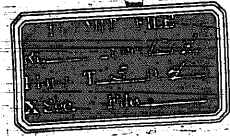
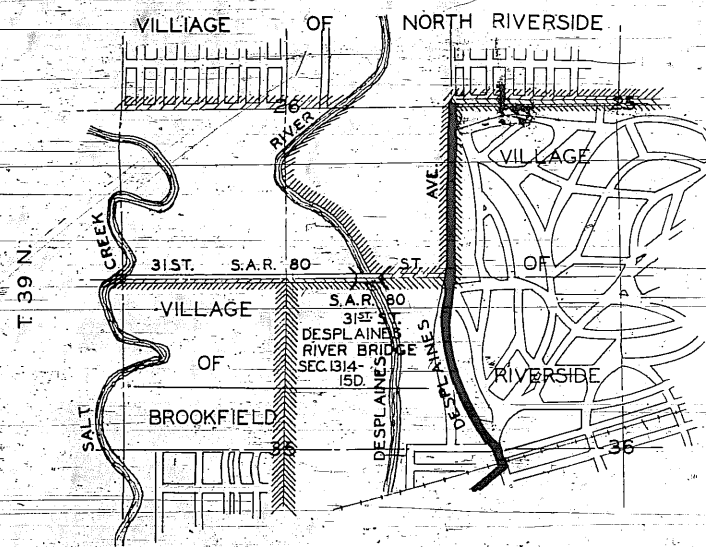
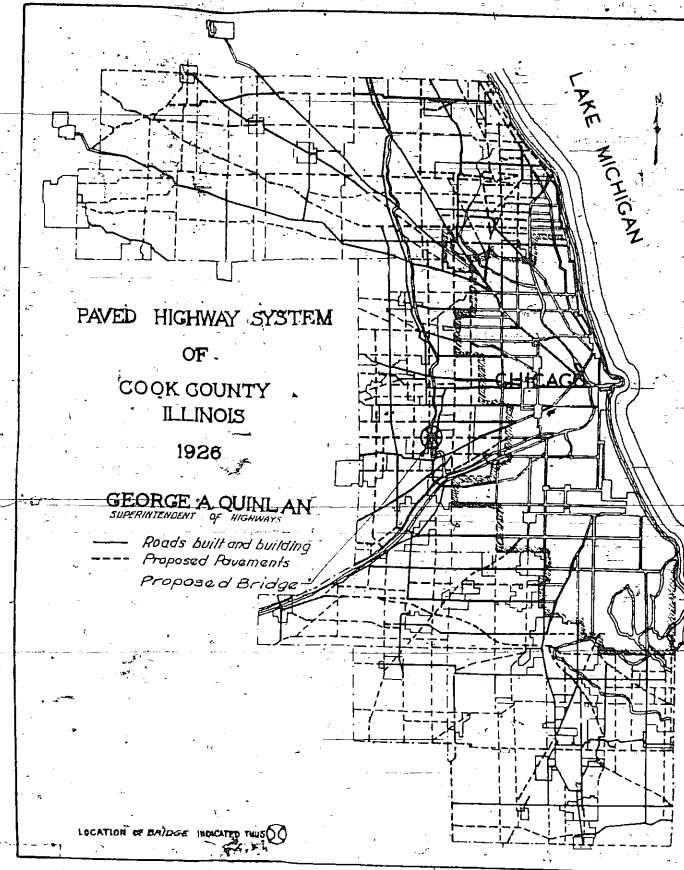


INDEX OF SHEETS

SHEET NO.	TITLE	PAGE
1	PLAN & PROFILE	
2	GENERAL ELEVATION & DETAIL OF PIER	
3	DETAIL OF SUPERSTRUCTURE	
4	DETAIL OF ABUTMENTS	

Revised Plans in accordance with conditions of letter of approval & found satisfactory.

STATE OF ILLINOIS
 COUNTY OF COOK
 DEPARTMENT OF HIGHWAYS
**PLANS FOR PROPOSED
 STATE AID HIGHWAY
 BRIDGE
 31ST. ST.
 DESPLAINES RIVER BRIDGE
 SEC. 1314-15D. S.A.R. 80**



SUMMARY OF QUANTITIES
 2252.8 CU.YDS. CLASS A CONCRETE
 3618.90 LBS. REINFORCING STEEL
 45.2 CU.YDS. CLASS X CONC. HANDRAIL
 150 SQ.FT. BITUMINOUS FELT
 5335 LBS. CAST IRON ROCKERS
 4571 LBS. STEEL BEARING PLATES
 2744 LBS. STEEL EXPANSION GUARD
 2-CAST IRON NAME PLATES
 2333 CU.YDS. EXCAVATION & BACKFILL
 3314 SQ.FT. (10") WIRE MESH REINFORCEMENT
 2268 SQ.FT. STANDARD 10" PARTITION TILE

R 12 E

CONVENTIONAL SIGNS

STATE AND NATIONAL LINE	LEVEE	
COUNTY LINE	CULVERTS	
CITY-VILLAGE OR BOROUGH	DROP INLET	
TOWNSHIP LINE	TROLLEY POLE	
GRANT LINE	POWER POLE	
SECTION LINE	TELEPHONE OR TELEGRAPH POLES	
FENCE LINE	MARSH	
GUARD RAIL	HEDGE	
UNFENCED PROPERTY	GROUND ELEVATION	
RIGHT-OF-WAY LINE	GRADE ELEVATION	
TRAVELED WAY		
RAILROADS		
RETAINING WALL		
BASE OR SURVEY LINE		

APPROVED _____ 19__

COUNTY SUPERINTENDENT OF HIGHWAYS

THE DEPARTMENT OF
 PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS

PASSED _____ 19__

ROAD ENGINEER

APPROVED _____ 19__

CHIEF HIGHWAY ENGINEER

APPROVED _____ 19__

SUPERINTENDENT OF HIGHWAYS

APPROVED _____ 19__

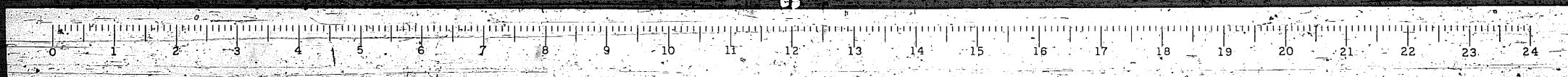
DIRECTOR

RECOMMENDED FOR APPROVAL

CHIEF ENGINEER OFFICE OF PUBLIC ROADS & RURAL ENGINEERING

APPROVED _____

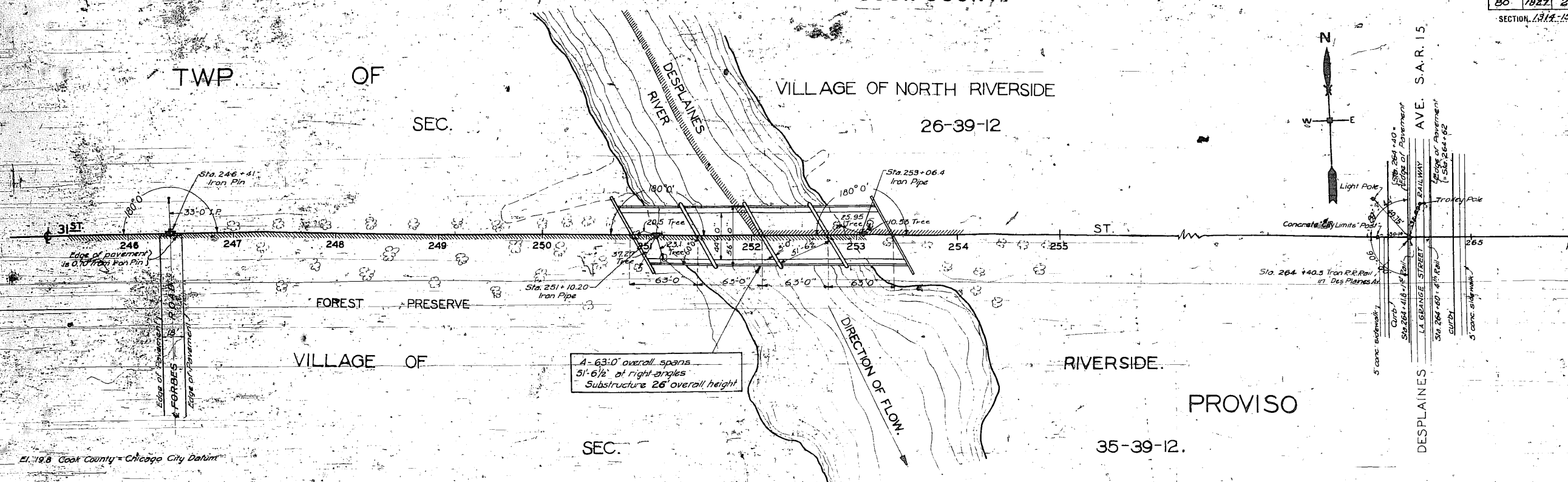
DIRECTOR OFFICE OF PUBLIC ROADS & RURAL ENGINEERING



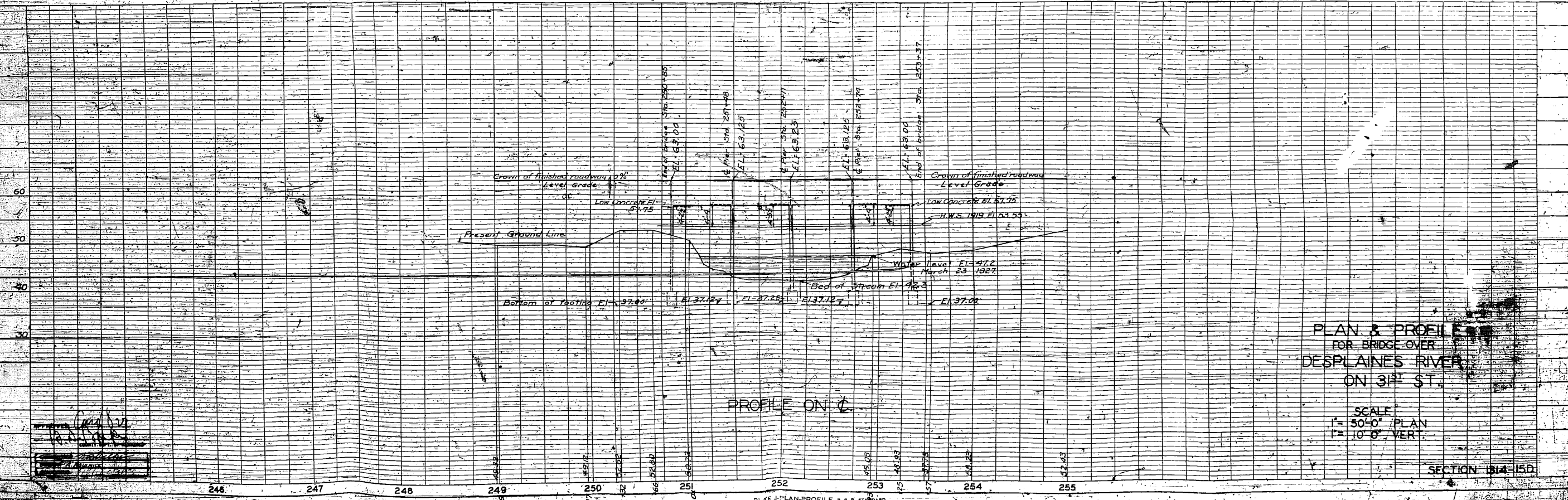
DEPARTMENT OF HIGHWAYS
COOK COUNTY

Sta. No.	Year	Sheet No.	Total Sheets
80	1927	2	5

SECTION 1314-150



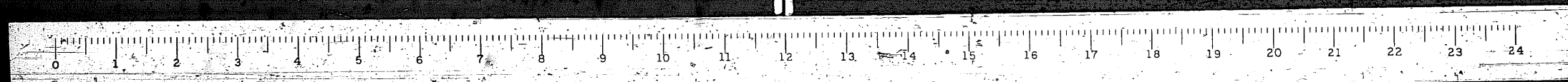
PLAN
SCALE: 1" = 50'-0"



PLAN & PROFILE
FOR BRIDGE OVER
DESPLAINES RIVER
ON 31st ST.

SCALE
1" = 50'-0" PLAN
1" = 10'-0" VERT.

SECTION 1314-150

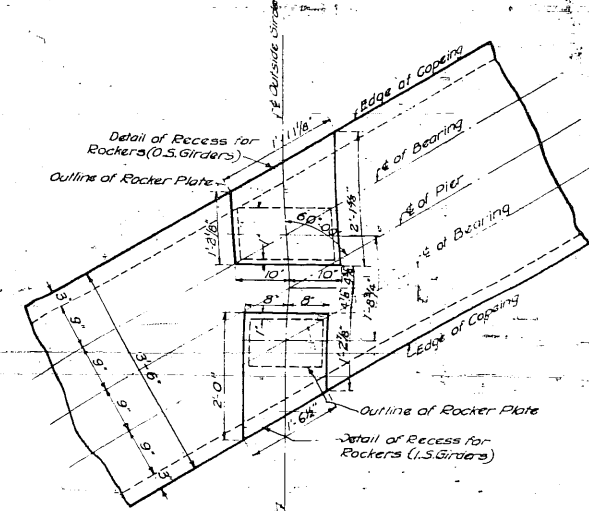
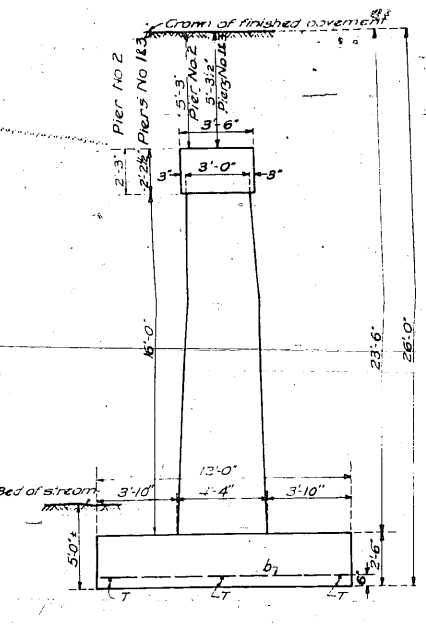
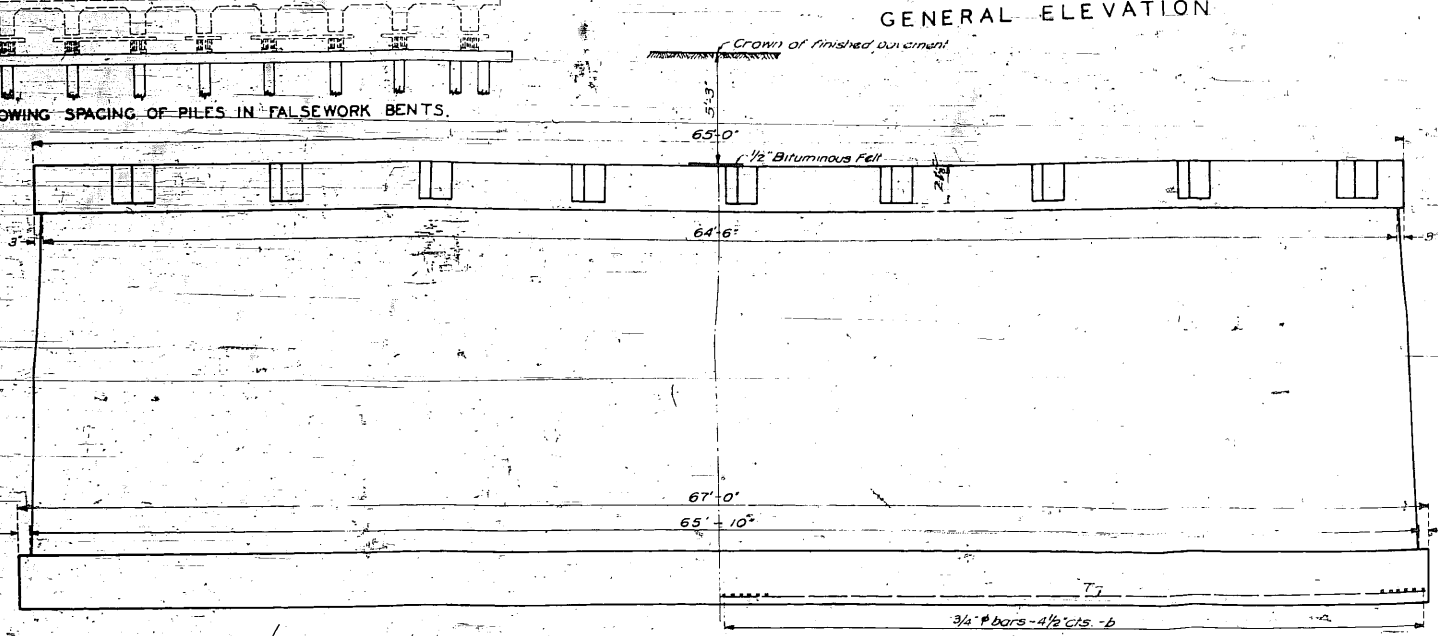
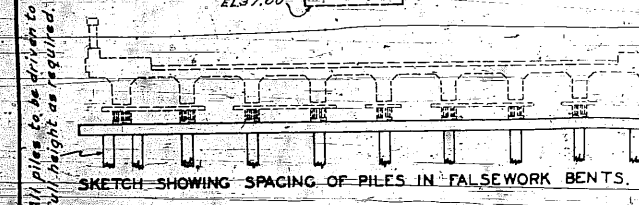
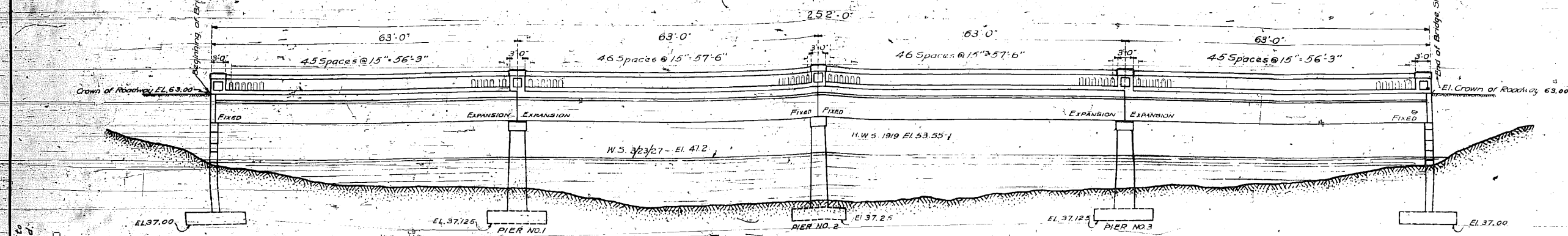


DEPARTMENT OF HIGHWAYS
COOK COUNTY

State Aid	Fiscal Year	Sheet No.	Total Sheets
80	1927	5	5

SECTION 1314-15D

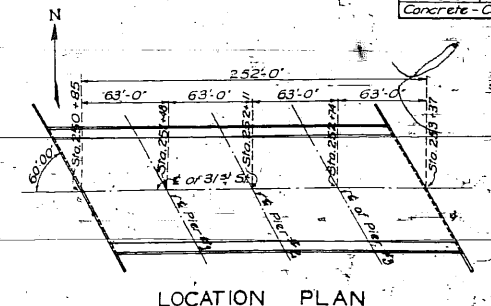
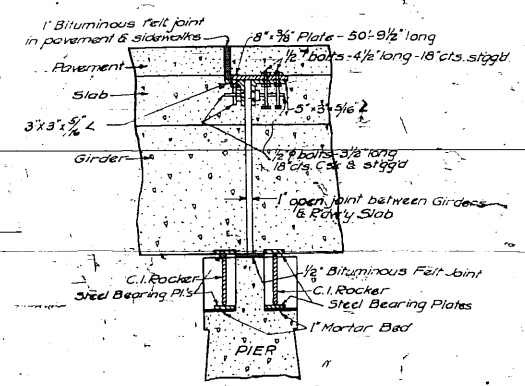
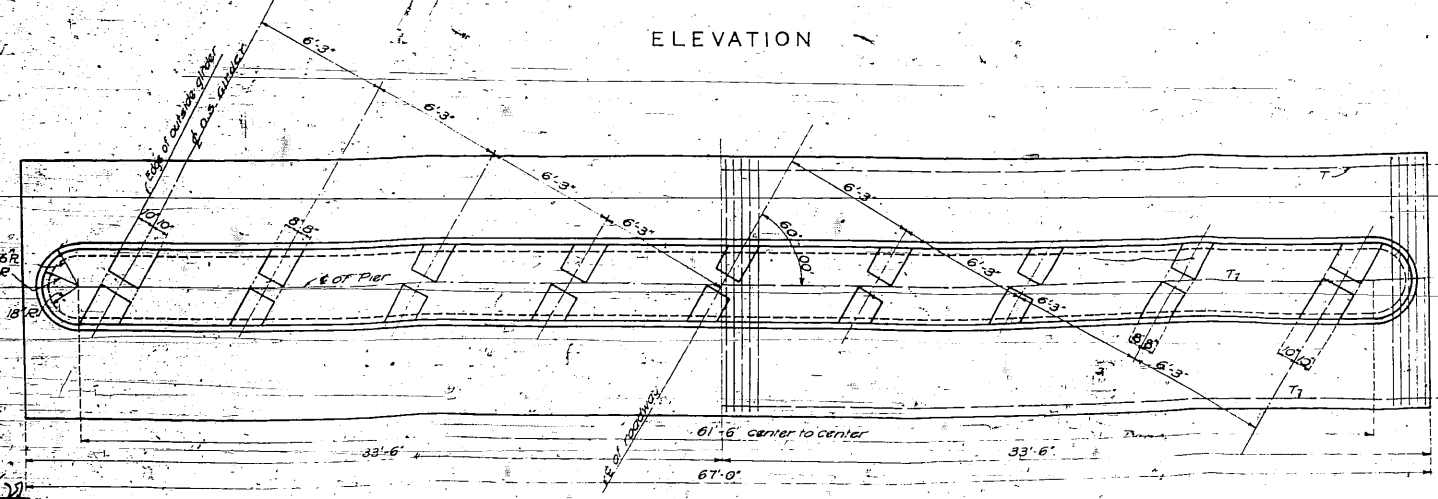
NOTE
Class A Concrete to be used throughout. Proportions 1-2 1/4-4.
All edges of exposed concrete to be beveled by use of 1/2 inch triangular moulding.
All reinforcing bars shall be either new billet steel or rail steel conforming to the requirements specified in Art. 474 of the County Specifications for Highways and Bridges. All bars must be obtained in full length indicated in the Bill of Material.
All reinforcing steel shall be securely wired in position before concrete is placed.



FOR THREE PIERS

BILL OF MATERIAL			
Bars	No.	Size	Length
b	537	3/4" x 9"	11'-9"
T	27	1/2"	23'-0"

Reinforcing Steel - lbs. 9672.1
Concrete - cu. yds. 72.2



GENERAL ELEVATION & DETAILS OF PIER
SEC. 1314-15D

APPROVED
[Signature]
DEPT. COUNTY DEPT. OF HIGHWAYS

HALF PLAN SHOWING OUTLINES

Recesses for Rockers shown in this plan in Piers No. 1 & No. 3 Only
FOR DIMENSIONS OF RECESSES SEE DETAIL

HALF PLAN SHOWING REINFORCEMENT

DETAIL OF EXPANSION DEVICE OVER PIERS 1 & 3
Full width of Roadway 2 Required
1" Bituminous Felt joint in Sidewalks
Total Weight - 2744



DEPARTMENT OF HIGHWAYS
COOK COUNTY

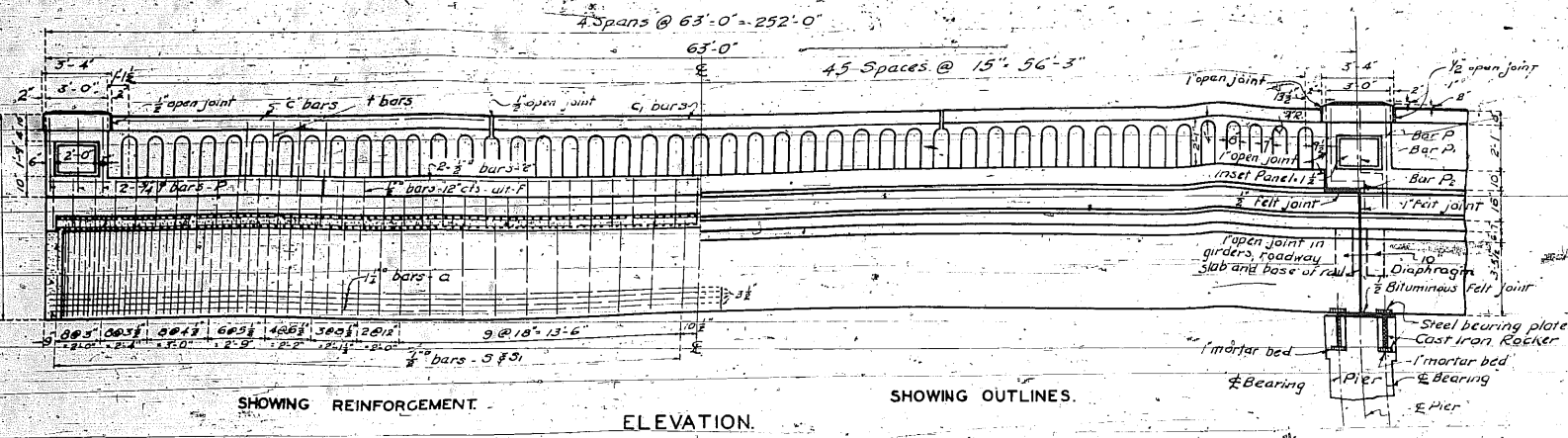
State Aid	Fiscal	Sheet	Total
Route No.	Year	No.	Sheets
80	1927	4	5

SECTION 1314-15D

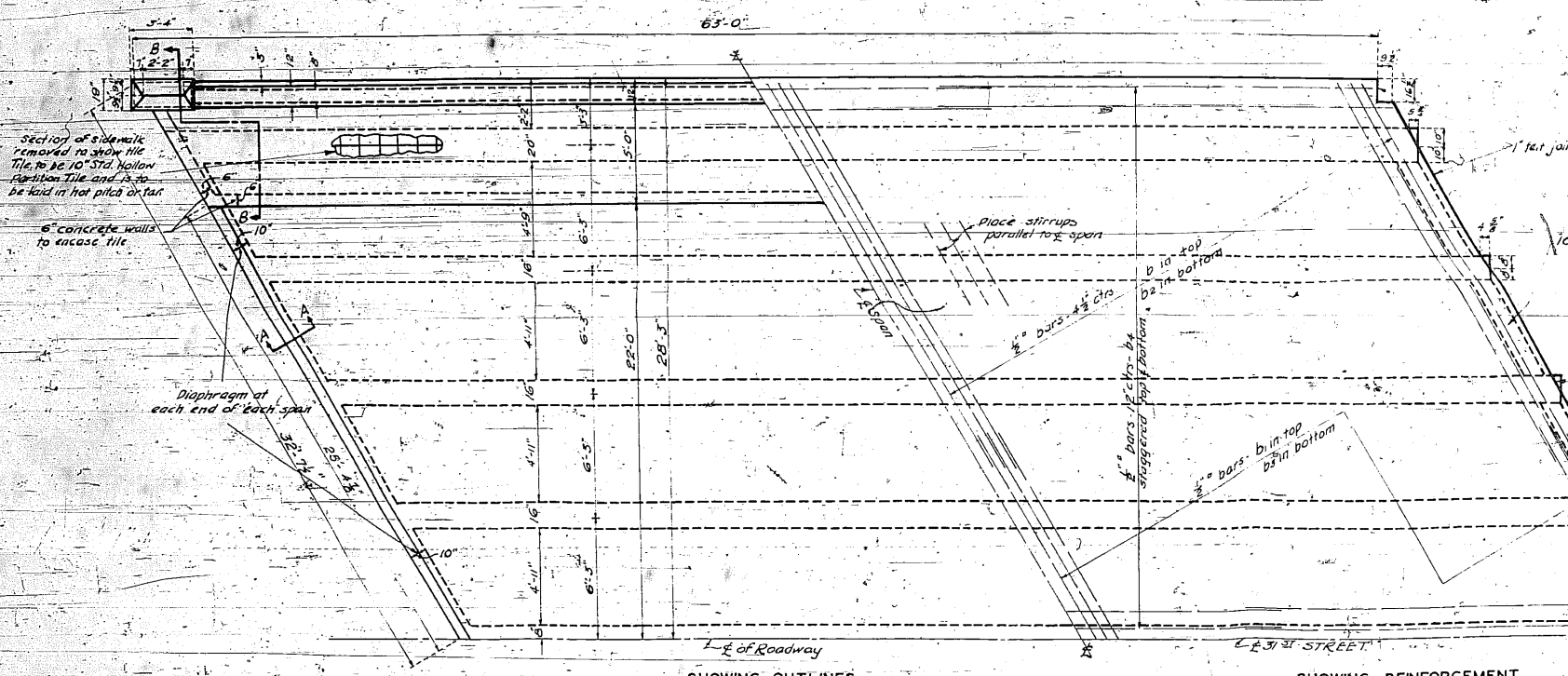
NOTE
Class A Concrete to be used throughout. Proportions 1-2 1/4-4.
All edges of exposed concrete to be beveled by use of 1/2 inch triangular mauling.
All reinforcing bars shall be either new billet steel or rail steel conforming to the requirements specified in Art. 574 of the County Specifications for Highways and Bridges. All bars must be obtained in full lengths indicated in the Bill of Material.
All reinforcing steel shall be securely wired in position before concrete is placed.

In all posts, the projecting portion of C bars shall be permitted to slide freely in the adjacent slab. A 1/2 inch pipe sleeve with cap shall be provided two inches longer than the projecting portion of the bar.
Before any work for the construction of false work is started by the Contractor, he shall submit to the Engineer for approval, a detail sketch of the falsework intended to be used for supporting the superstructure.

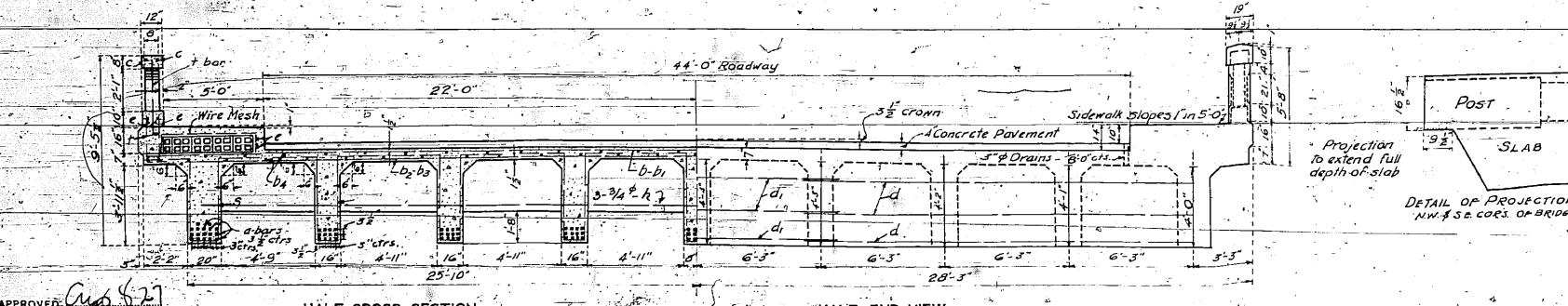
Class X concrete to be used in Rail Base, Rail Hand Rail and Posts.



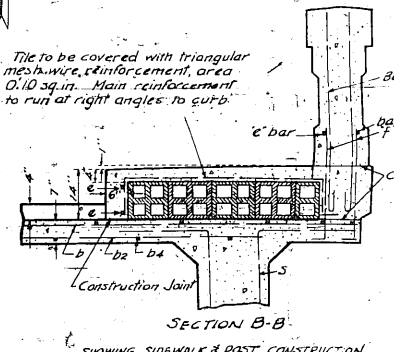
SHOWING REINFORCEMENT. ELEVATION. SHOWING OUTLINES.



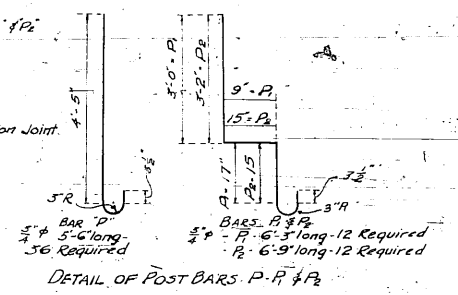
SHOWING OUTLINES. HALF FLOOR PLAN. SHOWING REINFORCEMENT.



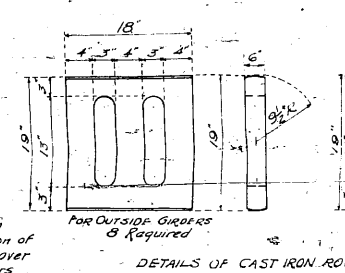
HALF CROSS SECTION. HALF END VIEW.



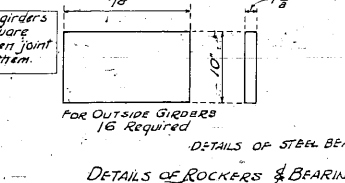
SECTION B-B SHOWING SIDEWALK & POST CONSTRUCTION.



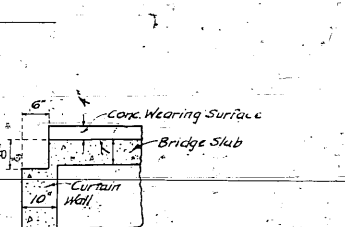
DETAIL OF POST BARS P-P & P.



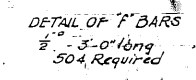
DETAILS OF CAST IRON ROCKERS



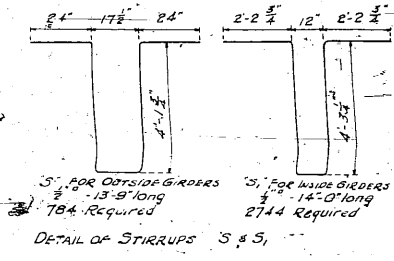
DETAILS OF BEARING PLATES



DETAILS OF ROCKERS & BEARING PLATES



DETAIL OF F BARS



DETAIL OF STIRRUPS S & S.

BILL OF MATERIALS FOR FOUR SPANS

BAR	NUMBER	SIZE	LENGTH
a	472	1 1/2"	62'-6"
b	1168	1/2"	22'-6"
b ₁	584	1/2"	22'-9"
b ₂	1168	1/2"	22'-9"
b ₃	584	1/2"	16'-6"
b ₄	688	1/2"	22'-3"
c	12	1/2"	22'-9"
c ₁	6	1/2"	18'-6"
f	504	3/4"	3'-0"
h	36	3/4"	30'-0"
h ₁	32	1/2"	17'-3"
c	16	1/2"	22'-3"
e	96	3/4"	22'-3"
p	36	3/4"	5'-6"
p ₁	12	3/4"	6'-3"
p ₂	12	3/4"	6'-9"
t	380	1/2"	3'-3"
s	784	1/2"	13'-9"
s ₁	2744	1/2"	14'-0"

MESH REINFORCEMENT - SQ. FT. 3314
REINFORCING STEEL - LBS. 284,018
56 CAST IRON ROCKERS - LBS. 6336
72 STEEL BEARING PLATES - LBS. 4571
CONCRETE - CLASS A - CUYDS. 9348
" CLASS X - CUYDS. 454
POSTS - ROLL-OVER - PARS - TIA - SQ. FT. 2266

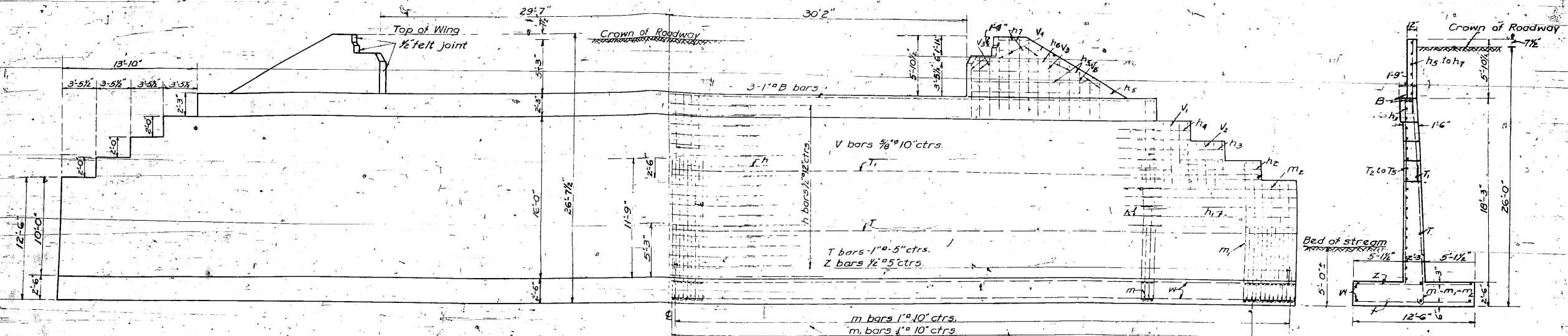
DETAILS OF SUPERSTRUCTURE
31ST ST. BRIDGE
OVER DESPLAINES RIVER
SEC. 1314-15D

APPROVED: [Signature]
DRAWN: A. ACULNIK
CHECKED: J. J. [Signature]
REVISED: 12-12-27 R.H. 1-30



DEPARTMENT OF HIGHWAYS
COOK COUNTY

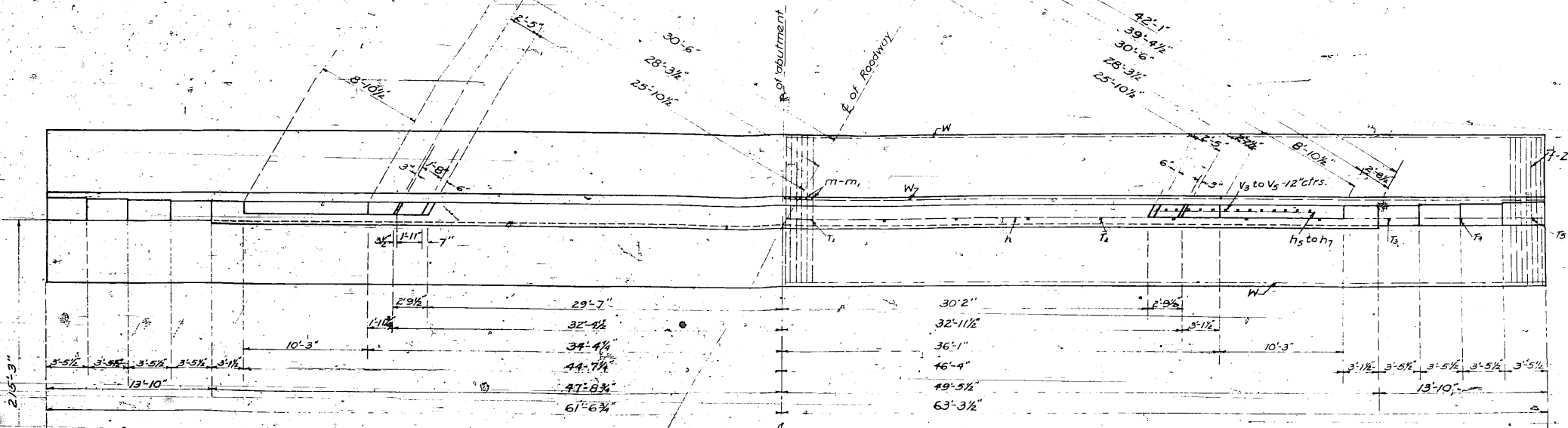
State Aid Route No. 80 Fiscal Year 1927 Sheet No. 5 Total Sheets 5
SECTION 1314-15D



SHOWING OUTLINE ELEVATION SHOWING REINFORCING END ELEVATION OF WING

NOTE

Class A Concrete to be used throughout. Proportions 1-2 1/4-4.
All edges of exposed concrete to be beveled by use of 1/4 inch triangular moulding.
All reinforcing bars shall be either new billet steel or rail steel conforming to the requirements specified in Art. 474 of the County Specifications for Highways and Bridges. All bars must be obtained in full lengths indicated in the Bill of Material.
All reinforcing steel shall be securely wired in position before concrete is placed.
Place 3 inch tile drains 8 ft. centers in abutment and wing walls one foot above ground line at face of abutment.
Abutments and wing walls to be constructed around existing tiles, sewers, pipes or conduits, as directed by the Engineer in field.
The wing walls may at the option of the Engineer be constructed at any angle with the face of the abutment.
The necessity of driving piles will be determined by the Engineer at the time the excavation for the footing is made. If piles are deemed necessary the Engineer will furnish detailed plans showing spacing and number required.



PLAN

BILL OF MATERIAL FOR TWO ABUTMENTS			
Bars	No.	Size	Lgth.
B	24	1"	26'-0"
T	600	1"	12'-3"
Z	600	1/2"	12'-3"
h	144	1/2"	28'-6"
h ₁	40	1/2"	15'-9"
h ₂	8	1/2"	12'-3"
h ₃	8	1/2"	9'-8"
h ₄	8	1/2"	5'-6"
h ₅	12	1/2"	14'-6"
h ₆	4	1/2"	8'-6"
h ₇	8	1/2"	4'-9"
m	300	1"	9'-3"
m ₁	284	1"	15'-9"
m ₂	16	1"	13'-9"
T	10	1/2"	26'-9"
T	10	1/2"	25'-3"
T ₂	32	1/2"	18'-0"
T ₃	4	1/2"	15'-9"
T ₄	4	1/2"	11'-9"
T ₅	4	1/2"	9'-9"
V	234	5/8"	8'-9"
V ₁	16	5/8"	5'-6"
V ₂	16	5/8"	4'-6"
V ₃	24	1/2"	6'-0"
V ₄	20	1/2"	7'-6"
V ₅	12	1/2"	14'-6"
W	60	1/2"	26'-9"

Cu Yds Concrete 5884
Reinforcing lbs. 68,000

DETAILS OF ABUTMENT
SEC. 1314-15D

