

**STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
STATE BOND ISSUE HIGHWAY**

FEDERAL AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53	539-BY	COOK	10	1
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SCALES } PLAN 1 INCH 10 FT.
 } PROFILE, HOR. 1 INCH 10 FT.
 } PROFILE, VERT. 1 INCH 10 FT.
 } CROSS-SECTIONS 1 INCH 5 FT.

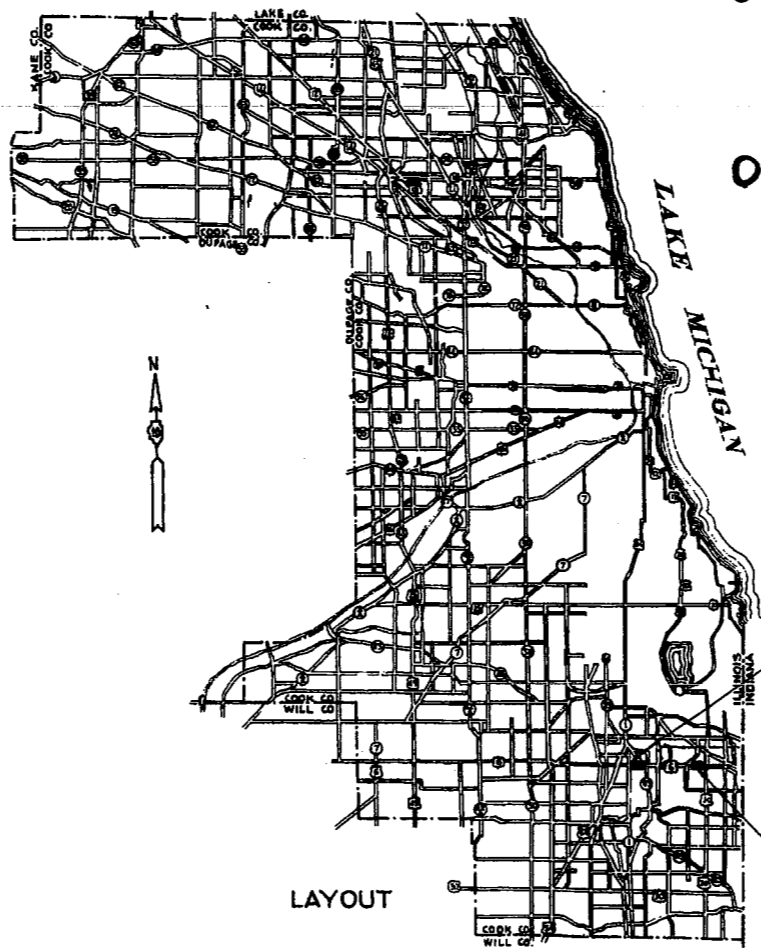
**DISTRICT 10
159TH ST. BRIDGE WIDENING
S.B.I. ROUTE 53 (F.A. ROUTE 62) SEC. 539-BY**

COOK COUNTY



016-0386 US 6 / Cal Union Ditch
92+31

016-0389 US 6 / Little Cal
203+31



SEC. 539-BY INCLUDES WIDENING EXIST. R.C. SLAB BRIDGE ON R.C. CLOSED ABUTTS. SPAN 28'-0" AT STA. 92+56.5

SEC. 539-BY INCLUDES WIDENING EXIST. R.C.D.G. BRIDGE ON SOLID PIERS & CLOSED R.C. ABUTTS. SPANS 3@50'-0" AT STA. 203+31.2

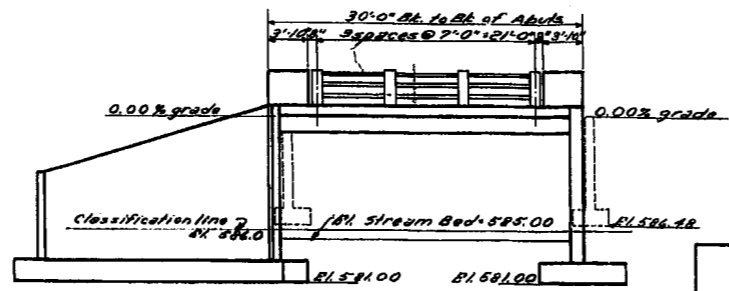
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
SUBMITTED 7-10-53
EXAMINED Aug 5 1953
PASSED
APPROVED
APPROVED

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL
APPROVED
DISTRICT ENGINEER DATE

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

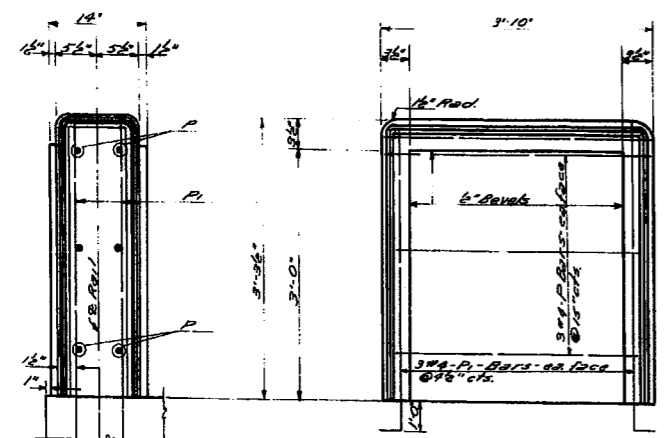
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I.			3	3
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

Existing Structure R.C. Slab - 1 Span @ 25'-4 1/2" Right Angles 40'-0" Rwy with two 5'-0" Sidewalks.
Closed type R.C. Abutments without Piling.
Contractor shall remove one half of Existing Structure at a time.
Traffic shall be maintained at all times.



GENERAL NOTES

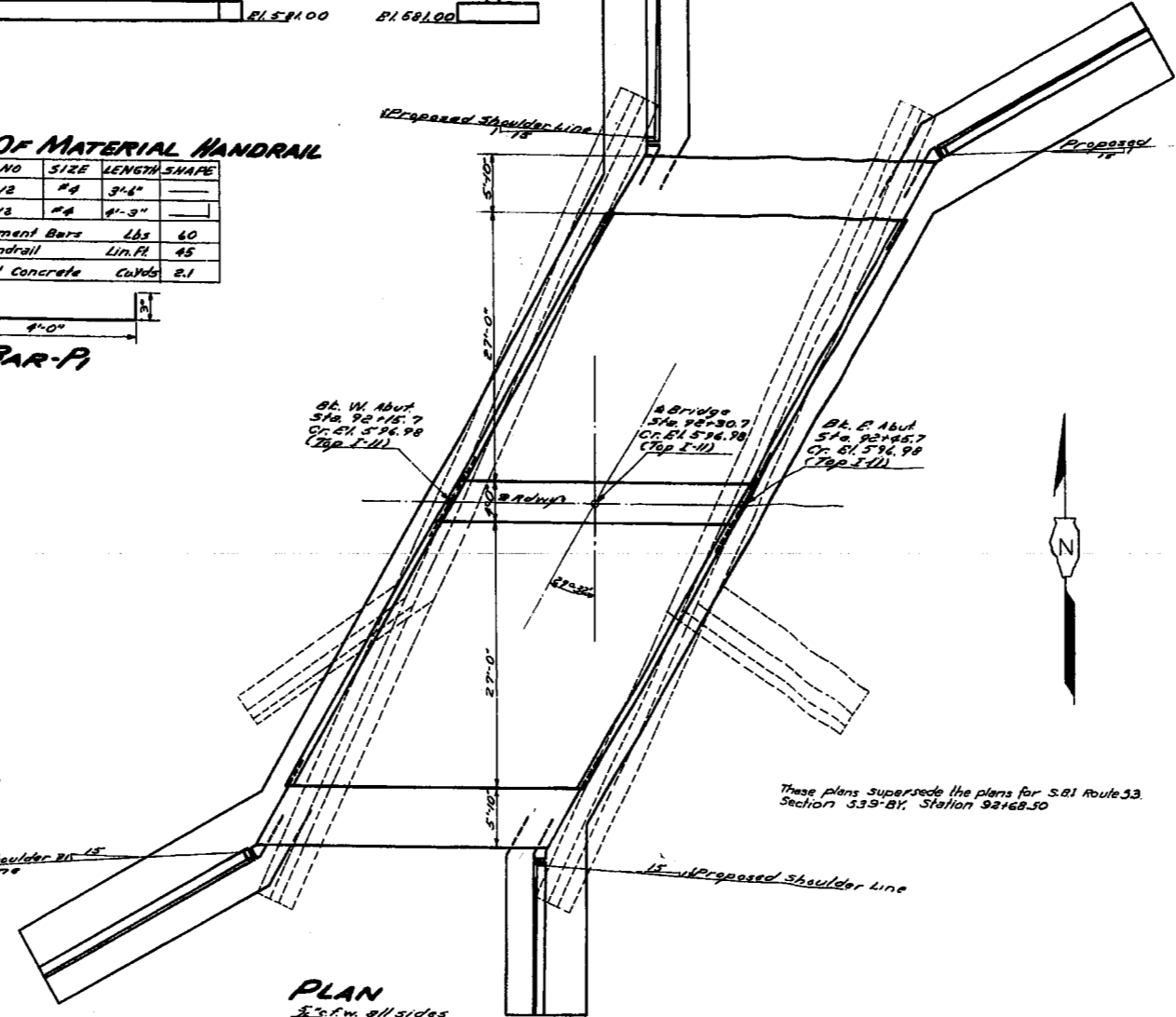
Class "X" Concrete shall be used throughout except as noted.
The Concrete Floor Slab shall be finished in accordance with the applicable provisions of section 89 of the Standard Specifications.
Sidewalk shall be poured monolithically with slab.
Handrail concrete shall be used in end posts.
The Contractor shall drive one test pile in permanent location before ordering remainder of piles.
All piles shall be untreated.
The following surfaces of the bridge shall be water-proofed, the back of the abutments from top of footing to top of wall and back of each wingwall from top of footing to top of wall. Waterproofing shall be done in accordance with Article 51.50 of the Standard Specifications.
Class "W" and "G" Excavation for Structures shall include all excavation for removal of existing structure and for constructing new structure.
All rail posts shall be vertical.
Railings shall be paid for as Metal Handrail, lined in and shall be the horizontal distance measured along a rail between Concrete Posts.
The contract unit price for Metal Handrail shall include furnishing, installing, fabricating and painting all pipe, posts complete, anchor shims and plates.
The metal Handrail shall be given one shop-coat of red lead paint and two field coats of aluminum paint. Paint shall be furnished and applied by contractor.
Metal Handrail shall not be installed until falsework has been removed.



BILL OF MATERIAL HANDRAIL

BAR NO	SIZE	LENGTH	SHAPE
P	#4	3'-6"	
A	#4	4'-3"	
Reinforcement Bars			Lbs 40
Metal Handrail			Lin. Ft. 45
Handrail Concrete			Cu Yds. 2.1

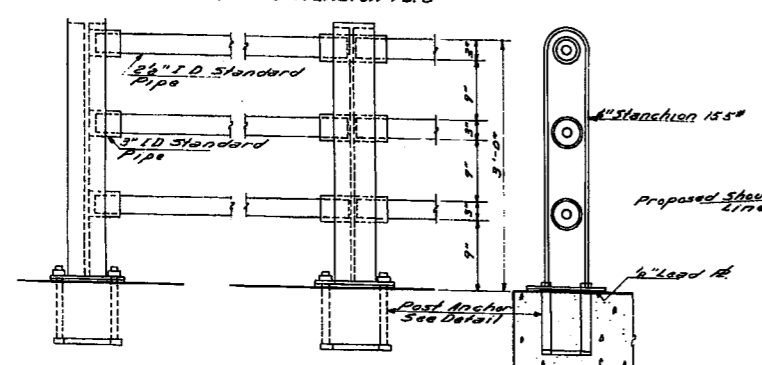
BAR-P



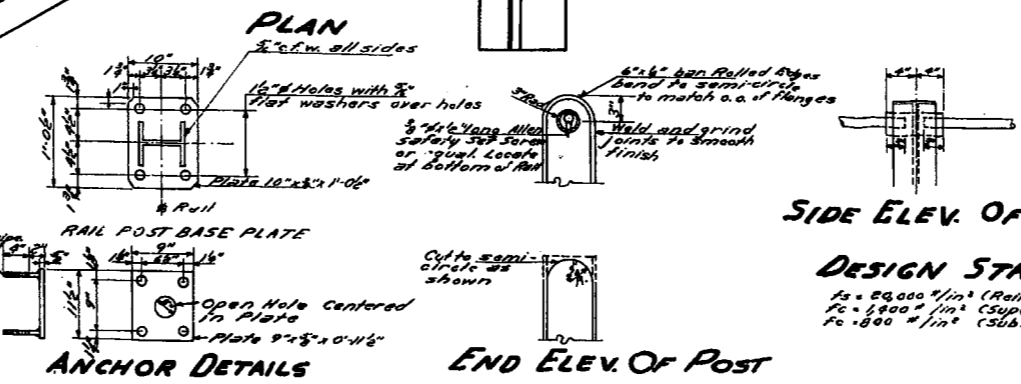
TOTAL BILL OF MATERIAL

ITEM	SUPER	SUB	TOTAL
Class X Concrete	Cu Yds 126.60	236.98	368.50
Handrail Concrete	Cu Yds 2.10		2.10
Reinforcement Bars	Lbs 22290	16570	41860
Untreated Timber Piles	Lin. Ft.	1978	1978
Test Piles	Each	1	1
Name Plates	Each	1	1
Metal Handrail	Lin. Ft.	45	45
Removal of Existing Struct.			Lump Sum
Class "W" Excav for Struct Cut		470	470
Class "G" Excav for Struct Cut		500	500

CONCRETE RAIL POST DETAILS



METAL RAIL & POST DETAILS



These plans supersede the plans for S.B.I. Route 53 Section 339-B1, Station 92+68.50

STATION 92+30.07
BUILT 1983 BY
STATE OF ILLINOIS
S.B.I. Rt. 53 Sec. 539B
LOADING H20-516

LETTERING FOR NAME PLATE
See Standard 213

016-0386

DESIGNED: Bob M. D'Amico
CHECKED: [Signature]
DRAWN: RMD
CHECKED: [Signature]
EXAMINED: [Signature]
PASSED: [Signature]
APPROVED: R.R. Bartsch

Room 4 top for 1 1/2 x 3/8
bolt. Use 3/8 x 3 1/2 thread
bolt. Use 1/2 cut washer and
bolt. Use double extra strong pipe
Weld pipe to plate all
around with 3/8 x 1/2 a.w.

SIDE ELEV. OF POST

DESIGN STRESSES

f_s = 20,000 #/in² (Reinforcement)
f_c = 1,900 #/in² (Super)
f_c = 800 #/in² (Sub)

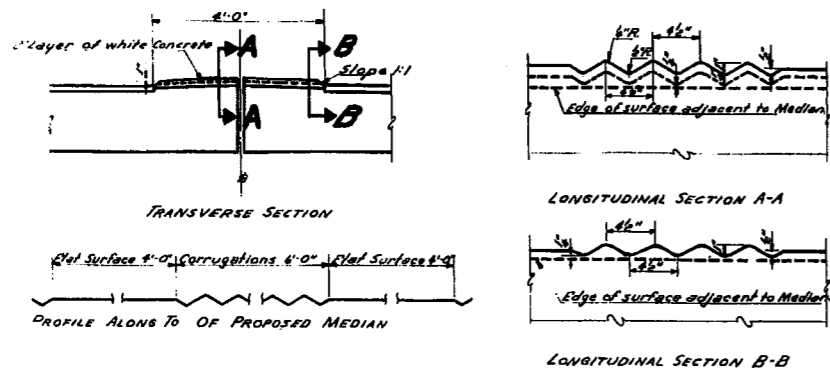
GENERAL PLAN AND ELEVATION

S.B.I. Rt. 53 Sec. 539-B1
COOK COUNTY
STA. 92+30.7
LOADING H20-516

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

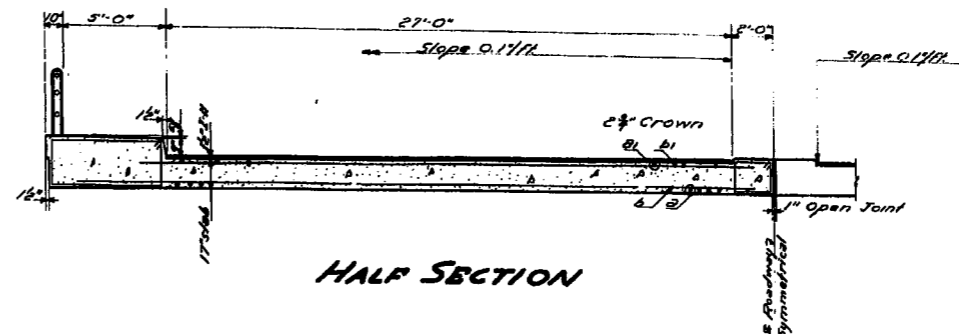
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I.				
P.A.				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 2
OF 3 SHEETS

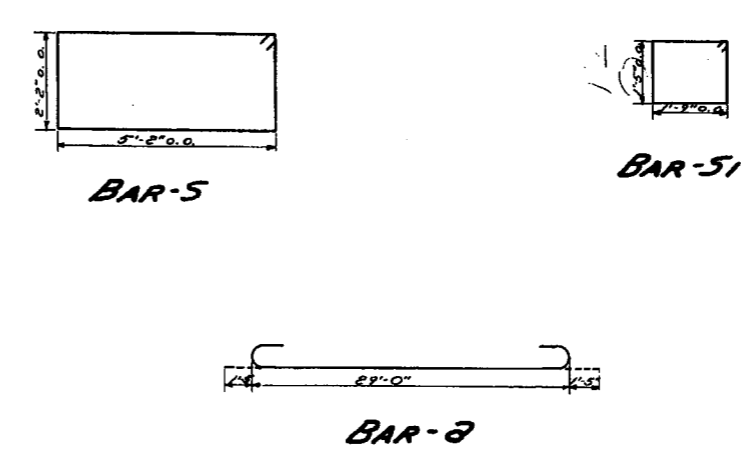
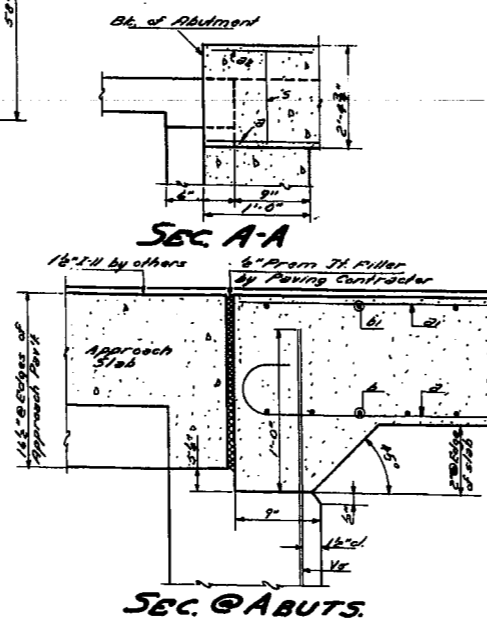
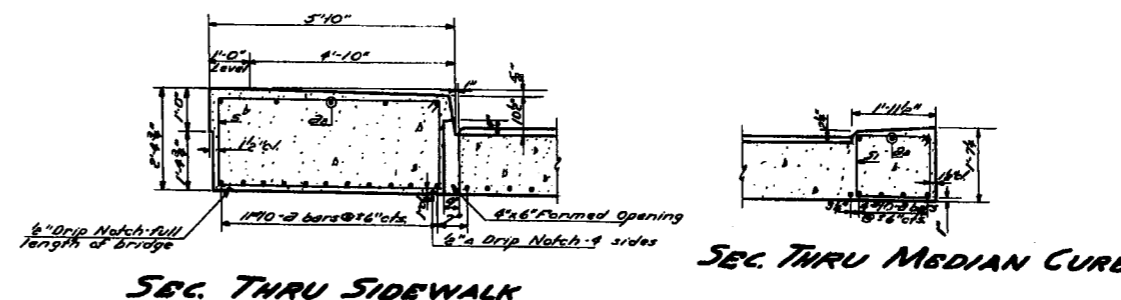
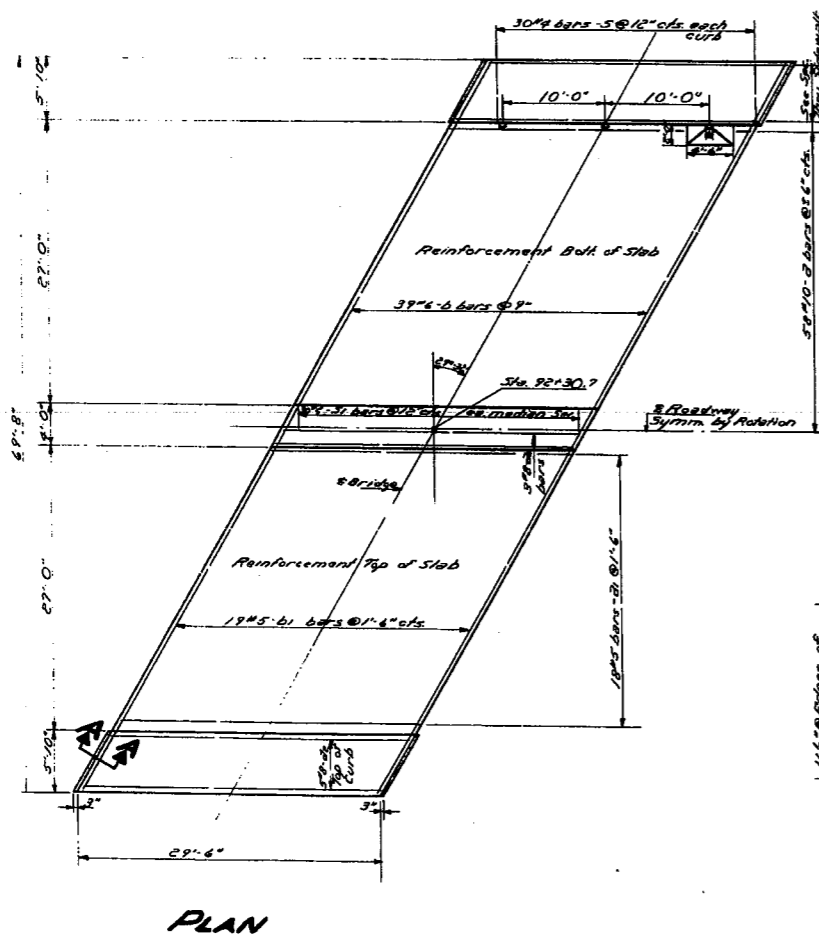


NOTES

If required by special provisions the 4'-0" of surface for the entire 4'-0" of width, shall receive a uniform sprinkling of glass beads of the type normally used for reflectorizing highway traffic stripes the type of glass beads, the amount per sq. ft. of surface and the method of application shall be specified in the special provisions.
Median Stripes shall be paid for as Class X concrete.



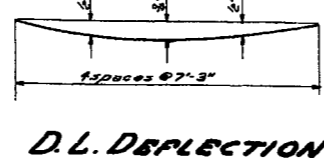
MEDIAN DETAILS



BILL OF MATERIAL SUPER

BAR	NO.	SIZE	LENGTH	SHAPE
a	138	#10	31'-10"	
b1	36	#5	25'-2"	
b2	16	#8	29'-0"	
b	78	#6	32'-4"	
b1	38	#5	32'-6"	
s	60	#4	18'-8"	
sl	60	#4	7'-1"	

Handrail Concrete Cu. Yds. 2.1
Class X Concrete Cu. Yds. 121.4
Reinforcement Bars lbs. 22230
Metal Handrail Lin. Ft. 45



DESIGNED *Hilly M. Darnel*
CHECKED *Joe P. ...*
DRAWN *R.P.D. C. Gressch*
CHECKED *[Signature]*

EXAMINED *W.E. Hanson*
PASSED *[Signature]*
APPROVED *R.R. Bartelmann*

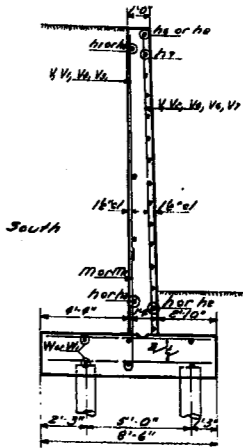
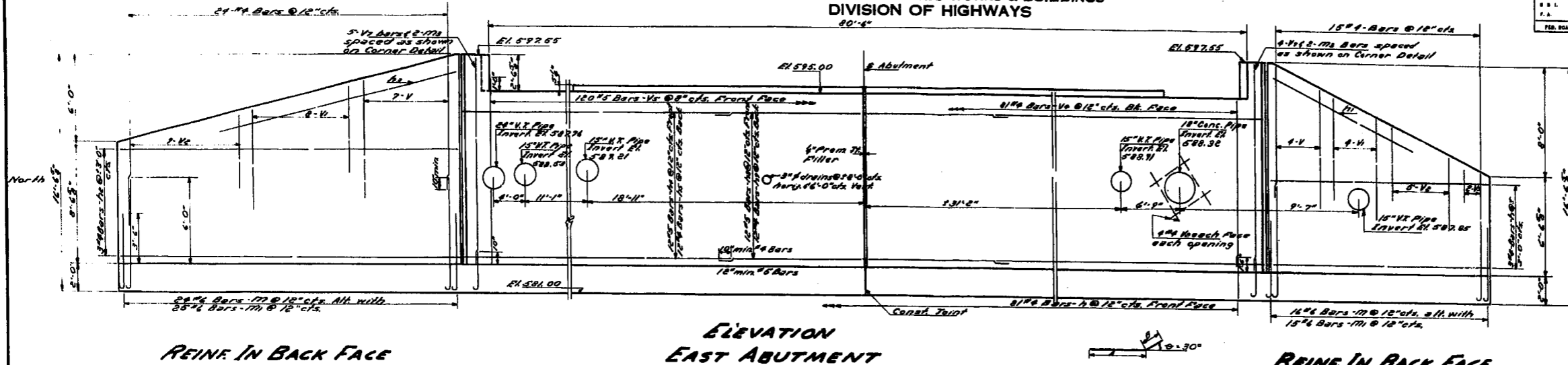
Jan 8 1954

SUPERSTRUCTURE
S.B.I. Rt. 53 Sec. 539-BY
COOK COUNTY
STA. 92+30.7

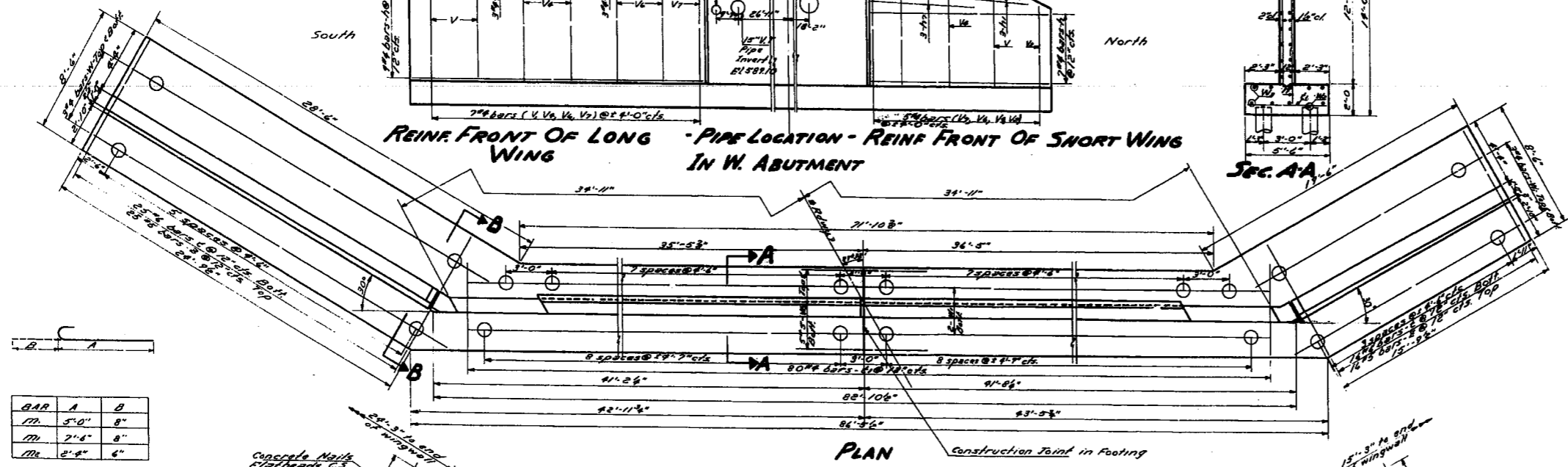
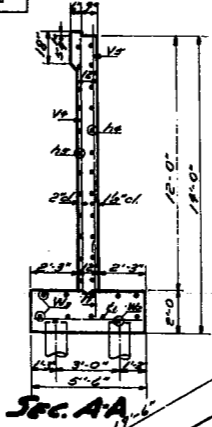
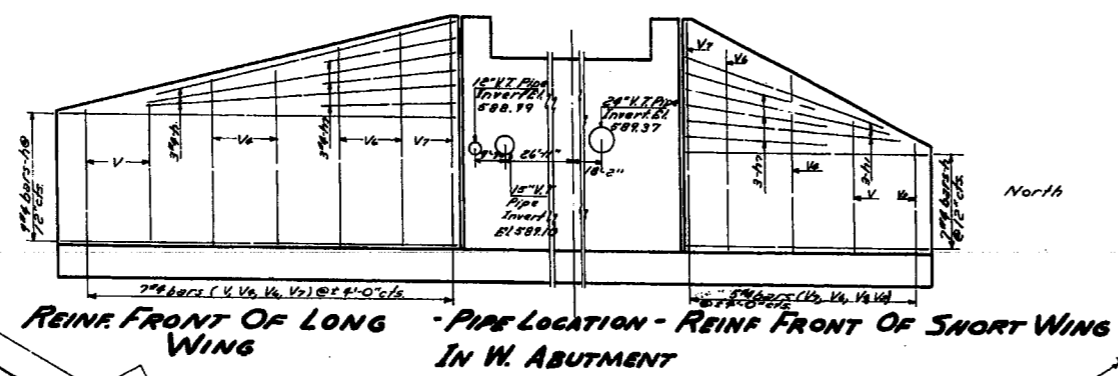
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	1	COOK	3	3
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT.				

SHEET NO. 3
3 SHEETS



BAR	A	B	Ø
16	20'-6"	6"	30°
18	21'-0"	6"	30°



BAR	A	B
17	5'-0"	8"
18	7'-6"	8"
19	2'-4"	6"

BILL OF MATERIAL

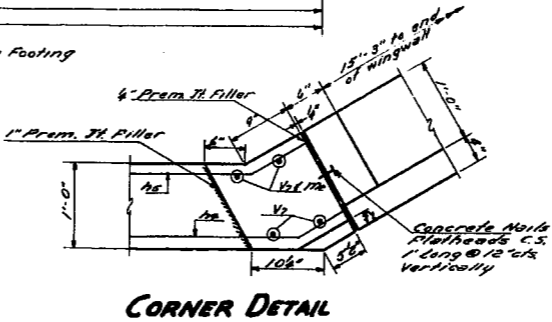
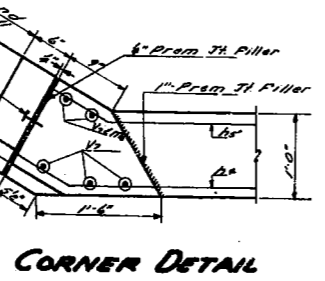
BAR NO	SIZE	LENGTH	SHAPE
h	26	#4	15'-0"
h1	8	#4	10'-6"
h2	24	#4	28'-3"
h3	2	#4	12'-4"
h4	48	#6	21'-0"
h5	48	#6	27'-6"
h6	12	#4	6'-6"
h7	48	#6	21'-0"
h8	48	#6	21'-0"
v	28	#4	8'-3"
v1	24	#4	7'-0"
v2	108	#4	5'-0"
v3	8	#6	2'-3"
v4	148	#4	10'-6"
v5	240	#6	18'-0"
v6	6	#4	12'-6"
v7	22	#4	18'-3"
m	80	#6	8'-8"
m1	80	#6	8'-8"
m2	8	#6	2'-10"
n	142	#4	3'-0"
c	82	#6	8'-3"
c1	160	#4	5'-3"
w	12	#4	27'-0"
w1	10	#4	12'-3"
w2	16	#4	28'-0"
w3	20	#6	8'-0"
z	82	#5	8'-3"

Class 2' Concrete Cu. Vol. 236.7
Reinforcement Bars Lbs. 14570
Class 2' Screen for Struck Concrete 500
Class 2' Screen for Struck Concrete 470
Untreated Piles 18 Ft. Dia. 1998
Test Piles Rock 1

DESIGNED *High M. Dwyer*
CHECKED *W. J. Hendon*
DRAWN B.M.D. *R. Grossch*
CHECKED *[Signature]*

EXAMINED *W. E. Hanson*
PASSED *[Signature]*
APPROVED *R. H. Bartelme*

Jan 8 1954
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
ENGINEER OF DESIGN
CHIEF HIGHWAY ENGINEER



PILING DATA
11 Required @ Abutts
15 Ton Min. Capacity
18 Ft. Estimated Length

N. & S. ABUTMENT
S.B.I. RT. 53-SEC. 539-BY
COOK COUNTY
STA. 92+30.7