

098-0095

BM. USGS BM #121 Chis "D" NE WW of Bridge over Johnson Creek. Elev 594.77

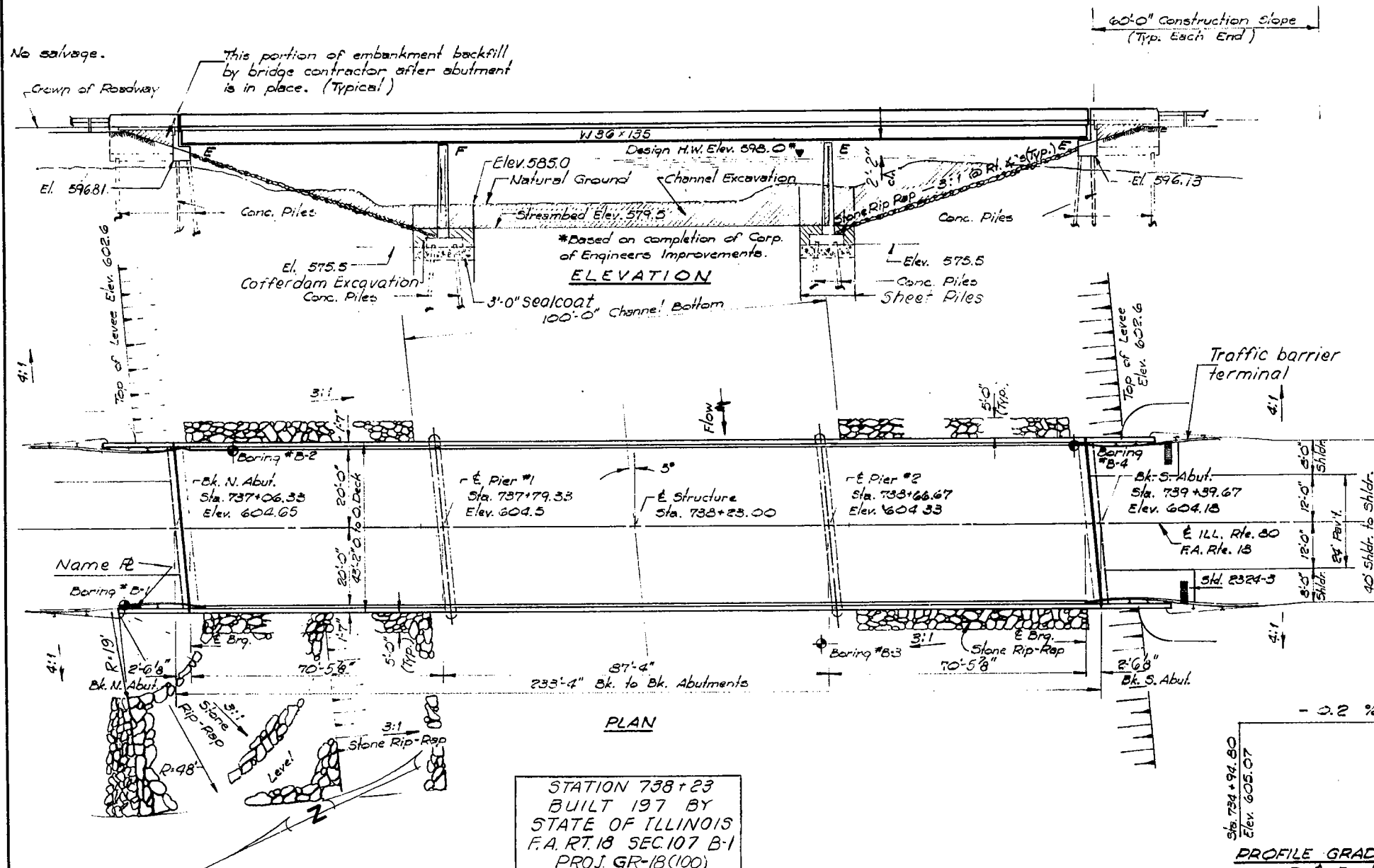
Existing Structure: @ Sta. 733+23, Built in 1931 as SBI Rte. 80. Sec. 107-B, Existing Steel Truss w/40' Rdwy Superstructure and R.C. closed Abut. to be removed after construction of new structure

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
107-B	107-B	WHITESIDE	61	49
13 SHEETS				

GENERAL NOTES

- See Proposal for Boring Data.
- Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ " ϕ , open holes $\frac{13}{16}$ " ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 224,040 lbs. M222
- All structural steel shall be AASHTO M222 unpainted except expansion joint angles and attached bars which shall be AASHTO M183 and shop painted with two coats of basic lead silico chromate paint.
- Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
- Anchor bolts shall be set before battering stoplogs over supports.
- Layout of stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.
- The Contractor shall drive on (1) test pile in a permanent location at Pier #1 South Abut. as directed by the Engineer before ordering the remainder of piles.
- The embankment configuration shall be the minimum embankment that must be constructed prior to construction of the abutments.
- The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Standard Concrete.
- 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 tension flanges, webs and all splice plate material of the steel girders or wide flange beams.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\pm 1/8$ " in. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $1/2$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
- No shims shall be allowed under Type I Elastomeric Bearing Pads at Pier #1 North Abutment.
- Protective coat shall be applied to surfaces of the deck & face of parapet and curb in accordance with Art. 503.12 of the Standard Specifications.
- Reinforcement bars shall conform to the requirements of AASHTO M-31 Grade 60



WATERWAY INFORMATION

Drainage Area	= 65.5 sq. mi.
Design Discharge (below 50yr. HWE)	= 17,000 c.f.s.
Existing Opening	= 1,200 sq. ft.
Required Opening (below 50yr. HWE)	= 2,800 sq. ft.
Proposed Opening	= 3,140 sq. ft.
Created Head for Design Flood	= 0
200 yr. Discharge	= 22,400 c.f.s.
Created Head 100 yr. Flood	= 0
50yr. H.W.E.	= 595.0 Elev.
200 yr. H.W.E.	= 599.4 Elev.

LOADING HS 20-44

Allow 25 #/sq. ft. for future wearing surface. Design Specifications: 1977 AASHTO, 1978 Interim Specifications.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Structure	Each			1
Protective Coat	Sq. Yd.	1,228		1,228
Class X Concrete	Cu. Yd.	889.7	79.0	968.7
Class A Concrete	Cu. Yd.		244.9	244.9
Stud Shear Connectors	Each	4140		4140
Reinforcement Bars	Pound	32,380	30,150	62,530
Reinf. Bars (Epoxy Coated)	Pound	46,850		46,850
Concrete Piles	Lin. Ft.		4258	4258
Test Pile Concrete	Each		2	2
Name Plates	Each	1		1
Stone Riprap	Sq. Yd.			1,228
Neoprene Expansion Joint 2"	Lin. Ft.	43		43
Preformed Joint Sealer 2 1/2"	Lin. Ft.	44		44
Channel Excavation	Cu. Yd.		131.6	131.6
Seal Coat Concrete	Cu. Yd.			131.6
Cofferdam Pier 1	Each		1	1
Cofferdam Pier 2	Each		1	1
Cofferdam Excavation	Cu. Yds.		307	307
Structural Steel	L. Sum.		1	1

** Quantity based on 100' upstream & 150' down stream

GENERAL PLAN & ELEVATION

PROJECT GR-18(100)
F.A. RT. 18 SEC. 107 B-1
WHITESIDE COUNTY
2237

DESIGNED	J. A. Hunch
CHECKED	James A. Hunch
DRAWN	Mercado
CHECKED	

EXAMINED	Carl E. Hunch
PASSED	
APPROVED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA. 18
WHITESIDE 61 51
SHEET 11

RDWY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK.N. ABUT.	73705.333	-0.000	604.647	604.647
E BRG.	73705.844	-0.000	604.642	604.642
A	73710.844	-0.000	604.622	604.652
B	73720.844	-0.000	604.602	604.632
C	73730.844	-0.000	604.582	604.612
D	73740.844	-0.000	604.562	604.592
E	73750.844	-0.000	604.542	604.572
F	73760.844	-0.000	604.522	604.552
E PIER #1	73779.333	-0.000	604.501	604.501
G	73789.333	-0.000	604.481	604.503
H	73799.333	-0.000	604.461	604.505
I	73809.333	-0.000	604.441	604.503
J	73819.333	-0.000	604.421	604.499
K	73829.333	-0.000	604.401	604.475
L	73839.333	-0.000	604.381	604.458
M	73849.333	-0.000	604.361	604.399
N	73859.333	-0.000	604.341	604.357
E PIER #2	73866.667	-0.000	604.326	604.326
O	73876.667	-0.000	604.306	604.323
P	73886.667	-0.000	604.286	604.321
Q	73896.667	-0.000	604.266	604.321
R	73906.667	-0.000	604.246	604.308
S	73916.667	-0.000	604.226	604.281
T	73926.667	-0.000	604.206	604.238
E BRG.	73937.156	-0.000	604.185	604.185
BK.S. ABUT.	73939.667	-0.000	604.180	604.180

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK.N. ABUT.	73706.658	3.708	604.588	604.588
E BRG.	73709.168	3.708	604.583	604.583
A	73719.168	3.708	604.563	604.594
B	73729.168	3.708	604.543	604.598
C	73739.168	3.708	604.523	604.585
D	73749.168	3.708	604.503	604.559
E	73759.168	3.708	604.483	604.519
F	73769.168	3.708	604.463	604.481
E PIER #1	73779.658	3.708	604.442	604.442
G	73789.658	3.708	604.422	604.444
H	73799.658	3.708	604.402	604.447
I	73809.658	3.708	604.382	604.444
J	73819.658	3.708	604.362	604.440
K	73829.658	3.708	604.342	604.416
L	73839.658	3.708	604.322	604.380
M	73849.658	3.708	604.302	604.341
N	73859.658	3.708	604.282	604.299
E PIER #2	73866.991	3.708	604.260	604.268
O	73876.991	3.708	604.240	604.265
P	73886.991	3.708	604.220	604.262
Q	73896.991	3.708	604.200	604.262
R	73906.991	3.708	604.180	604.249
S	73916.991	3.708	604.160	604.223
T	73926.991	3.708	604.140	604.179
E BRG.	73937.481	3.708	604.127	604.127
BK.S. ABUT.	73939.991	3.708	604.122	604.122

BEAM #5

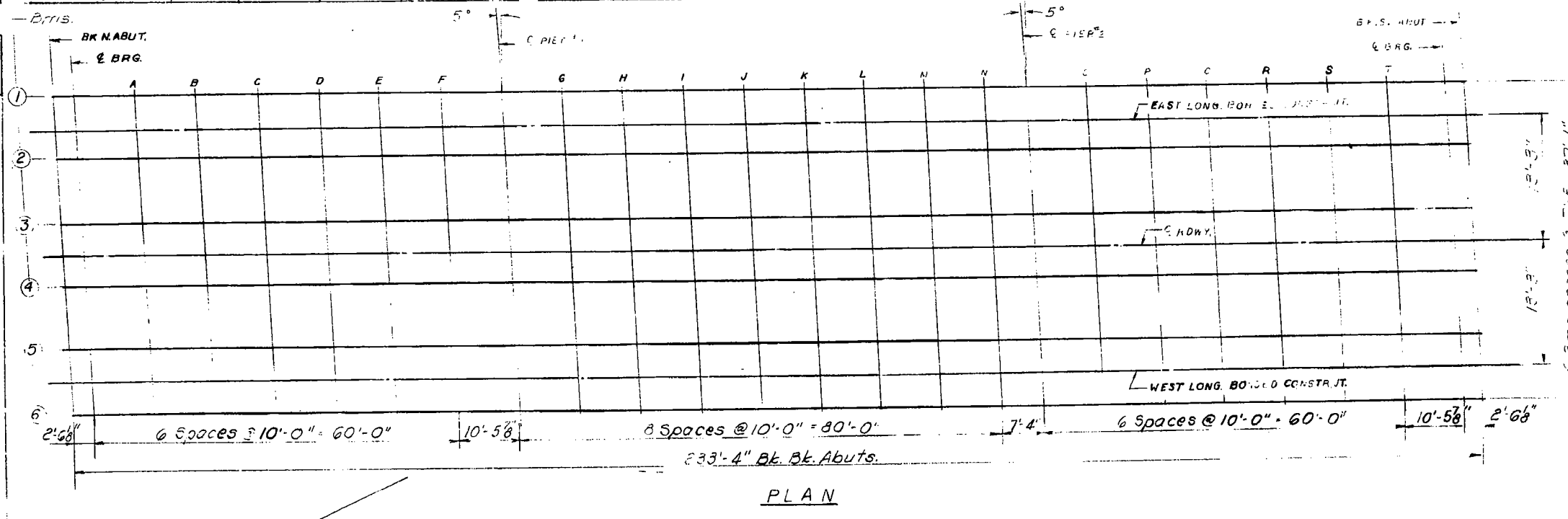
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK.N. ABUT.	73707.307	11.125	604.471	604.471
E BRG.	73709.817	11.125	604.466	604.466
A	73719.817	11.125	604.446	604.476
B	73729.817	11.125	604.426	604.481
C	73739.817	11.125	604.406	604.468
D	73749.817	11.125	604.386	604.442
E	73759.817	11.125	604.366	604.412
F	73769.817	11.125	604.346	604.364
E PIER #1	73780.307	11.125	604.325	604.325
G	73790.307	11.125	604.305	604.327
H	73800.307	11.125	604.285	604.329
I	73810.307	11.125	604.265	604.327
J	73820.307	11.125	604.245	604.323
K	73830.307	11.125	604.225	604.299
L	73840.307	11.125	604.205	604.262
M	73850.307	11.125	604.185	604.223
N	73860.307	11.125	604.165	604.181
E PIER #2	73867.640	11.125	604.150	604.150
O	73877.640	11.125	604.130	604.148
P	73887.640	11.125	604.110	604.145
Q	73897.640	11.125	604.090	604.145
R	73907.640	11.125	604.070	604.132
S	73917.640	11.125	604.050	604.106
T	73927.640	11.125	604.030	604.062
E BRG.	73938.130	11.125	604.010	604.010
BK.S. ABUT.	73940.640	11.125	604.005	604.005

WEST LONG. BONDED CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK.N. ABUT.	73707.493	13.250	604.431	604.431
E BRG.	73710.003	13.250	604.426	604.426
A	73720.003	13.250	604.406	604.436
B	73730.003	13.250	604.386	604.441
C	73740.003	13.250	604.366	604.428
D	73750.003	13.250	604.346	604.402
E	73760.003	13.250	604.326	604.362
F	73770.003	13.250	604.306	604.324
E PIER #1	73780.493	13.250	604.285	604.285
G	73790.493	13.250	604.265	604.287
H	73800.493	13.250	604.245	604.289
I	73810.493	13.250	604.225	604.287
J	73820.493	13.250	604.205	604.283
K	73830.493	13.250	604.185	604.259
L	73840.493	13.250	604.165	604.222
M	73850.493	13.250	604.145	604.183
N	73860.493	13.250	604.125	604.141
E PIER #2	73867.826	13.250	604.110	604.110
O	73877.826	13.250	604.090	604.108
P	73887.826	13.250	604.070	604.105
Q	73897.826	13.250	604.050	604.105
R	73907.826	13.250	604.030	604.092
S	73917.826	13.250	604.010	604.066
T	73927.826	13.250	603.990	604.022
E BRG.	73938.316	13.250	603.969	603.969
BK.S. ABUT.	73940.826	13.250	603.964	603.964

BEAM #6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK.N. ABUT.	73707.955	18.542	604.320	604.320
E BRG.	73710.466	18.542	604.315	604.315
A	73720.466	18.542	604.295	604.325
B	73730.466	18.542	604.275	604.330
C	73740.466	18.542	604.255	604.317
D	73750.466	18.542	604.235	604.291
E	73760.466	18.542	604.215	604.251
F	73770.466	18.542	604.195	604.213
E PIER #1	73780.955	18.542	604.174	604.174
G	73790.955	18.542	604.154	604.176
H	73800.955	18.542	604.134	604.176
I	73810.955	18.542	604.114	604.176
J	73820.955	18.542	604.094	604.172
K	73830.955	18.542	604.074	604.148
L	73840.955	18.542	604.054	604.111
M	73850.955	18.542	604.034	604.072
N	73860.955	18.542	604.014	604.030
E PIER #2	73867.289	18.542	603.999	603.999
O	73877.289	18.542	603.979	603.997
P	73887.289	18.542	603.959	603.994
Q	73897.289	18.542	603.939	603.994
R	73907.289	18.542	603.919	603.981
S	73917.289	18.542	603.899	603.955
T	73927.289	18.542	603.879	603.911
E BRG.	73938.778	18.542	603.858	603.858
BK.S. ABUT.	73941.289	18.542	603.853	603.853



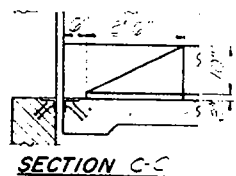
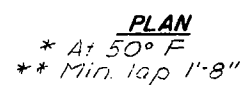
DESIGNED: [Signature]
CHECKED: [Signature]
DRAWN: [Signature]
CHECKED: [Signature]

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

T.P. OF SLAB ELEVATIONS
FA. RT. 18 SEC. 10 T. 1 E.
WHITESIDE COUNTY
STA. 738+23.00

ROUTE NO.	SECTION	COUNTY	TOWNSHIP	RANGE
FA-18	107-1 107VB 107B	WHITESIDE	61	52
FED. ROAD DIST. NO. 1				

SHEET NO. 52
SHEETS



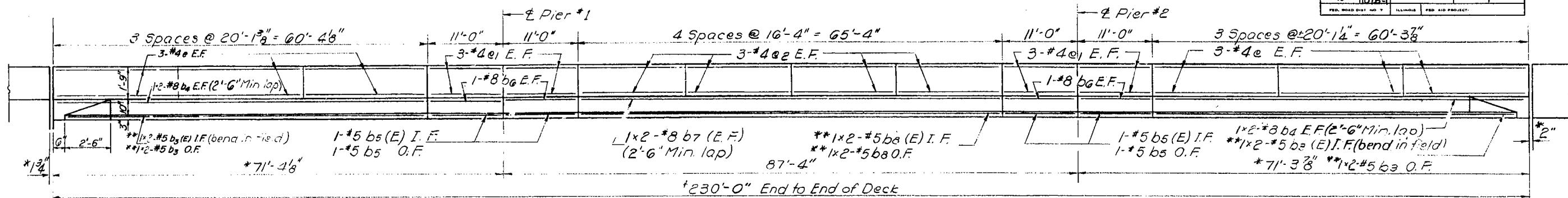
SUPERSTRUCTURE
F.A.R.T. 18 SEC. 107B-
WHITESIDE ROAD
STA. 7381.50

DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN	ENGINEER OF DESIGN
CHECKED	APPROVED

S-I-R ($\leq 15^\circ$)

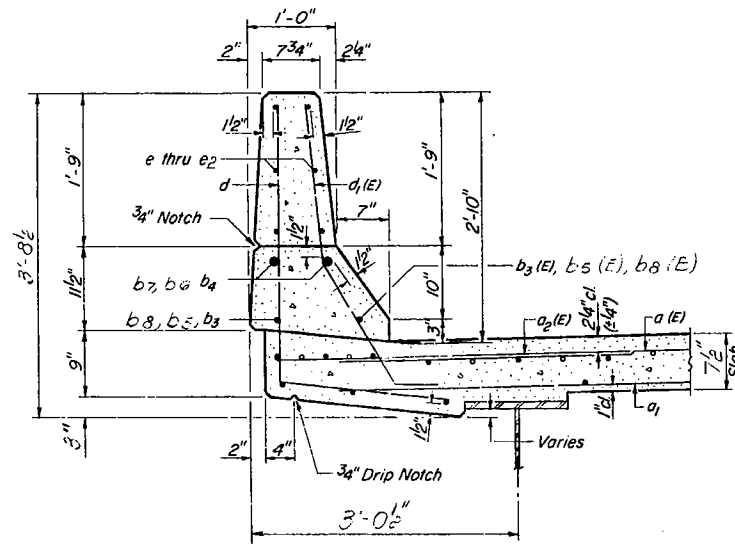
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
107-1	107-1	WHITESIDE	61	53
F.A.R. 18	107-1	ILLINOIS	FED. AID PROJECT	13 SHEETS

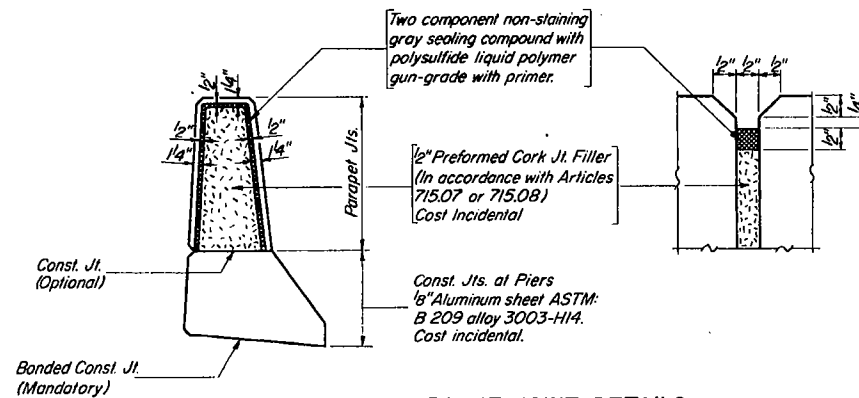


INSIDE ELEVATION OF PARAPET

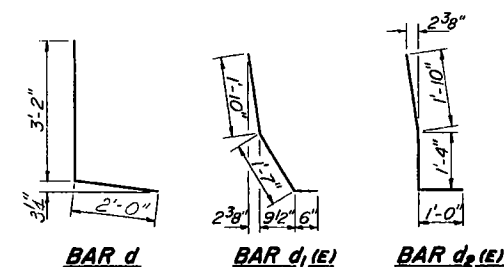
* At 50°F
** 2'-2" Min. lap



SECTION THRU PARAPET



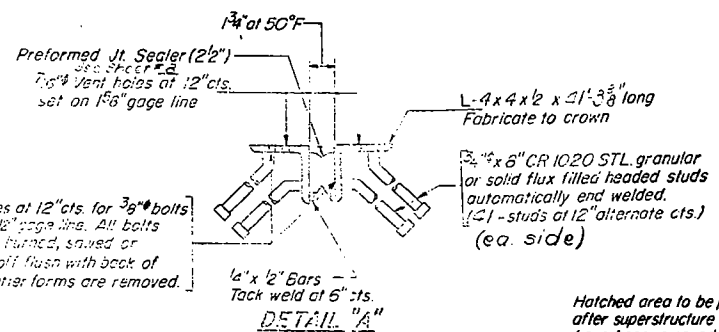
PARAPET JOINT DETAILS



SUPERSTRUCTURE
BILL OF MATERIAL

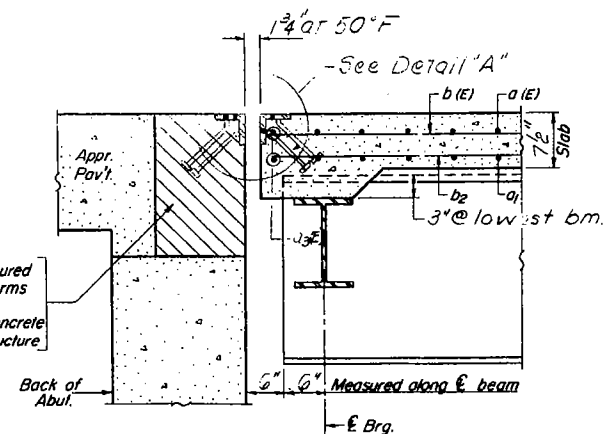
Bar	No.	Size	Length	Shape
a (E)	552	#5	41'-0"	
a1	345	#5	40'-0"	
a2 (E)	552	#6	4'-0"	
a3 (E)	4	#6	41'-4"	
b (E)	368	#5	30'-2"	
b1 (E)	86	#6	43'-0"	
b2	368	#5	30'-2"	
b3 (E)	8	#5	31'-1"	
b4	10	#8	31'-3"	
b5 (E)	8	#5	10'-9"	
b6	8	#5	10'-9"	
b7	10	#8	10'-9"	
b8	8	#8	33'-10"	
b9 (E)	4	#5	33'-8"	
b10	4	#5	33'-8"	
d	460	#4	5'-2"	L
d1 (E)	490	#5	3'-11"	L
d2 (E)	12	#5	4'-2"	L
e	72	#4	19'-10"	
e1	48	#4	10'-9"	
e2	48	#4	16'-1"	
Reinforcement Bars	Lbs.		32,380	
Reinforcement Bars (Epoxy Coated)	Lbs.		46,850	
Class X Concrete	Cu Yds.		2,697	

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

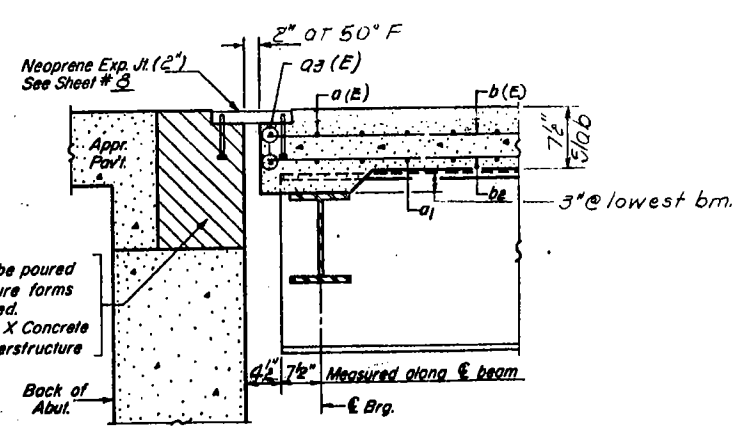


DETAIL "A"

Hatched area to be poured after superstructure forms have been removed. Quantity of Class X Concrete included with superstructure.



SECTION A-A



SECTION B-B

SUPERSTRUCTURE DETAILS

F.A.R. 18 SEC. 107-1

WHITESIDE COUNTY

STA 738+23.00

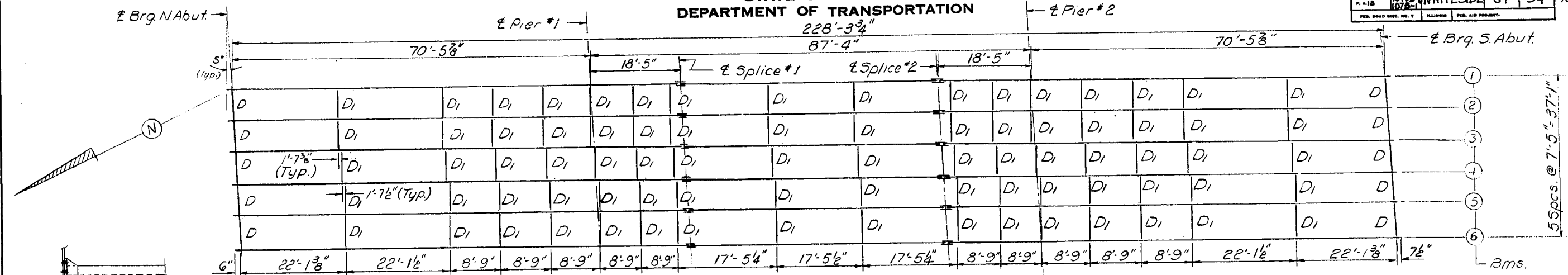
DESIGNED	Lee Hunt
CHECKED	Jim B...
DRAWN	Mercado
CHECKED	RE

EXAMINED	Sept. 17, 1988
PASSED	Code...
APPROVED	

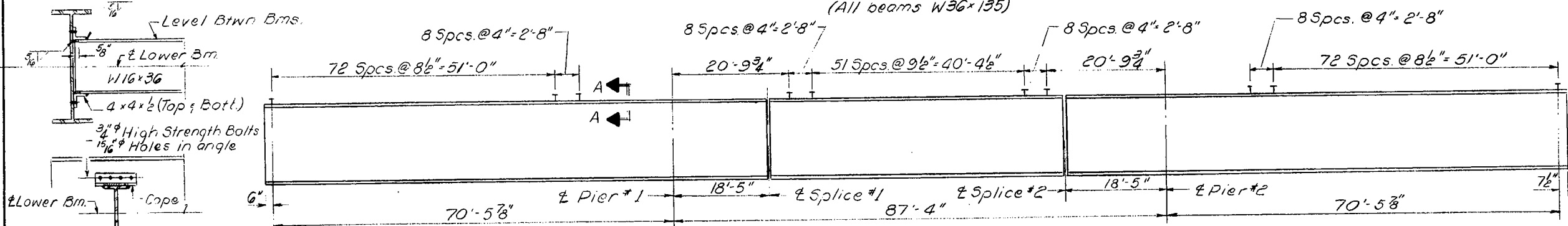
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
107A	107B-1	WHITESIDE	61	54
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 6
13 SHEETS



FRAMING PLAN
(All beams W36x135)



ELEVATION

Note: Hardened washers shall be required over $\frac{1}{16}$ " holes in angles.

INTERIOR BEAM MOMENT TABLE

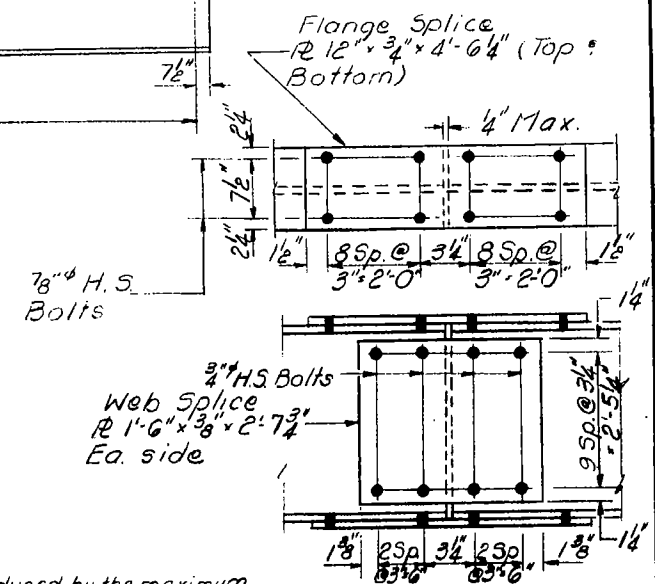
	4Sp 1st 3	Piers	5Span 2
I_s (in ⁴)	7800	7800	7800
I_c (in ⁴)	20632		20632
S_s (in ³)	439	439	439
S_c (in ³)	644		644
Z_s (in ³)	509	509	509
M (K/ft)	0.872	1.262	0.872
S (K/ft)	0.390		0.390
M (K)	300	742	282
M_s (K)	156		180
M (K)	556	342	605
M (K)	142	84	143
M (K)	698	426	748
M (K)	2105	1888	2221
M (K)	3722	2121	3722
VR (K)	54.21		45.86

M_{max} is the maximum moment induced by the maximum design load $\cdot 1.3M_D + M_S + \frac{1}{2}(M_L + I)$
 M_u is the maximum moment capacity.

INTERIOR BEAM REACTION TABLE

	Abuts	Piers
R_D (K)	33.95	110.11
R_L (K)	33.54	53.88
Imp (K)	10.11	18.21
R Total (K)	83.6	177.2

I_s and S_s are the moment of inertia and Section Modulus of the steel section. Z_s is the plastic section modulus of the steel section. I_c and S_c are the Moment of Inertia and Section Modulus of the Composite Section. VR is the Maximum $\pm$ Imp. Shear Range in span used to determine Shear Connector Spacing.



TOP OF BEAM ELEVATIONS (12 Req'd)

	Bm #1	Bm #2	Bm #3	Bm #4	Bm #5	Bm #6
Brq. N. Abut.	603.59	603.74	603.86	603.85	603.74	603.59
Pier #1	603.46	603.60	603.72	603.71	603.60	603.46
Splice #1	603.42	603.56	603.68	603.68	603.56	603.42
Splice #2	603.31	603.46	603.58	603.58	603.46	603.31
Pier #2	603.28	603.43	603.54	603.54	603.43	603.28
Brq. S. Abut.	603.14	603.28	603.40	603.40	603.28	603.14

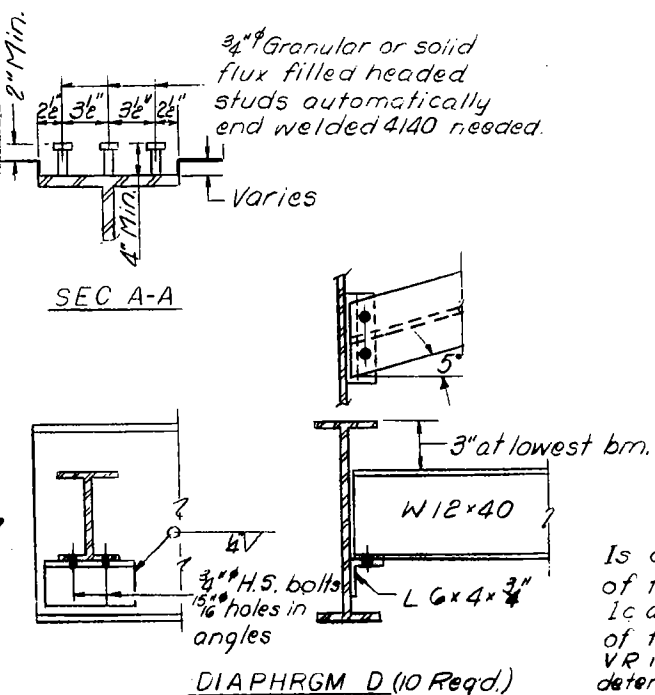
STRUCTURAL STEEL
F.A. RT. 18 SEC. 107 B-1
WHITESIDE COUNTY
STA. 738+23.00

DIAPHRAGM D₁
At Beams 1, 3, 4 & 6 only

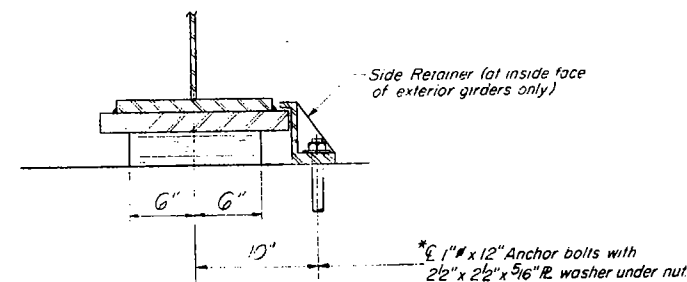
DIAPHRAGM D₁
At Beams 2 & 5 only
(Total D₁ Req'd. 80)

DESIGNED: J. L. Hume
CHECKED: J. L. Hume
DRAWN: Mercado
CHECKED: J. L. Hume

EXAMINED: J. L. Hume
PASSED: J. L. Hume
APPROVED: J. L. Hume



ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO	SHEET NO. 7
P 1 P 1B	107-1 107VB 107B	WHITESIDE	61	55	13 SHEETS
FED ROAD DIST NO 7	ILLINOIS FED AID PROJECT				

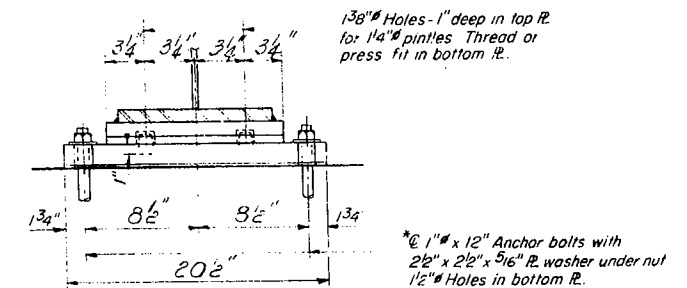


SECTION A-A

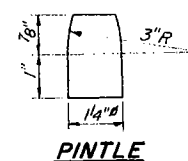
NORTH APURTMENT



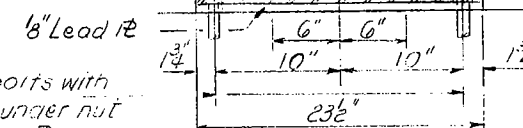
FIXED BEARING



SECTION B-B



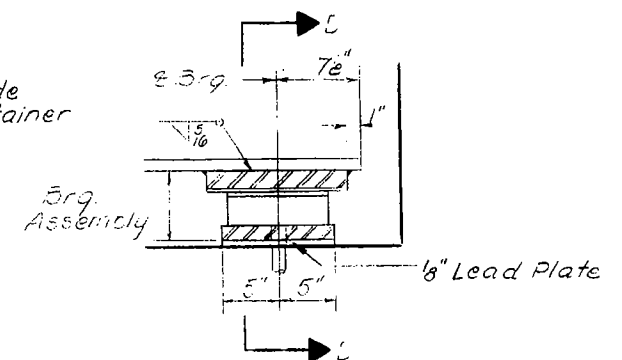
PINTLE



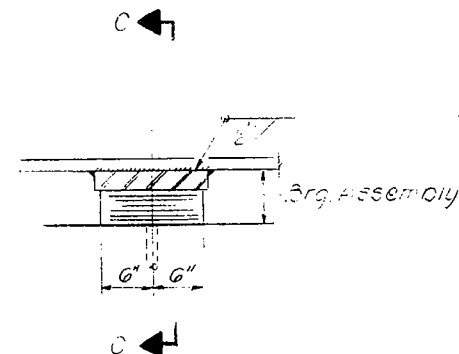
SECTION D-D

TYPE II THE ELASTOMERIC EXP. GRG.

SOUTH ABUTMENT



SECTION AT ABUT.

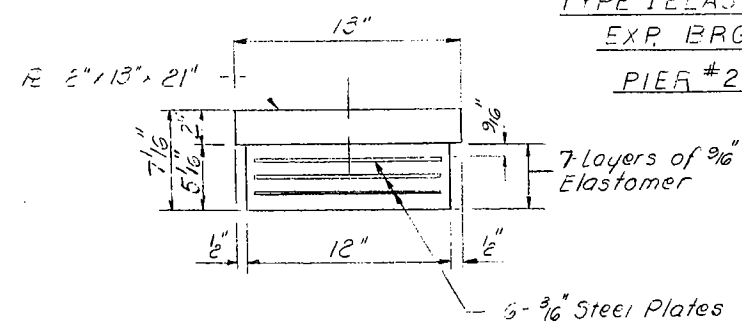


SEC. C-C

TYPE I ELASTOMERIC

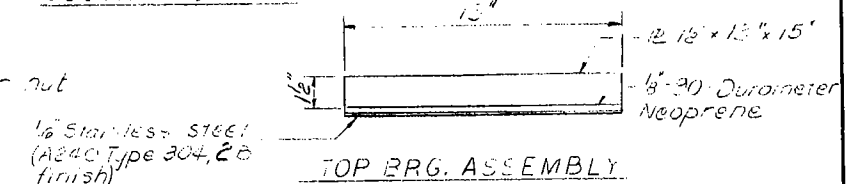
EXP. BRG.

PIER #2

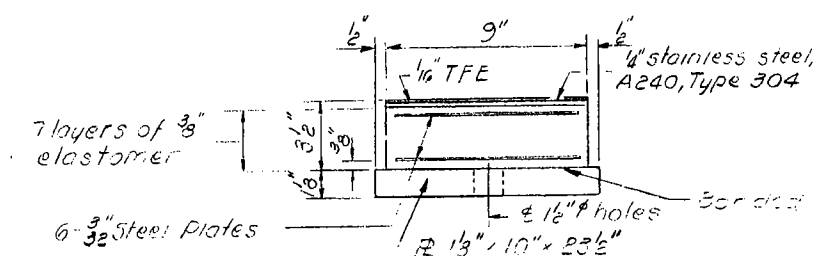


BEARING ASSEMBLY

Note:
The $\frac{1}{16}$ " TFE sheet shall be bonded directly to the top steel laminate sheet 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.



TOP BRG. ASSEMBLY



BOTTOM BRG. ASSEMBLY

BEARING DETAILS

F.A.R.T. 18 SEC. 107 B-1

WHITESIDE COUNTY

STA. 738+23.00

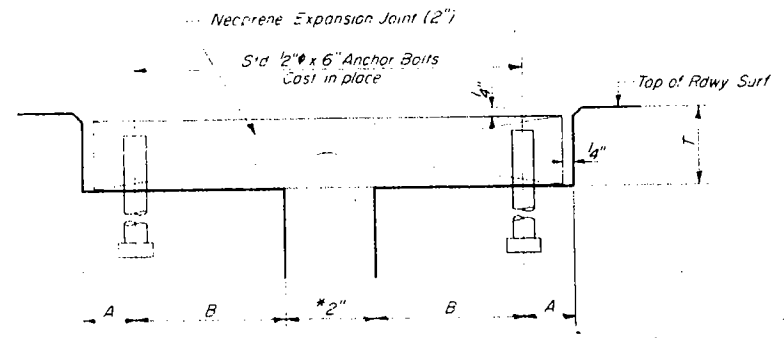
DESIGNED	L. J. Kuch
CHECKED	R. J. Kuch
DRAWN	4/8/2000
CHECKED	7/5

Sept. 29 1978
EXAMINED *Carl E. Homan*
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED
ENGINEER OF 363-64
APPROVED
DIRECTOR OF HIGHWAYS

DETAILED INFORMATION

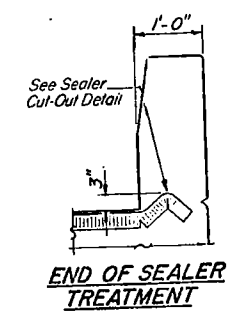
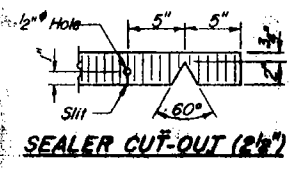
ALTERNATE NEOPRENE EXPANSION JOINTS (2")

Model	Supplier	Dimensions
TRANSFLEX, MODEL 200A	General Tire Company	T = 1 1/4", A = 1 1/4", B = 5 1/4"
WABOFLEX, MODEL SR 2	Watson Bowman Associates, Inc.	T = 1 1/4", A = 1 1/4", B = 5 1/4"
FEL-SPAN, MODEL T-30 Set joint seal 1 1/2" at 50°F	Fel-Pro Building Products Inc.	T = 1 3/4", A = 2 1/4", B = 2 1/2"
WABO ELASTODAM, TYPE 300 Set joint seal 1 1/2" at 50°F	Watson Bowman Associates, Inc.	T = 1 3/4", A = 2 1/4", B = 2 1/2"
LOW PROFILE ONFLEX-25 Set joint seal 1 1/2" at 50°F Roadway bolt channel shall be filled with approved grout. Permitted for up to 50° skew	Structural Accessories, Inc.	T = 1 3/4", A = 1 1/2", B = 2 1/2"

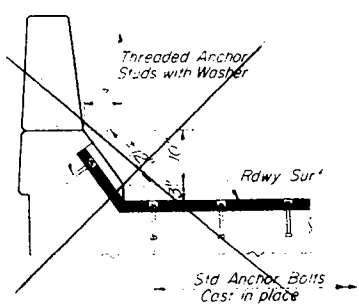


CROSS SECTION
At 50°F
Dimensions are at right angles
SOUTH ABUT.

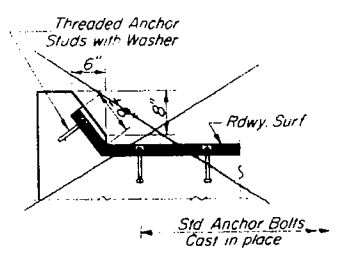
NOTE
Joint openings shall be adjusted in accordance with Article 503.07(c) of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F



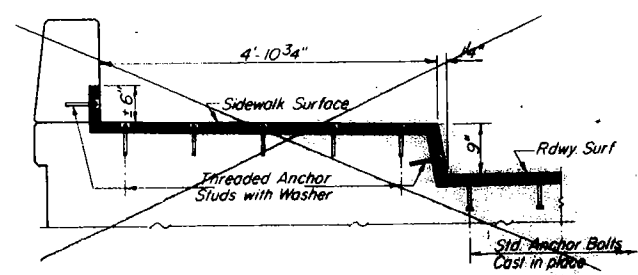
NORTH ABUTMENT



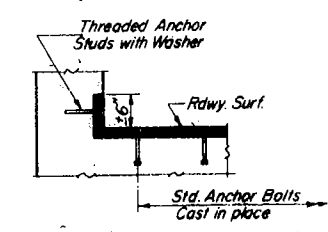
AT CURBS



TYPICAL END TREATMENTS



AT SIDEWALK

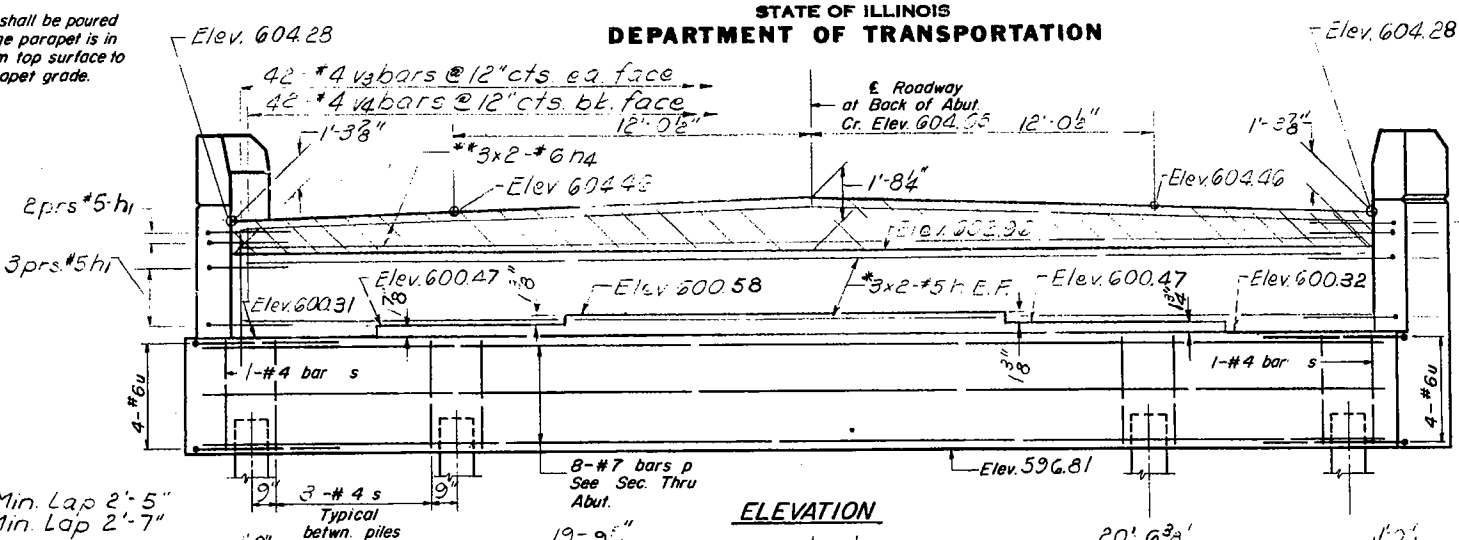


SOUTH ABUTMENT

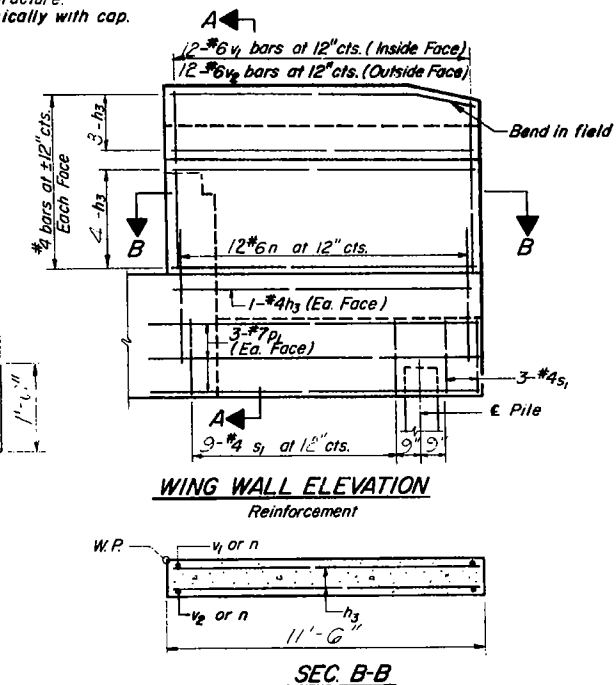
PREFORMED JT. SEALER (2")
NEOPRENE EXPANSION JOINTS (2")
FOR EXPANSION LENGTH OF DECK = 0 TO 160 ft
F.A. RT. 18 SEC. 107B-1
WHITESIDE COUNTY
STA. 738+23.00

DESIGNED J. L. Hunk
CHECKED J. L. Hunk
DRAWN Mercado
CHECKED AS

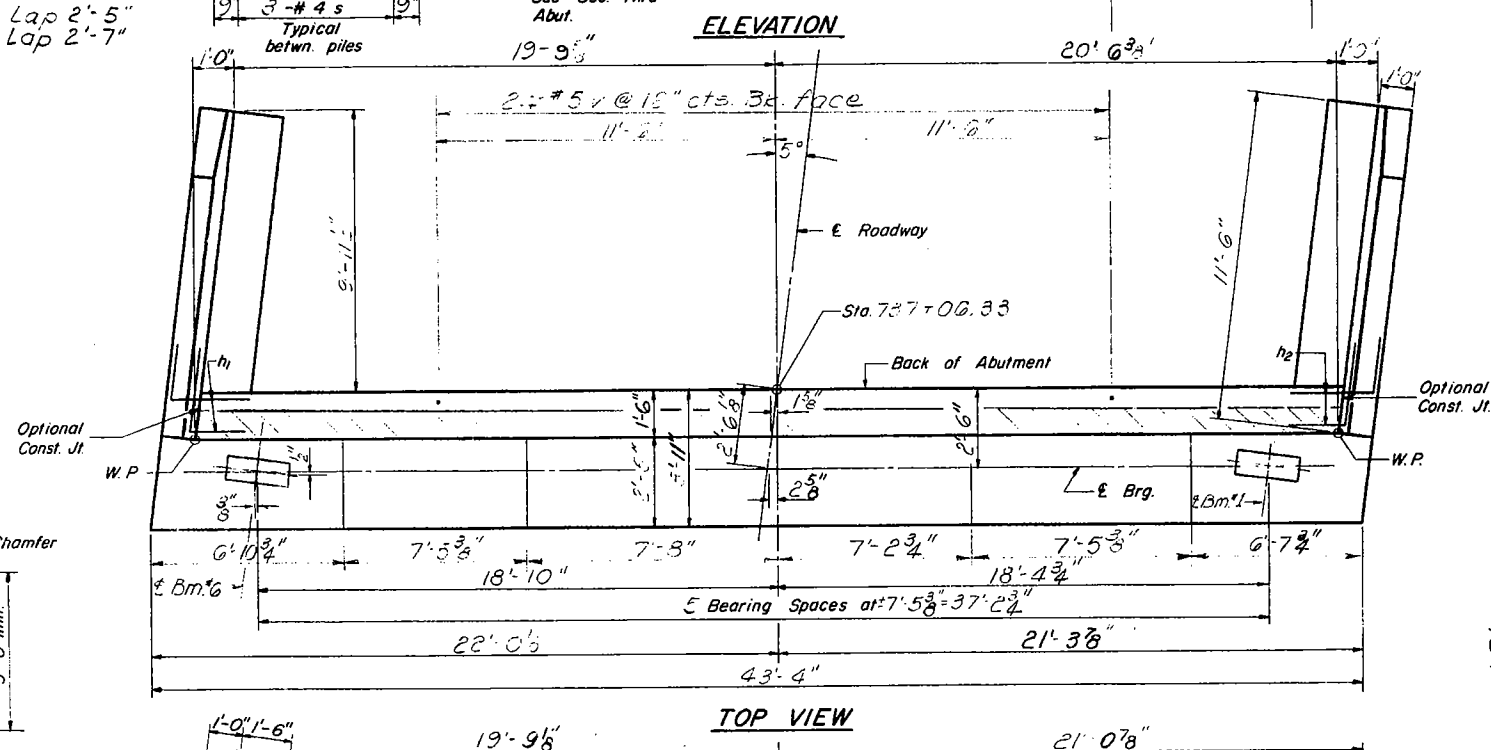
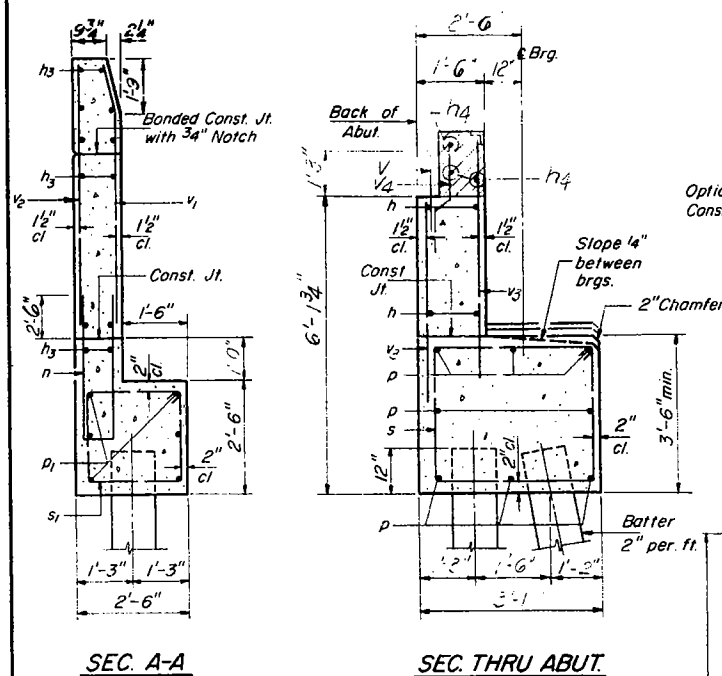
EXAMINED Carl E. Hummer
PASSED
APPROVED
DIRECTOR OF HIGHWAYS



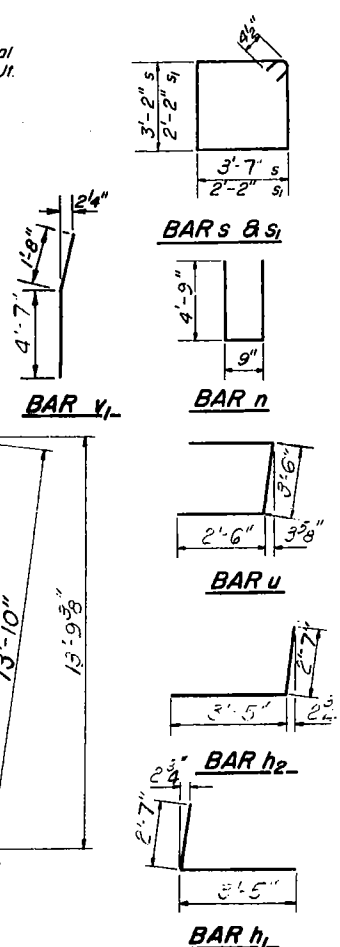
Hatched area to be poured after superstructure forms have been removed.
Quantity of Class X Concrete included with superstructure.
Pour steps monolithically with cap.



Note: Bars are 1/2 inch high 3/8 inch wide
indicating 3/8 inch of bars at
2 lengths per line



PILE DATA
Type Concrete
Capacity 30 Tons
Est. Length 70'
No. Required 17

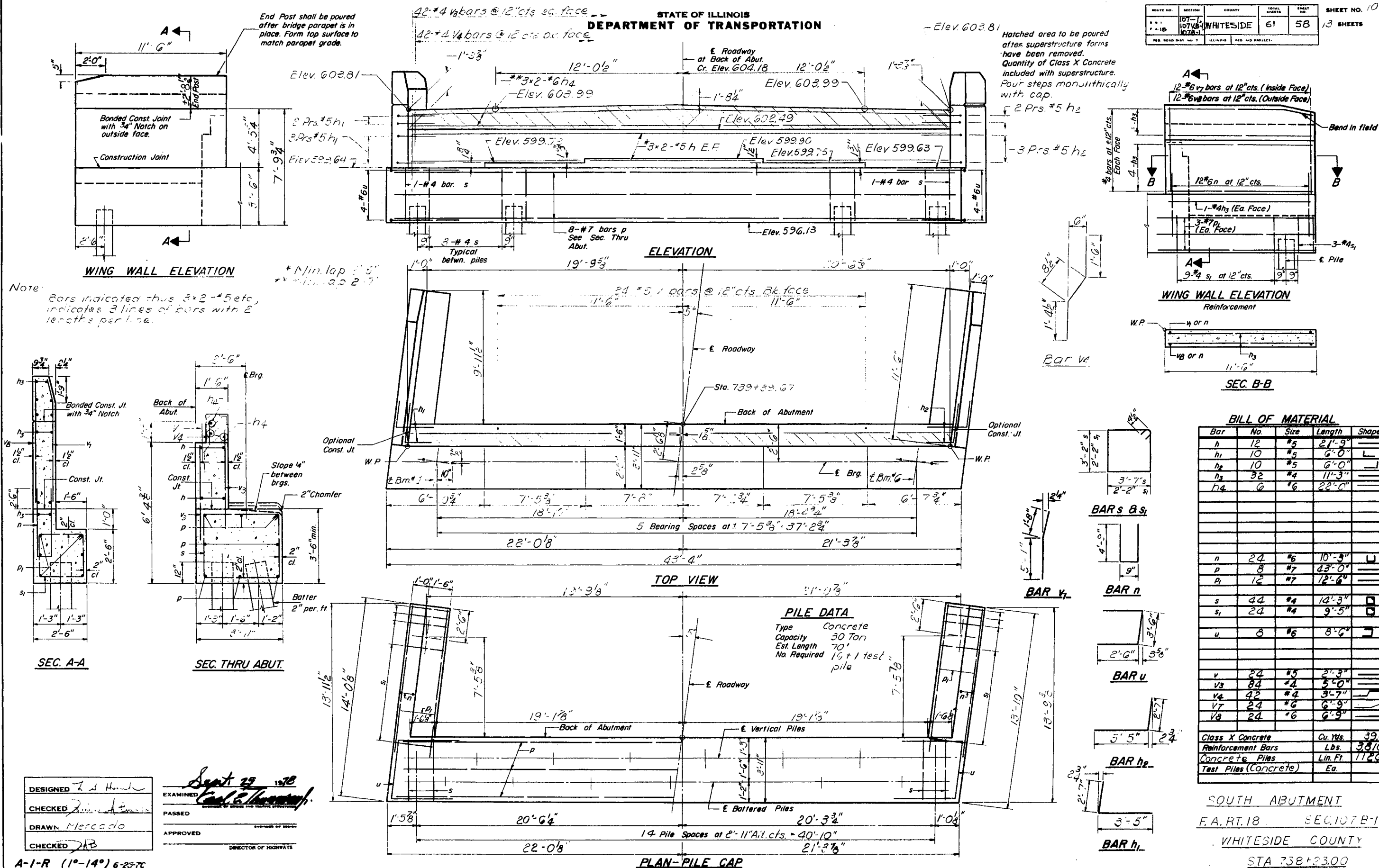
[illegible]

NORTH ABUTMENT
F.A. RT. 18 SEC. 107 B-1
WHITESIDE COUNTY
STA. 738+23.00

DESIGNED	T. L. Hawk
CHECKED	J. L. Baker
DRAWN	M. J. J. J.
CHECKED	AC

EXAMINED Sept. 29 1938
E. E. Hargrave
 CHIEF OF BRIDGE AND TRAFFIC STRUCTURES
 PASSED
 S. S. Hargrave, Jr.
 APPROVED
 DIRECTOR OF HIGHWAYS

A-1-R (1°-14°) 6-25-70



SOUTH ABUTMENT
F.A.R.T. 18 SEC. 107 B-1
WHITESIDE COUNTY
STA 738+23.00

Sept 29 1978
EXAMINED *Carl E. Therman*
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

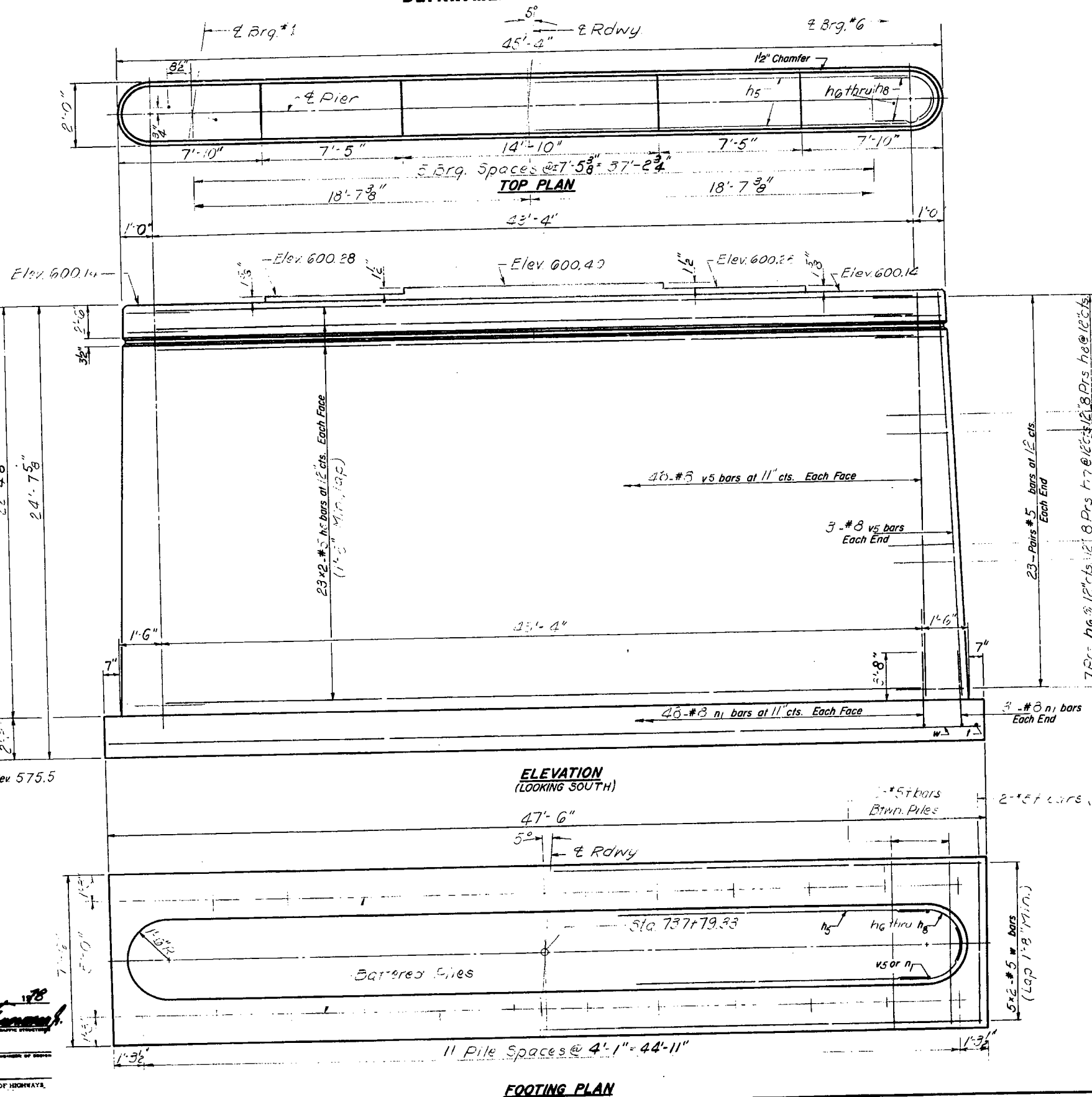
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 11
107-1	107-1	WHITESIDE	61	59	13 SHEETS
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			

PILE DATA

Type Concrete
Capacity 35 Ton
Est. Length 44 ft.
No. Req'd. 23 + 1 test pile

* Piles driven to 45 Ton Brg.



Bar	R	A
h6	14"	2'-8"
h7	12"	2'-5"
h8	10"	2'-2"

DETAIL OF BARS
h6 thru h8



BAR n1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h5	92	#5	23'-0"	—
h6	28	#5	5'-2"	—
h7	32	#5	4'-11"	—
h8	32	#5	4'-8"	—
n1	102	#8	6'-9"	—
i	77	#5	7'-3"	—
v5	102	#8	22'-2"	—
w	10	#5	24'-6"	—
Class A Concrete				Cu. Yds. 123.3
Reinforcement Bars				Lbs. 11340
Concrete Piles				Lin. Ft. 1012
Test Pile (Concr.)				Each 1

Bars indicated thus 5x2-#5 etc., indicates 5 lines of bars with 2 lengths per line.

P.E.R. 1

F.A. PT 18 SEC. 107 15-1
WHITESIDE COUNTY
STA. 738+23.00

DESIGNED	J. A. Hark
CHECKED	J. A. Hark
DRAWN	J. A. Hark
CHECKED	J. A. Hark

EXAMINED	Sept 29, 1978
PASSED	Earl E. Hammond
APPROVED	
DIRECTOR OF HIGHWAYS	

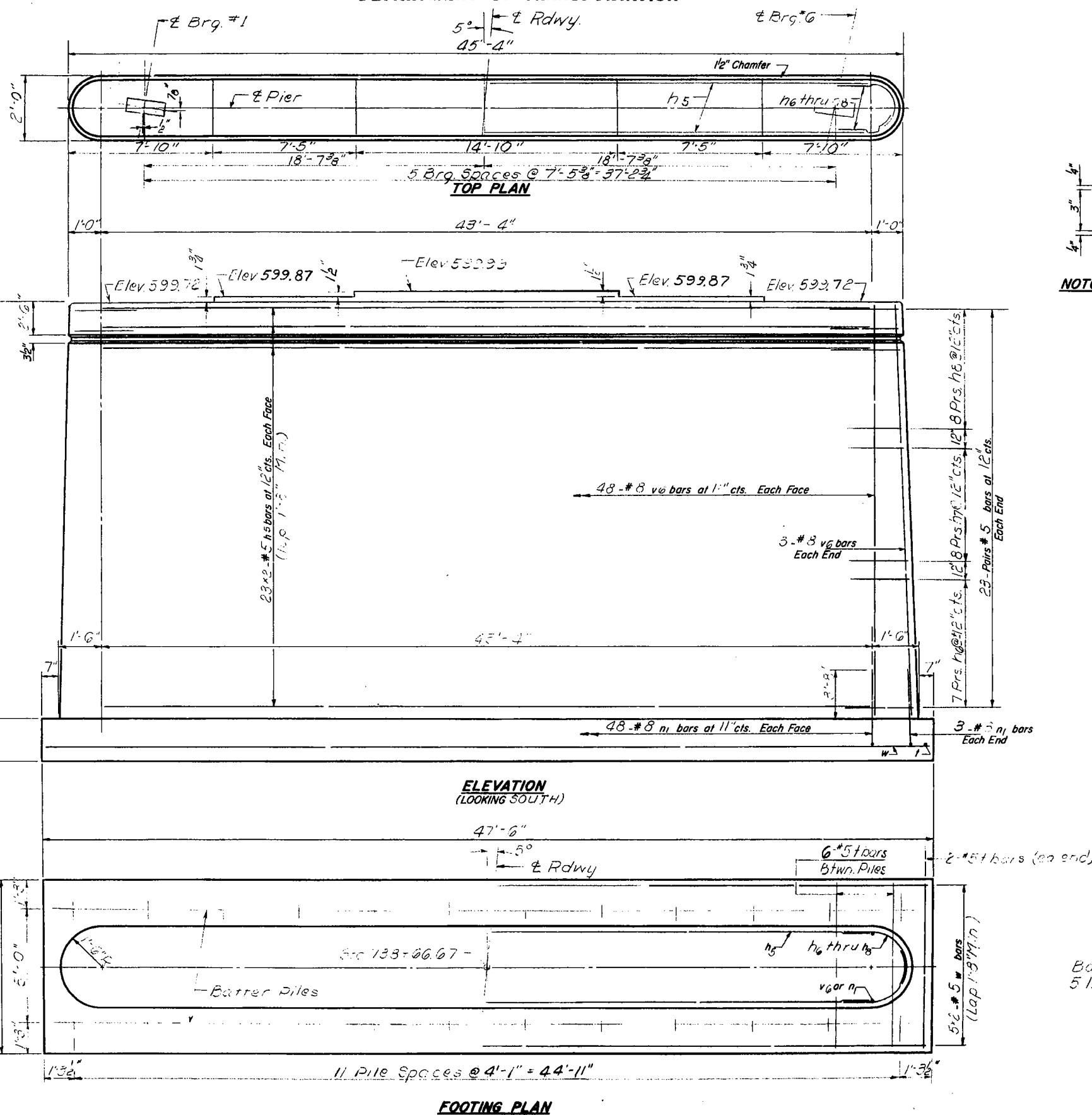
PILE DATA

Type Concrete
 *Capacity 35 Ton
 Est. Length 39 ft.
 No. Req'd. 24

*Piles driven to 45 Ton Brg.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

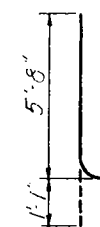
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEETS
107-1	107B-1	WHITESIDE	61	60	13 SHEETS
107B-1					



NOTCH DETAIL

Bar	R	4
h6	14"	2'-8"
h7	12"	2'-5"
h8	10"	2'-2"

DETAIL OF BARS
 h6 thru h8



BAR n1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h5	32	#5	23'-0"	—
h6	28	#5	5'-2"	—
h7	32	#5	2'-11"	—
h8	32	#5	4'-3"	—
n1	102	#8	6'-9"	—
1	70	#5	7'-3"	—
v6	102	#8	21'-9"	—
w	10	#5	24'-6"	—
Class A Concrete			Cu. Yds.	121.6
Reinforcement Bars			Lbs.	11,220
Concrete Piles			Ln. Ft.	936

Bars indicated thus 5x2-#5 etc, indicates 5 lines of bars with 2 lengths per line.

PIER #2

F.A.R.T. 18 SEC. 107E-1

WHITESIDE COUNTY

STA. 738+23.00

DESIGNED	by [Signature]
CHECKED	by [Signature]
DRAWN	Merzoo
CHECKED	LAP

EXAMINED	by [Signature]
PASSED	
APPROVED	
DIRECTOR OF HIGHWAYS	