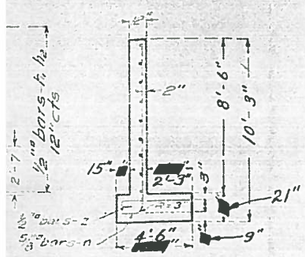
041-0031

SEC.	TOTAL SHEETS	SHEET NO.
1	45	35

Sheet No. 3
3 sheets



BILL OF MATERIAL

Bars	No.	Size	Length
v	46	1/2"□	9'-0"
v_1	24	1/2"□	10'-6"
v_2	12	1/2"□	9'-6"
v_3	12	1/2"□	8'-0"
n	20	3/8"□	22'-6"
n	40	1/2"□	14'-0"
		1/2"□	
m	46	1/2"□	3'-0"
n	48	5/8"□	5'-0"
n	46	1/2"□	4'-9"
z	48	1/2"□	4'-9
Steel-Lbs.			2420
Concrete-Cu. Yds.			62.0

Class A concrete to be used throughout. Proportions 1:2½:4

STA. 197+87
STATE BOND ISSUE ROAD
SECTION 1B, ROUTE 37
JEFFERSON CO.

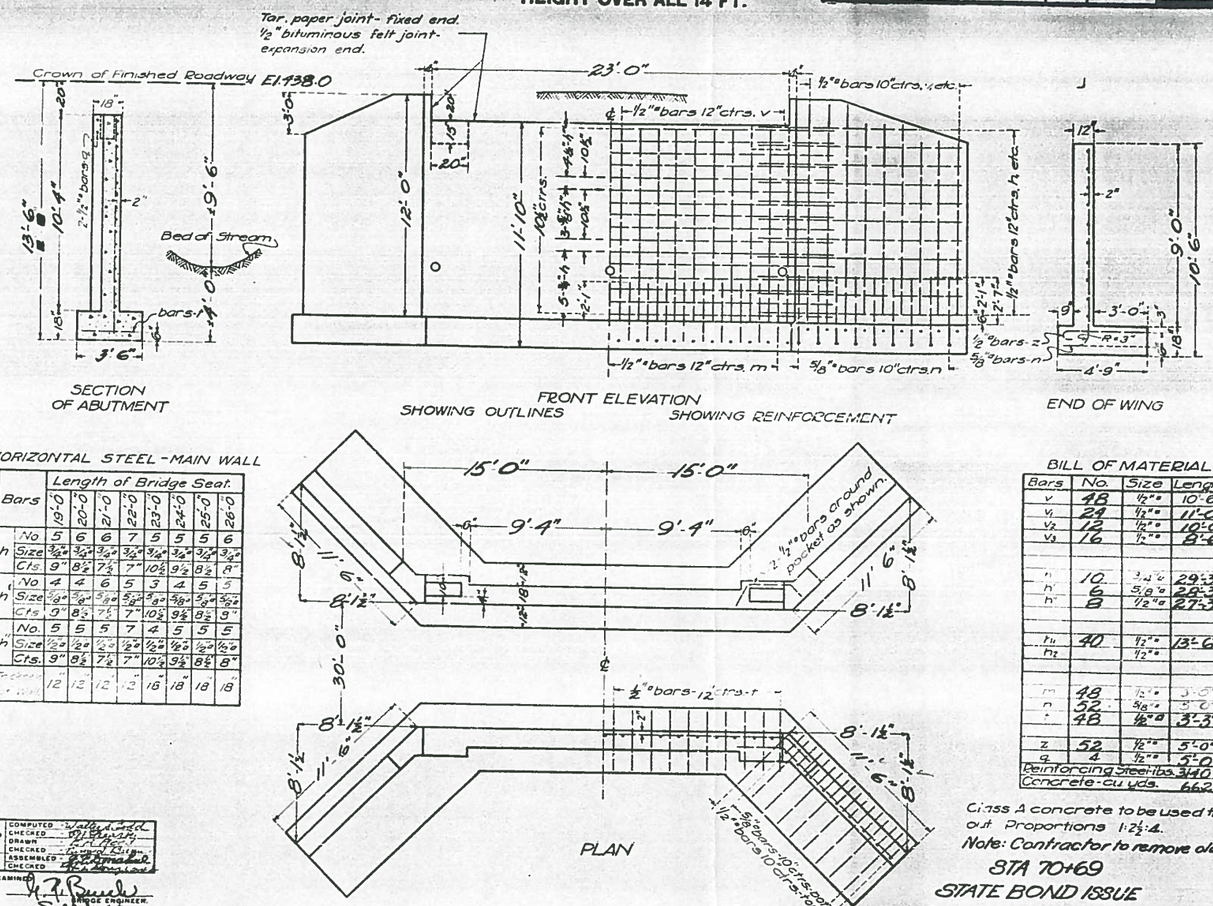
670

BM. SEE ROAD PLANS

STATE OF ILLINOIS
STATE HIGHWAY DEPARTMENT
R. C. ABUTMENTS FOR GIRDER BRIDGE
HEIGHT OVER ALL 14 FT.

BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
37	JEFFERSON	1	45	36

Sheet No. 2
2 sheets



HORIZONTAL STEEL - MAIN WALL

Bars		Length of Bridge Seat 19'-0"	20'-0"	21'-0"	22'-0"	23'-0"	24'-0"	25'-0"	26'-0"
h	No.	5	6	6	7	5	5	5	6
	Size	3/4"□	3/4"□	3/4"□	3/4"□	3/4"□	3/4"□	3/4"□	3/4"□
	Cts.	9"	8½"	7½"	7"	10½"	9½"	8½"	8"
h'	No.	4	4	6	5	3	4	5	5
	Size	5/8"□	5/8"□	5/8"□	5/8"□	5/8"□	5/8"□	5/8"□	5/8"□
	Cts.	9"	8½"	7½"	7"	10½"	9½"	8½"	9"
h''	No.	5	5	5	7	4	5	5	5
	Size	1/2"□	1/2"□	1/2"□	1/2"□	1/2"□	1/2"□	1/2"□	1/2"□
	Cts.	9"	8½"	7½"	7"	10½"	9½"	8½"	8"
Footing		12"	12"	12"	12"	16"	18"	18"	18"

BILL OF MATERIAL

Bars	No.	Size	Length
v	48	1/2"□	10'-6"
v_1	24	1/2"□	11'-0"
v_2	12	1/2"□	10'-0"
v_3	16	1/2"□	8'-6"
n	10	3/4"□	29'-3"
n'	6	5/8"□	28'-3"
n''	8	1/2"□	27'-3"
h_1	40	1/2"□	13'-6"
h_2		1/2"□	
m	48	1/2"□	3'-0"
n	52	5/8"□	5'-0"
r	48	1/2"□	3'-3"
z	52	1/2"□	5'-0"
q	4	1/2"□	5'-0"
Reinforcing Steel-lbs.			3140
Concrete-cu yds.			66.2

Class A concrete to be used throughout Proportions 1:2½:4.
Note: Contractor to remove old structure.

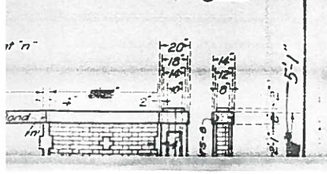
STA 70+69
STATE BOND ISSUE
SECTION 1B, ROUTE 37
JEFFERSON COUNTY

709

STANDARD		
	COMPUTED	Walter Ketch
	CHECKED	W. T. Beach
	DRAWN	W. T. Beach
	CHECKED	Walter Ketch
SPECIAL	ASSEMBLED	B. Armstrong
	CHECKED	[illegible]

EXAMINED: W. T. Beach, BRIDGE ENGINEER.
APPROVED: Sept. 22 '21, [illegible], STATE HIGHWAY ENGINEER.

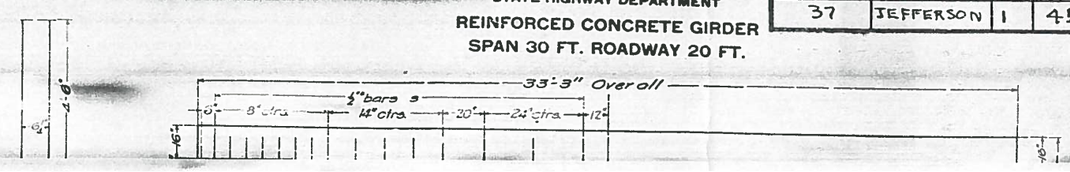
SHEET NO. 2
3 sheets



STATE OF ILLINOIS
STATE HIGHWAY DEPARTMENT
REINFORCED CONCRETE GIRDER
SPAN 30 FT. ROADWAY 20 FT.

BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
37	JEFFERSON	1	45	35

SHEET NO. 1
2 sheets



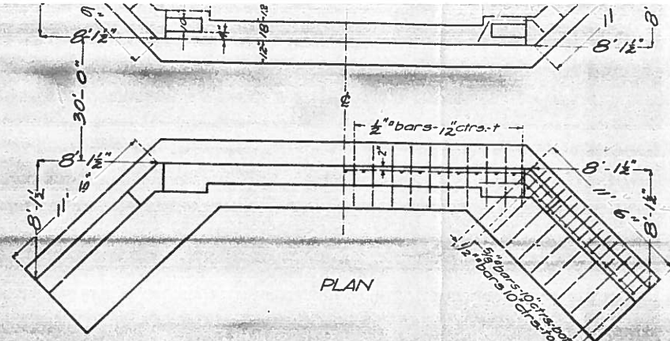
	20		22'-6"
	40		14'-0"
m	46	1/2"ø	3'-0"
n	48	5/8"ø	5'-0"
r	46	1/2"ø	4'-9"
z	48	1/2"ø	4'-3"
Steel - lbs.			2420
Concrete - cu yds.			82.0

Class A concrete to be used throughout. Proportions 1:2½:4

STA. 197+87
STATE BOND ISSUE ROAD
SECTION 1D, ROUTE 37
JEFFERSON CO.

670

	No.	4	4	6	5	3	4	5	5
h'	Size	3/8"	3/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	Cts.	9"	8½"	7½"	7"	10½"	9½"	8½"	8"
	No.	5	5	5	7	4	5	5	5
h''	Size	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	Cts.	9"	8½"	7½"	7"	10½"	9½"	8½"	8"
Thickness f' Wall		12"	12"	12"	12"	18"	18"	18"	18"



n	10	3/4"ø	29'-3"
n'	6	5/8"ø	28'-3"
n''	8	1/2"ø	27'-3"
n_1	40	1/2"ø	13'-6"
n_2		1/2"ø	
m	48	1/2"ø	3'-0"
n	52	5/8"ø	5'-0"
r	48	1/2"ø	3'-3"
z	52	1/2"ø	5'-0"
q	4	1/2"ø	5'-0"
Reinforcing Steel lbs			3140
Concrete - cu yds.			66.2

Class A concrete to be used throughout. Proportions 1:2½:4.
Note: Contractor to remove old structure.

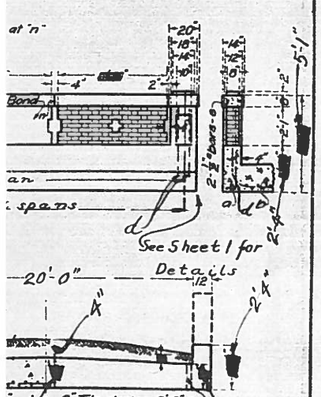
STA 70+69
STATE BOND ISSUE
SECTION 1B, ROUTE 37
JEFFERSON COUNTY

709

STANDARD	COMPUTED - Walter J. Gould
	CHECKED - W. Walter J. Gould
	DRAWN - [illegible]
	CHECKED - [illegible]
SPECIAL	ASSEMBLED - [illegible]
	CHECKED - [illegible]

EXAMINED: H. F. Burch, BRIDGE ENGINEER.
APPROVED: Sept. 22 1921, STATE HIGHWAY ENGINEER.

SHEET NO. 2
3 sheets



24 Ft. Roadway				30 Ft. Roadway			
Bars	No.	Size	Length	Bars	No.	Size	Length
a	80	1"	30'-0"	a	89	1"	30'-0"
b	26	1/2"	28'-0"	b	52	1/2"	18'-0"
c	6	1/2"	27'-6"	c	6	1/2"	27'-6"
d	52	1/2"	5'-6"	d	52	1/2"	5'-6"
			9160				11280
			472				548
a	80	1"	30'-0"	a	89	1"	30'-0"
b	26	1/2"	28'-0"	b	52	1/2"	18'-0"
e	16	1/2"	6'-0"	e	16	1/2"	6'-0"
			8870				10390
			45.3				54.9
			24				24
a	80	1"	30'-0"	a	89	1"	30'-0"
b	26	1/2"	28'-0"	b	52	1/2"	18'-0"
c	6	1/2"	27'-6"	c	6	1/2"	27'-6"
d	52	1/2"	5'-6"	d	52	1/2"	5'-6"
			9160				11280
			47.3				56.0

STA. 197+87
STATE BOND ISSUE ROAD
SECTION 1-D, ROUTE 37
JEFFERSON CO.

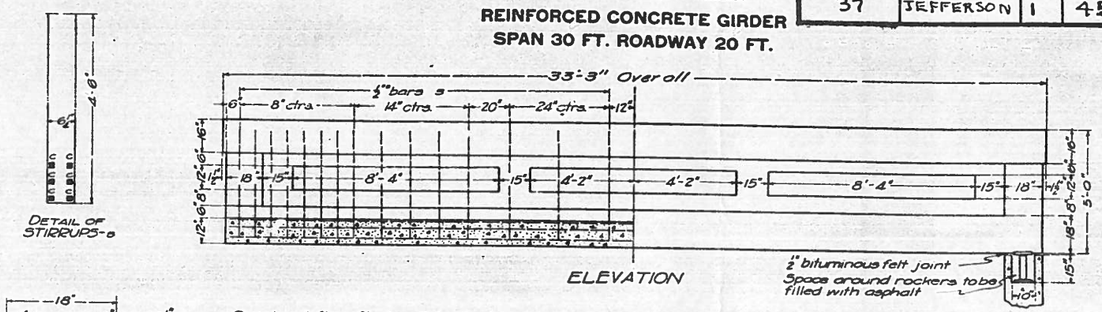
615

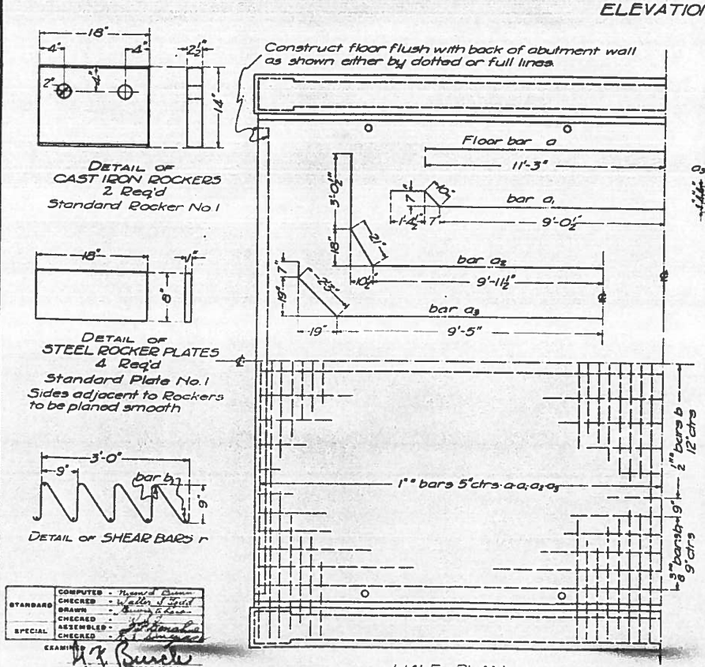
STATE OF ILLINOIS
STATE HIGHWAY DEPARTMENT

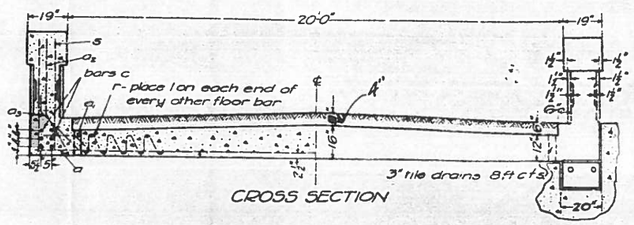
BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
37	JEFFERSON	1	45	36

SHEET NO. 1
2 sheets

REINFORCED CONCRETE GIRDER
SPAN 30 FT. ROADWAY 20 FT.







BILL OF MATERIAL

Letter	No.	Size	Length
a	20	1" ø	22'-6"
a_1	20	1" ø	22'-6"
a_2	19	1" ø	29'-6"
a_3	19	1" ø	24'-6"
b	24	1/2" ø	17'-6"
b_1	28	5/8" ø	17'-6"
c	12	1 1/4" ø	32'-6"
s	60	1/2" ø	9'-6"
r	78	5/8" ø	8'-0"
Reinforcing Steel - lbs.			9,990
2 Cast Iron Rockers - lbs.			328
4 Steel Plates - lbs.			163
Concrete - cu yds.			45.1

Note: Class A concrete to be used throughout
Proportions: 1:2½:4

STA. 70+69
STATE BOND ISSUE
SECTION 1B, ROUTE 37
JEFFERSON COUNTY

STANDARD	COMPUTED - Walter J. Gould
	CHECKED - Walter J. Gould
	DRAWN - [illegible]
	CHECKED - [illegible]
SPECIAL	ASSEMBLED - [illegible]
	CHECKED - [illegible]

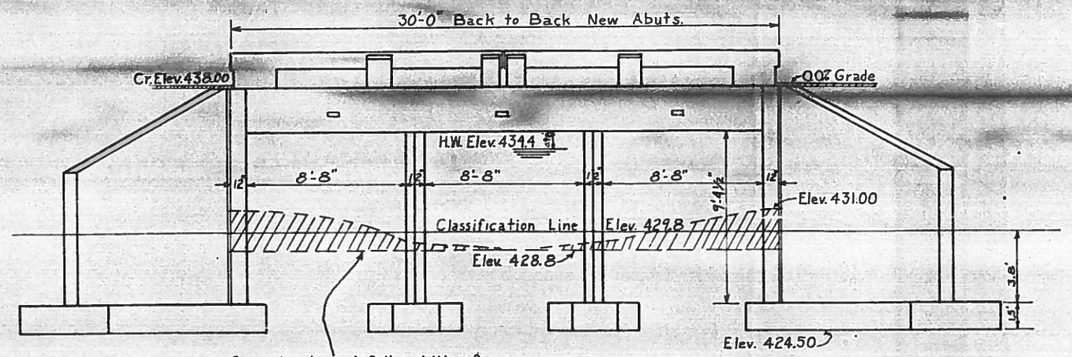
EXAMINED: H. F. Burch, BRIDGE ENGINEER.
APPROVED: Sept. 22 1921, STATE HIGHWAY ENGINEER.

837

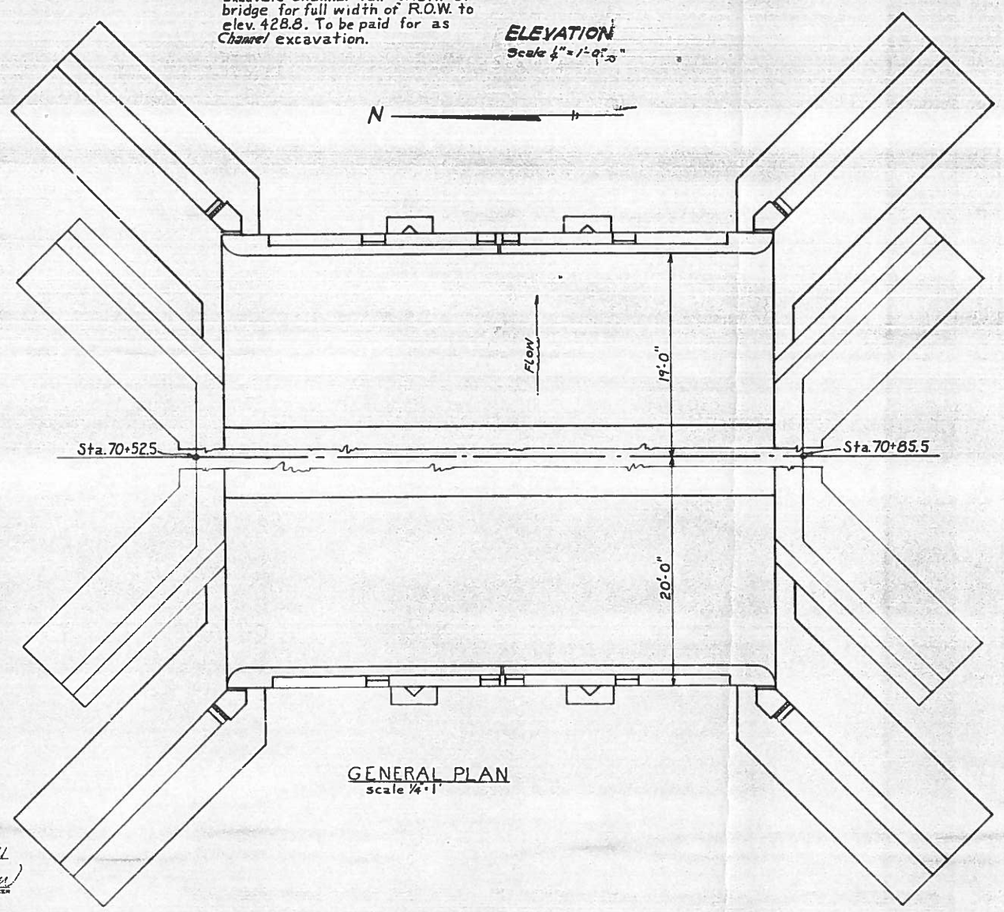
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
37	(1-2)BY	Jefferson	56	18
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- F-232(9)		

SHEET NO 1
SHEETS 2



ELEVATION
Scale ¼" = 1'-0"



GENERAL PLAN
scale ¼" = 1'

GENERAL NOTES

Class X Concrete shall be used thruout except as noted.
Handrail Concrete shall be used in rails & posts.
Traffic shall be permitted to use existing bridge during construction period.
All reinforcing bars shall conform to A.S.T.M. specs. A-305-49
The handrail shall not be poured until falsework has been removed.

Waterway Information

Drainage Area	1020 Acres
Present Opening	134 Sq. ft.
Proposed Opening	146 Sq. ft.

Stresses

fs = 20,000#/sq. in.
fc = 1,200 (pos. M)
fc = 1,350 (Neg. M)
fc = 800 (Substructure)
n = 10

STATION 70+69
BUILT 195 BY
STATE OF ILLINOIS
S.B.I. RT. 37 SEC. 1-B-Y
F.A. PROJ. F 232 (9)
LOADING H 20

Name Plate
See Std. 1881

TOTAL BILL OF MATERIALS

Channel Excavation	Cu. Yds.	90
Class A Excavation for Structures	Cu. Yds.	100
Class B Excavation for Structures	Cu. Yds.	380
Class X Concrete	Cu. Yds.	110.2
Handrail Concrete	Cu. Yds.	2.6
Reinforcement Bars	Lbs.	12080 11120
Masonry Removal	Cu. Yds.	15
Name Plate	Each	1
Bituminous Mat'ls Applied (Prime)	Gal.	10.0
	Tons	
Bituminous Conc. Surface Course-I-11	Tons	1.6

DESIGNED
CHECKED
DRAWN
CHECKED

Sept 29 1951
EXAMINED — BRIDGE ENGINEER
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

PROJECT F 232(9)
FA RT. 37 (S.B.I. 37) SEC. 1-B-Y
JEFFERSON COUNTY
STATION 70+69

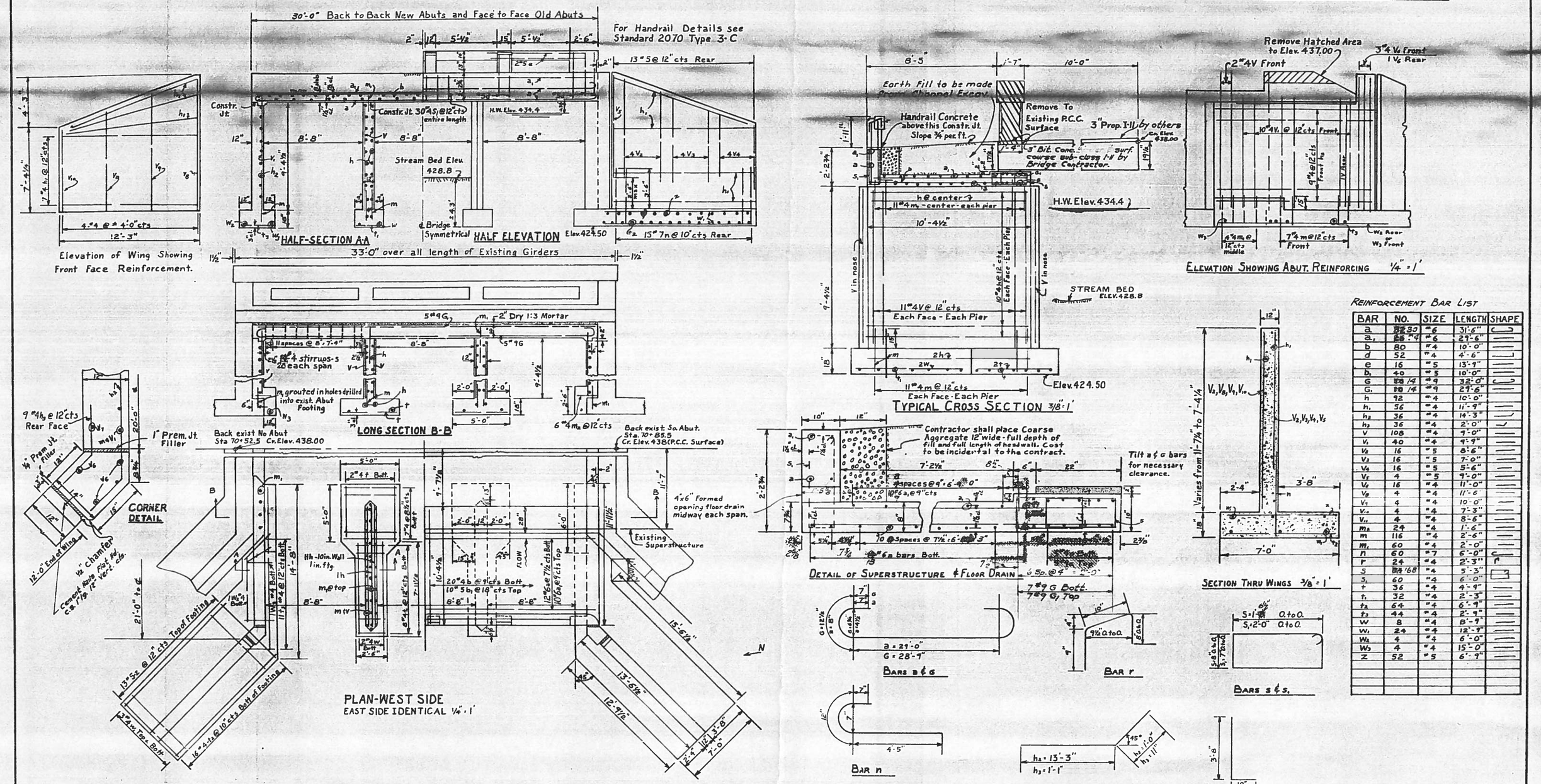
Loading H20

B.M. Top N.W. Wing Existing Bridge Elev. 437.84

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

BOND ISSUE ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37	(1-2)BY	Jefferson	56	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	F-232(9)	

SHEET NO 2
SHEETS 2



REINFORCEMENT BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
a	30	#6	31'-6"	
a1	28	#6	29'-6"	
b	80	#4	10'-0"	
d	52	#4	4'-6"	
e	16	#5	13'-9"	
b1	40	#5	10'-0"	
G	14	#9	32'-0"	
G1	14	#9	29'-6"	
h	92	#4	10'-0"	
h1	56	#4	11'-9"	
h2	36	#4	14'-3"	
h3	36	#4	2'-0"	
V	108	#4	9'-0"	
V1	40	#4	9'-9"	
V2	16	#5	8'-6"	
V3	16	#5	7'-0"	
V4	16	#5	5'-6"	
V5	4	#5	9'-0"	
V6	16	#4	11'-0"	
V8	4	#4	11'-6"	
V9	4	#4	10'-0"	
V10	4	#4	7'-3"	
V11	4	#4	8'-6"	
m2	24	#4	1'-6"	
m	116	#4	2'-6"	
m1	60	#4	2'-0"	
n	60	#7	6'-0"	
r	24	#4	2'-3"	
s	68	#7	5'-3"	
s1	60	#4	6'-0"	
t	36	#4	4'-9"	
t1	32	#4	2'-3"	
t2	64	#4	6'-9"	
t3	44	#4	2'-9"	
W	8	#4	8'-9"	
W1	24	#4	12'-9"	
W2	4	#4	6'-0"	
W3	4	#4	15'-0"	
z	52	#5	6'-9"	

DESIGNED	
CHECKED	
DRAWN	
CHECKED	

Sept. 29 1951
EXAMINED W. E. Harrison — BRIDGE ENGINEER
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

PROJECT F232 (9)
F.A. RT. 37 (SBI-37) SEC. 1-B-Y
JEFFERSON COUNTY
STATION 70+69