

RT. FA-26

SEC. 139-HB

23

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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

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

F.A. ROUTE 26 SECTION 139-HB
KANKAKEE COUNTY
PROJECT UI-29(16)



APPROXIMATE SCALE 1" = 1 MILE

SECTION 139-HB INCLUDES CONSTRUCTION OF 2 PARALLEL STEEL I-BEAM GRADE SEPARATION STRUCTURES, SPANS 2 @ 30'-0", 1 @ 62'-6" ON R.C. OPEN PIERS AND ABUTMENTS (CARRYING F.A. ROUTE 26 OVER S.B.T. ROUTE 17) AT STA. 190+92.05



STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
SUBMITTED March 10, 1955
John Grayhack Jr.
EXAMINED March 28, 1955
Raymond H. Brown
PASSED March 28, 1955
March 28, 1955
March 28, 1955
March 28, 1955
March 28, 1955

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED
DISTRICT ENGINEER
DATE

SECTION 139-HB

26	139HB	KANKAKEE	10	2
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SUMMARY OF QUANTITIES

944.6	cu.yds.	Class X Concrete
99,010	lbs.	Reinforcement Bars
304,810	lbs.	Furnishing and Erecting Structural Steel
728	lin.ft.	Furnishing and Erecting Metal Handrail
4	each	Cast Iron Frames
20	lin.ft.	Corrugated Metal Pipe - 8"
1,800	cu.yds.	Class A Excavation for Structures
11,970	cu.yds.	Borrow Excavation
2	each	Name Plates

ALTERNATE A

560	sq.yds.	Slope Pavement
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ALTERNATE B

560	sq.yds.	Slope Wall
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INDEX OF SHEETS

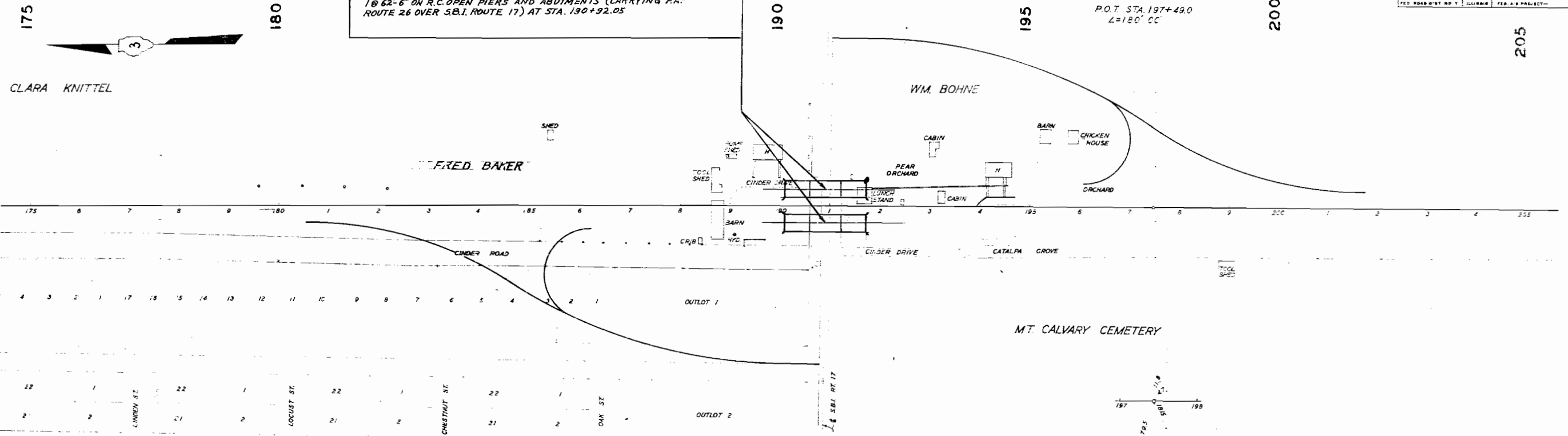
Sheet No.	
1	Cover Sheet
2	Index of Sheets, Summary of Quantities, Standards 1874S, 2113
3	Plan & Profile, Sta. 175 to 205
4 to 9	Bridge Plans, Sta. 92 / 06 (Sheet 1 to 6 of 6)
10	Standards 1971S, 2114, 1972R

SEC. 34-T31N-R12E-3 P.M.

SEC. 4-T30N-R13W-2 P.M.

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
26	KANKAKEE	10	3
STA. 175+00 TO STA. 205+00			
FED. ROAD DIST. NO. 1 - ILLINOIS - FED. AID PROJECT -			

SECTION 133-HB INCLUDES CONSTRUCTION OF 2 PARALLEL STEEL I-BEAM GRADE SEPARATION STRUCTURES SPANS 2@ 50'-0" 1@ 62'-6" ON R.C. OPEN PIERS AND ABUTMENTS (CARRYING FA. ROUTE 26 OVER S.B.I. ROUTE 17) AT STA. 190+92.05



SEC. 33-T31N-R12E-3 P.M.

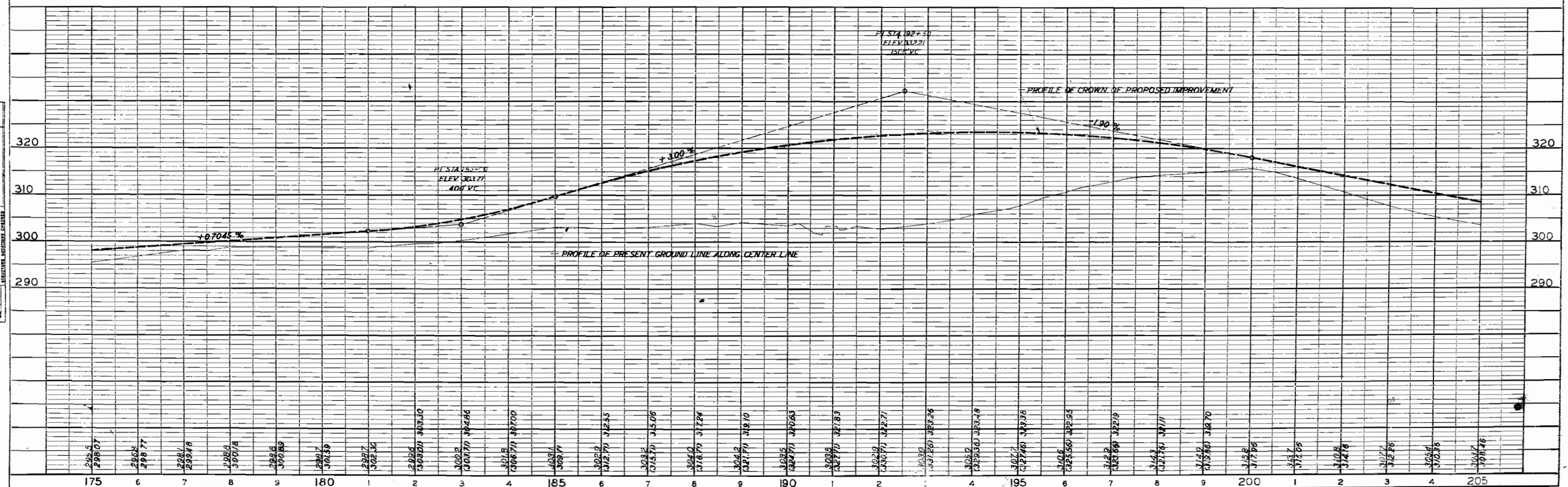
B.M. SPIKE & WASHER IN P.P. RT.
STA. 180+35 ELEV. 300.65

B.M. SPIKE & WASHER IN P.P. RT.
STA. 187+25 ELEV. 303.83

B.M. 4 X ON E. HDY. P.E. 80 RT.
STA. 191+13 ELEV. 304.31

TIES TO P.O.T. STA. 197+49.0

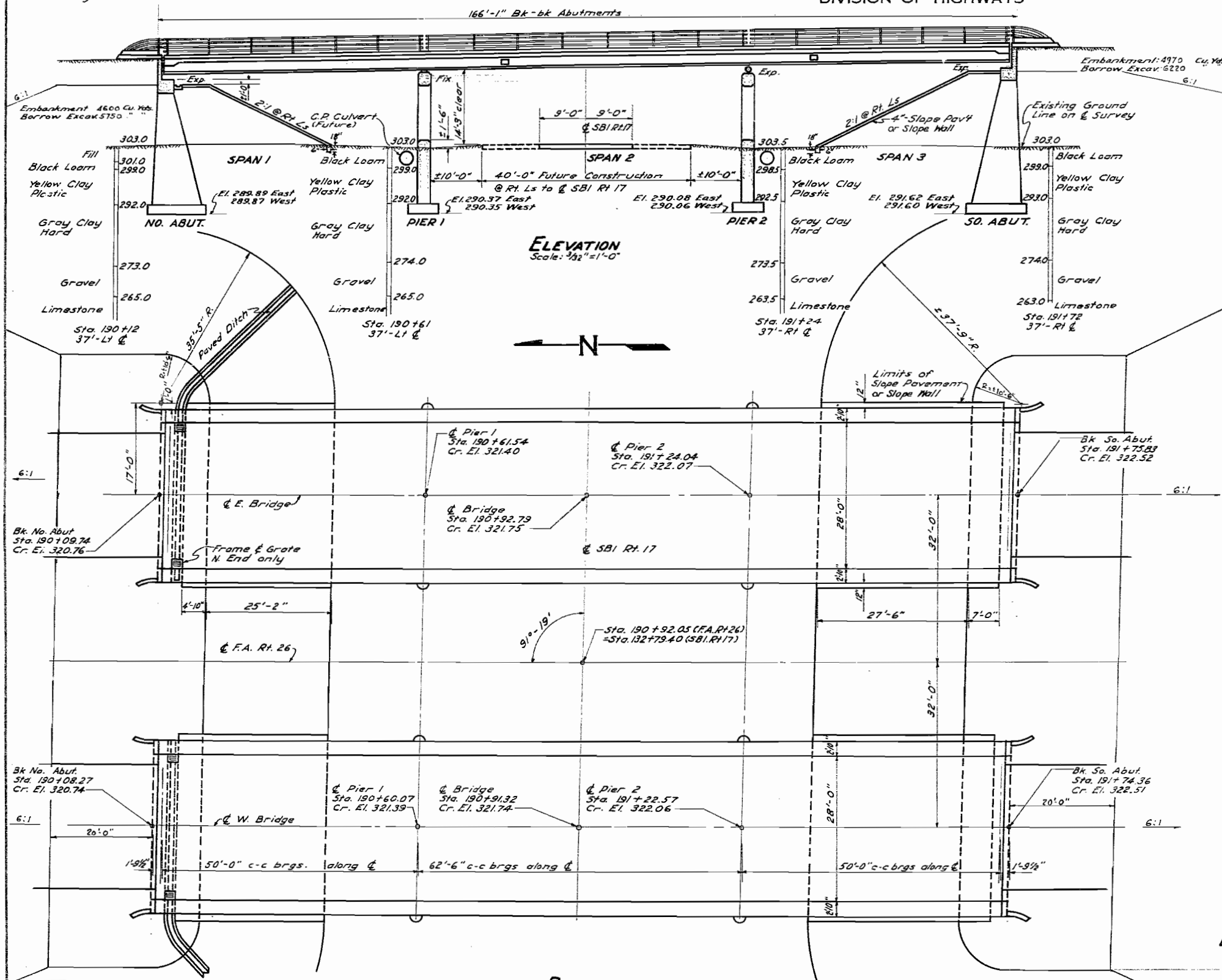
SEC. 4-T30N-R13W-2 P.M.



B.M. #4 "X" on E. Headwall
P.E. Culvert Rt. 17, Sta. 134.99
on SBI Rt. 17. Elev. 304.41
No Existing Structure

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

PROJECT	SECTION	SHEET	TOTAL SHEETS	DATE
139 HB	KANKAKEE	10	4	6 SHEETS



GENERAL NOTES

Class X concrete shall be used throughout.

The concrete floor slab shall be finished in accordance with Article 51.18 (a) of the Standard Specifications, & the applicable portions of Articles 46.18 & 48.20.

Rivets 3/4" x 9, Open holes 1 1/2" x 9, unless noted.

Field connections riveted unless noted.

All rollers, rockers, bearing plates, lead plates pintles and anchor bolts shall be fabricated and set in accordance with Article 51.14 of the Standard Specifications and are included for payment as Structural Steel.

Anchor bolts shall be set before riveting diaphragms over supports.

The following surfaces of expansion guards shall be given two shop coats of red lead paint, backs of the vertical legs of the angles.

Expansion guards are included for payment as Structural Steel.

Estimated Wt. = 3160 Lbs.

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 57.1 to 57.5 inclusive of the Standard Specifications.

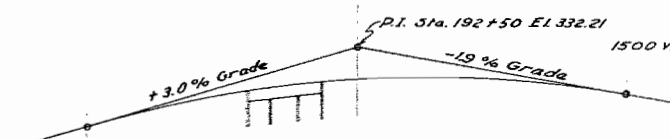
All paint shall be furnished and applied by the Contractor.

All bars shall be 20 diameters unless otherwise shown.

Boring Data are shown on the drawings only as a guide to bidders in estimating soil conditions which may be encountered in the work.

Slope Wall or Slope Pavement shall be constructed as shown on the plans and to a thickness of 4 inches with a 1/2" wall of 6" width. If concrete slope wall is used, it shall be reinforced with #4-#4, 6" x 6" welded wire mesh placed midway of the slab.

PROFILE OF GRADE



TOTAL BILL OF MATERIAL FOR TWO BRIDGES

ITEM	SUPER STRUCT.	SUB STRUCT.	SECTION 139 H-B
Class "X" Concrete	Cu. Yd.	308.4	636.2 944.6
Reinforcement Bars	Lbs.	44910	54100 99010
Structural Steel	Lbs.	304,810	304,810
Name Pl.	Each	2	2
Cast Iron Frames	Each	4	4
8" C.M. Pipe	Lin. Ft.	20	20
Metal Hand Rail	Lin. Ft.	728.0	728.0
Class A Excavation for Str. Cu. Yd.		1800	1800
Borrow Excavation		11970	11970
ALTERNATE A			
Slope Pavement	Sq. Yd.	560	560
ALTERNATE B			
Slope Wall	Sq. Yd.	560	560

STATION 190+92.05
BUILT 195 BY
STATE OF ILLINOIS
F.A. RT. 26 SEC. 139 HB
F.A. PROJ. UI-29 (16)
LOADING H20-516

LETTERING FOR NAME PL.
See Std. 2113

DESIGN DATA

fs = 18,000 p.s.i. (Structural)
fs = 20,000 p.s.i. (Reinf.)
fc = 1400 p.s.i. (Super)
fc = 800 p.s.i. (Substr.)
n = 10

GENERAL PLAN & ELEVATION
PROJECT UI-29 (16)
F.A. RT. 26 OVER SBI RT. 17 SEC 139 H-B
KANKAKEE COUNTY
STA. 190+92.05

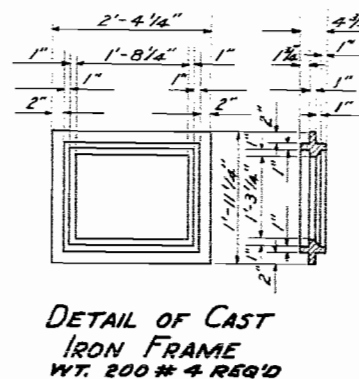
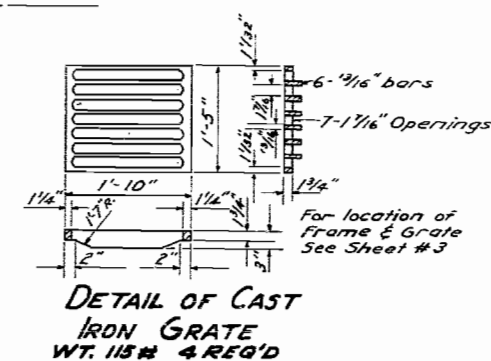
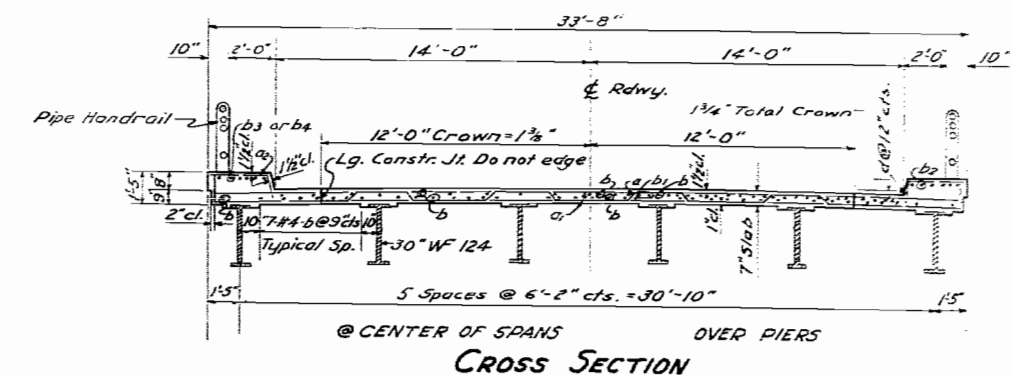
DESIGNED *Imbillion*
CHECKED *Robt. D. Collins*
DRAWN *W.E.B. J. Ganci*
CHECKED *M.O. R.C.*

EXAMINED *W.E. Hanson*
PASSED *E. H. H. H.*
APPROVED *J. N. Parker*

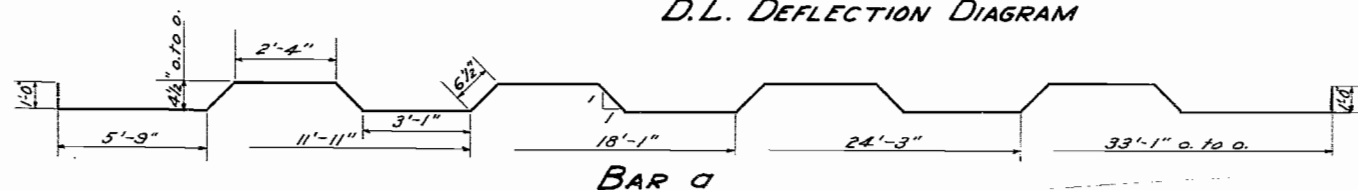
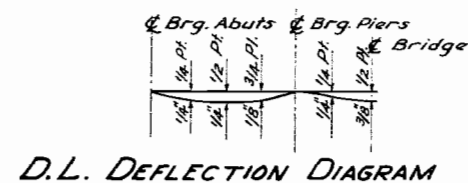
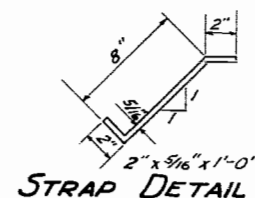
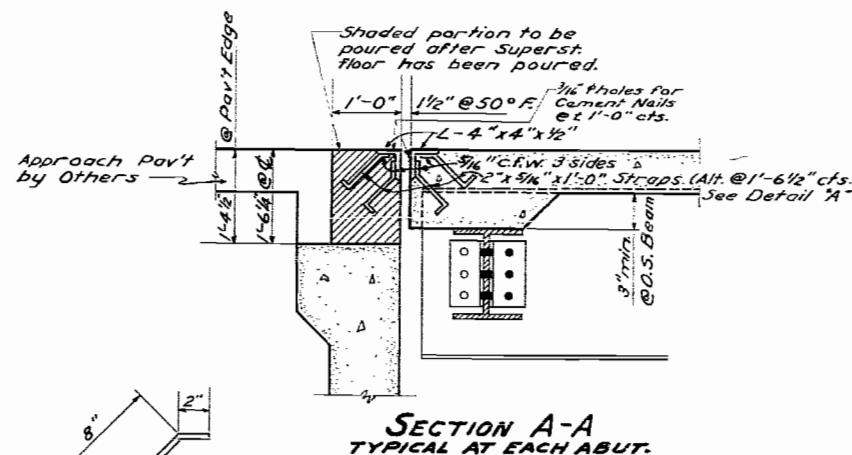
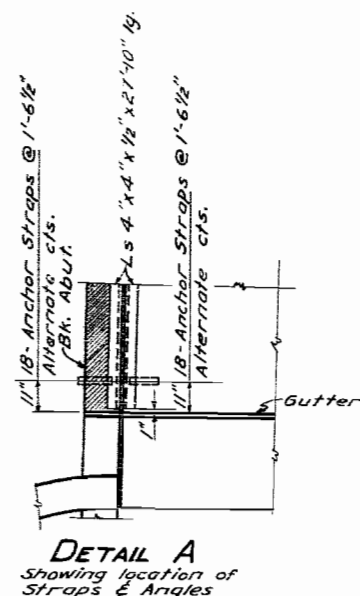
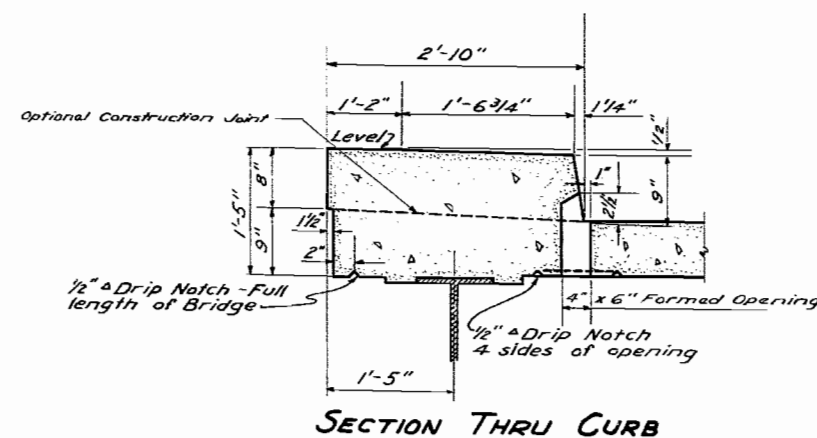
Rev. 3-17-55
9-6-55

H20-516-44 LOADING

PLATE NO	SECTION	COUNTY	DATE S-ECT	AMOUNT NO	S-ECT NO
1334B	KANKAKEE	10	5	65	2
PLATE NO	SECTION	COUNTY	DATE S-ECT	AMOUNT NO	S-ECT NO



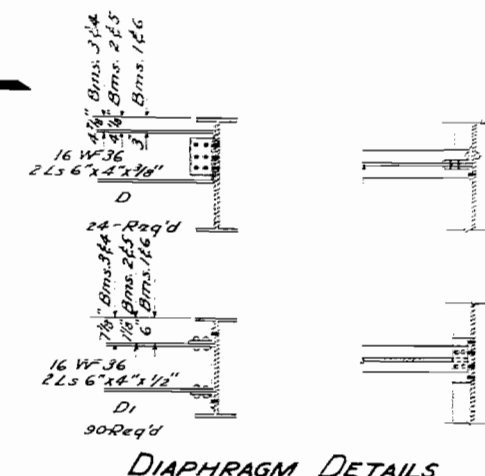
*SUPERSTRUCTURE
BILL OF MATERIAL - TWO BRIDGES*

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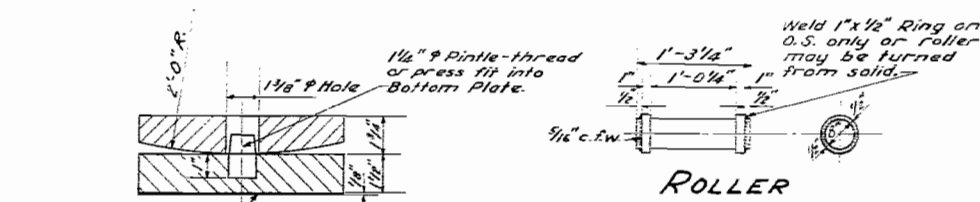
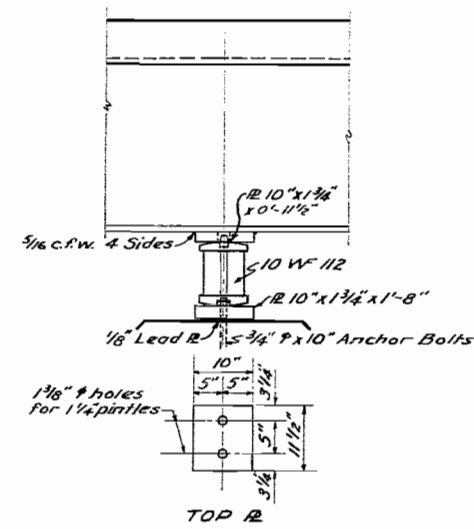
SLAB DETAILS
PROJ. UT-29 (16)
F.A. RT. 26 SEC. 139 H-B
KANKAKEE CO.
STA. 190+92.05

DESIGNED	<i>Emmett O'Keefe</i>	EXAMINED	<i>W.E. Shenson</i> REGISTERED MECHANICAL ENGINEER
CHECKED	<i>Richard A. Collins</i>	PASSED	<i>E. O'Keefe</i> REGISTERED MECHANICAL ENGINEER
DRAWN	<i>JUSTICE J. Ganci</i>	APPROVED	<i>J. M. Burke</i> REGISTERED MECHANICAL ENGINEER
CHECKED	<i>M.O. R.R.</i>		

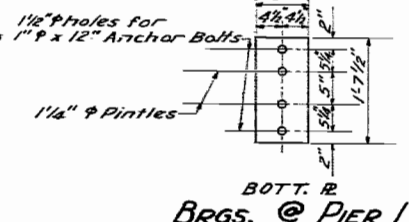
PLANT	SECTION	COUNT	DATE	POST NO.	SHEET NO.
10	139HB	KANKAKEE	10	6	6 SHEET



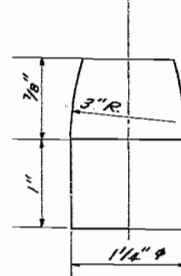
DIAPHRAGM DETAILS



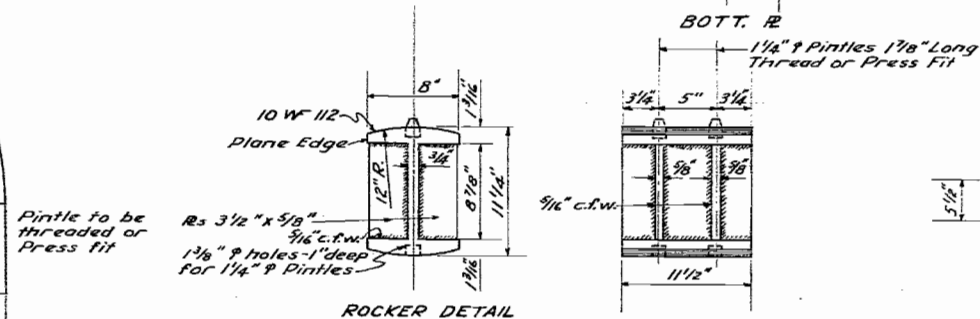
ROLLER



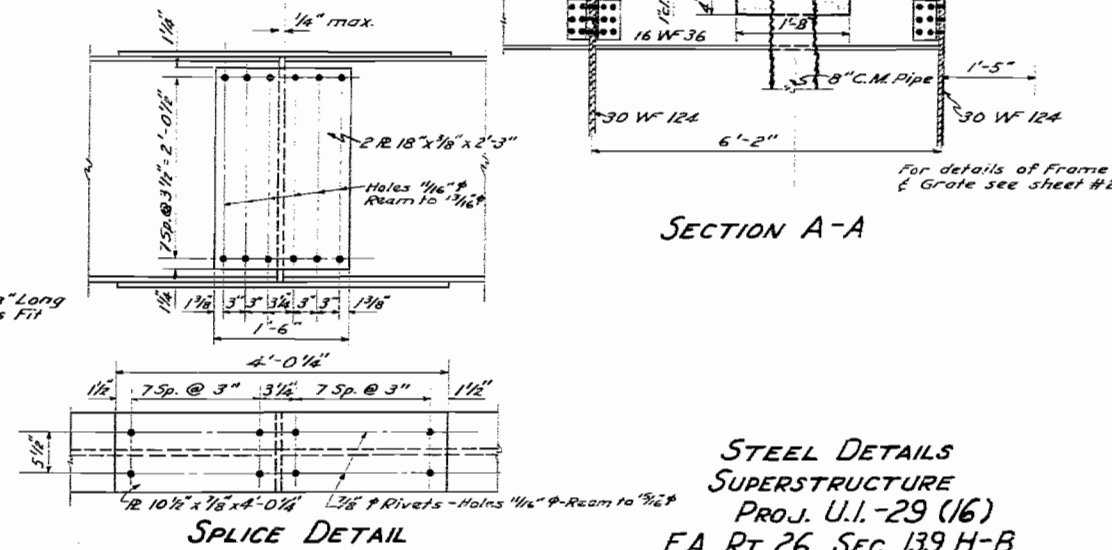
BRGS. @ PIER 1



PINTLE



BRGS. @ PIER 2

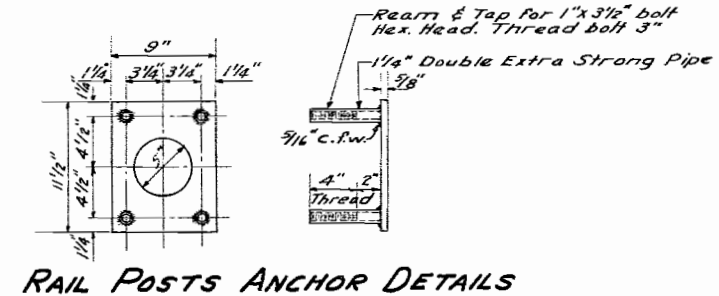
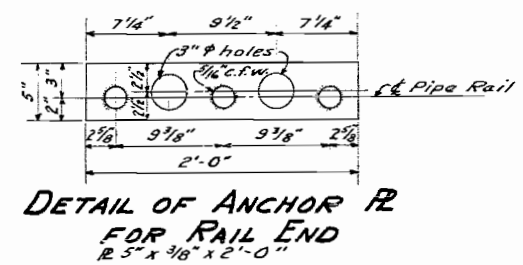
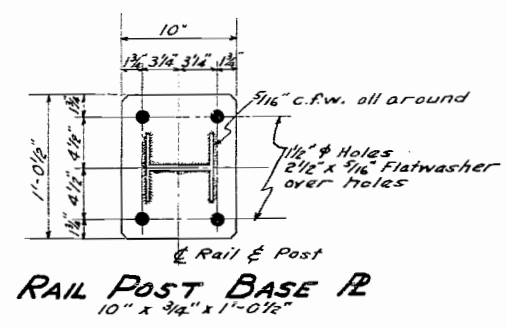
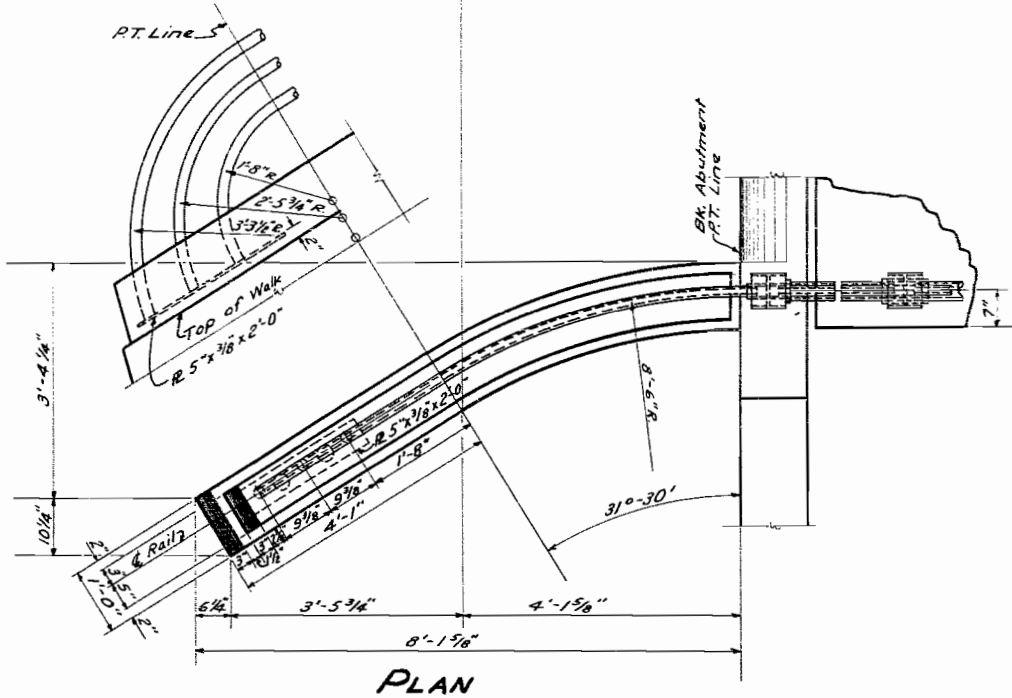
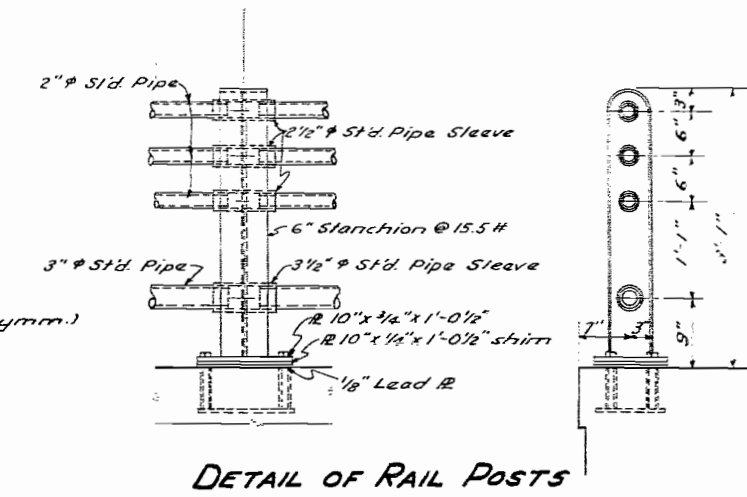
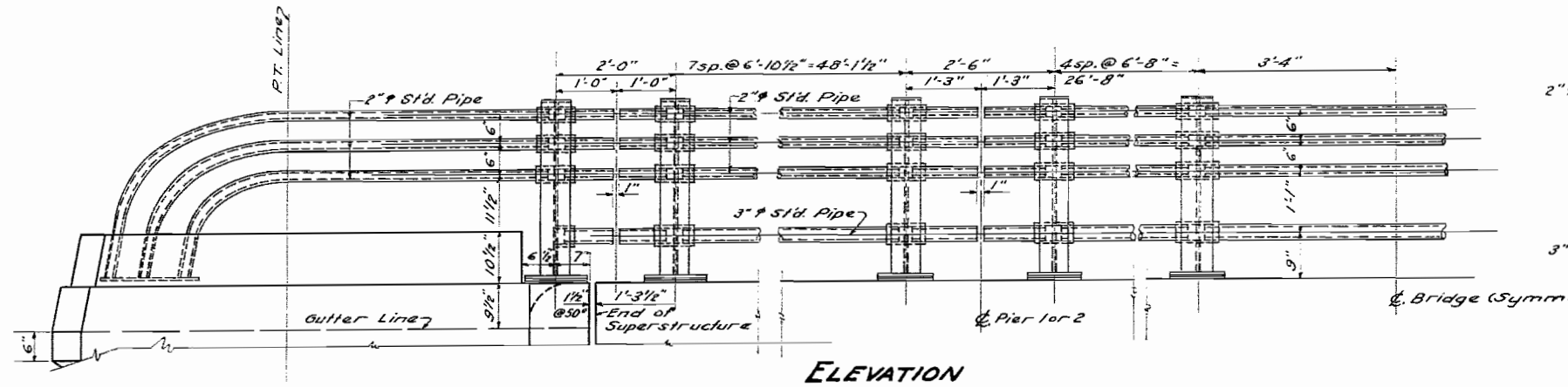


SPLICE DETAIL

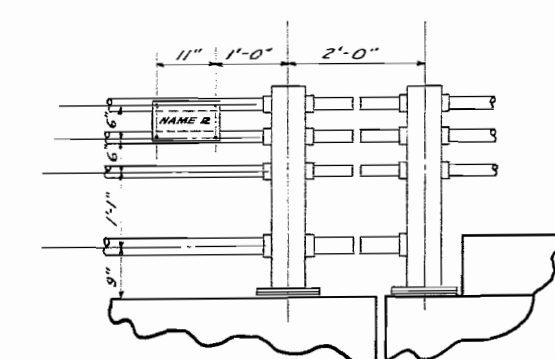
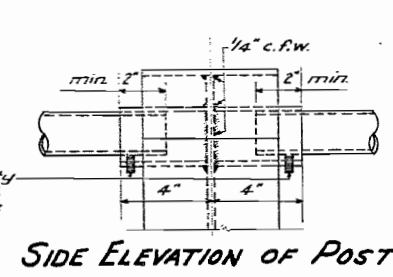
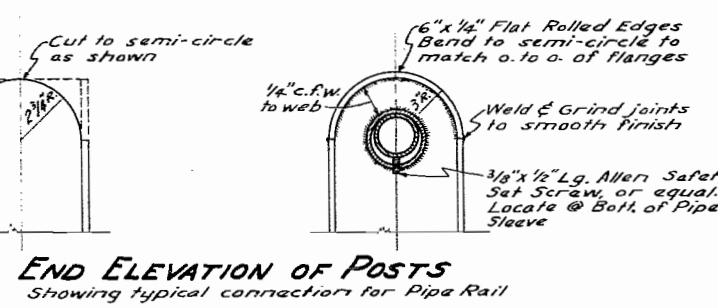
DESIGNED	<i>Michael Dwyer</i>	EXAMINED	<i>W.E. Hanson</i> ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
CHECKED	<i>Robt. L. Collins</i>	PASSED	<i>W. Hanson</i> ENGINEER OF BRIDGE
DRAWN	<i>EUTLEE J. Ganci</i>	APPROVED	<i>F.N. Parker</i> CHIEF HIGHWAY ENGINEER
CHECKED	<i>M.O. R.A.L.</i>		

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
139 H-B	26	MANKAKEE	10	7
6 SHEETS				

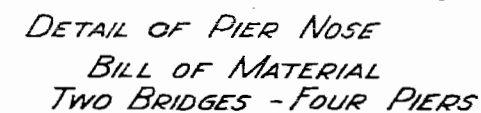
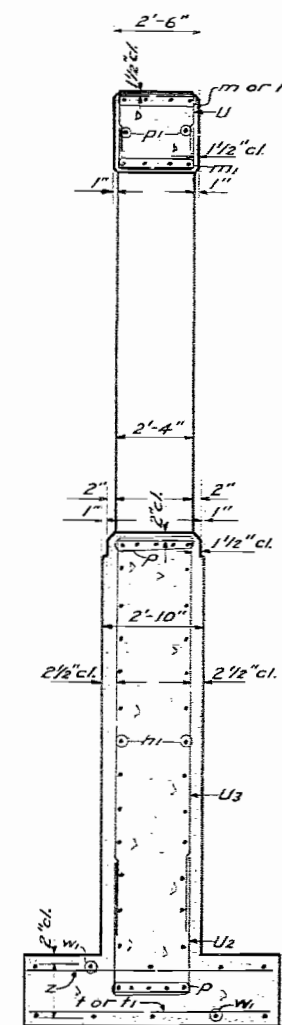


Contractor shall ream all 2 1/4 inch & 3 inch standard pipe sleeves to full size of pipe. Leave ends free of burrs.
Weld all short pieces of pipe to pipe sleeves @ all Double Posts.
Contractor shall provide one 1/8 inch shim & 1/16 inch shim for 50% of the rail posts, in addition to normal 1/4 inch shim.



DESIGNED	Frederick O. O'Connell	EXAMINED	W. E. Fineman
CHECKED	Robert D. Bell	PASSED	W. E. Fineman
DRAWN	SUTER J. Ganci	APPROVED	A. M. Perkins
CHECKED	M. O. R. B.		

HANDRAIL DETAILS
PROJ. U.I. 29 (16)
F.A. RT. 26 SEC 139 H-B
MANKAKEE COUNTY
STA. 190+92.05



BAR	NO.	SIZE	LENGTH	SHAPE
h	16	#11	16'-0"	—
h ₁	192	#5	18'-6"	—
m	32	#11	15'-0"	—
m ₁	32	#11	17'-9"	—
p	80	#6	19'-0"	—
p ₁	16	#7	17'-6"	—
s	44	#4	9'-5"	□
t	76	#4	5'-3"	—
t ₁	76	#6	7'-3"	—
U	224	#4	6'-0"	□
U ₁	176	#4	5'-7"	□
U ₂	148	#5	7'-5"	□
U ₃	148	#5	27'-1"	□
V	176	#7	13'-6"	—
w	56	#4	19'-3"	—
z	76	#4	7'-3"	—
Class "X" Concrete			Cu. Yds.	327.6
Reinforcement Bars			Lbs.	27680

DESIGNED *Institution Concept*
CHECKED *Robert A. Collins*
DRAWN *5/2/82 J. Ganci*
CHECKED *M. O. P. C.*

June 19 1953
EXAMINED *W E Hanson*
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED *E. L. ...*
ENGINEER OF DESIGN
APPROVED *A. N. Barker*

$2'-3''$	$U-U_1$	$U=1'-10\frac{1}{2}''; U_1=1'-8''$
$2'-5''$	U_2-U_3	$U_2=2'-6''; U_3=12'-4''$

$$BAR \ U-U_1-U_2 \not\subseteq U_3$$

Orthographic projection of a square. The top view is a square with side length 2'. The front view is a rectangle with height 2'. A 45-degree line is drawn from the top-left corner of the front view to the top-right corner of the top view. The angle is labeled 45°.

17'-9"

48'-0"

BAR M

3'-2"

2'-0"

9'-0"

2'-0" Rad.

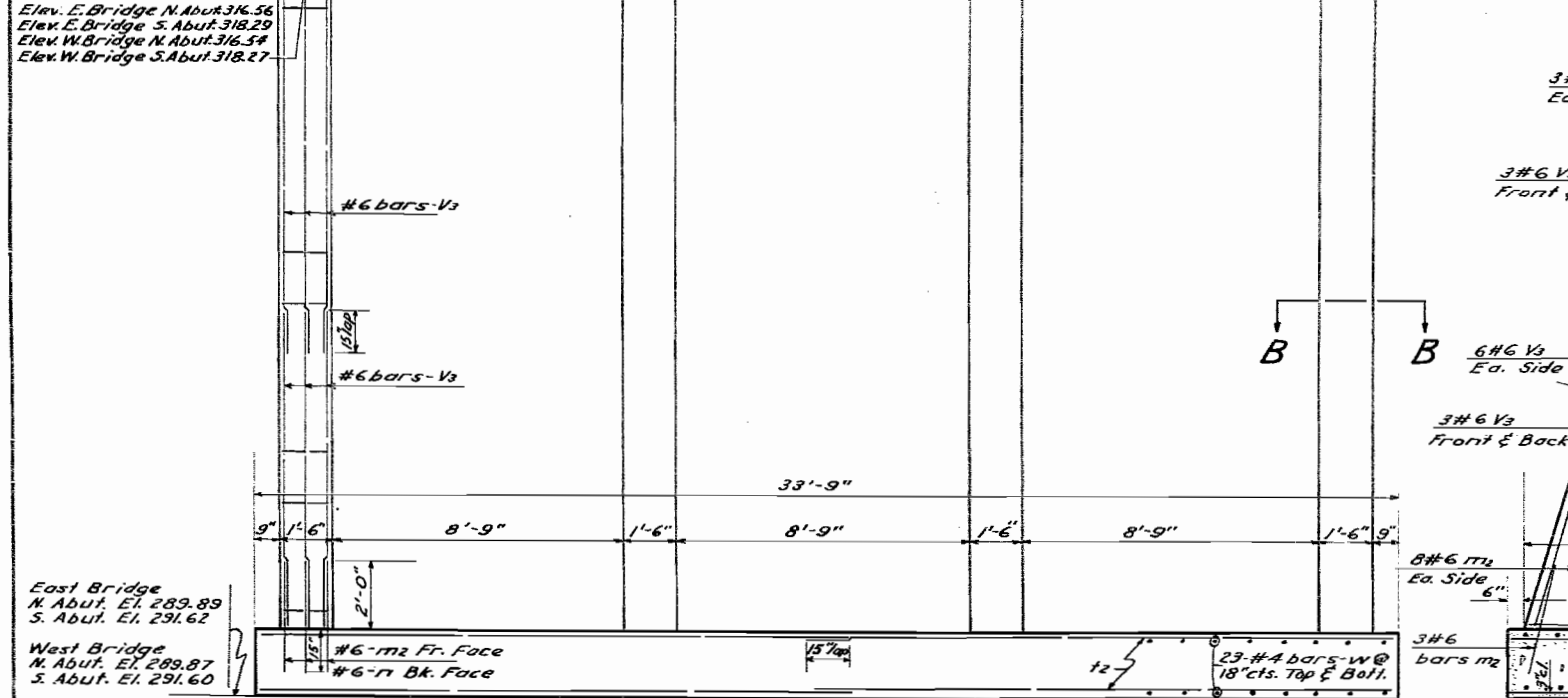
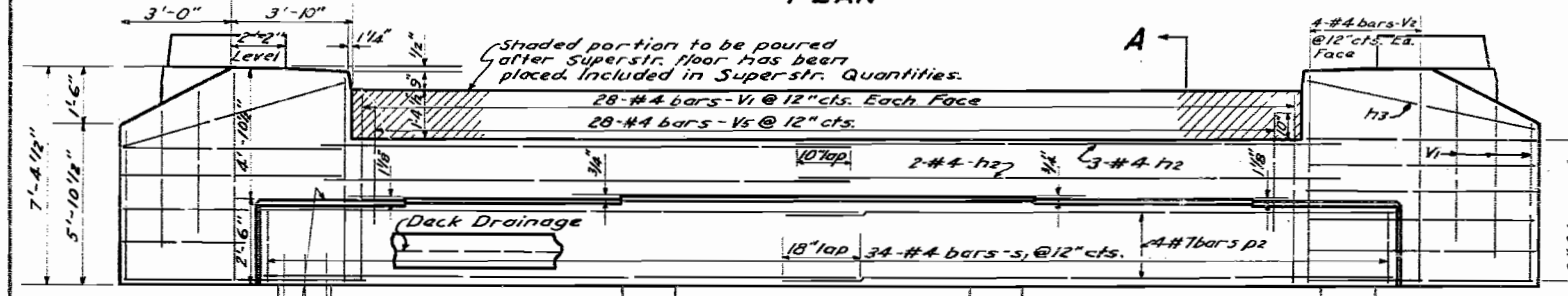
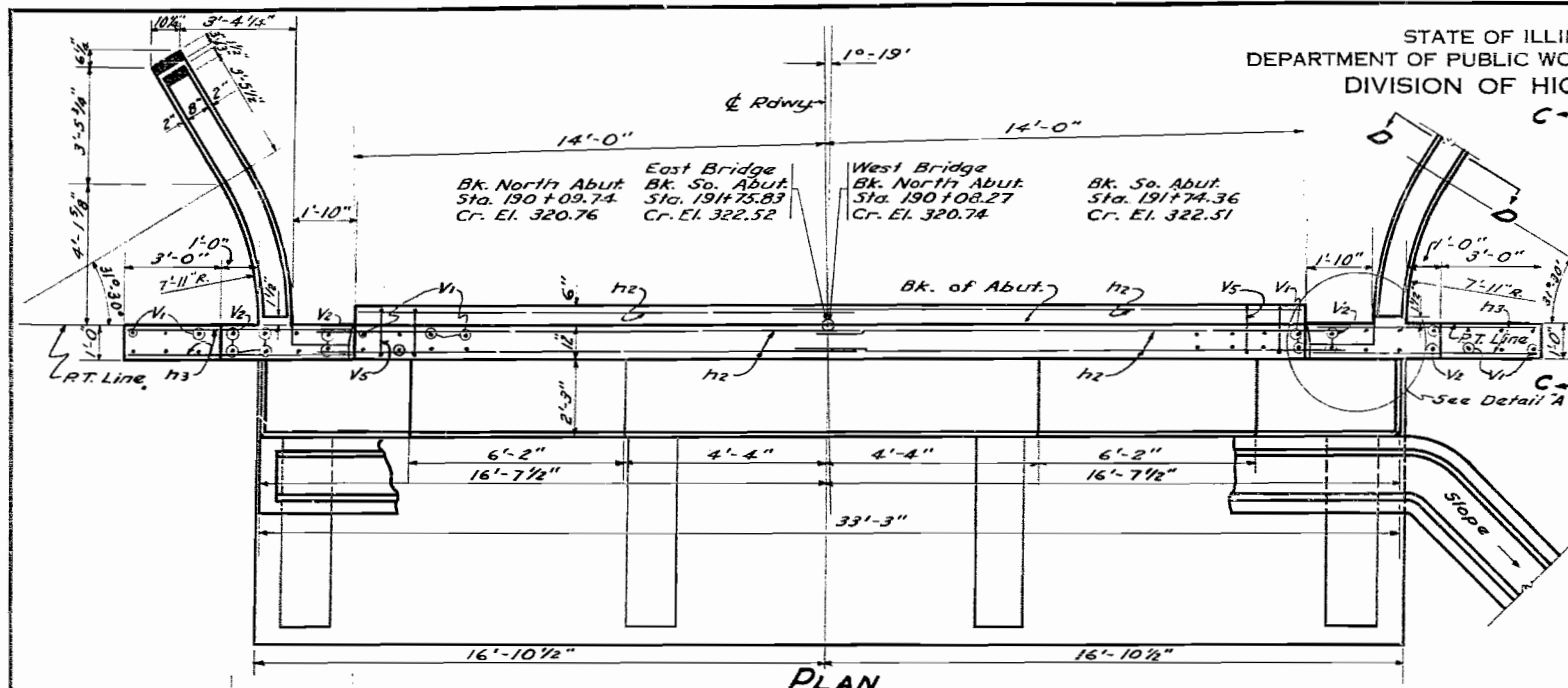
BAR M

SHOWING REINFORCEMENT

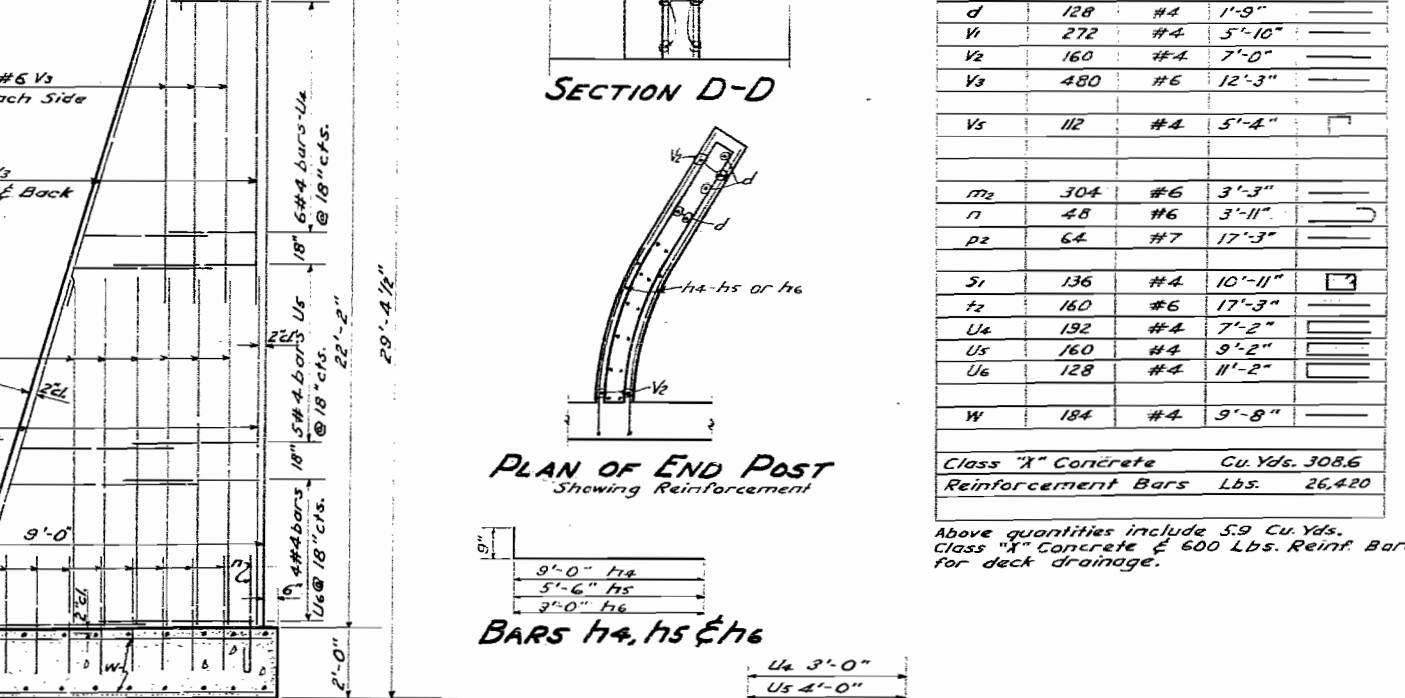
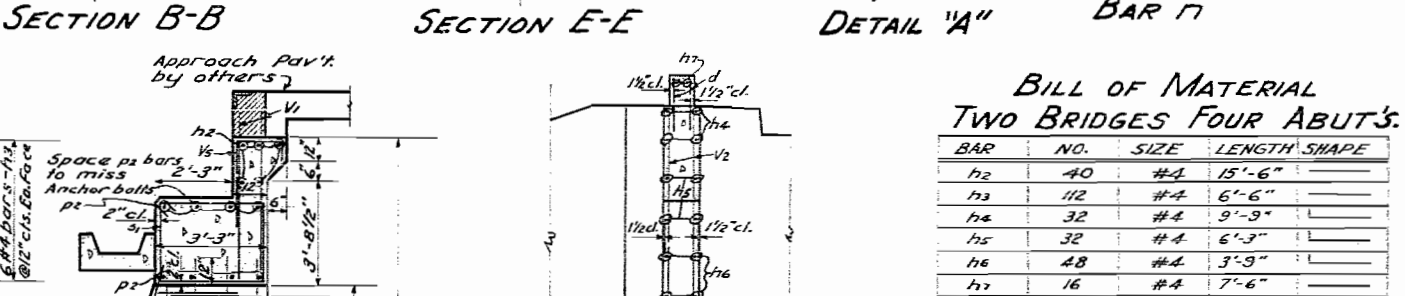
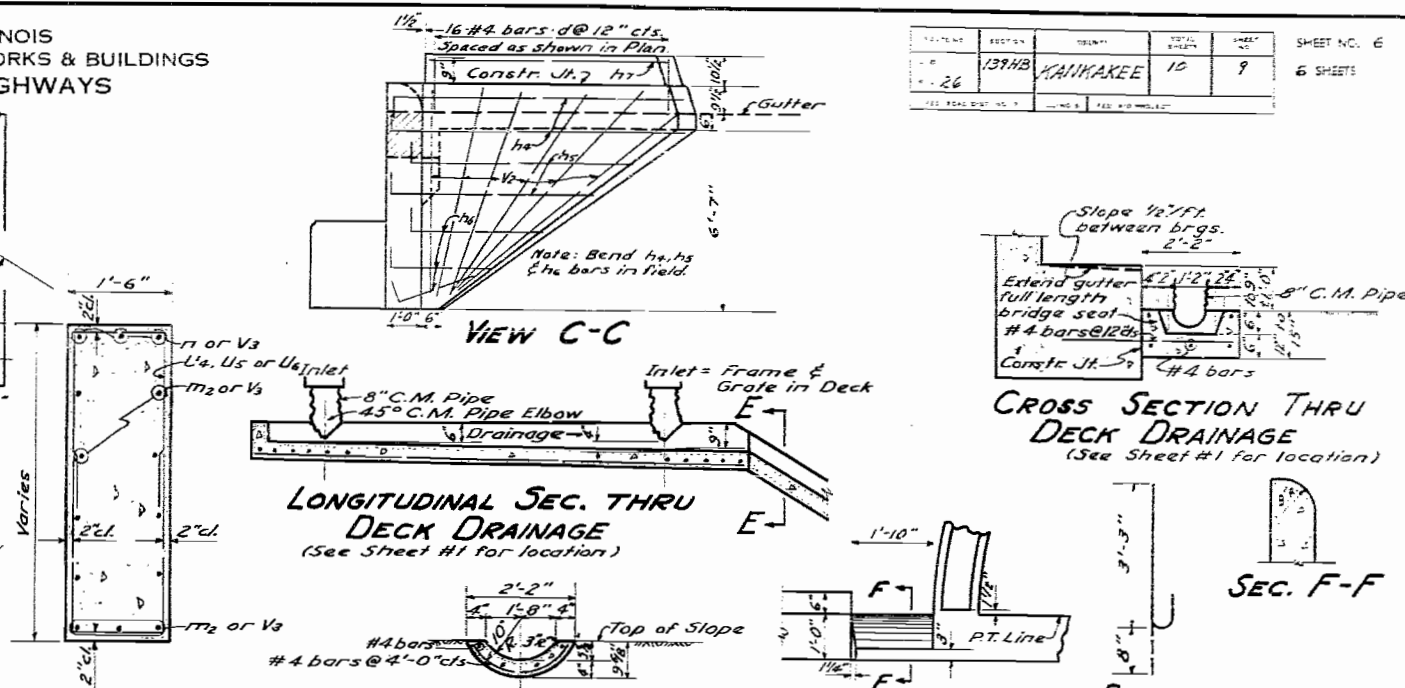
BAR M.

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

SECTION	139H-B	TOTAL SHEETS	10	SHEET NO.	6
PROJECT	KANKAKEE	DATE	9	SHEETS	6



DESIGNED	M. J. O'Connell	EXAMINED	W. E. Hanson	DATE	June 19 1953
CHECKED	Robt. J. O'Connell	PASSED	C. E. Hanson		
DRAWN	SUTLER J. Ganci	APPROVED	J. M. Parker		
CHECKED	M. O. ROG				



ABUTMENTS	PROJ. U.I.-29 (16)
F.A. RT. 26 SEC. 139 H-B	KANKAKEE CO.
STA. 190+92.05	

BILL OF MATERIAL TWO BRIDGES FOUR ABUTS.

BAR	NO.	SIZE	LENGTH	SHAPE
h2	40	#4	15'-6"	
h3	112	#4	6'-6"	
h4	32	#4	9'-9"	
h5	32	#4	6'-3"	
h6	48	#4	3'-9"	
h7	16	#4	7'-6"	
d	128	#4	1'-9"	
Vi	272	#4	5'-10"	
V2	160	#4	7'-0"	
V3	480	#6	12'-3"	
V5	112	#4	5'-4"	
m2	304	#6	3'-3"	
n	48	#6	3'-11"	
p2	64	#7	17'-3"	
S1	136	#4	10'-11"	
t2	160	#6	17'-3"	
U4	192	#4	7'-2"	
U5	160	#4	9'-2"	
U6	128	#4	11'-2"	
W	184	#4	9'-8"	

Class "X" Concrete Cu. Yds. 308.6
 Reinforcement Bars Lbs. 26,420

Above quantities include 5.9 Cu. Yds. Class "X" Concrete & 600 Lbs. Reinf. Bars for deck drainage.