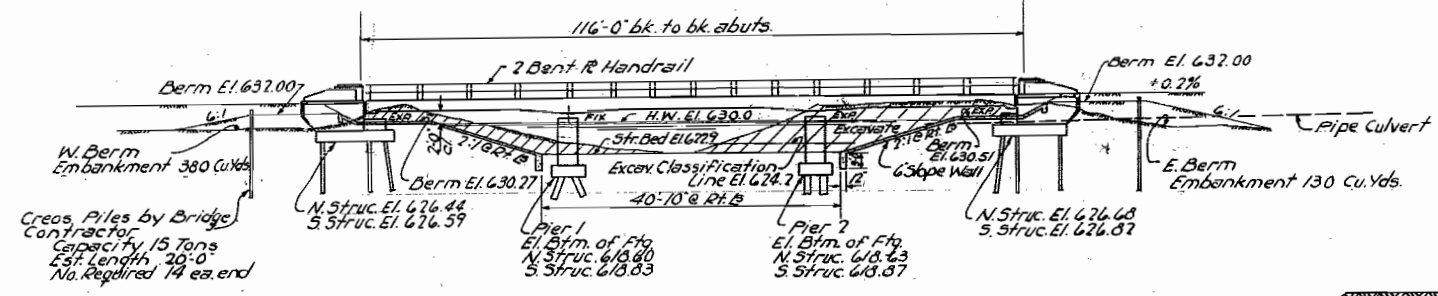


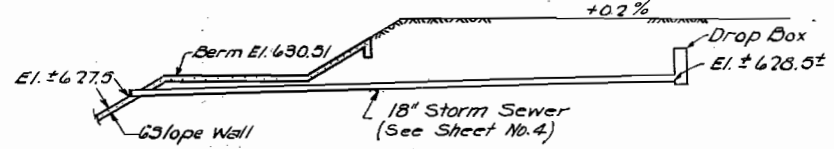
B.M. Spike & Washer in telephone pole No. 541
 244' Lt. Sta. 180+79 El. 630.63 (U.S.G.S. Datum)
 Existing Structure: None

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
1-80	6-18-2	Bureau	19	6	8 SHEETS
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT: I-80-1(38)39			



ELEVATION

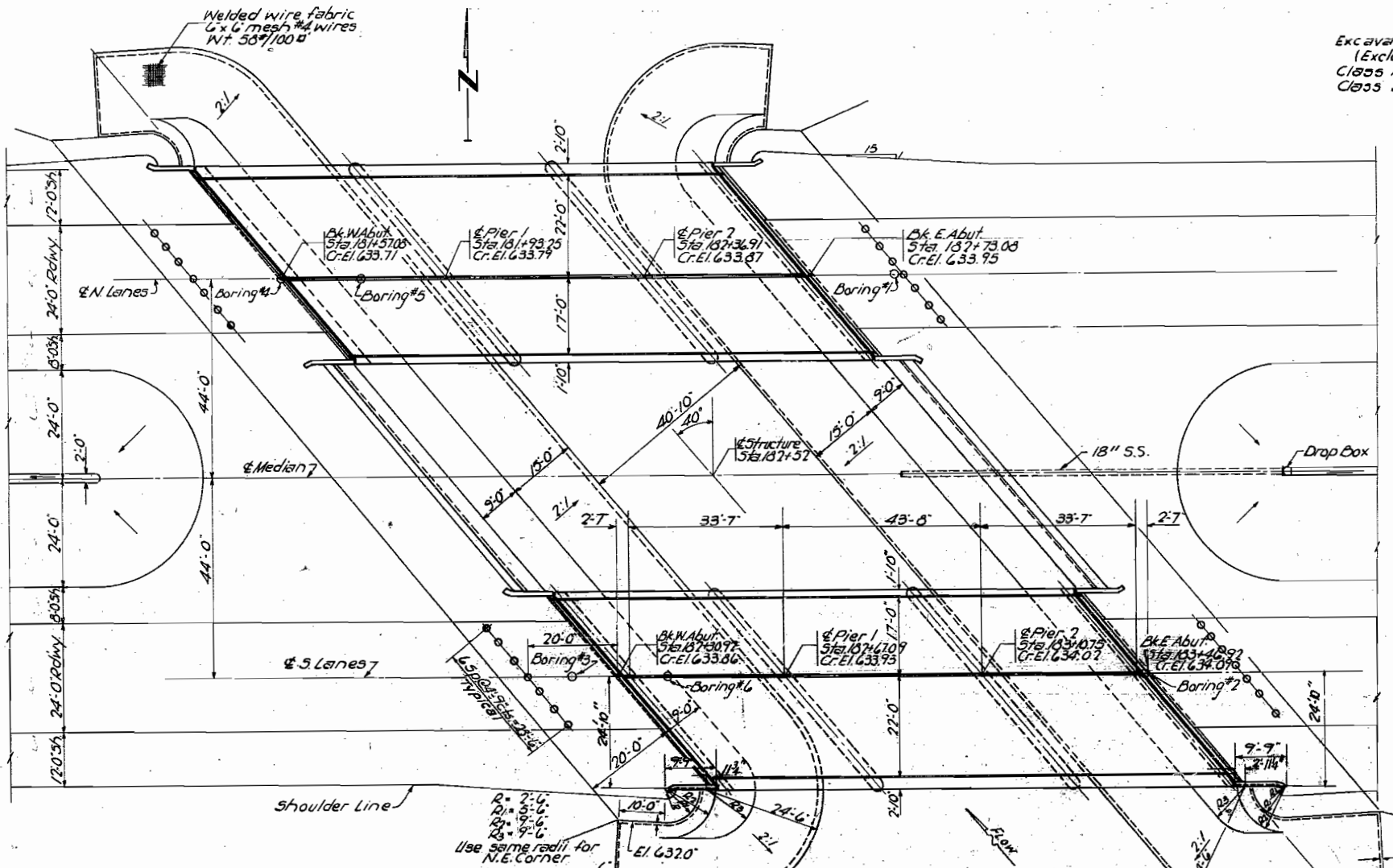


GENERAL NOTES
 Class X concrete shall be used throughout except in handrails and piers.
 Class A concrete shall be used in piers.
 Handrail concrete shall be used in handrails.
 The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.
 Slope wall shall be reinforced with welded wire fabric, 6"x6" mesh, #4 wires weighing 50# per 100 sq. ft.
 Layout of slope walls may be varied to suit ground conditions in the field as directed by the Engineer.
 All rollers, rockers, bearing plates, lead 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.
 Expansion guards shall be fabricated and erected in accordance with Article 51.13(d) of the Standard Specifications.
 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 2 concrete and 2 timber test piles in permanent locations as directed by the Engineer before ordering remainder of piles. One concrete test pile shall be driven in the North East Abutment and one in the South West abutment. One timber test pile shall be driven in Pier #1, North structure and one in Pier #2 South structure.
 Holes shall be precored for piles under abutments. See Article 60.9(c) of the Standard Specifications

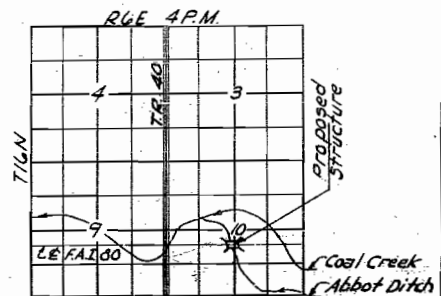
Excavation for Slope Wall
 (Excluding Channel Excav.)
 Class A Excav. for Struct. = 440 Cu.Yds.
 Class B Excav. for Struct. = 140 Cu.Yds.

STATION 182+52
 BUILT 19 BY
 STATE OF ILLINOIS
 F.A.I. Pt. 80 Sec. 06/18-2
 F.A. Proj. I-80-1(38)
 LOADING H20-316#ALT.

NAME PLATE LETTERING
 See Std. 2113



PLAN



LOCATION SKETCH

WATERWAY INFORMATION
 Drainage Area 2940 Acres
 Character rolling, hilly, cult.
 Required Opening (50 Yr. Fl.) 350 Sq. Ft.
 Present Opening 50 Sq. Ft.
 Proposed Opening 350 Sq. Ft.
 Ordinary Water Elev. 623.7
 Low Water Elev. 623.2

TOTAL BILL OF MATERIAL

ITEM	SUPER	SUB	TOTAL
Class X Concrete	Cu.Yds. 346.3	201.3	747.6
Class A Concrete	Cu.Yds.	324.7	324.7
Handrail Concrete	Cu.Yds. 4.6		4.6
Reinforcement Bars	Lbs. 164,710	24,110	188,820
Structural Steel	Lbs. 28,030		28,030
Metal Handrail	Lin. Ft. 453		453
Name Plate	Ea. 2		2
Concrete Piles	Lin. Ft. 1740		1740
Test Piles (Concrete)	Ea. 2		2
Untreated Piles	Lin. Ft. 1880		1880
Test Piles (Timber)	Ea. 2		2
Cresoted Piles	Lin. Ft. 560		560
Slope Wall (G)	Sq.Yds. 1800		1800
Class A Excavation for Structures	Cu.Yds. 770		770
Class B Excavation for Structures	Cu.Yds. 410		410
Channel Excavation	Cu.Yds. 3907		3907

DESIGNED V.R. Sonti
 CHECKED P.H. Hogensen
 DRAWN V.R.S. J. Sandoval
 CHECKED Q.H. H.
 MAY 25 1960
 EXAMINED V.M. Romine
 PASSED [Signature]
 APPROVED [Signature]

DESIGN STRESSES
 fc = 1400 psi Super. # 5ub.
 yc = 75 psi Footings
 fs = 20,000 psi Reinf.
 fs = 18,000 psi Struct.
 Use same radii for NW corner

GENERAL PLAN AND ELEVATION
 ABBOTT DITCH
 PROJ. I-80-1(38)39
 F.A.I. Pt. 80 Sec. 06/18-2
 BUREAU COUNTY
 STA. 182+52.00
 LOADING H20-316#ALT.

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

Elevation	Blows per Foot	Qu
Boring No. 1 Boring located at Station 182+92, 44 Ft Lt Centerline.		
Surface of Ground. 630.5		
Stiff brown silty clay.		
626.0	4	
Loose brown silty fine sand.		
625.5		
624.5		
624.0		
Medium brown silty fine sand.	16	
623.0		
622.0		
621.5		
620.5	60	
619.5		
Very dense brown silty fine sand.		
618.0	72	
617.0		
616.0		
Very dense gray subangular well graded sand.	59	
615.5		
614.5		
613.5		
613.0	39	
Dense gray subangular well graded sand and occasional small gravel.		
612.0		
610.5	32	
608.0		
607.0	39	
606.5		
Medium gray coarse subangular sand and occasional gravel.	23	
605.5		
603.0		
Very dense gray subangular sand and occasional gravel.	52	
602.0		
601.0		
600.5		
599.5	16	1.38
598.0		
Stiff gray sandy clay till.	16	1.34
597.0		
595.5		
594.5	21	1.80
592.5		
Very stiff gray clay till.	26	2.00
590.5		
589.5		

Elevation	Blows per Foot	Qu
Boring No. 1 Cont.		
Very stiff gray clay till.		
585.5	37	2.50
584.5		
583.5		
Very dense gray sandy silt.		
580.5	103	
579.5		

Elevation	Blows per Foot	Qu
Boring No. 2 Boring located at Station 183+46, 44 Ft Rt Centerline.		
Surface of Ground. 631.5		
Medium dark brown sandy silty clay.		
627.0	5	0.65
626.0		
625.0		
Loose brown silty fine sand.		
622.0		
621.0	9	
620.0		
Medium gray subangular well graded sand and occasional small gravel.	26	
617.0		
616.0		
Dense gray subangular well graded sand and occasional small gravel.	37	
612.0		
611.0		
609.0		
607.0	17	
606.0		
Medium gray subangular well graded gravel.		
605.0		
604.0	24	
602.0		
601.0	24	
599.0		
Stiff gray sandy clay till with silt lenses.	24	1.50
597.0		
596.0		
595.0		
Dense gray sandy silt with thin layers of clay till.		
592.0	33	
591.0		
587.0	30	
586.0		

Elevation	Blows per Foot	Qu
Boring No. 3 Boring located at Station 182+22, 44 Ft Rt Centerline.		
Surface of Ground. 630.0		
Stiff black silty clay.		
628.0		
Stiff gray sandy clay.		
625.0	4	1.22
624.0		
623.0		
Medium brown silty fine sand.		
620.0	20	
619.0		
Dense gray subangular well graded sand and occasional small gravel.	48	
615.0		
614.0		
613.0		
Medium gray subangular well graded sand and occasional small gravel.	21	
610.0		
609.0		
607.0		
606.0		
605.0	24	
604.0		
Medium gray subangular sand and occasional small gravel.		
600.0	15	
599.0		
598.0	32	
Dense gray sandy silt.		
599.0		
596.5		
595.0	10	1.96
594.0		
593.0		
Stiff gray clay till.	17	1.96
590.0		
589.0		

Elevation	Blows per Foot	Qu
Boring No. 4 Boring located at Station 181+57, 44 Ft Lt Centerline.		
Surface of Ground. 629.8		
Stiff black and brown silty clay.		
625.5		
625.0		
Loose brown and gray silty slightly clayey sand.	6	
624.0		
622.0		
Dense gray silty fine sand.	30	
620.0		
619.0		
617.0		
Medium gray subangular well graded sand.	28	
615.0		
614.0		
Dense gray subangular well graded sand and occasional small gravel.	30	
612.0		
610.0		
609.0		
607.5	17	
605.0		
604.0		
Medium gray subangular sand and occasional small gravel.		
600.0	15	
599.0		
598.0	17	1.43
595.0		
594.0		
593.0		
Dense gray poorly graded gravel.	31	
590.0		
589.0		

Elevation	Blows per Foot	Qu
Boring No. 5 Boring located at Station 181+75, 44 Ft Lt Centerline.		
Surface of Ground. 636.0		
Medium to stiff black and brown silty clay.		
625.5		
Loose gray-brown silty sand.		
622.0		
621.0	32	
620.0		
617.0		
Dense gray silty sand.	32	
615.0		
614.0		
612.0		
610.0	34	
609.0		
607.5		
Dense gray subangular well graded sand and occasional gravel.		
605.0	37	
604.0		
603.0		
602.0		
601.0	14	
600.0		
599.0		
598.0		
Medium gray well graded sand and occasional gravel.		
601.0	13	
600.0		
599.0		
Dense gray poorly graded gravel.	38	
595.0		
594.0		
593.0		
592.0		
591.0		
590.0	37	

Elevation	Blows per Foot	Qu
Boring No. 6 Boring located at Station 182+40, 44 Ft Rt Centerline.		
Surface of Ground. 636.0		
Medium to stiff black and brown silty clay.		
627.0		
Stiff gray sandy clay.		
622.0		
621.0	18	
620.0		
Medium brown silty sand.		
617.0		
Very dense gray subangular well graded sand and small gravel.	53	
615.0		
612.0		
611.0	25	
610.0		
Medium gray subangular well graded sand, occasional gravel.		
606.0		
605.0	18	
602.5		
Dense gray sandy silt.	36	
601.0		
600.0		
599.0		
Very stiff gray clay till.	8	2.10
595.0		
591.0	14	2.06
590.0		

DESIGNED *V.R. Smith*
CHECKED *P.H. Higgins*
DRAWN *KRS*
CHECKED *P.H.H.*

MAY 25 1960
EXAMINED *V.M. Romine*
PASSED *[Signature]*
APPROVED *[Signature]*

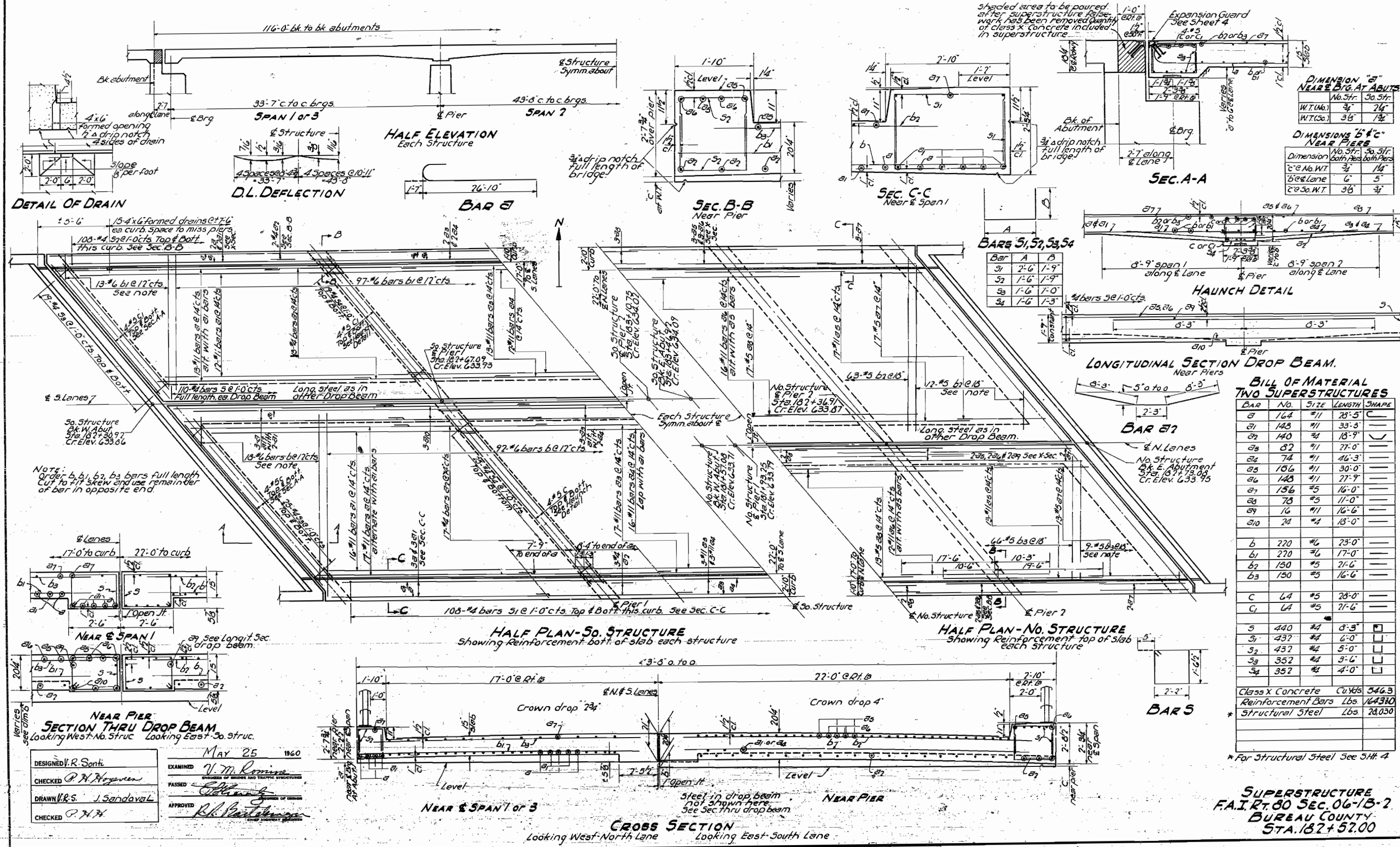
Note:
N = Blows per foot of penetration of sampling spoon.
Hammer Weight: 350 lbs. Drop = 12 inches
Qu = Unconfined compressive strength in tons per sq. ft.

BORING DATA
F.A.I. RT. 80 SEC. 06/18-2
BUREAU COUNTY
STA. 182+57.00

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6-10-B	Bureau	19	8	3

8 SHEETS



DIMENSION 'a' NEAR & BIG. AT ABUTS

No. Str.	30 Str.
WT. (No.)	24
WT. (So.)	35

DIMENSIONS 'b' & 'c' NEAR PIERS

Dimension	No. Str.	No. Str.
c'e No. WT	34	14
b'e Lane	6	5
c'e So. WT	36	34

BAR S₁, S₂, S₃, S₄

Bar	A	B
S ₁	2'-6"	1'-9"
S ₂	1'-6"	1'-9"
S ₃	1'-6"	1'-0"
S ₄	1'-6"	1'-3"

BILL OF MATERIAL TWO SUPERSTRUCTURES

BAR	NO.	SIZE	LENGTH	SHAPE
a	164	#11	28'-5"	C
a1	143	#11	33'-3"	
a2	140	#4	18'-9"	
a3	82	#11	27'-0"	
a4	74	#11	46'-3"	
a5	186	#11	30'-0"	
a6	148	#11	27'-9"	
a7	156	#5	16'-0"	
a8	78	#5	11'-0"	
a9	16	#11	16'-6"	
a10	24	#4	18'-0"	
b	220	#6	23'-0"	
b1	270	#6	17'-0"	
b2	150	#5	21'-6"	
b3	150	#5	16'-6"	
c	64	#5	28'-0"	
c1	64	#5	21'-6"	
s	440	#4	8'-3"	
s1	437	#4	6'-0"	
s2	432	#4	5'-0"	
s3	352	#4	3'-6"	
s4	352	#4	4'-0"	
Class X Concrete				Cu Yds 546.3
Reinforcement Bars				Lbs 164310
* Structural Steel				Lbs 28,030

* For Structural Steel See SH: 4

DESIGNED V.R. Sonti
CHECKED P.H. Nguyen
DRAWN V.R.S. J. Sandava L.
CHECKED P.H.H.

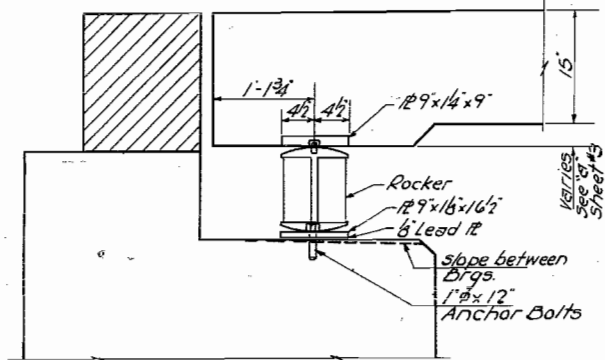
EXAMINED V.M. Romine
PASSED [Signature]
APPROVED R.H. [Signature]

MAY 25 1960

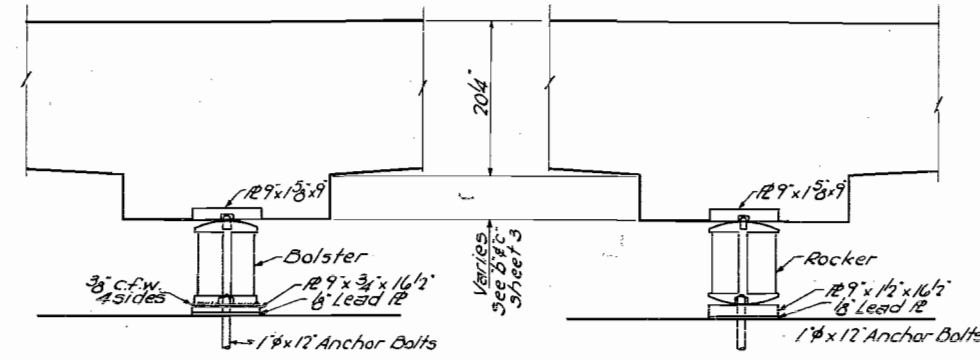
SUPERSTRUCTURE
F.A.I. RT. 80 SEC. 06-1B-2
BUREAU COUNTY
STA. 182+52.00

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

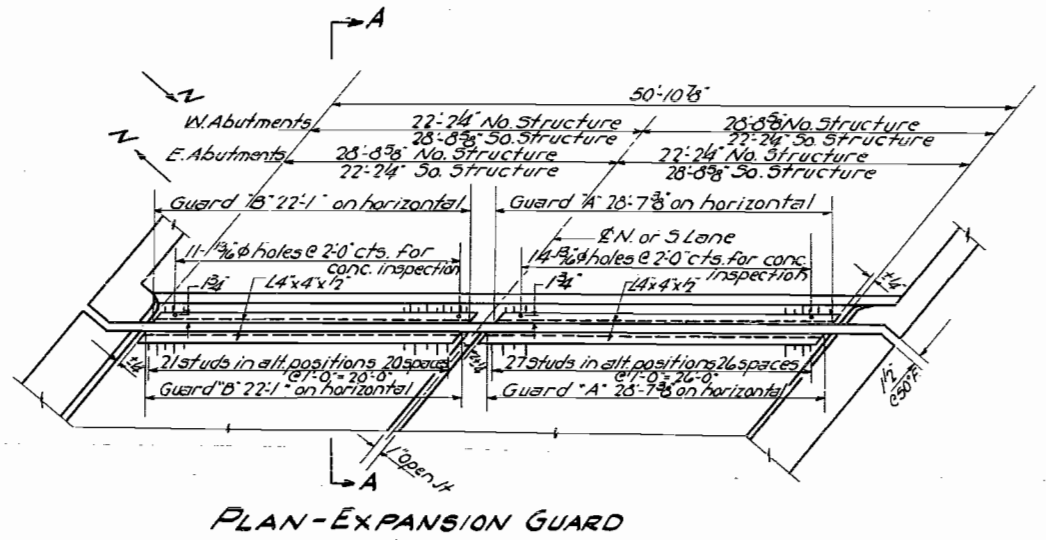
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4 OF SHEETS
F.A.R. 80	6-18-2	Bureau	19	9	
FED. ROAD DIST. NO. 7		ALLEN	FED. AID PROJECT		



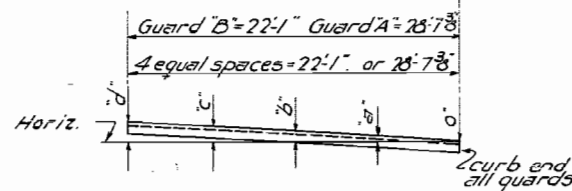
SECTION AT ABUTMENT



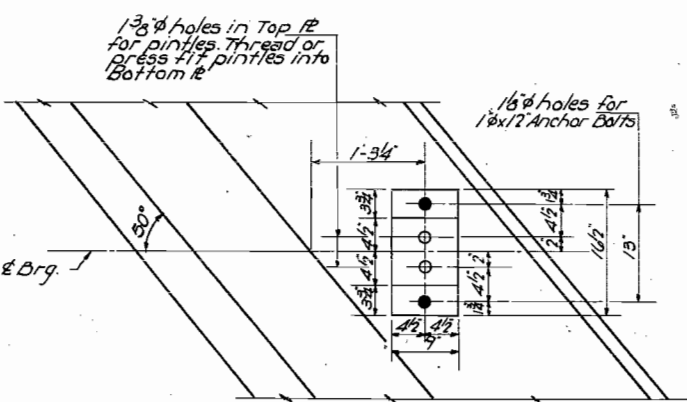
PIER 1 FIXED
PIER 2 EXPANSION



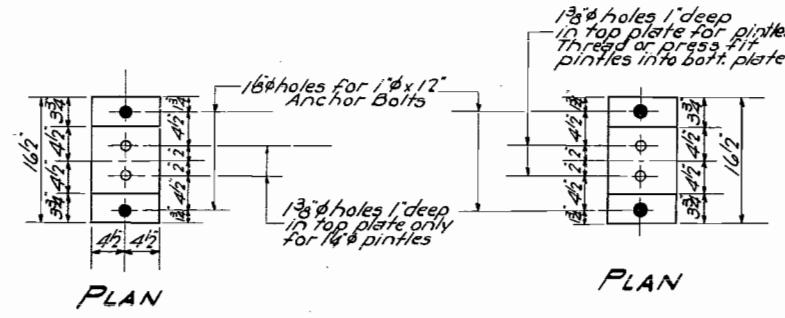
PLAN-EXPANSION GUARD



PROFILE OF EXPANSION GUARD

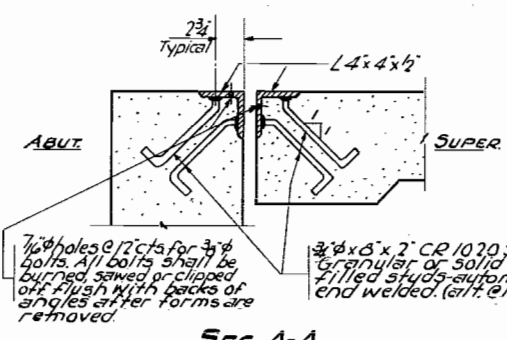


PLAN



PLAN

PLAN



SEC. A-A

LOCATION	GUARD	"a"	"b"	"c"	"d"
East & West Abuts.	N. Struc.	"A"	1 1/2	3	4 1/2
	S. Struc.	"B"	8	13 1/2	26
S. Struc.	"A"	14	2 1/2	34	3 1/2
	"B"	16	24	2 1/2	3 1/2

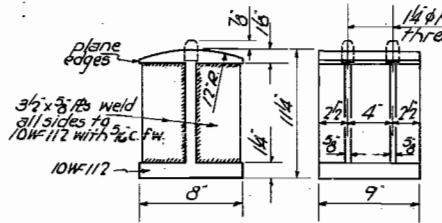
ELEVATIONS TOP OF SLAB
over brgs. @ West abutments between curbs

NORTH STRUCTURE															
Location	No. Curb	Brg. 2	Brg. 3	Brg. 4	Brg. 5	Brg. 6	Brg. 7	Brg. 8	± Lane	Brg. 9	Brg. 10	Brg. 11	Brg. 12	So. Curb	
W. Abutment	433	.34	.38	.45	.52	.59	.65	.68	.70	.71	.70	.67	.62	.56	.51

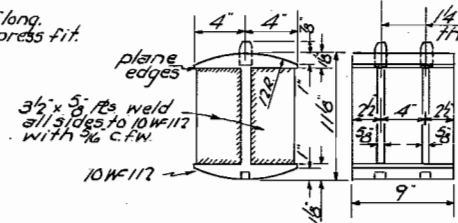
SOUTH STRUCTURE															
Location	No. Curb	Brg. 2	Brg. 3	Brg. 4	Brg. 5	Brg. 6	± Lane	Brg. 7	Brg. 8	Brg. 9	Brg. 10	Brg. 11	Brg. 12	So. Curb	
W. Abutment	433	.60	.66	.73	.79	.83	.86	.86	.86	.85	.82	.77	.72	.66	.60

NOTE: For elevations at other points on slab add 0.007 foot per foot measured parallel to ± lane

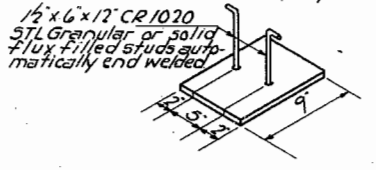
Weight of Bolsters, Rockers, Bearing Plates, Lead Plates and Anchor Bolts 22,250 Lbs.
Weight of Expansion Guard Structural Steel 5,780 Lbs
28,030 Lbs For Two Structures



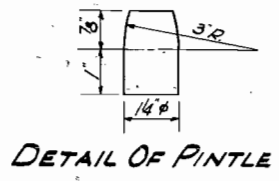
DETAIL OF BOLSTER AT PIER 1
28 Required



DETAIL OF ROCKER AT PIER 2 AND ABUTS.
84 Required



DETAIL OF TOP PLATES



DETAIL OF PINTLE

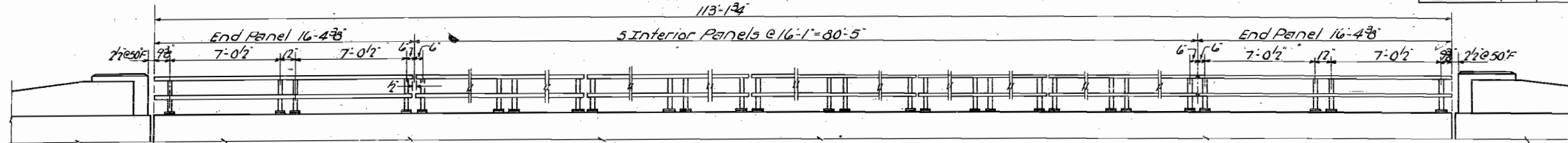
DESIGNED V.R. Senti	MAY 25 1960
CHECKED P.H. Higgins	EXAMINED V.M. Romina
DRAWN V.R.S. Sandoval	PASSED E. L. ...
CHECKED P.H.H.	APPROVED H. ...

STRUCTURAL STEEL
F.A.I.R.T. 80 SEC. 06-18-2
BUREAU COUNTY
STA. 182+57.00

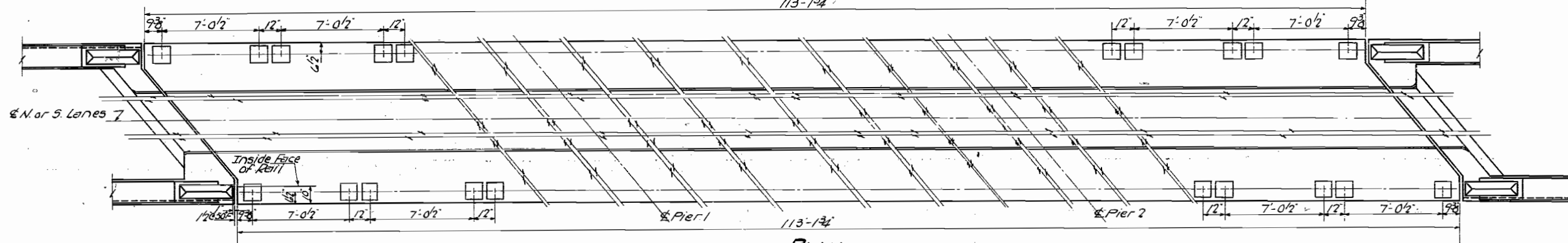
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	4-18-2	Bureau	19	10
PER. ROAD DIST. NO. 1	ALIGNED	FED. AID PROJECT		

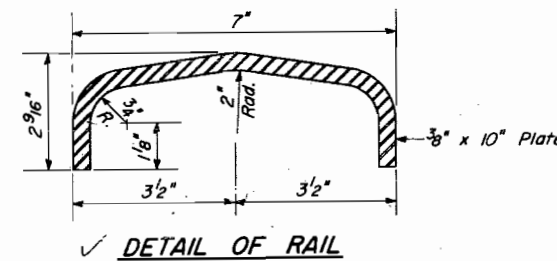
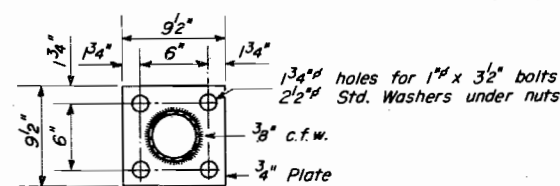
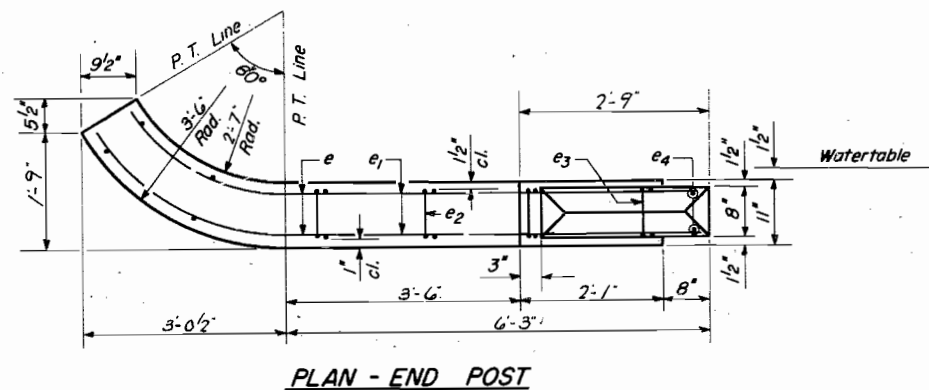
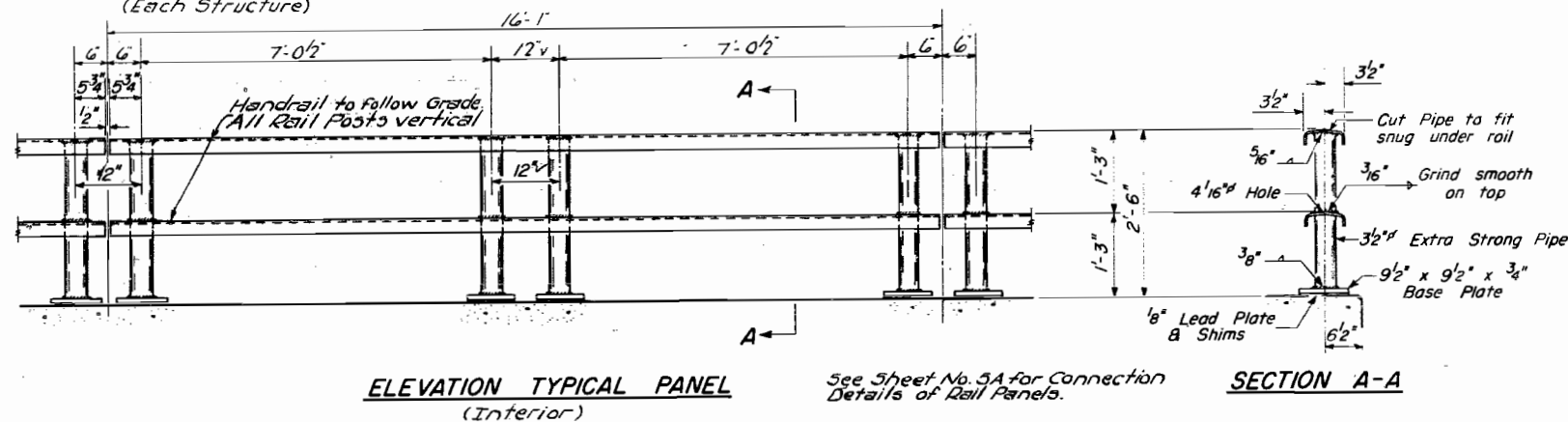
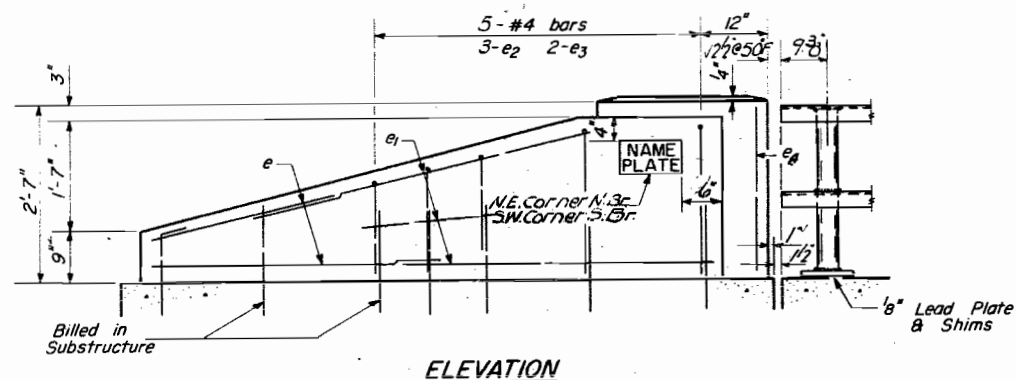
SHEET NO. 5
OF 5 SHEETS



ELEVATION
(Each Structure)
113-134

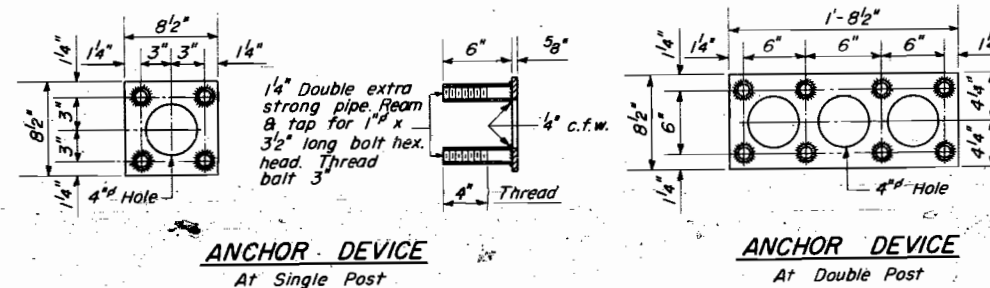
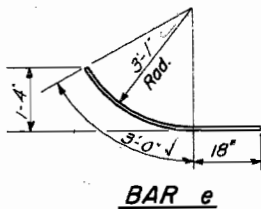


PLAN
(Each Structure)



3 END POSTS
BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
e	32	#4	4'-6"	—
e1	48	#4	5'-6"	—
e2	24	#4	3'-4"	—
e3	16	#4	5'-0"	—
e4	16	#4	2'-3"	—



TWO BRIDGES
BILL OF MATERIAL

Handrail Concrete	Cu. Yd.	4.6
Reinforcement Bars	Lbs.	400
Metal Handrail	Lin. Ft.	453

GENERAL NOTES

- All End Posts shall be Handrail Concrete.
- After erection all Bolts and Washers shall be spot painted with one coat of red lead and two coats of aluminum paint.
- Provide 1-8" and 2-1/16" Shims for 50% of the Posts.
- All Posts shall be vertical.

HANDRAIL
F.A.I. RT 80 SEC. 06/18-2
BUREAU COUNTY
STA. 182+52.00

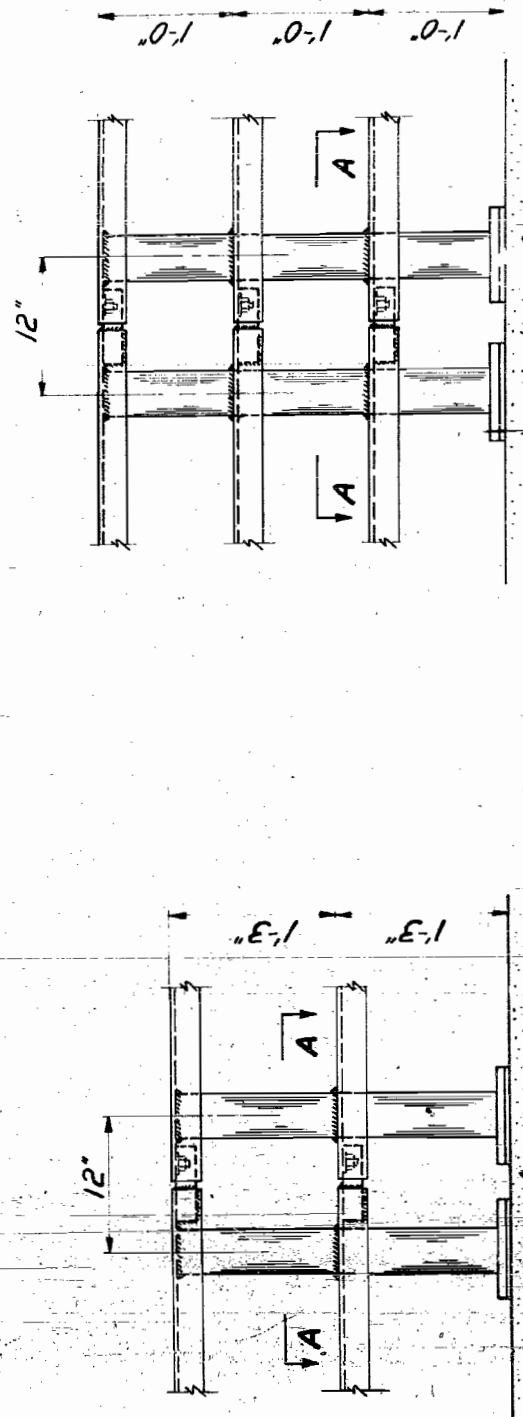
DESIGNED V.R. Sonti
CHECKED C.H. Hogeweg
DRAWN R.S.W. A. Sausamari
CHECKED P.H. H.

MAY 25 1960
EXAMINED V.M. Romine
PASSED [Signature]
APPROVED R.H. [Signature]

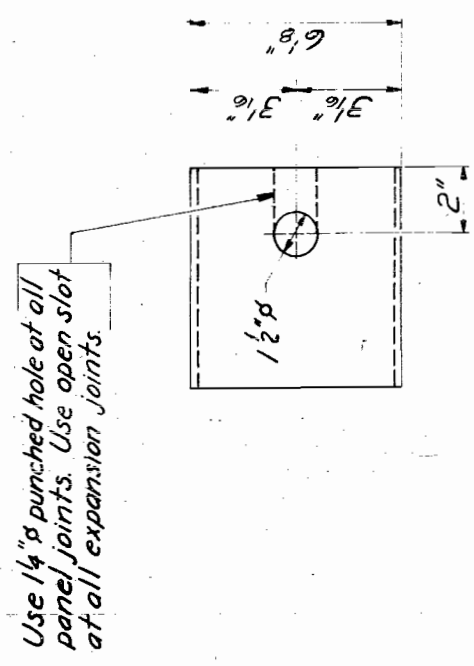
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO 5A
8 SHEETS

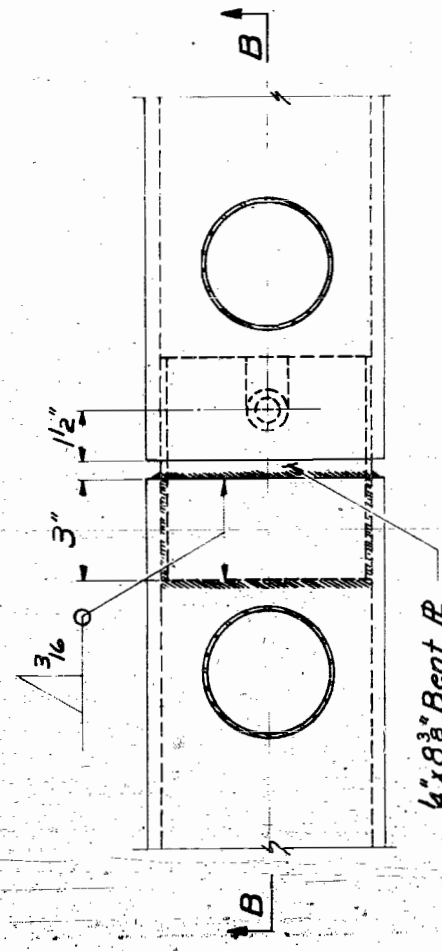
ROUTE NO.	BEG.	COUNTY	TOTAL SHEETS
FAI 80	6-18-2	Bureau	19
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT		10A



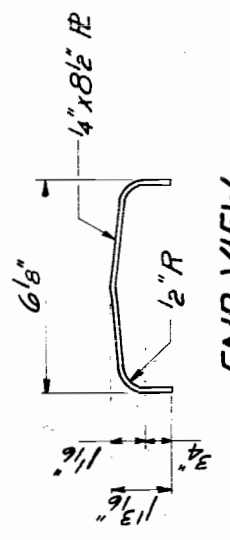
TYPICAL ELEVATION
AT PANEL JOINTS



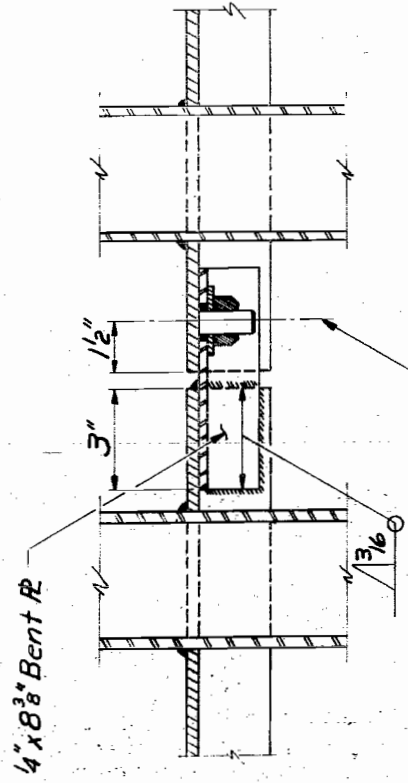
SECTION A-A



PLAN



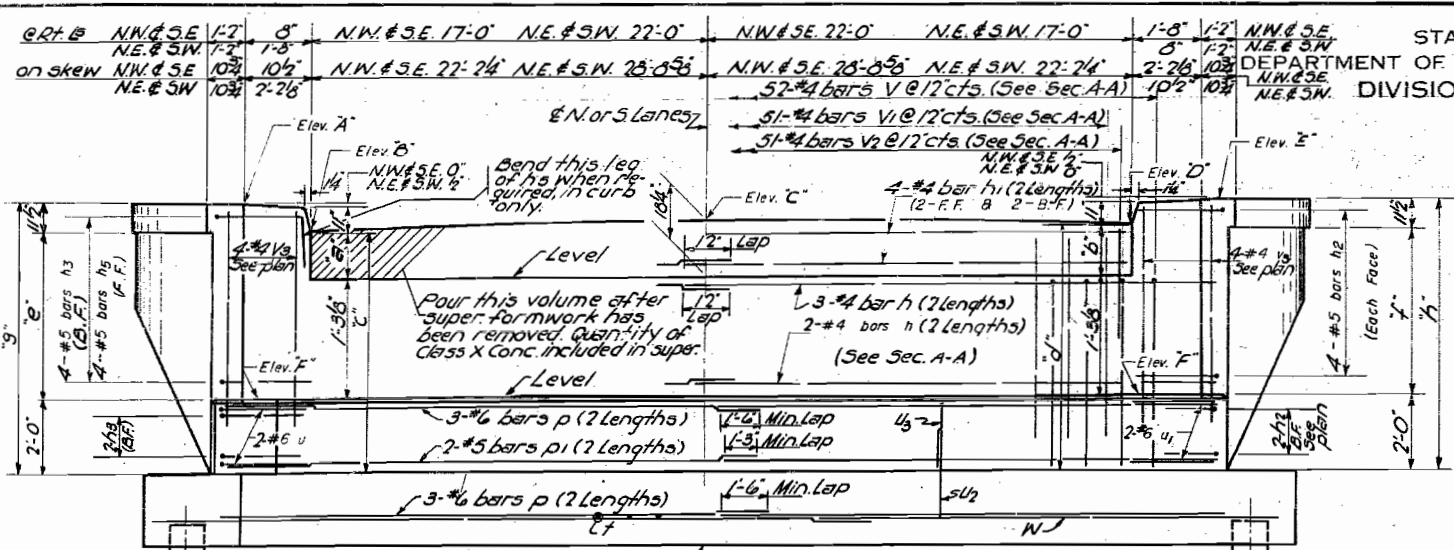
END VIEW
DETAIL 4" BENT R



SECTION B-B

3/4" x 1 3/4" Granular or Solid Flux Filled Stud. Threaded Full Length - Automatically End Welded or 3/4" x 1 3/4" Fully Threaded Stud Welded With 8" c.f.w. Provide Washer and Locknut.

CONNECTION DETAILS
FOR BENT PLATE
RAIL PANELS



SCHEDULE OF ELEVATIONS ON FRONT FACE

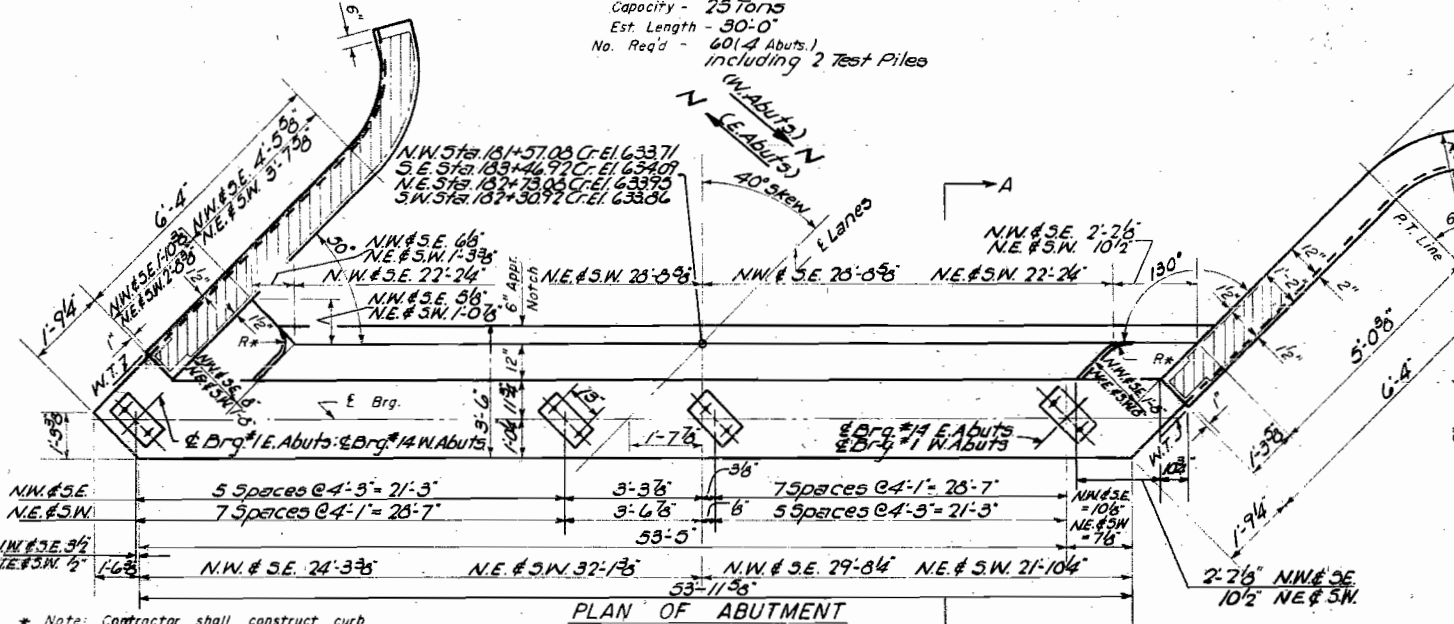
ABUTMENT	A	B	C	D	E	F	G
N.W.	634.43	633.51	633.71	633.34	634.30	630.93	626.43
S.W.	634.53	633.57	633.86	633.60	634.52	631.03	626.58
N.E.	634.59	633.33	633.93	633.75	634.67	631.17	626.67
S.E.	634.75	633.63	634.09	633.80	634.70	631.31	626.81

SCHEDULE OF DIMENSIONS ON FRONT FACE

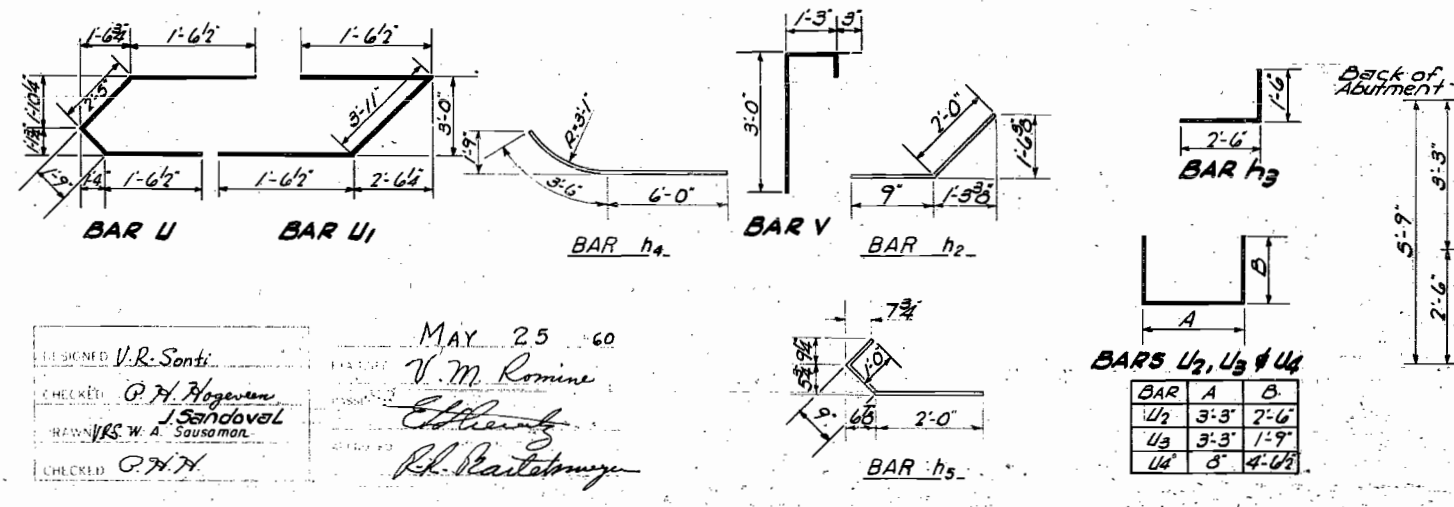
ABUTMENT	B	C	D	E	F	G	H
N.W.	1-3 1/2	1-1 1/2	4-7	4-4 1/2	2-6	2-4 1/2	5-6
S.W.	1-7 1/2	1-3 1/2	4-5 1/2	4-6 1/2	2-5 1/2	2-5 1/2	5-3 1/2
N.E.	1-7 1/2	1-3 1/2	4-4 1/2	4-7	2-4 1/2	2-6 1/2	5-4 1/2
S.E.	1-3 1/2	1-7 1/2	4-4 1/2	4-5 1/2	2-3 1/2	2-5 1/2	5-3 1/2

ELEVATION
At Right Angles to Lanes

PILE DATA
Capacity - 25 Tons
Est. Length - 30'-0"
No. Req'd - 60 (4 Abuts.)
including 2 Test Piles

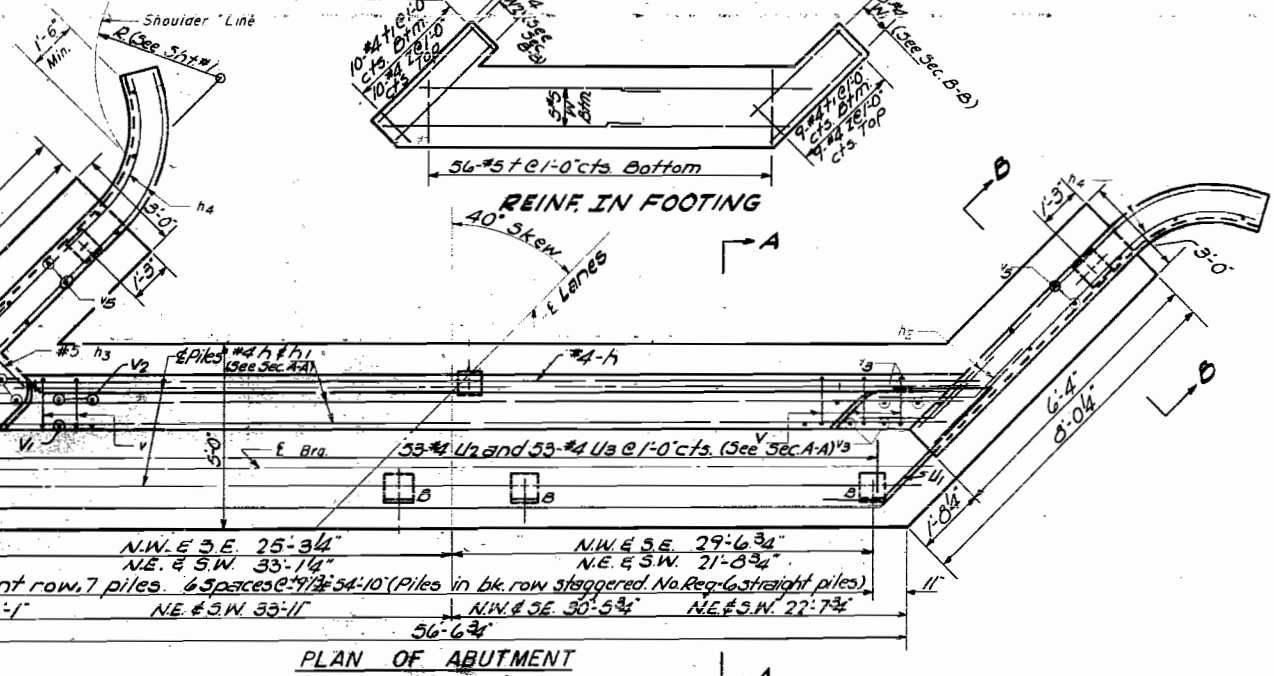
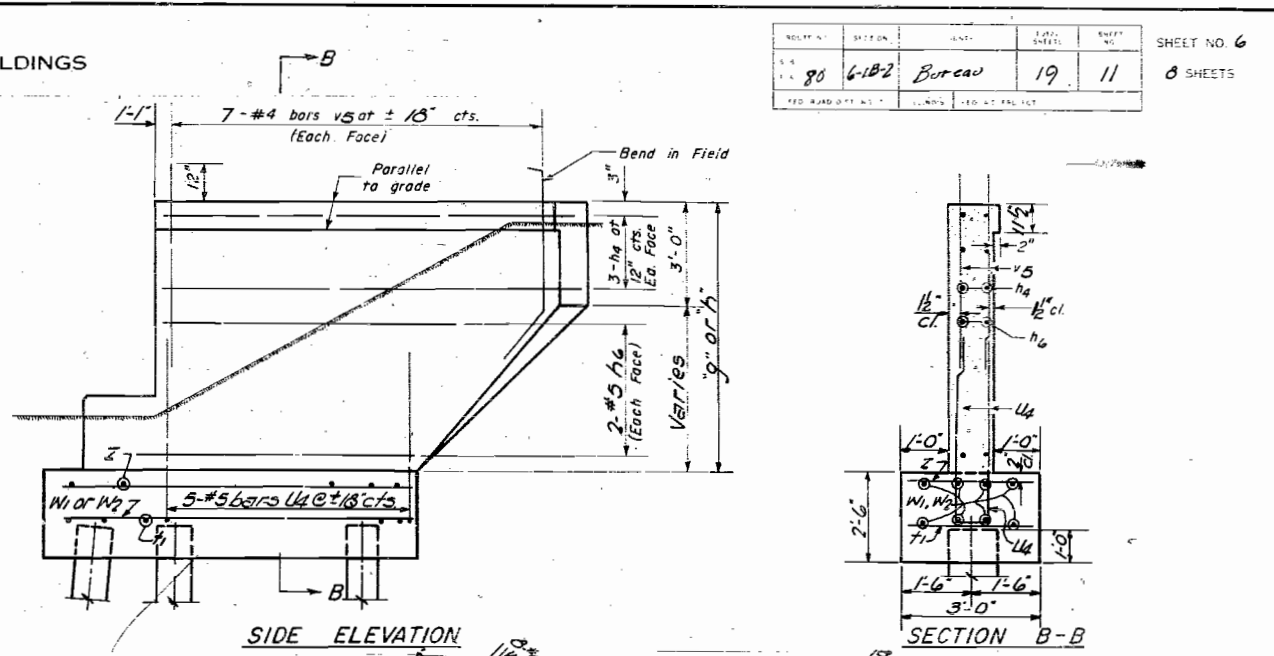


PLAN OF ABUTMENT
Dimensions
(Footings not shown)



DESIGNED V.R. Sonti
CHECKED P.H. Hogewen
DRAWN J. Sandoval
CHECKED P.H. Hogewen

MAY 25 60
V.M. Romine
C. H. ...
R.H. Karstow



PLAN OF ABUTMENT
Reinforcement & Pile Spacing
(Showing plan of Footing)

4 ABUTMENTS BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h	40	#4	27'-6"	—	W	40	#5	30'-0"	—
h1	32	#4	25'-6"	—	W1	32	#4	7'-9"	—
h2	40	#5	2'-9"	—	W2	32	#4	9'-6"	—
h3	24	#5	4'-0"	—	V	224	#5	4'-9"	—
h4	48	#5	9'-6"	—	V1	76	#4	2'-9"	—
h5	16	#5	3'-9"	—	V	208	#4	4'-6"	—
h6	32	#5	6'-0"	—	V1	204	#4	3'-3"	—
P	48	#6	28'-3"	—	V2	204	#4	2'-0"	—
P1	16	#5	28'-3"	—	V3	32	#4	4'-0"	—
U	8	#6	7'-3"	C	V5	112	#4	4'-3"	—
U1	8	#6	7'-0"	—	Z	76	#4	2'-9"	—
U2	212	#4	8'-3"	—					
U3	212	#4	6'-9"	—					
U4	40	#5	9'-9"	—					

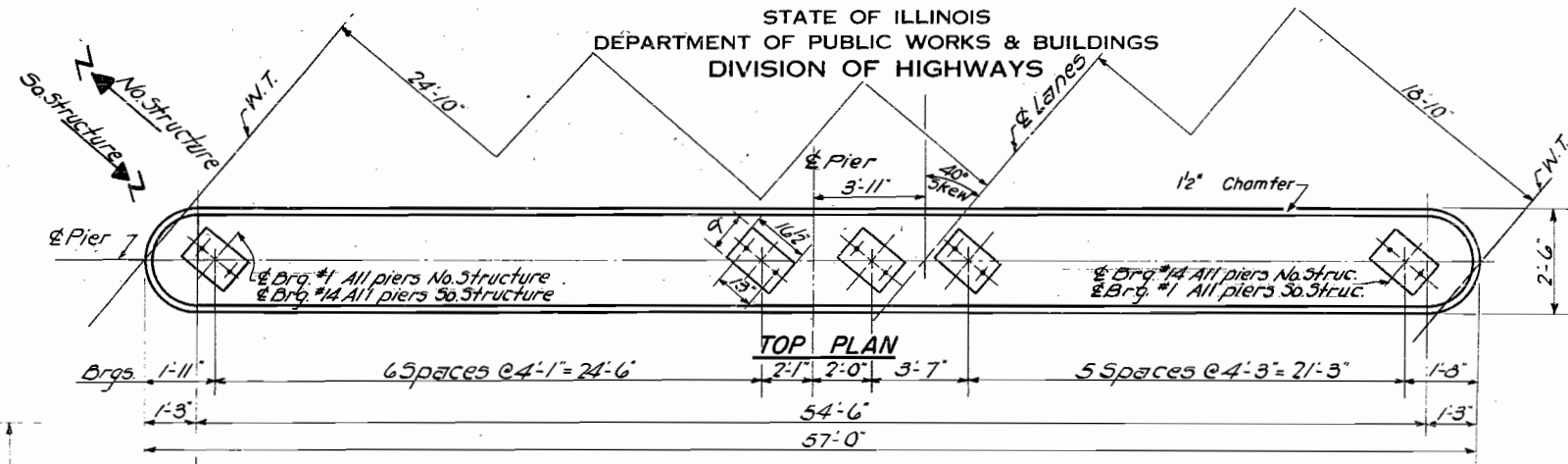
4 ABUTMENTS BILL OF MATERIAL

Item	Unit	Quantity
Class X Concrete	Cu. Yd.	207.3
Reinforcement Bars	Lb.	12,200
Concrete Piles	Lin. Ft.	1740
Test Piles (Concrete)	Eq.	2
Class A Excav. for Structures	Cu. Yd.	330

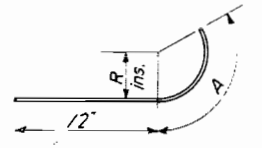
ABUTMENTS
F.A.I. RT. 80 S.C. 06-18-2
BUREAU COUNTY
STA. 182+52.00

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

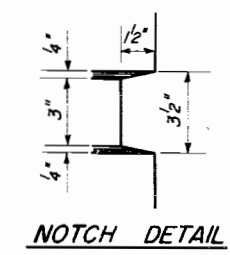
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7
80	6-18-2	Bureau	19	12	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



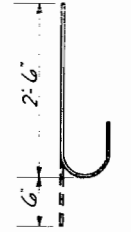
Sta. Cr. Elev. on \bar{x} Lane @ \bar{x} Pier
No. Structure
Pier 1 Sta. 181+93.25 Cr. Elev. 633.79
Pier 2 Sta. 182+36.91 Cr. Elev. 633.87
So. Structure
Pier 1 Sta. 182+67.09 Cr. Elev. 633.93
Pier 2 Sta. 183+10.75 Cr. Elev. 634.07



Bar	R	A
h8	1'-2"	2'-3"
h9	1'-3 1/2"	2'-6"



DETAIL OF BARS



BAR n

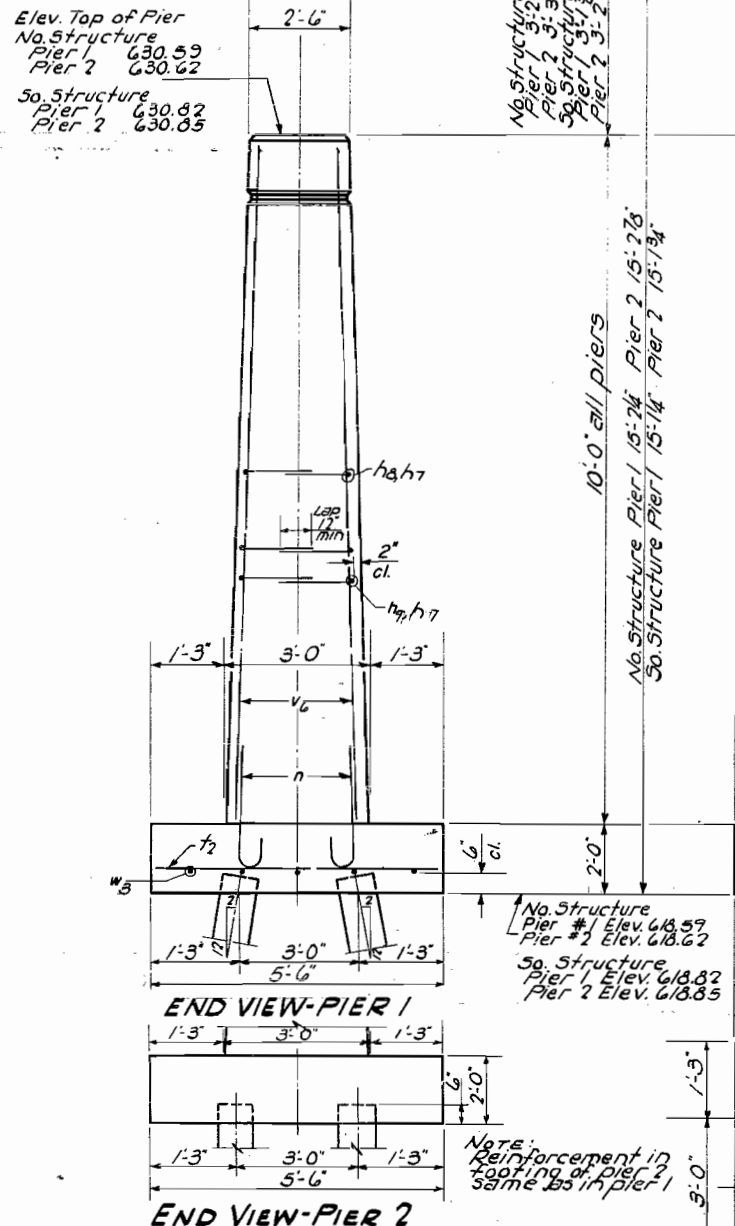
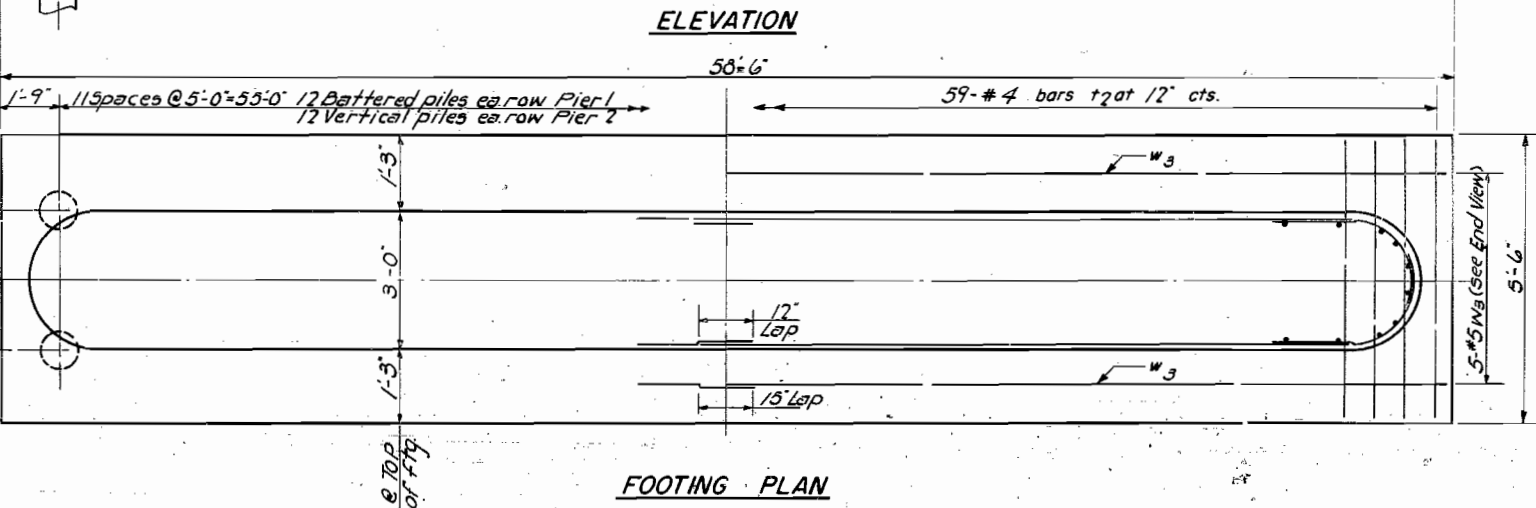
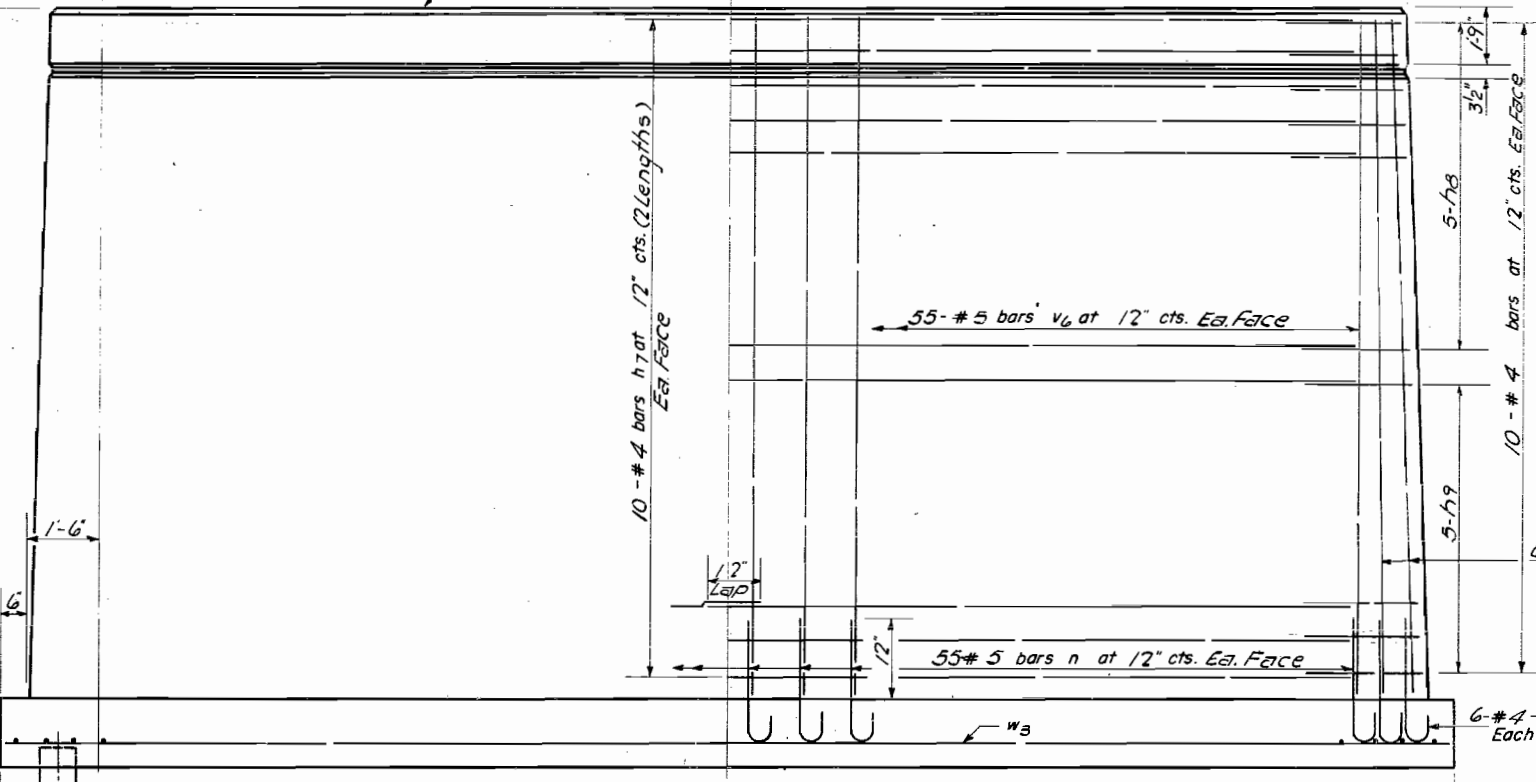
4 PIERS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7	160	#4	28'-0"	—
h8	80	#4	3'-5"	—
h9	80	#4	3'-6"	—
n	488	#5	3'-0"	C
t2	236	#4	5'-3"	—
v6	488	#5	9'-9"	—
w3	40	#5	29'-9"	—

FILE DATA
Untreated Piles
Capacity: 20 Tons
Est. Length: 20'-0"
No. Required: 96
including 2 test piles

Class A Concrete	Cu. Yds.	374.7
Reinforcement Bars	Lbs.	11910
Untreated Piles	Lin. Ft.	1880
Test Piles (Timber)	Eq.	2
Class B Excavation for Structures	Cu. Yds.	270

PIERS
F.A.I.R.T. 80 SEC. 06-1B-2
BUREAU COUNTY
STA. 182+52.00



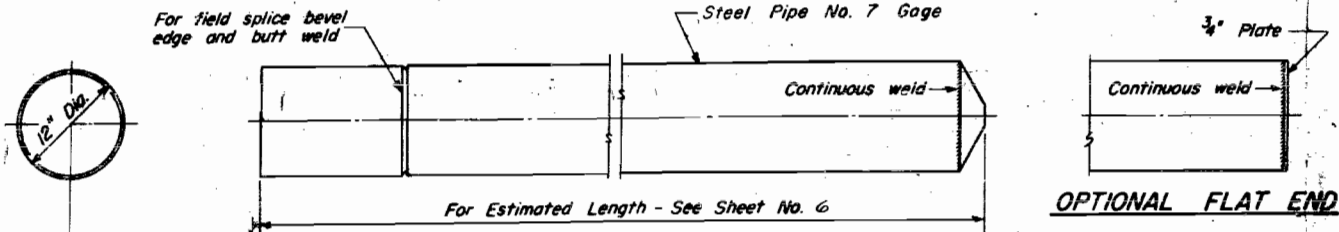
DESIGNED: V.R. Sonti
CHECKED: P.H. Argueen
DRAWN: R.S.W. A. Sausamar
CHECKED: P.H.A.

EXAMINED: V.M. Romine
PASSED: [Signature]
APPROVED: R.H. Partch

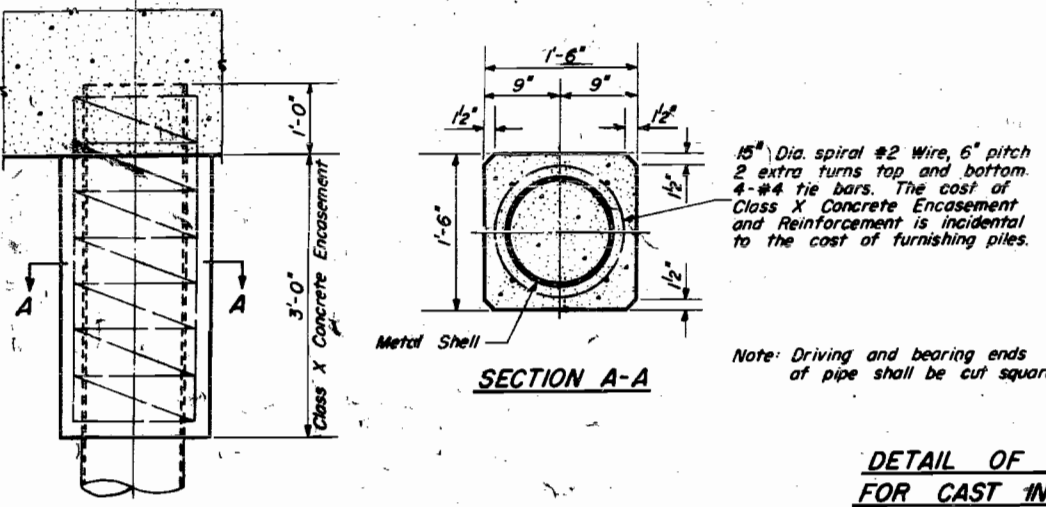
MAY 25 1960

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

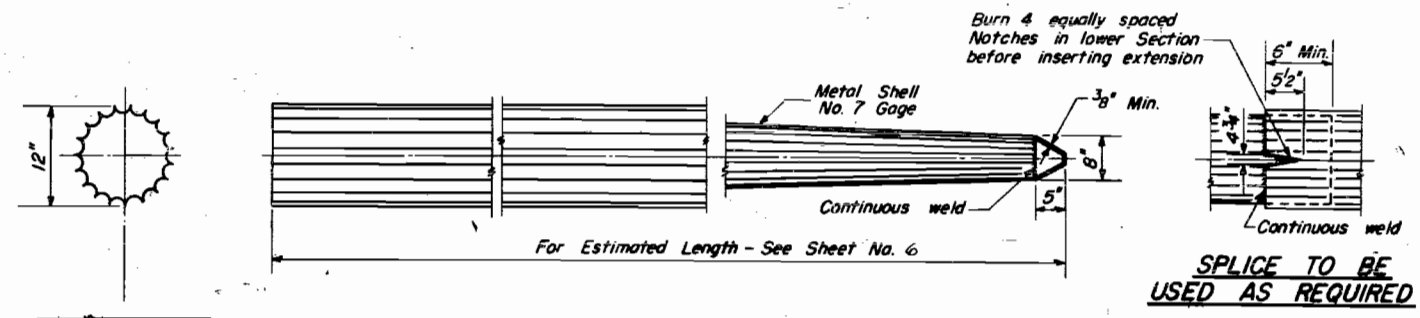
ROUTE NO.	ACTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8
F.A.I. 80	6-18-2	Bureau	13	13	8 SHEETS
PUB. ROAD DIST. NO. 1		ILLINOIS	PUB. WORK PROJECT		



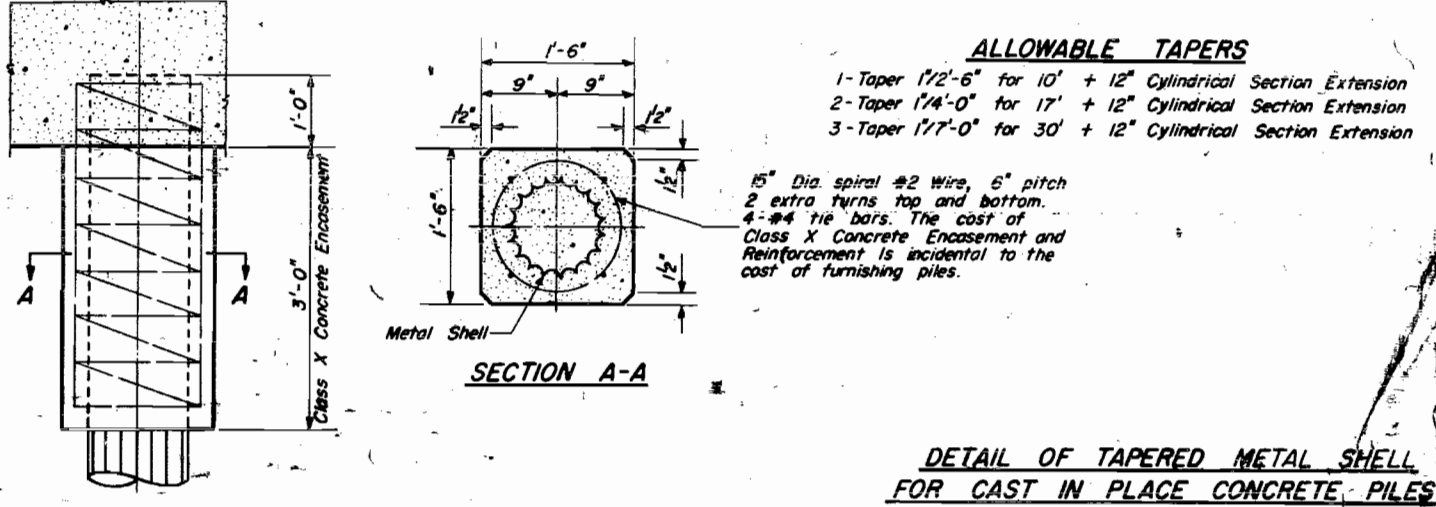
OPTIONAL FLAT END



DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES

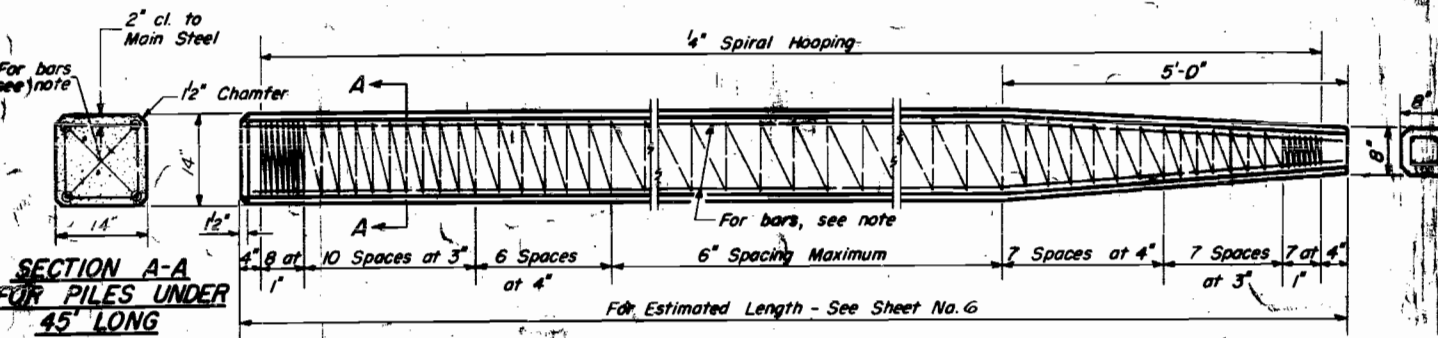


SPLICE TO BE USED AS REQUIRED

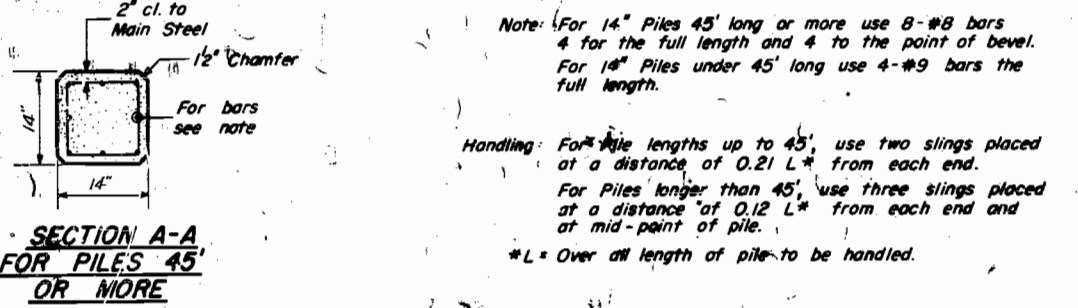


DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES

- 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

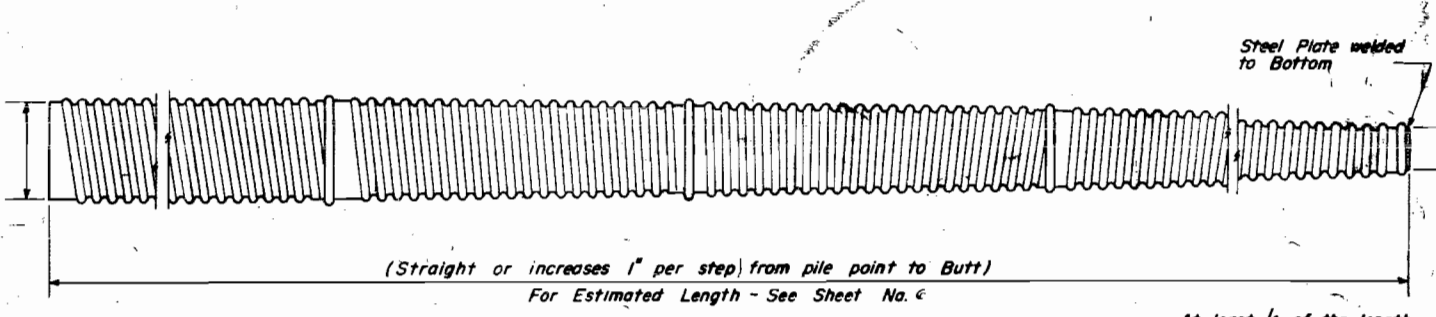


SECTION A-A FOR PILES 45' OR MORE

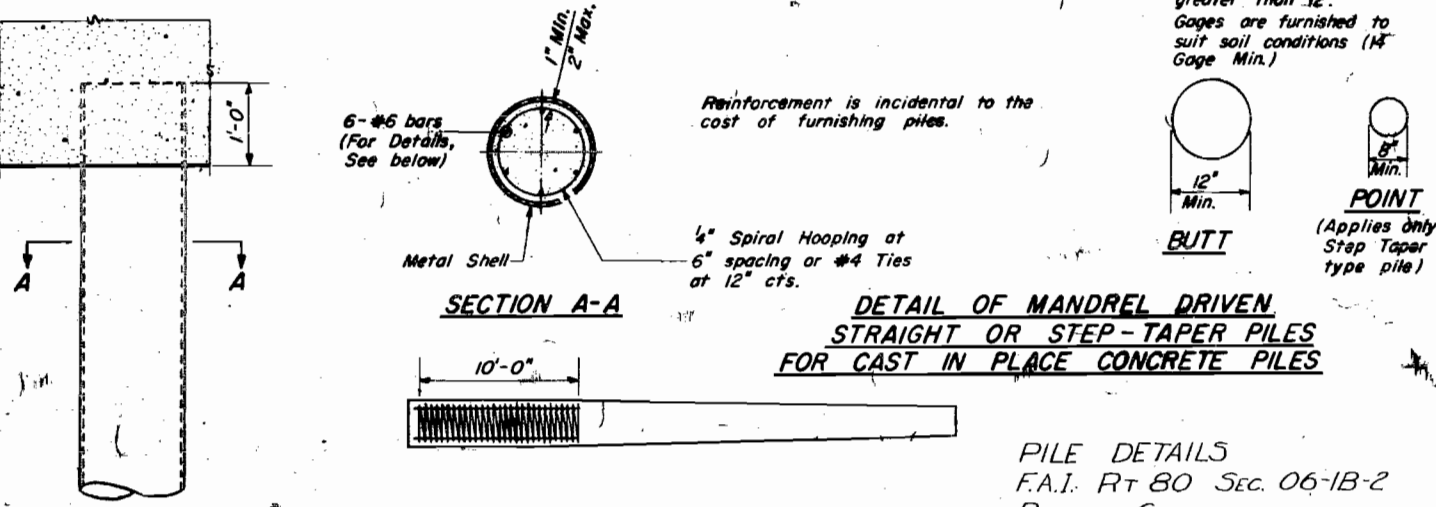
Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel. For 18" Piles under 45' long use 4-#9 bars the full length.

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.

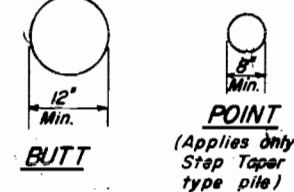


DETAIL OF MANDREL DRIVEN STRAIGHT OR STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES



DETAIL OF MANDREL DRIVEN STRAIGHT OR STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES

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.)



DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN W. A. Sausman	APPROVED
CHECKED	

DETAIL OF PRECAST CONCRETE PILES

PILE DETAILS
F.A.I. Rt 80 SEC. 06-18-2
BUREAU COUNTY
STA. 182 +52.00