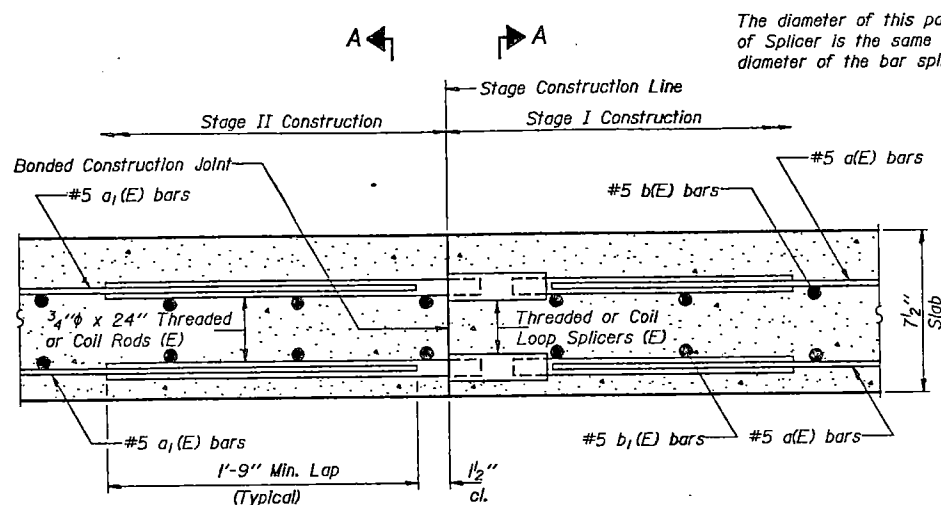
* Approximate weight of existing structural steel to be painted is 204 tons.

STAGE CONSTRUCTION DETAILS
F.A. RT. 25 SEC. 17R-MBR
WHITESIDE COUNTY
STA. 118+76.91

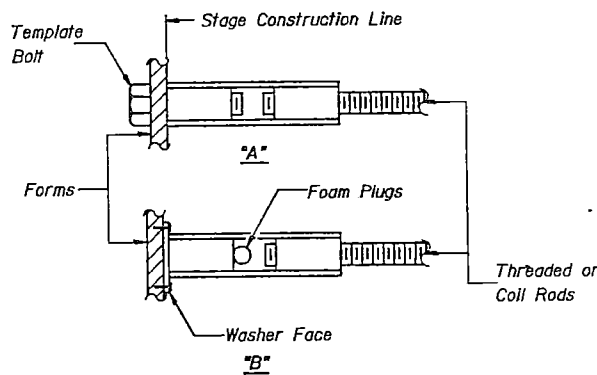
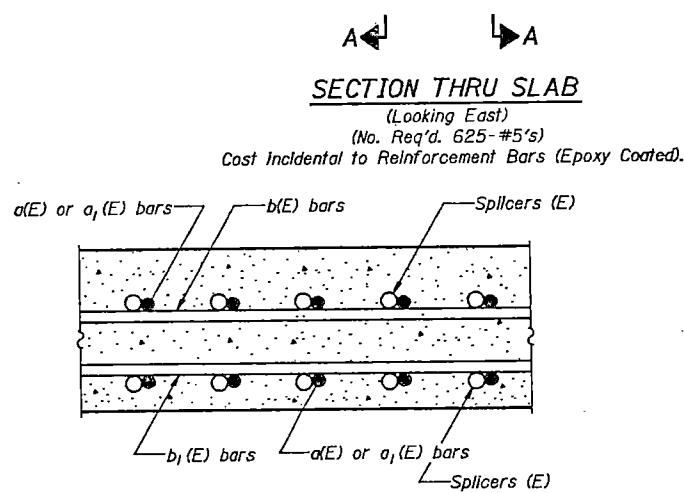
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	DISTRICT	COUNTY	TOTAL SHEETS	SHEET NO.
118-76.91	17B	WHITESIDE	47	20
PROJECT NAME		FED. AID PROJECT		

SHEET NO. 3
23 SHEETS



SPLICER ALTERNATIVES
** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS
"A": Set splicer by means of a template bolt.
"B": Set splicer by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

SECTION A-A

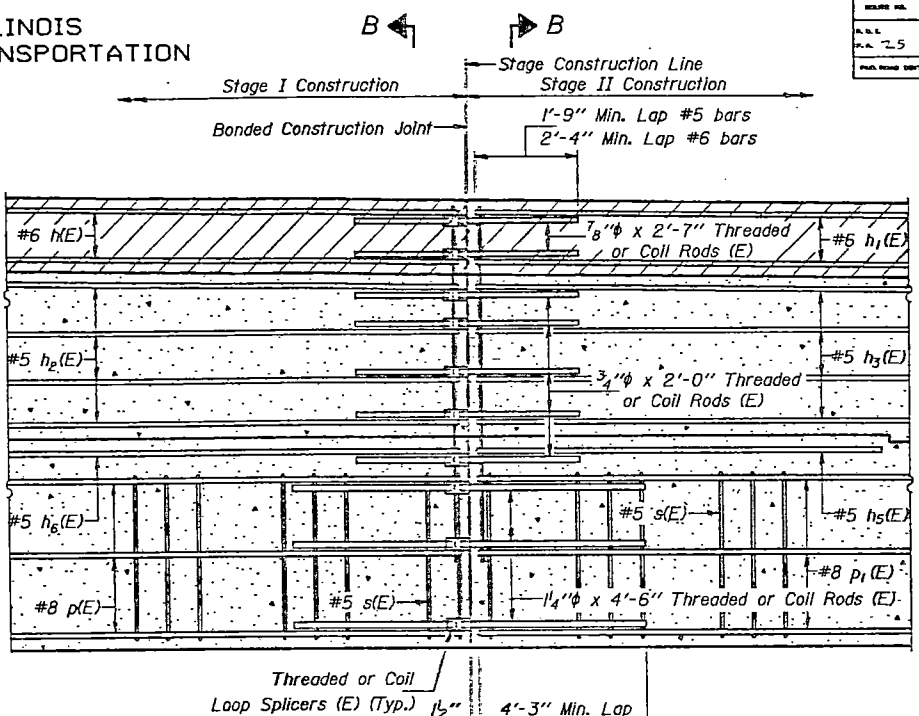
NOTES

Steel Splicer (Coupler) assembly shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Steel Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length and have effective tensile stress area equal to or greater than that of the lapped reinforcement bars.
All reinforcement bars shall be lapped and tied to the splicer rods.
Splicer (coupler) assembly in the slab shall be epoxy coated in accordance with the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed splicer (coupler) assembly satisfies the following requirements:

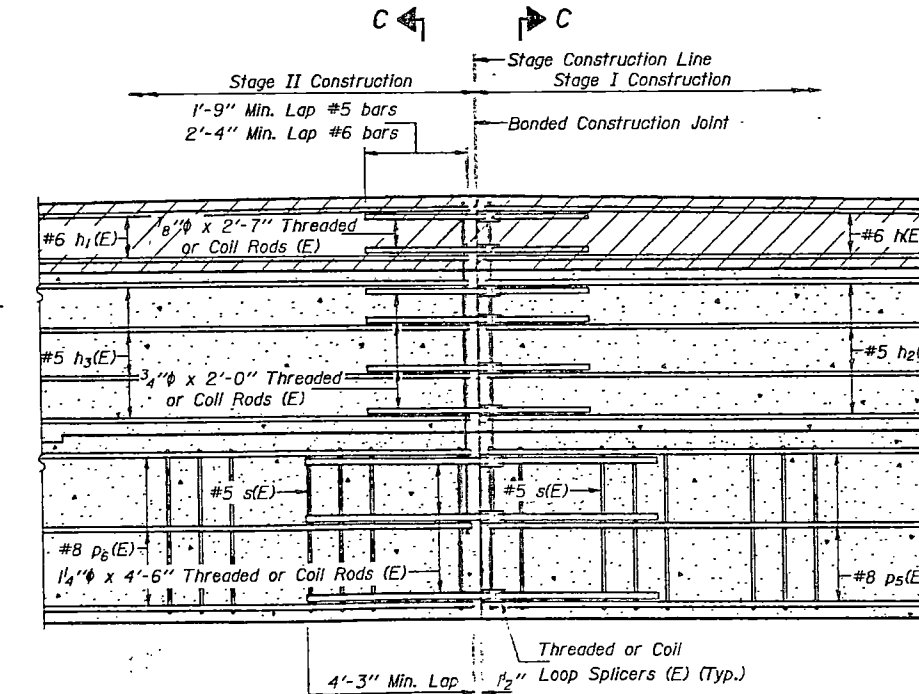
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s_{allow}} \times A_t$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

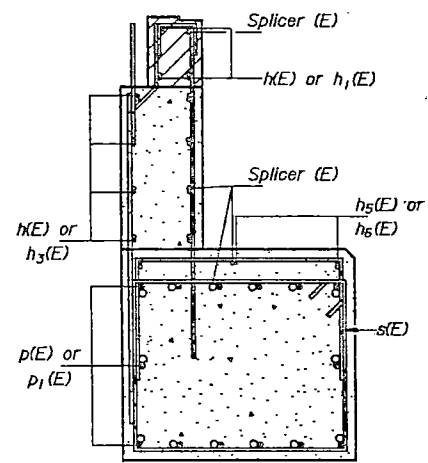
Typical Splicer (Coupler) Assembly Sizes:	Minimum Capacity	Minimum Pull-out Strength
Superstructure - #5 bar lap with 3/4" Splicer (Coupler) x 2'-0" Splicer Rods	23.0 kips-tension	9.2 kips-tension
Substructure - #5 bar lap with 3/4" Splicer (Coupler) x 2'-0" Splicer Rods	23.0 kips-tension	9.2 kips-tension
Substructure - #6 bar lap with 7/8" Splicer (Coupler) x 2'-7" Splicer Rods	33.1 kips-tension	13.3 kips-tension
Substructure - #8 bar lap with 1 1/4" Splicer (Coupler) x 4'-6" Splicer Rods	58.9 kips-tension	23.6 kips-tension



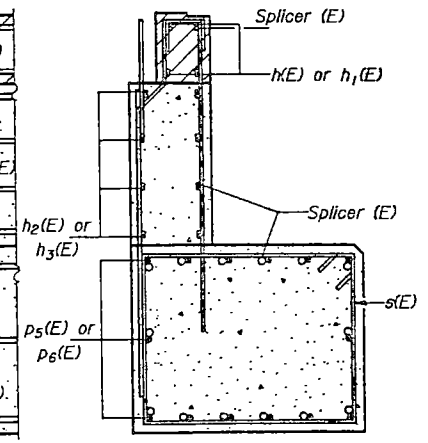
SECTION THRU W. ABUTMENTS



SECTION THRU E. ABUTMENTS



SECTION B-B



SECTION C-C

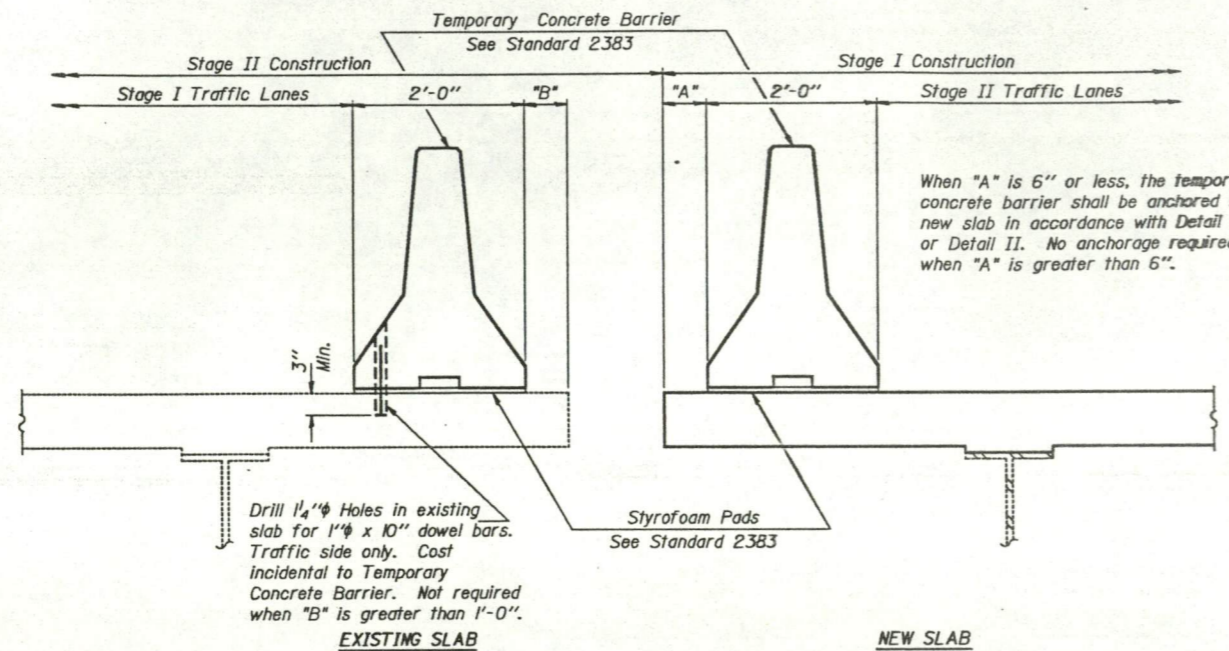
BAR SPLICER (COUPLER) DETAILS AT STAGE CONSTRUCTION
F.A. RT. 25 SEC. 17B-MBR
WHITESIDE COUNTY
STA. 118+76.91

DESIGNED *John F. Schneller Jr.*
CHECKED *Patrick M. Parris*
DRAWN *John F. Schneller Jr.*
CHECKED *PMP GHA*

February 8, 1989
EXAMINED *Gregory J. Kasper*
PASSED *James J. Kasper*
APPROVED _____
DIRECTOR OF HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DISTRICT	COUNTY	SHEET NO.	SHEET NO.
P.A. 25	17R-NBR	WHITESIDE	47	21
FED. ROAD DIST. NO. 7		FED. AID PROJECT		



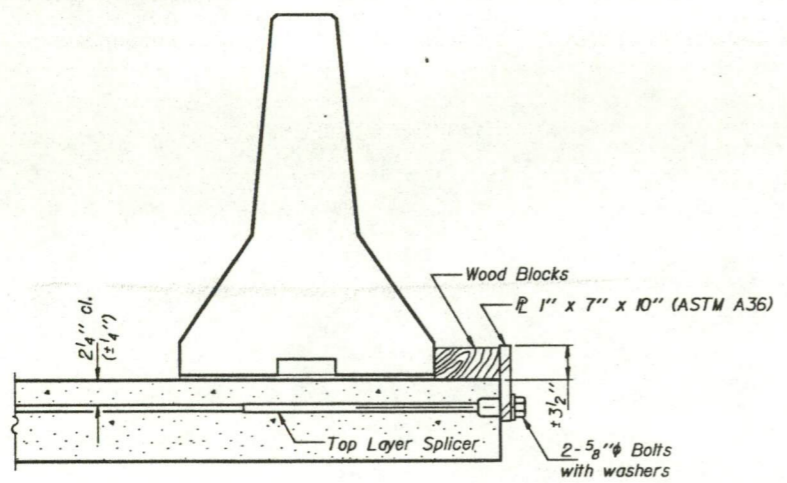
When "A" is 6" or less, the temporary concrete barrier shall be anchored to new slab in accordance with Detail I or Detail II. No anchorage required when "A" is greater than 6".

Drill 1/4" ϕ Holes in existing slab for 1" ϕ x 10" dowel bars. Traffic side only. Cast incidental to Temporary Concrete Barrier. Not required when "B" is greater than 1'-0".

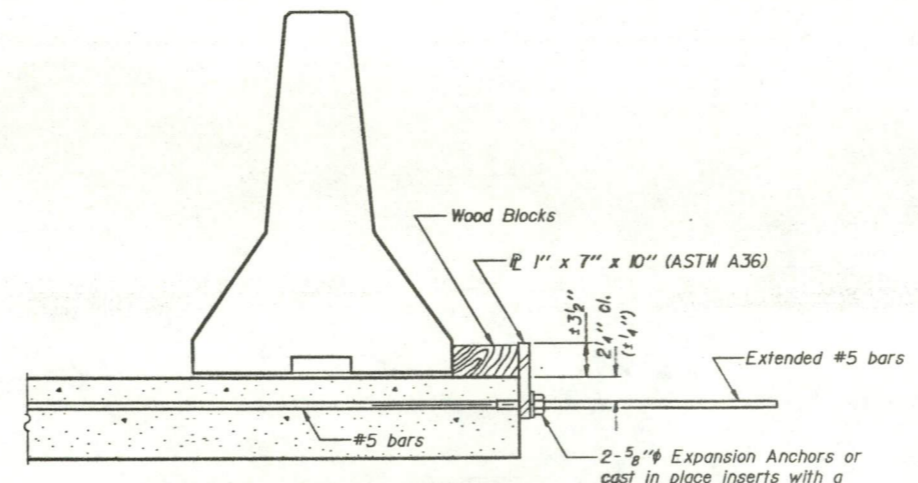
SECTIONS THRU SLAB

NOTES

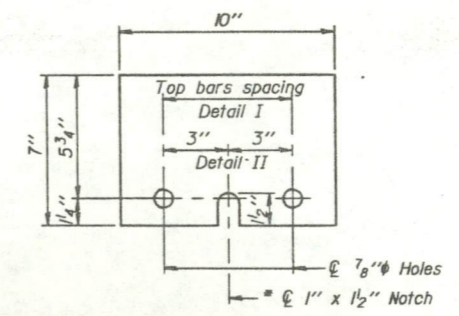
- Detail I - With Bar Splicer or Couplers: Connect one (1) 1" x 7" x 10" steel \bar{c} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{c} of each 10'-0" barrier panel.
 - Detail II - With Extended Reinforcement Bars: Connect one (1) 1" x 7" x 10" steel \bar{c} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{c} of each 10'-0" barrier panel.
- Cost of anchorage is incidental to Temporary Concrete Barrier.



DETAIL I
The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II
The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



1" x 7" x 10"
* Required only with Detail II

DESIGNED *Sh. P. Ahrend*
CHECKED *Patrick M. Petrus*
DRAWN *John F. Schneller Jr.*
CHECKED *PMP GRA*

February 8, 1989
EXAMINED *Greg J. Kaspar*
PASSED *James J. Kuehner*
APPROVED _____
DIRECTOR OF HIGHWAYS

R-27 6-15-83

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17R-1	17R-1	WHITESIDE	47	22
SHEET NO. 5 23 SHEETS				

BEAM #7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11721.524	-18.649	702.377	702.377
€ Brg. W. Abut.	11725.812	-18.656	702.427	702.427
A	11735.828	-18.665	702.542	702.558
B	11745.838	-18.667	702.653	702.684
C	11755.838	-18.667	702.760	702.793
D	11765.838	-18.667	702.863	702.897
E	11775.838	-18.667	702.962	702.984
F	11785.838	-18.667	703.056	703.068
G	11795.838	-18.667	703.147	703.152
€ Pier 1	11803.046	-18.667	703.210	703.210
H	11813.046	-18.667	703.294	703.306
I	11823.046	-18.667	703.373	703.399
J	11833.046	-18.667	703.449	703.486
K	11843.046	-18.667	703.520	703.567
L	11853.046	-18.667	703.587	703.645
M	11863.046	-18.667	703.651	703.698
N	11873.046	-18.667	703.710	703.747
O	11883.046	-18.667	703.767	703.792
P	11893.046	-18.667	703.820	703.832
€ Pier 2	11903.046	-18.667	703.868	703.868
Q	11913.046	-18.667	703.913	703.920
R	11923.046	-18.667	703.954	703.968
S	11933.046	-18.667	703.991	704.016
T	11943.046	-18.667	704.023	704.058
U	11953.046	-18.667	704.052	704.084
V	11963.046	-18.667	704.076	704.103
W	11973.046	-18.667	704.097	704.108
€ Brg. E. Abut.	11980.358	-18.667	704.109	704.109
Bk. E. Abut.	11984.556	-18.667	704.115	704.115

BEAM #6

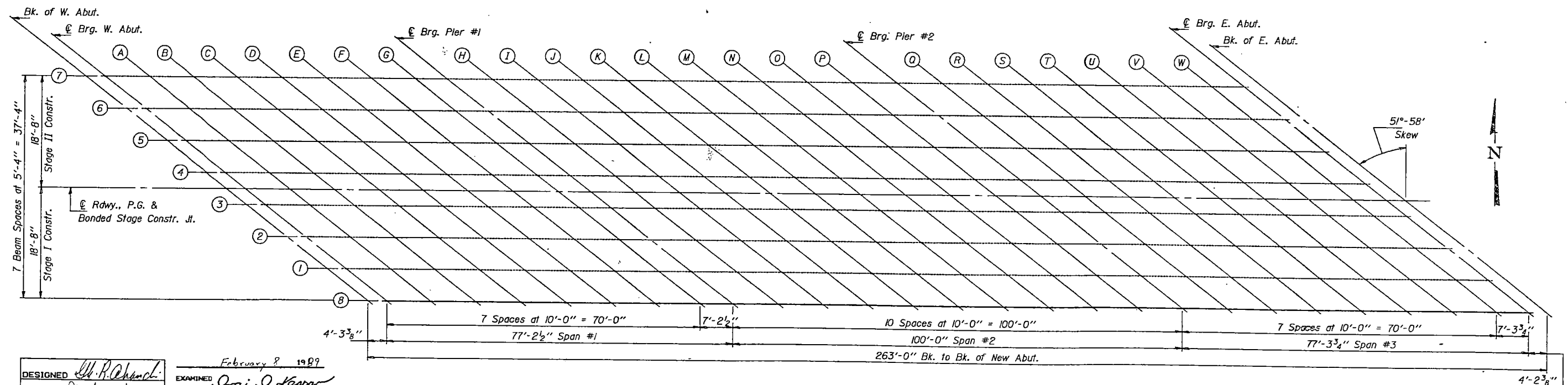
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11728.359	-13.326	702.548	702.548
€ Brg. W. Abut.	11732.645	-13.330	702.597	702.597
A	11742.656	-13.333	702.711	702.727
B	11752.656	-13.333	702.821	702.851
C	11762.656	-13.333	702.926	702.959
D	11772.656	-13.333	703.028	703.061
E	11782.656	-13.333	703.125	703.147
F	11792.656	-13.333	703.218	703.230
G	11802.656	-13.333	703.307	703.312
€ Pier 1	11809.864	-13.333	703.369	703.369
H	11819.864	-13.333	703.452	703.464
I	11829.864	-13.333	703.530	703.555
J	11839.864	-13.333	703.604	703.641
K	11849.864	-13.333	703.674	703.721
L	11859.864	-13.333	703.740	703.797
M	11869.864	-13.333	703.802	703.849
N	11879.864	-13.333	703.860	703.897
O	11889.864	-13.333	703.914	703.940
P	11899.864	-13.333	703.964	703.977
€ Pier 2	11909.864	-13.333	704.010	704.010
Q	11919.864	-13.333	704.052	704.059
R	11929.864	-13.333	704.090	704.104
S	11939.864	-13.333	704.124	704.149
T	11949.864	-13.333	704.154	704.189
U	11959.864	-13.333	704.180	704.212
V	11969.864	-13.333	704.201	704.229
W	11979.864	-13.333	704.219	704.231
€ Brg. E. Abut.	11987.176	-13.333	704.229	704.229
Bk. E. Abut.	11991.374	-13.333	704.234	704.234

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11735.188	-7.998	702.712	702.712
€ Brg. W. Abut.	11739.472	-8.000	702.761	702.761
A	11749.474	-8.000	702.872	702.888
B	11759.474	-8.000	702.979	703.010
C	11769.474	-8.000	703.082	703.115
D	11779.474	-8.000	703.181	703.215
E	11789.474	-8.000	703.276	703.298
F	11799.474	-8.000	703.367	703.379
G	11809.474	-8.000	703.454	703.459
€ Pier 1	11816.682	-8.000	703.514	703.514
H	11826.682	-8.000	703.594	703.607
I	11836.682	-8.000	703.670	703.695
J	11846.682	-8.000	703.741	703.778
K	11856.682	-8.000	703.809	703.856
L	11866.682	-8.000	703.873	703.930
M	11876.682	-8.000	703.932	703.979
N	11886.682	-8.000	703.988	704.025
O	11896.682	-8.000	704.039	704.065
P	11906.682	-8.000	704.086	704.099
€ Pier 2	11916.682	-8.000	704.130	704.130
Q	11926.682	-8.000	704.169	704.176
R	11936.682	-8.000	704.204	704.218
S	11946.682	-8.000	704.235	704.261
T	11956.682	-8.000	704.262	704.297
U	11966.682	-8.000	704.285	704.318
V	11976.682	-8.000	704.304	704.331
W	11986.682	-8.000	704.319	704.330
€ Brg. E. Abut.	11993.995	-8.000	704.327	704.327
Bk. E. Abut.	11998.193	-8.000	704.331	704.331

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11742.011	-2.667	702.873	702.873
€ Brg. W. Abut.	11746.292	-2.667	702.920	702.920
A	11756.292	-2.667	703.029	703.045
B	11766.292	-2.667	703.133	703.164
C	11776.292	-2.667	703.233	703.266
D	11786.292	-2.667	703.330	703.363
E	11796.292	-2.667	703.422	703.444
F	11806.292	-2.667	703.510	703.522
G	11816.292	-2.667	703.594	703.599
€ Pier 1	11823.500	-2.667	703.652	703.652
H	11833.500	-2.667	703.729	703.742
I	11843.500	-2.667	703.802	703.828
J	11853.500	-2.667	703.871	703.908
K	11863.500	-2.667	703.936	703.983
L	11873.500	-2.667	703.997	704.054
M	11883.500	-2.667	704.054	704.101
N	11893.500	-2.667	704.106	704.144
O	11903.500	-2.667	704.155	704.181
P	11913.500	-2.667	704.200	704.212
€ Pier 2	11923.500	-2.667	704.240	704.240
Q	11933.500	-2.667	704.277	704.283
R	11943.500	-2.667	704.309	704.323
S	11953.500	-2.667	704.337	704.363
T	11963.500	-2.667	704.362	704.396
U	11973.500	-2.667	704.382	704.414
V	11983.500	-2.667	704.398	704.425
W	11993.500	-2.667	704.410	704.422
€ Brg. E. Abut.	12000.813	-2.667	704.416	704.416
Bk. E. Abut.	12005.011	-2.667	704.419	704.419

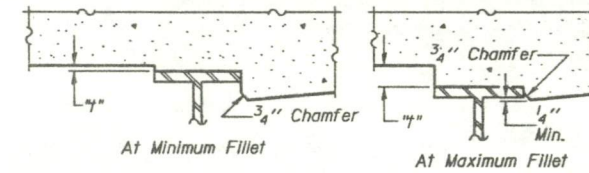


DESIGNED *W. R. Schmid*
 CHECKED *Richard M. Petre*
 DRAWN *John F. Schneller Jr.*
 CHECKED *PMP GRR*
 E-S 1-6-82

February 8, 1989
 EXAMINED *Gregory J. Casper*
 PASSED *James J. Kuehner*
 APPROVED _____
 DIRECTOR OF HIGHWAYS

TOP OF SLAB ELEVATIONS
 F.A. RT. 25 SEC. 17R-1NBR
 WHITESIDE COUNTY
 STA. 118+76.91

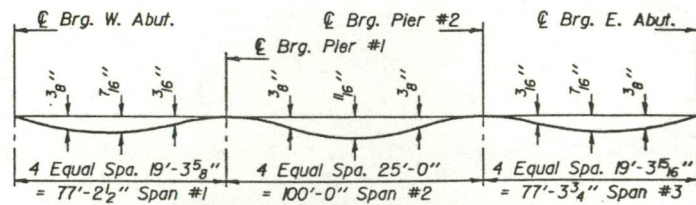
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



To determine "T": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted For Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "T" above top flange of beams.

FILLET HEIGHTS

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. OF
P-25	17R-17B2	WHITESIDE	47	23	23 SHEETS
FED. ROAD DIST. NO. 7	ILL. HIGH	FED. AID PROJECT			



Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

RDWY. & P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11745.420	0.000	702.952	702.952
€ Brg. W. Abut.	11749.701	0.000	702.999	702.999
A	11759.701	0.000	703.106	703.122
B	11759.701	0.000	703.209	703.240
C	11779.701	0.000	703.308	703.341
D	11789.701	0.000	703.403	703.437
E	11799.701	0.000	703.494	703.516
F	11809.701	0.000	703.581	703.593
G	11819.701	0.000	703.663	703.668
€ Pier 1	11826.909	0.000	703.721	703.721
H	11836.909	0.000	703.796	703.809
I	11846.909	0.000	703.868	703.894
J	11856.909	0.000	703.935	703.973
K	11866.909	0.000	703.999	704.046
L	11876.909	0.000	704.058	704.116
M	11886.909	0.000	704.114	704.161
N	11896.909	0.000	704.165	704.202
O	11906.909	0.000	704.212	704.238
P	11916.909	0.000	704.256	704.268
€ Pier 2	11926.909	0.000	704.295	704.295
Q	11936.909	0.000	704.330	704.337
R	11946.909	0.000	704.361	704.375
S	11956.909	0.000	704.388	704.413
T	11966.909	0.000	704.411	704.446
U	11976.909	0.000	704.430	704.462
V	11986.909	0.000	704.444	704.471
W	11996.909	0.000	704.455	704.467
€ Brg. E. Abut.	12004.222	0.000	704.460	704.460
Bk. E. Abut.	12008.420	0.000	704.462	704.462

BEAM #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11748.829	2.667	703.001	703.001
€ Brg. W. Abut.	11753.110	2.667	703.045	703.045
A	11763.110	2.667	703.147	703.163
B	11773.110	2.667	703.244	703.275
C	11783.110	2.667	703.338	703.371
D	11793.110	2.667	703.427	703.461
E	11803.110	2.667	703.512	703.535
F	11813.110	2.667	703.594	703.605
G	11823.110	2.667	703.671	703.676
€ Pier 1	11830.319	2.667	703.724	703.724
H	11840.319	2.667	703.794	703.807
I	11850.319	2.667	703.860	703.886
J	11860.319	2.667	703.922	703.959
K	11870.319	2.667	703.980	704.027
L	11880.319	2.667	704.036	704.093
M	11890.319	2.667	704.090	704.137
N	11900.319	2.667	704.140	704.177
O	11910.319	2.667	704.186	704.212
P	11920.319	2.667	704.228	704.241
€ Pier 2	11930.319	2.667	704.265	704.265
Q	11940.319	2.667	704.299	704.306
R	11950.319	2.667	704.329	704.343
S	11960.319	2.667	704.354	704.380
T	11970.319	2.667	704.376	704.411
U	11980.319	2.667	704.393	704.426
V	11990.319	2.667	704.407	704.434
W	12000.319	2.667	704.416	704.428
€ Brg. E. Abut.	12007.631	2.667	704.420	704.420
Bk. E. Abut.	12011.829	2.667	704.422	704.422

BEAM #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11755.647	8.000	703.088	703.088
€ Brg. W. Abut.	11759.928	8.000	703.128	703.128
A	11769.928	8.000	703.218	703.234
B	11779.928	8.000	703.304	703.335
C	11789.928	8.000	703.387	703.420
D	11799.928	8.000	703.465	703.498
E	11809.928	8.000	703.539	703.561
F	11819.928	8.000	703.609	703.621
G	11829.928	8.000	703.675	703.680
€ Pier 1	11837.137	8.000	703.720	703.720
H	11847.137	8.000	703.779	703.792
I	11857.137	8.000	703.834	703.860
J	11867.137	8.000	703.885	703.922
K	11877.137	8.000	703.935	703.982
L	11887.137	8.000	703.990	704.047
M	11897.137	8.000	704.041	704.088
N	11907.137	8.000	704.088	704.126
O	11917.137	8.000	704.131	704.157
P	11927.137	8.000	704.171	704.183
€ Pier 2	11937.137	8.000	704.206	704.206
Q	11947.137	8.000	704.236	704.243
R	11957.137	8.000	704.263	704.277
S	11967.137	8.000	704.286	704.312
T	11977.137	8.000	704.305	704.340
U	11987.137	8.000	704.320	704.352
V	11997.137	8.000	704.330	704.352
W	12007.137	8.000	704.337	704.348
€ Brg. E. Abut.	12014.449	8.000	704.339	704.339
Bk. E. Abut.	12018.647	8.000	704.339	704.339

BEAM #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11762.465	13.333	703.158	703.158
€ Brg. W. Abut.	11766.746	13.333	703.193	703.193
A	11776.746	13.333	703.272	703.288
B	11786.746	13.333	703.347	703.378
C	11796.746	13.333	703.418	703.451
D	11806.746	13.333	703.485	703.518
E	11816.746	13.333	703.547	703.570
F	11826.746	13.333	703.606	703.618
G	11836.746	13.333	703.661	703.666
€ Pier 1	11843.955	13.333	703.698	703.698
H	11853.955	13.333	703.745	703.758
I	11863.955	13.333	703.789	703.814
J	11873.955	13.333	703.828	703.865
K	11883.955	13.333	703.863	703.930
L	11893.955	13.333	703.935	703.993
M	11903.955	13.333	703.984	704.031
N	11913.955	13.333	704.028	704.065
O	11923.955	13.333	704.068	704.094
P	11933.955	13.333	704.105	704.117
€ Pier 2	11943.955	13.333	704.137	704.137
Q	11953.955	13.333	704.165	704.172
R	11963.955	13.333	704.189	704.203
S	11973.955	13.333	704.209	704.234
T	11983.955	13.333	704.225	704.260
U	11993.955	13.333	704.237	704.269
V	12003.955	13.333	704.245	704.272
W	12013.955	13.333	704.249	704.260
€ Brg. E. Abut.	12021.267	13.333	704.249	704.249
Bk. E. Abut.	12025.465	13.333	704.248	704.248

BEAM #8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	11769.283	18.667	703.205	703.205
€ Brg. W. Abut.	11773.565	18.667	703.235	703.235
A	11783.565	18.667	703.302	703.317
B	11793.565	18.667	703.364	703.395
C	11803.565	18.667	703.422	703.455
D	11813.565	18.667	703.477	703.510
E	11823.565	18.667	703.527	703.549
F	11833.565	18.667	703.573	703.585
G	11843.565	18.667	703.615	703.620
€ Pier 1	11850.773	18.667	703.643	703.643
H	11860.773	18.667	703.678	703.691
I	11870.773	18.667	703.709	703.735
J	11880.773	18.667	703.754	703.781
K	11890.773	18.667	703.808	703.855
L	11900.773	18.667	703.858	703.915
M	11910.773	18.667	703.903	703.951
N	11920.773	18.667	703.945	703.982
O	11930.773	18.667	703.983	704.008
P	11940.773	18.667	704.016	704.029
€ Pier 2	11950.773	18.667	704.046	704.046
Q	11960.773	18.667	704.071	704.078
R	11970.773	18.667	704.092	704.106
S	11980.773	18.667	704.110	704.135
T	11990.773	18.667	704.123	704.158
U	12000.773	18.667	704.132	704.164
V	12010.773	18.667	704.137	704.164
W	12020.773	18.667	704.138	704.150
€ Brg. E. Abut.	12028.085	18.667	704.136	704.136
Bk. E. Abut.	12032.283	18.667	704.134	704.134

DESIGNED *W. P. Arnold*
 EXAMINED *George J. Kasper*
 CHECKED *Patricia M. Petrone*
 PASSED *James J. Rabinowitz*
 DRAWN *John F. Schneller Jr.*
 CHECKED *PMP GAA*
 February 9, 1989
 ENGINEER OF CIVIL DESIGN
 ENGINEER OF BRIDGE AND STRUCTURES
 DIRECTOR OF HIGHWAYS
 E-S 1-6-82

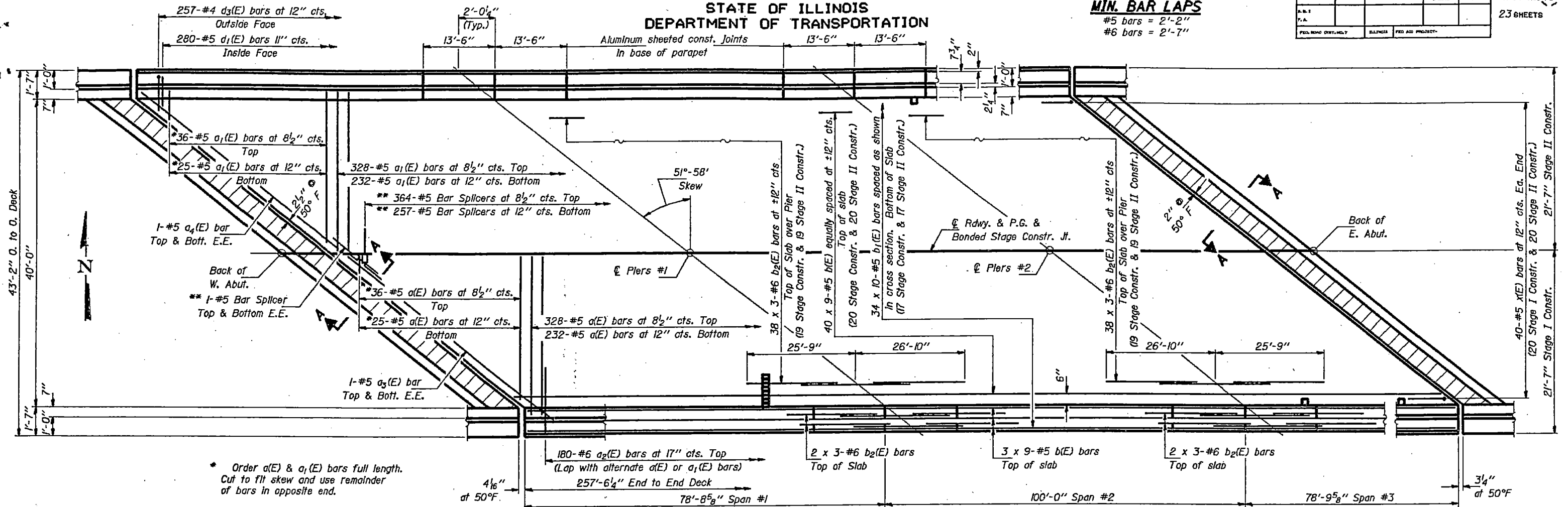
TOP OF SLAB ELEVATIONS
 F.A. RT. 25 SEC. 17R-17B2
 WHITESIDE COUNTY
 STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MIN. BAR LAPS

#5 bars = 2'-2"
#6 bars = 2'-7"

ROUTE NO.	SECTION	COUNTY	DATE	PREP.	SHEET NO. (7a)
F.A.					23 SHEETS
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	



* Order a(E) & a₁(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

Notes: See Sheet #8 of 23 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars Indicated thus 20 x 3-#5 etc. Indicates 20 lines of bars with 3 lengths per line.
See Sheet #8 of 23 for parapet reinforcement. Hatched area to be poured after Superstructure forms have been removed.
For Drainage Scupper details see sheets #9 & #10 of 23.

** Bar splicers lapped with a(E) and a₁(E) bars shall be tied with double the number of ties normally used.

a₅(E) bars: #4 at 12" cts. a₅(E) bars are located between the shear studs at the following locations:

Bm. #1 & 3 - Brg. W. Abut. to Spl. #2
Bm. #3 - Brg. E. Abut. to Spl. #5

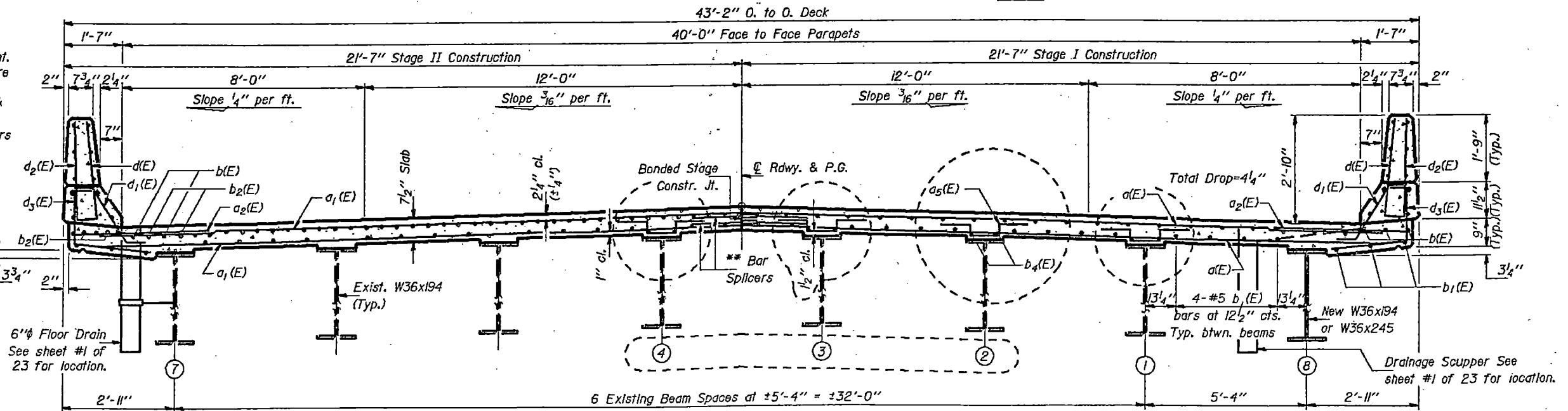
Bm. #2 - Brg. W. Abut. to Spl. #2

Bm. #4 - Brg. E. Abut. to Spl. #5

b₄(E) bars: 2 x 2-#5 located at inside face of outside shear studs at the above locations.

Note: At each location mentioned above, there are 53-#4 a₅(E) bars at 12" cts. required.

PLAN



CROSS SECTION
(Looking East at Normal Cross Section)

DESIGNED: *W. R. ...*
CHECKED: *...*
DRAWN: *DT*
CHECKED: *G.R.A.*

February 8, 1989
EXAMINED: *...*
PASSED: *...*
APPROVED: *...*

S-1-R(15) 12-31-87

AS REVISED 6-9-89 G.R.A.

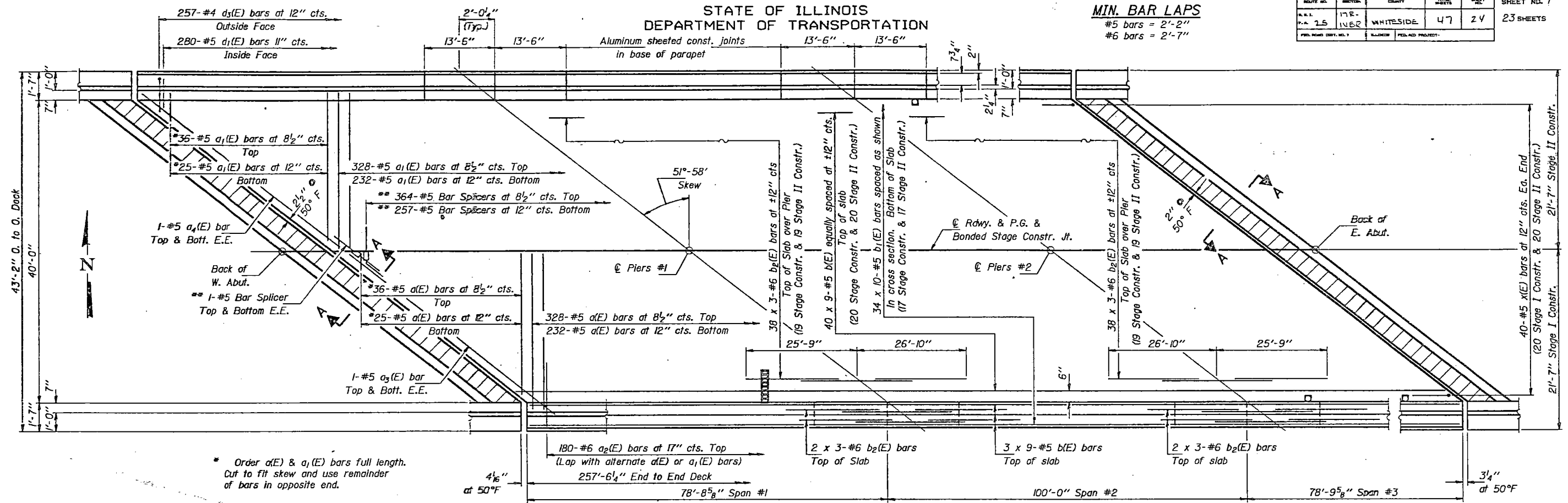
SUPERSTRUCTURE
F.A. RT. 25 SEC. 17R-IVBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

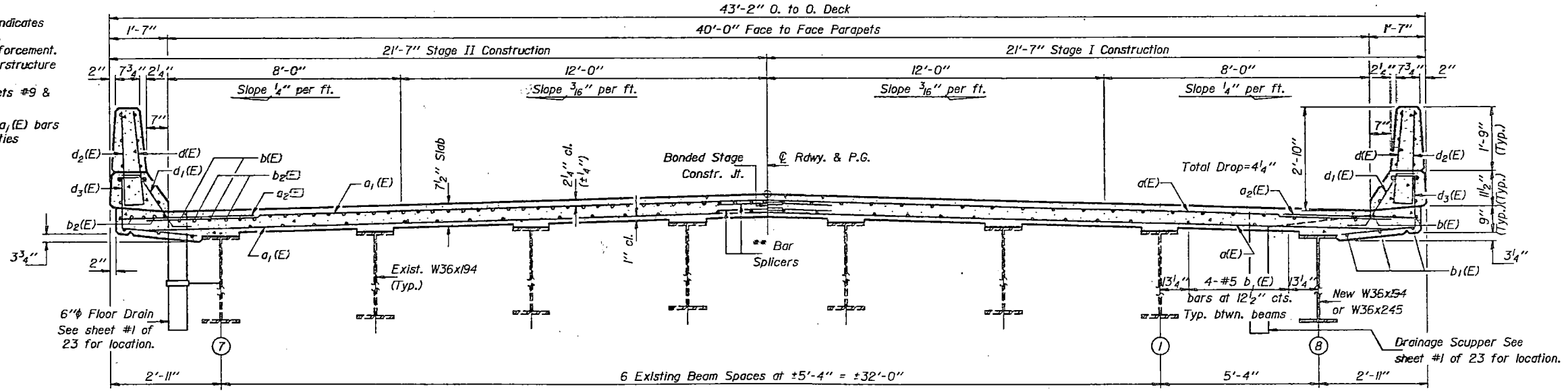
MIN. BAR LAPS

#5 bars = 2'-2"
#6 bars = 2'-7"

ROUTE NO.	DIVISION	COUNTY	SHEET NO.	SHEET NO.
RT. 25	17R-MBR	WHITESIDE	47	24
SHEET NO. 7 23 SHEETS				



Notes: See Sheet #8 of 23 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet #8 of 23 for parapet reinforcement.
Hatched area to be poured after Superstructure forms have been removed.
For Drainage Scupper details see sheets #9 & #10 of 23.
** Bar splicers lapped with a(E) and a₁(E) bars shall be tied with double the number of ties normally used.

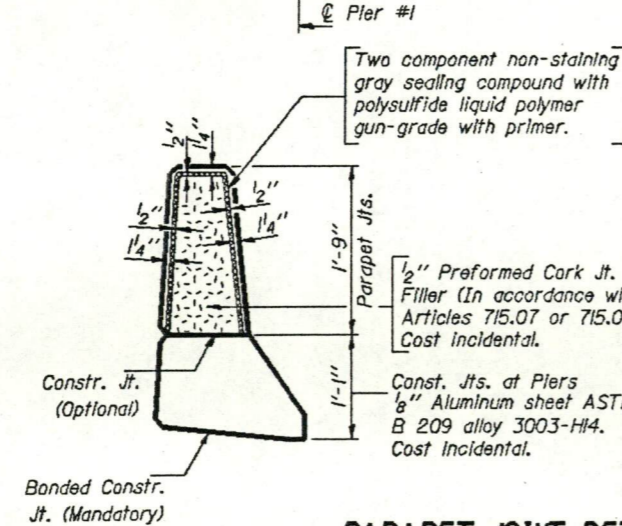
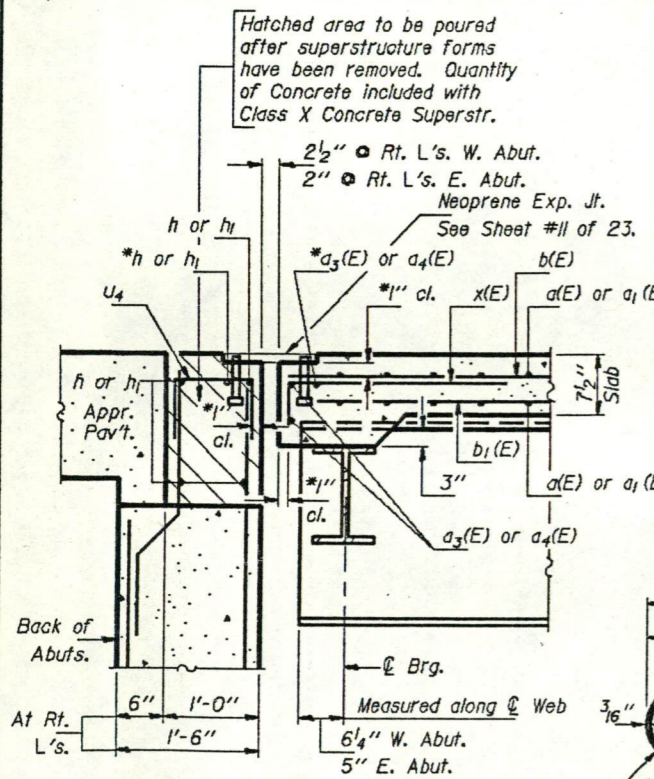
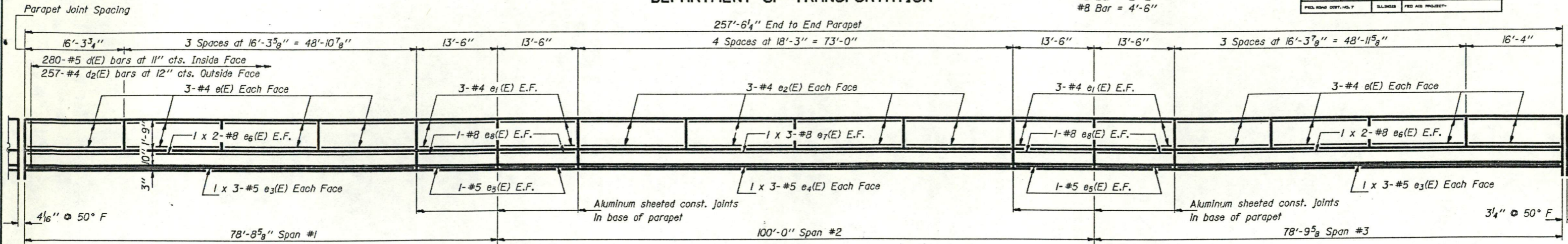


DESIGNED: *W.H. ...*
CHECKED: *John F. Schneller Jr.*
DRAWN: John F. Schneller Jr.
CHECKED: PMP G.P.P.

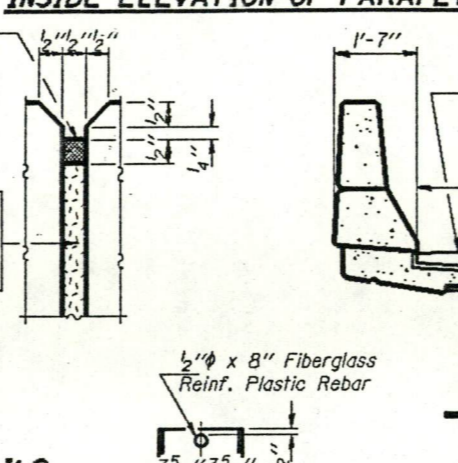
EXAMINED: *Gregory O. Kaspar*
PASSED: *James J. ...*
APPROVED: *...*
DIRECTOR OF HIGHWAYS

February 8, 1989

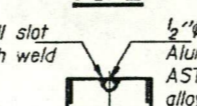
SUPERSTRUCTURE
F.A. RT. 25 SEC. 17R-MBR
WHITESIDE COUNTY
STA. 118+76.91



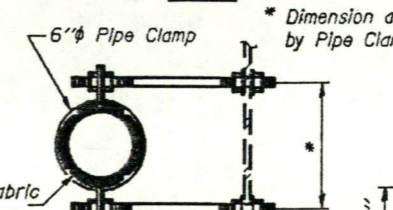
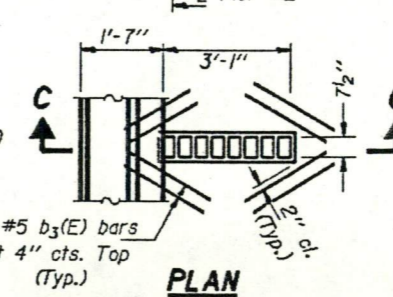
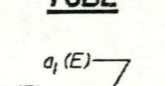
INSIDE ELEVATION OF PARAPET



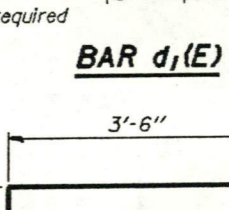
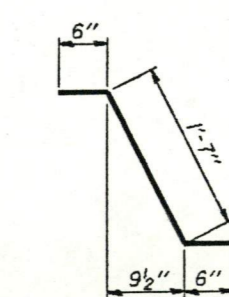
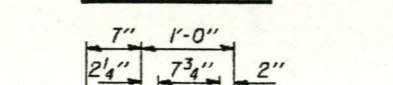
FIBERGLASS PIPE



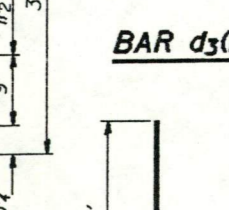
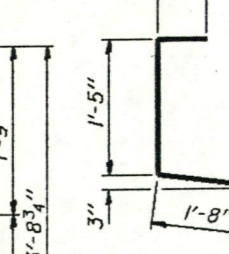
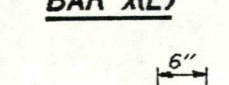
ALUMINUM TUBE



SECTION B-B

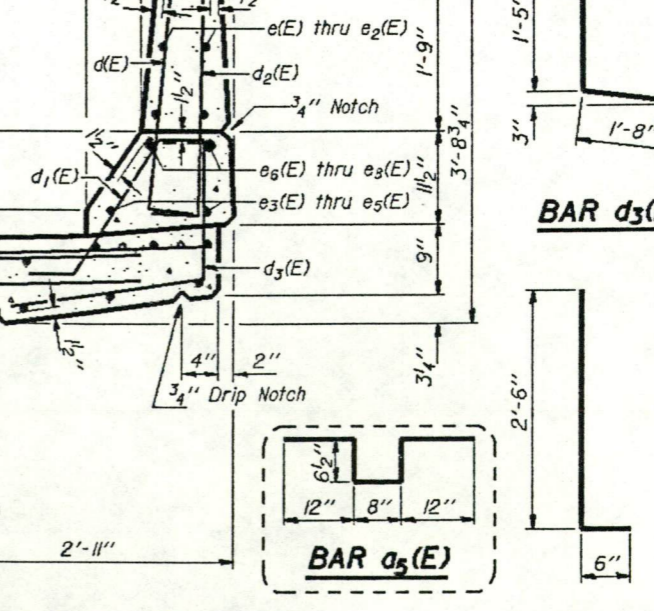
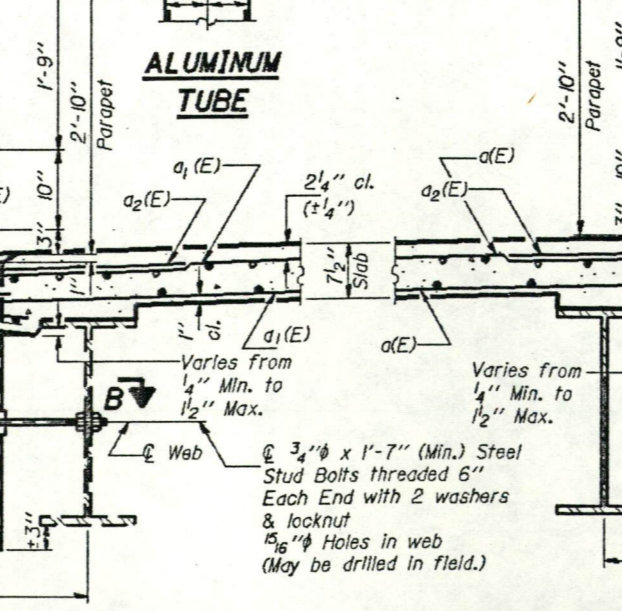
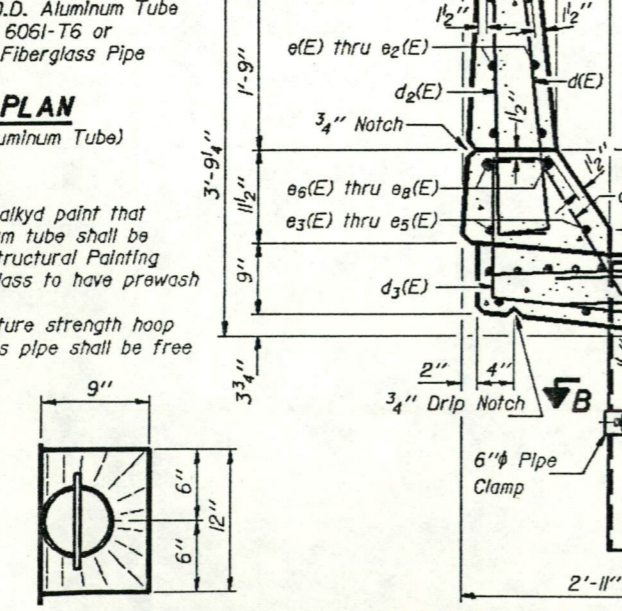
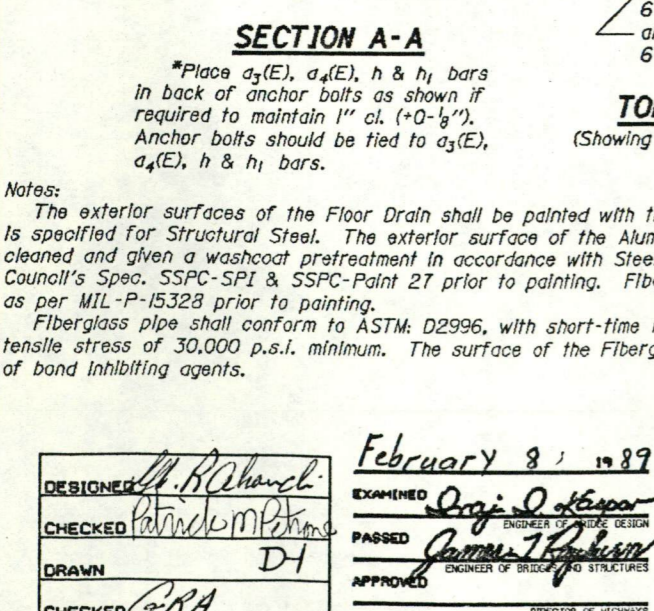


SECTION C-C



SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	621	#5	20'-2"	
a1(E)	621	#5	20'-7"	
a2(E)	360	#6	4'-0"	
a3(E)	4	#5	32'-9"	
a4(E)	4	#5	33'-5"	
a5(E)	318	#4	2'-8"	
b(E)	414	#5	30'-7"	
b1(E)	340	#5	27'-9"	
b2(E)	252	#6	19'-3"	
b3(E)	8	#5	2'-0"	
b4(E)	12	#5	27'-4"	
c(E)	560	#5	3'-0"	
d1(E)	560	#5	2'-7"	
d2(E)	514	#4	3'-0"	
d3(E)	514	#4	3'-7"	
e(E)	96	#4	16'-0"	
e1(E)	48	#4	13'-3"	
e2(E)	48	#4	18'-0"	
e3(E)	24	#5	23'-3"	
e4(E)	12	#5	25'-10"	
e5(E)	16	#5	13'-3"	
e6(E)	16	#8	34'-11"	
e7(E)	12	#8	27'-4"	
e8(E)	16	#8	13'-3"	
x(E)	80	#5	4'-1"	
Reinforcement Bars (Epoxy Coated)		Lbs.	72,040	
Class X Concrete Superstructure		Cu. Yds.	339.0	



Notes:
The exterior surfaces of the Floor Drain shall be painted with the alkyd paint that is specified for Structural Steel. The exterior surface of the Aluminum tube shall be cleaned and given a washcoat pretreatment in accordance with Steel Structural Painting Council's Spec. SSPC-SPI & SSPC-Paint 27 prior to painting. Fiberglass to have prewash as per MIL-P-15328 prior to painting.
Fiberglass pipe shall conform to ASTM: D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. The surface of the Fiberglass pipe shall be free of bond inhibiting agents.

DESIGNED: M. R. Chanch
CHECKED: Patrick M. P...
DRAWN: DI
CHECKED: G. RA
February 8, 1989
EXAMINED: Craig J. ...
PASSED: James J. ...
APPROVED: ...
DIRECTOR OF HIGHWAYS

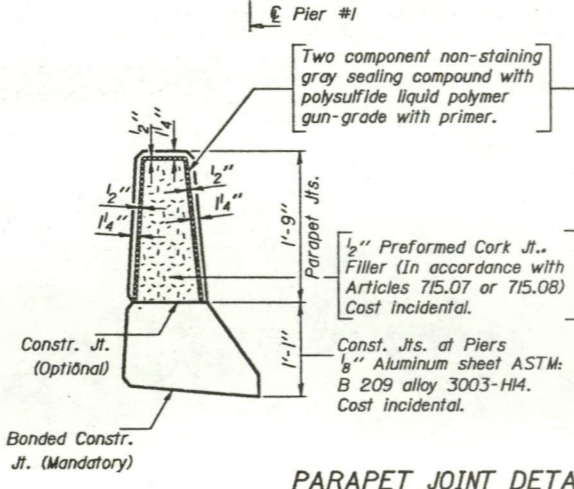
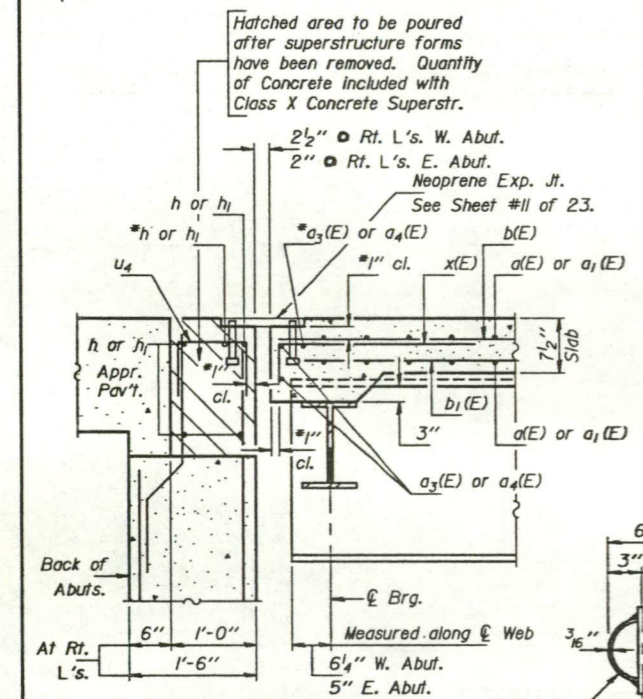
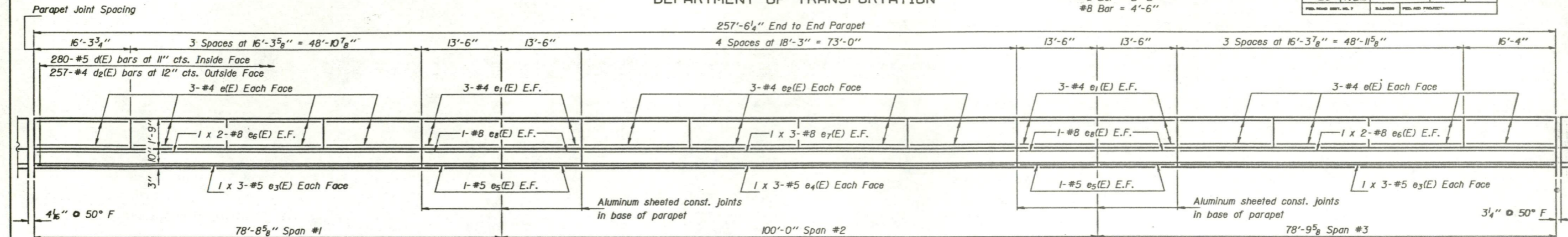
Reinforcement bars designated (E) shall be epoxy coated.
Bars Indicated thus 1 x 2-#5 etc. Indicates 1 line of bars with 2 lengths per line.
AS REVISED 6-9-89 G.R.A.
SUPERSTRUCTURE DETAILS
F.A. RT. 25 SEC. 17R-MBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

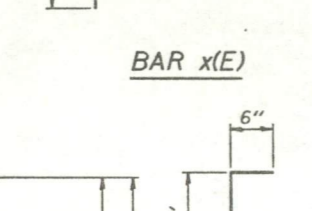
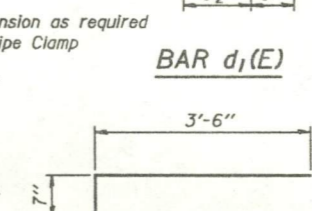
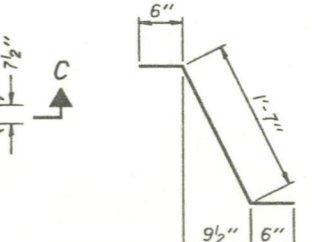
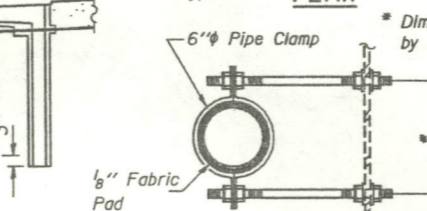
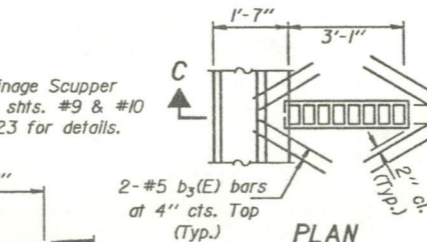
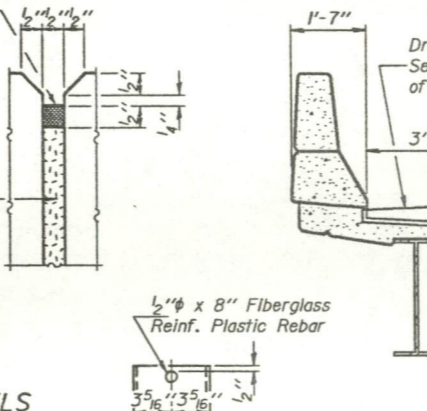
MIN. BAR LAPS

#5 Bar = 2'-2"
#8 Bar = 4'-6"

ROUTE NO.	SECTION	COUNTY	POST MILES	SHEET NO.
25	17R-NBR	WHITESIDE	47	25
SHEET NO. 8 23 SHEETS				

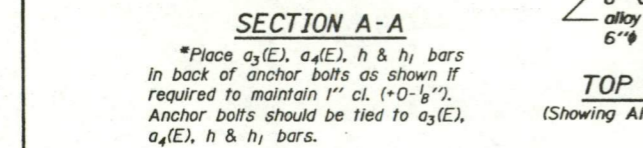


INSIDE ELEVATION OF PARAPET



SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	621	#5	20'-2"	—
a1(E)	621	#5	20'-7"	—
a2(E)	360	#6	4'-0"	—
a3(E)	4	#5	32'-9"	—
a4(E)	4	#5	33'-5"	—
b(E)	414	#5	30'-7"	—
b1(E)	340	#5	27'-9"	—
b2(E)	252	#6	19'-3"	—
b3(E)	8	#5	2'-0"	—
c(E)	560	#5	3'-0"	—
d1(E)	560	#5	2'-7"	—
d2(E)	514	#4	3'-0"	—
d3(E)	514	#4	3'-7"	—
e(E)	96	#4	16'-0"	—
e1(E)	48	#4	13'-3"	—
e2(E)	48	#4	18'-0"	—
e3(E)	24	#5	23'-3"	—
e4(E)	12	#5	25'-10"	—
e5(E)	16	#5	13'-3"	—
e6(E)	16	#8	34'-11"	—
e7(E)	12	#8	27'-4"	—
e8(E)	16	#8	13'-3"	—
x(E)	80	#5	4'-1"	—
Reinforcement Bars (Epoxy Coated)		Lbs.	71,130	
Class X Concrete Superstructure		Cu. Yds.	339.0	

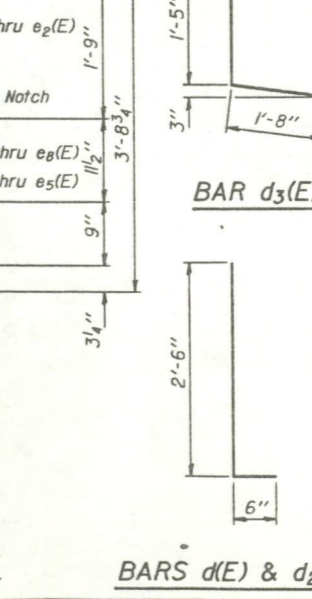
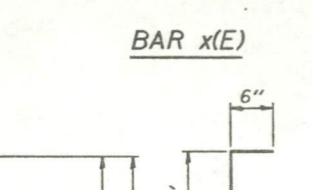
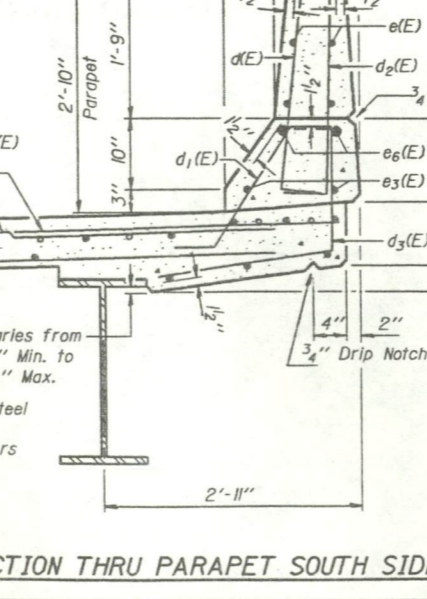
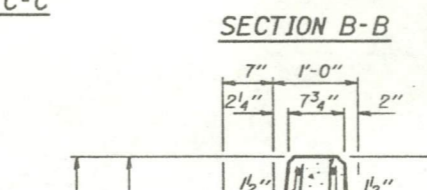
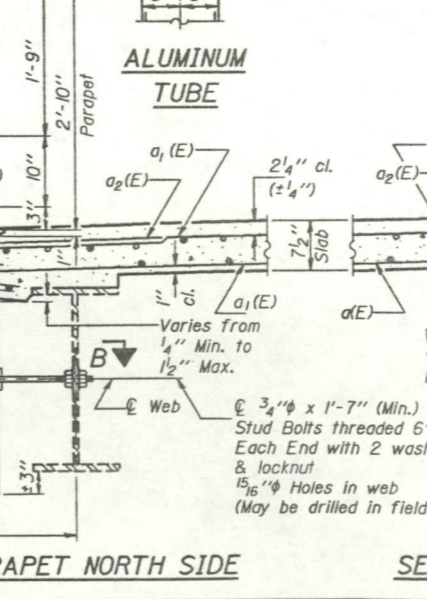
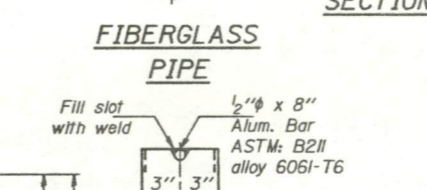
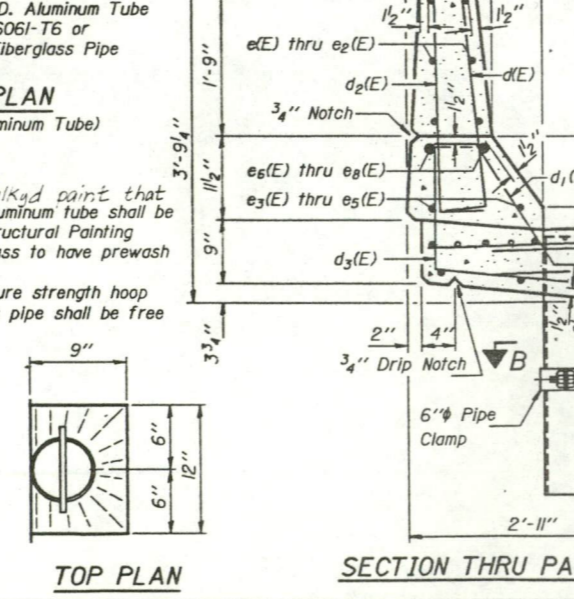
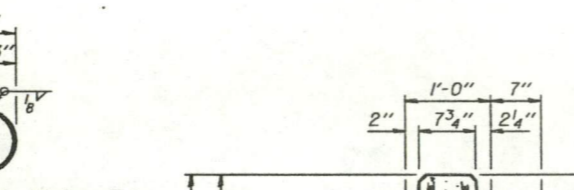


Notes:
The exterior surfaces of the Floor Drain shall be painted with the alkyl paint that is specified for Structural Steel. The exterior surface of the Aluminum tube shall be cleaned and given a washcoat pretreatment in accordance with Steel Structural Painting Council's Spec. SSPC-SPI & SSPC-Paint 27 prior to painting. Fiberglass to have prewash as per MIL-P-15328 prior to painting.
Fiberglass pipe shall conform to ASTM: D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. The surface of the Fiberglass pipe shall be free of bond inhibiting agents.

DESIGNED: *H. R. Chud*
CHECKED: *Patrick M. P...*
DRAWN: *John F. Schneller Jr.*
CHECKED: *PMP GPP*

February 8, 1977
EXAMINED: *James J. Ryburn*
PASSED: *James J. Ryburn*
APPROVED: *James J. Ryburn*

S-2-D 12-31-87

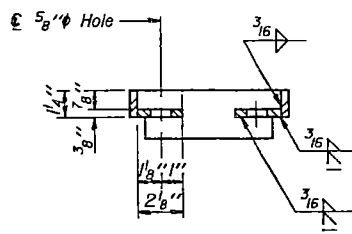


Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

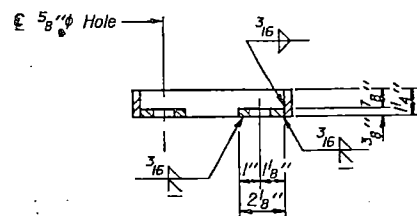
SUPERSTRUCTURE DETAILS
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

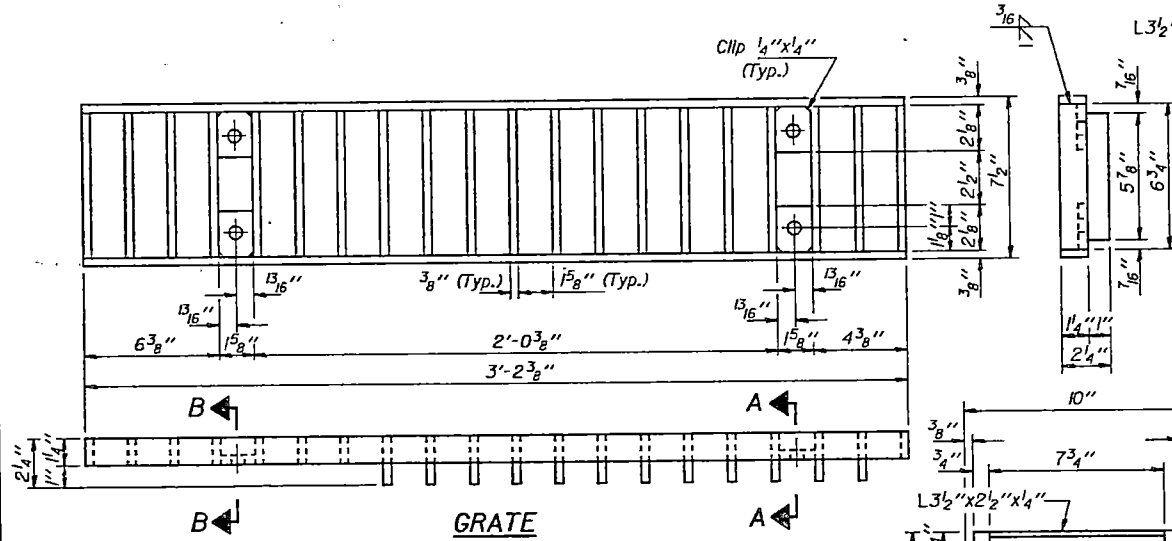
ROUTE NO.	SECTION	COUNTY	POST MILE	SHEET NO.
F.A. 25	17R-NBR	WHITESIDE	47	26
PROJECT NAME				23 SHEETS
SHEET NO. 9				



SECTION A-A

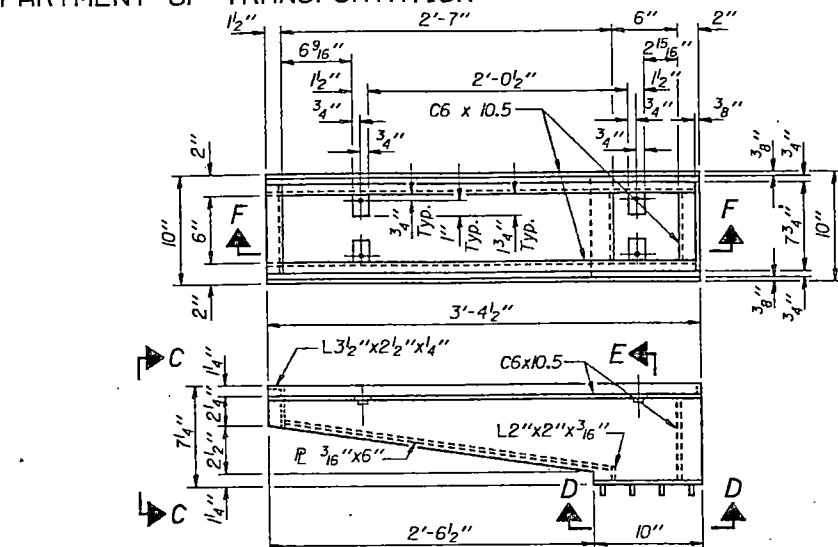


SECTION B-B

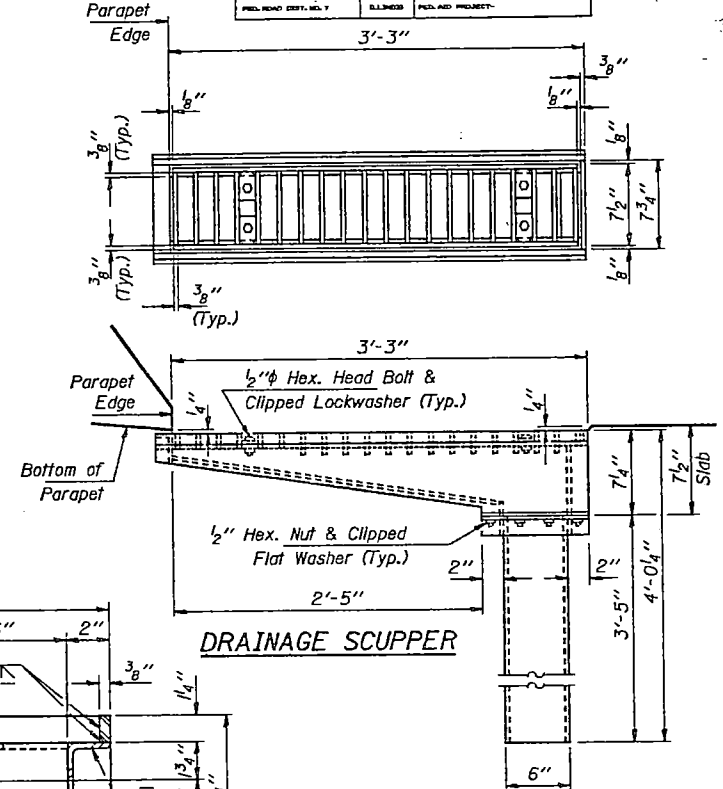


GRATE

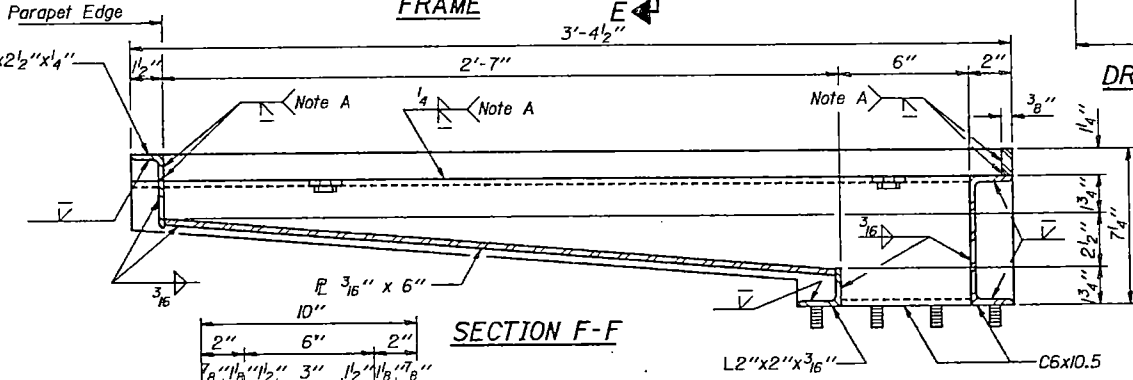
Notes: Hollow structural steel tubing shall conform to the requirements of ASTM designation A500 Grade B, or A501 Structural Steel Tubing.
All other shapes, plates and bars shall conform to the requirements of AASHTO M183.
Bolts, studs, washers and nuts shall conform to the requirements of ASTM A307.
The Grate, Frame and Downspout shall be galvanized after shop fabrication in accordance with AASHTO M11 & ASTM A385.
All bolts, washers and nuts shall be galvanized in accordance with AASHTO M232.
Cast of the Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper will be paid for at the unit bid price for "DRAINAGE SCUPPERS."



FRAME

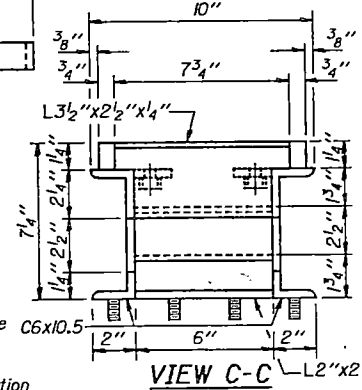


DRAINAGE SCUPPER

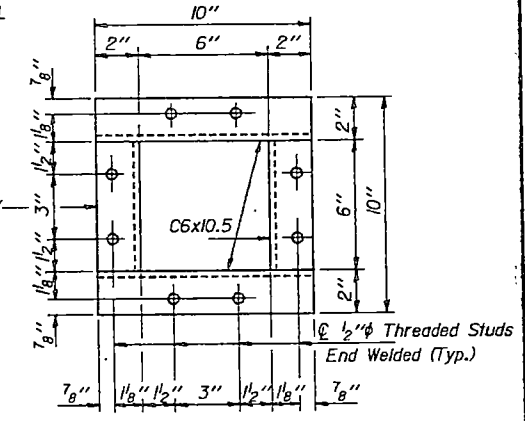


SECTION F-F

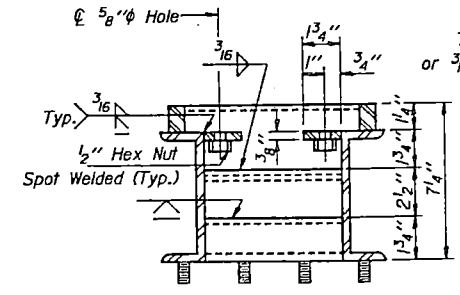
Note A: Surface of welds shall be recessed 1/16" Max. or placed flush with inside face of bars to provide clearance for Grate.



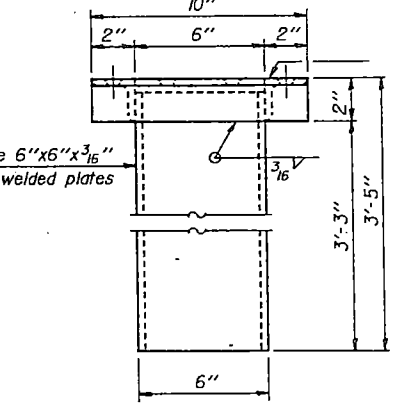
VIEW C-C



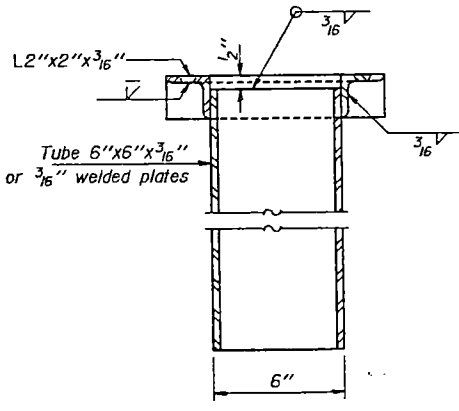
VIEW D-D



SECTION E-E



DOWNSPOUT



SECTION G-G

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper	Each	1

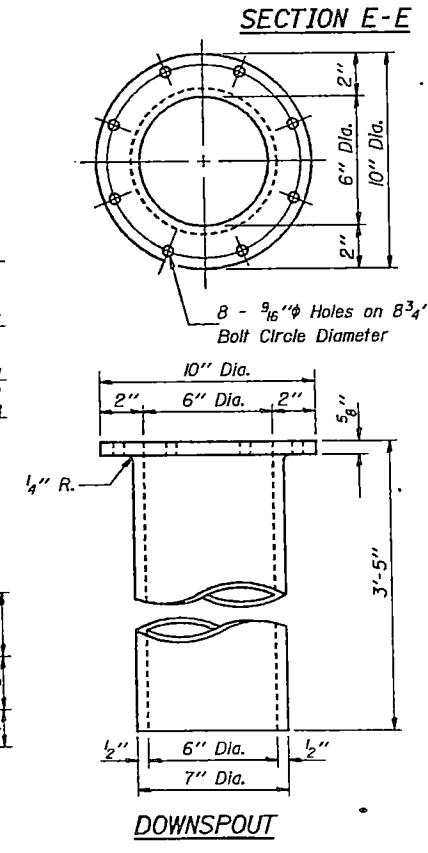
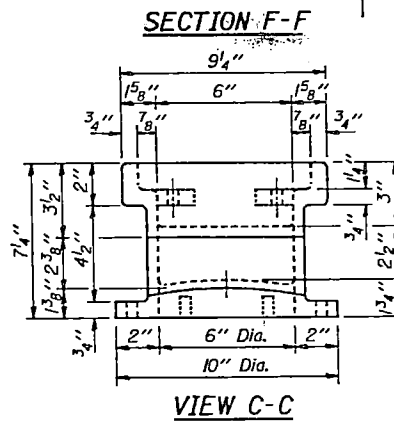
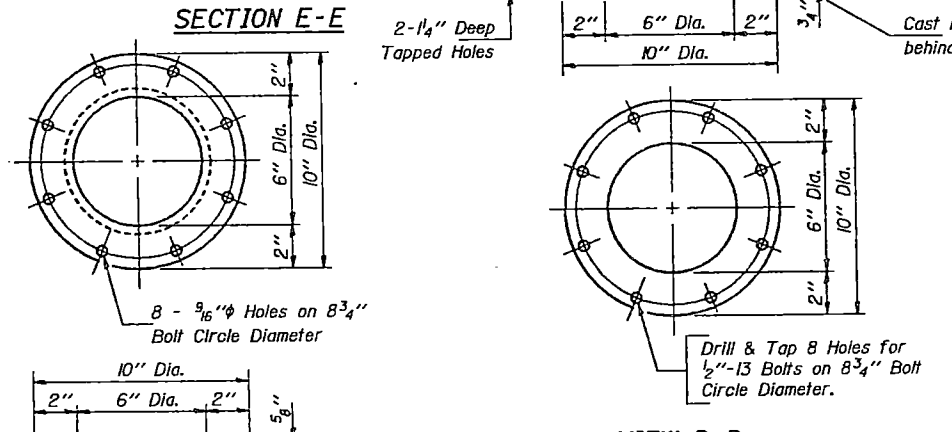
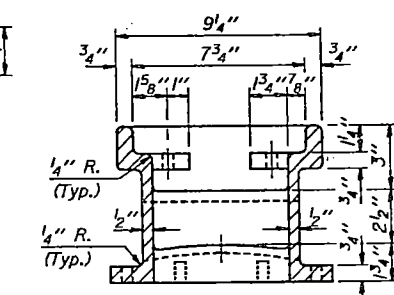
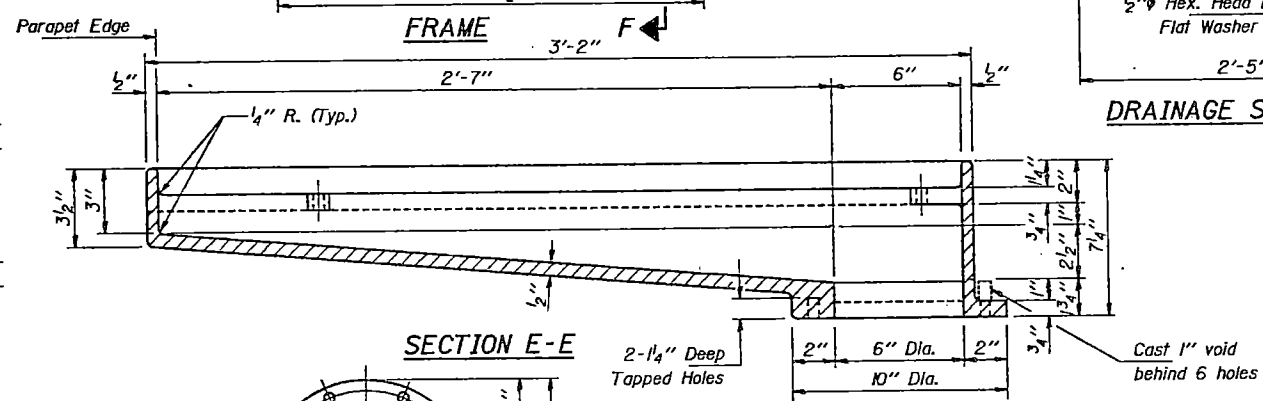
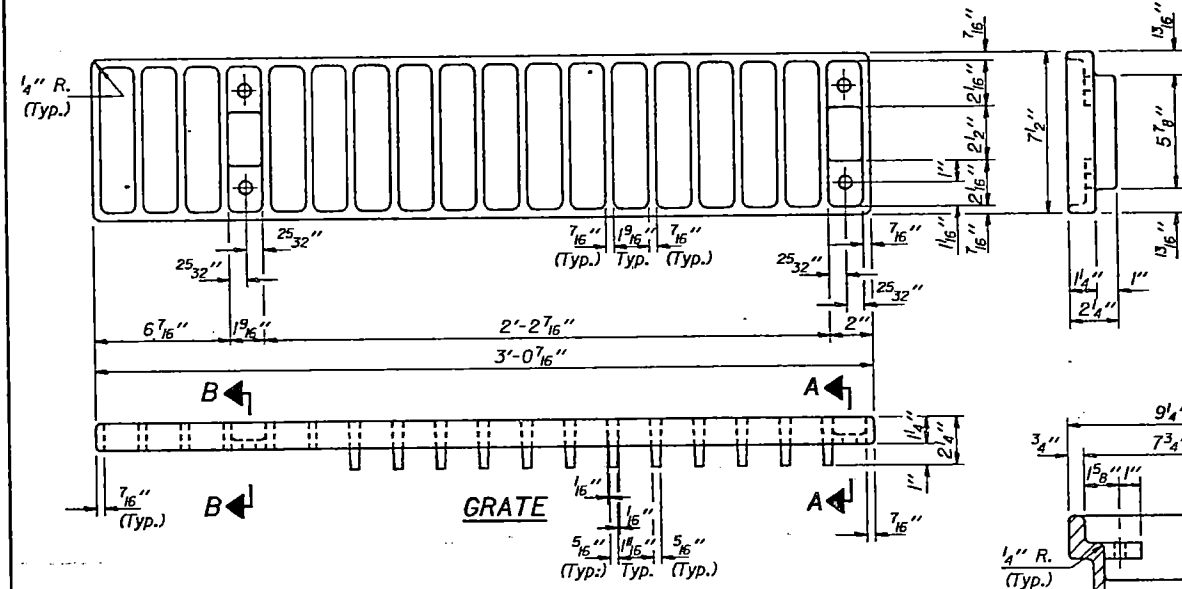
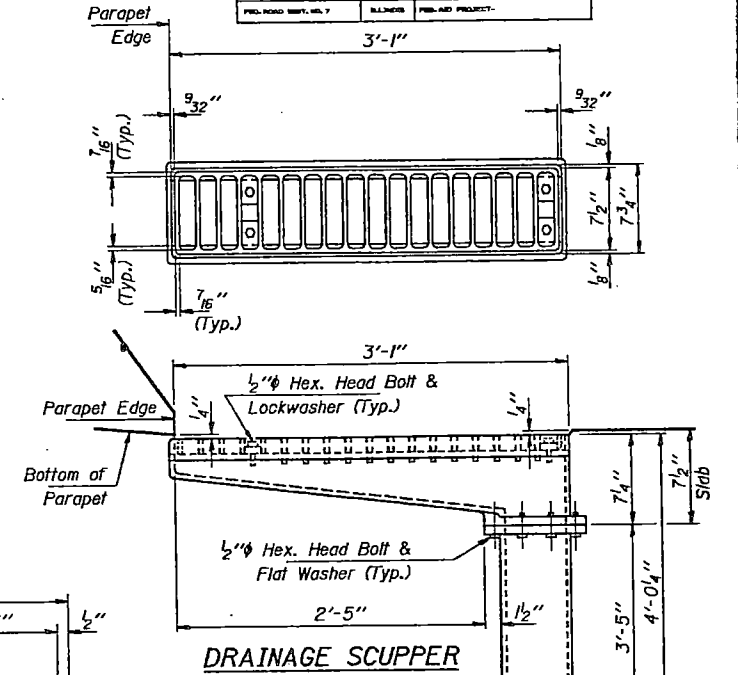
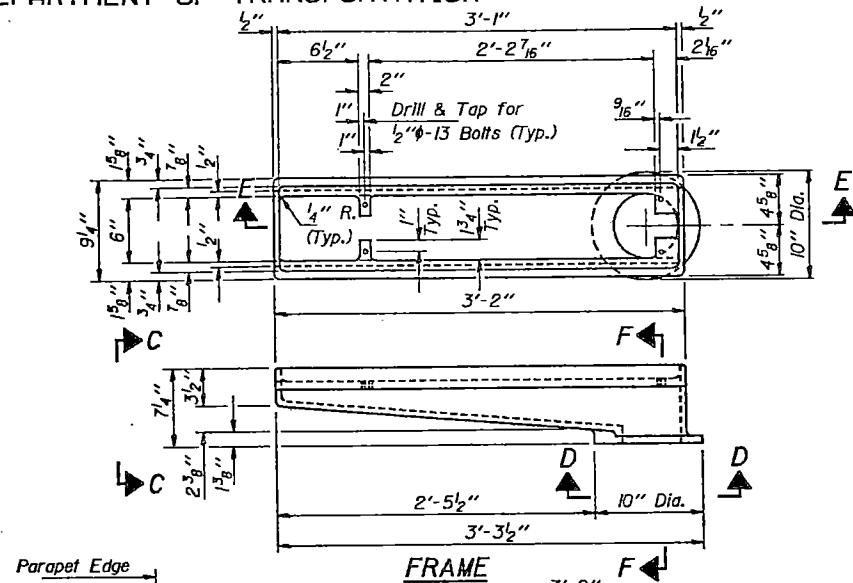
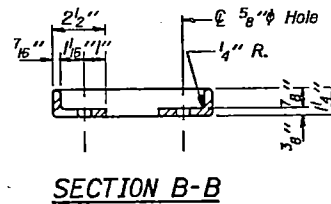
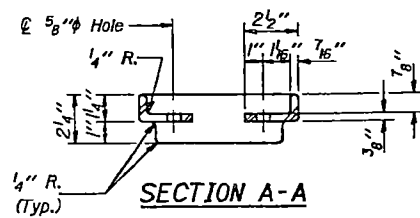
(Sheet 1 of 2)
STEEL DRAINAGE SCUPPER
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

DESIGNED	February 8, 1999
CHECKED	EXAMINED
DRAWN	APPROVED
CHECKED	SECTION CHIEF

DS-3 12-1-83 (W.T. to inside of exterior stringer flange shall not be > 3'-11")

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO.	SECTION	COUNTY	SHEET	SHEET NO.
25	17R-NBR	WHITESIDE	47	27
SHEET NO. 10 23 SHEETS				



- Notes:
- All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 30.
 - Bolts and washers shall conform to the requirements of ASTM A307.
 - All bolts and washers shall be galvanized in accordance with AASHTO M232.
 - As an alternate bolts and washers may be stainless steel conforming to the requirements of ASTM A193, Type 304.
 - Cost of the Grate, Frame, Downspout, bolts and washers including complete installation of Scupper will be paid for at the unit bid price for "DRAINAGE SCUPPERS."
 - The Contractor may use at his option steel drainage scuppers or cast iron drainage scuppers.

DESIGNED <i>John F. Schneller Jr.</i>	EXAMINED <i>James J. Rohrman</i>
CHECKED <i>John F. Schneller Jr.</i>	PASSED <i>James J. Rohrman</i>
DRAWN <i>John F. Schneller Jr.</i>	APPROVED <i>James J. Rohrman</i>
CHECKED <i>PMP GRA</i>	

February 8, 1989

JAMES J. ROHRMAN
ENGINEER OF STRUCTURES AND MATERIALS
DIRECTOR OF HIGHWAYS

DS-4 12-1-83 (N.T. to inside of exterior stringer flange shall not be >3'-11")

(Sheet 2 of 2)
ALTERNATE - CAST IRON
DRAINAGE SCUPPER
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Joint Size	"C" at 50°F	"D" at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	1 3/4" Min.
4"	3"	2 1/2" Min.

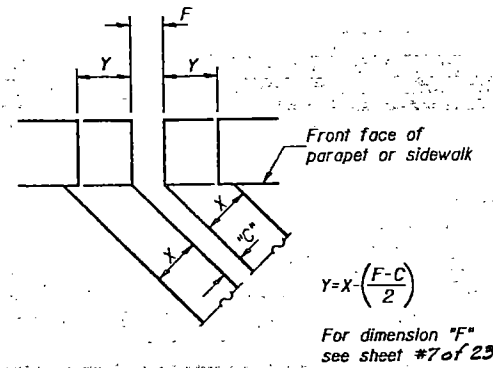
INSTALLATION NOTES

- Install sponge mandrels into positions shown to form flap convolution.
- Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
- Install continuous seal in roadway.
- Install anchor blocks as indicated.

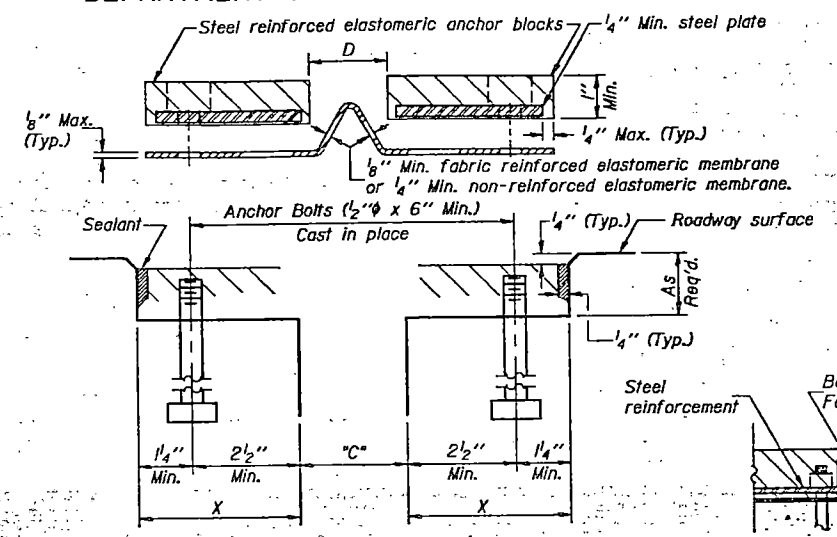
NOTE A: Maximum spacing of anchor bolts shall be 12" centers.

SKIEW LIMITATIONS

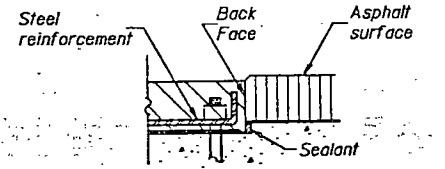
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skew. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



FORMING BLOCKOUT SKETCH



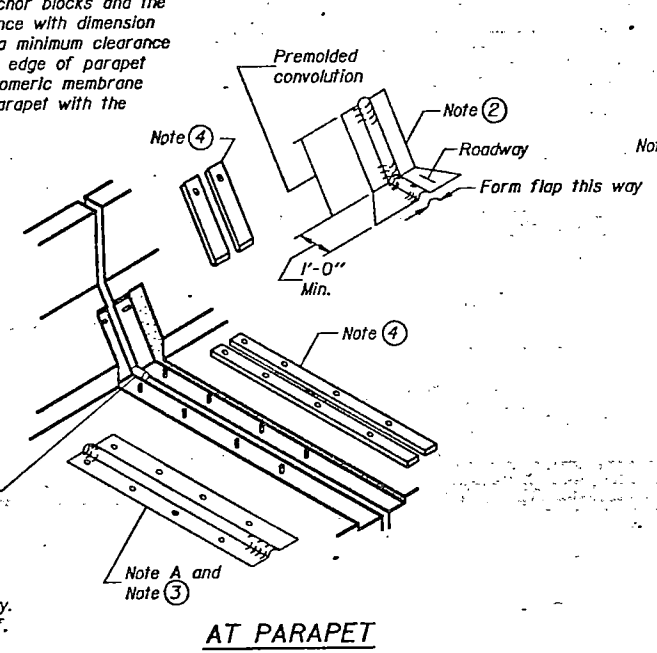
CROSS SECTION



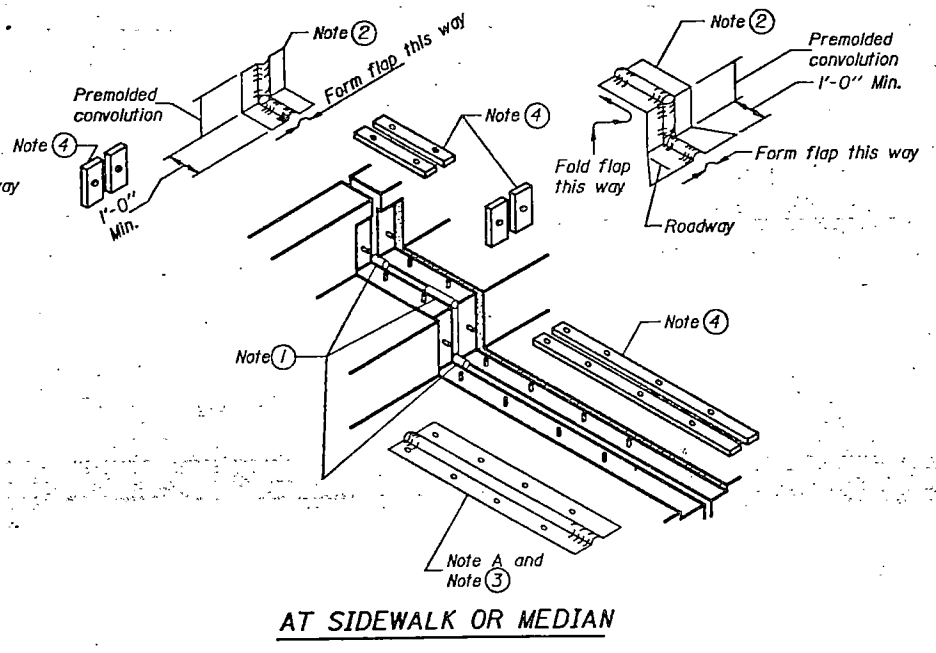
ANCHOR BLOCK REINFORCEMENT WITH ASPHALT SURFACE

GENERAL NOTES

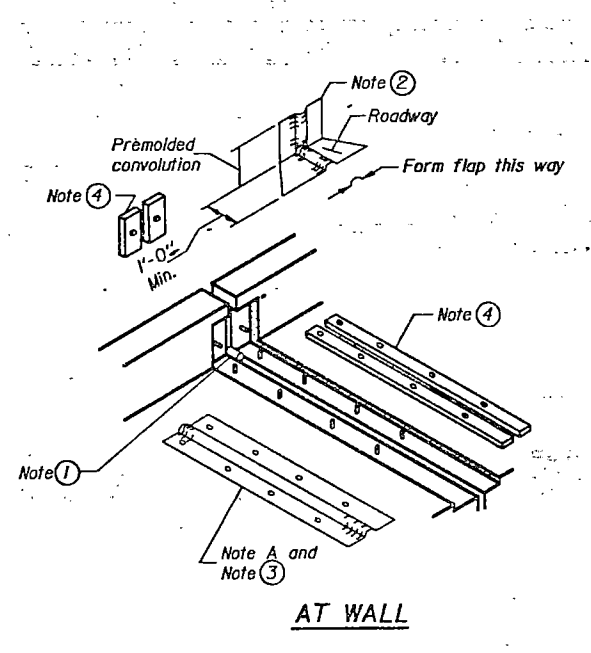
Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions. The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure. The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout. The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed. Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F. The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.



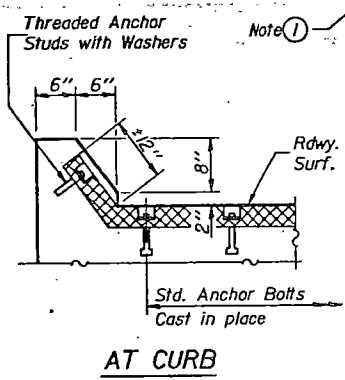
AT PARAPET



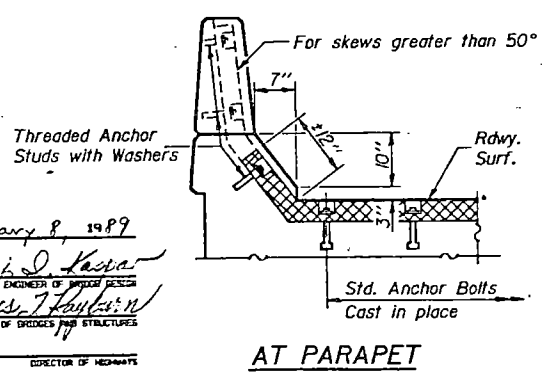
AT SIDEWALK OR MEDIAN



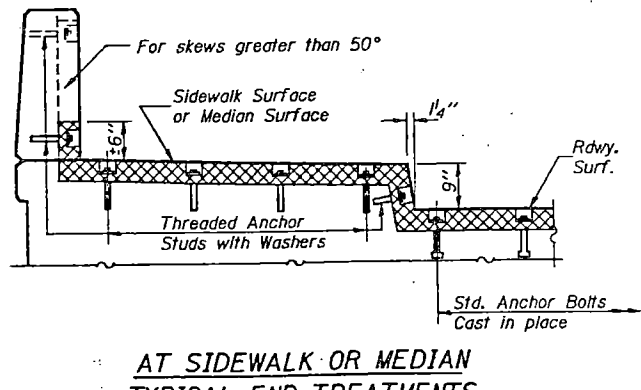
AT WALL



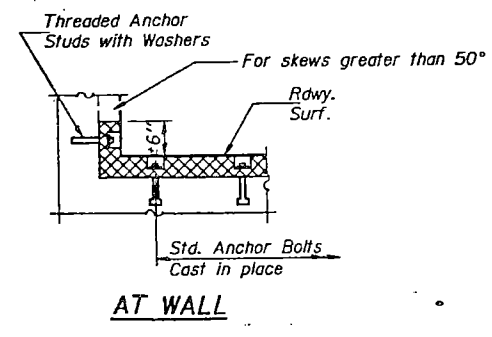
AT CURB



AT PARAPET



AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS



AT WALL

DESIGNED *U.R. Alford*
CHECKED *Peter M. P...*
DRAWN *J. SCHNELLER*
CHECKED *PMP GRA*

February 8, 1989
EXAMINED *James J. ...*
PASSED *James J. ...*
APPROVED *James J. ...*

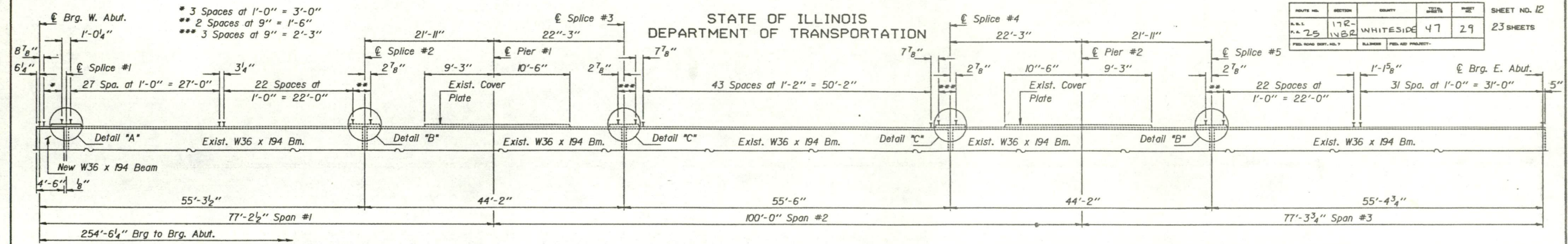
EJ-CS 12-31-87

CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS
For 2", 2 1/2" and 4" Movement

E.A. RT. 25 - SEC. 17R-1VBR
WHITESIDE COUNTY
STA. 118+76.91

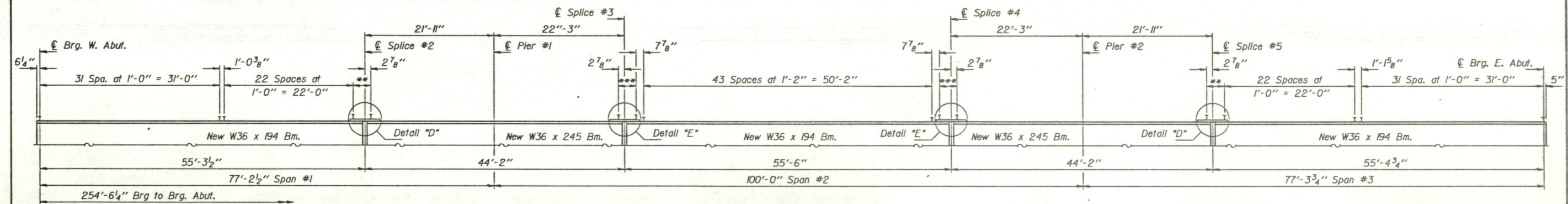
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	BRIDGE	SPANS	FEET	SHEET NO. 12
25	17R-IVBR	WHITESIDE	47	29	23 SHEETS
FED. ROAD DIST. NO. 7					



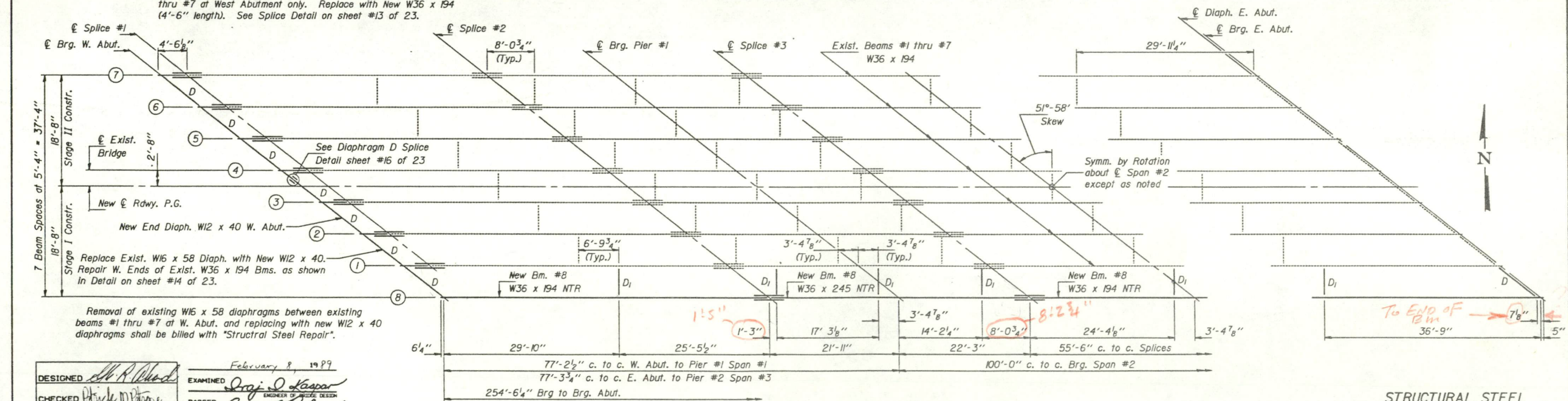
ELEVATION EXISTING BEAMS #1 THRU #7
(Showing Stud Shear Connector Spacing)

For Details "A" thru "E" see sheet #13 of 23.



ELEVATION NEW BEAM #8
(Showing Stud Shear Connector Spacing)

Note:
Cut 4'-6 1/4" from Ends of Existing W36 x 194 of Beams No. #1 thru #7 at West Abutment only. Replace with New W36 x 194 (4'-6" length). See Splice Detail on sheet #13 of 23.



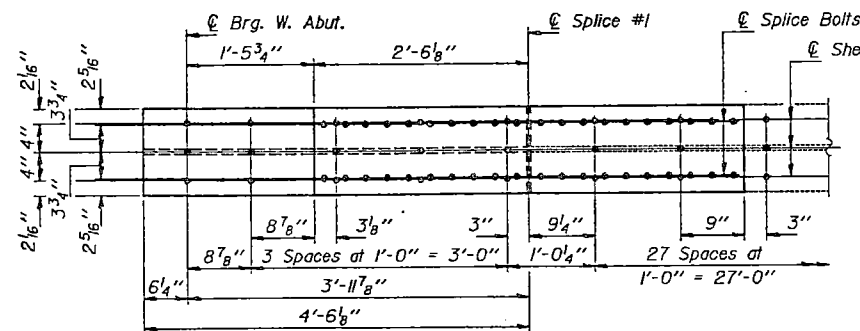
DESIGNED <i>M. R. Wood</i>	EXAMINED <i>Gregory O. Kaspar</i>
CHECKED <i>Patrick M. Brown</i>	PASSED <i>James J. Ferguson</i>
DRAWN <i>John F. Schneller Jr.</i>	APPROVED <i>[Signature]</i>
CHECKED <i>GAA WMP</i>	DIRECTOR OF HIGHWAYS

FRAMING PLAN

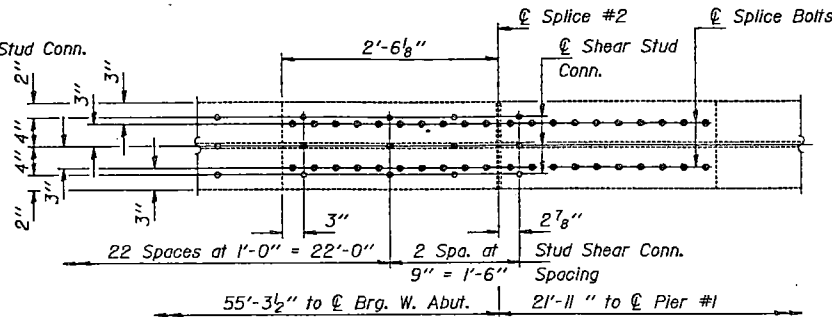
STRUCTURAL STEEL
F.A. RT. 25 SEC. 17R-IVBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	LETS	POST	SHEET NO. 13
25	17R-NBR	WHITESIDE	47	30	23 SHEETS
FED. ROAD DIST. NO. 7		BLANK	FED. AID PROJECT		

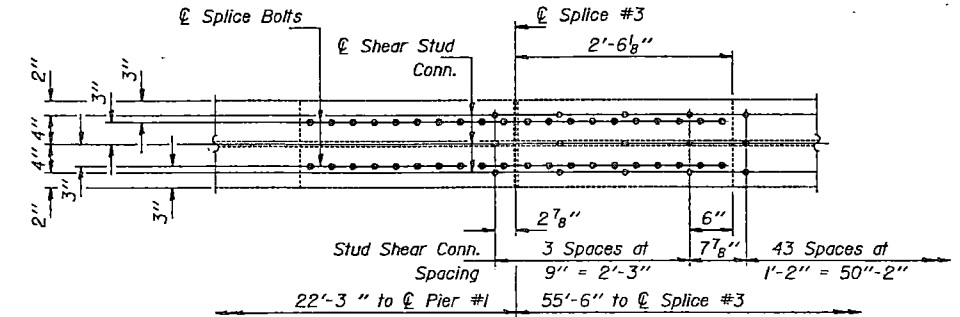


DETAIL "A"



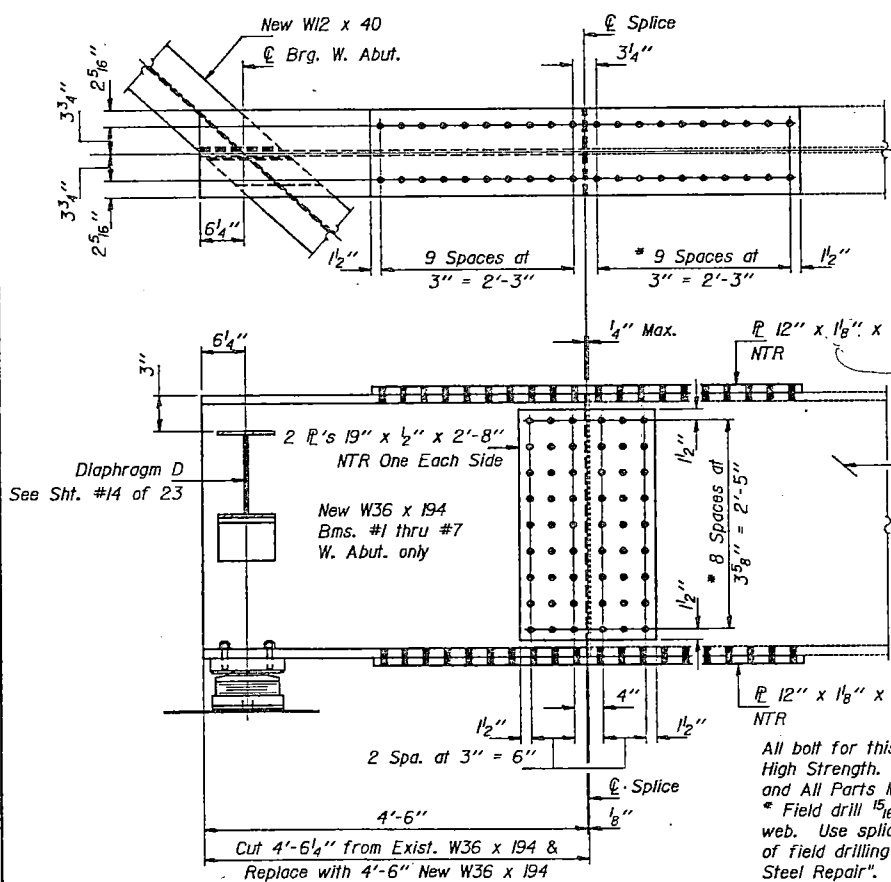
DETAIL "B"

(Splice #2 is shown, Splice #5 similar by 180° rotation)

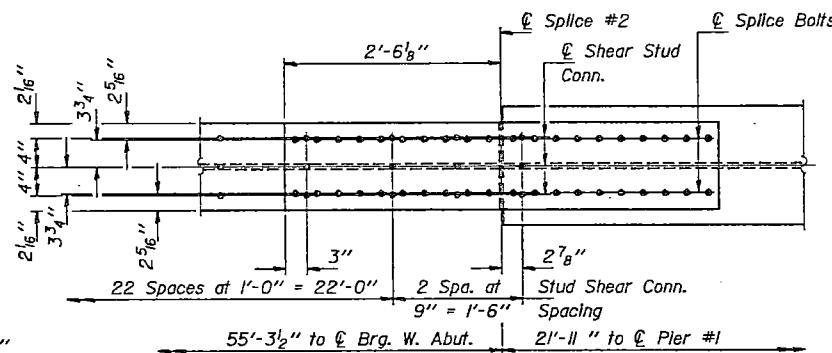


DETAIL "C"

(Splice #3 is shown, Splice #4 similar by 180° rotation)

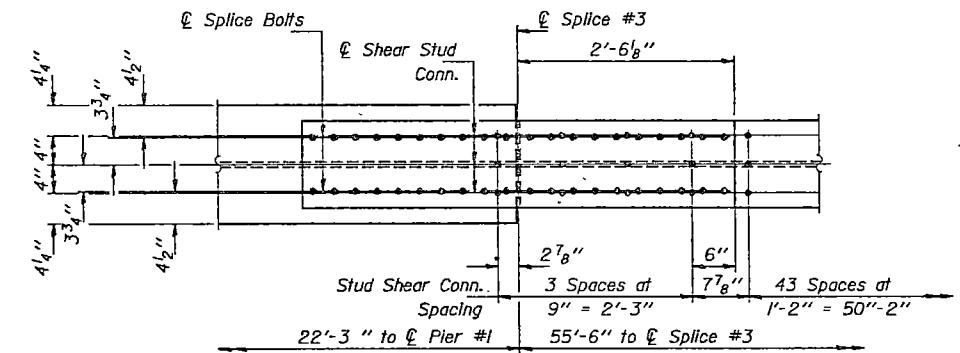


DETAIL OF REPAIR OF BEAMS AT WEST ABUTMENT



DETAIL "D"

(Splice #2 is shown, Splice #5 similar by 180° rotation)



DETAIL "E"

(Splice #3 is shown, Splice #4 similar by 180° rotation)

	0.4 Sp. #1	Pier #1	0.5 Sp. #2	Pier #2	0.6 Sp. #3
Is (in ⁴)	12,100	16,100	12,100	16,100	12,100
Ic (in ⁴)	26,310		26,310		26,310
Ss (in ³)	664	895	664	895	664
Sc (in ³)	904		904		904
φ (K/ft.)	0.756	1.002	0.756	1.002	0.756
Mφ (K)	281	822	305	822	281
sφ (K/ft.)	0.236		0.236		0.236
Msφ (K)	102		127		102
Mt (K)	455	363	504	363	455
M (Imp) (K)	112	84	112	84	112
Total (K)	669	447	743	447	669
fs non-comp (k.s.i.)	5.1	11.0	5.5	11.0	5.1
fs(t+I) non-comp (k.s.i.)		6.0		6.0	
fs (comp) (k.s.i.)	8.9		9.9		8.9
fs (Total) (k.s.i.)	14.0	17.0	15.4	17.0	14.0
VR (K)	41.4		36.2		41.4

	W. Abut.	Pier #1	Pier #2	E. Abut.
Rφ (K)	27.7	99.1	99.1	27.7
Rt (K)	30.0	44.5	44.5	30.0
Imp. (K)	7.4	10.4	10.4	7.4
R (Total) (K)	65.1	154.0	154.0	65.1

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs Total.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs Total.
VR is the maximum live Load + Impact shear range in span.

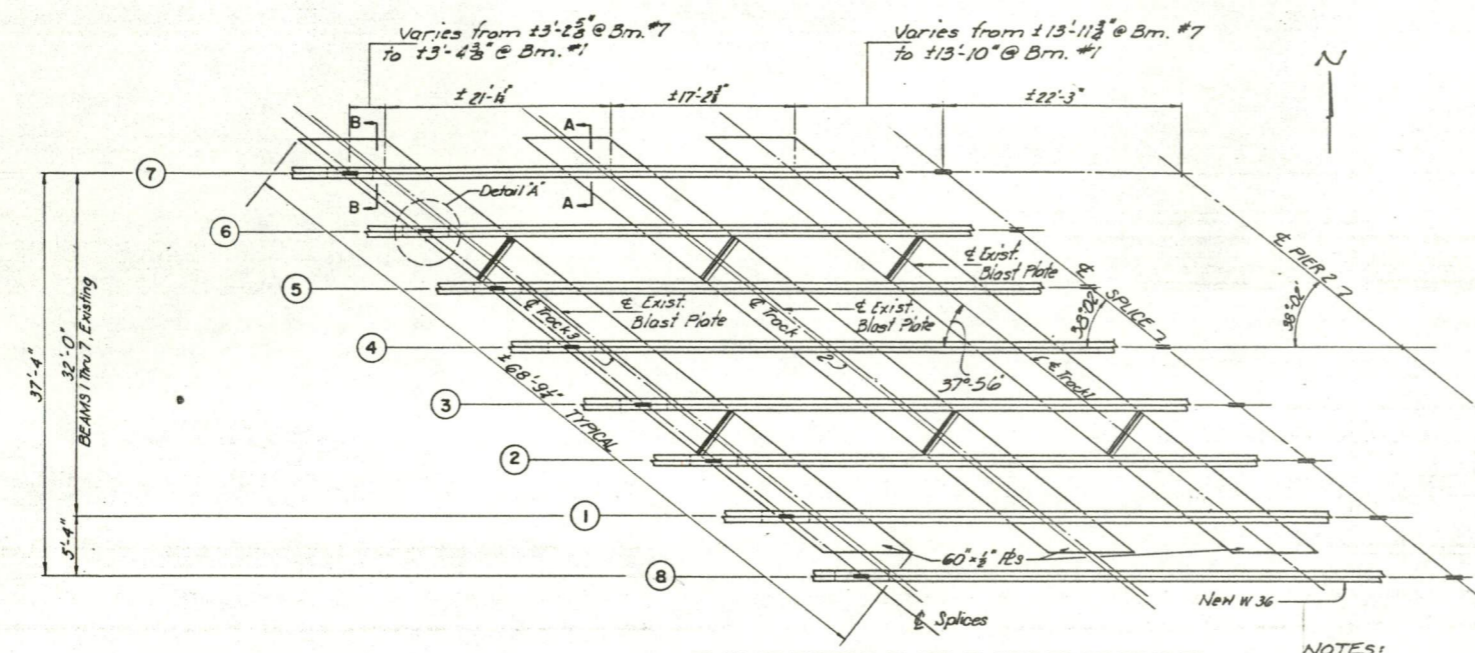
All bolt for this Splice are to be 7/8" φ M253 High Strength. All Bolt Holes to be Reamed and All Parts Match Marked.
* Field drill 5/16" φ Holes in existing flange & web. Use splice plates for template. Cost of field drilling shall be incidental to "Structural Steel Repair".

DESIGNED <i>W. R. Blundell</i>	EXAMINED <i>Greg O. Kasper</i>	NOTES:
CHECKED <i>John F. Schneller Jr.</i>	PASSED <i>James J. Kasper</i>	"NTR" denotes plates to which Notch Toughness Requirements are applicable.
DRAWN <i>John F. Schneller Jr.</i>	APPROVED <i>James J. Kasper</i>	
CHECKED <i>GNA PMP</i>	DIRECTOR OF HIGHWAYS	

OK TO use M222 For Splice + Brigs - P. 2/22/89

STRUCTURAL STEEL
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

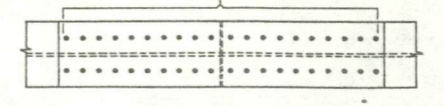
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US ROUTE 25	17R-IVBR	WHITESIDE	47	31
FED. ROAD DIV. NO.	ILLINOIS	PROJ. NO. P-92-083-84	SHEET NO. 14	



PLAN OF EXISTING BLAST PLATES TO BE REMOVED

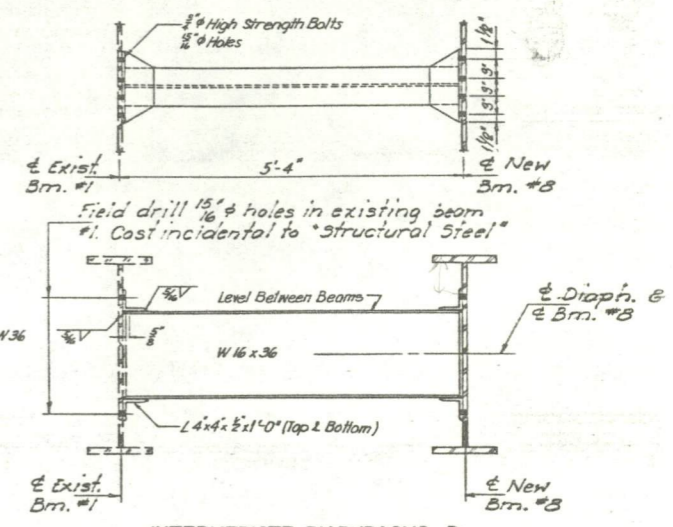
NOTES:
 Hatched area indicates "Structural Steel Removal".
 Remove Blast Plates and Clip Angles and grind webs smooth. All existing welds are $\frac{1}{8}$ " C.F. Bolts are $\frac{1}{2}$ " x 2 1/2" Machine Bolts. See Special Provisions for grinding of existing welds. Cost of grinding exist. welds shall be incidental to "Structural Steel Removal".

Replace 80- $\frac{1}{2}$ " rivets with 80- $\frac{1}{2}$ " M-253 High Strength Bolts, 40- each flange, each splice on existing beams. Exist. holes $\frac{1}{8}$ ".



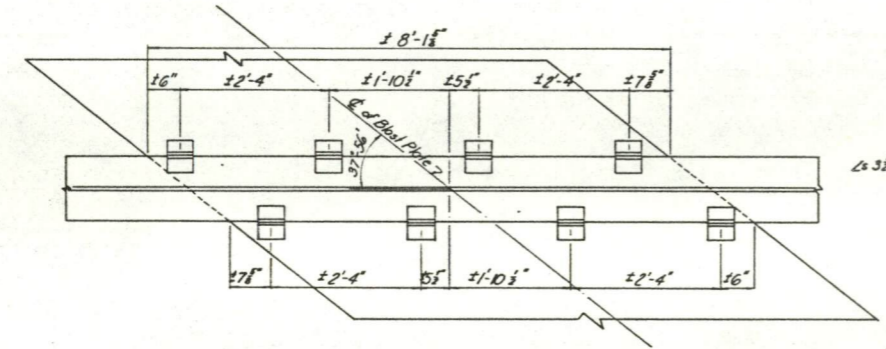
EXISTING BEAM SPLICE (23 Locations)

NOTE:
 Replace all $\frac{1}{2}$ " rivets in existing 12"x1"x5'-0" flange I-beams with $\frac{1}{2}$ " M-253 High Strength Bolts. Remove and replace rivets with bolts one at a time after existing deck is removed. Each bolt shall be torqued before next rivet is removed. All rivets holding an individual blast plate clip angle over track 3 may be removed at one time to remove the angle (See section B-B and Detail A' this sheet.) After removing angle immediately place bolts and torque before removing additional bolts.

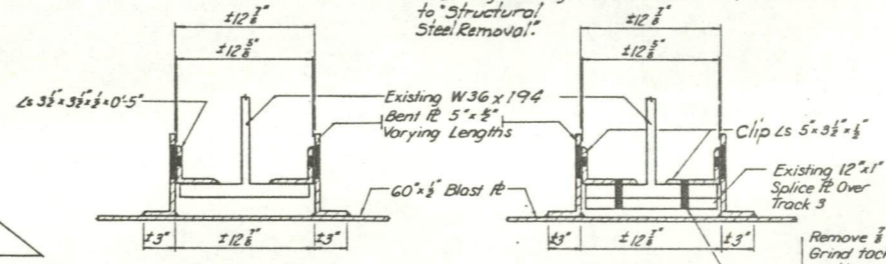


INTERMEDIATE DIAPHRAGMS D1 9 (Req'd.)

Note:
 Two hardened washers shall be required over all $\frac{1}{2}$ " holes for diaphragms.



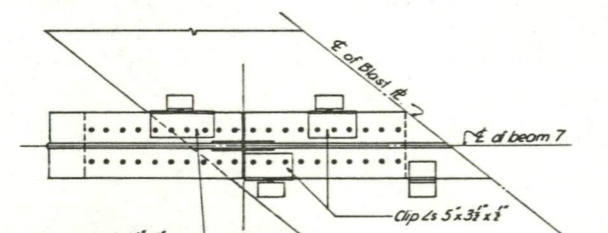
EXISTING BLAST PLATE HANGERS OVER TRACKS 1 & 2 (TYPICAL FOR BEAMS 1 THRU 7)



SECTION A-A TRACK 1 and 2

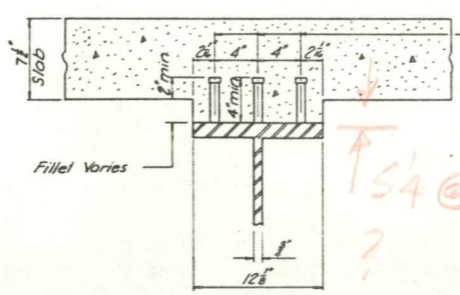
SECTION B-B TRACK 3

Remove $\frac{1}{2}$ " Rivets and Clip Angles, Grind tack welds smooth and replace with $\frac{1}{2}$ " M-253 High Strength Bolts. (See note for existing Beam Splice this sheet).



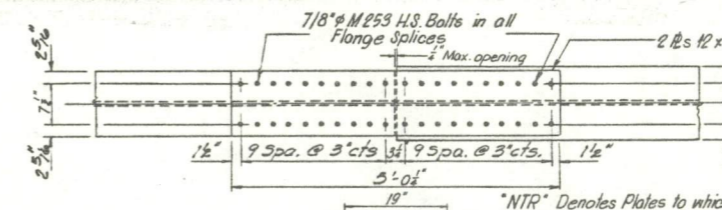
DETAIL "A" is for beams #1 to #7 over track 3.

DETAIL "A"

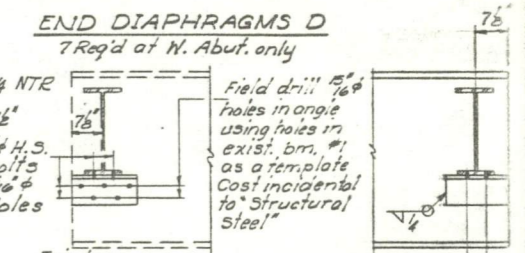


SHEAR STUDS

$\frac{3}{8}$ " Granular or solid flux filled headed studs, conforming to the requirements of the Std. Specs. automatically end welded. (No. Req'd. = 4005)



NEW BEAM No. 8 SPLICE



END DIAPHRAGMS D 7 Req'd at N. Abut. only

STEEL GIRDER & FRAMING DETAILS
 F.A.25 (U.S.30) SEC. 17R-IVBR
 WHITESIDE COUNTY
 STA. 118+76.91

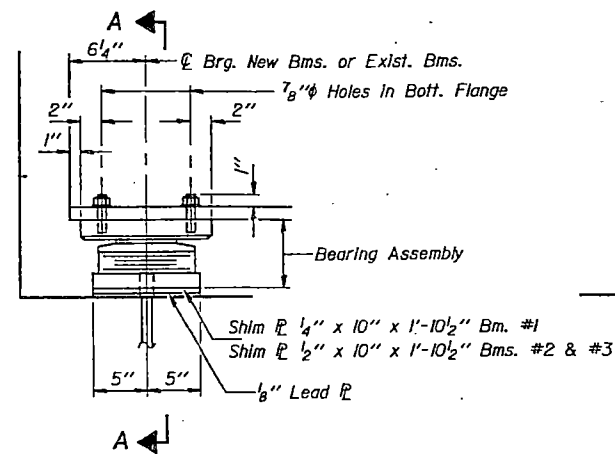
DESIGNED <i>M. P. Lehauch</i>	EXAMINED <i>Draj J. Kaspar</i>	DATE February 8, 1989
CHECKED <i>Patricia M. Blaine</i>	PASSED <i>James J. Kowalski</i>	
DRAWN <i>JFS</i>	APPROVED	
CHECKED <i>PMP GRA</i>		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

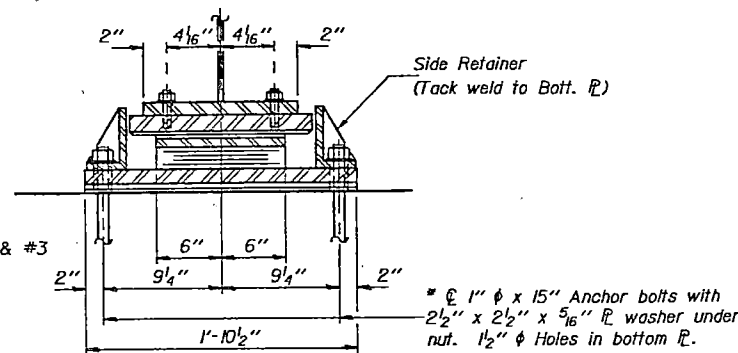
** 7/8" φ holes shall be field drilled in existing beams #1 through 7 at the East Abutment. Cost of field drilling shall be incidental to "Elastomeric Bearing Assembly, Type II".

NO. 15	SECTION	QUANTITY	DATE	BY	SHEET NO. 15
25	17R-NBR	WHITESIDE	47	32	23 SHEETS
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	DATE	

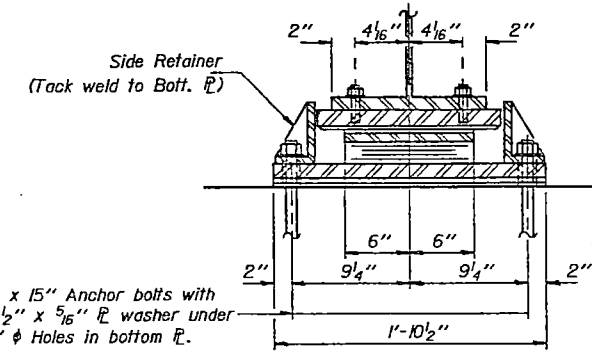
* Notes: Anchor bolts at fixed bearings may be built into the masonry.
See sheet #17 of 23 for Anchor Bolt installation.



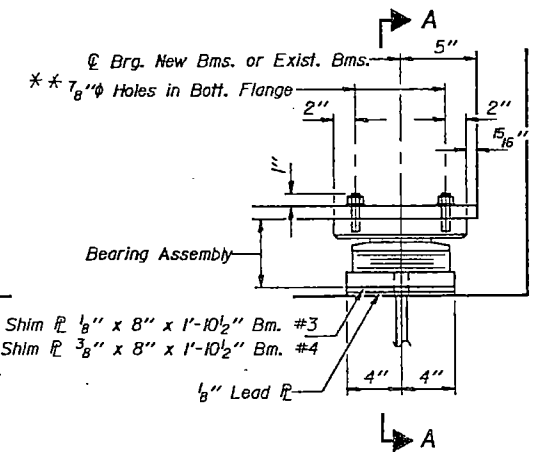
ELEVATION AT WEST ABUT.



SECTION A-A

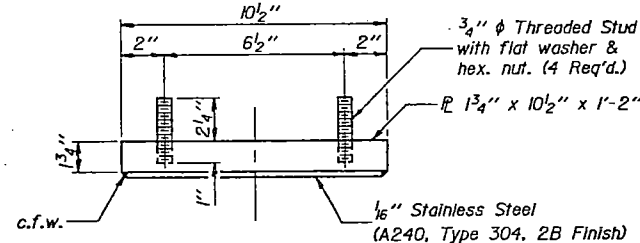


SECTION A-A

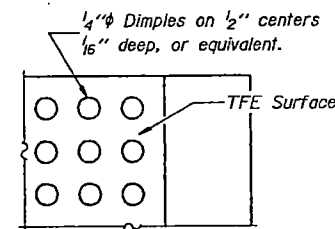


ELEVATION AT EAST ABUT.

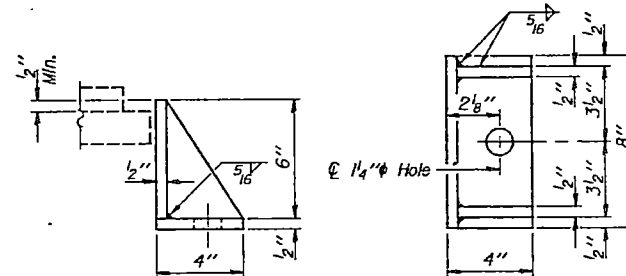
TYPE II TFE ELASTOMERIC EXP. BRG.



TOP BEARING ASSEMBLY

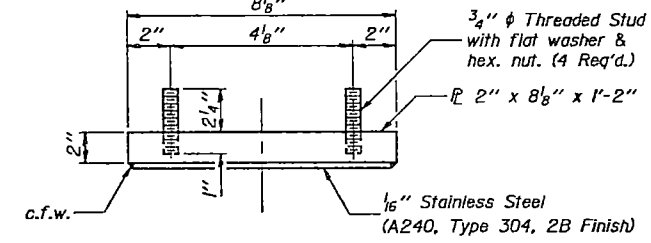


PLAN-TFE SURFACE

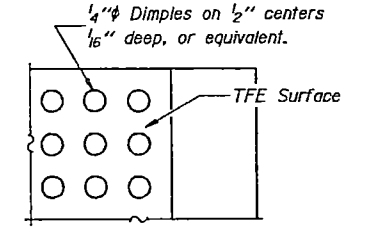


SIDE RETAINER W. ABUT.

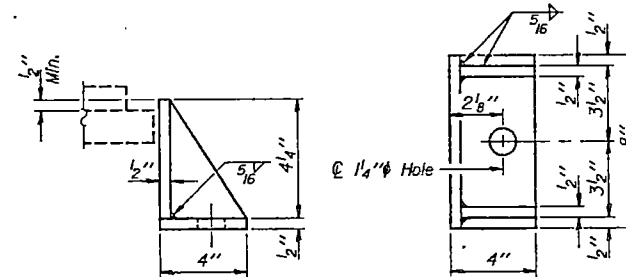
(16 Req'd.)
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



TOP BEARING ASSEMBLY

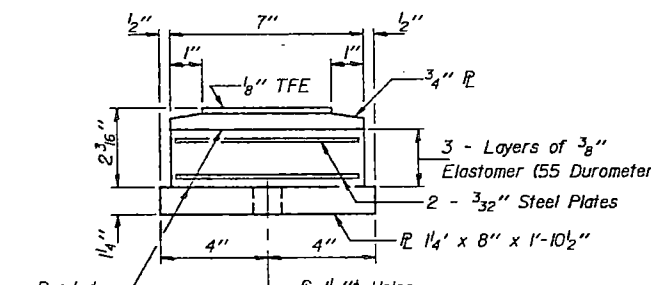


PLAN-TFE SURFACE

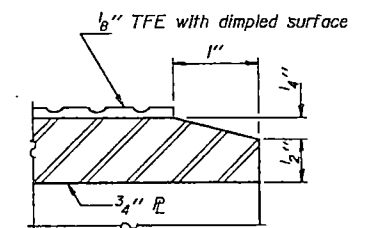


SIDE RETAINER E. ABUT.

(16 Req'd.)
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BOTTOM BEARING ASSEMBLY



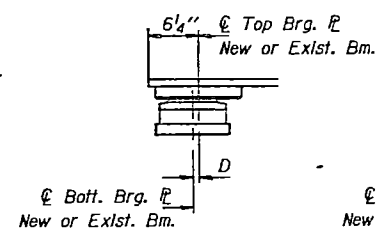
SECTION THRU TFE

Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

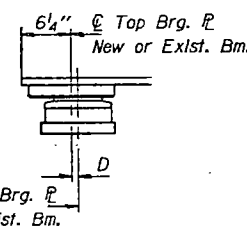
DESIGNED	W. H. D. d.
CHECKED	W. H. D. d.
DRAWN	John F. Schneller Jr.
CHECKED	OMP G. R. A.

EXAMINED	February 8, 1989
PASSED	James J. Kasper
APPROVED	James J. Kasper
	DIRECTOR OF HIGHWAYS



BELOW 50°F.

(Move bott. brg. away from fixed brg.)

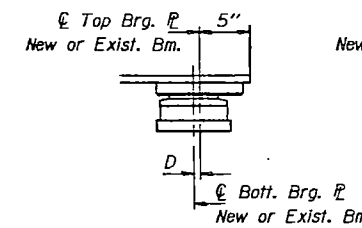


ABOVE 50°F.

(Move bott. brg. toward fixed brg.)

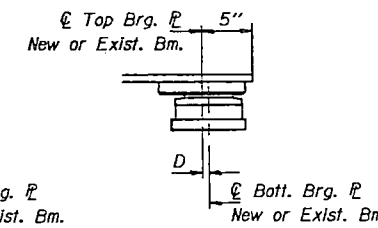
SETTING ANCHOR BOLTS AT EXP. BRG. W. ABUT.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



ABOVE 50°F.

(Move bott. brg. toward fixed brg.)



BELOW 50°F.

(Move bott. brg. away from fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG. E. ABUT.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

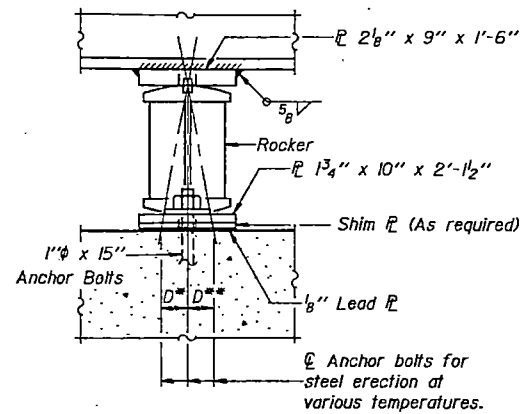
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	16

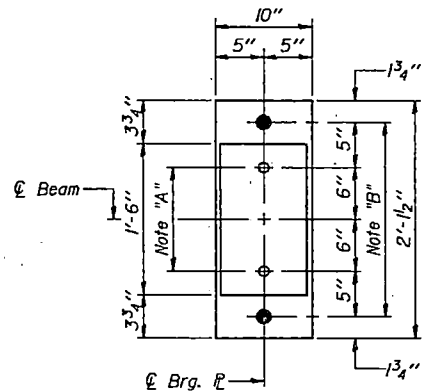
BEARING DETAILS AT
WEST & EAST ABUTMENTS
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	MILES	SHEET	SHEET NO. 15 23 SHEETS
25	17R-IVB	WHITESIDE	47	33	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



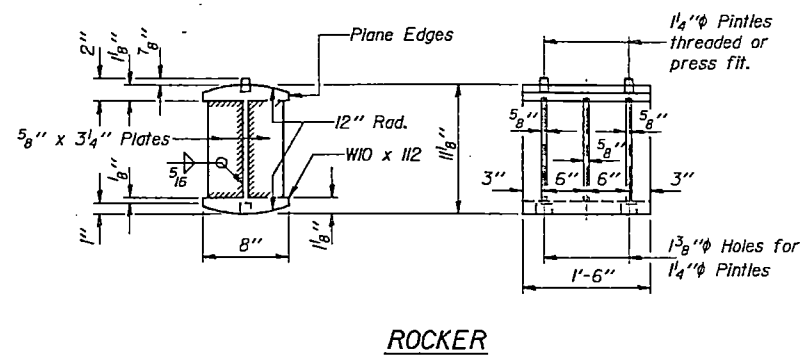
ELEVATION AT PIER #1
(New Beam #8)



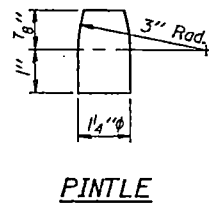
PLAN
AT PIER #1

NOTES FOR SETTING OF ANCHOR BOLTS
AT EXPANSION BEARINGS

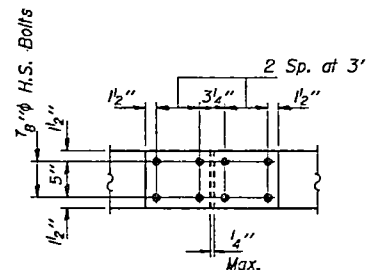
- a.) D^* (Side of brg. away from fixed brg.)
 $D^* = \frac{1}{8}''$ per each 100' of expansion for every 15° fall below the normal temp.
- D^{**} (Side of brg. toward fixed brg.)
 $D^{**} = \frac{1}{8}''$ per each 100' of expansion for every 15° rise above the normal temp. of 50° F.
- b.) After girders have been erected and dimensions D^* & D^{**} determined, holes shall be drilled and anchor bolts shall be installed as shown on Sheet #17 of 23. All fixed anchor bolts may be built into the masonry.



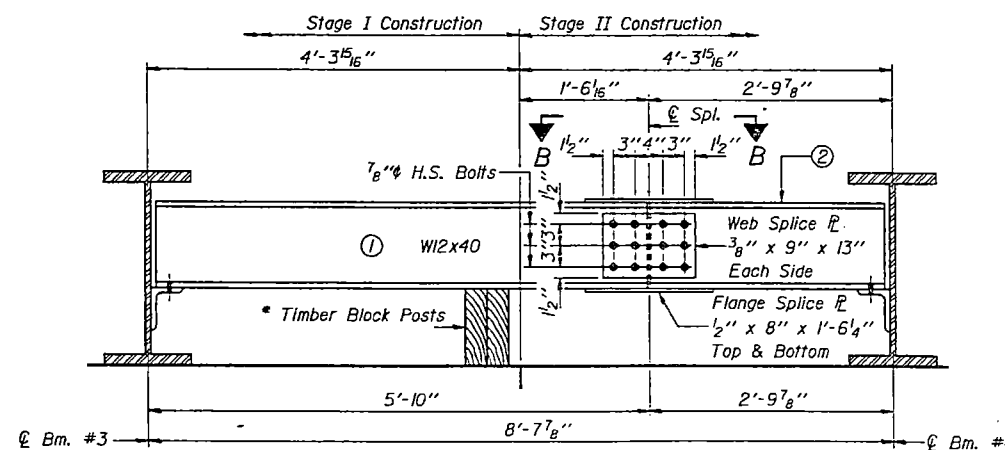
ROCKER



PINTLE



VIEW B-B

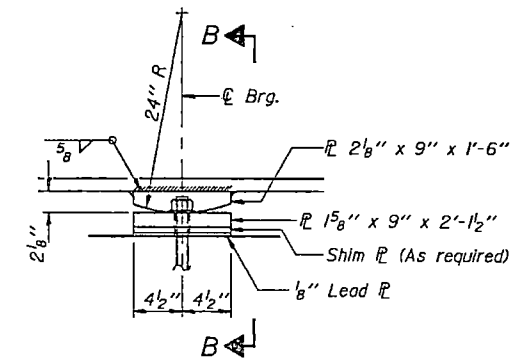


END DIAPHRAGM D

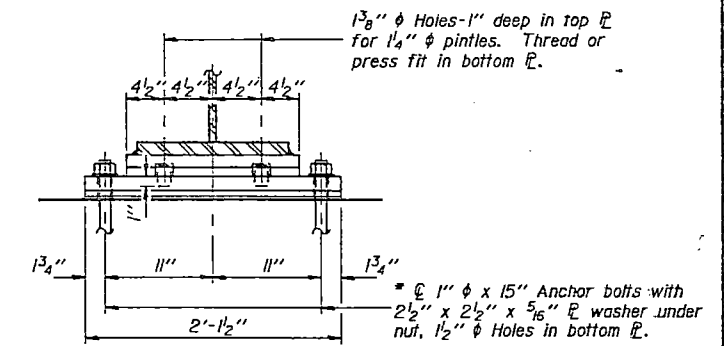
1 Required at W. Abut. only.
(Looking West)

For details of connections to beams see diaphragm D sheet #14 of 23.
Dimensions are along $\bar{\bar{c}}$ Diaphragm.

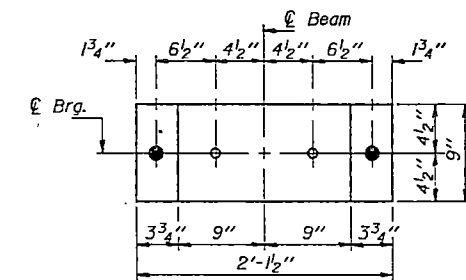
* Cost of Timber Block Posts is incidental to Structural Steel.



ELEVATION AT PIER #2
(New Beam #8)



SECTION B-B



PLAN
AT PIER #2

- Notes: Removal and disposal of existing rollers and bottom plates at West Abutment shall be incidental to "Structural Steel Repair".
Removal and disposal of existing rollers and bottom plates at East Abutment shall be incidental to "Removal of Existing Bearings".
"Structural Steel Repair" includes: removal and replacement of 6 (six) existing End Diaphragms D between existing beams #1 thru #7 (including angles and fasteners), and the 4'-6 1/4" length of the existing W36 x 194 beam at the West Abutment; all splice plate material and fasteners, for Splice #1; field drilling holes in existing flange and web material, and removal of existing top bearing plates at East Abutment.
The welds on the bottom flange of the existing W36 x 194 beam at the East Abutment shall be removed by Arc Gouging and/or grinding. Care shall be taken to avoid damage to the bottom flange of the existing beams. Any unavoidable gouges in the bottom flange shall be ground smooth. Cost shall be incidental to "Structural Steel Repair".

END DIAPHRAGM CONSTRUCTION SEQUENCE

- 1.) Order Diaphragm D between Beams #3 & #4 in two sections with lengths of 5'-10" and 2'-9 7/8".
- 2.) Attach section ① of Diaphragm to Beam #3 during Stage I Construction.
- 3.) Place Timber Block Posts between section ① of diaphragm and abutment bearing seat.
- 4.) Attach section ② of diaphragm to both Beam #4 and section ① of diaphragm during Stage II Construction.
- 5.) Attach all splice plates to section ① and section ② of diaphragms.
- 6.) Remove Timber Block Posts.

DESIGNED	<i>W. A. Wood</i>
CHECKED	<i>Frank M. Moore</i>
DRAWN	John F. Schneller Jr.
CHECKED	<i>G. A. [Signature]</i>

EXAMINED	<i>Oray D. Kaspar</i>
PASSED	<i>James J. [Signature]</i>
APPROVED	<i>[Signature]</i>

I-2-B 12-31-87

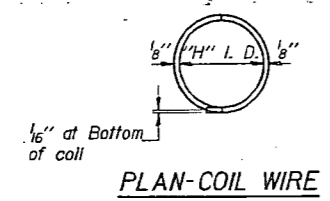
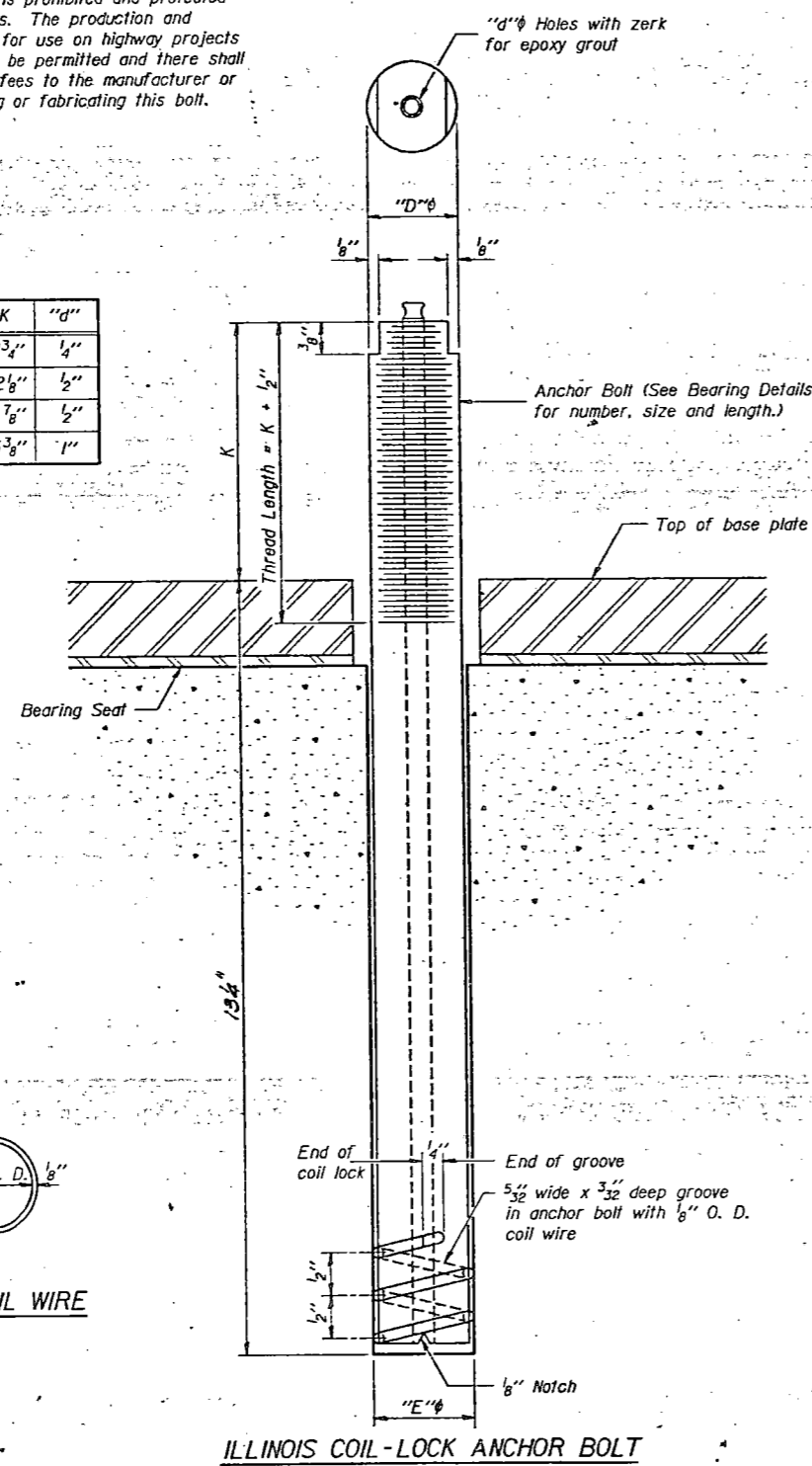
BEARING DETAILS
AT PIERS #1 & #2
F.A. RT. 25 SEC. 17R-IVB
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
25	17R-1NBR	WHITESIDE	47	34
FED. AID DIST. NO.		BLANK	FED. AID PROJECT	

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 15/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A519, Grade K26 and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C881, Type I, Grade I and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures.
The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer conforming to ASTM A307.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or in accordance with the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel".

DESIGNED W. R. Rho-d
CHECKED Patrick M. Parsons
DRAWN J. SCHNELLER
CHECKED PMP GAA

February 8, 1989
EXAMINED Dora J. Kaspar
PASSED James J. Kautern
APPROVED _____

ABB-1 12-1-83

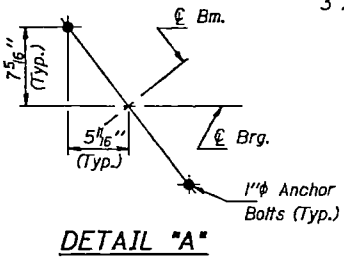
ANCHOR BOLT DETAILS
FOR BEARINGS
F.A. RT. 25 SEC. 17R-1NBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

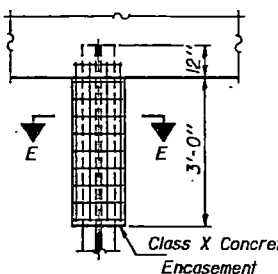
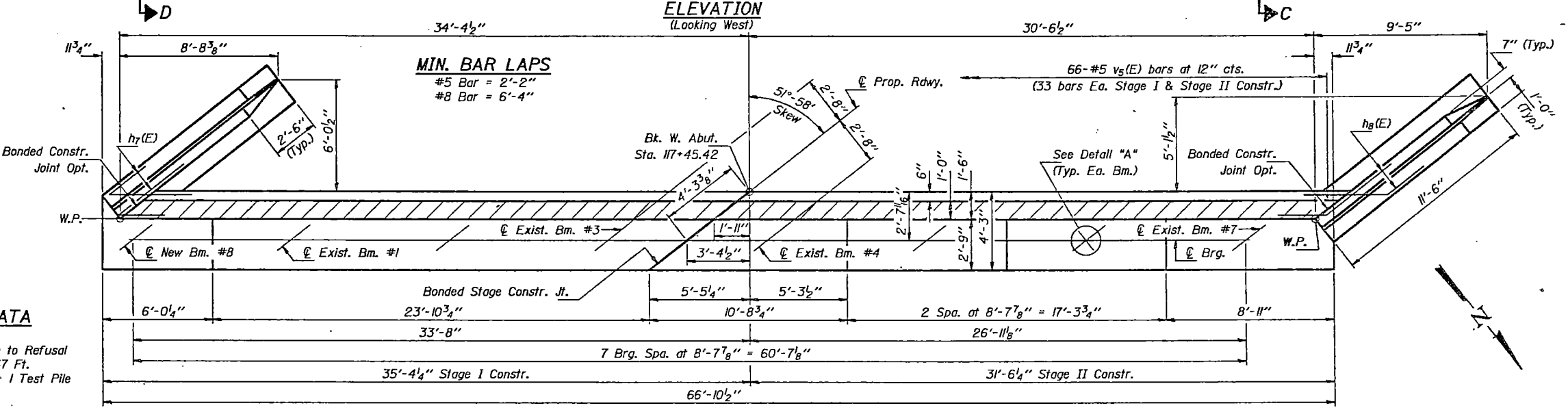
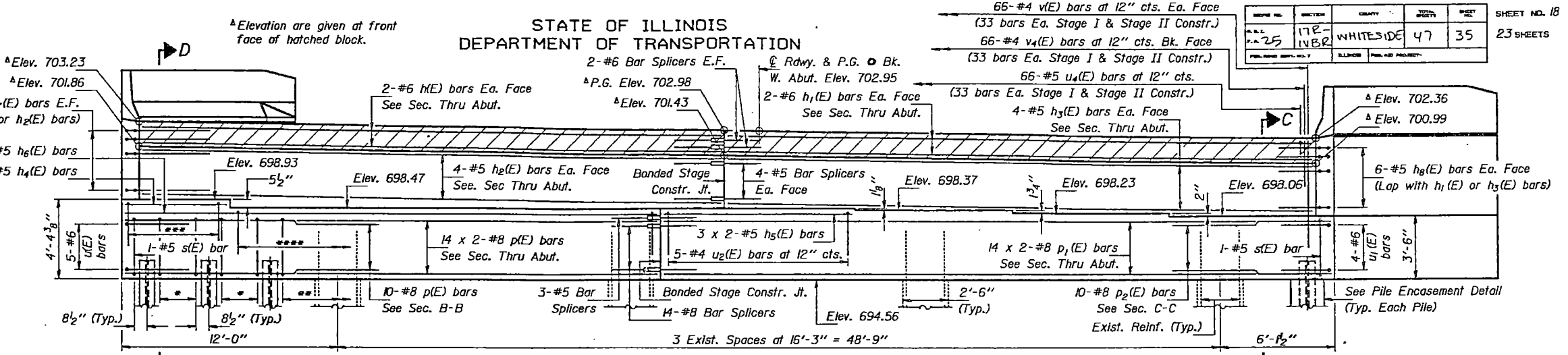
PROJECT NO.	SECTION	COUNTY	POST MILES	SHEET	SHEET NO. 18 23 SHEETS
25	17E-1VBR	WHITESIDE	47	35	

* 3-#5 s(E) bars at 12" cts.
** 52-#5 s(E) bars at 12" cts.
(22 bars Stage I Constr. & 30 bars Stage II Constr.)

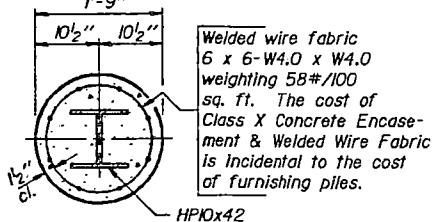
*** 6-#4 u₂(E) bars at 12" cts.
**** 24-#4 u₂(E) bars at 12" cts.



Notes:
Space reinforcement in cap to miss anchor bolts.
Four steps monolithically with cap.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Hatched area to be poured after superstructure forms have been removed. Quantity of "Class X Concrete Superstructure" billed with superstructure see sheet #8 of 23.
See sheet #3 of 23 for bar splicer details.
Existing reinforcement extending into new construction shall be cleaned, straightened, and incorporated into new construction. Remainder of existing reinforcement shall be cut off flush and covered with 2" of cement mortar. Cost incidental.



PILE DATA
Type: HPI0x42
Capacity: Drive to Refusal
Est. Length: 47 Ft.
No. Req'd: 5 + 1 Test Pile



SECTION E-E
PILE ENCASEMENT DETAIL

DESIGNED: *[Signature]*
CHECKED: *[Signature]*
DRAWN: John F. Schneller Jr.
CHECKED: *[Signature]*

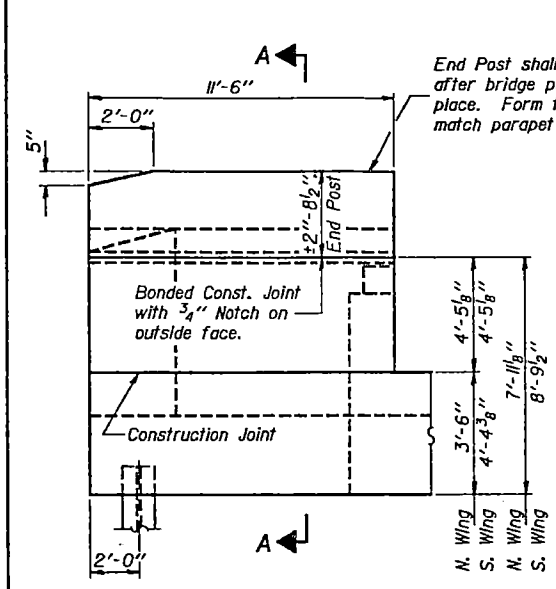
EXAMINED: *[Signature]*
PASSED: *[Signature]*
APPROVED: *[Signature]*
DIRECTOR OF HIGHWAYS

WEST ABUTMENT
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

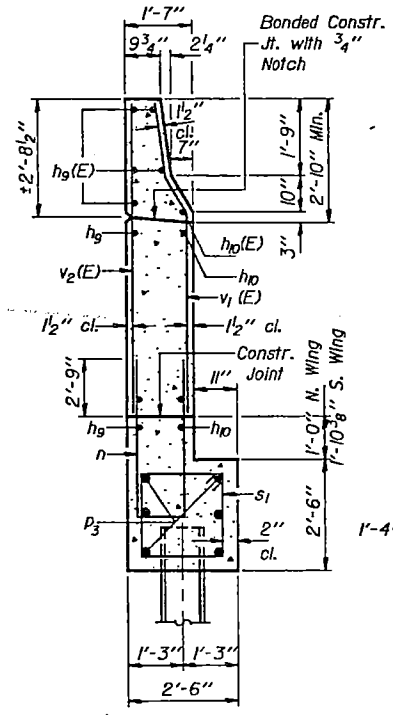
PLAN-PILE CAP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

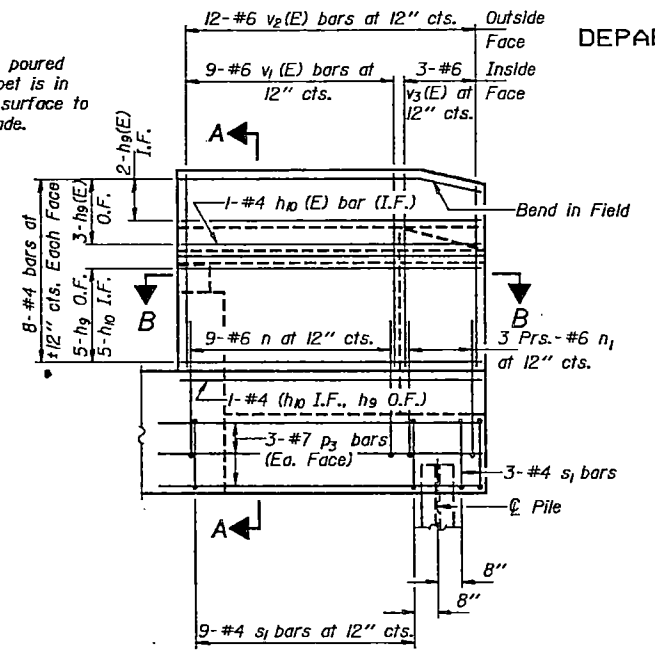
DATE	SECTION	COUNTY	STATION	SHEET	SHEET NO. 19
25	17R	WHITESIDE	47	36	23 SHEETS



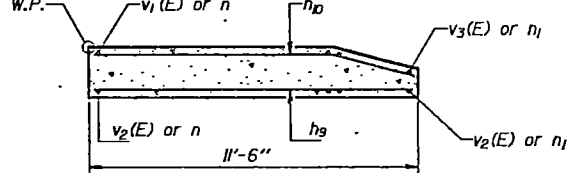
WING WALL ELEVATION



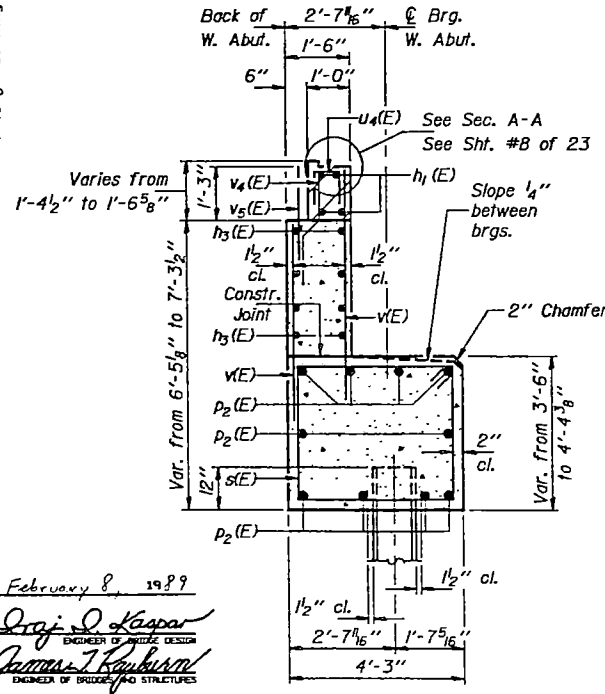
SEC. A-A



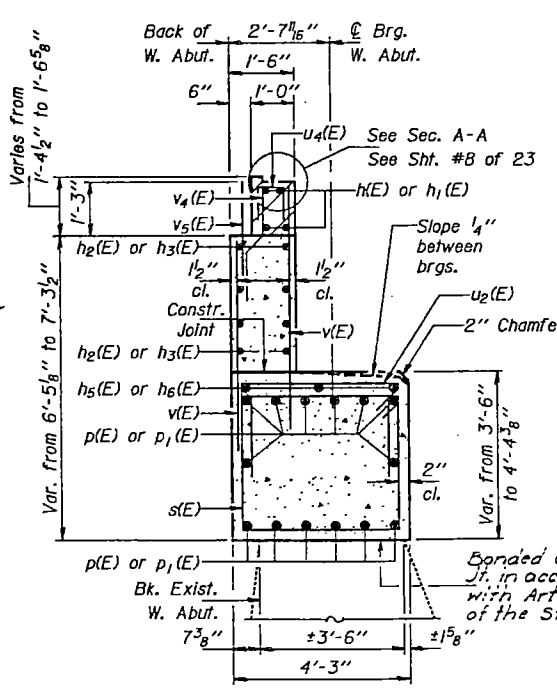
WING WALL ELEVATION
Reinforcement



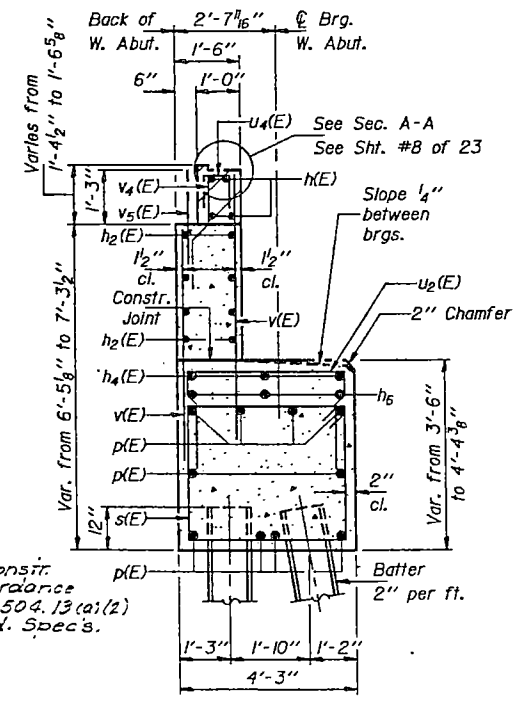
SEC. B-B



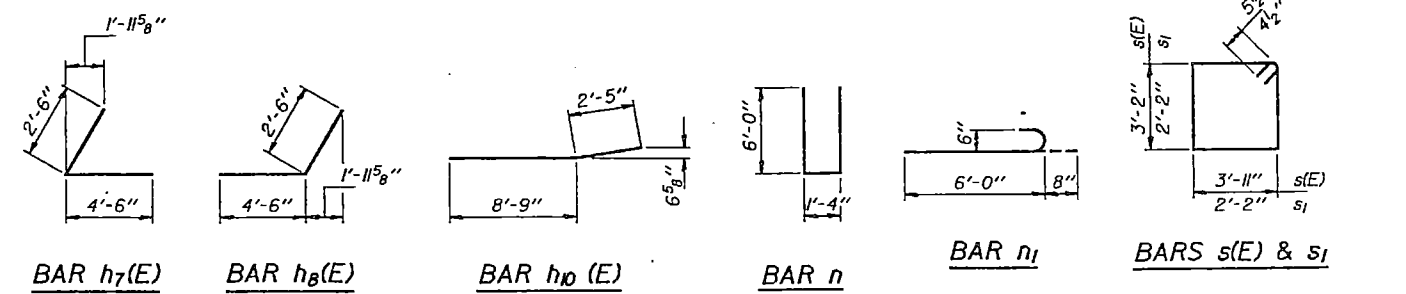
SECTION C-C
(Dim. at Rt. L's)



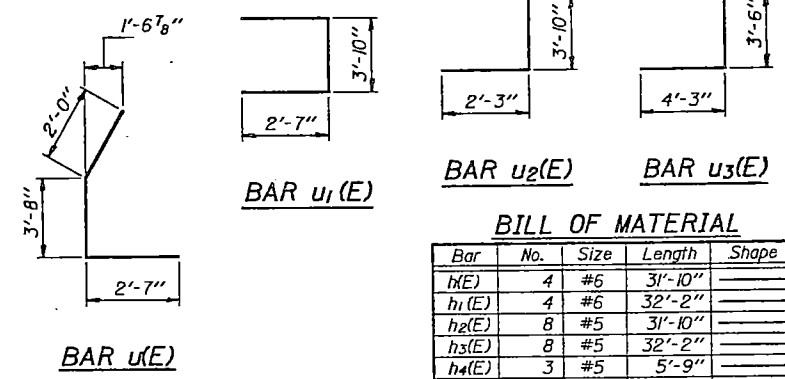
SECTION THRU ABUT.
(Dim. at Rt. L's)



SECTION D-D
(Dim. at Rt. L's)



DETAIL "B"



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#6	31'-10"	
h1(E)	4	#6	32'-2"	
h2(E)	8	#5	31'-10"	
h3(E)	8	#5	32'-2"	
h4(E)	3	#5	5'-9"	
h5(E)	6	#5	6'-6"	
h6(E)	6	#5	18'-6"	
h7(E)	12	#5	7'-0"	
h8(E)	12	#5	7'-0"	
h9	12	#4	11'-3"	
h10	12	#4	11'-2"	
h9(E)	10	#4	11'-3"	
h10(E)	2	#4	11'-2"	
n	18	#6	13'-4"	
n1	12	#6	6'-8"	
p(E)	38	#8	16'-0"	
p1(E)	28	#8	19'-9"	
p2(E)	10	#8	10'-1"	
p3	12	#7	11'-3"	
s(E)	60	#5	15'-1"	
s1	24	#4	9'-5"	
u(E)	5	#6	8'-3"	
u1(E)	4	#6	9'-0"	
u2(E)	35	#4	8'-4"	
u3(E)	20	#5	12'-0"	
u4(E)	66	#5	1'-11"	
v(E)	132	#4	5'-6"	
v1(E)	18	#6	6'-10"	
v2(E)	24	#6	6'-9"	
v3(E)	6	#6	6'-4"	
v4(E)	66	#4	3'-5"	
v5(E)	66	#5	2'-6"	
Class X Concrete			Cu. Yds.	66.0
Reinforcement Bars			Lbs.	1,090
Reinforcement Bars (Epoxy Coated)			Lbs.	7,660
Steel Piles (HPIOX42)			Lin. Ft.	235
Test Piles			Each	1
Steel HPIOX42				
Structure Excavation			Cu. Yd.	113

WEST ABUTMENT DETAILS
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

DESIGNED *John F. Schneller Jr.*
CHECKED *John F. Schneller Jr.*
DRAWN *John F. Schneller Jr.*
CHECKED *John F. Schneller Jr.*

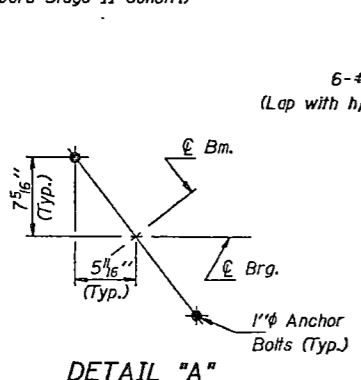
February 8, 1989
EXAMINED *John F. Schneller Jr.*
PASSED *John F. Schneller Jr.*
APPROVED *John F. Schneller Jr.*
DIRECTOR OF HIGHWAYS

Bonded Constr. Jt. in accordance with Art. 504.13(a)(2) of the Sid. Specs.

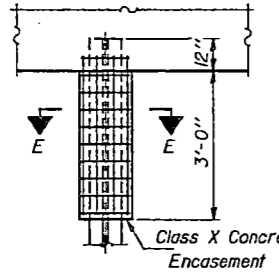
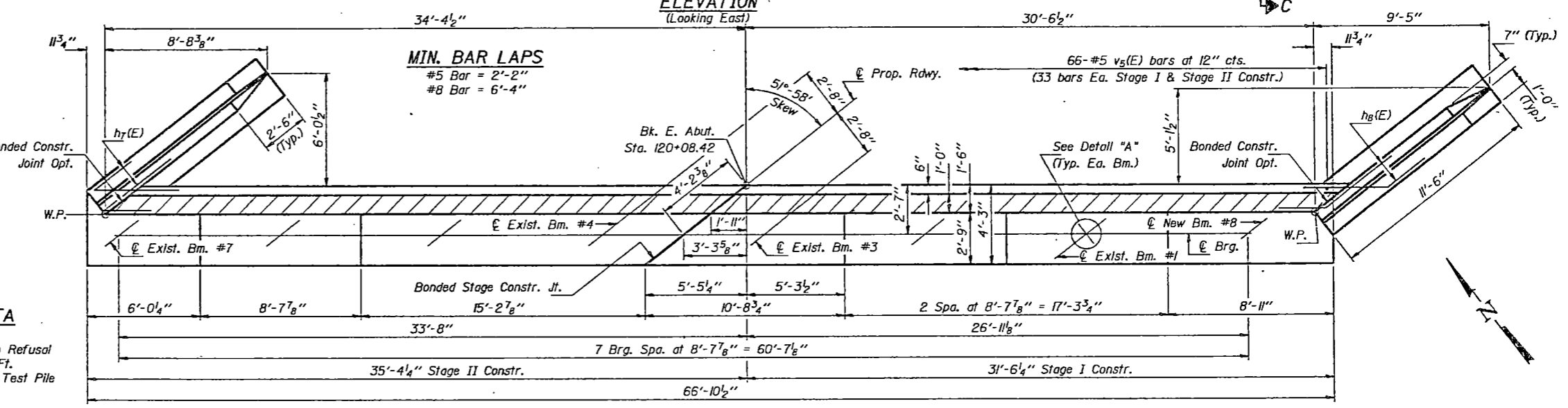
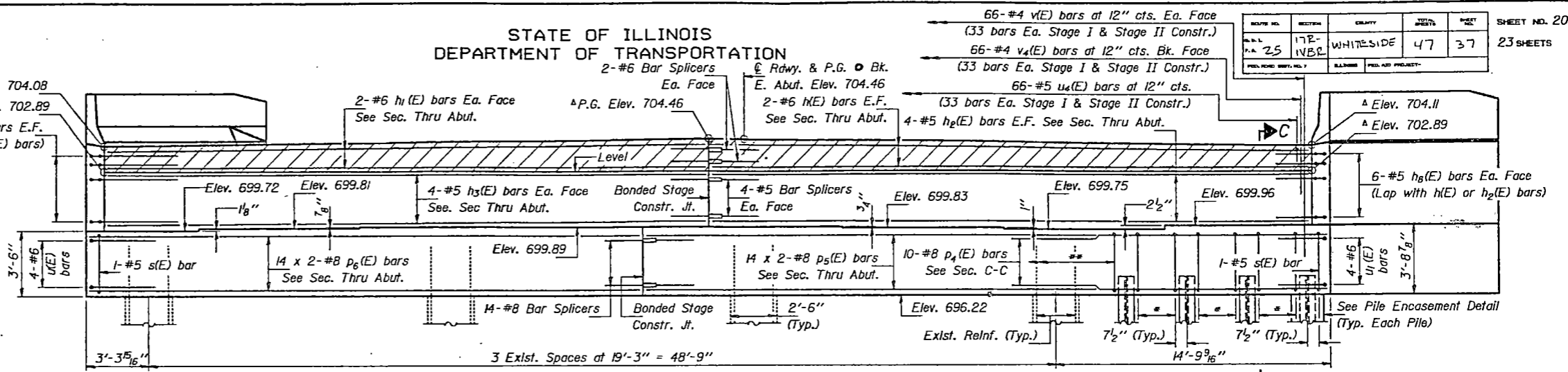
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	DRAWN	DATE	SHEET NO.
RT. 25	17R-IVB	WHITESIDE	47	37
PROJECT NO. 17R-IVB-1		SHEET NO. 20		
TOTAL SHEETS 23				

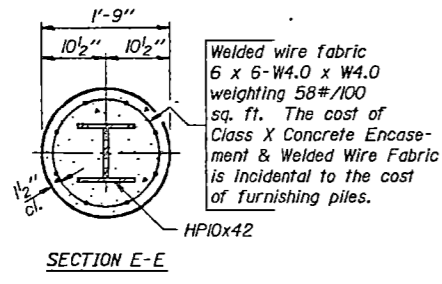
3-#5 s(E) bars at 12" cts.
49-#5 s(E) bars at 12" cts.
(20 bars Stage I Constr. & 29 bars Stage II Constr.)



Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Hatched area to be poured after superstructure forms have been removed. Quantity of "Class X Concrete Superstructure" billed with superstructure see sheet #8 of 23.
See sheet #3 of 23 for bar splicer details.
Existing reinforcement extending into new construction shall be cleaned, straightened, and incorporated into new construction. Remainder of existing reinforcement shall be cut off flush and covered with 2" of cement mortar. Cost incidental.



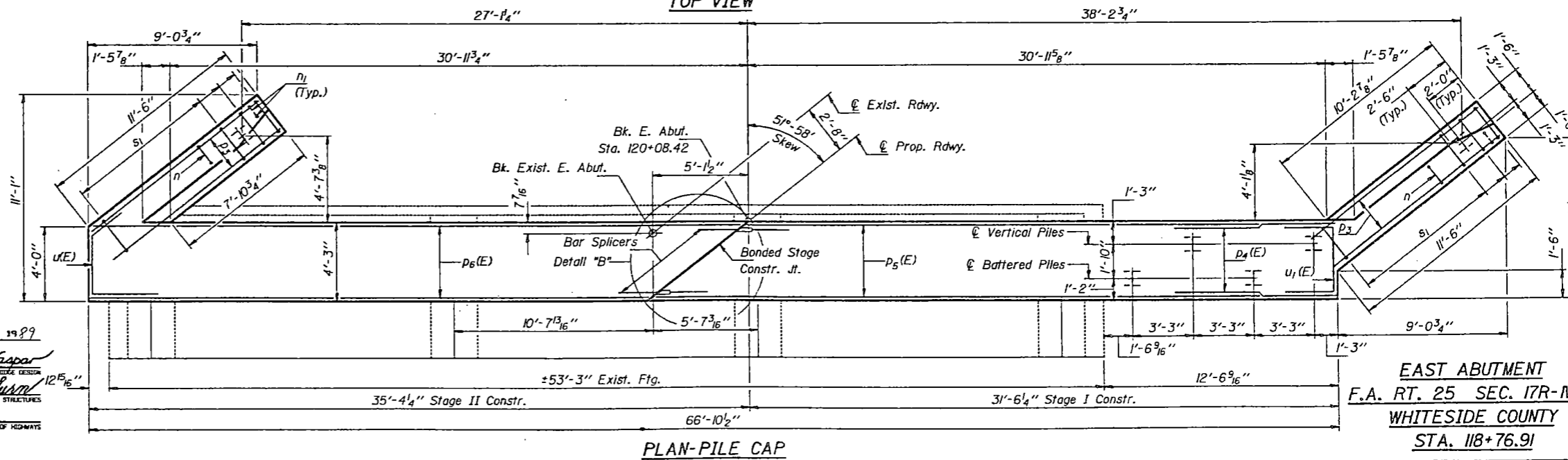
Type: HPI0x42
Capacity: Drive to Refusal
Est. Length: 66 FT.
No. Req'd: 5 + 1 Test Pile



PILE ENCASEMENT DETAIL

DESIGNED	<i>John F. Schneller Jr.</i>
CHECKED	<i>John F. Schneller Jr.</i>
DRAWN	<i>John F. Schneller Jr.</i>
CHECKED	<i>John F. Schneller Jr.</i>

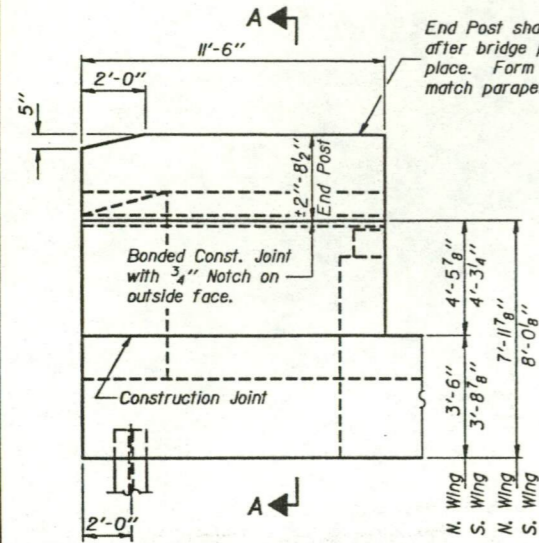
EXAMINED	<i>John F. Schneller Jr.</i>
PASSED	<i>John F. Schneller Jr.</i>
APPROVED	<i>John F. Schneller Jr.</i>



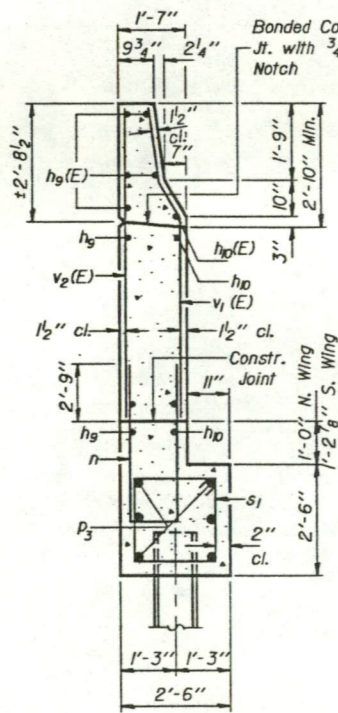
EAST ABUTMENT
F.A. RT. 25 SEC. 17R-IVB
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

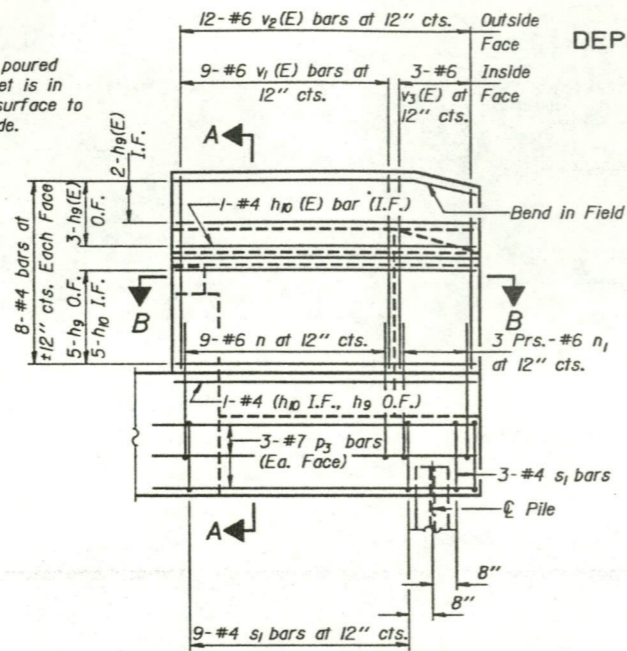
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 21
25	17R-NBR	WHITESIDE	47	38	23 SHEETS



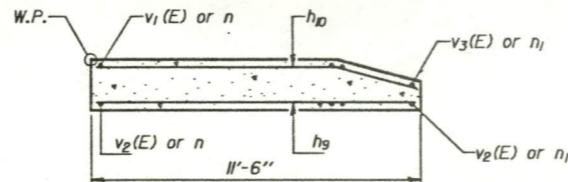
WING WALL ELEVATION



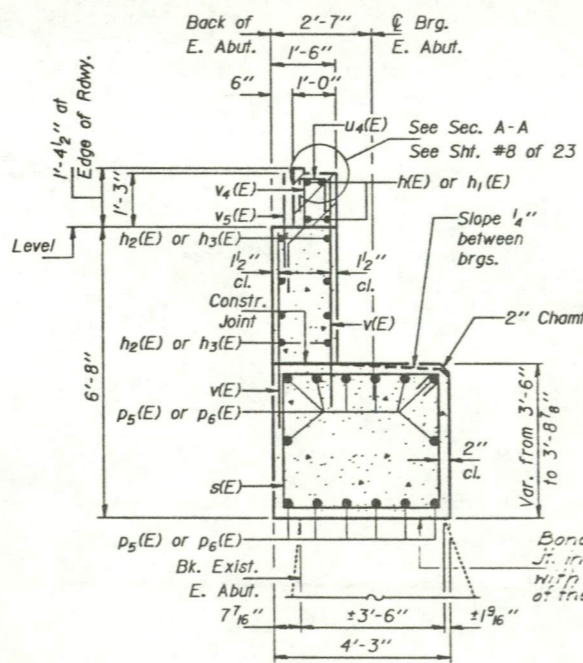
SEC. A-A



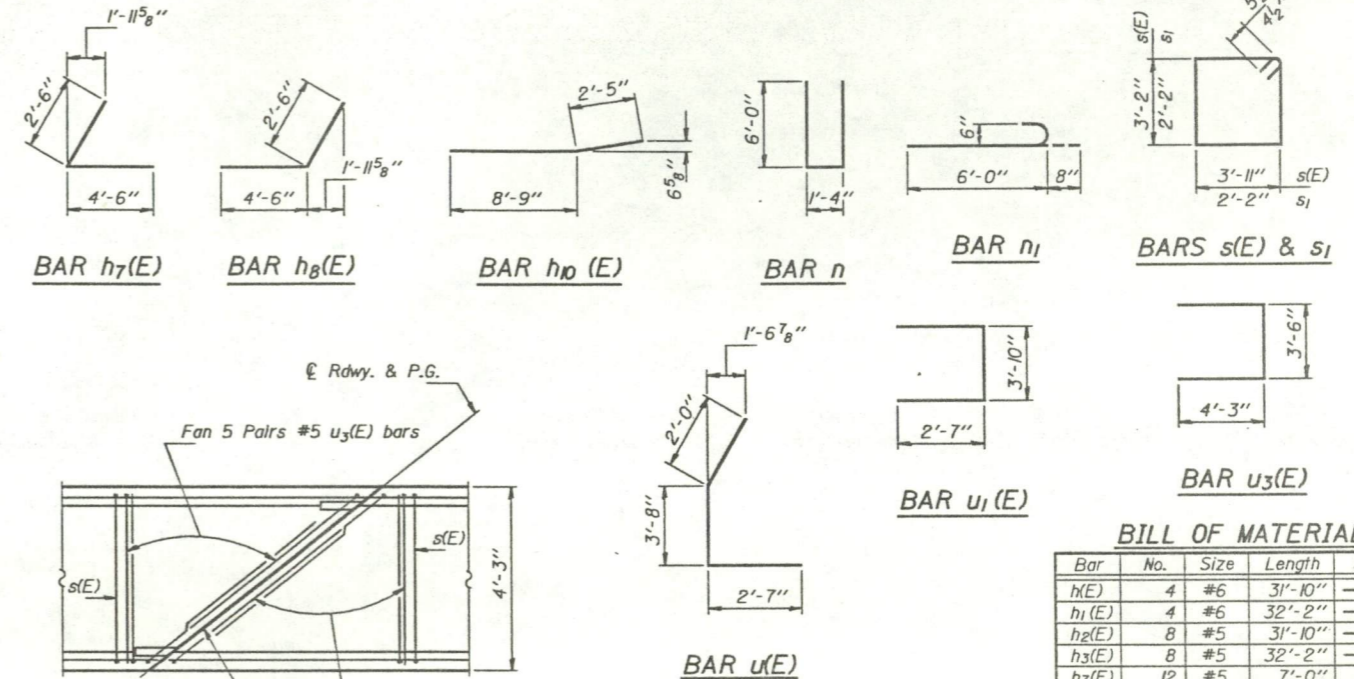
WING WALL ELEVATION
Reinforcement



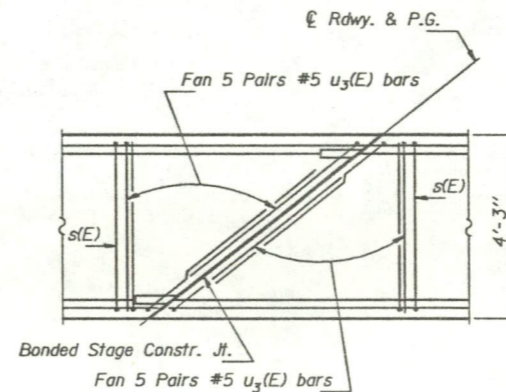
SEC. B-B



SECTION THRU ABUT.
(Dim. at Rt. L's)



DETAIL "B"



SECTION C-C
(Dim. at Rt. L's)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#6	31'-10"	
h1(E)	4	#6	32'-2"	
h2(E)	8	#5	31'-10"	
h3(E)	8	#5	32'-2"	
h7(E)	12	#5	7'-0"	
h8(E)	12	#5	7'-0"	
h9	12	#4	11'-3"	
h10	12	#4	11'-2"	
h9(E)	10	#4	11'-3"	
h10(E)	2	#4	11'-2"	
n	18	#6	13'-4"	
n1	12	#6	6'-8"	
p3	12	#7	11'-3"	
p4(E)	10	#8	18'-9"	
p5(E)	28	#8	15'-3"	
p6(E)	28	#8	20'-9"	
s(E)	59	#5	15'-1"	
s1	24	#4	9'-5"	
u(E)	4	#6	8'-3"	
u1(E)	4	#6	9'-0"	
u3(E)	20	#5	12'-0"	
u4(E)	66	#5	1'-11"	
v(E)	132	#4	5'-6"	
v1(E)	18	#6	6'-10"	
v2(E)	24	#6	6'-9"	
v3(E)	6	#6	6'-4"	
v4(E)	66	#4	3'-5"	
v5(E)	66	#5	2'-6"	
Class X Concrete		Cu. Yds.	63.0	
Reinforcement Bars		Lbs.	1,090	
Reinforcement Bars (Epoxy Coated)		Lbs.	7,080	
Steel Piles (HP10x42)		LIn. Ft.	330	
Test Piles		Each	1	
Structure Excavation		Cu. Yd.	114	

EAST ABUTMENT DETAILS
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

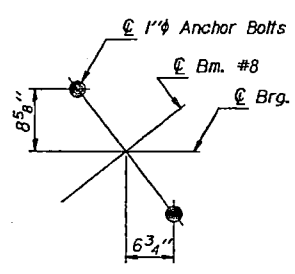
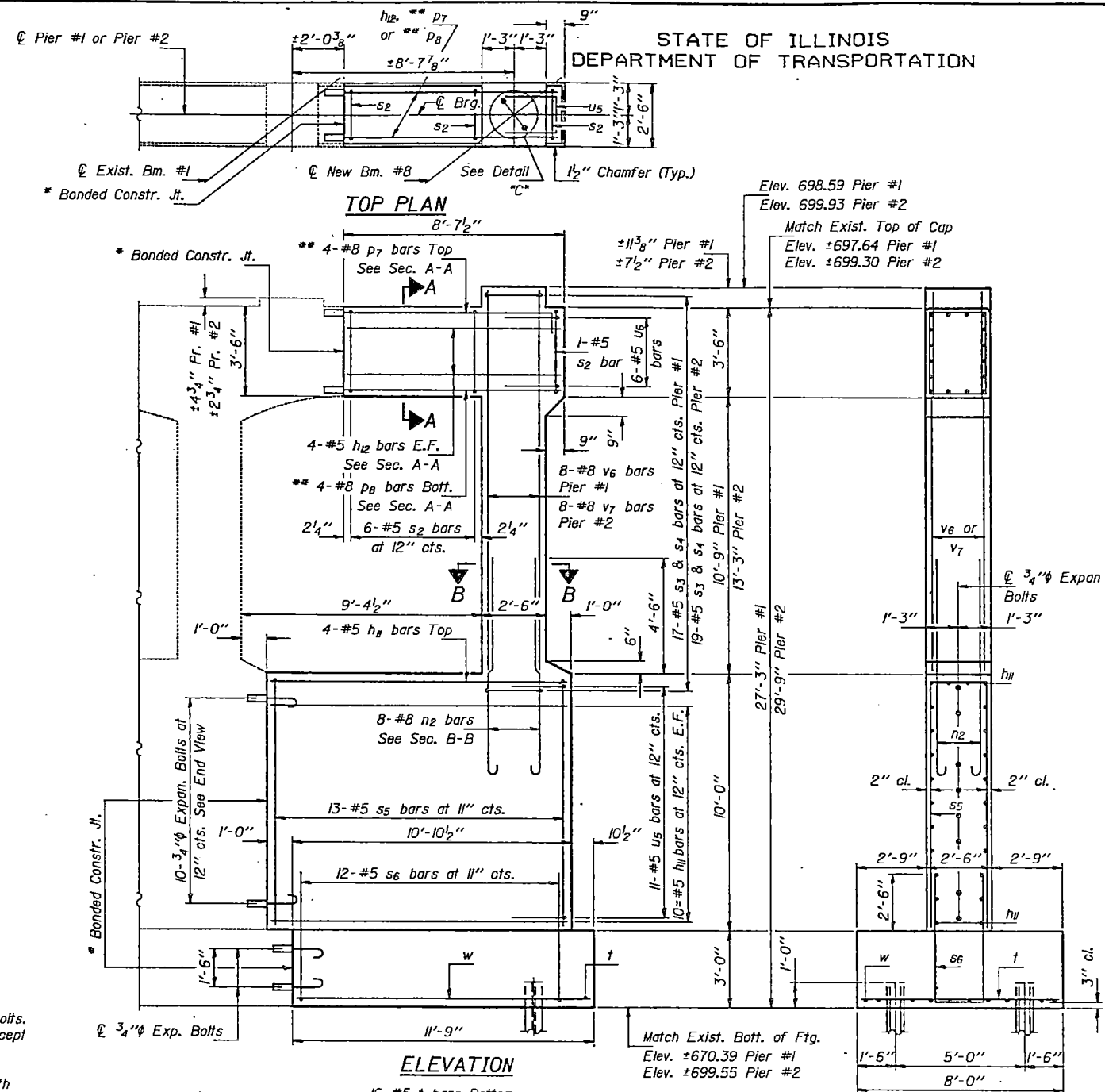
DESIGNED	W. R. Oberndorf	EXAMINED	Dr. J. O. Kaspar
CHECKED	W. R. Oberndorf	PASSED	James J. Kasper
DRAWN	John F. Schneller Jr.	APPROVED	James J. Kasper
CHECKED	PMP GAA		

February 8, 1989

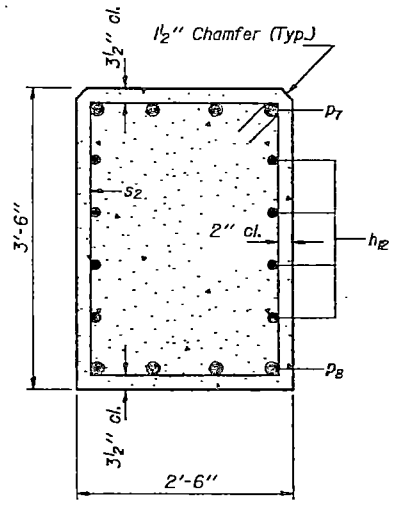
DIRECTOR OF HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

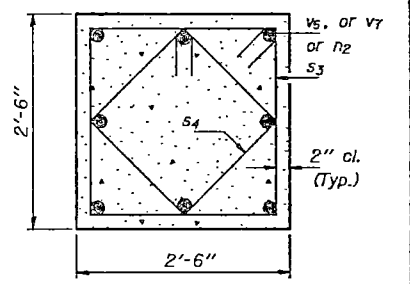
PROJECT NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
25	17R-NBR	WHITESIDE	47	39
SHEET NO. 22				23 SHEETS



DETAIL "C"



SECTION A-A



SECTION B-B

TWO PIERS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h11	48	#5	11'-7"	—
h12	16	#5	8'-4"	—
n2	16	#8	7'-5"	—
p7	8	#8	10'-2"	—
p8	8	#8	8'-7"	—
s2	14	#5	11'-1"	□
s3	36	#5	9'-7"	□
s4	36	#5	6'-11"	□
s5	26	#5	21'-6"	□
s6	24	#5	12'-2"	□
t	32	#5	7'-9"	—
u5	34	#5	6'-1"	□
v6	8	#8	15'-0"	—
v7	8	#8	17'-0"	—
w	20	#5	11'-6"	—

Class X Concrete	Cu. Yds.	54.6
Reinforcement Bars	Lbs.	4,510
Steel Piles (HP8x36)	Lin. Ft.	678
Expan. Bolts (3/4" φ)	Each	44
Structure Excavation	Cu. Yds.	78

NOTES:
Space Reinforcement in cap to miss anchor bolts. All edges shall have standard 3/4" chamfer except as noted.
Pour step monolithically with cap.
* Bonded Construction Joint in accordance with Article 504.13(a)(2) of the Standard Specifications.
** Epoxy grout p7 and p8 bars in 1 1/4" x 10" (Min.) drilled holes. Use a grout approved by the Department or epoxy grout in accordance with BSP-II (See Special Provisions). The method of grout application shall be approved by the Engineer.

DESIGNED *John F. Schneller Jr.*
CHECKED *John F. Schneller Jr.*
DRAWN *John F. Schneller Jr.*
CHECKED *GPA PMP*

EXAMINED *James J. Kowalski*
PASSED *James J. Kowalski*
APPROVED *James J. Kowalski*
DIRECTOR OF HIGHWAYS

February 9, 1989

PILE DATA
Type: Steel (HP8x36)
Capacity: Drive to Refusal
Est. Length: 50 Ft. Pier #1
63 Ft. Pier #2
No. Req'd.: 6 Pier #1
6 Pier #2

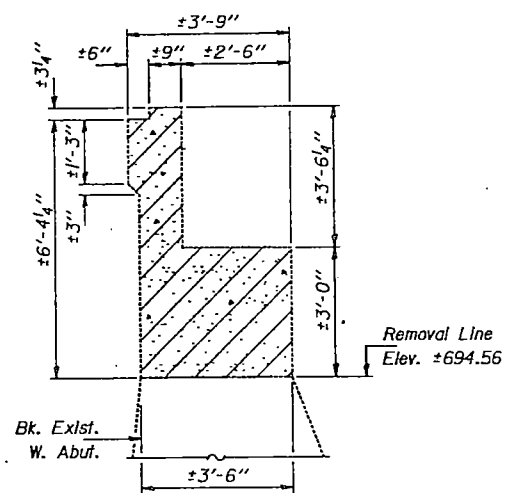
A & B DIMENSIONS

Bar	A	E
s5	2'-2"	9'-8"
s6	2'-2"	5'-0"
u5	2'-1"	2'-0"

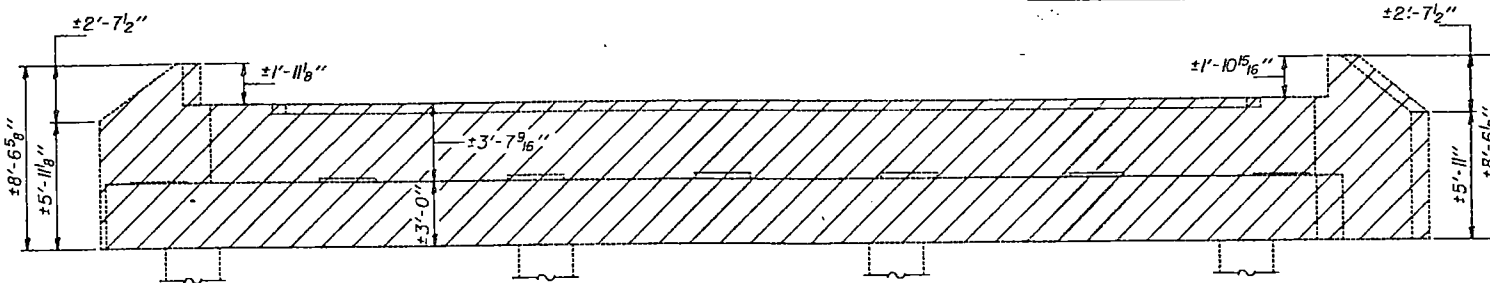
PIERS #1 & #2
F.A. RT. 25 SEC. 17R-NBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

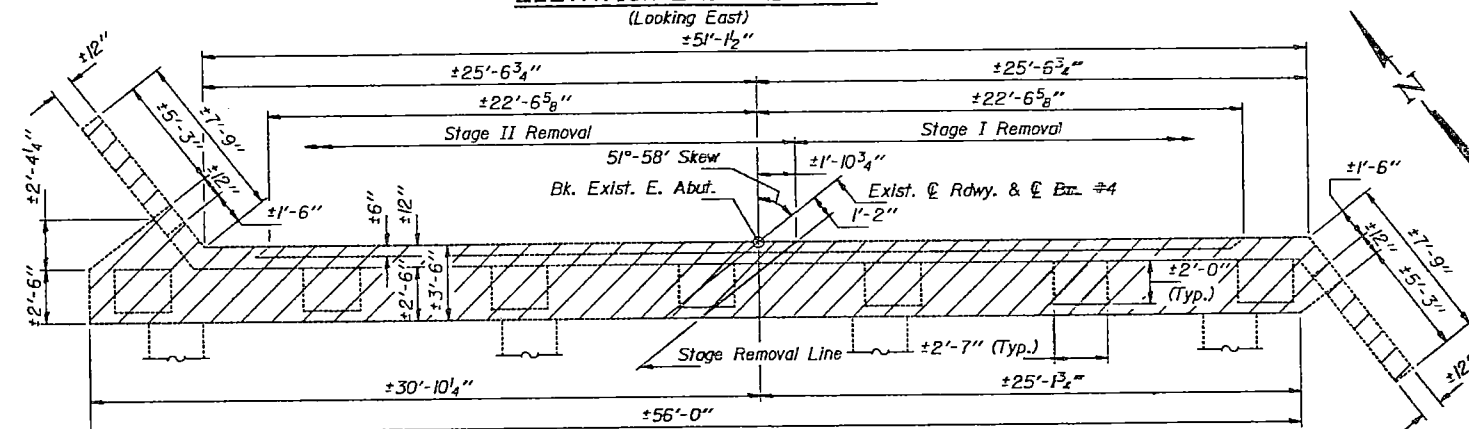
ROUTE NO.	SECTION	COUNTY	POST MILE	SHEET NO.	SHEET NO. 23
RT. 25	17R-MBR	WHITESIDE	47	40	23 SHEETS
PROJECT NO.	PROJECT NAME	PROJECT LOCATION			



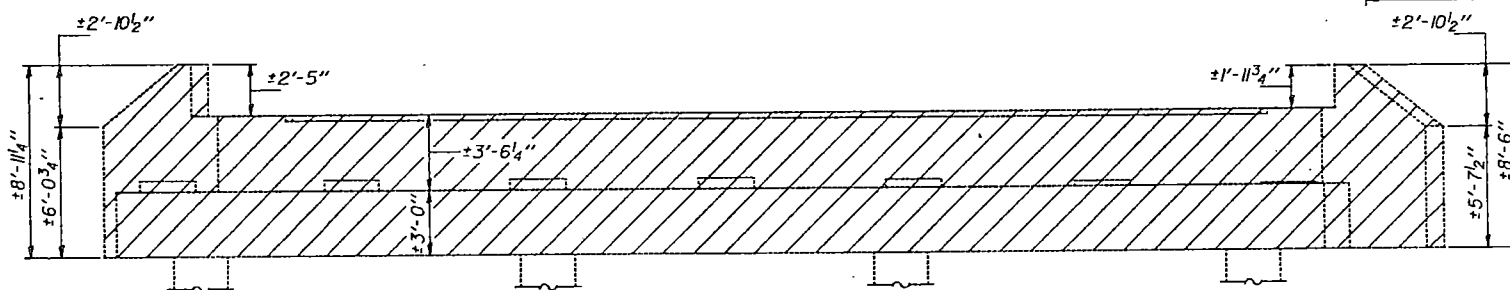
SEC. THRU W. ABUT.
(Dim. at Rt. L's)



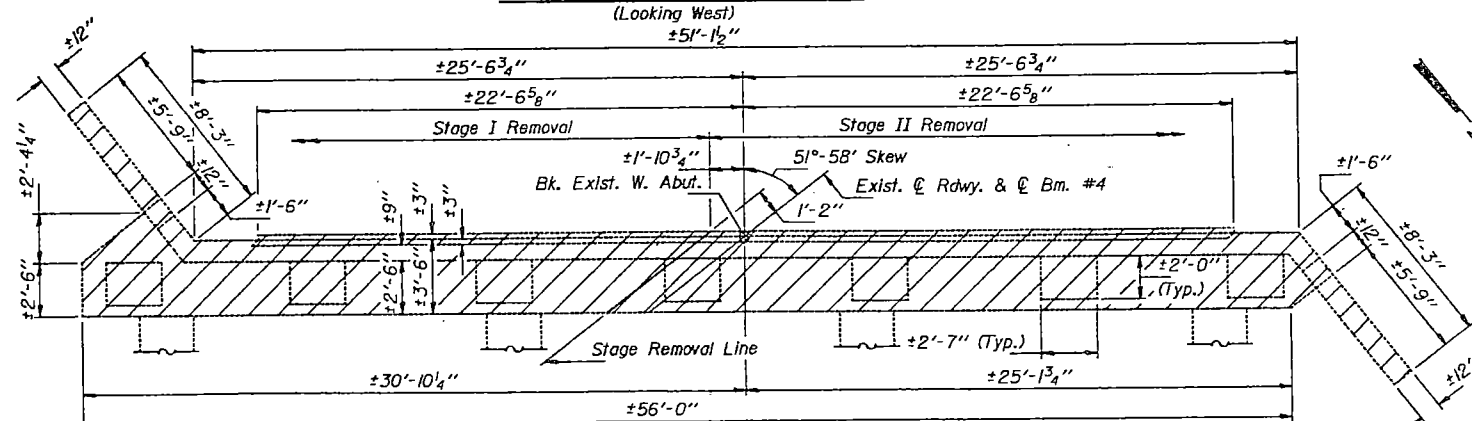
ELEVATION EAST ABUTMENT
(Looking East)



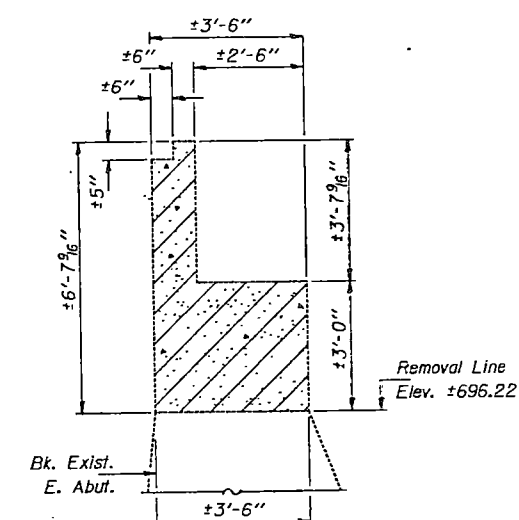
PLAN EAST ABUTMENT



ELEVATION WEST ABUTMENT
(Looking West)



PLAN WEST ABUTMENT



SEC. THRU E. ABUT.
(Dim. at Rt. L's)

Notes: Hatched area indicates "Concrete Removal."

DESIGNED <i>W. Albrecht</i>	EXAMINED <i>Origi O. Kaspar</i>
CHECKED <i>John F. Schneller Jr.</i>	PASSED <i>James J. Kuehner</i>
DRAWN <i>John F. Schneller Jr.</i>	APPROVED <i>James J. Kuehner</i>
CHECKED <i>PMP GRA</i>	DIRECTOR OF HIGHWAYS

CONCRETE REMOVAL DETAILS
F.A. RT. 25 SEC. 17R-MBR
WHITESIDE COUNTY
STA. 118+76.91

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FED. AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
7	17R-IVB	Whiteside	15	1
	17R-IVF		28	
PROJECT F-1(33) & FG-1(26)			FG-1(26)	

INDEX OF SHEETS
Sec. 17R-IVB & 17R-IVF

Sheet No. 1 Title Page
 2 Plan and Profile Sta. 100+00 to 130+00
 3-13 Special Bridge Design Sta. 120+17.5 (sheets 1 to 11 of 11)
 13 Standard 1976
 14 " 1984
 15 " 1961, 1971, 1972

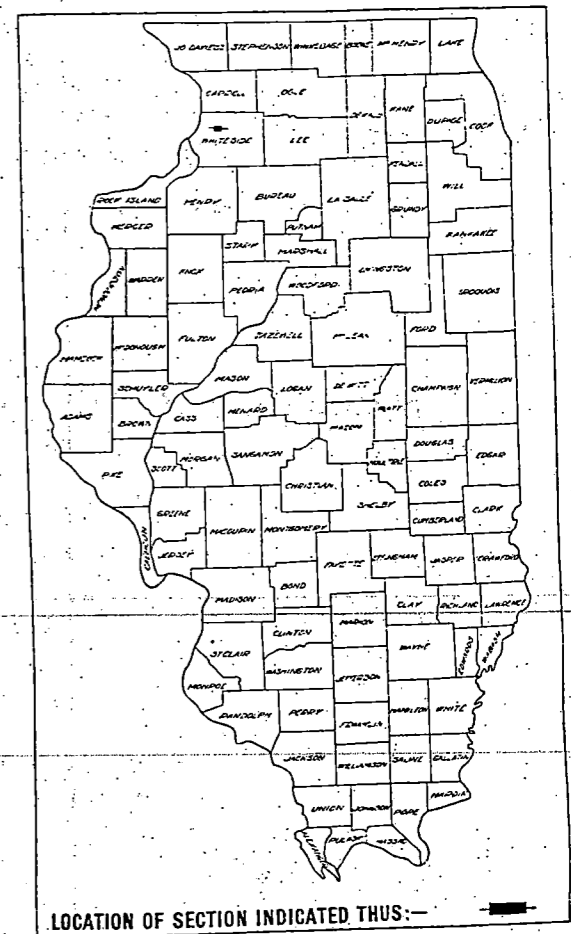
Sec. 17R-I

Sheet No. 1 Title Page
 2 Standard 206A, 1766R, 1776
 3 " 1908R, 2015R, 2016R
 4 " 1913T, 1792S
 5 " 1897S, 1971, 1972
 6 Borrow Pit
 6 Drainage Structures of Sta. 124+93 and 130+42.1
 7 Gravel or Cr. Stone Surf. Course, Type A Rt. Sta. 130+ to 133+67, Pavement Connection, Widening & Culvert Schedule
 8 Channel Pavement, Concrete Gutter Special, Outlet Headwall, Granular Borrow and 9" Perforated C.M. Pipe
 9 Plan and Profile Sta. 77+00 to 100+00
 10 " " " 100+00 " 130+00
 11 " " " 130+00 " 160+00
 12 " " " 160+00 " 175+21
 13-24 Cross Sections
 25 Special Culvert Design Sta. 86+72, 97+74, 139+14, 145+22
 26 " " " 147+00, 161+07, 171+17
 26 Standard 1999
 27 " 1867, 1744, 1892
 28 " 1678

SCALES
 PLAN 1 INCH = 100 FT.
 PROFILE HOR. 1 INCH = 100 FT.
 PROFILE VERT. 1 INCH = 10 FT.
 CROSS-SECTIONS 1 INCH = 5 FT.

17R-1 17R-IVB F.A. ROUTE 7, SECTION 17R-IVF, WHITESIDE COUNTY PROJECT F-1(33) & FG-1(26)

From a point near the NE corner of the SE 1/4 of the SW 1/4 of Sec. 2, T.21N, R.4E of the 4th P.M.
To a point near the center of Section 4, T. 21N, R.4E. of the 4th P.M.



SUMMARY OF QUANTITIES
Sec. 17R-IVB

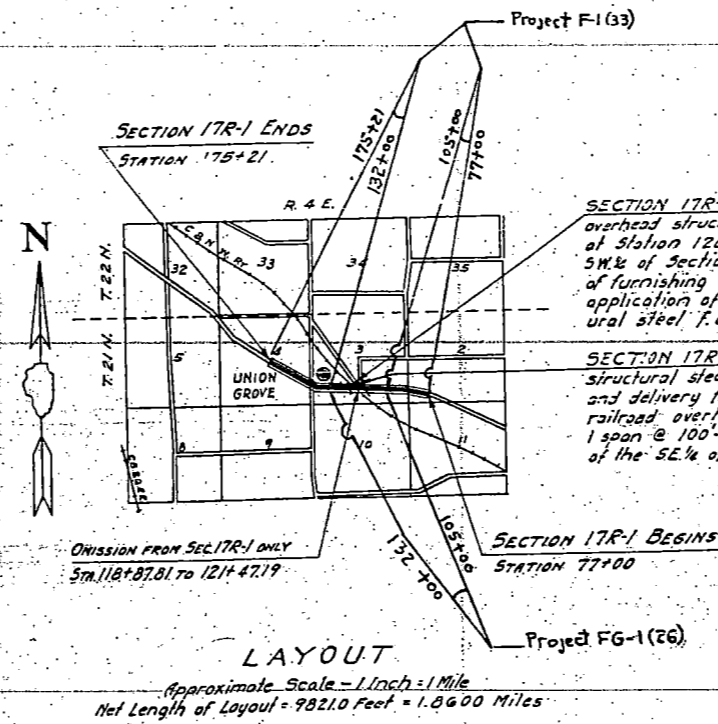
21156	Cu.Yds.	Borrow Excavation
15671	Cu.Yds.	Compaction by Watersoaking
55	Lin.Ft.	Corrugated Metal Pipe 2 inch
130	Lin.Ft.	Storm Sewers, Type 2 12 inch
188	Lin.Ft.	Pipe Culverts, Type 1 30 inch
30.2	Cu.Yds.	Handrail Concrete
853.4	Cu.Yds.	Class X Concrete
94350	Pounds	Reinforcement Bars
446620	Pounds	Structural Steel
1	Each	Test Piles
4960	Lin.Ft.	Furnishing Treated Piles, up to 20 feet
720	Lin.Ft.	Furnishing Untreated Piles, 30.1 to 45 feet
1960	Lin.Ft.	Driving Timber Piles 20 feet long
720	Lin.Ft.	Driving Timber Piles 45 feet long
1	Each	Name Plate

Sec. 17R-IVF

446620	Pounds	Structural Steel
--------	--------	------------------

Sec. 17R-I

21458	Cu.Yds.	Earth Excavation
182776	Cu.Yds.	Borrow Excavation
6453	Cu.Yds.	Granular Borrow
1085	Inch Dia.	Tree Removal - Inch Diameter
1203	Units	Hedge Removal (in units of 100 linear feet)
7291	Sq.Yds.	Pavement Removal
23533	Sq.Yds.	P.C. Concrete Pavement (9" uniform)
2643	Sq.Yds.	P.C. Concrete Pavement (16 1/2" x 16 1/2")
34	Sq.Yds.	P.C. Concrete Driveway Pavement 6"
24356	Sq.Yds.	Earth Shoulders
500	Lin.Ft.	Concrete Gutter, Special
778	Lin.Ft.	Concrete Gutter, Type A
72	Lin.Ft.	Corrugated Metal Pipe 12 inch
48	Lin.Ft.	Corrugated Metal Pipe 15 inch
274	Pounds	Cast Iron Grates
290	Sq.Yds.	Channel Pavement
739	Tons	Gravel or Crushed Stone Surface Course, Type A
2	Each	Furnishing and Erecting Drainage Markers
80	Lin.Ft.	Wood Guard Rail
1755	Cu.Yds.	Class X Concrete
30490	Pounds	Reinforcement Bars
26	Lin.Ft.	Pipe Culverts Type 1 12 inch
76	Lin.Ft.	Pipe Culverts Type 1 15 inch
46	Lin.Ft.	Pipe Culverts Type 2 18 inch
124	Lin.Ft.	Pipe Culverts Type 2 24 inch
2	Each	Project Markers
40	Each	Furnishing and Erecting Right of Way Markers
23533	Sq.Yds.	Pavement Fabric
450	Lin.Ft.	Perforated Corrugated Metal Pipe 8 inch
71	Each	Guard Posts
500	Cu.Yds.	Gravel or Crushed Stone Surface Course Type B
20	Tons	Calcium Chloride Applied
235	Acres	Seeding



SECTION 17R-IVB includes the construction of an I-beam railroad overhead structure (C.&N.W. Ry.), 2 spans @ 77'-3 1/2" and 1 span @ 100'-0" at Station 120+17.5, a point near the NE corner of the SE 1/4 of the SW 1/4 of Section 3, T. 21N, R. 4E. of the 4th P.M., with the exception of furnishing and fabrication of structural steel, furnishing and application of the shop coat of paint and delivery of the structural steel f.o.b. Union Grove.

SECTION 17R-IVF includes the furnishing and fabrication of structural steel, furnishing and application of the shop coat of paint and delivery f.o.b. Union Grove of the structural steel for an I-beam railroad overhead structure (C.&N.W. Ry.), 2 spans @ 77'-3 1/2" and 1 span @ 100'-0" at Station 120+17.5, a point near the NE corner of the SE 1/4 of the SW 1/4 of Section 3, T. 21N, R. 4E. of the 4th P.M.

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS	
SUBMITTED	DEC 3 1946
EXAMINED	R.M. Ferguson DISTRICT ENGINEER
PASSED	G.D. [Signature] FIELD ENGINEER
APPROVED	[Signature] CHIEF HIGHWAY ENGINEER
APPROVED	[Signature] DIRECTOR

2-40

RECOMMENDED FOR APPROVAL DATE

APPROVED DATE

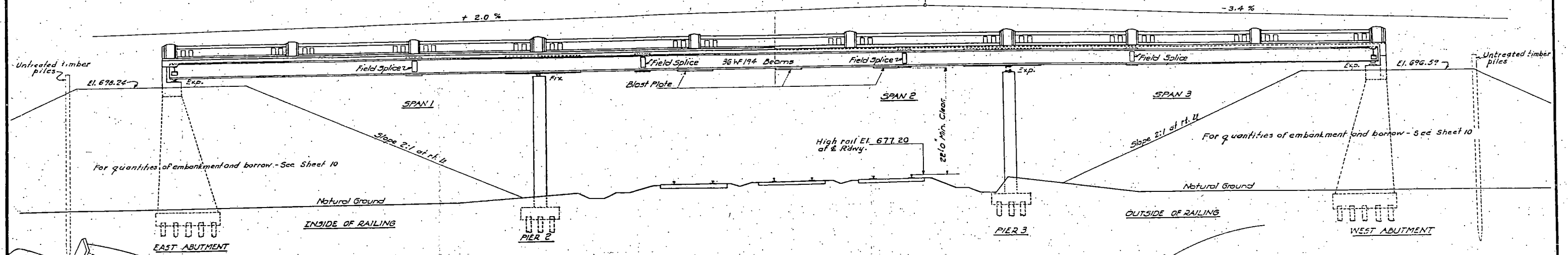
DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

F.W.A. 2-8-47
Sec. 17R-1(26) 1-26

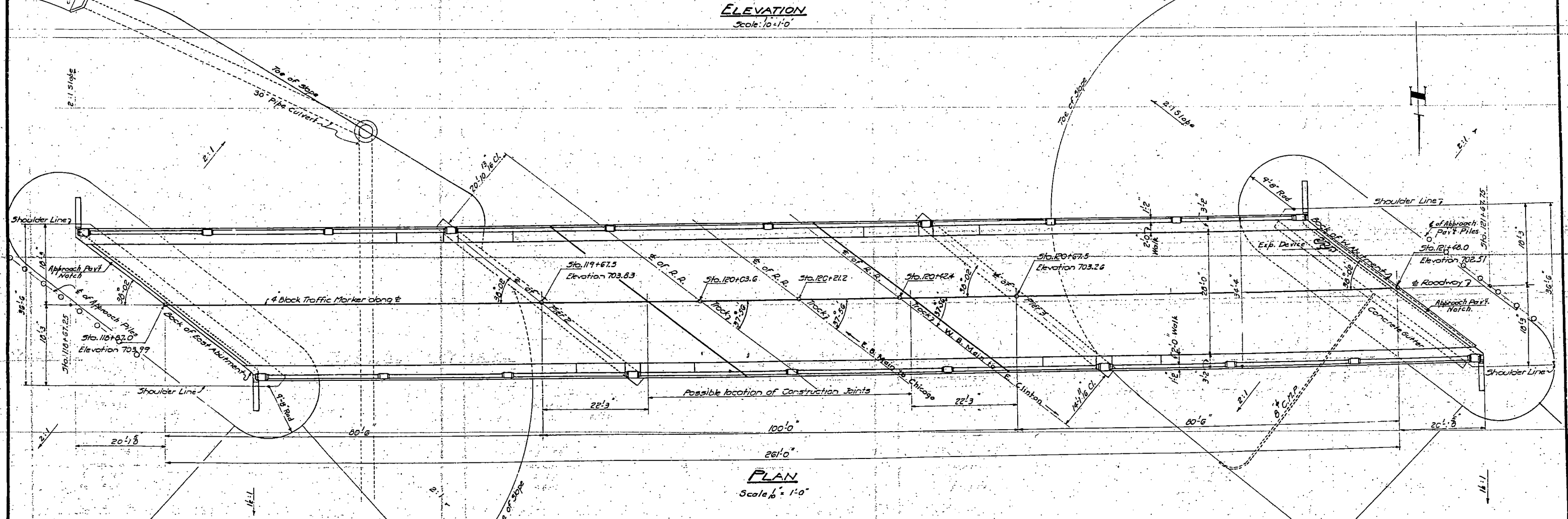
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 17E-NB 7 17E-NB	White Side	15	3
11 SHEETS			

P.I. Sta. 120+50
Elev. 712.30 (703.39)
V.C. 1320'



ELEVATION
Scale 1/10" = 1'-0"



PLAN
Scale 1/10" = 1'-0"

Note: For details of embankment, drainage and approach piles - See Sheet 10

DESIGN STRESSES
 $f_s = 18000$ % Structural Steel
 $f_s = 20000$ % Reinforcement
 $f_c = 1200$ % Concrete
 $n = 10$

COMPUTED	<i>W. H. Sommer</i>	EXAMINED	February 14, 1945
CHECKED	<i>W. H. Sommer</i>	DRAWN	<i>W. H. Sommer</i>
DRAWN	<i>W. H. Sommer</i>	CHECKED	<i>W. H. Sommer</i>
CHECKED	<i>W. H. Sommer</i>	APPROVED	<i>W. H. Sommer</i>
SPECIAL	ASSEMBLED		
	CHECKED		

EXHIBIT-3

GENERAL PLAN
C. AND N.W. RY. - UNION GROVE
F.A. ROUTE 7 - SECTION 17E-NB
PROJECT FG-1 (25)
WHITE SIDE COUNTY

H20-316-41 Live Load

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

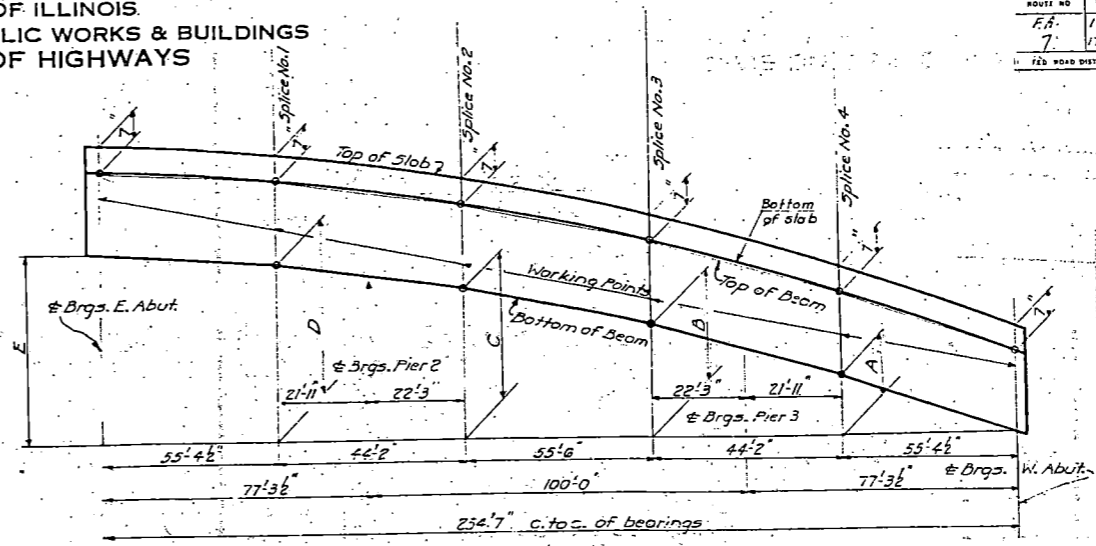
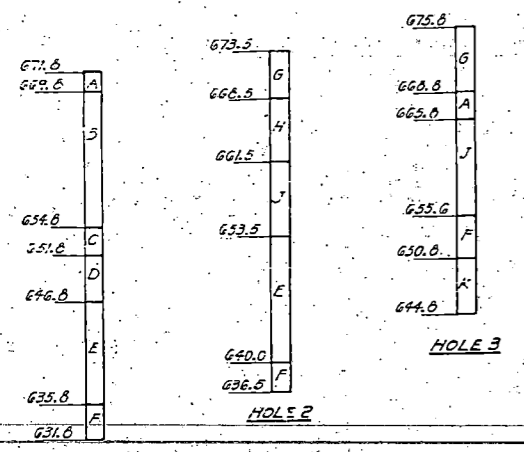
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 172-IVB 7	Whiteside	15	4
ILLINOIS FED. AID PROJECT			

5.4. - 1/2" G.S. Plate top of Culvert headwall.
R.R. 20+04 E.L. 676.66

LOG OF BORINGS

SYMBOL	DESCRIPTION
A	Black Loom
B	Sandy Yellow Clay
C	Gray Clay
D	Sand & Gravel - Packed
E	Stony Gray Clay - Hard
F	Cemented Gravel
G	Fill
H	Yellow Sand
J	Yellow Clay
K	Sandstone

Boring data shown here is only for guidance of the bidder in estimating soil conditions which may be encountered in the work.



DIMENSIONS A-B-C-D-E

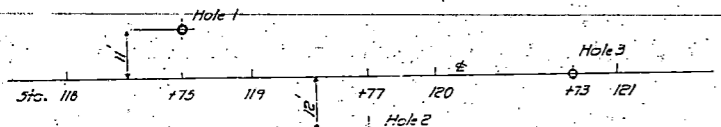
BEAM	A	B	C	D	E
1	5 1/16	9 1/16	1-3 1/2	1-2 1/2	1-2 3/8
2	6 5/8	9 7/8	1-1 3/8	1-2 1/8	1-3 3/8
3	6 1/8	10 7/8	1-1 1/8	1-2 1/8	1-4 1/8
4	6 1/8	10 7/8	1-2 3/8	1-4 1/8	1-5 1/8
5	6 5/8	10 5/8	1-2 5/8	1-4 1/8	1-6 7/8
6	6 7/8	11 1/2	1-3 3/8	1-5 1/8	1-7
7	7 1/8	11 1/8	1-3 1/8	1-6 1/4	1-7 3/8

LOCATION OF WORKING POINTS

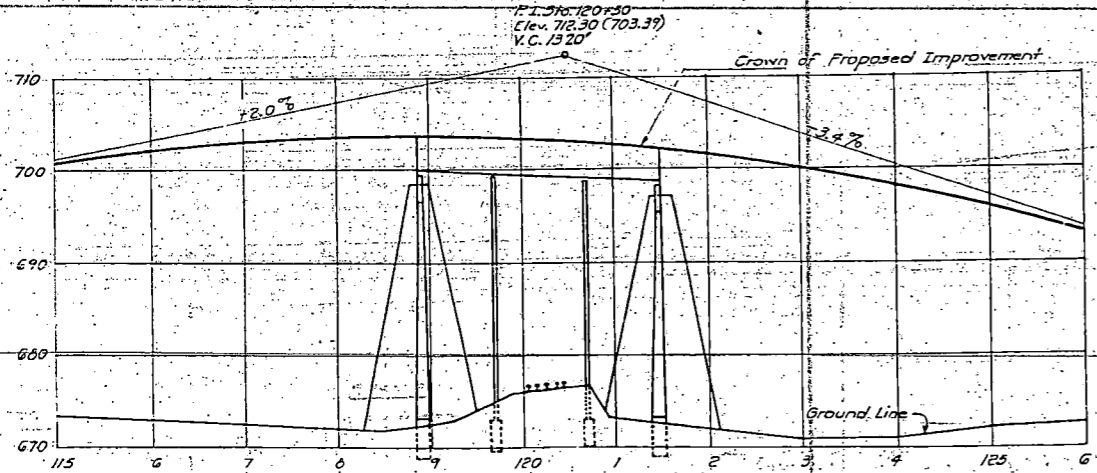
GENERAL NOTES

Class-X Concrete shall be used throughout. The concrete floor shall be finished in accordance with Art. 61.3(e) of the Standard Specifications. Temporary construction joints in the floor slab may be located as shown on sheet 1. No additional construction joints may be used except by written permission of the Engineer. The concrete floor shall be poured continuously between construction joints. The 5/8" joint filler shall be in accordance with Art. 115.6(b) of the Standard Specifications. The cost of the filler shall be included in the unit price bid for Class-X Concrete. Rivets shall be 3/4" except as noted otherwise. All field connections shall be riveted unless otherwise specified. All beams shall be shop assembled to their proper grade and alignment with or without diaphragms. Rivet holes in the splices shall be reamed and the splice parts match marked while the beams are shop assembled. The assembled units shall be inspected before reaming. All structural steel items will be inspected by the Illinois Division of Highways before being painted. Structural steel items shall be given one shop coat of red lead paint. Shop paint shall be furnished and applied by the Contractor for the V.F. Sec. The structural steel shall be given two field coats of paint after erection. The first field coat shall be tinted red lead and the second coat shall be black graphite. All paint for the field coats shall be furnished and applied by the Contractor for the V.F. section. The tops of the beams in contact with concrete shall not be painted except for a distance of (5) feet each way from center line of bearings at the piers and five (5) feet of the abutment ends. The embankment shall be built according to Sec. 16 of the Standard Specifications before the superstructure is placed. Both mechanical and waterprooing methods of compaction shall be used. Welding of cover plates to beams shall be made in such a manner as to prevent warping of the main material. The plates shall be clamped securely to the beam flanges before welding. The skip step back method of welding or other effective means shall be used if necessary to obtain satisfactory results. Lap all splices of reinforcing steel 30 diameters unless otherwise shown on the plans.

TEST HOLES



LOCATION OF TEST HOLES



PROFILE ALONG C OF SURVEY

PROFILE ALONG C OF SURVEY

TOTAL BILL OF MATERIAL

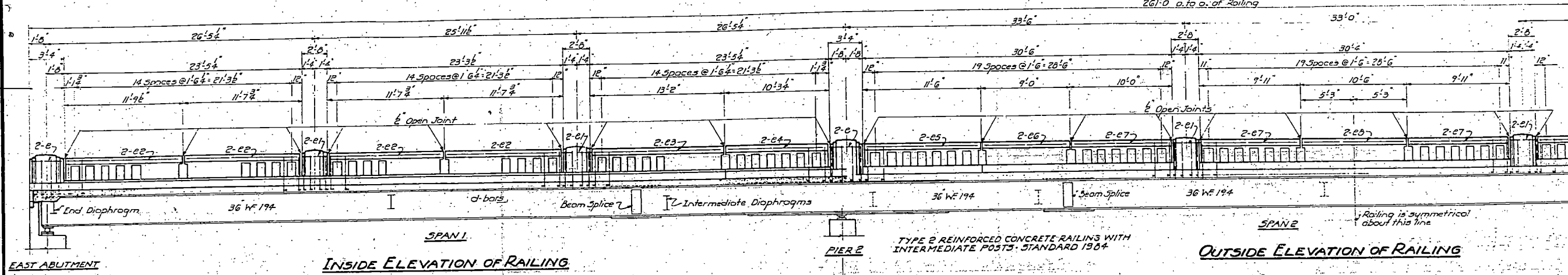
ITEM	UNIT	SEC. 172-IVB	SEC. 172-IVF
Handrail Concrete	Cu. Yd.	30.2	
Class-X Concrete	Cu. Yd.	253.4	
Reinforcement Bars	Lbs.	94350	
Structural Steel	Lbs.	446620	446620
8" Corrugated Metal Pipe	Lin. Ft.	55	
Borrow Excavation	Cu. Yd.	21156	
Compaction by Watersoaking	Cu. Yd.	15671	
Furnishing Treated Piles, up to 20'	Lin. Ft.	4960	
Driving Timber Piles	Lin. Ft.	5680	
Test Piles	Each	1	
Furnishing Untreated Piles, 30.1 to 45'	Lin. Ft.	720	
12" Storm Sewer, Type 2	Lin. Ft.	130	
30" Pipe Culvert, Type 1	Lin. Ft.	188	
Name Plates	Each	7	

COMPUTED	<i>Bliss</i>	EXAMINED	<i>February 14 1945</i>
CHECKED	<i>W. T. Sommer</i>	DESIGNED	<i>Bliss</i>
DRAWN	<i>Bliss</i>	ENGINEER	<i>A. R. Crossings</i>
CHECKED	<i>W. T. Sommer</i>	PASSED	<i>Bliss</i>
SPECIAL	ASSEMBLED	APPROVED	<i>Bliss</i>
	CHECKED		

GENERAL DATA
G. AND N.W. RY. UNION GROVE
F.A. ROUTE 7 - SECTION 172-IVB
PROJECT F6-1(25)
WHITESIDE COUNTY

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

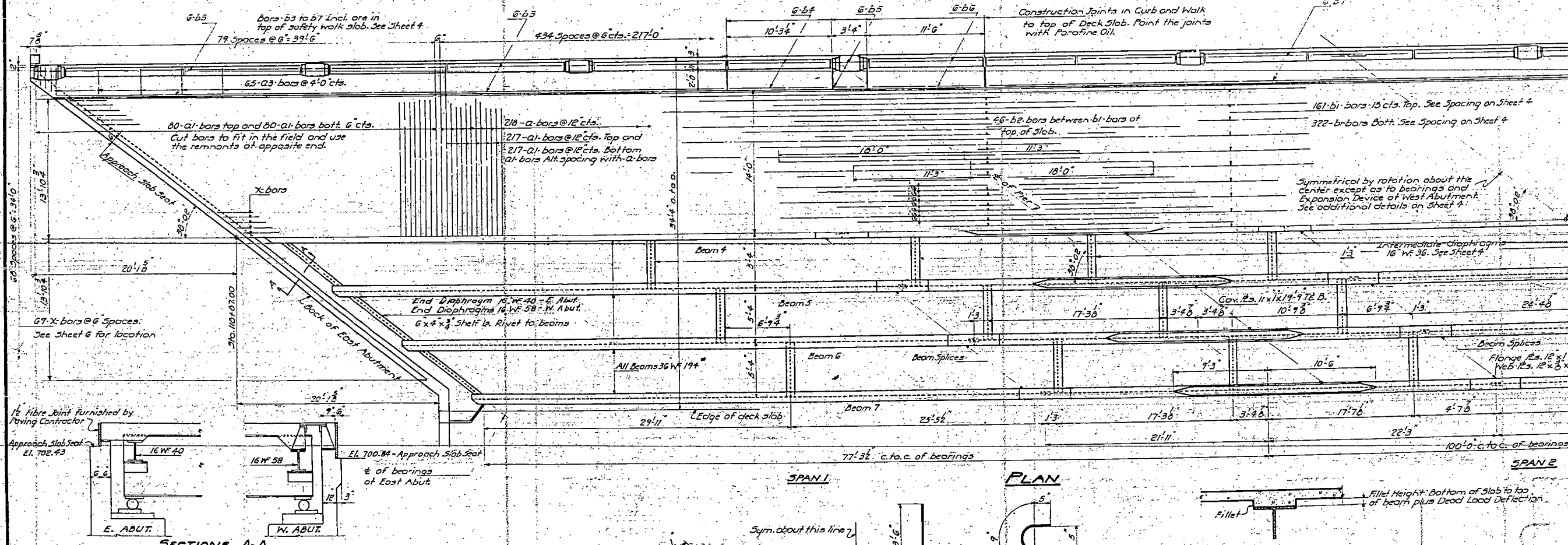
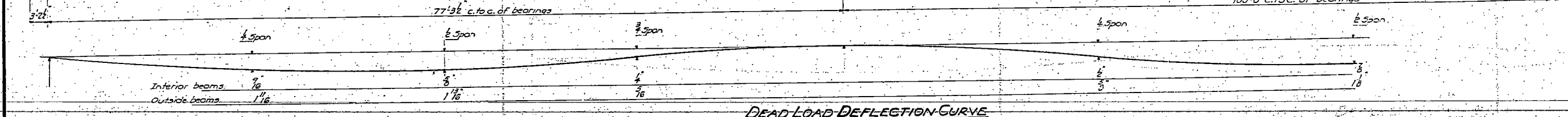
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7	172-18 172-19	Whiteside	15	5
SHEET NO. 5 11 SHEETS				



BILL OF MATERIAL

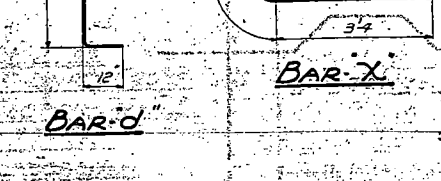
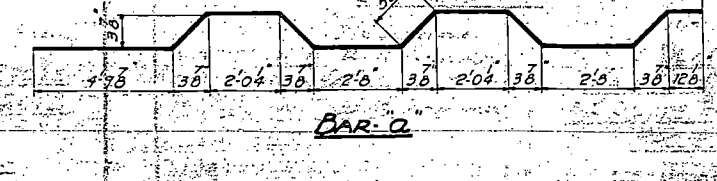
BAR	NO.	SIZE	LENGTH	SHAPE
a	25	3"	35'0"	
a1	502	3"	34'0"	
a3	130	3"	2'9"	
b1	422	3"	36'3"	
b2	92	3"	29'3"	
b3	40	3"	35'3"	
b4	24	3"	10'0"	
b5	24	3"	5'0"	
b6	24	3"	11'3"	
b7	24	3"	57'6"	
d	373	3"	4'6"	
e	12	3"	3'0"	
e1	24	3"	2'6"	
e2	32	3"	11'6"	
e3	8	3"	13'0"	
e4	8	3"	10'0"	
e5	3	3"	11'3"	
e6	8	3"	8'9"	
e7	16	3"	9'9"	
e8	4	3"	10'3"	
x	62	3"	4'6"	

Class 'C' Concrete	Cu. Yds. 237.2
Handrail Concrete	Cu. Yds. 30.2
Reinforcement Bars	Lbs. 59270
Structural Steel	Lbs. 407780

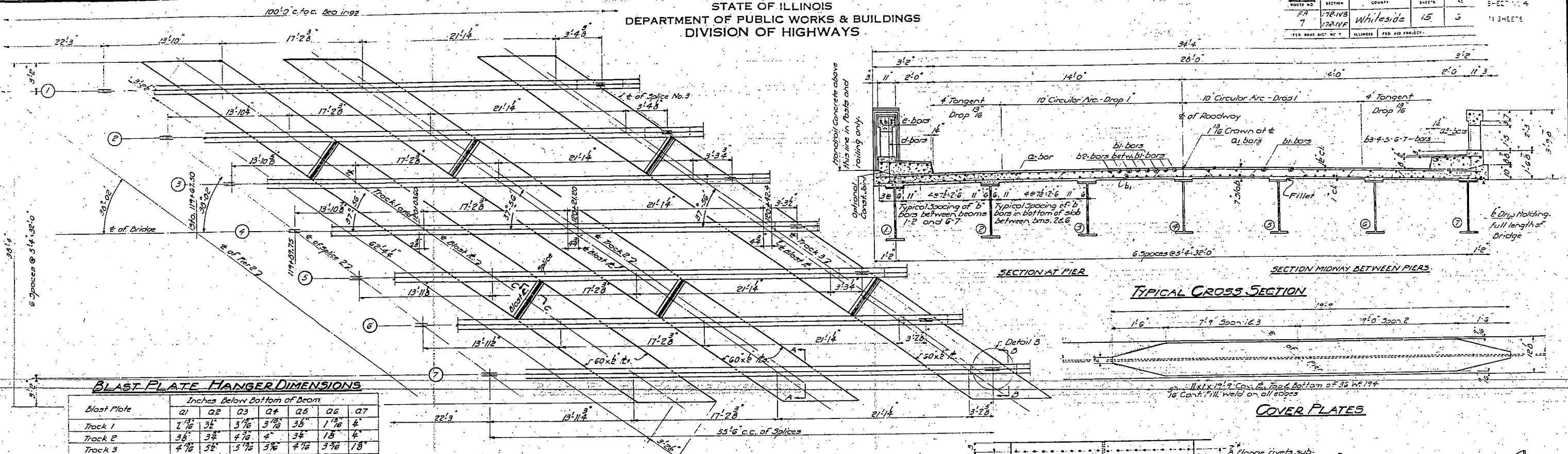


SECTIONS A-A

COMPUTED	W. N. Sommer	EXAMINED	February 14 1945
CHECKED	W. N. Sommer	PASSED	Dick D. Clark
DRAWN	W. N. Sommer	APPROVED	W. N. Sommer
CHECKED	W. N. Sommer	ENGINEER OF DESIGN	
SPECIAL	ASSEMBLED	APPROVED	
CHECKED		CONTRACTOR	

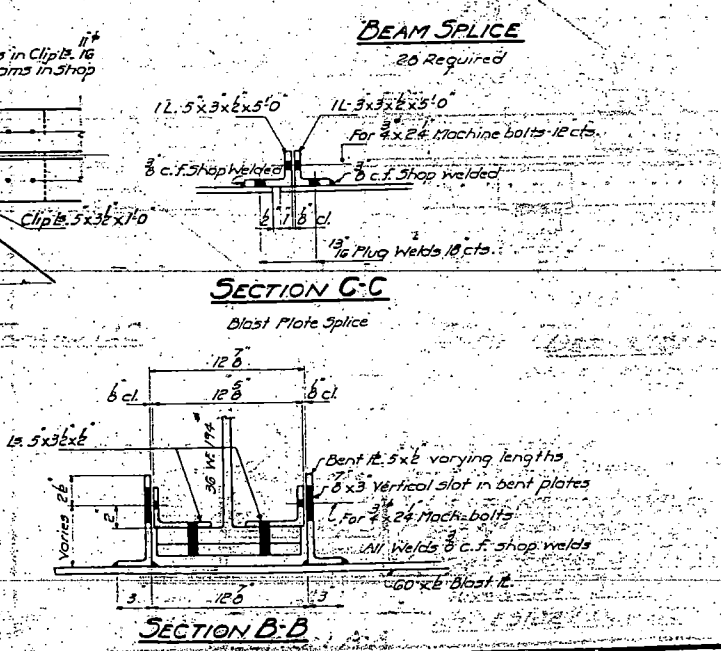
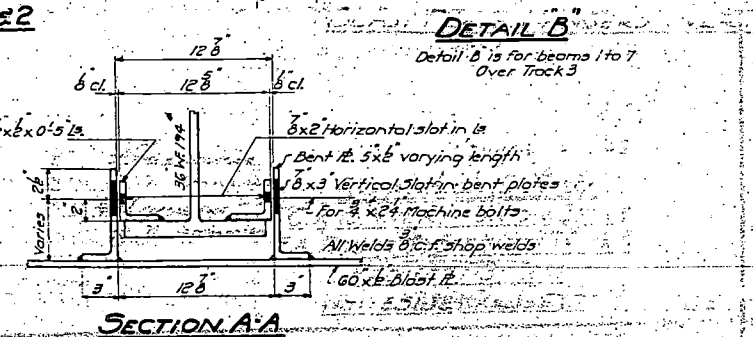
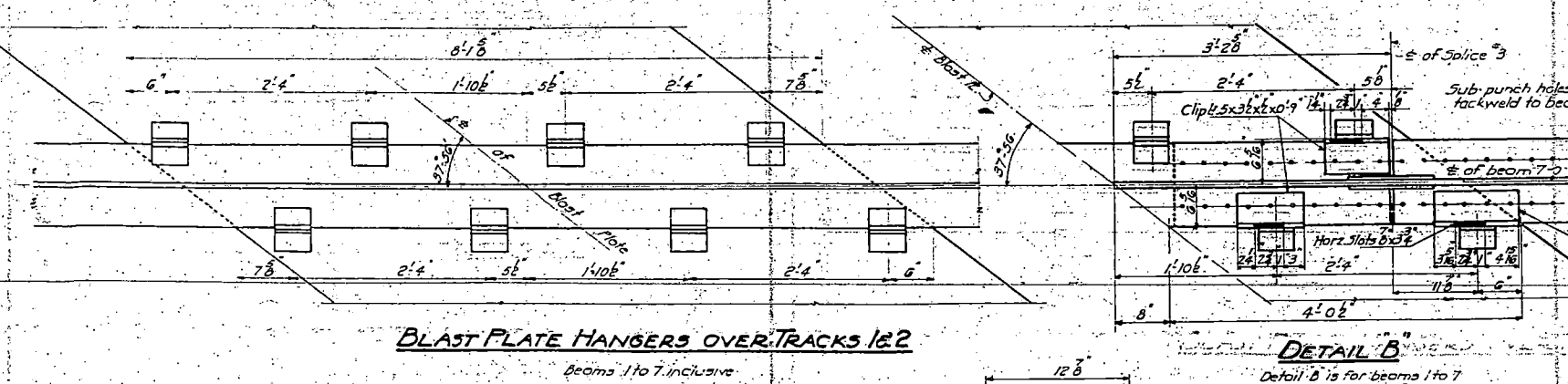
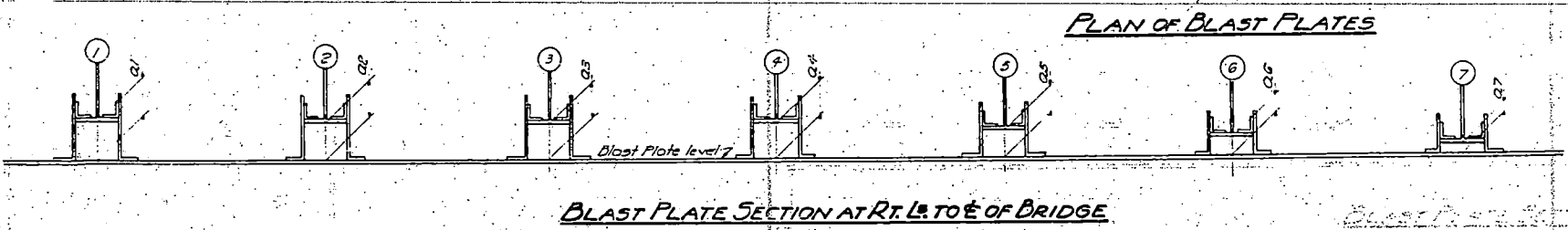
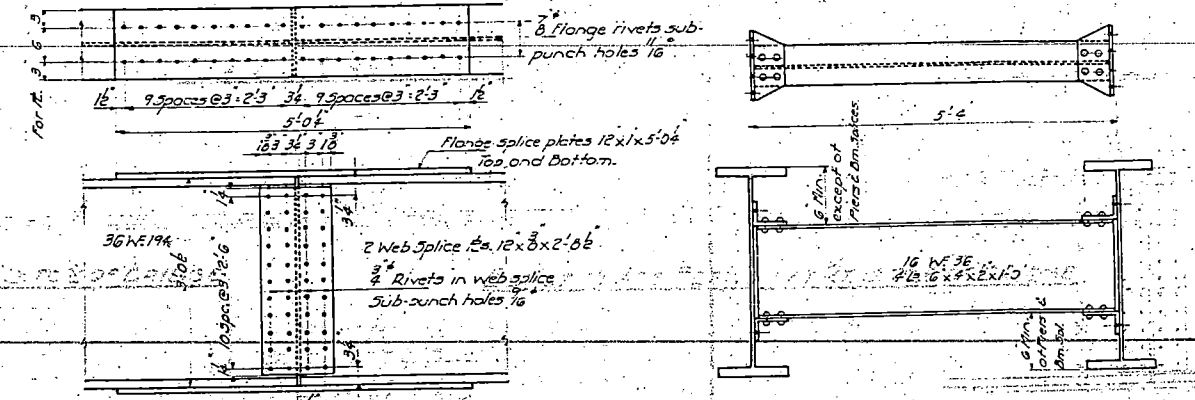
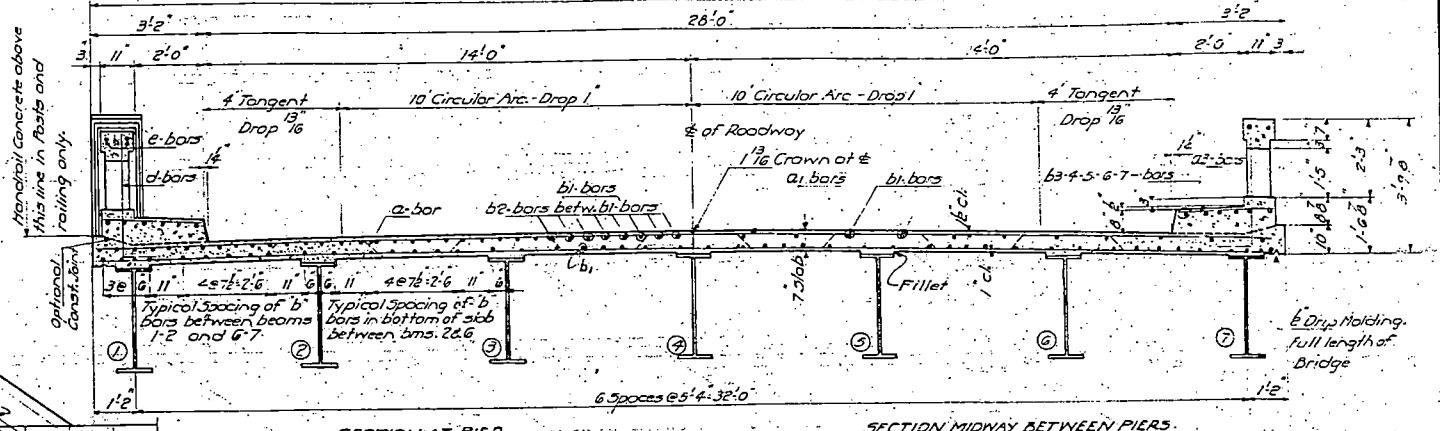


SUPERSTRUCTURE
G. AND N. W. R. UNION GROVE
F.A. ROUTE 7-SECTION 17R-1VB
PROJECT FG-1 (2)
WHITESIDE COUNTY



BLAST PLATE HANGER DIMENSIONS

Blast Plate	Inches Below Bottom of Beam						
	a1	a2	a3	a4	a5	a6	a7
Track 1	2 1/8	3 1/2	5 1/8	3 7/8	3 1/2	1 7/8	4
Track 2	3 5/8	3 3/4	4 7/8	4	3 3/4	1 3/4	4
Track 3	4 1/8	5 1/2	5 1/8	5 3/8	4 1/8	3 3/8	1 3/8

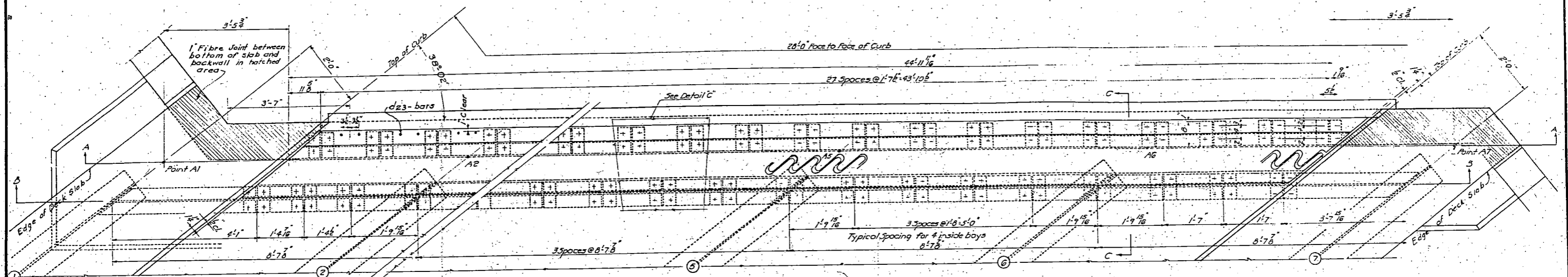


NOTE:
Blast Plates shall be 6" thick and shall conform to A.S.T.M. Standard Specifications A-7 for Structural Steel except that 0.2% of copper shall be added.
All bolts and nuts shall be galvanized. Painting shall be the same as for Structural Steel.
The estimated total weight of blast plates and the accessories is 22617 Lbs.
The blast plates including splice angles hangers, bolts and nuts will be paid for at the unit price bid for Structural Steel.

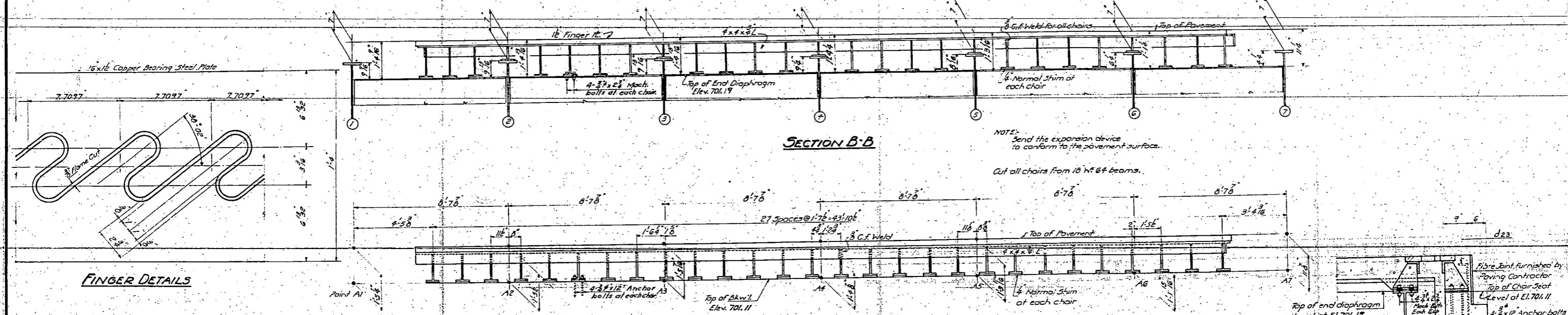
COMPUTED: *W. N. Sommer*
CHECKED: *W. N. Sommer*
DRAWN: *W. N. Sommer*
CHECKED: *W. N. Sommer*
SPECIAL: ASSEMBLED
CHECKED

EXAMINED: February 14 1945
Dick S. Starker
APPROVED: *[Signature]*
CHIEF HIGHWAY ENGINEER

BLAST PLATES
G. AND W. RY. UNION GROVE
FA. ROUTE 7-SECTION 17R-1VB
PROJECT F.G. 1(25)
WHITESIDE COUNTY

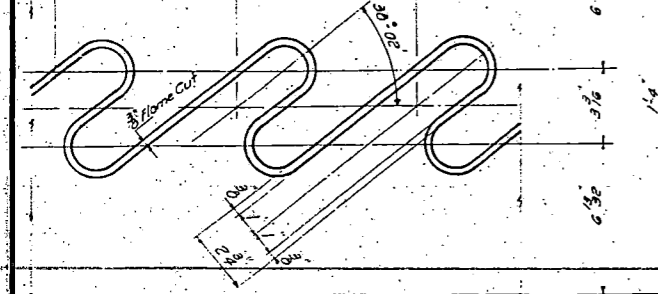


PLAN OF EXPANSION DEVICE AT WEST ABUTMENT

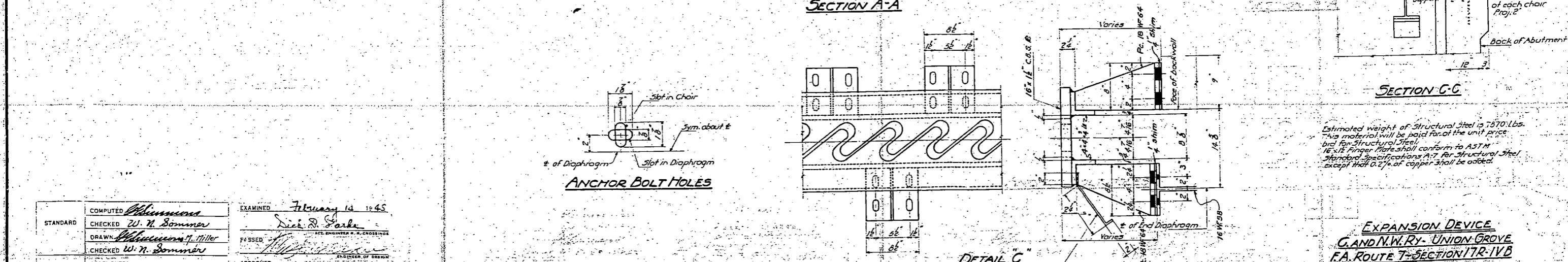


SECTION B-B

NOTE:
Send the expansion device to conform to the pavement surface.
Cut all chairs from 18 WF 64 beams.



FINGER DETAILS



SECTION A-A

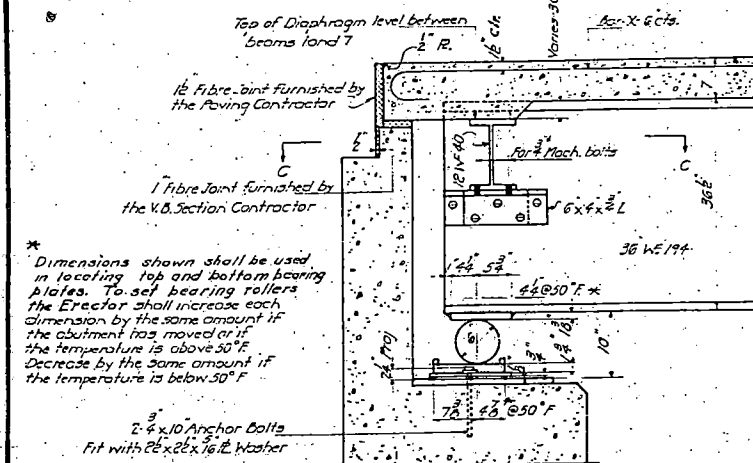
ANCHOR BOLT HOLES

SECTION C-C

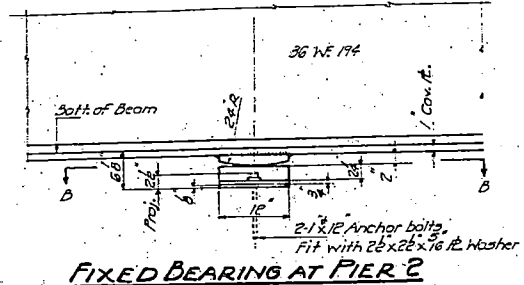
Estimated weight of Structural Steel is 7570 Lbs.
This material will be paid for at the unit price bid for Structural Steel.
16" WF Finger Plate shall conform to ASTM Standard Specifications A-7 for Structural Steel except that 0.2% of copper shall be added.

COMPUTED	<i>Whitcomb</i>	EXAMINED	February 14 1945
CHECKED	<i>W. N. Sommer</i>	DRAWN	<i>Rich. D. Parke</i>
DRAWN	<i>Whitcomb & Miller</i>	CHECKED	<i>W. N. Sommer</i>
CHECKED	<i>W. N. Sommer</i>	APPROVED	<i>W. N. Sommer</i>
SPECIAL ASSEMBLED		CHIEF HIGHWAY ENGINEER	

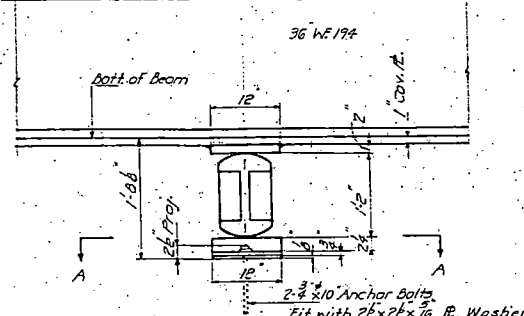
EXPANSION DEVICE
G. AND N. W. RY - UNION GROVE
F.A. ROUTE 7 - SECTION 17R-1VB
PROJECT 66-1(25)
WHITESIDE COUNTY



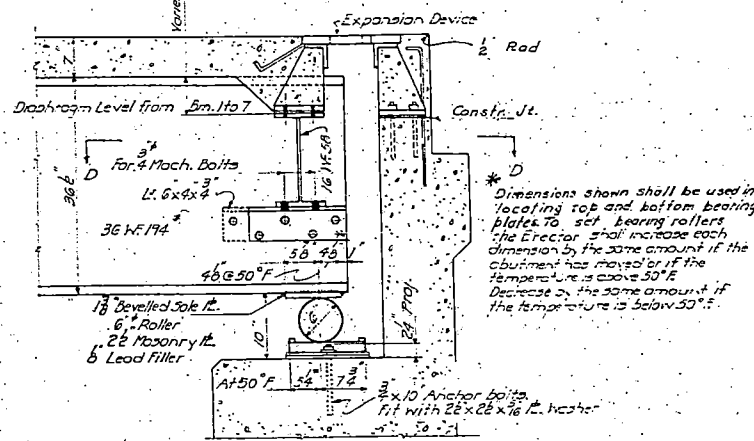
ROLLER BEARING AT EAST ABUTMENT



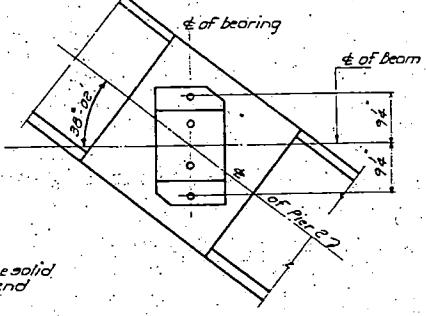
FIXED BEARING AT PIER 2



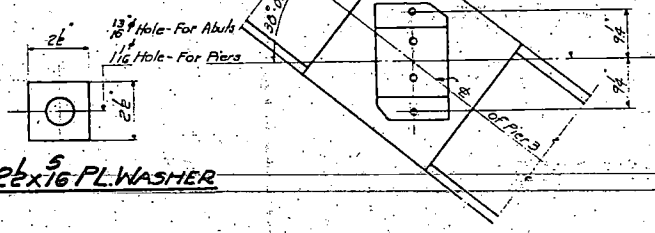
ROCKER BEARING AT PIER 3



ROLLER BEARING AT WEST ABUTMENT

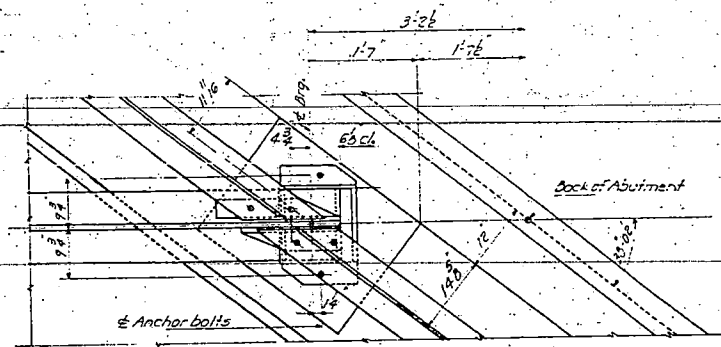


SECTION B-B
26" x 26" x 1/8" PL WASHER

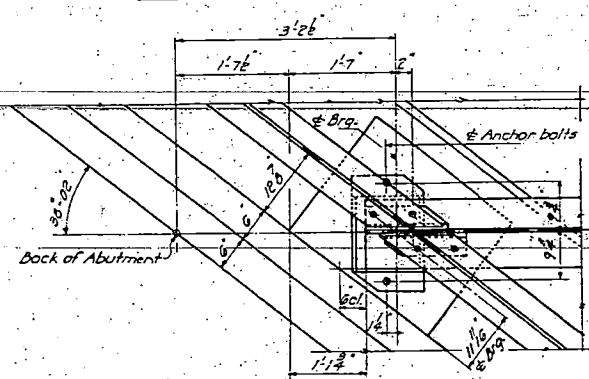


ANCHOR BOLT LIST

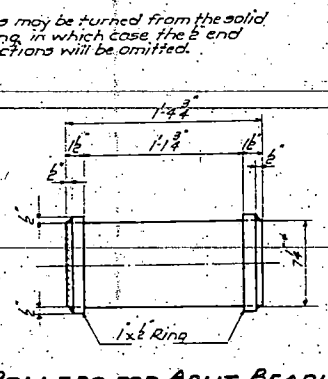
Anchor Bolt Qty	Req'd	D	L
50	42	3/4"	10"
	14	1"	12"



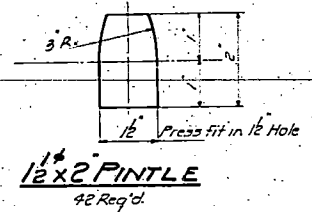
SECTION D-D



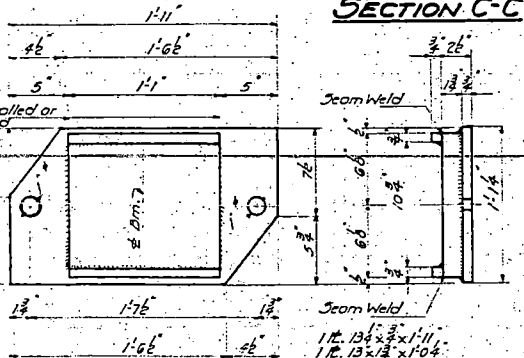
SECTION C-C



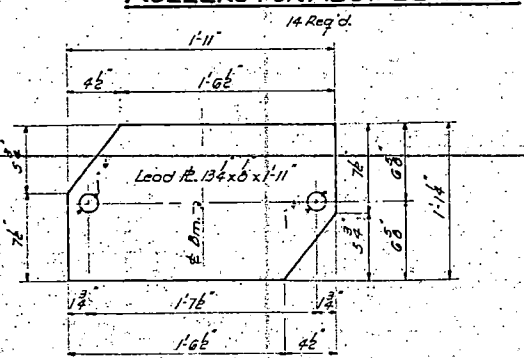
ROLLERS FOR ABUT. BEARINGS



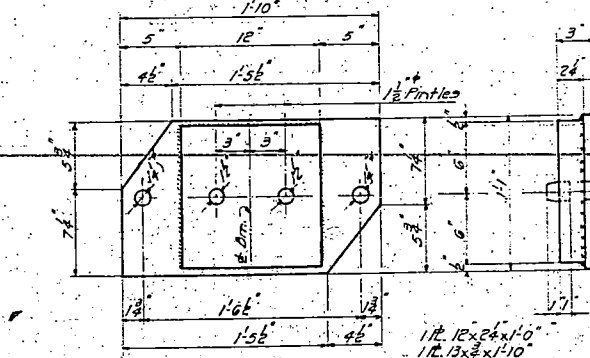
1 1/2" x 2" PINTLE
42 Req'd.



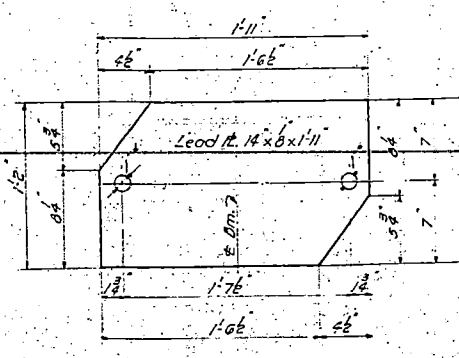
MASONRY PLATE - EAST ABUTMENT



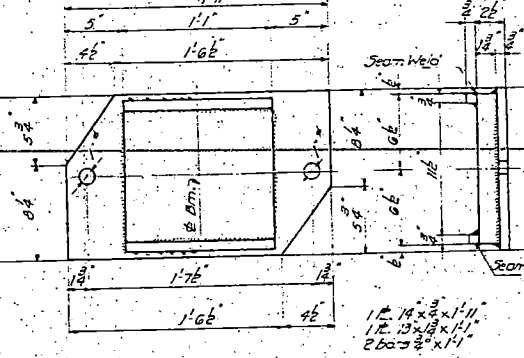
LEAD PLATE FILLER - EAST ABUTMENT



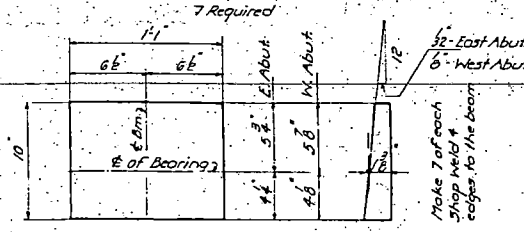
MASONRY PLATE - PIERS 2 & 3



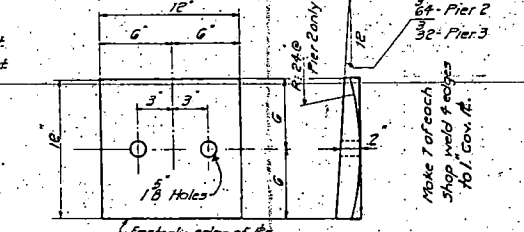
LEAD PLATE FILLER - WEST ABUTMENT



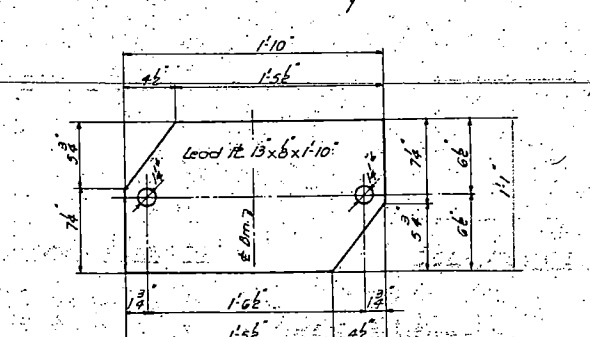
MASONRY PLATE - WEST ABUTMENT



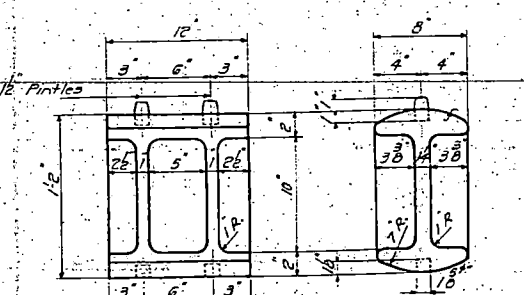
SOLE PLATES AT ABUTMENTS



SOLE PLATES AT PIERS 2 & 3



LEAD PLATE FILLERS - PIERS 2 & 3



ROCKER AT PIER 3
Cast Steel - 7 Required

LIST OF QUANTITIES

Structural Steel	Lbs.	4493
Lead Plates	Lbs.	667
Rollers and Rockers	Lbs.	3270
Pintles	Lbs.	42
Anchor Bolts and Plate Washers	Lbs.	137
Total		8399 Lbs.

Note: All welds are 3/8" continuous fillets unless otherwise noted. Lead plates, anchor bolts, pintles and plate washers will be paid for at the unit price bid for Structural Steel.

Weight of Sole Plates are included in Bill of Material on Sheet 3

BEARING DETAILS
C. AND N.W. RY. UNION GROVE
F.A. ROUTE 7 - SECTION 17R-IVB
PROJECT FG-1(25)
WHITESIDE COUNTY

COMPUTED	W. N. Sommer
CHECKED	W. N. Sommer
DRAWN	W. N. Sommer
CHECKED	W. N. Sommer
ASSEMBLED	
CHECKED	

EXAMINED	February 14, 1945
	Dick D. Starke
PASSED	
APPROVED	

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

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO.
7	17R-IVB	Whiteside	15	9	11 SHEETS

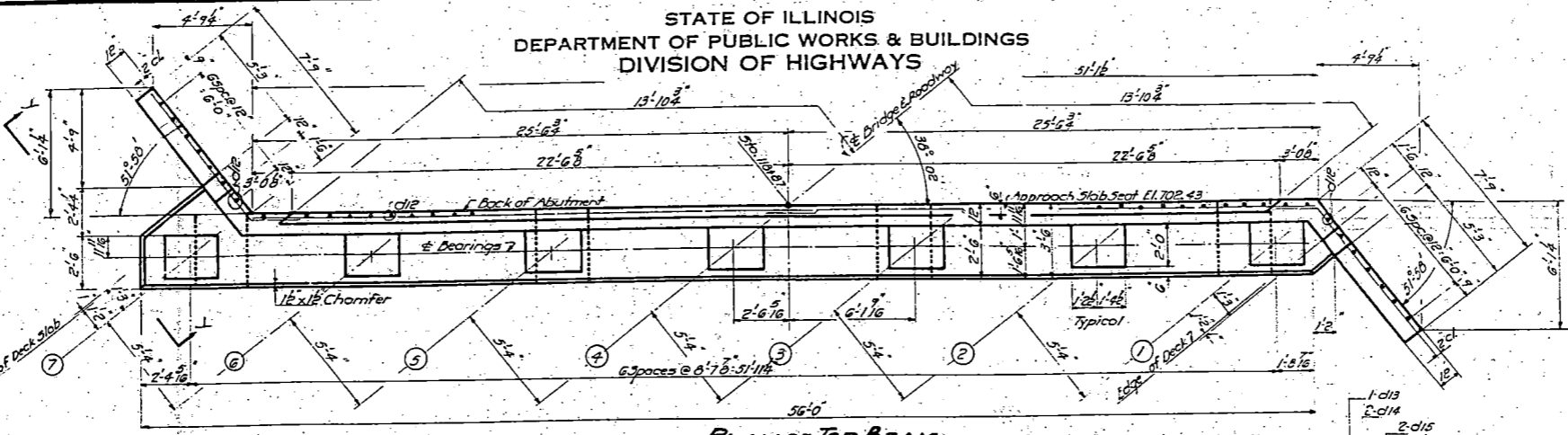
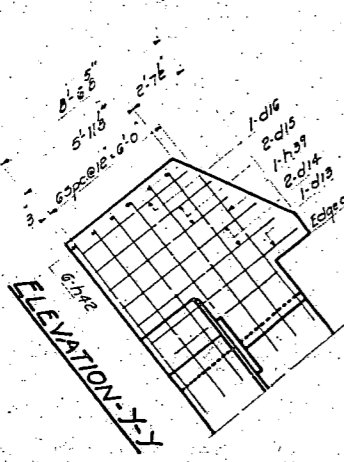
BILL OF HOOKED BARS

Bar	Size	Length	A	B	N	X	No.
H14	1"	34"	6	14	6	27	12
H2	2"	6'	11	6	47	16	
W13	3"	26'	6	11	6	27	36

BENT BARS h39 & h42

2-Req'd. h39
12-Req'd. h42

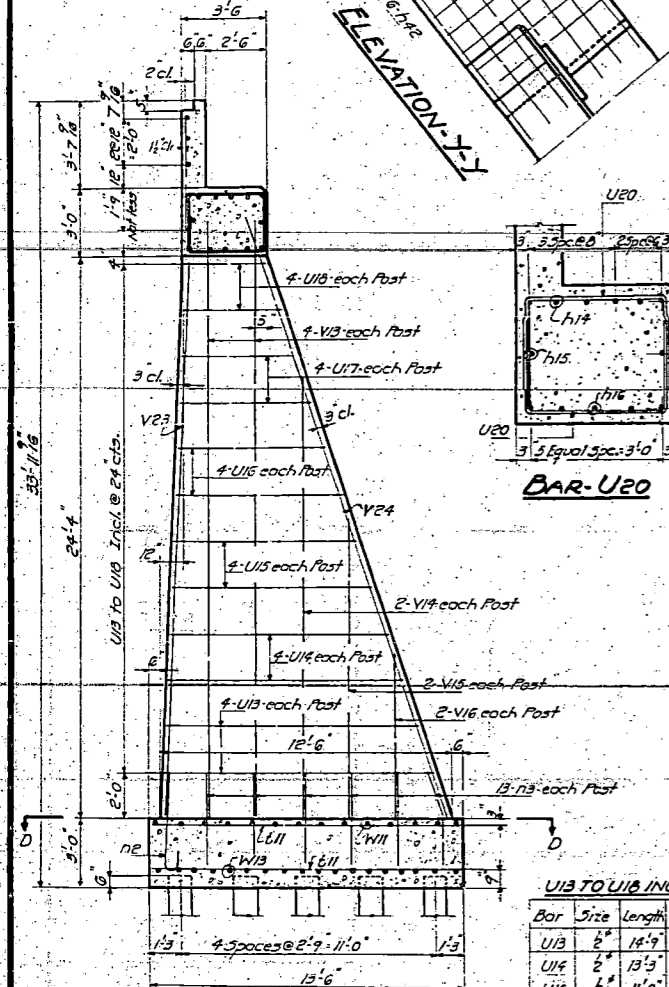
ELEVATION-X-Y



BILL OF MATERIAL-EAST ABUTMENT

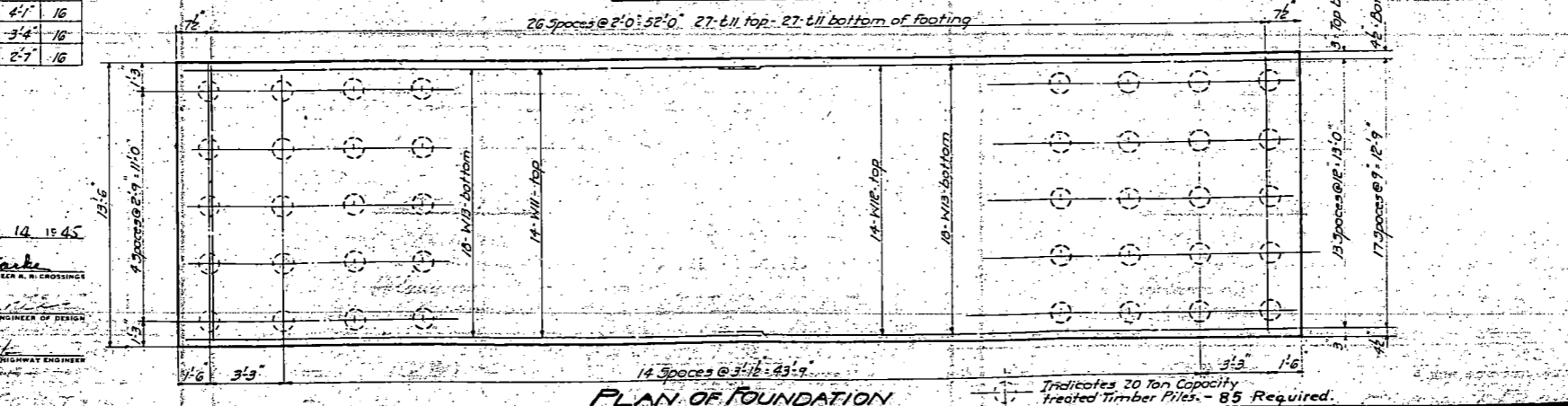
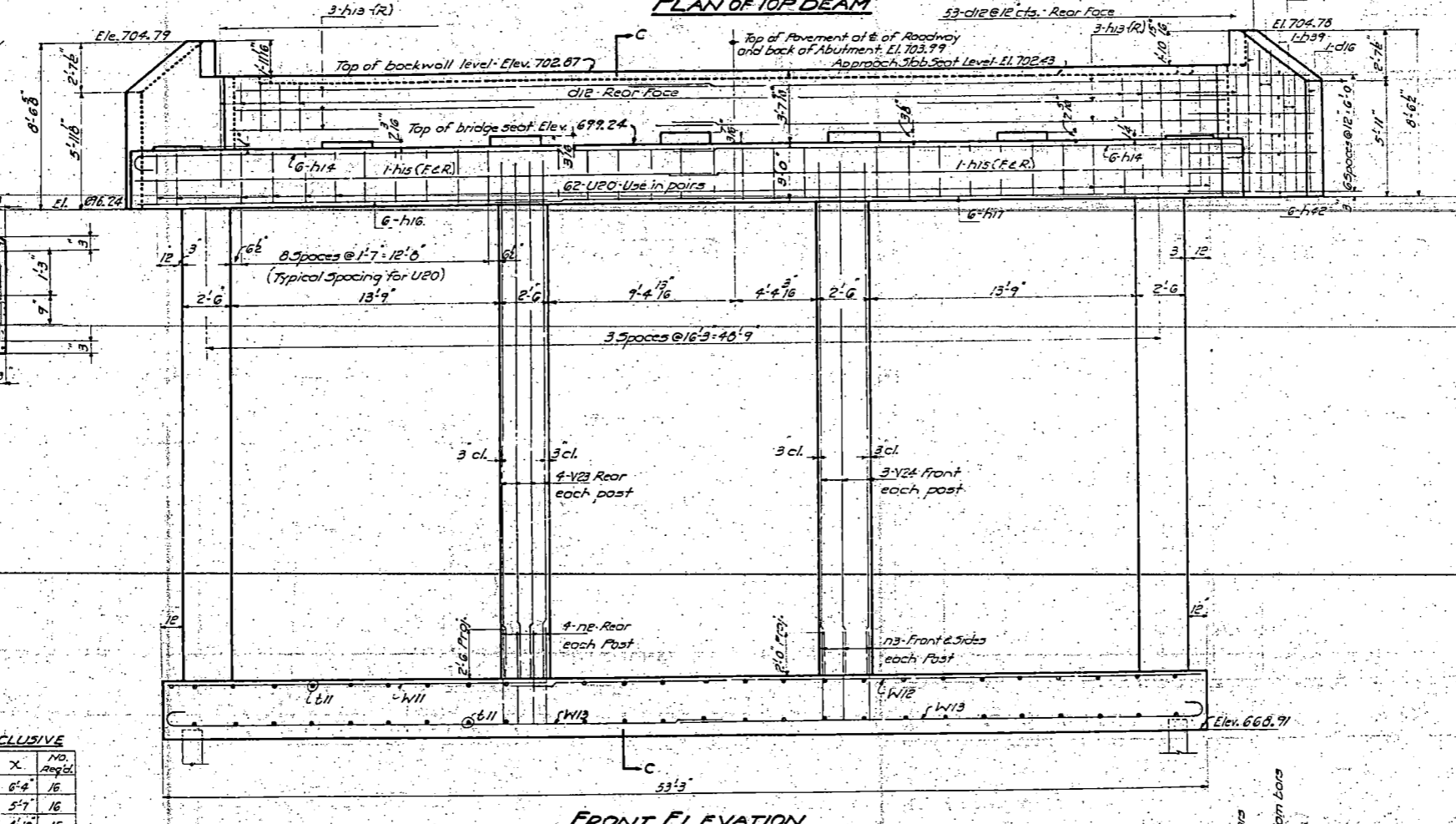
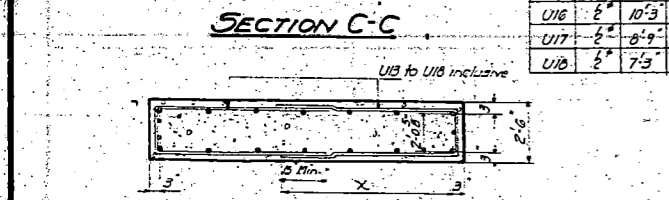
BAR	NO.	SIZE	LENGTH	SHAPE
C12	53	3"	5'-6"	
C13	2	3"	8'-0"	
C14	4	3"	7'-3"	
C15	4	3"	6'-3"	
C16	2	3"	5'-0"	
h13	6	5"	26'-5"	
h14	12	1"	3'-6"	
h15	4	5"	26'-9"	
h16	2	1"	2'-3"	
h29	2	5"	8'-5"	
h42	12	5"	9'-3"	
h17	6	1"	36'-0"	
h2	16	3"	6'-0"	
h3	52	3"	4'-3"	
U11	54	3"	13'-0"	
U13	16	4"	14'-9"	
U14	16	4"	13'-3"	
U15	16	4"	11'-9"	
U16	16	4"	10'-3"	
U17	16	4"	6'-0"	
U18	16	4"	7'-3"	
U20	62	5"	7'-3"	
V23	16	5"	26'-6"	
V24	12	5"	27'-0"	
V25	16	5"	26'-0"	
V24	8	5"	10'-9"	
V25	8	5"	12'-9"	
W16	8	5"	6'-9"	
W11	14	5"	19'-6"	
W12	14	5"	35'-6"	
W13	36	5"	25'-6"	

Class-X Concrete	Cu. Yds.	184.1
Reinforcement Bars	Lbs.	8760
Furnishing Treated Timber Piles (Up to 20')	Lin. Ft.	1700
Driving Timber Piles	Lin. Ft.	1700



U13 TO U18 INCLUSIVE

Bar	Size	Length	X	No.
U13	2"	14'-9"	6'-4"	16
U14	2"	13'-3"	5'-7"	16
U15	2"	11'-9"	4'-10"	16
U16	2"	10'-3"	4'-1"	16
U17	2"	8'-9"	3'-4"	16
U18	2"	7'-3"	2'-7"	16



COMPUTED *W. H. Sommer*
CHECKED *W. H. Sommer*
DRAWN *W. H. Sommer*
CHECKED *W. H. Sommer*
ASSEMBLED
CHECKED

EXAMINED *February 14, 1945*
Dick D. Starks
PASSED
APPROVED

ENGINEER OF DESIGN
HIGHWAY ENGINEER

EAST ABUTMENT
C. AND N.W.R. UNION GROVE
FA. ROUTE 7-SECTION 17R-IVB
PROJECT F6-1(25)
WHITESIDE COUNTY

Indicates 20 Ton Capacity Treated Timber Piles - 65 Required.

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

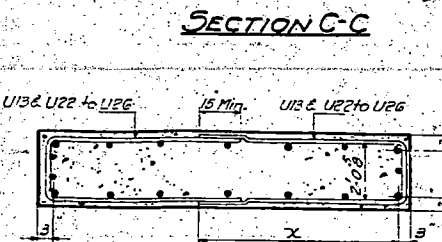
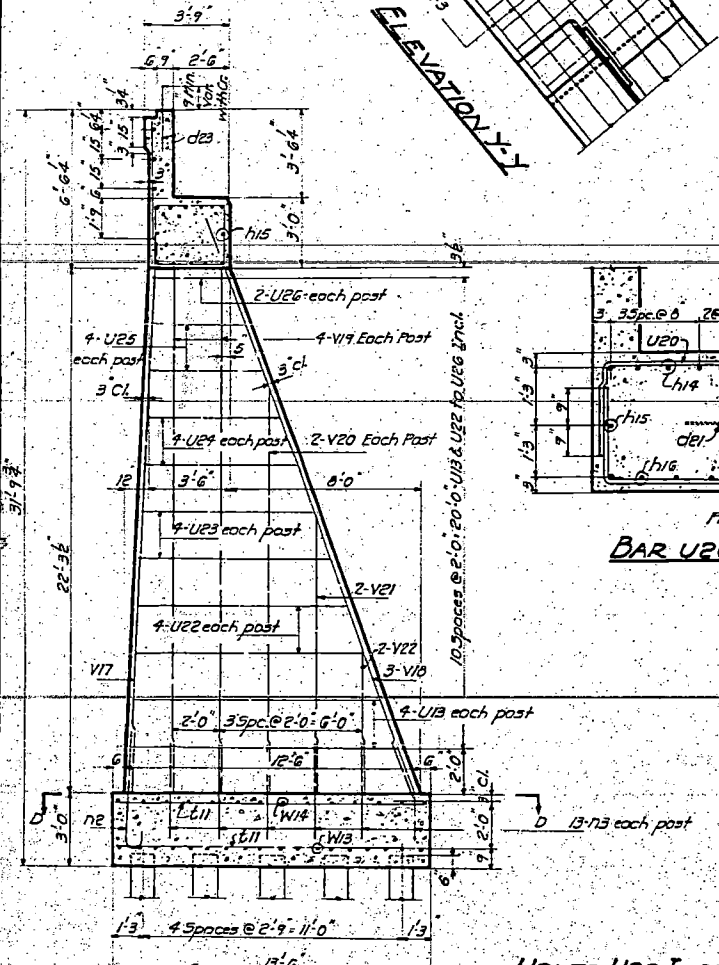
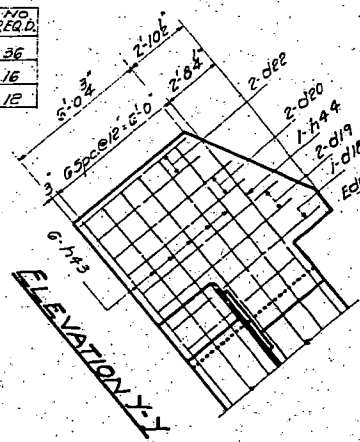
SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
7-11B	Whiteside	15	10
SHEET NO. 6			
11 SHEETS			

BILL OF HOOKED BARS

BAR SIZE	LGTH	A	B	N	X	REQ'D
W15	23'-6"	6	11	6	27'-1"	26
D2	6'-0"	5	7	5	4'-10"	16
H14	3'-6"	6	14	8	29'-0"	12

BENT BARS

12-3" x 9'-9" h43
2-3" x 8'-9" h44

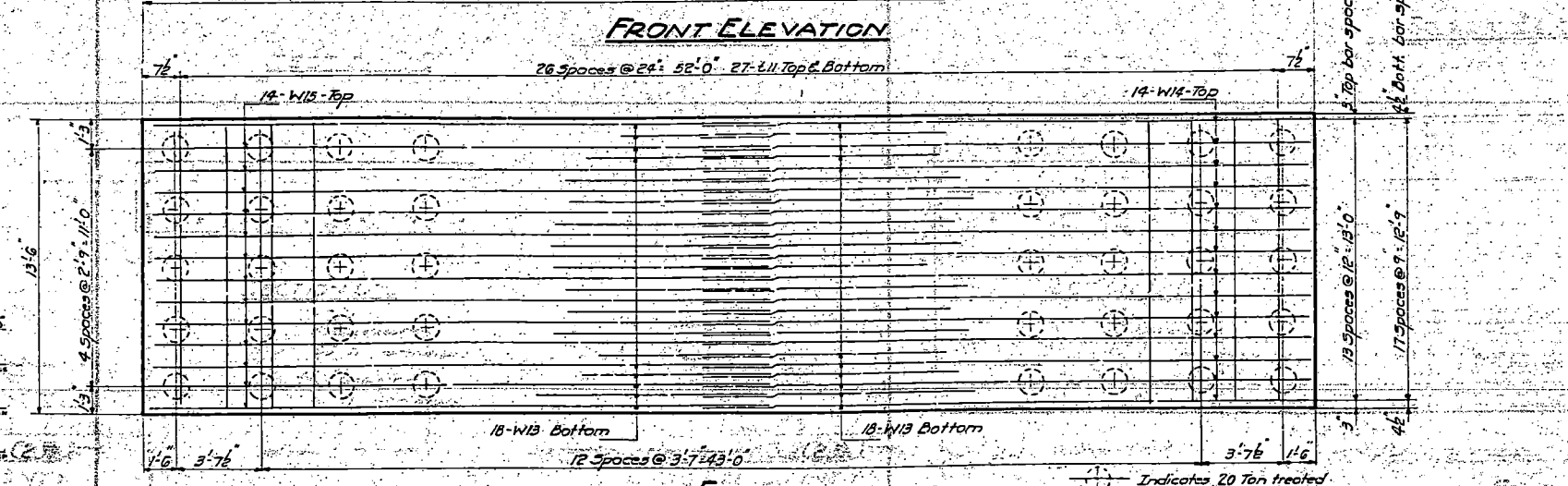
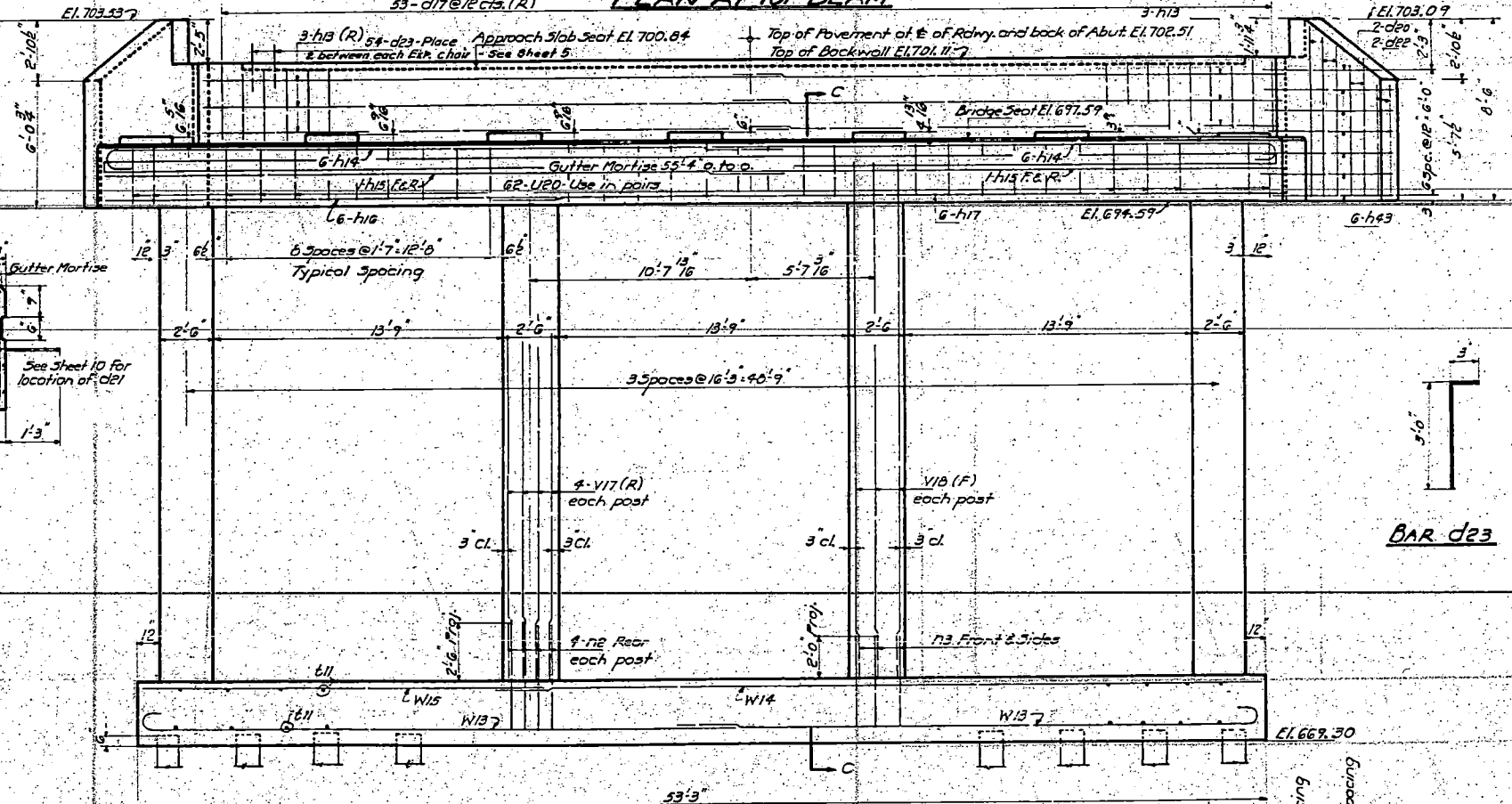
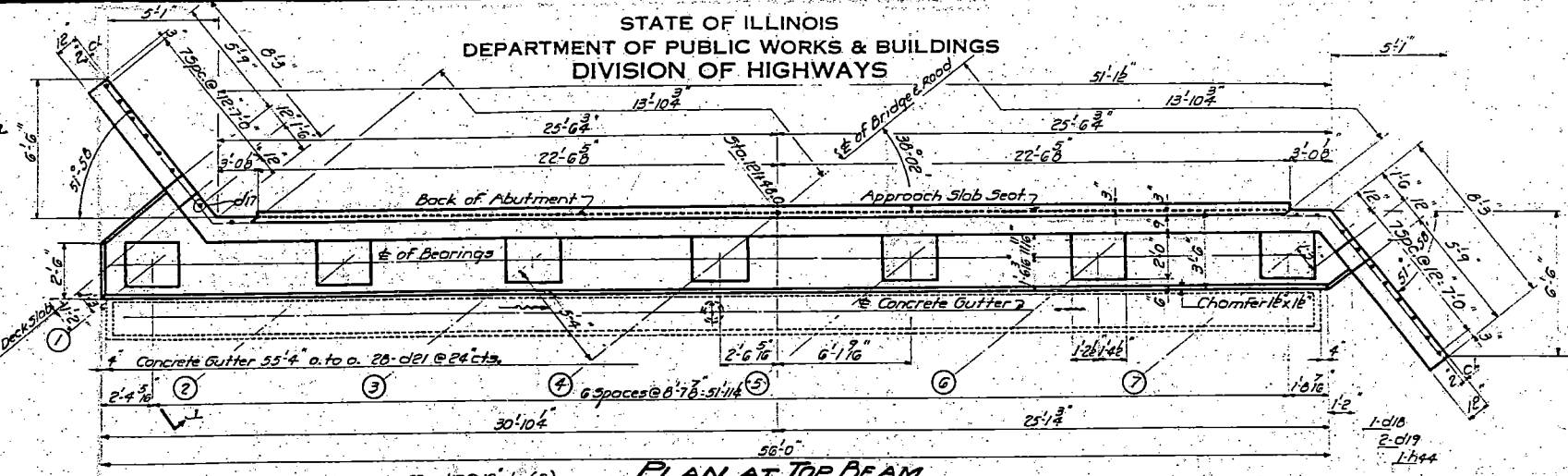


SECTION C-C

COMPUTED	W. N. Sommer
CHECKED	W. N. Sommer
DRAWN	W. N. Sommer
CHECKED	W. N. Sommer
SPECIAL ASSEMBLED	
CHECKED	

U21 TO U26 INCL.

BAR	SIZE	LGTH	X	REQ'D
U21	2"	14'-9"	6'-2"	16
U22	2"	13'-0"	5'-5"	16
U23	2"	11'-6"	4'-7"	16
U24	2"	9'-9"	3'-7"	16
U25	2"	8'-3"	3'-0"	16
U26	2"	6'-6"	2'-3"	8



BILL OF MATERIAL

BAR NO.	SIZE	LENGTH	SHAPE
017	5/8"	5'-3"	
018	2"	8'-3"	
019	4"	7'-6"	
d20	4"	6'-3"	
d21	26	2'-9"	
d22	4"	5'-3"	
d23	5/8"	3'-3"	
h13	6"	26'-5"	
h14	12	3'-5"	
h15	4"	25'-9"	
h16	6"	21'-3"	
h43	12	9'-9"	
h44	2"	8'-9"	
h17	6"	38'-0"	
n2	16	6'-0"	
n3	5/8"	4'-3"	
e11	5/8"	11'-0"	
U20	6"	7'-3"	
U13	16	16'-0"	
U22	16	13'-0"	
U23	16	11'-6"	
U24	16	9'-9"	
U25	16	8'-3"	
U26	8"	6'-6"	
V17	16	24'-9"	
V18	12	26'-0"	
V19	16	24'-6"	
V20	8	17'-3"	
V21	8	11'-6"	
V22	8	6'-0"	
W12	36	26'-6"	
W14	14	35'-5"	
W15	14	19'-6"	
Class X Concrete		Cu. Yd.	179.2
Reinforcement Bars		Lbs.	9170
Furnishing Treated Timber Piles (UP to 20' L)		Lin. Ft.	1500
Driving Timber Piles		Lin. Ft.	1500

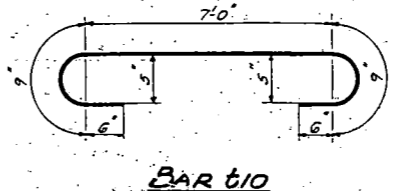
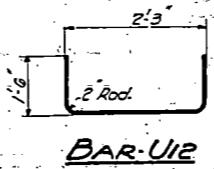
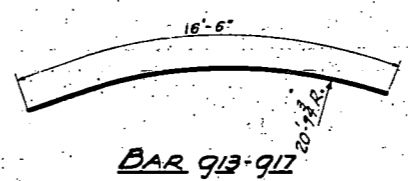
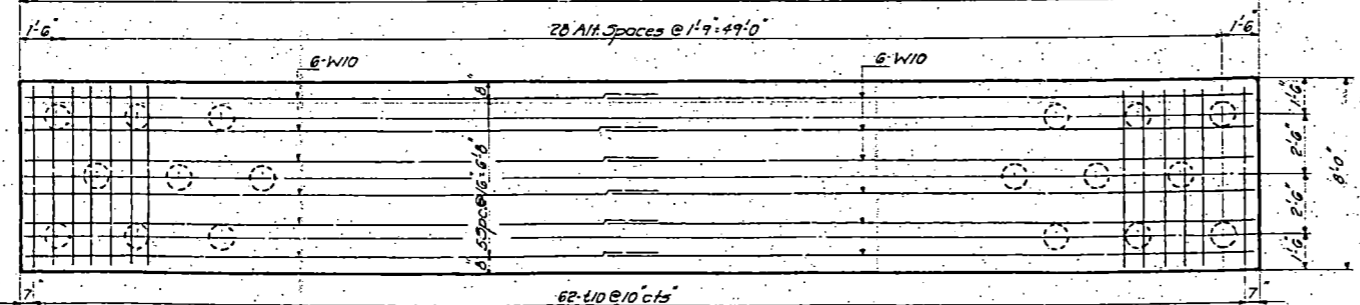
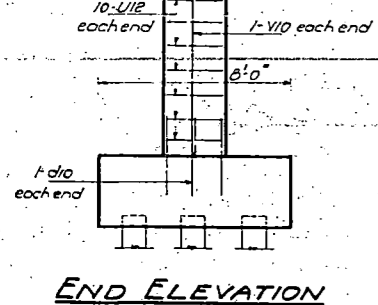
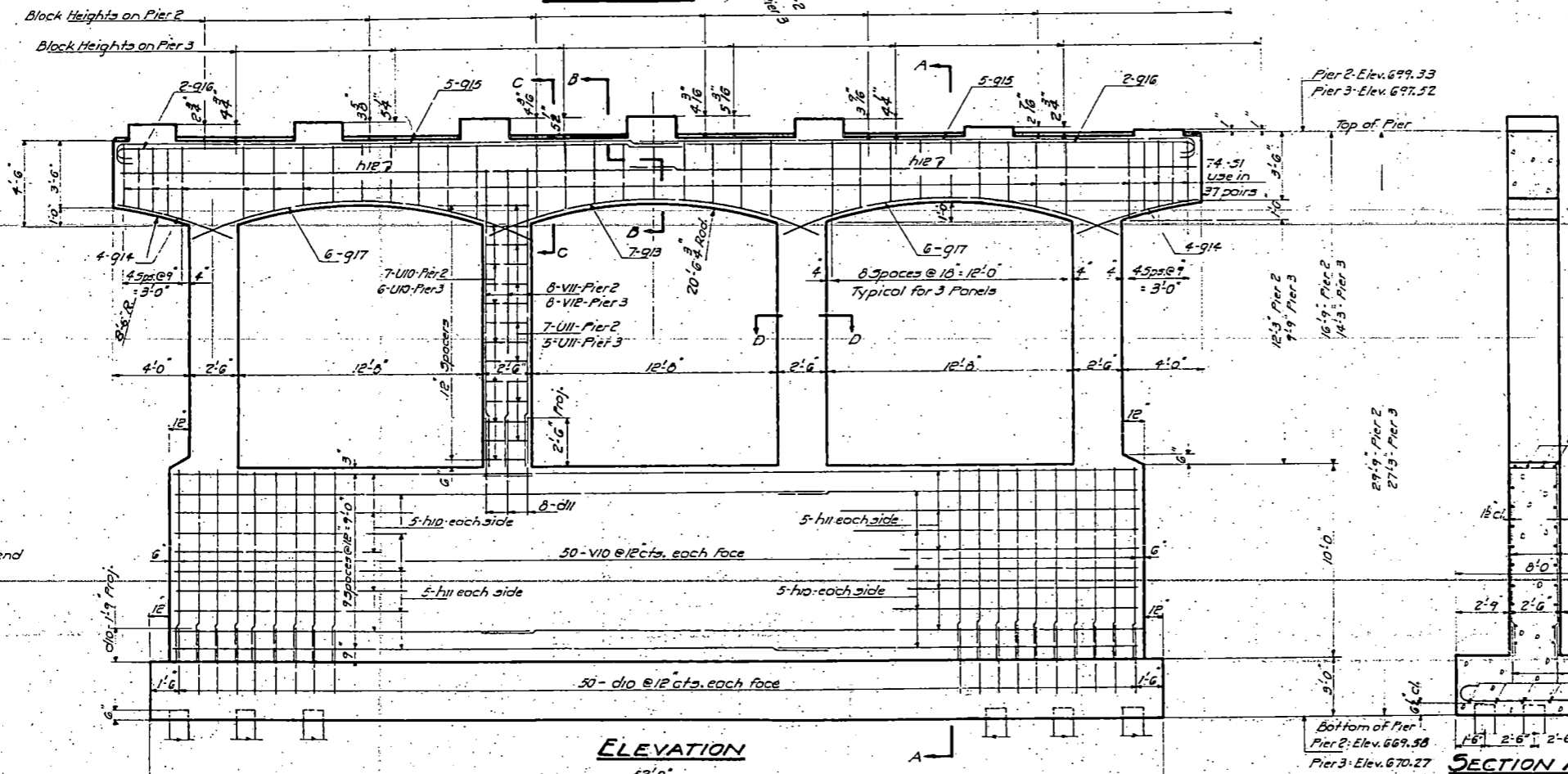
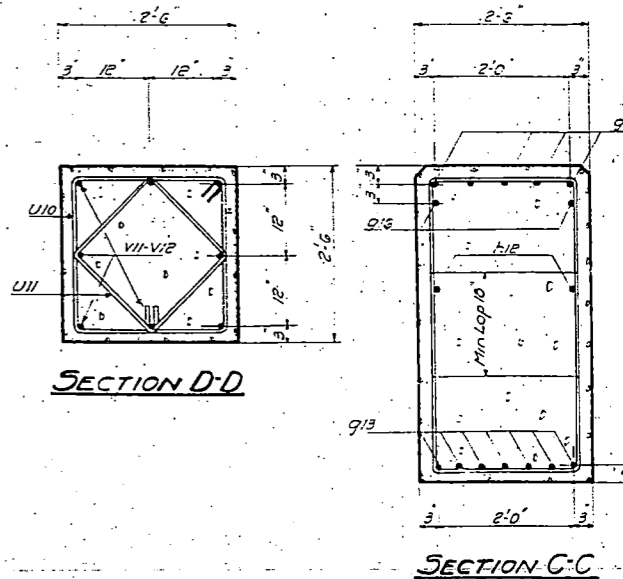
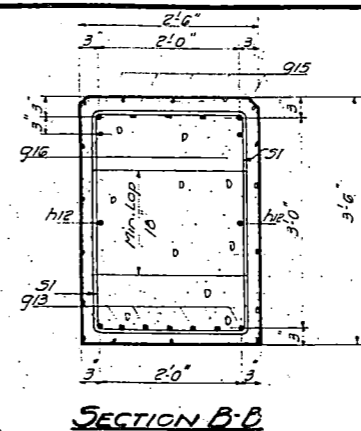
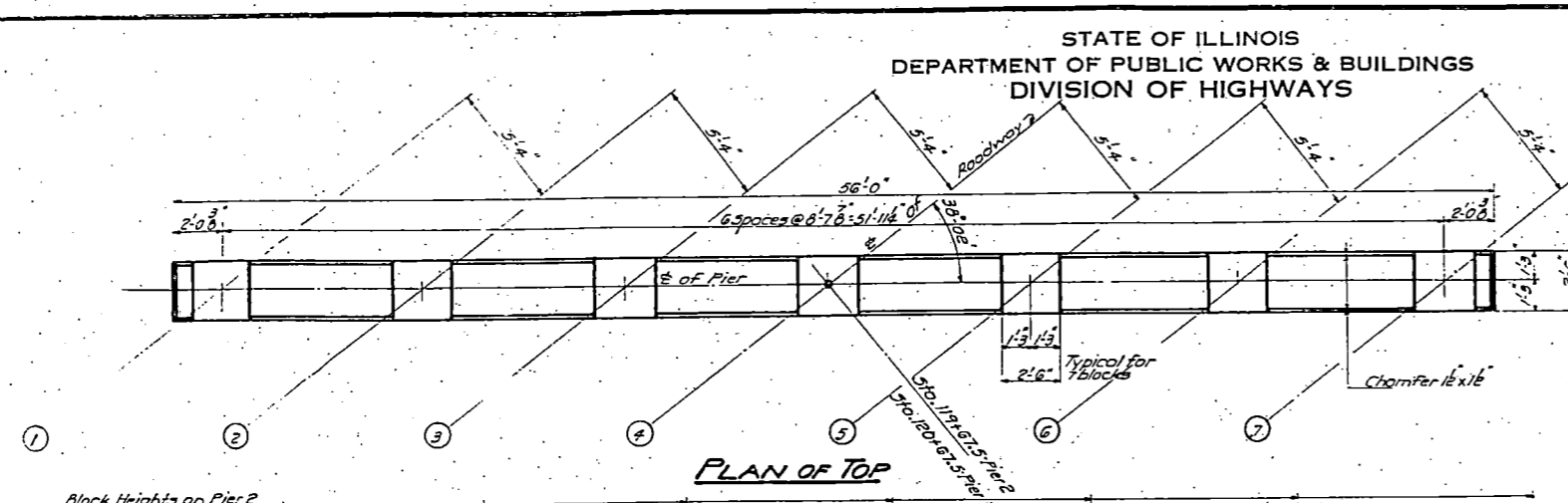
WEST ABUTMENT
G. AND N.W. RY. - UNION GROVE
F.A. ROUTE 7 - SECTION 17R-1VB
PROJECT FG-1(25)
WHITESIDE COUNTY

EXAMINED February 14, 1945
DICK S. STARKS
CIVIL ENGINEER P.E. CROSSING

Indicates 20 Ton treated timber piles. 75 Req'd.

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

ROUTE NO. 172-113
SECTION 7
COUNTY Whiteside
TOTAL SHEETS 15
SHEET NO. 9
11 SHEETS



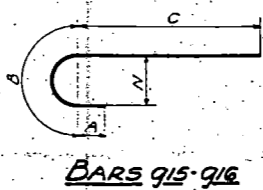
BILL OF MATERIAL - 2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
C10	204	5"	3'-6"	—
C11	64	1"	5'-0"	—
Q13	14	1"	16'-6"	—
Q14	16	1"	6'-0"	—
Q15	20	1"	20'-2"	—
Q16	8	3/8"	30'-2"	—
Q17	24	1"	16'-6"	—
H10	44	5/8"	32'-6"	—
H11	44	5/8"	10'-2"	—
H12	8	5/8"	28'-9"	—
S1	148	5/8"	7'-9"	—
S10	124	5/8"	9'-6"	—
U10	52	1/2"	9'-3"	—
U11	48	1/2"	7'-0"	—
U12	40	5/8"	5'-3"	—
V10	204	5/8"	9'-9"	—
V11	32	1"	4'-9"	—
V12	32	1"	12'-2"	—
W10	24	5/8"	26'-9"	—

Class-X Concrete Cu. Yds. 246.4
Reinforcement Bars Lbs. 16890
Furnishing Treated Timber Piles (Up to 20' Lg.) Lin. Ft. 1760
Driving Timber Piles Lin. Ft. 1760

COMPUTE: *Abraham*
CHECKED: *W. H. Sommer*
DRAWN: *Abraham M. Miller*
CHECKED: *W. H. Sommer*
ASSEMBLED:
CHECKED:

EXAMINED: February 14, 1945
Diak S. Santa
PASSED: *W. H. Sommer*
APPROVED: *W. H. Sommer*



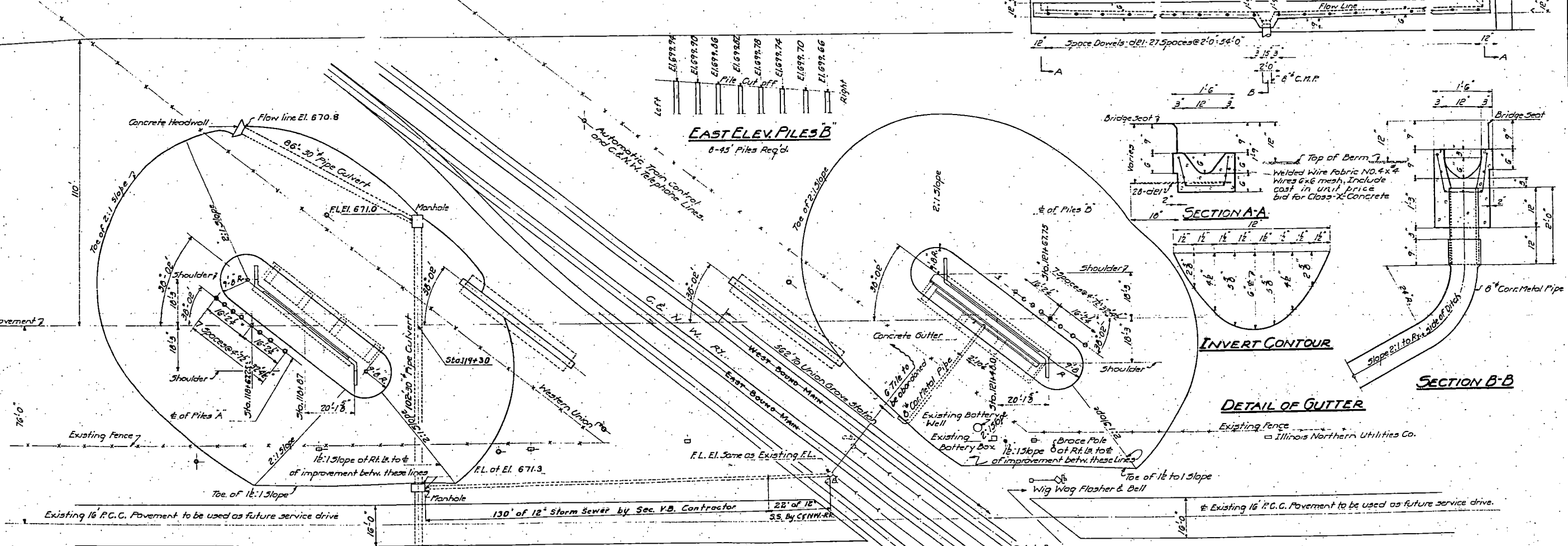
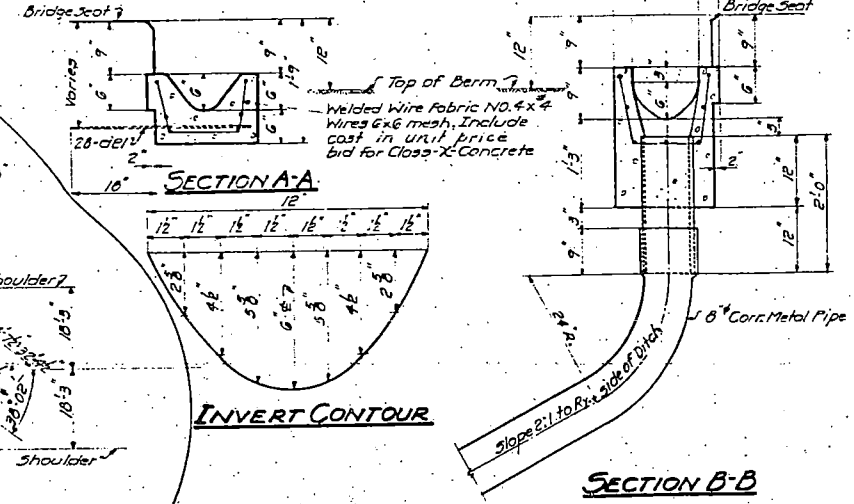
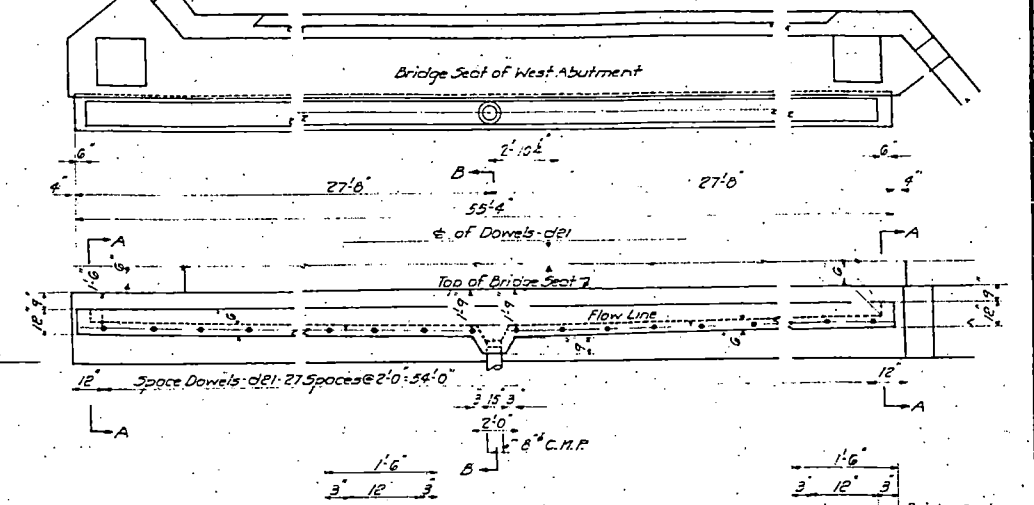
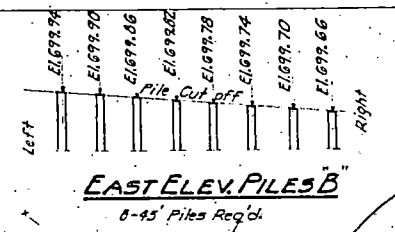
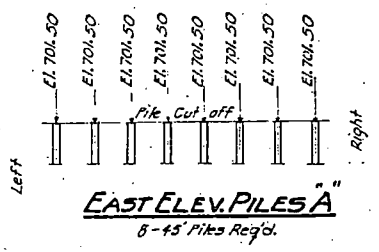
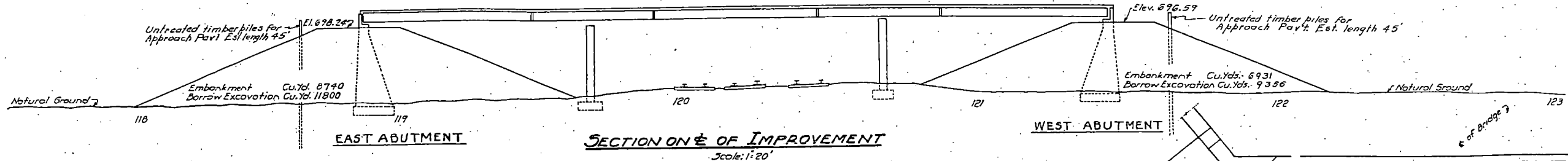
BAR	A	B	C	N
Q15	6	14	20'-7"	0
Q16	6	13	20'-8"	7

PIERS 2&3
G. AND N.W. RY. - UNION GROVE
E.A. ROUTE 7 - SECTION 17R-1VB
PROJECT FG-1(25)
WHITESIDE COUNTY

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

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 17R-1V	7	Whiteside	15	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 10
11 SHEETS



COMPUTED	<i>Whitcomb</i>
CHECKED	<i>W. H. Sommer</i>
DRAWN	<i>Whitcomb & Miller</i>
CHECKED	<i>W. H. Sommer</i>
SPECIAL ASSEMBLED	
CHECKED	

EXAMINED	<i>February 14 1945</i>
	<i>Diek & Spake</i>
PASSED	<i>Whitcomb</i>
APPROVED	<i>W. H. Sommer</i>

NOTE
Relocation of battery well and battery box, changing overhead wires and supporting poles removing crossing protection devices are to be performed by others. They are not included in the B section contract quantities.
6" Tile to be abandoned and direction of flow between catch basins reversed by the C. & N.W. Ry. See Sheet No. 11 which shows details of 30" pipe culverts and manholes Rt. and Lt. of E. and 30" pipe headwall.

BILL OF MATERIAL

ITEM	UNIT	NO. OF UNITS
12" Storm Sewer, Type B	Lin. Ft.	130
Compaction by Water Soaking	Cu. Yd.	15671
Borrow Excavation	Cu. Yd.	2156
Furnishing Unreated Timber Piles (30 to 45)	Lin. Ft.	720
Concrete Gutter, Class X Concrete	Cu. Yds.	2.4
Welded Wire Fabric	Sq. Yds.	165
6" Corrugated Metal Pipe	Lin. Ft.	55

Include cost of this item in the unit price bid for Class X Concrete.

This crossing protection to be protected during construction of the embankment and kept in service until highway traffic has been diverted to the new overhead crossing. Existing battery well and battery box to be remodelled or relocated before embankment is completed.

EXHIBIT 4
ABUTMENT EMBANKMENTS
C. AND N.W. RY. UNION GROVE
F.A. ROUTE 7-SECTION 17R-1V
PROJECT FG-1(25)
WHITESIDE COUNTY

098-0005