

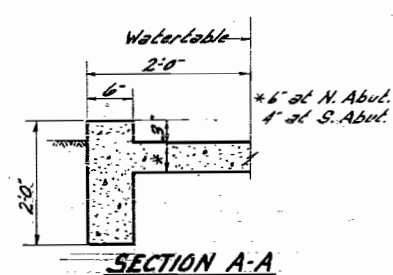
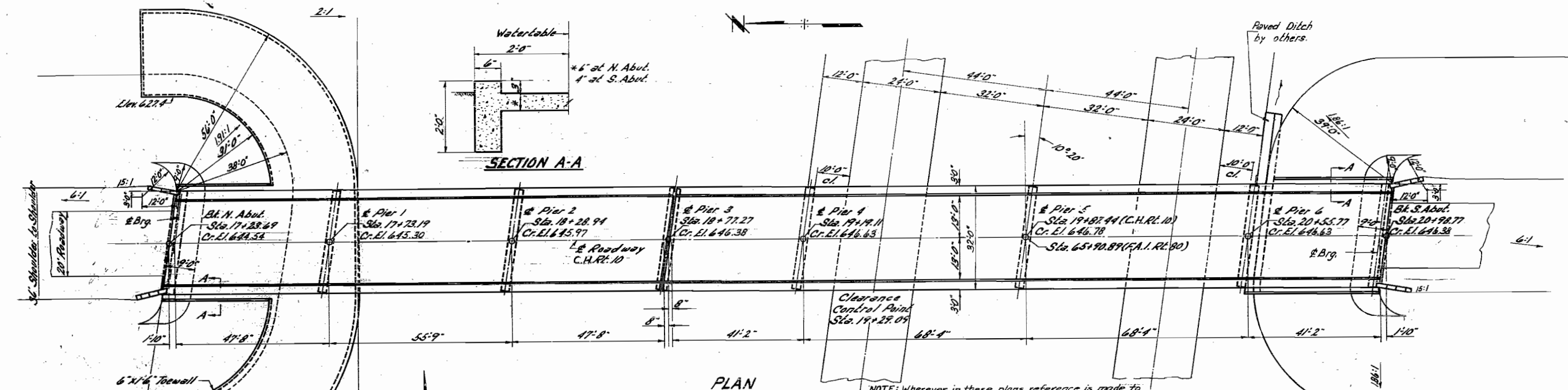
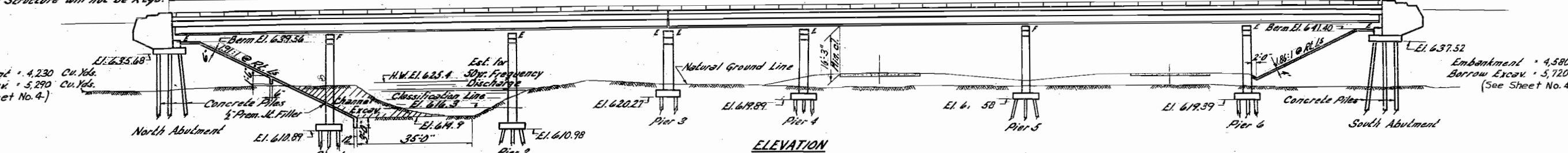
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS  
375'-1" Back to Back Abutments

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
66-1HB	06-1HB	BUREAU	37	8
F.A.I. 80	06-1HB		9	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	I-80-1(37)37	

B.M. Spike & Washer in Root of 36" Maple Tree  
88' L. Sta 13+73 Elev. 620.12 (U.S.G.S. Datum).  
Existing Structure - RC Span at 38', 23' Rely.  
Built 1932. To be removed prior to new  
Construction. No Salvage.  
A Temporary Structure will not be Req'd.

Embankment - 4,230 Cu.Yds.  
Borrow Excav. - 5,290 Cu.Yds.  
(See Sheet No. 4)

Embankment - 4,580 Cu.Yds.  
Borrow Excav. - 5,720 Cu.Yds.  
(See Sheet No. 4)



GENERAL NOTES

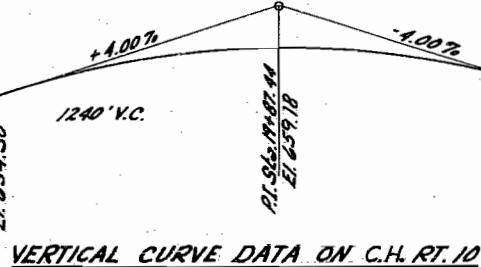
Class X Concrete shall be used throughout.  
Coarse aggregate which is to be used in parapet handrails and end posts must be absolutely free of chert, flint, limonite, lignite and soft sandstone.  
The Concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.  
Slope walls shall be reinforced with welded wire fabric 6"x6" mesh, #4 wires, weighing 58# per 100 sq. ft.  
Layout of slope walls may be varied to suit ground conditions in the field, as directed by the Engineer.  
Rivets 3/4" open holes 1/2", unless noted.  
All rockers, bolsters, bearing plates, shim plates, pintles and anchor bolts shall be fabricated and set in accordance with Article 51.15 of the Standard Specifications and are included in quantity of Structural Steel.  
Est. Wt. = 11,980 lbs.  
Anchor bolts shall be set before riveting diaphragms over supports.  
Structural Steel for 30 W 124 & 30 W 108 & for cover plates shall be A-36.

The roadway expansion guards shall be fabricated and erected in accordance with Article 51.13(d) of the Standard Specifications. Expansion Guards are included in quantity of Struct. Steel. Except as otherwise provided, all Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 56.1 to 56.5 inclusive of the Standard Specifications.  
All paint shall be furnished and applied by the Contractor.  
The Contractor shall drive one concrete test pile at each abutment in permanent location, one timber test pile at pier 2 in permanent location, and one timber test pile in the vicinity of pier 5 as directed by the Engineer before casting or ordering remainder of piles.  
Piles at abutments shall be driven in holes prepared to natural ground line in woodcries and preserved in place.

TOTAL BILL OF MATERIAL, 06-1HB

Item	Super	Sub	Total
Protective Coat	Sq.Yds. 1521		1521
Removal of Existing Structure	Each		1
Class A Excav. for Structures	Cu.Yds.	249	249
Class B Excav. for Structures	Cu.Yds.	* 169	* 169
Erecting Structural Steel	Lbs.	279,760	279,760
Class X Concrete	Cu.Yds.	360.9	768.6
Aluminum Handrail	Lin.Ft.	746	746
Reinforcement Bars	Lbs.	72,260	100,280
Crossed Piles	Lin.Ft.	1,809	1,809
Test Piles (Timber)	Each	2	2
Concrete Piles	Lin.Ft.	1,144	1,144
Test Piles (Concrete)	Each	2	2
Name Plates	Each	2	2
Slope Wall (6")	Sq.Yds.	1,052	1,052
Untreated Piles	Lin.Ft.	738	738
Slope Wall (4")	Sq.Yds.	187	187
* Includes 4.8 Cu.Yds. for Slope Wall			
TOTAL BILL OF MATERIAL, 06-1HF			
Furnishing Structural Steel	Lbs.		279,760

DESIGN STRESSES  
fc = 1,400 p.s.i. Super & Sub  
fs = 20,000 p.s.i. Reinf.  
fs = 18,000 p.s.i. Struct. (A7 Steel)  
fc = 75 p.s.i. Footings  
n = 10  
LOADING HIS-S12-44



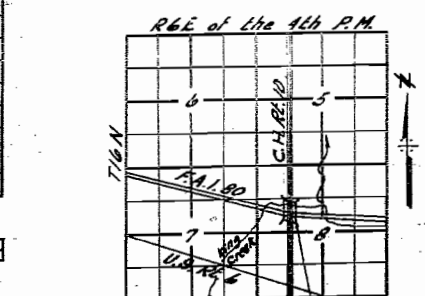
STATION 65+90.89  
BUILT 196 BY  
STATE OF ILLINOIS  
F.A.I. RT. 80 SEC. 06-1HB  
LOADING HIS-S12  
NAME PLATE  
See Std. 2113

WATERWAY INFORMATION

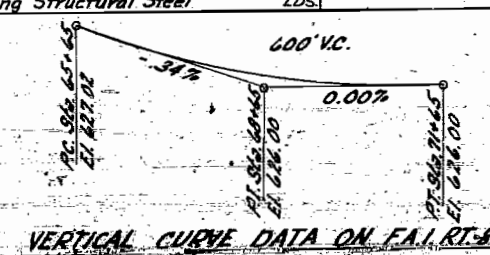
Drainage Area - 12,500 Acres  
Character - Rolling, Hilly & Cultivated  
Required Opening - 10,550 Sp. Ft.  
Present Opening - None  
Proposed Opening - 552 Sp. Ft.  
Ordinary Water El. 615.9  
Low Water El. 615.3

DESIGNED James J. Rayburn  
CHECKED C. J. Kistner  
DRAWN P. J. Lawler  
CHECKED C. J. Kistner

EXAMINED W. M. F. Smith  
PASSED C. J. Kistner  
APPROVED P. R. B. Smith



PROJ. I-80-1(37)37  
C.H. RT. 10 OVER  
F.A.I. RT. 80 & KING CREEK  
F.A.I. RT. 80 SEC. 06(1HB, 1HF)  
BUREAU COUNTY  
STA. 65+90.89

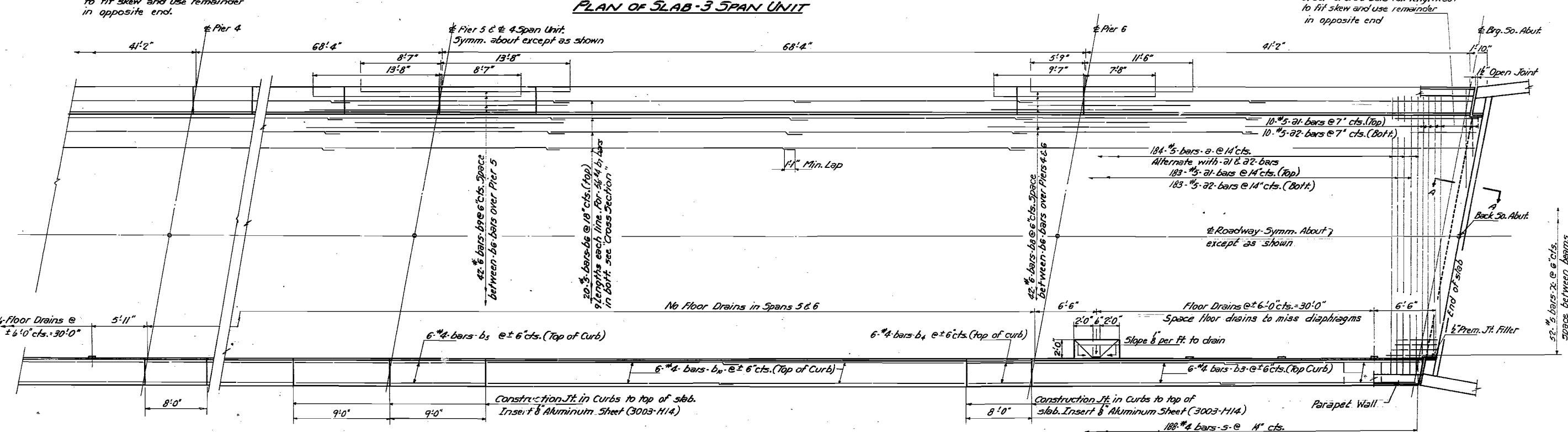
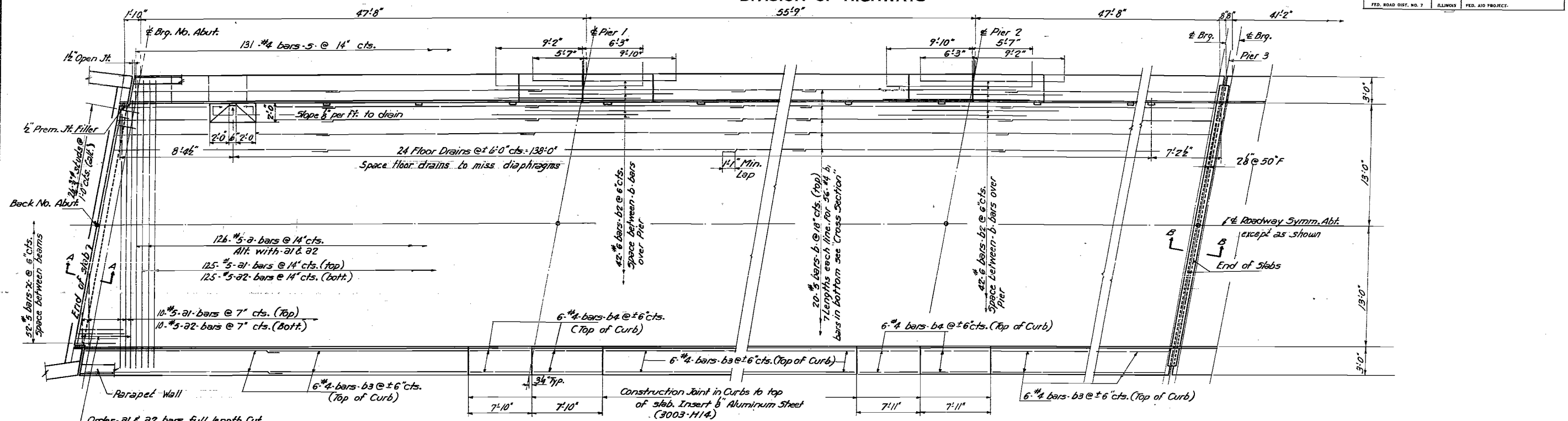


Rev. 2-23-61 Clearance increased to 14'-3". Curbs revised for parapet wall & aluminum handrail. Curb height decreased to 9". A-36 steel used for beams & cover plates. Abutment wings changed to new type. New top of slab elevation sheet added. New pile sheet substituted for old. Pier cap paint increased. New cut off wall section used. Bill of material revised accordingly.  
Revised BILL OF MATERIAL, 06-1HB. Reinf. Bars changed from 67,000 to 72,260 Lbs.  
Added note \* Includes 4.8 Cu. Yds. for Slope Wall

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	06-1HB 06-1HF	BUREAU	34	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	9	6

SHEET NO. 2  
15 SHEETS



DESIGNED: James J. Hayden  
 CHECKED: [Signature]  
 DRAWN: J.R. Miller  
 CHECKED: [Signature]

EXAMINED: [Signature]  
 PASSED: [Signature]  
 APPROVED: [Signature]  
 CHIEF HIGHWAY ENGINEER

Oct 14 1957

Note: For Sections A-A & B-B. Bill of Materials bar details see Sheet 3  
 For Parapet Wall details, See Sheets 3 & 4

**SUPERSTRUCTURE**  
**C.H. ROUTE 10 OVER**  
**F.A.I. RT. 80 & KING CREEK**  
**F.A.I. RT. 80 - SECTION 06-1HB**  
**BUREAU COUNTY**  
**STATION 65+90.89**

Revised 4/23/62 Bottom slab (Distribution steel) changed from 50% to 47% R.A.Z.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.R. 1	06-1HB	BUREAU	34	10
F.A.L. 80	06-1HF		9	7
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 3  
15 SHEETS

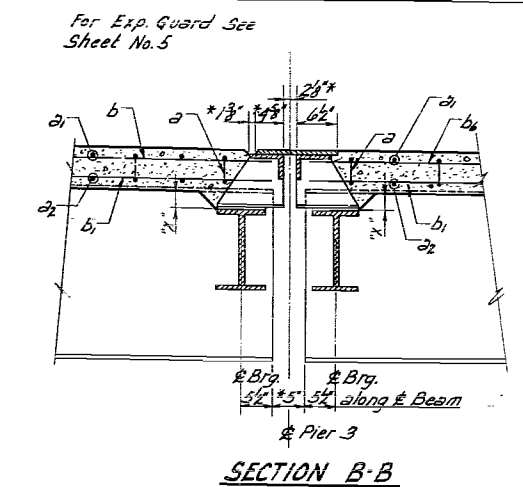
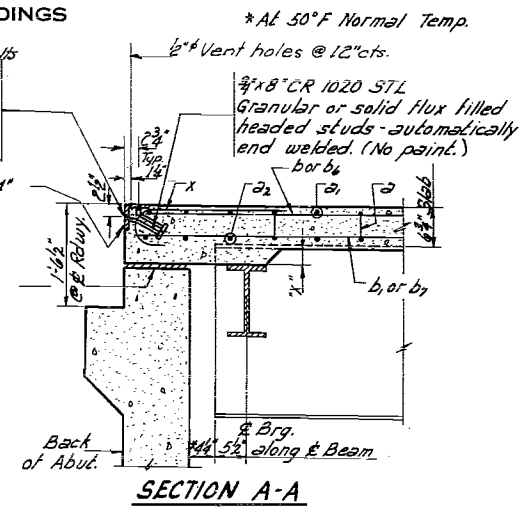
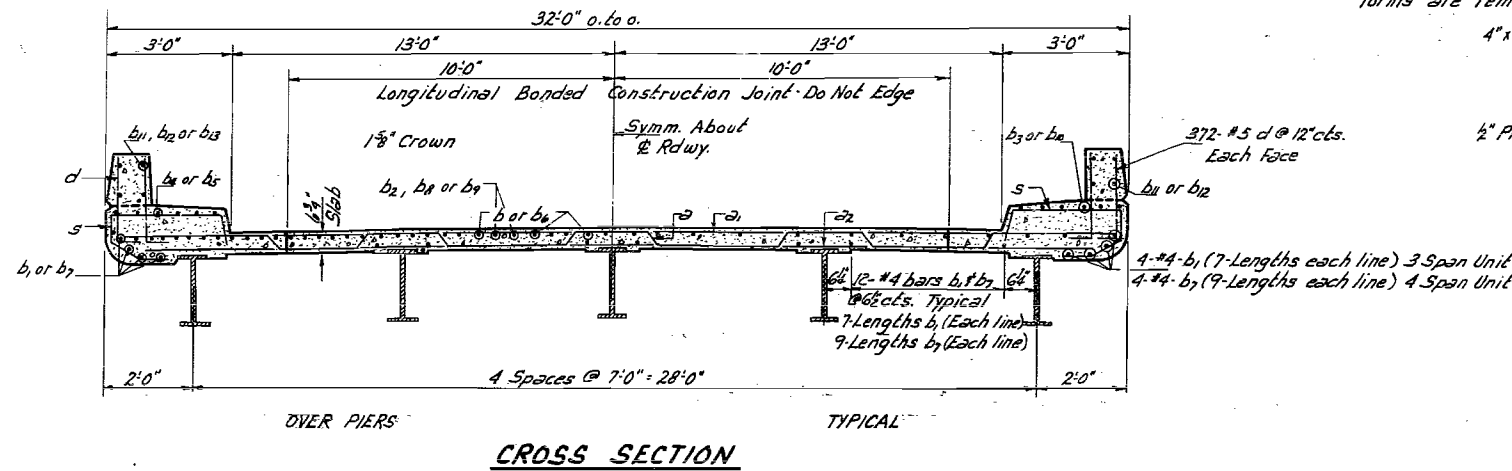


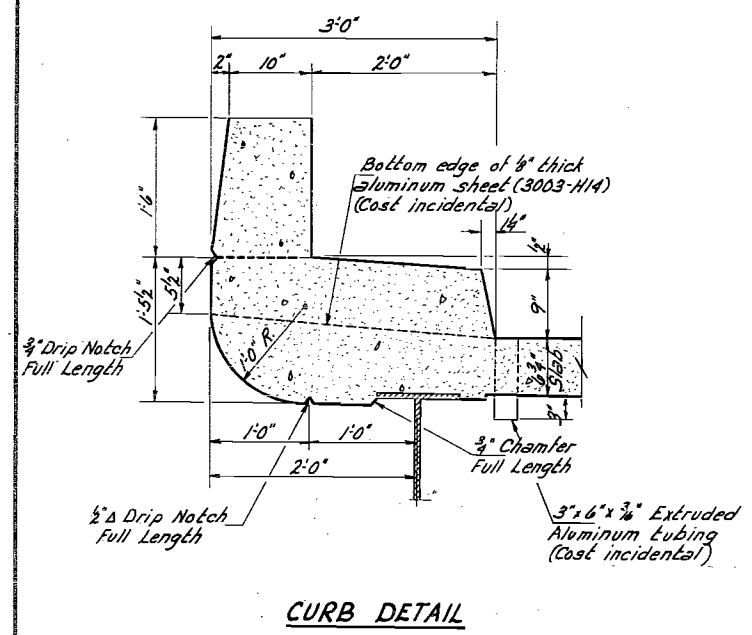
TABLE OF "X" DIMENSIONS

	Bm. 5	Bm. 4	Bm. 3	Bm. 2	Bm. 1
No. Abut.	3"	4 3/8"	5 3/8"	5 3/8"	4 3/8"
Pier 3 (No.)	3"	4 3/8"	4 3/8"	4 3/8"	3 3/8"
Pier 3 (So.)	3"	4 3/8"	4 3/8"	4 3/8"	3 3/8"
So. Abut.	3 3/8"	4 3/8"	4 3/8"	4 3/8"	3"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	310	#5	32'-4"	~
a1	328	#5	31'-2"	~
a2	328	#5	30'-0"	~
b	140	#5	22'-9"	~
b1	392	#4	22'-9"	~
b2	84	#6	15'-5"	~
b3	120	#4	21'-0"	~
b4	72	#4	7'-6"	~
b5	24	#4	8'-7"	~
b6	180	#5	25'-6"	~
b7	504	#4	25'-6"	~
b8	84	#6	17'-3"	~
b9	42	#6	22'-3"	~
b10	42	#4	26'-0"	~
b11	148	#5	7'-7"	~
b12	196	#5	7'-10"	~
b13	16	#5	8'-8"	~
d	1,488	#5	2'-8"	~
s	638	#4	5'-3"	~
x	104	#5	3'-6"	~

Class X Concrete Cu. Yds. 360.9  
Reinforcement Bars Lbs. 72,260  
Structural Steel Lbs. 279,740



METHOD OF DETERMINING FILLET HEIGHT 'f'

After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at stations shown on Sheet 15. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheet 15, minus floor thickness equals the fillet heights above top of beams.

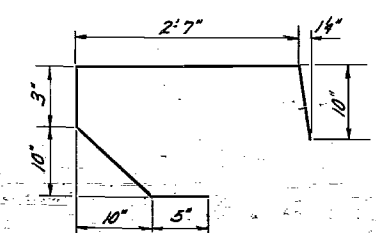
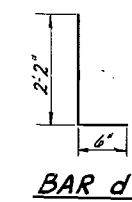
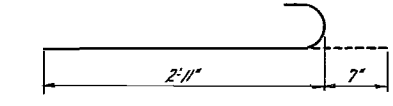
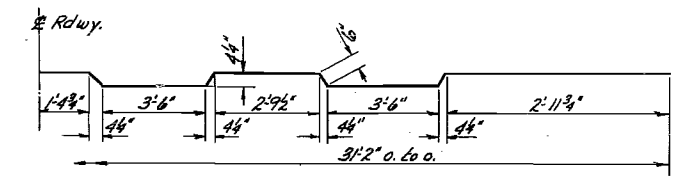
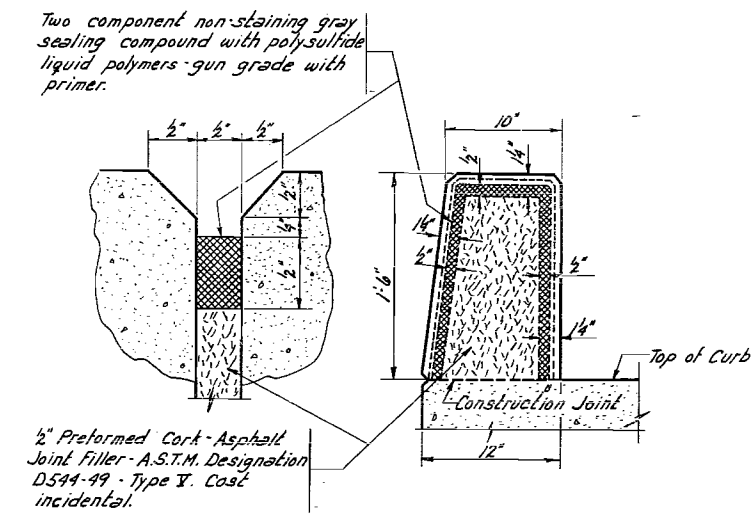
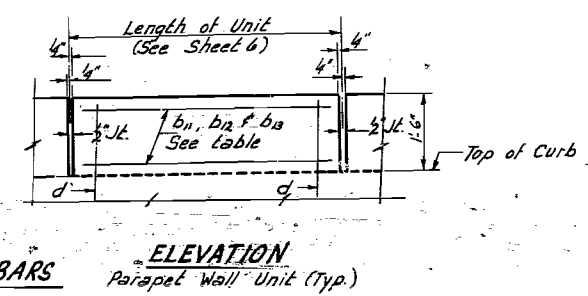


TABLE SHOWING b11, b12 & b13 BARS IN PARAPET WALLS

Length of Unit	Bars
7'-10", 7'-11", 8'-0"	2 #5 - b11 Each Face
8'-0", 8'-0 3/8", 8'-1 1/8"	2 #5 - b12 Each Face
8'-2", 8'-2 3/8", 8'-3 1/8", 8'-3 3/8"	2 #5 - b13 Each Face
8'-4", 8'-5 3/8", 8'-6 3/8"	2 #5 - b13 Each Face
9'-0"	2 #5 - b13 Each Face



SUPERSTRUCTURE DETAILS  
C.H. RT. 10 OVER  
F.A.I. RT. 80 F KING CREEK  
F.A.I. RT. 80 SEC. 06-1HB  
BUREAU COUNTY  
STA. 45 + 90.89

DESIGNED: *Caufubach*  
CHECKED: *James M. Pence*  
DRAWN: *P. Lawler*  
CHECKED: *M. P.*

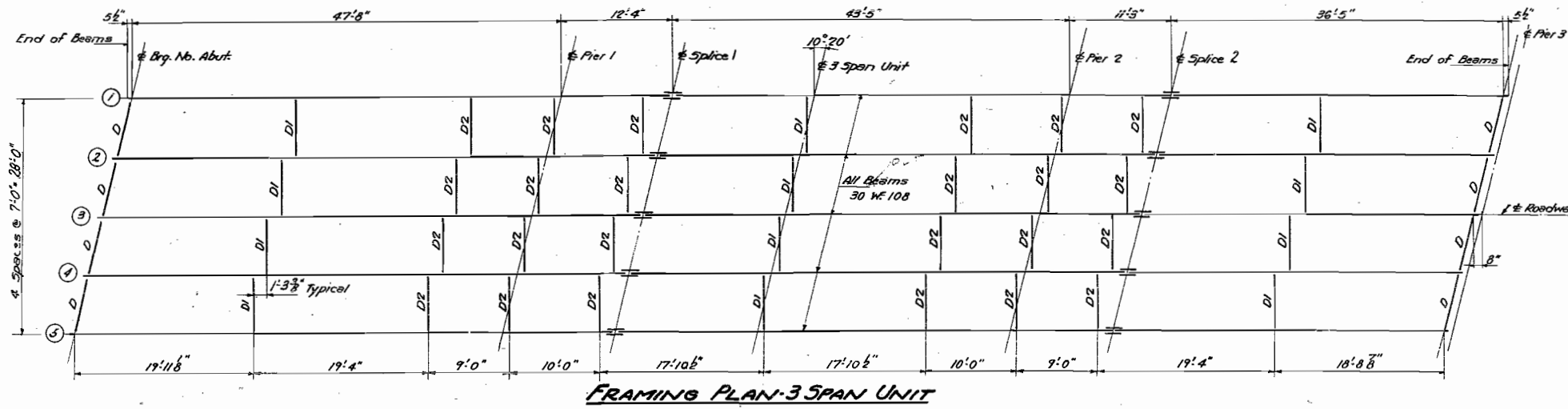
EXAMINED: *W. B. Baumann*  
PASSED: *[Signature]*  
APPROVED: *[Signature]*

MAY 9 1961

Revised 4/23/62 In Cross Section, Typical Spacing Shown, Beams Chg'd. from 9" x 24" to 9" x 28" @ 7'0" to 10" x 24" @ 6'0" c/c. In Bar b11, Rein. Bars Chg'd. from #4, #5 to #5, #6 (b11 chg'd. from 300 to 392 # by chg'd. from 396 to 504). In Sec. A-A, Exp. device modernized. R.A.R.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4 / 5 SHEETS
S.A.I. F.A.I. 80	06-1HB 06-1HF	BUREAU	34 9	11 8	
T.E. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.		



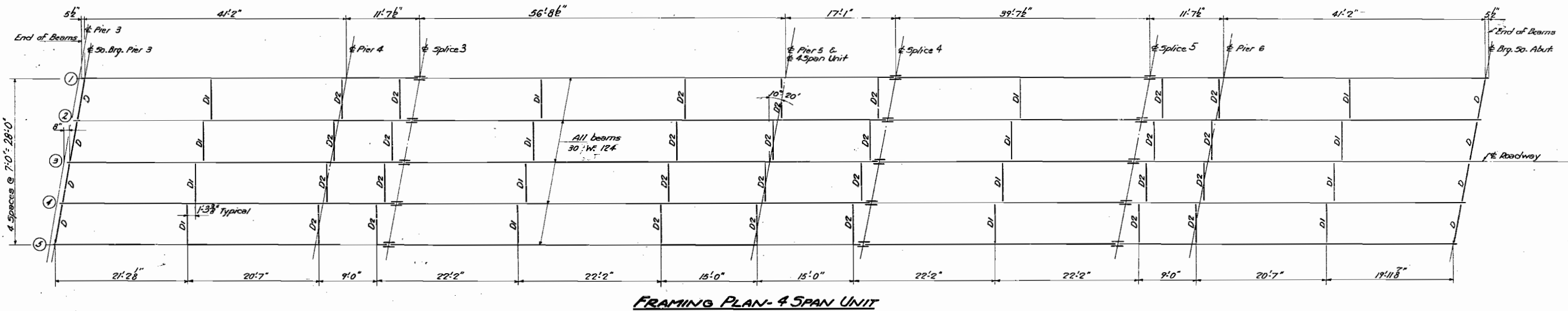
ELEVATIONS TOP OF BEAMS (3 SPAN UNIT)

	E Brg No. Abut	E Pier 1	E Splice 1	E Pier 2	E Splice 2	E No. Brg Pier 3
Bm. 1	643.90	644.57	644.74	645.22	645.35	645.69
Bm. 2	643.99	644.67	644.84	645.32	645.45	645.79
Bm. 3	644.01	644.69	644.86	645.35	645.48	645.82
Bm. 4	643.95	644.63	644.80	645.29	645.42	645.77
Bm. 5	643.81	644.50	644.68	645.17	645.30	645.66

ELEVATIONS TOP OF BEAMS (4 SPAN UNIT)

	E So. Brg. Pier 3	E Pier 4	E Splice 3	E Pier 5	E Splice 4	E Splice 5	E Pier 6	E Brg. So. Abut.
Bm. 1	645.70	645.87	645.92	645.98	646.00	645.90	645.85	645.67
Bm. 2	645.80	645.97	646.02	646.09	646.11	646.01	645.96	645.78
Bm. 3	645.83	646.01	646.06	646.13	646.15	646.06	646.01	645.83
Bm. 4	645.78	645.96	646.01	646.09	646.11	646.02	645.97	645.80
Bm. 5	645.67	645.85	645.90	645.98	646.00	645.91	645.86	645.70

Note: Elevations shown are at top of flanges.



FRAMING PLAN-4 SPAN UNIT

Note: For Bearings and Structural Details see Sheet 5

DESIGNED *James T. Reiburn*  
 CHECKED *Clayton*  
 DRAWN *J.T.R. H. Miller*  
 CHECKED *Clayton*

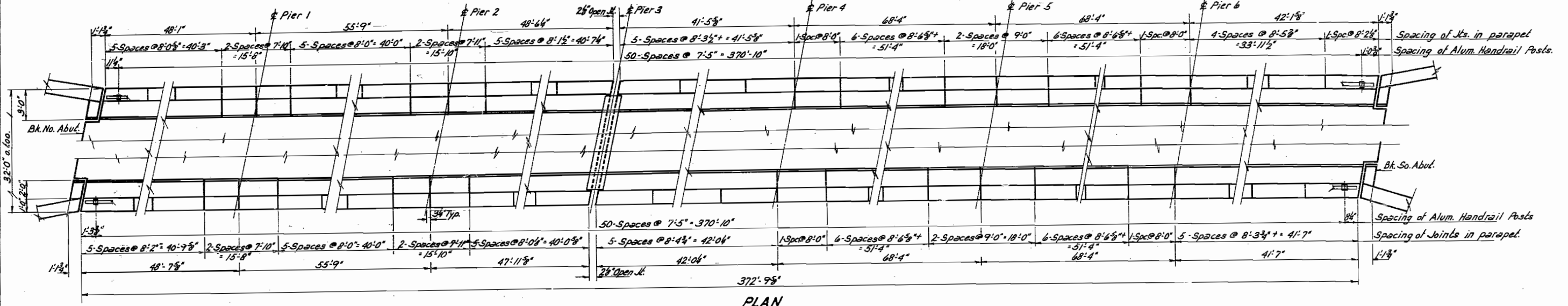
EXAMINED *Oct. 14 1959*  
*V.M. Romine*  
 ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES  
 PASSED *C.S. Shuff*  
 ENGINEER OF DESIGN  
 APPROVED *R.R. Barlow*  
 CHIEF HIGHWAY ENGINEER

STRUCTURAL STEEL FRAMING  
 C.H. ROUTE 10 OVER  
 F.A.I. RT. 80 & KING CREEK  
 F.A.I. RT. 80-SECTION 061 HB  
 BUREAU COUNTY  
 STATION 65+90.89

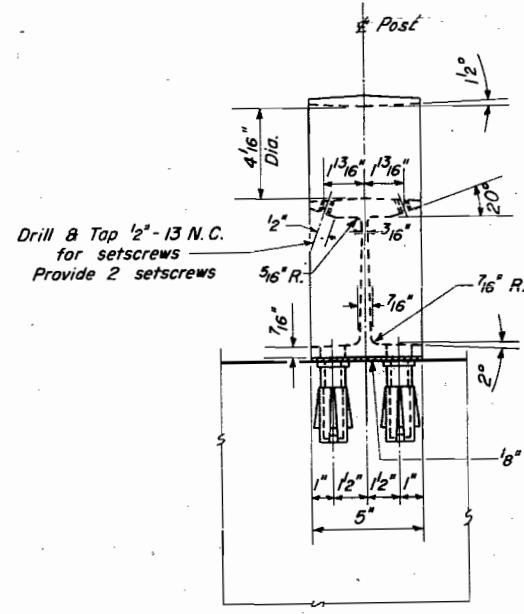


STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

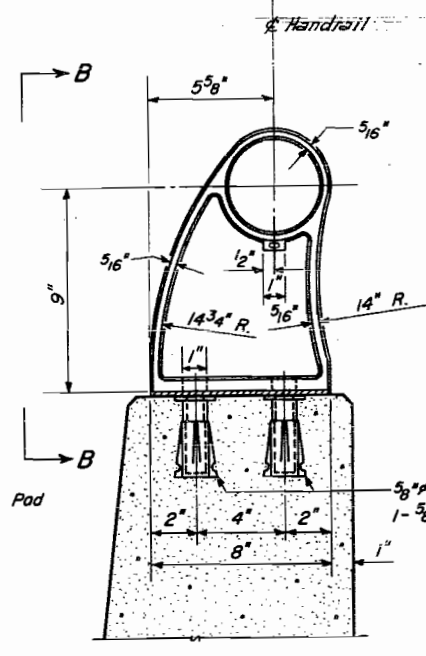
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6
F.A.I. 80	06-1HB	BUREAU	34	12	15 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



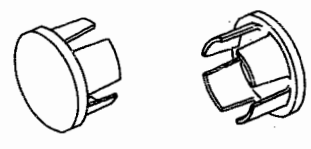
PLAN



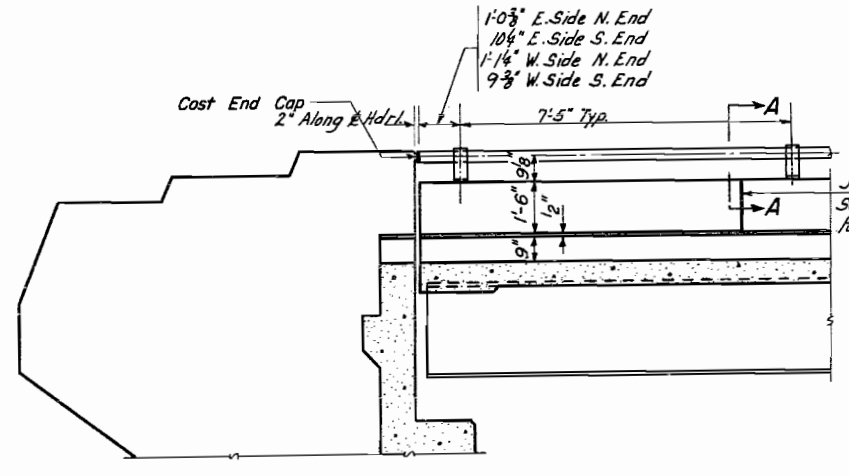
VIEW B-B



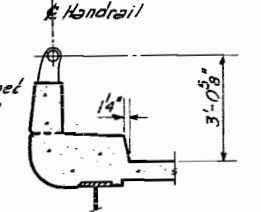
SECTION A-A



CAST END CAP  
DRIVE FIT TYPE  
4 - Required  
Incidental to item "Aluminum Handrail"



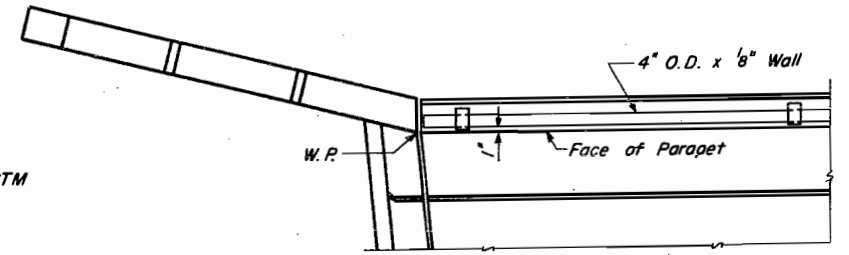
ELEVATION - END POST



SEC. THRU CURB

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Handrail	Lin. Ft.	746



PLAN - END POST

NOTES  
All Posts shall be placed normal to parapet  
All Posts shall be of Aluminum conforming to ASTM Specification B-108 alloy SG-70B-T6.  
All Rail Tubing shall be of Aluminum conforming to ASTM Specification B-235 alloy GS-11A-T6.  
Alclad Washers shall be made from sheet conforming to ASTM Specification B-209 alloy clad CG-42A-T4.  
Rail Tubing may be cut to random lengths.  
For material composition of Prefabricated Pad, See Ari. 54.9 (f), (Bearings and Anchorage), of the Std. Specs.  
Set Screws shall be of Aluminum conforming to ASTM Specification B-211 alloy CG-42A-T4.

HANDRAIL & PARAPET DETAILS  
C.W.R.T. 10 OVER  
F.A.I. RT. 80 & KING CREEK  
F.A.I. RT. 80 SEC. 06-1HB  
BUREAU COUNTY  
STA. 65+90.89

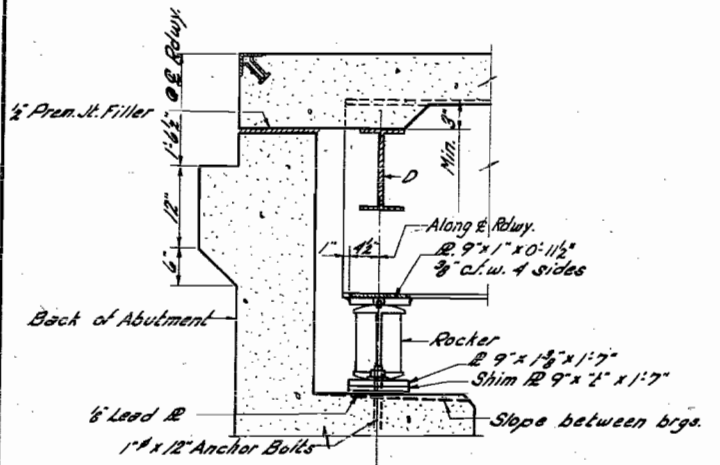
DESIGNED	<i>W. A. Sausaman</i>	EXAMINED	<i>W. C. Bannerman</i>
CHECKED	<i>James M. Pence</i>	PASSED	<i>W. A. Sausaman</i>
T.R. DRAWN	<i>W. A. Sausaman</i>	APPROVED	<i>W. A. Sausaman</i>
CHECKED	<i>J. M. P.</i>		

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

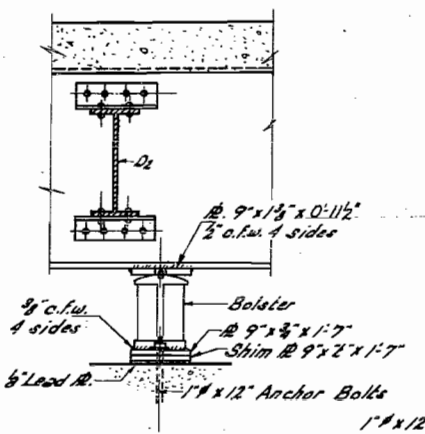
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
E.A. 1. 80	06-11B 06-11F	BUREAU	34	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	9	9

SHEET NO. 5  
15 SHEETS

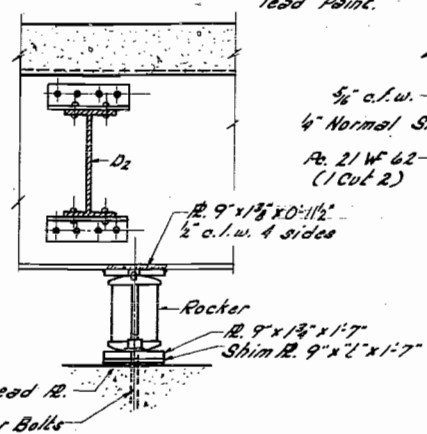
\*At 50°F Normal Temp.



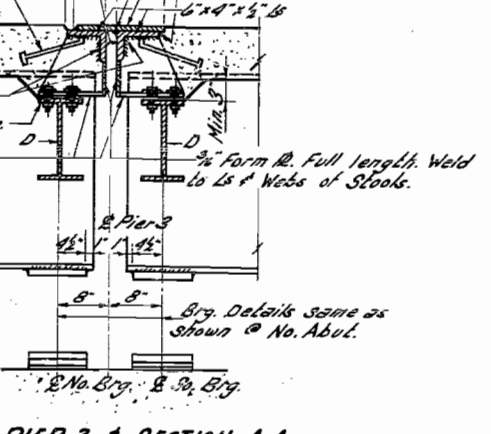
**SECTION @ NO. ABUTMENT**  
So. Abutment similar except opposite hand.



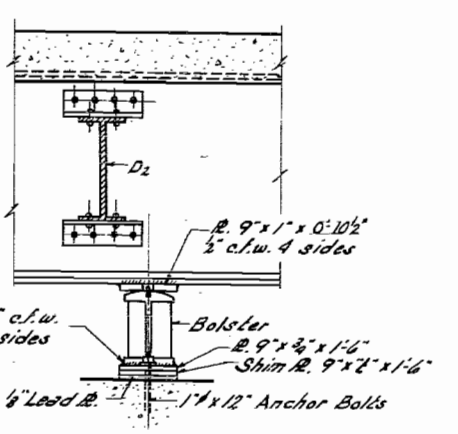
**PIER 1**



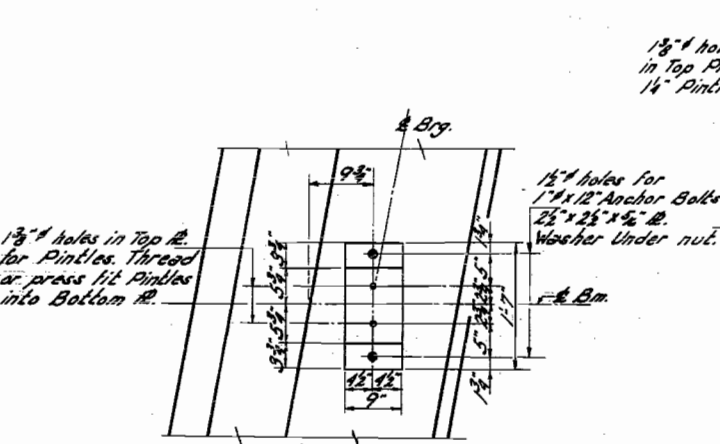
**PIERS 2, 4 & 6**



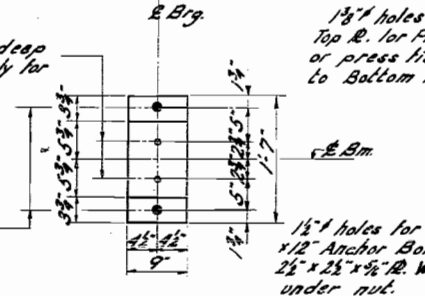
**PIER 3 & SECTION A-A**



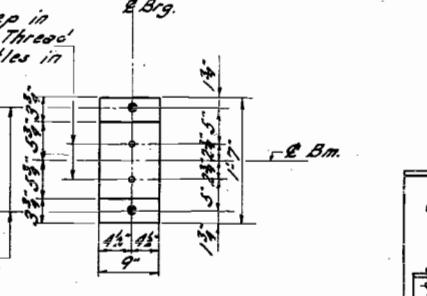
**PIER 5**



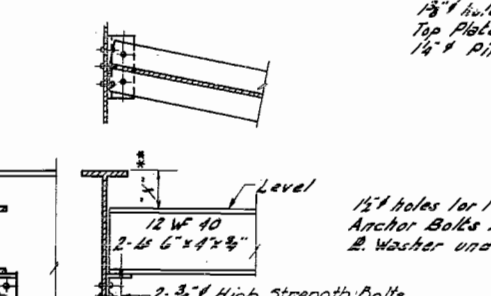
**PLAN**



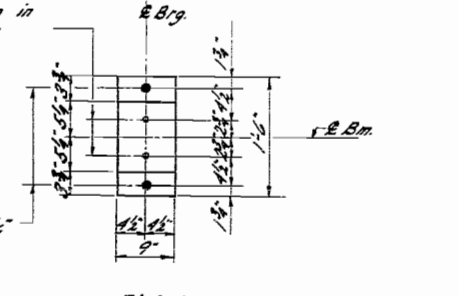
**PLAN**



**PLAN**



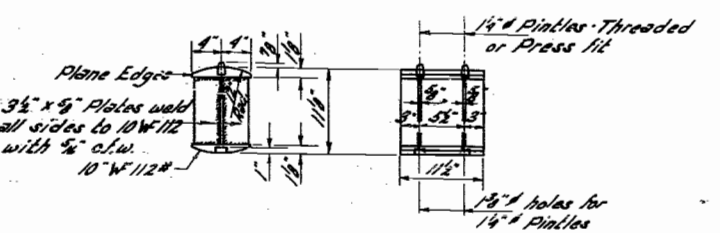
**PLAN**



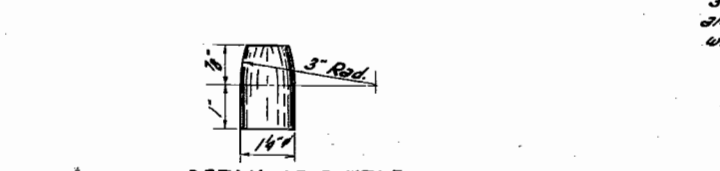
**PLAN**

**SHIM NO. 2**

Location	Bm. 5	Bm. 4	Bm. 3	Bm. 2	Bm. 1
No. Abut.	-	-	3	2	2
Pier 1	-	-	4	3	3
Pier 2	-	-	3	3	3
Pier 3 (No.)	6	6	3	3	2
Pier 3 (So.)	-	-	5	4	3
Pier 4	-	-	5	4	4
Pier 5	-	-	10	-	-
Pier 6	8	8	3	-	-
So. Abut.	-	4	3	-	-



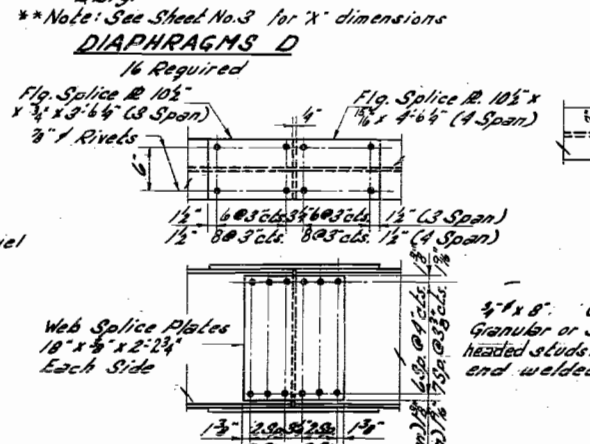
**DETAIL OF ROCKER**



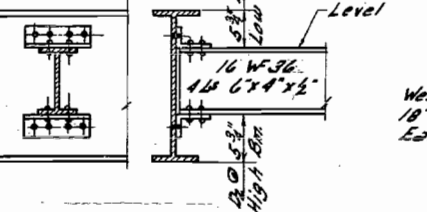
**DETAIL OF BOLSTER**



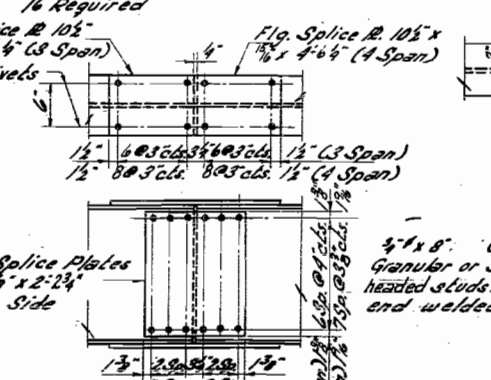
**DETAIL OF PINTLE**



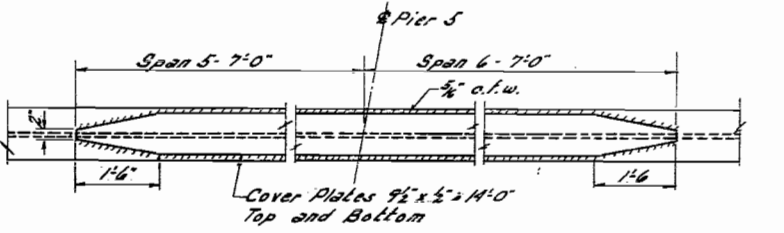
**DIAPHRAGMS D**



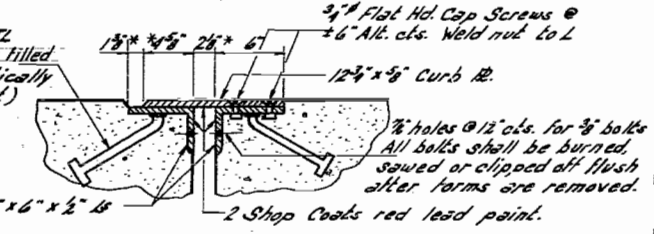
**DIAPHRAGMS D1 & D2**



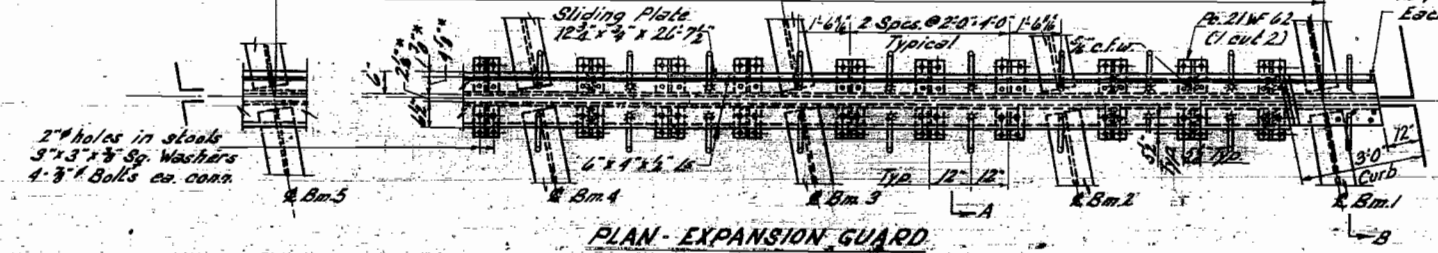
**DETAIL OF SPLICES**



**DETAIL OF COVER PLATES**



**SECTION B-B**



**PLAN - EXPANSION GUARD**

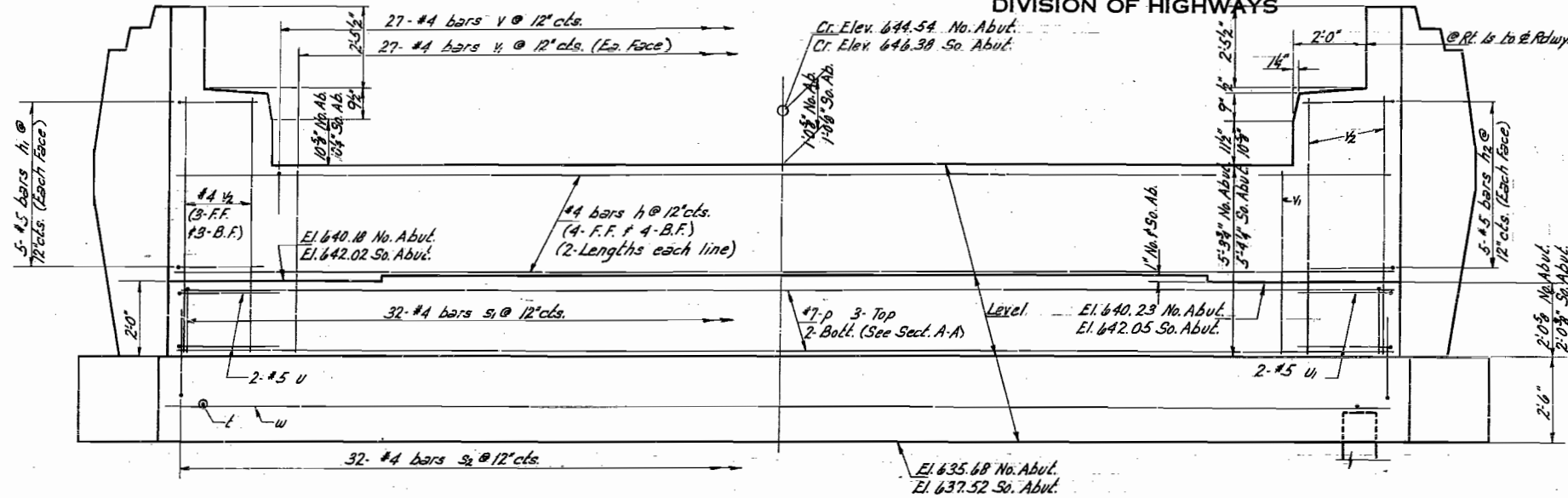
DESIGNED *James J. Rayburn*  
CHECKED *W. J. Keadel*  
DRAWN *J. R. P. Lowler*  
CHECKED *W. J. Keadel*

Oct. 14 1959  
EXAMINED *W. M. Romine*  
PASSED *W. J. Keadel*  
APPROVED *R. R. Bartholomew*

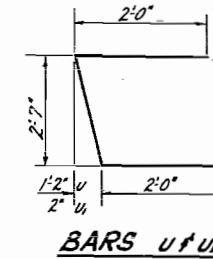
**STRUCTURAL STEEL DETAILS**  
C.H. ROUTE 10 OVER  
E.A. 1. RT. 80 & KING CREEK  
E.A. 1. RT. 80 SEC. 06-11B  
BUREAU COUNTY  
STA. 65+90.88

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

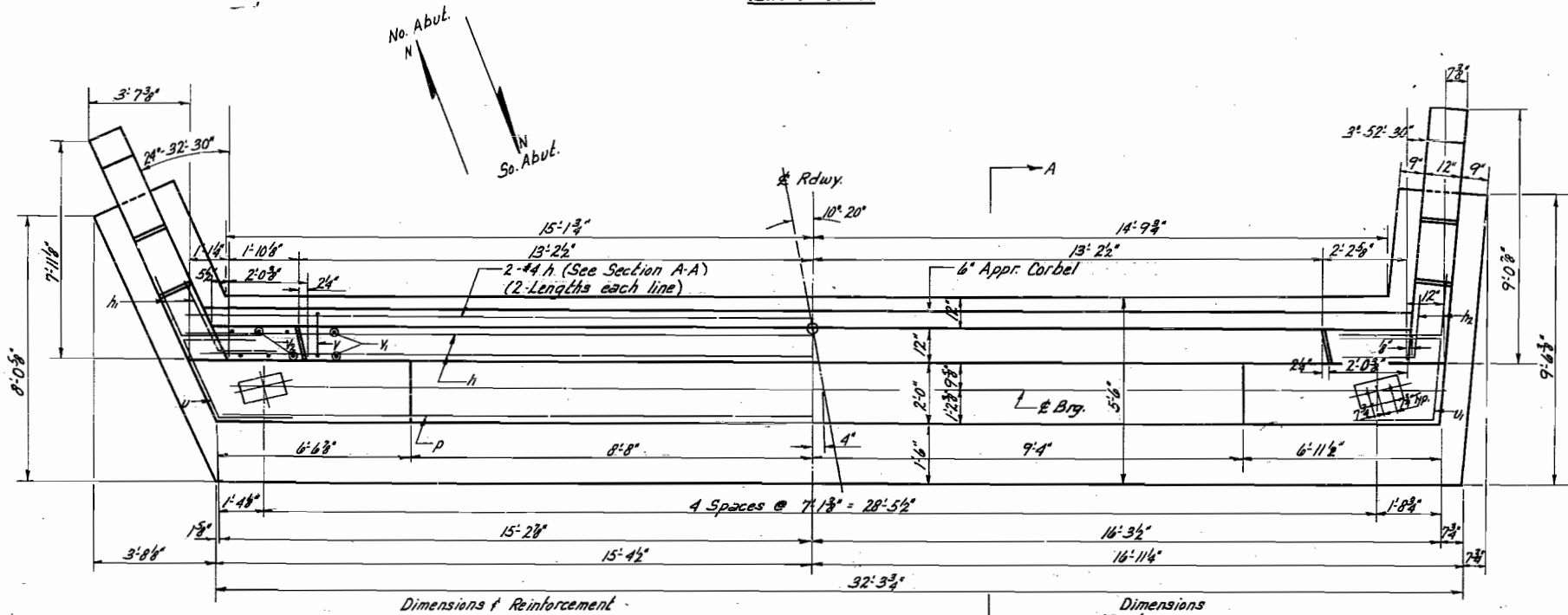
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7 15 SHEETS
F.A.I. 80	06-1HB	BUREAU	34	14	
FED. ROAD DIST. NO. 1					



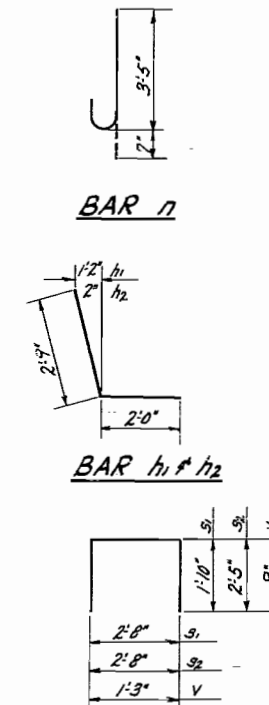
ELEVATION



BARS U & U



PLAN



BAR n

BAR h1 & h2

BARS S1, S2, & V

NO. & SO. ABUTMENTS  
BAR LIST

Bar	No.	Size	Length	Shape
h	40	#4	16'-6"	—
h1	20	#5	4'-9"	L
h2	20	#5	4'-9"	L
n	40	#5	4'-0"	U
p	10	#7	3'-10"	—
s1	64	#4	6'-4"	□
s2	64	#4	7'-6"	□
f	64	#5	5'-2"	—
l	38	#5	2'-2"	—
u	4	#5	6'-10"	—
u1	4	#5	6'-7"	—
v	54	#4	2'-9"	□
v1	108	#4	5'-0"	—
v2	24	#4	6'-6"	—
w	10	#5	3'-10"	—
w1	12	#5	9'-2"	—

NO. & SO. ABUTMENTS  
BILL OF MATERIAL

Item	Unit	Quantity
Class X Concrete	Cu. Yds.	71.0
Reinforcement Bars	Lbs.	4,290
Concrete Piles	Lin. Ft.	1,144
Test Piles (Concrete)	Each	2

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

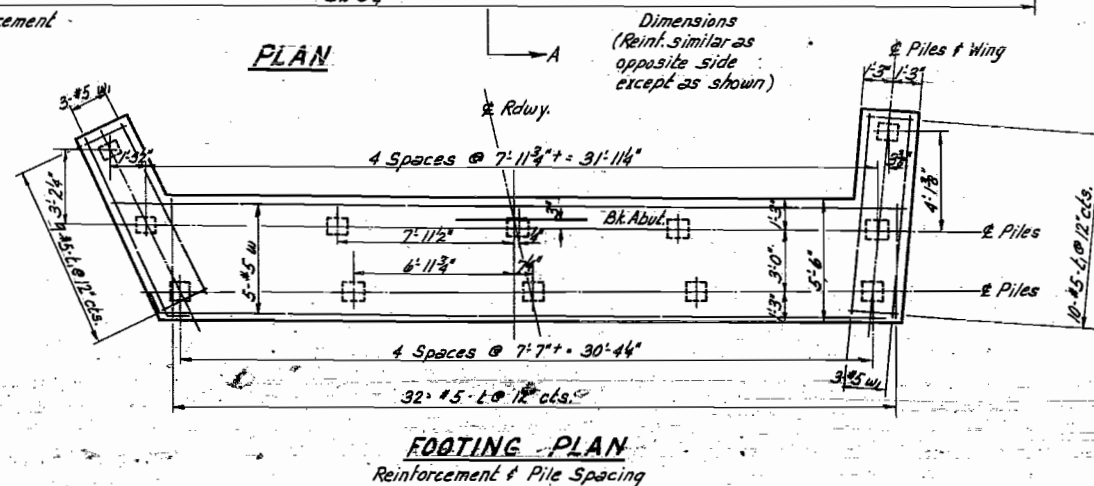
PILE DATA

Type - Concrete  
Capacity - 25 Tons Min.  
Est. Length - 52 Feet  
No. Req'd - 24 (2 abut.)  
Including 2 test piles

ABUTMENTS  
C.H. RT. 10 OVER  
F.A.I. RT. 80 & KING CREEK  
F.A.I. RT. 80 SEC. 06-1HB  
BUREAU COUNTY  
STA. 65+90.89

DESIGNED *Carroll*  
CHECKED *James H. Pence*  
DRAWN *P. Lawler*  
CHECKED *J.R.P.*

EXAMINED *Max 9 1961*  
*W.C. Baumann*  
PASSED *[Signature]*  
APPROVED *[Signature]*  
CHIEF HIGHWAY ENGINEER

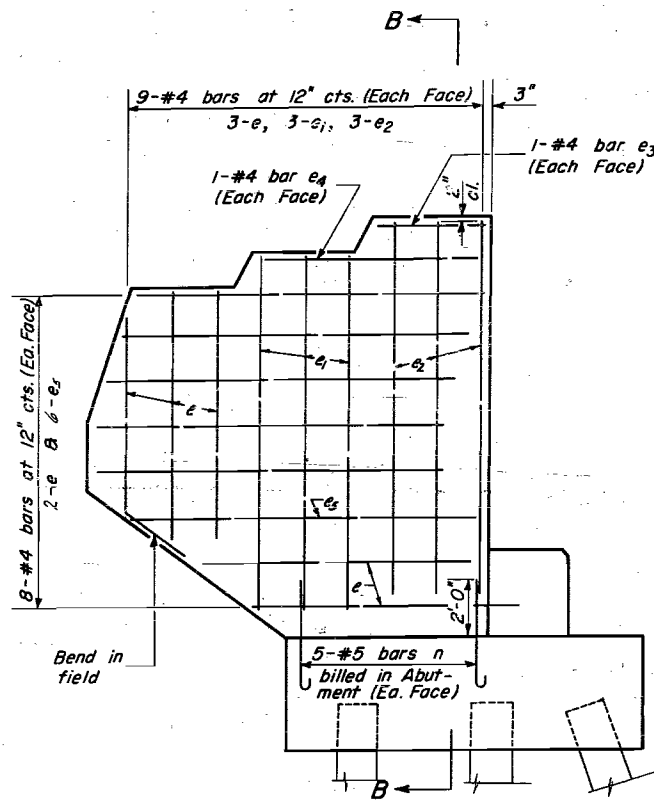


FOOTING PLAN  
Reinforcement & Pile Spacing

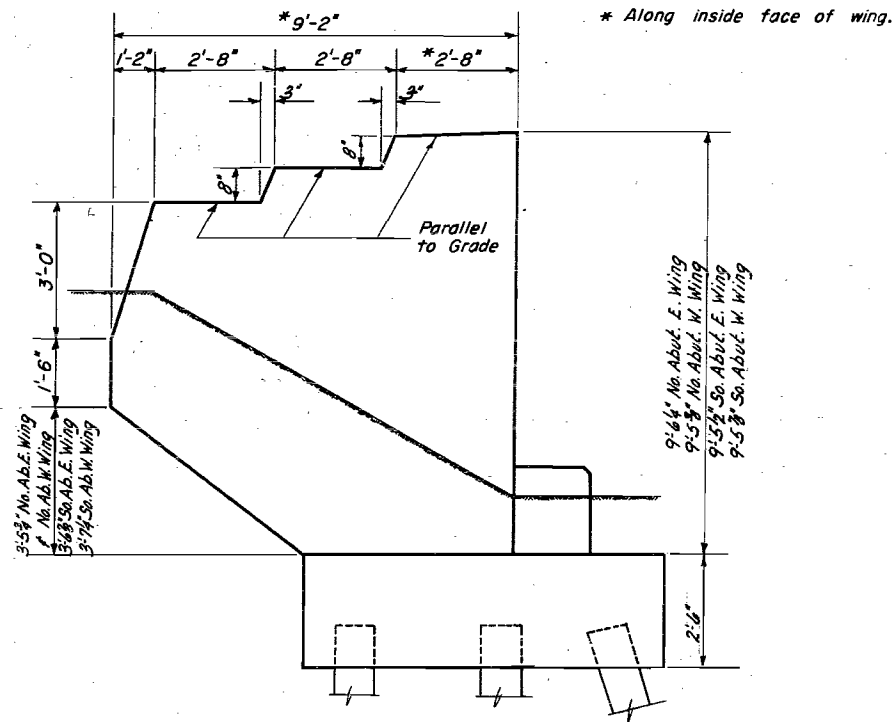
For Details of End Post & Sec. A-A See Sheet 8

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

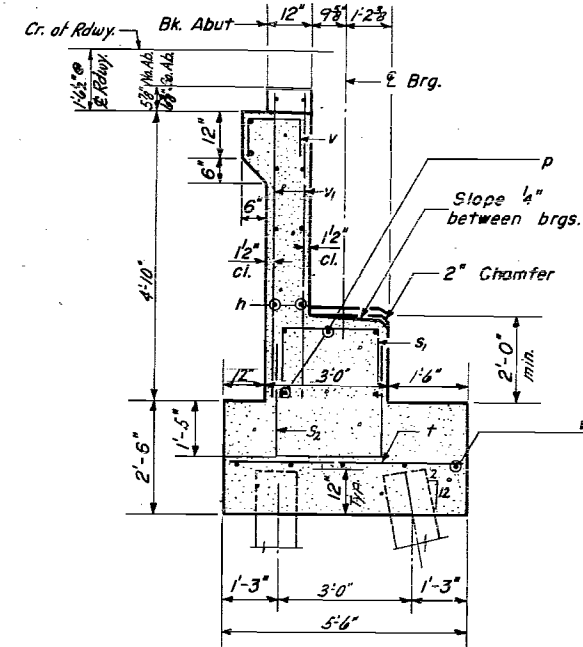
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 15 SHEETS
F.A.I. 80	06-1HB	BUREAU	34	15	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



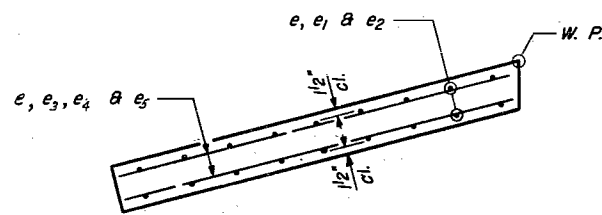
ELEVATION



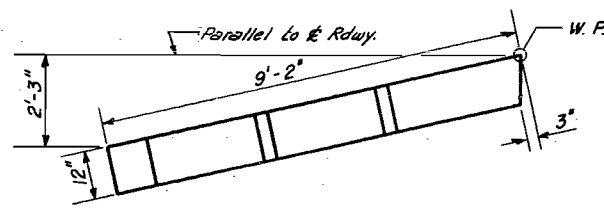
ELEVATION



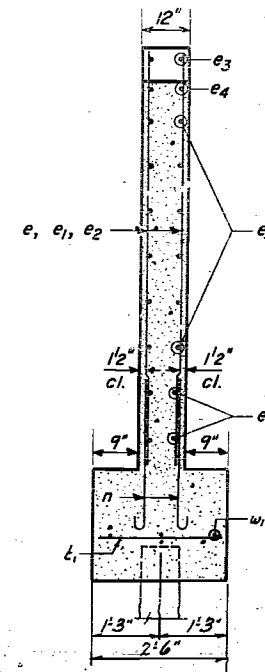
SECTION A-A



PLAN



PLAN



SECTION B-B

ONE END POST  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e	10	#4	6'-6"	—
e1	6	#4	8'-6"	—
e2	6	#4	9'-2"	—
e3	2	#4	2'-6"	—
e4	2	#4	5'-0"	—
e5	12	#4	7'-6"	—
Class X Concrete			Cu. Yds.	2.6
Reinforcement Bars			Lbs.	184

Class X Concrete and Reinforcement Bars are included in abutment bill of materials. See Sheet #7.

END POST DETAILS  
C.H. RT. 10 OVER  
F.A.I. RT. 80 KING CREEK  
F.A.I. RT. 80 SEC. 06-1HB  
BUREAU COUNTY  
STA. 65 + 90.89

DESIGNED *Daufelkactal*  
CHECKED *James M. Pence*  
DRAWN *W. A. Sausman*  
CHECKED *J. R. P.*

EXAMINED *W. E. Bannerman*  
PASSED *[Signature]*  
APPROVED *[Signature]*  
CHIEF HIGHWAY ENGINEER

MAY 9 1961

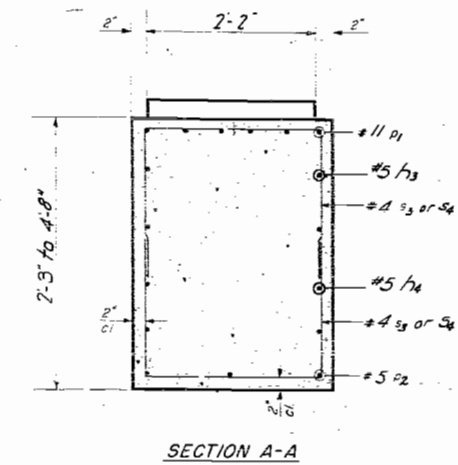
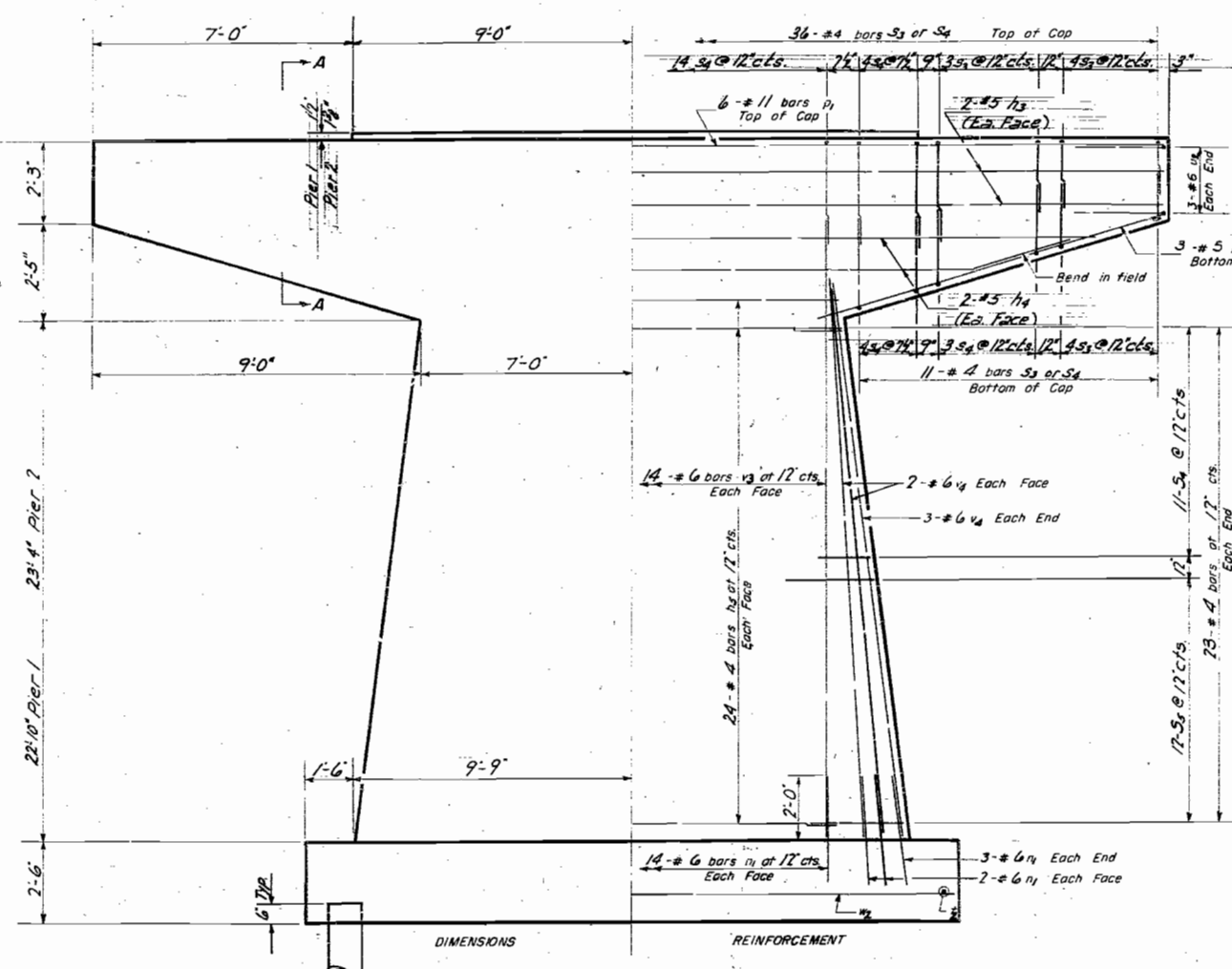
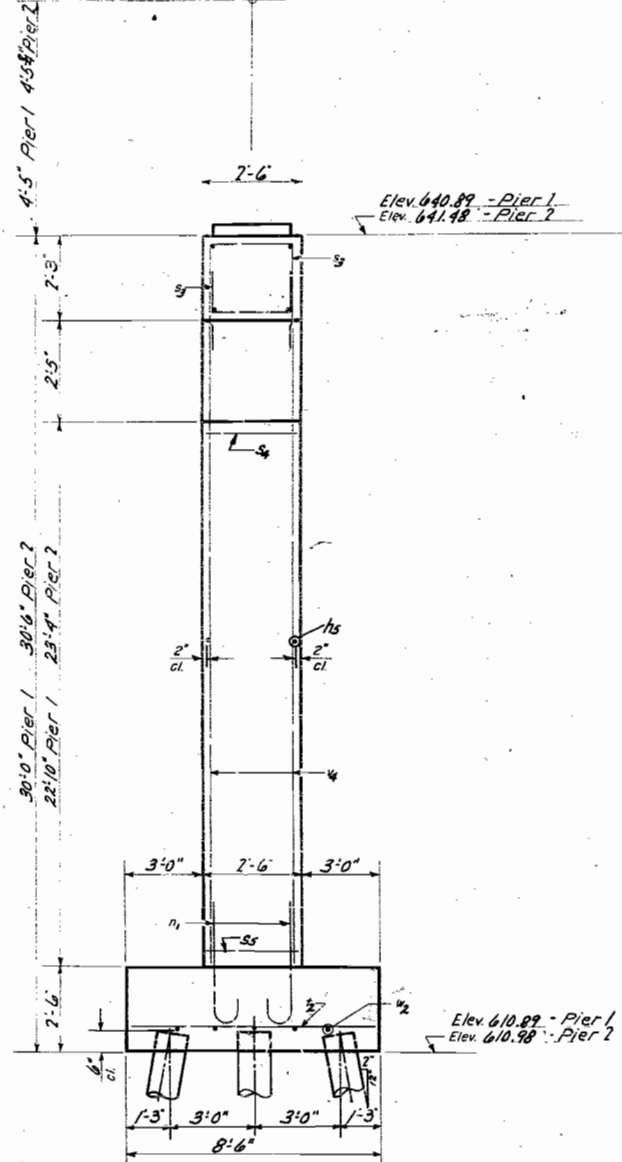
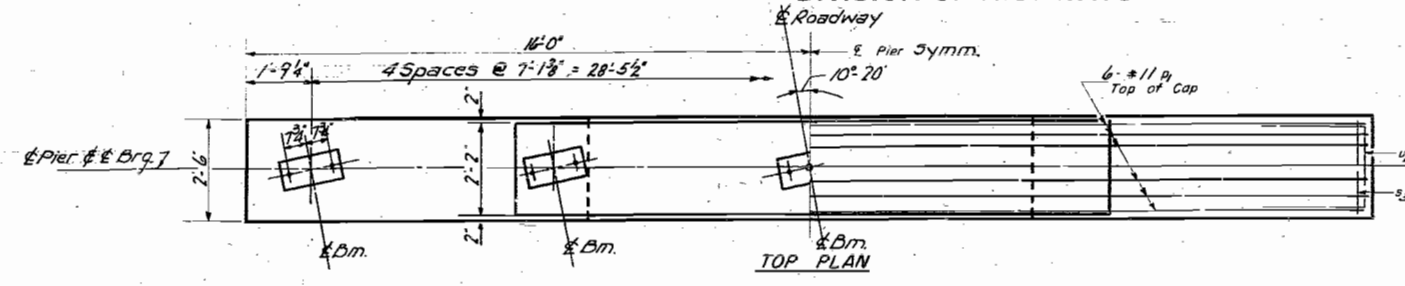


STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

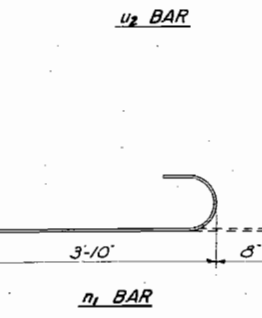
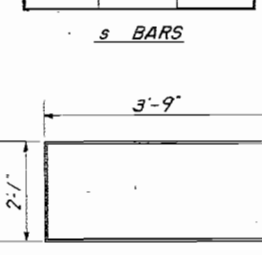
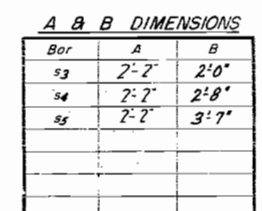
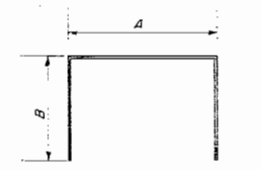
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.R.T. 80	06-1HB	BUREAU	34	16
FED. ROAD DIST. NO. 7		ALLOTTED	FED. AID PROJECT	

SHEET NO. 97  
15 SHEETS

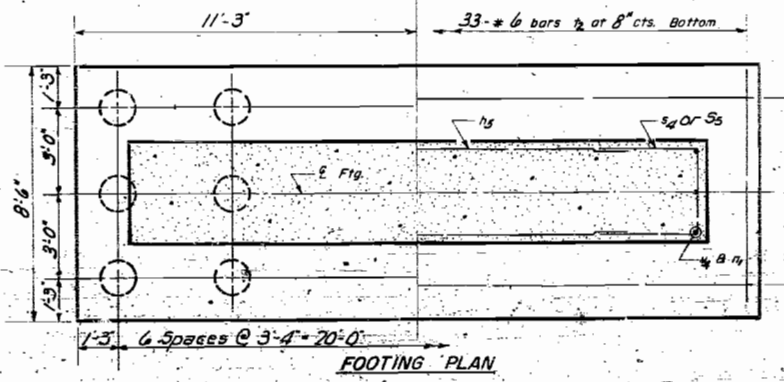
Pier 1 - Sta. 17+73.19  
Gr. Elev. 645.30  
Pier 2 - Sta. 18+78.94  
Gr. Elev. 645.97



Note: All edges shall have standard 3/4" chamfers except footings



FILE DATA  
Type - Untreated Piles  
No. Reg'd - 21 (Pier 1) & 21 (Pier 2)  
including 1 Test Pile @ Pier 2  
Capacity - 20 Tons  
Estimated Length - 18'-0"

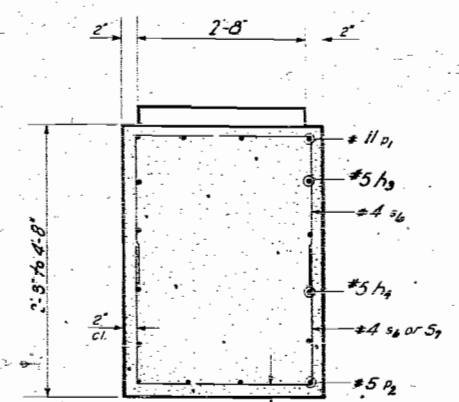
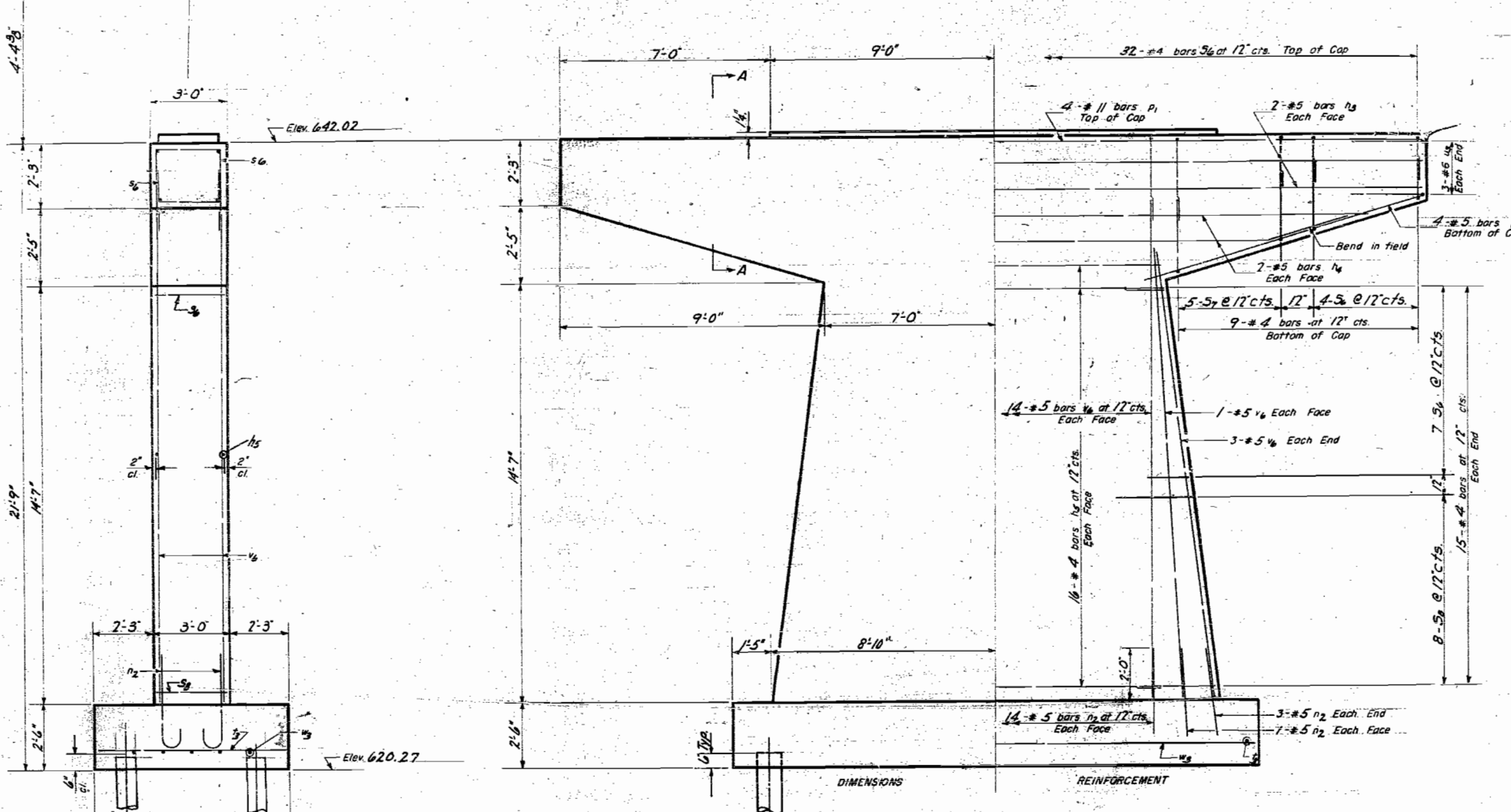
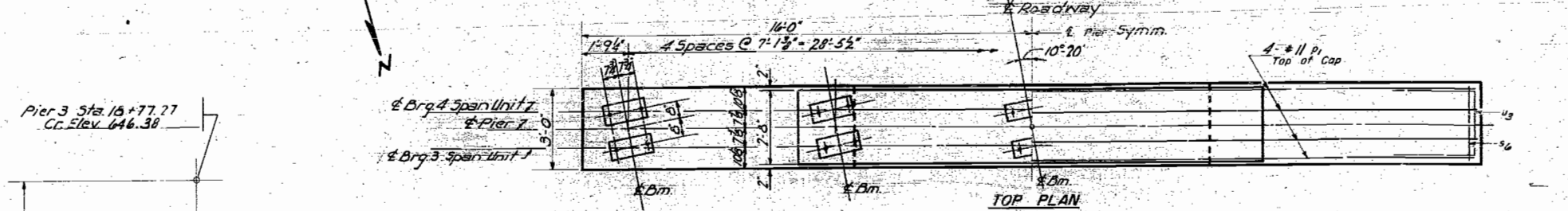


DESIGNED James J. Rayburn  
CHECKED *[Signature]*  
DRAWN J.T.P. W. A. Sausman  
CHECKED *[Signature]*  
EXAMINED V.M. Romine  
PASSED *[Signature]*  
APPROVED R.L. Bantlinger

PIERS 1 & 2  
C.H. ROUTE 10 OVER  
F.A.I.R.T. 80 & KING CREEK  
SECTION 06-1HB  
BUREAU COUNTY  
STA. 65+90.89

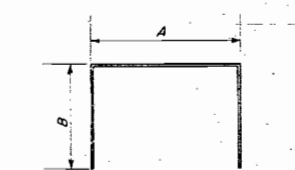
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10 15 SHEETS
S.A.L. P.A. I. 80	06-1HB	BUREAU	34	17	
FEEL ROAD DIST. NO. 7	CL. LINE	FEEL. AD. POINT			



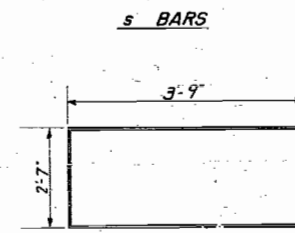
Note: All edges shall have standard 3/4" chamfers except footings

SECTION A-A

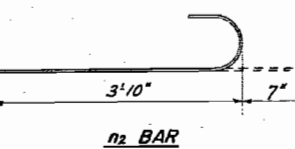


**A & B DIMENSIONS**

Bar	A	B
s6	7'-0"	2'-0"
s7	7'-0"	3'-4"
s8	7'-8"	2'-10"



u3 BAR



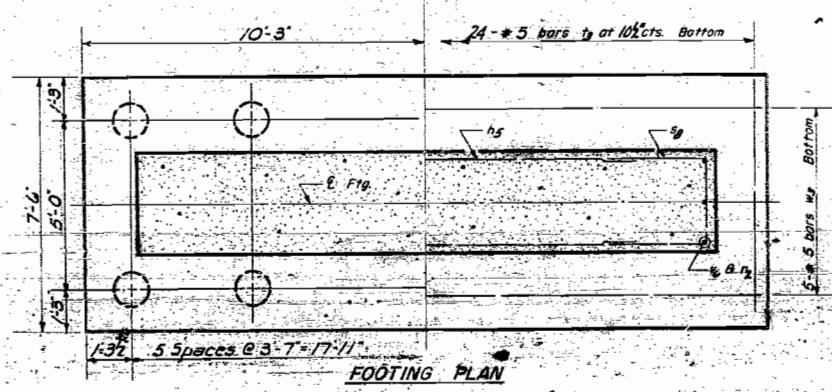
n2 BAR

**PIER 3  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h3	4	#5	31'-8"	—
h4	4	#5	26'-8"	—
h5	32	#4	13'-8"	—
n2	36	#5	4'-5"	U
p1	4	#11	31'-8"	—
p2	8	#5	10'-3"	—
s6	54	#4	6'-8"	□
s7	10	#4	9'-4"	□
s8	16	#4	8'-4"	□
u3	24	#5	7'-2"	—
u3	6	#6	10'-1"	□
v5	28	#5	18'-6"	—
v6	10	#5	16'-6"	—
v8	5	#5	20'-2"	—
Class X Concrete		Cu Yds.	54.3	
Reinforcement Bars		Lb.	2,950	
Crested Piles		Lin. Ft.	374	
Class A Excav. for Structures		Cu Yds.	43	

**FILE DATA**  
Type - Crested Piles  
No. Reg'd - 12  
Capacity - 20 Tons  
Est. Length - 77'-0"

ELEVATIONS



FOOTING PLAN

DESIGNED: James J. Rayburn  
CHECKED: Carl Katal  
DRAWN: J.P.R. W.A. Sauer  
CHECKED: Carl Katal

EXAMINED: V.M. Romine  
PASSED: C.F. Shuck  
APPROVED: P.P. Bartholomew

Oct. 14 1959

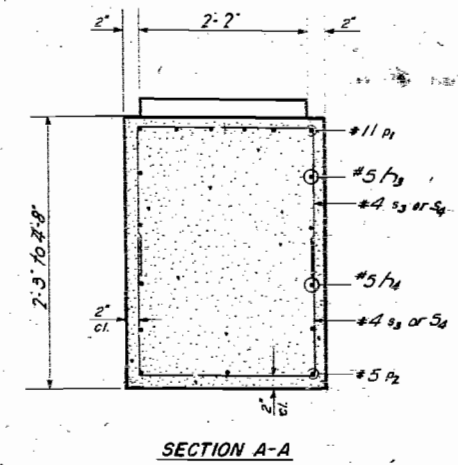
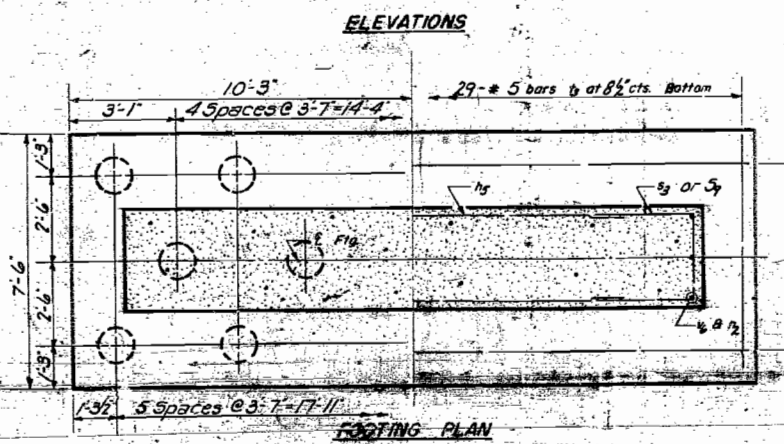
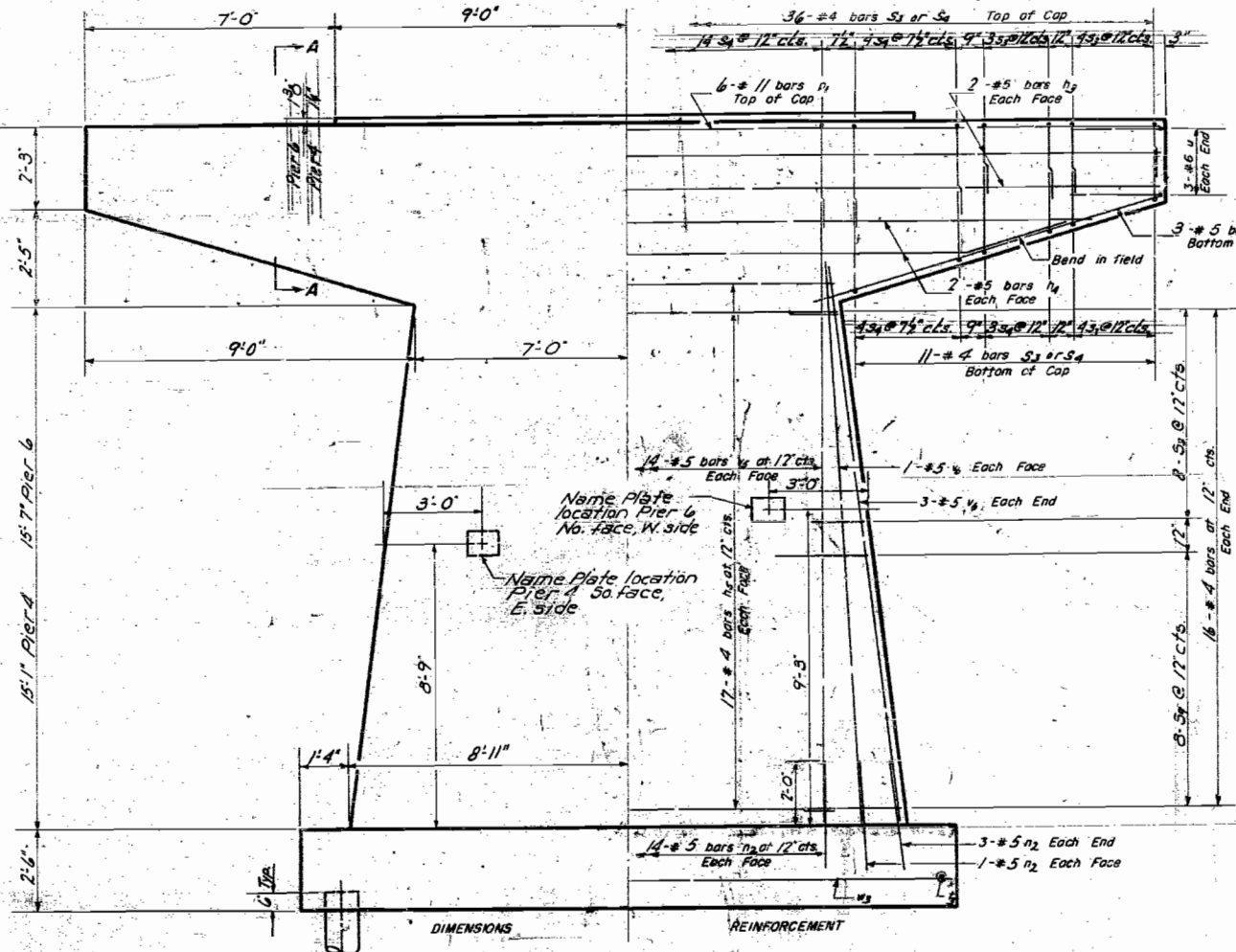
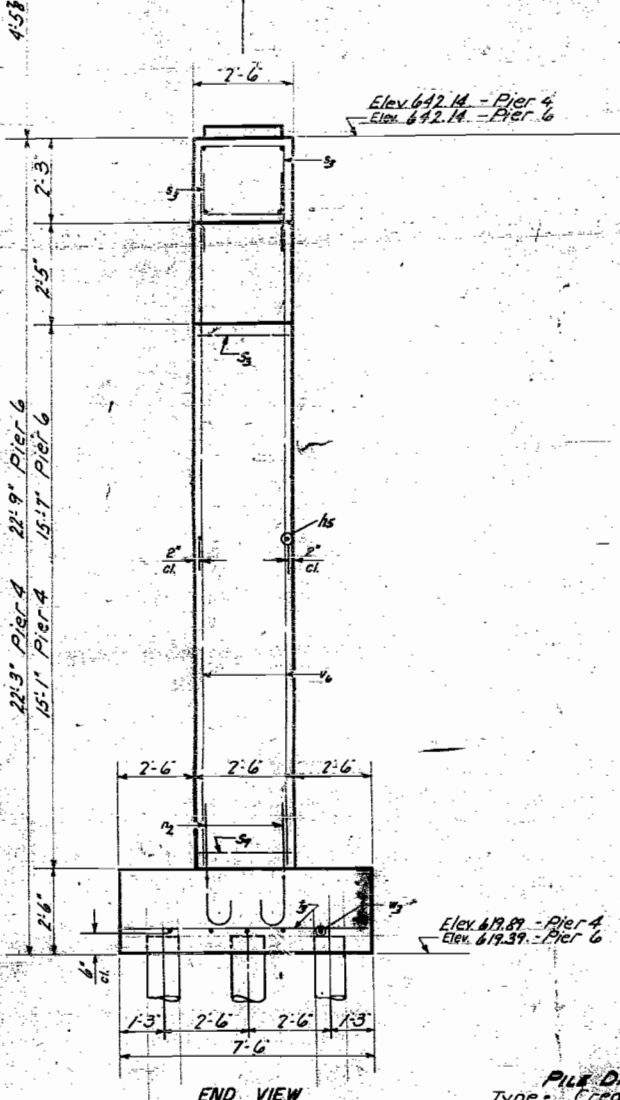
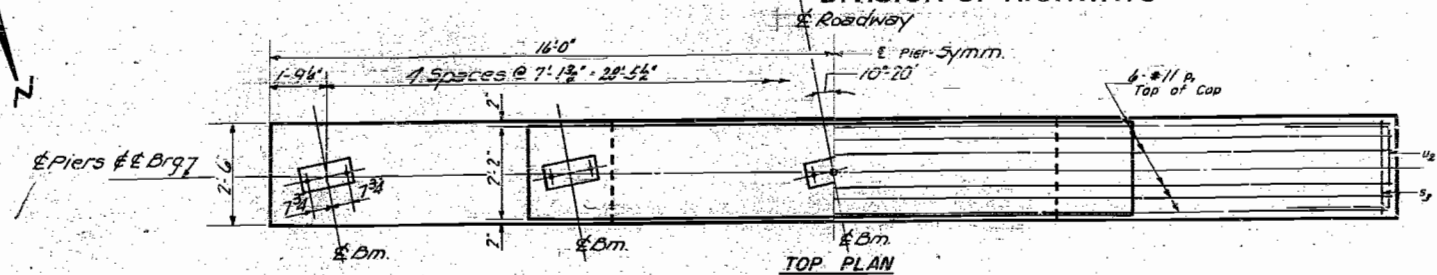
PIER 3  
C.H. ROUTE 10 OVER  
F.A.I. RT. 80 & KING CREEK  
F.A.I. RT. 80 SECTION 06-1HB  
BUREAU COUNTY  
STA. 65+90.89

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

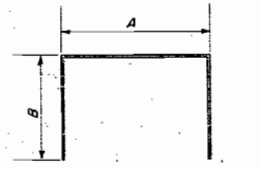
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	06-1HB	BUREAU	34	18
FED. ROAD DIST. NO. 7	CLIP 85	FED. NO. PROJECT		

SHEET NO. 11  
15 SHEETS

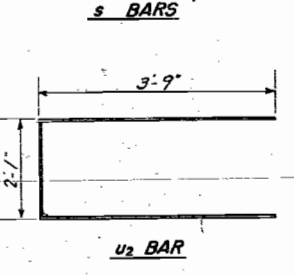
Pier 4 Sta. 19+19.11  
Ct. Elev. 444.63  
Pier 6 Sta. 20+55.77  
Ct. Elev. 444.43



Note: All edges shall have standard 3/4\"/>



Bar	A	B
S3	2'-2"	2'-0"
S4	2'-2"	2'-8"
S5	2'-2"	3'-0"



Bar	No.	Size	Length	Shape
h3	8	#5	3'-8"	—
h4	8	#5	2'-8"	—
h5	68	#2	13'-8"	—
n2	76	#5	4'-5"	□
p1	12	#11	31'-8"	—
p2	12	#5	10'-3"	—
s3	76	#4	6'-2"	□
s4	72	#4	7'-6"	□
s5	32	#4	8'-2"	□
u2	58	#5	7'-2"	—
u3	12	#6	9'-7"	□
u5	56	#5	18'-6"	—
u6	20	#5	16'-6"	—
u7	10	#5	20'-2"	—
Class X Concrete		Cu. Yds.	100.2	
Reinforcement Bars		Lb.	6,700	
Creosoted Piles		Lin. Ft.	913	
Class A Excav. For Struct.		Cu. Yds.	84	

DESIGNED *James J. Rayburn*  
CHECKED *W. A. Soudouka*  
DRAWN *W. A. Soudouka*  
EXAMINED *M. J. Romine*  
PASSED *W. A. Soudouka*  
APPROVED *W. A. Soudouka*

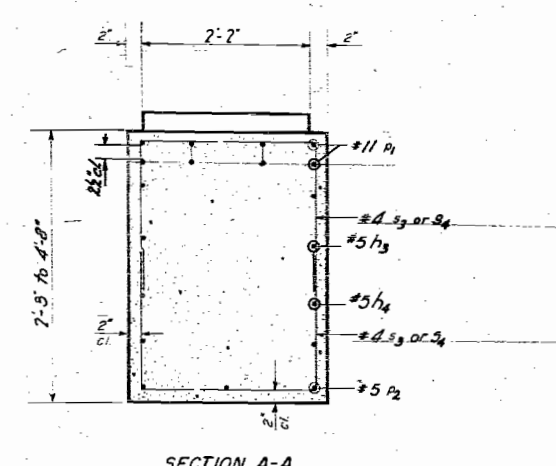
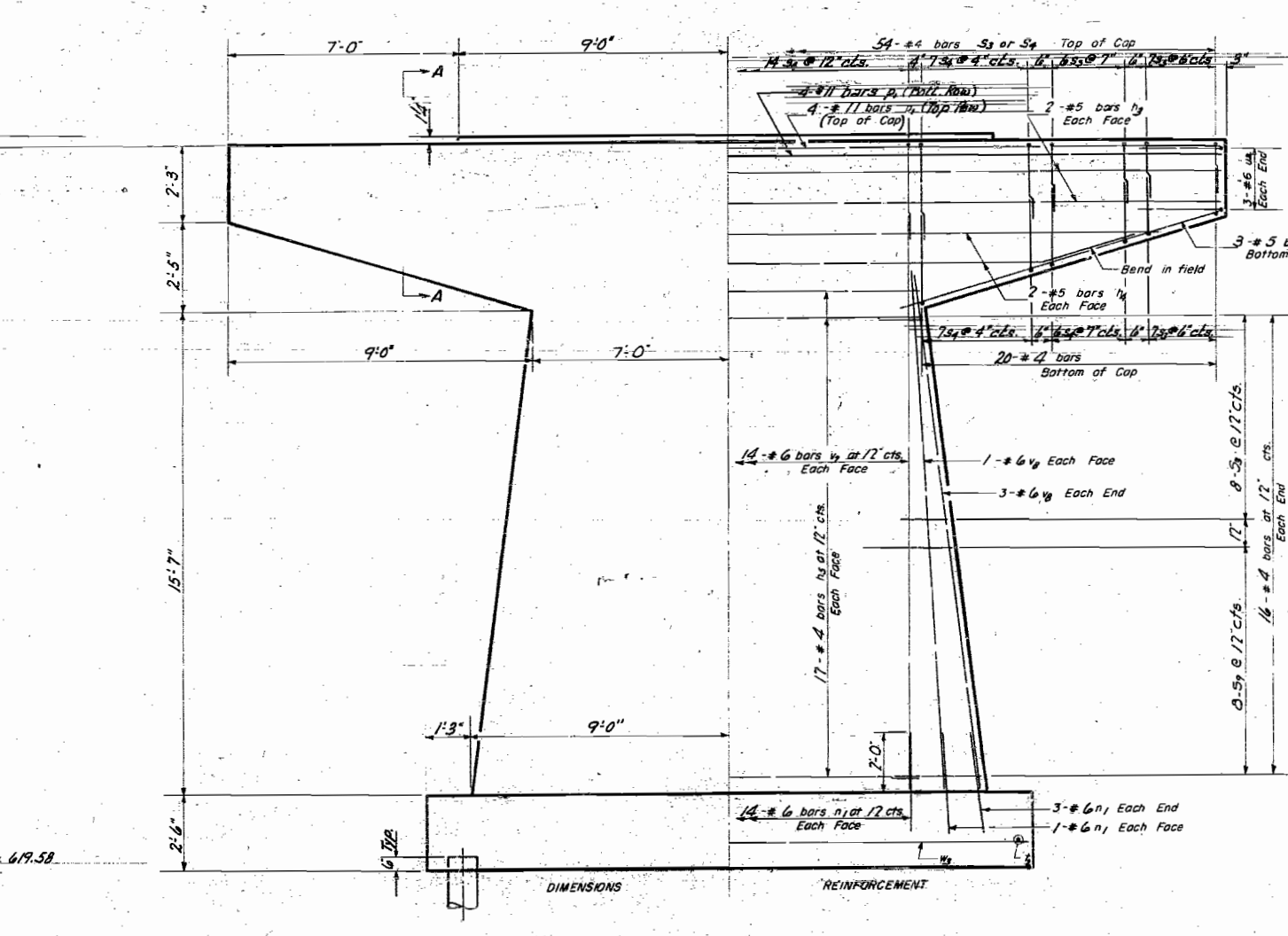
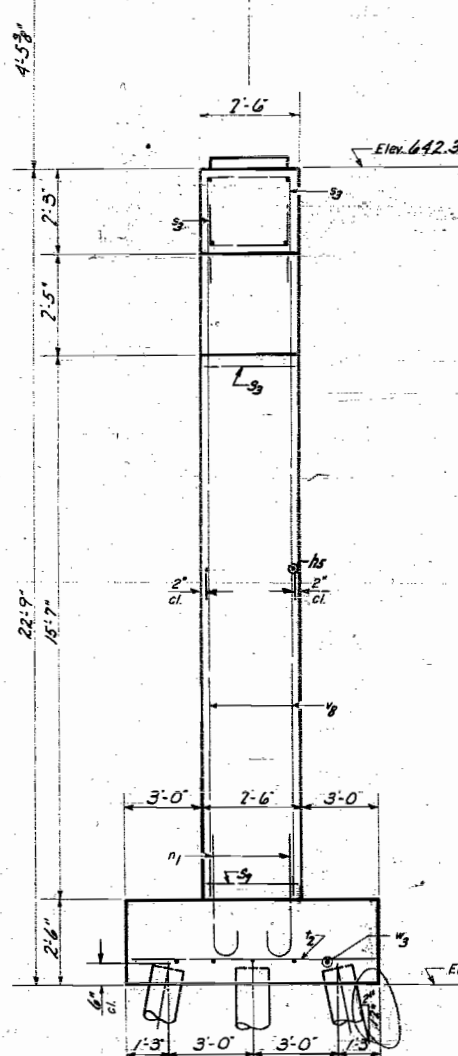
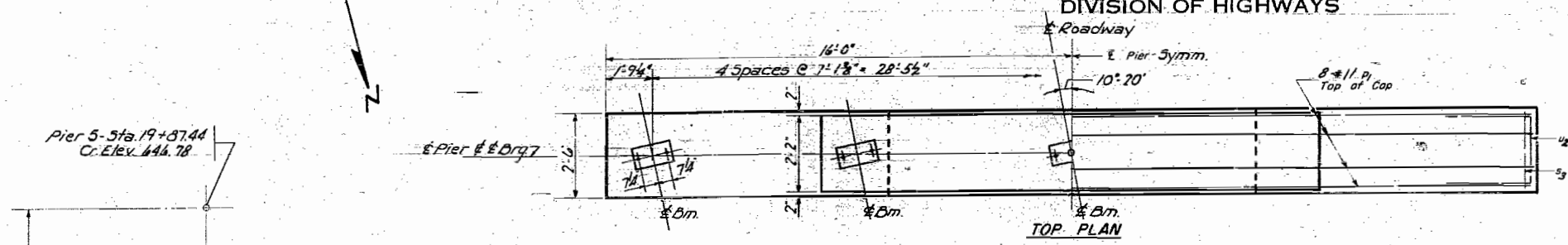
Oct 14, 1957

PILE DATA  
Type - Creosoted Piles  
No. Reqd. - 17 Pier 4 & 17 Pier 6  
Capacity - 20 Tons  
Est. Length - 77'-0"

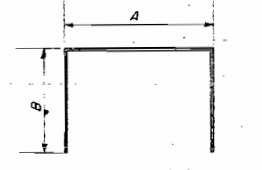
PIERS 4 & 6  
C.H. ROUTE 10 OVER  
F.A.I. RT. 80 & KING CREEK  
F.A.I. RT. 80 SECTION 06-1HB  
BUREAU COUNTY  
STA. 65+90.89

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12 15 SHEETS
F.A.I. RD.	06-1NB	BUREAU	34	19	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			

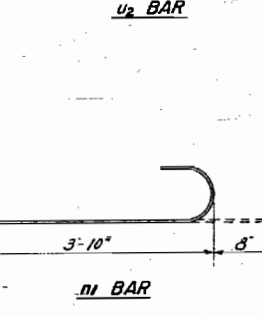
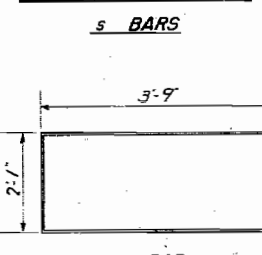


Note: All edges shall have standard 3/4" chamfers except footings



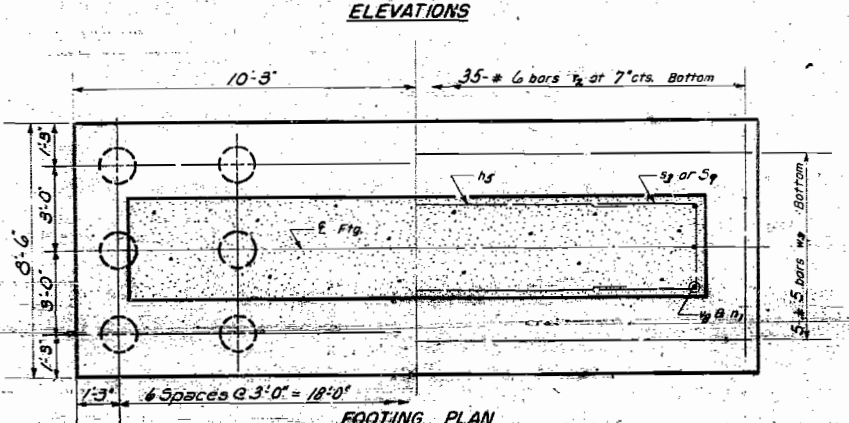
**A B B DIMENSIONS**

Bar	A	B
S3	2'-2"	2'-0"
S4	2'-2"	2'-8"
S9	2'-2"	3'-0"



PIER 5  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n3	4	#5	31'-8"	—
n4	4	#5	24'-8"	—
n5	34	#4	13'-8"	—
n1	38	#6	4'-6"	U
P1	8	#11	31'-8"	—
P2	6	#5	10'-3"	—
S3	56	#4	6'-2"	□
S4	54	#4	7'-6"	□
S9	16	#4	8'-2"	□
U2	35	#6	8'-2"	—
U2	6	#6	9'-7"	□
V7	28	#6	19'-0"	—
V8	10	#6	17'-0"	—
V9	5	#5	20'-2"	—
Class X Concrete		Cu Yds	51.2	
Reinforcement Bars		Lb.	4,470	
Crested Piles		Lin. Ft.	567	
Test Piles		Each	1	
Class A Excav for Structures		Cu Yds	45	



**PILE DATA**  
Type - Crested Piles  
No. Reg'd - 21  
Capacity - 70 Tons  
Est. Length - 77'-0"

DESIGNED *James J. Rayburn*  
CHECKED *Confidential*  
DRAWN *W. A. Sausaman, P.L.*  
CHECKED *Confidential*

EXAMINED *V.M. Romine*  
PASSED *P.L. Shurt*  
APPROVED *R.R. Bastian*

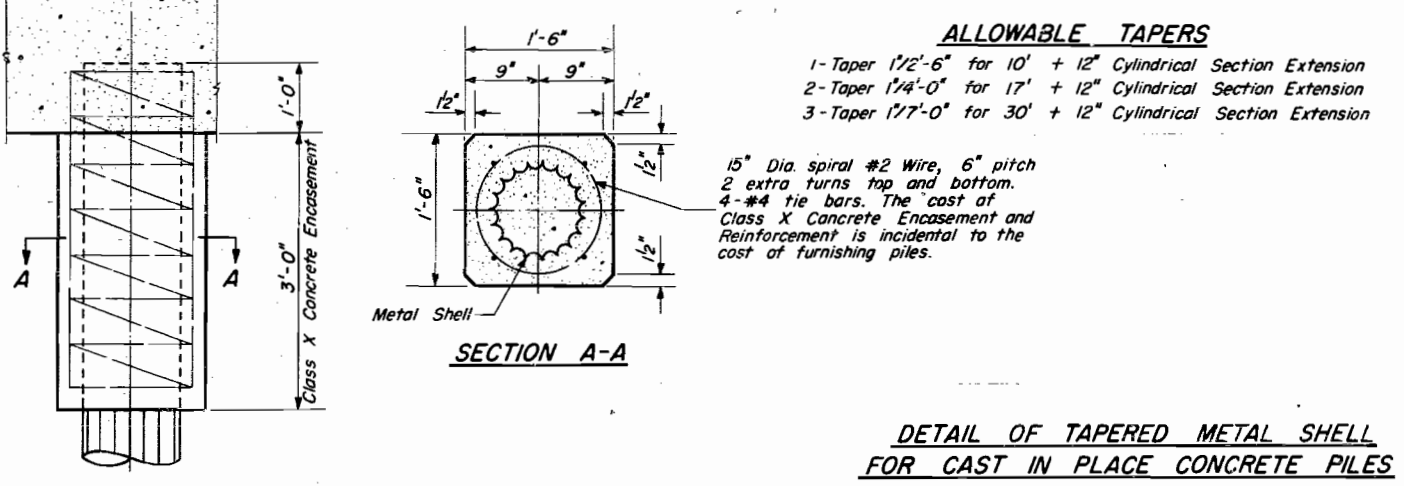
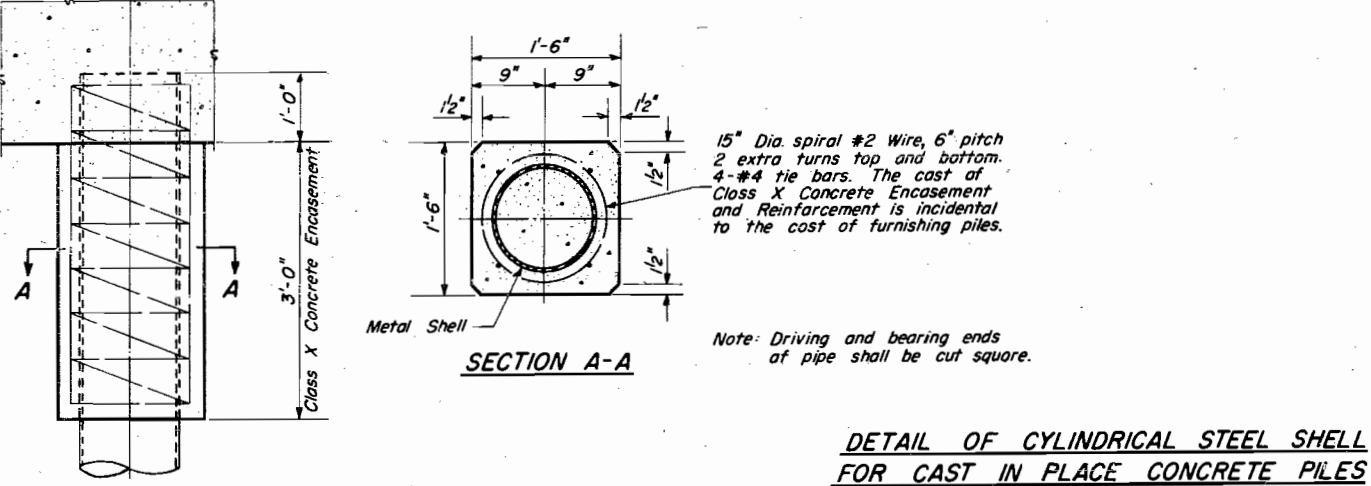
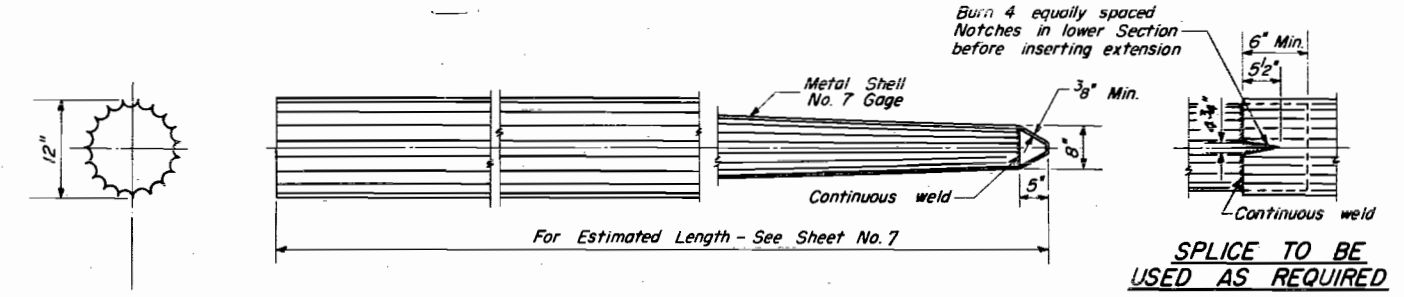
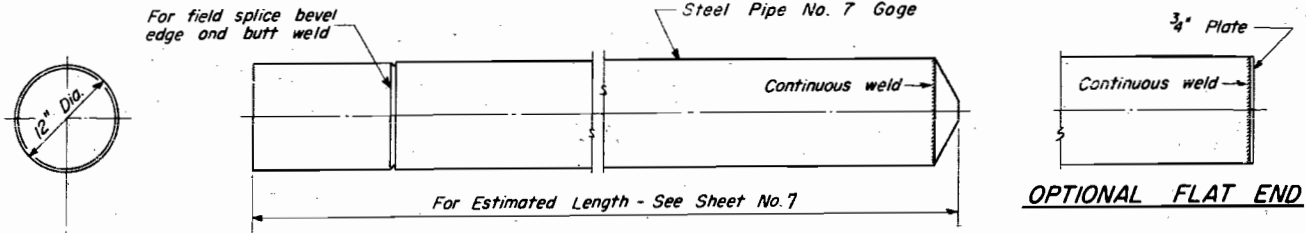
Oct 14, 1957  
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES  
AREA OF DESIGN  
CHIEF HIGHWAY ENGINEER

PIER 5  
C.H. ROUTE 10 OVER  
F.A.I. RT. 80 & KING CREEK  
F.A.I. RT. 80 SECTION 06-1 NB  
BUREAU COUNTY  
STA. 65+90.89

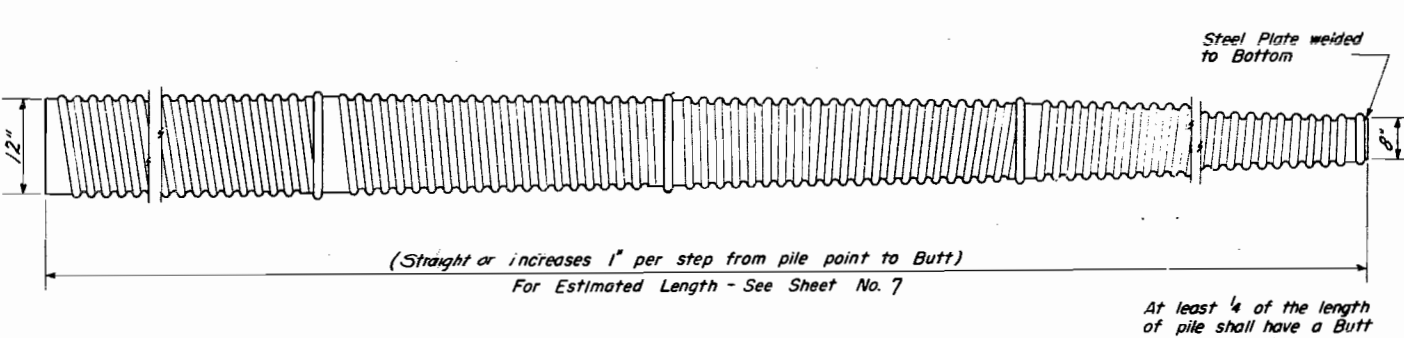
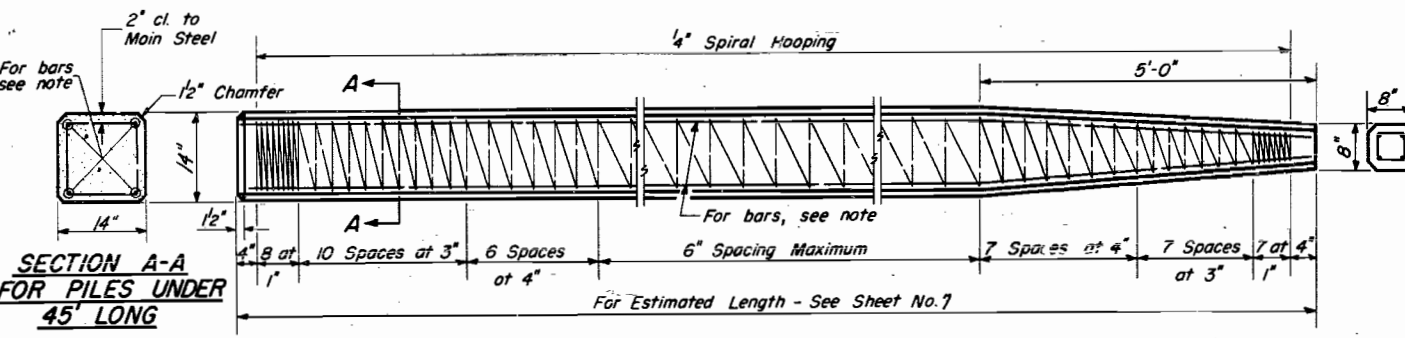


STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO./3
1. A. I. 80	06-1HB	BUREAU	34	20	15 SHEETS
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			



- ALLOWABLE TAPERS**
- 1-Taper 1/2'-6" for 10' + 12" Cylindrical Section Extension
  - 2-Taper 1/4'-0" for 17' + 12" Cylindrical Section Extension
  - 3-Taper 1/7'-0" for 30' + 12" Cylindrical Section Extension



**SECTION A-A FOR PILES UNDER 45' LONG**

Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel. For 14" Piles under 45' long use 4-#9 bars the full length.

Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21 L\* from each end. For Piles longer than 45', use three slings placed at a distance of 0.12 L\* from each end and at mid-point of pile.

\*L = Over all length of pile to be handled.

At least 1/4 of the length of pile shall have a Butt diameter equal to or greater than 12". Gages are furnished to suit soil conditions (14 Gage Min.)

Reinforcement is incidental to the cost of furnishing piles.

6-#6 bars (For Details, See below)

4" Spiral Hooping at 6" spacing or #4 Ties at 12" cts.

POINT (Applies only to Step Taper type Piles)

BUTT

DESIGNED	Checked	EXAMINED	MAY 9 1961
CHECKED	James R. Pence	W. G. Bennett	
T.K. DRAWN	P. Lawler	PASSED	
CHECKED	W. A. Sausaman	APPROVED	
	J. G. P.		

DETAIL OF PRECAST CONCRETE PILES

DETAIL OF MANDREL DRIVEN PILES FOR CAST IN PLACE CONCRETE PILES

CONCRETE PILE DETAILS  
C.H. RT. 10 OVER  
F.A.I. RT. 80 & KING CREEK  
F.A.I. RT. 80 SEC. 06-1HB  
BUREAU COUNTY  
STA. 65+90.89