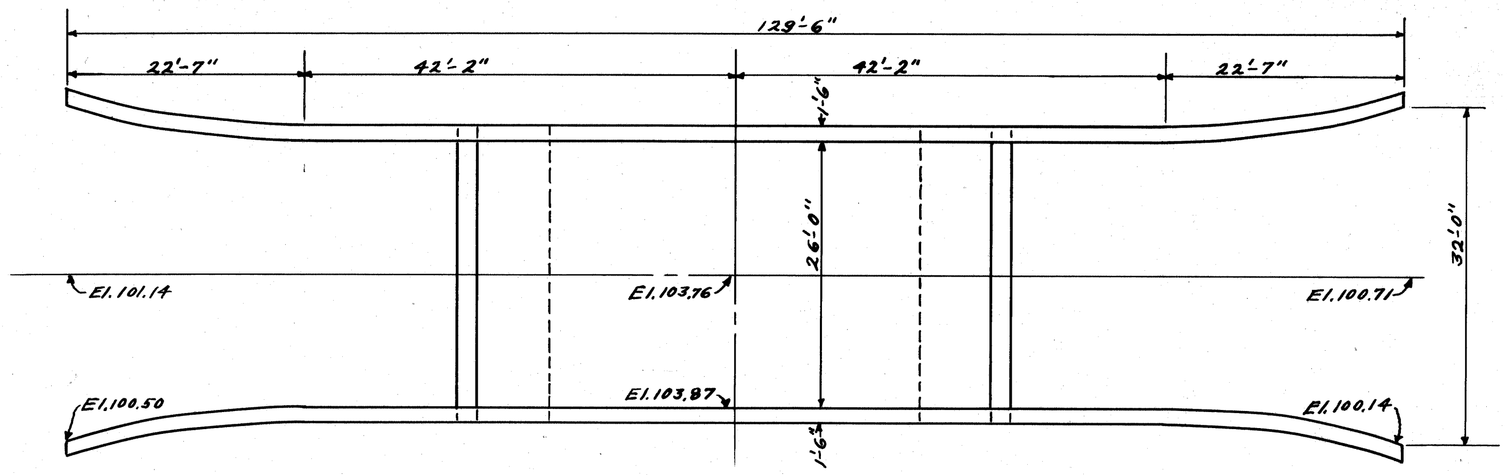
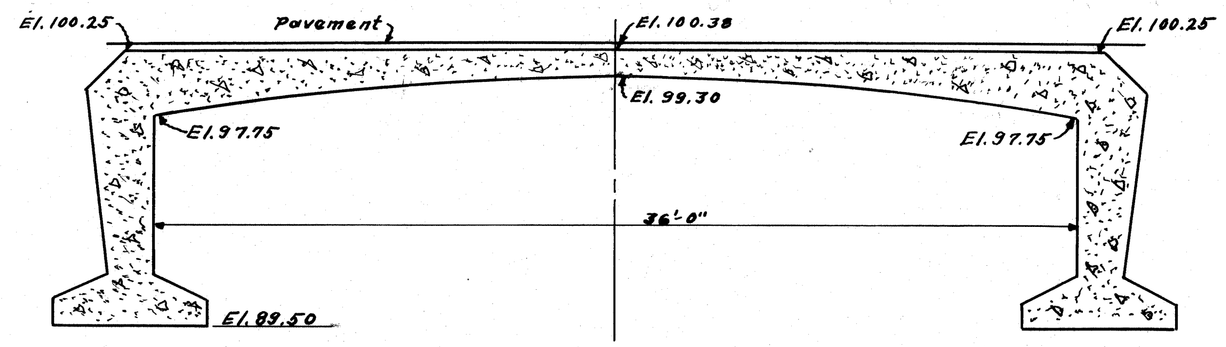
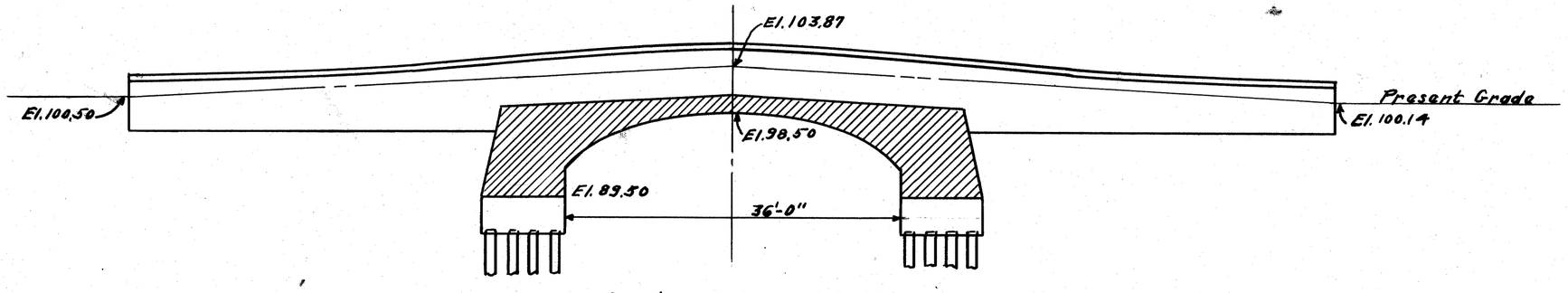


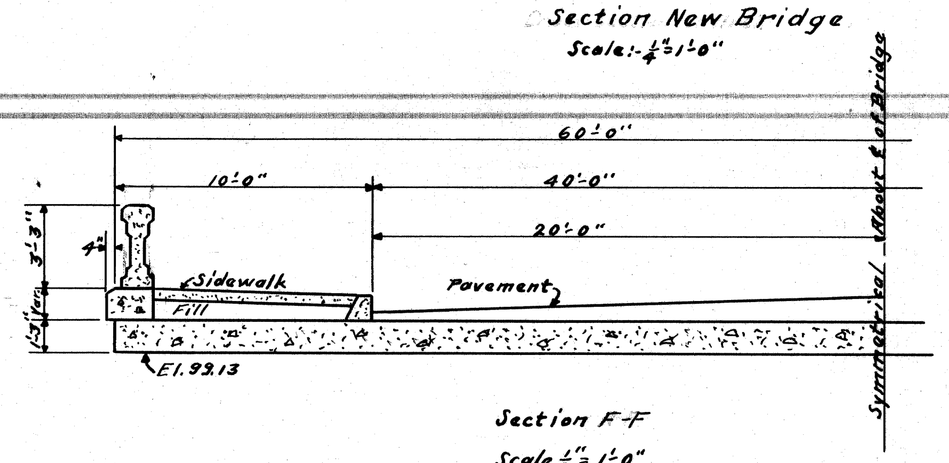
Plan of Present Bridge
Scale:- 1" = 10'-0"



Section New Bridge
Scale:- $\frac{1}{4}$" = 1'-0"

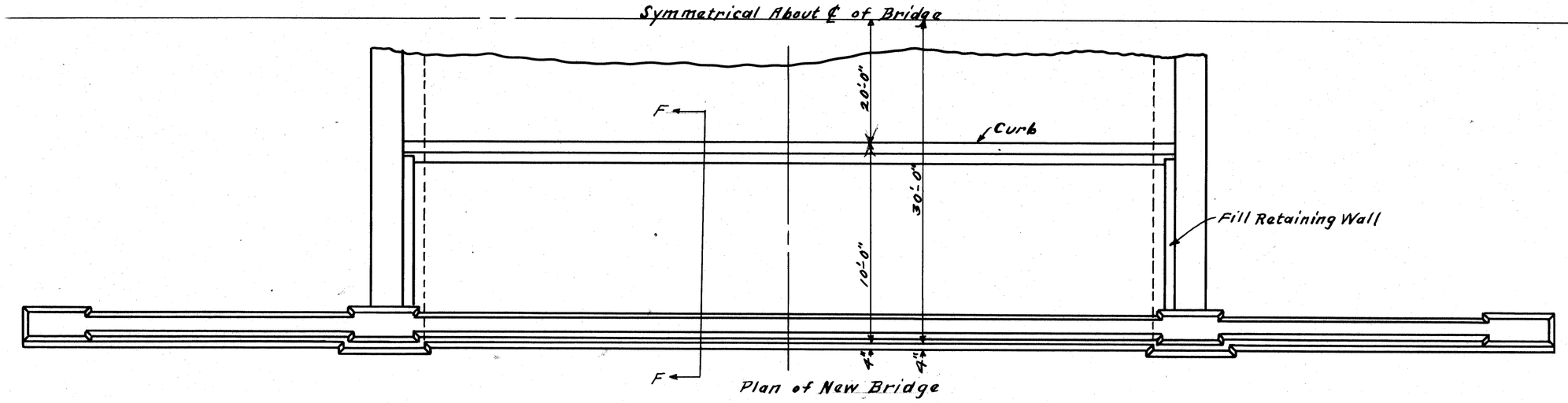


Section of Present Bridge
Scale:- 1" = 10'-0"

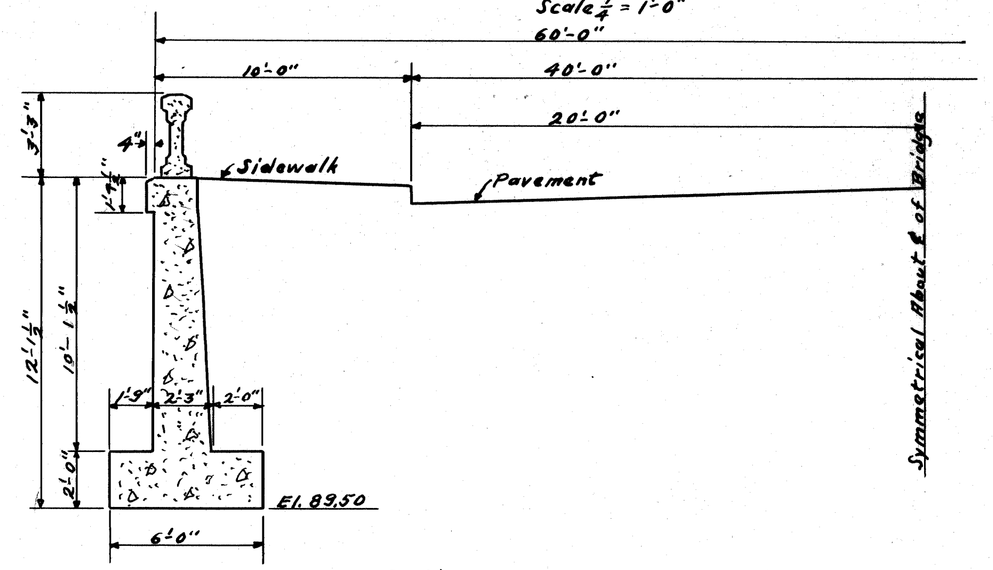


Section F-F
Scale $\frac{1}{4}$" = 1'-0"

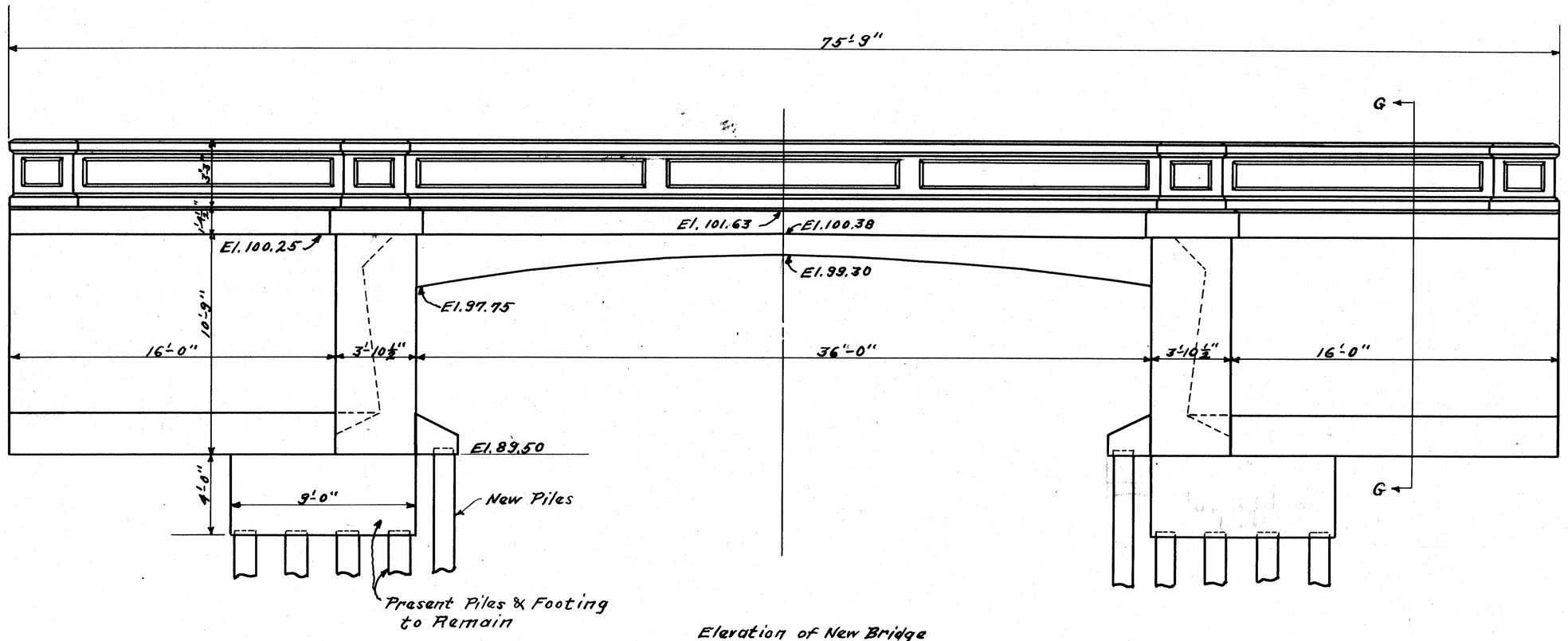
Symmetrical About ℄ of Bridge



Plan of New Bridge
Scale:- $\frac{1}{4}$" = 1'-0"



Section G-G
Scale:- $\frac{1}{4}$" = 1'-0"



Elevation of New Bridge
Scale:- $\frac{1}{4}$" = 1'-0"

GENERAL NOTES

All elevations refer to City Datum.
All work to be done in accordance with the specifications accompanying these drawings.
Concrete:- Mix for railings 1-1½-2½
All other mix 1-2½-3½
No concrete to be placed under water.
Waterproofing as per specifications.
Construction Joints:- All construction joints to have keys of suitable dimensions.
All construction joints in deck, abutments and wingwalls to be covered with a double thickness of asphalt saturated fabric 24" wide. Each layer to be placed in a hot asphalt mopping.
Piles:- All piles to be in accordance with specifications. Test piles to be driven after excavation to determine length of piles to develop a carrying capacity of 15 tons per pile.
Present Structure:- To be removed to top of present concrete footing.

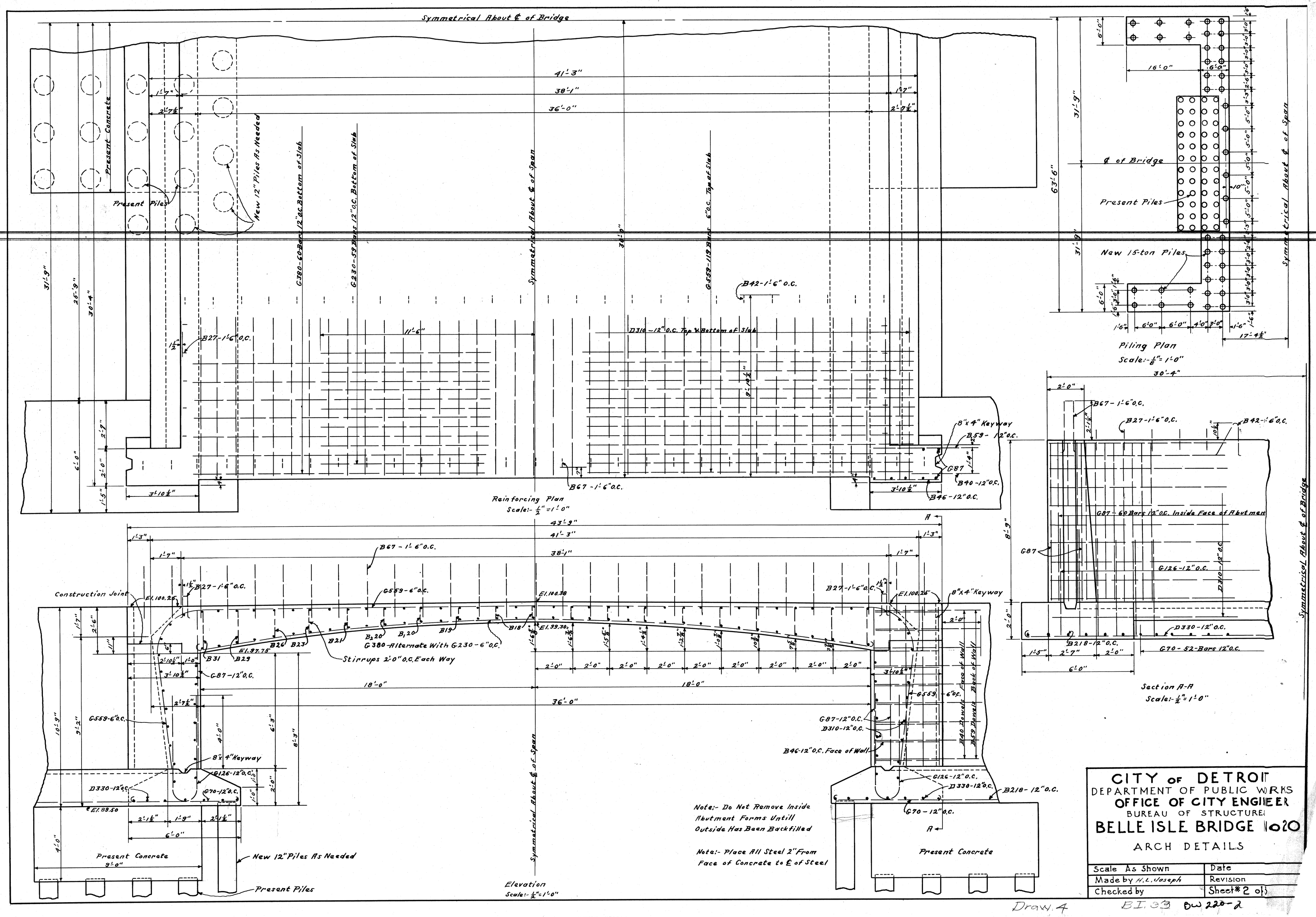
Bill of Material
1-2½-3½ Concrete 319 Cu. Yds.
1-1½-2½ Concrete 28 Cu. Yds.
Reinforcing Steel 71647 #

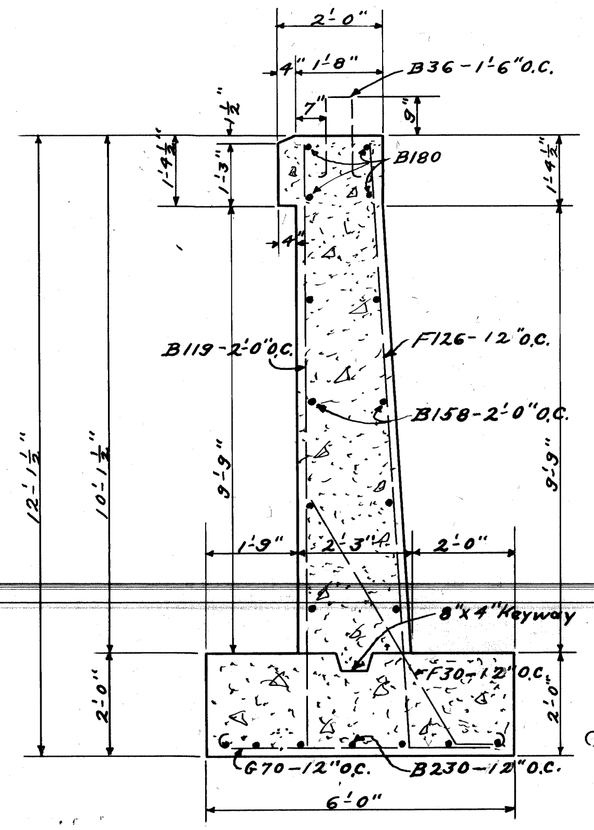
Field Book 732

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
OFFICE OF CITY ENGINEER
BUREAU OF STRUCTURES
BELLE ISLE BRIDGE No20
GENERAL PLANS

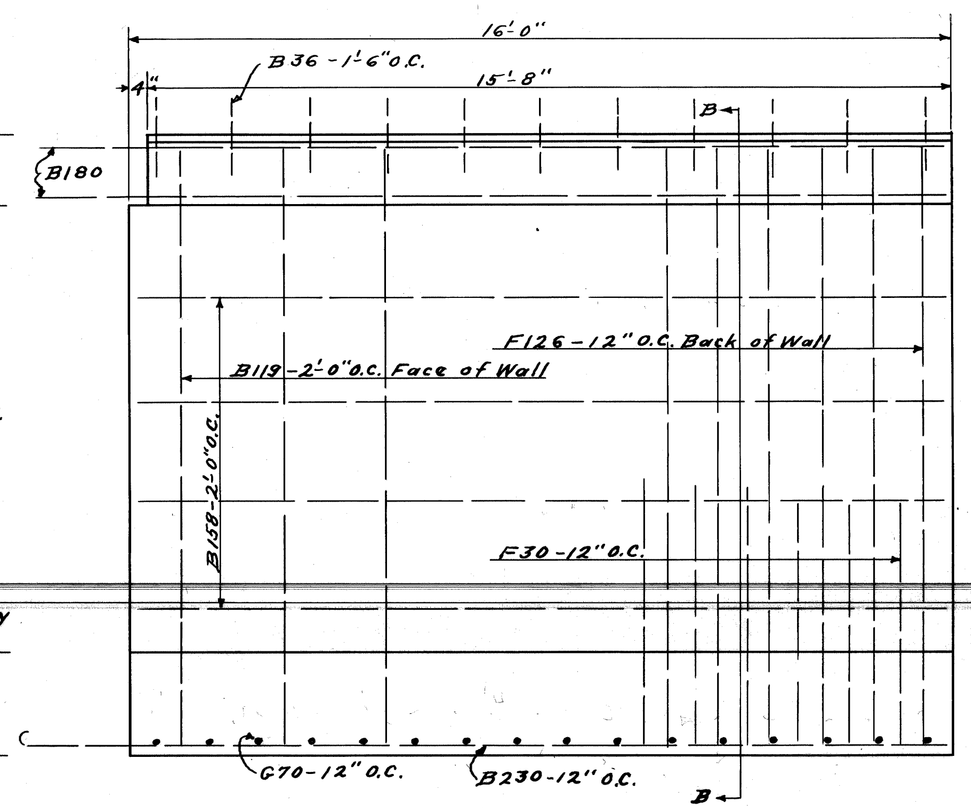
Scale As shown	Date
Made by H.L. Joseph	Revision
Checked by	Sheet # 1 of 3

BW 220-1 Draw. 4 B.I. 32

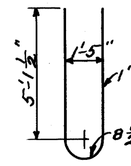

Symmetrical About ℄ of Bridge
Present Concrete
Present Piles
New 12" Piles As Needed
G380-60 Bars 12" o.c. Bottom of Slab
G230-59 Bars 12" o.c. Bottom of Slab
Symmetrical About ℄ of Span
G559-119 Bars 6" o.c. Top of Slab
B42-1'-6" o.c.
B27-1'-6" o.c.
D310-12" o.c. Top & Bottom of Slab
B67-1'-6" o.c.
8"x4" Keyway
B59-12" o.c.
G87
B40-12" o.c.
B46-12" o.c.
Reinforcing Plan
Scale:- 1/2" = 1'-0"
Construction Joint
El. 100.25
El. 100.30
El. 99.30
El. 97.75
El. 89.50
G559-6" o.c.
Stirrups 2'-0" o.c. Each Way
G380-Alternate With G230-6" o.c.
G87-12" o.c.
D310-12" o.c.
B46-12" o.c. Face of Wall
G126-12" o.c.
D330-12" o.c.
G70-12" o.c.
B218-12" o.c.
Face of Wall
Back of Wall
Present Concrete
New 12" Piles As Needed
Present Piles
Elevation
Scale:- 1/2" = 1'-0"
℄ of Bridge
Present Piles
New 15-ton Piles
Piling Plan
Scale:- 1/8" = 1'-0"
G87-60 Bars 12" o.c. Inside Face of Abutment
G126-12" o.c.
D310-12" o.c.
D330-12" o.c.
B218-12" o.c.
G70-52-Bars 12" o.c.
Section A-A
Scale:- 1/2" = 1'-0"
Note:- Do Not Remove Inside Abutment Forms Untill Outside Has Been Backfilled
Note:- Place All Steel 2" From Face of Concrete to ℄ of Steel
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
OFFICE OF CITY ENGINEER
BUREAU OF STRUCTURES
BELLE ISLE BRIDGE 1020
ARCH DETAILS
Scale As Shown
Date
Made by H.L. Joseph
Revision
Checked by
Sheet # 2 of 3
Draw. 4
B.I. 33
BW 220-2



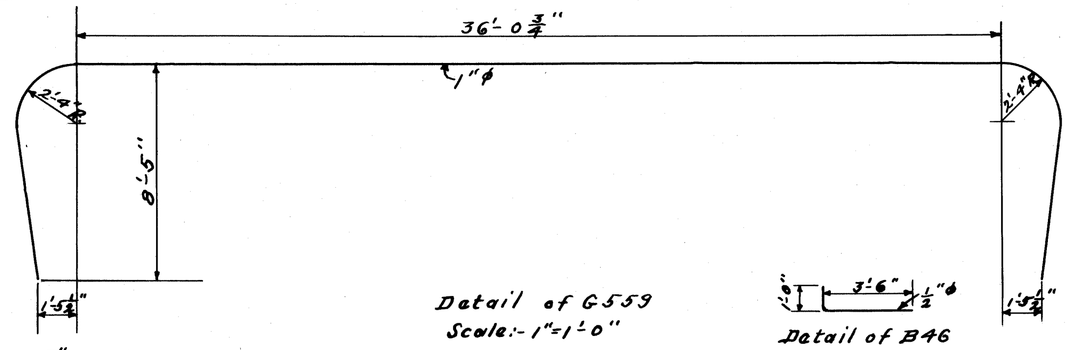
Section B-B
Scale:- ½" = 1'-0"



Elevation of Wing Wall
Scale:- ½" = 1'-0"

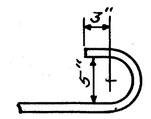


Detail of G126
Scale:- ¼" = 1'-0"

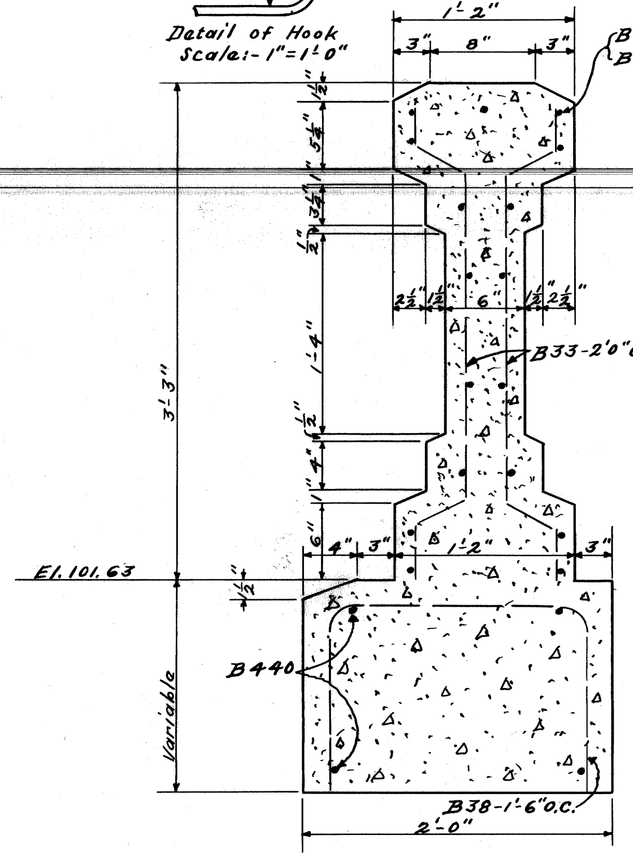


Detail of G559
Scale:- 1" = 1'-0"

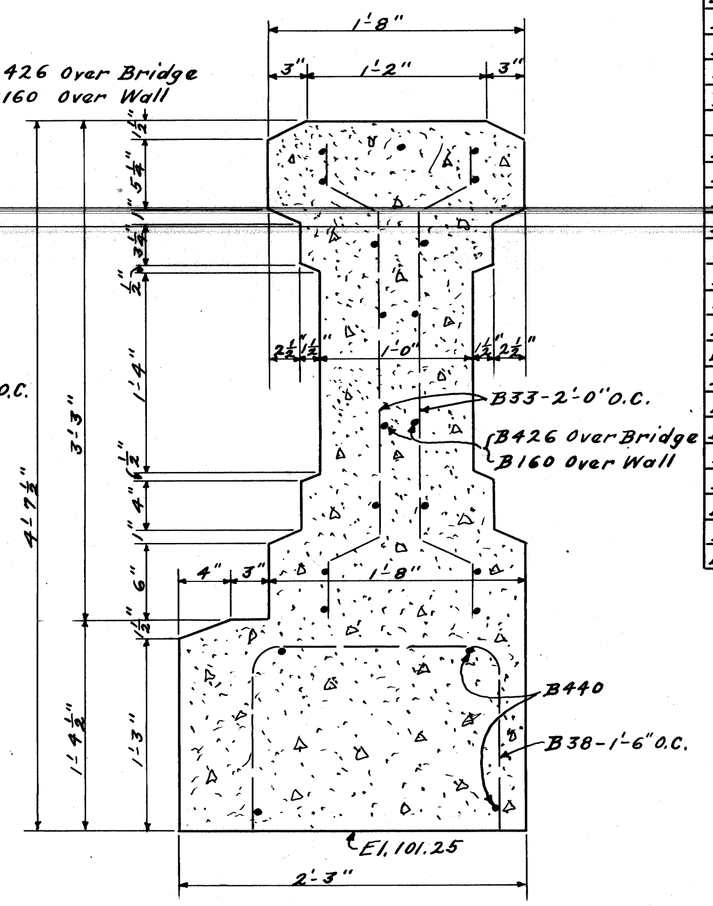
Detail of B46
Scale:- ¼" = 1'-0"



Detail of Hook
Scale:- 1" = 1'-0"

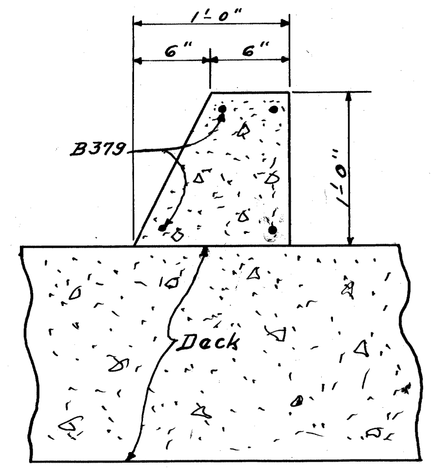


Section C-C
Scale:- 1½" = 1'-0"

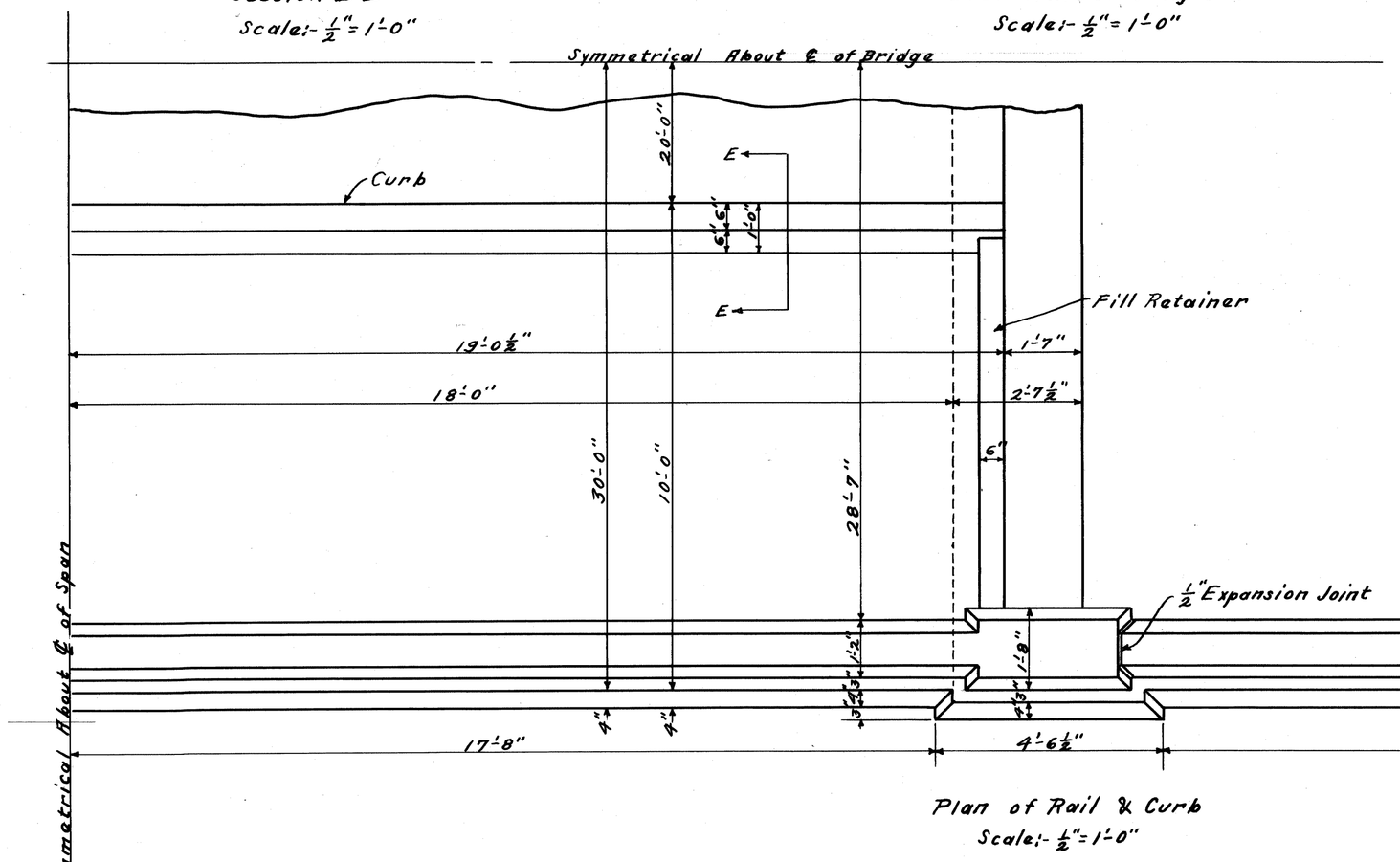


Section D-D
Scale:- 1½" = 1'-0"

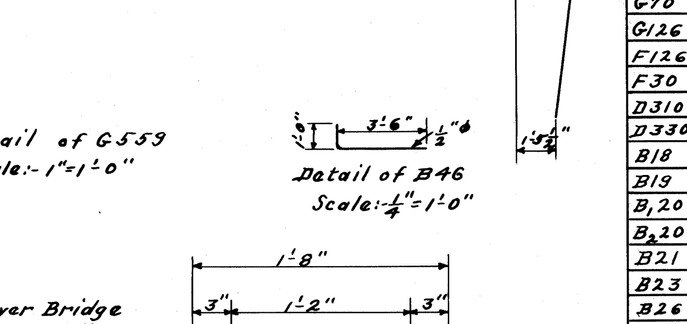
Bar Schedule				
Mark	No.	Size	Length	Location
G380	60	1"ϕ	38'-0"	Long. Bot. of Slab-Hooked
G230	59	1"ϕ	23'-0"	Long. Bot. of Slab
G87	148	1"ϕ	8'-7"	Vert. Inside Face-Abutment
G559	113	1"ϕ	55'-9"	Long. Top of Slab-Bent
G70	168	1"ϕ	7'-0"	Footing-Hooked
G126	120	1"ϕ	12'-6"	Footing Dowals-Bent
F126	64	⅞"ϕ	12'-6"	Vert. Back of Wing Wall
F30	60	⅞"ϕ	3'-0"	Shear-Wing Wall-Bent
B310	220	⅝"ϕ	31'-0"	Trans. Abutment & Deck
B330	28	⅝"ϕ	33'-0"	Footing-Hooked One End
B18	93	½"ϕ	1'-8"	Stirrups-Slab-Bent
B19	62	½"ϕ	1'-9"	Stirrups-Slab-Bent
$B_1$20	62	½"ϕ	2'-0"	Stirrups-Slab-Bent
$B_2$20	62	½"ϕ	2'-0"	Stirrups-Slab-Bent
B21	62	½"ϕ	2'-1"	Stirrups-Slab-Bent
B23	62	½"ϕ	2'-3"	Stirrups-Slab-Bent
B26	62	½"ϕ	2'-6"	Stirrups-Slab-Bent
B29	62	½"ϕ	2'-9"	Stirrups-Slab-Bent
B31	62	½"ϕ	3'-1"	Stirrups-Slab-Bent
B67	58	½"ϕ	6'-7"	Dowals-Rail-Bent
B42	52	½"ϕ	4'-2"	Dowels-Curb-Bent
B27	20	½"ϕ	2'-7"	Dowels-Fill Retainer-Bent
B59	36	½"ϕ	5'-3"	Dowels-Wing Wall
B40	36	½"ϕ	4'-0"	Dowels-Wing Wall
B46	36	½"ϕ	4'-6"	Long. Face of Pier-Bent
B36	44	½"ϕ	3'-6"	Dowals-Top of Wing Wall
B119	32	½"ϕ	11'-9"	Vert. Face of Wing Wall
B230	28	½"ϕ	23'-0"	Footing-Hooked One End
B180	16	½"ϕ	18'-0"	Long. Top of Wing Wall
B158	32	½"ϕ	15'-8"	Long. Both Faces Wing Wall
B440	8	½"ϕ	44'-0"	Long. Rail Curb Over Bridge
B38	58	½"ϕ	3'-8"	Stirrups Over Bridge
B33	164	½"ϕ	3'-3"	Vert. Rail-Bent
B379	8	½"ϕ	37'-9"	Long. Curb
B426	34	½"ϕ	42'-6"	Long. Rail Over Bridge
B160	68	½"ϕ	16'-0"	Long. Rail Over Wall



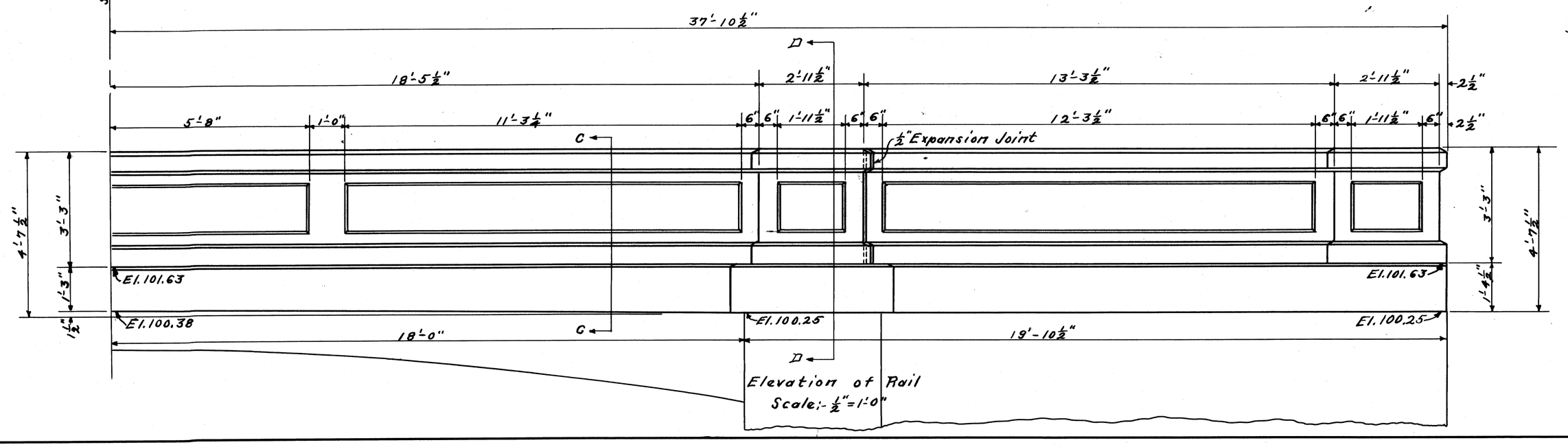
Section E-E
Scale:- 1½" = 1'-0"



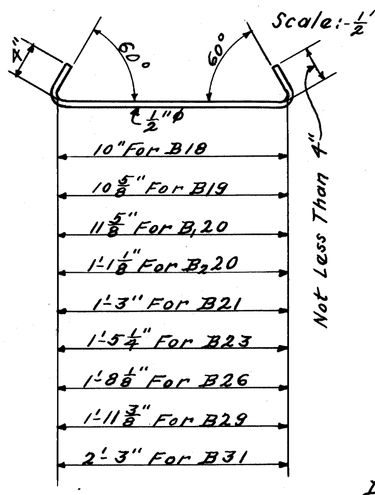
Plan of Rail & Curb
Scale:- ½" = 1'-0"



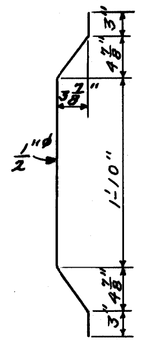
End Elevation
Scale:- ½" = 1'-0"



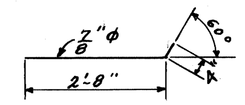
Elevation of Rail
Scale:- ½" = 1'-0"



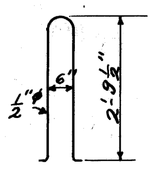
Detail of Stirrups
Scale:- 1" = 1'-0"



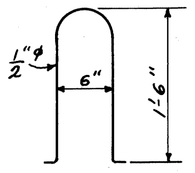
Detail of B33
Scale:- 1" = 1'-0"



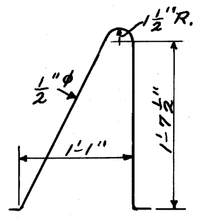
Detail of F30
Scale:- ½" = 1'-0"



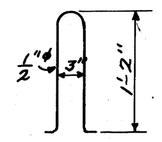
Detail of B67
Scale:- ½" = 1'-0"



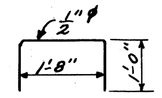
Detail of B36
Scale:- 1" = 1'-0"



Detail of B42
Scale:- 1" = 1'-0"



Detail of B27
Scale:- 1" = 1'-0"

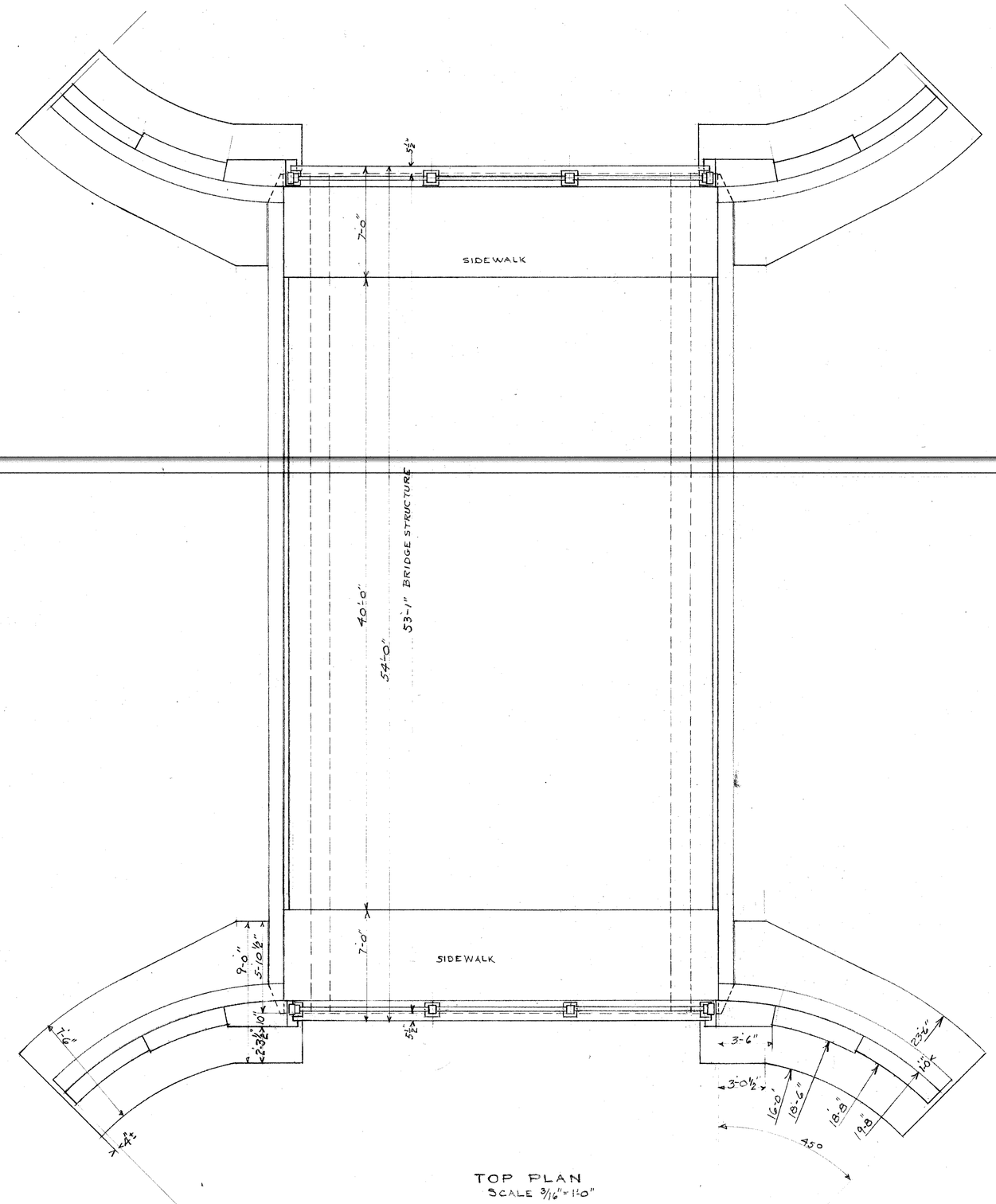


Detail of B38
Scale:- ½" = 1'-0"

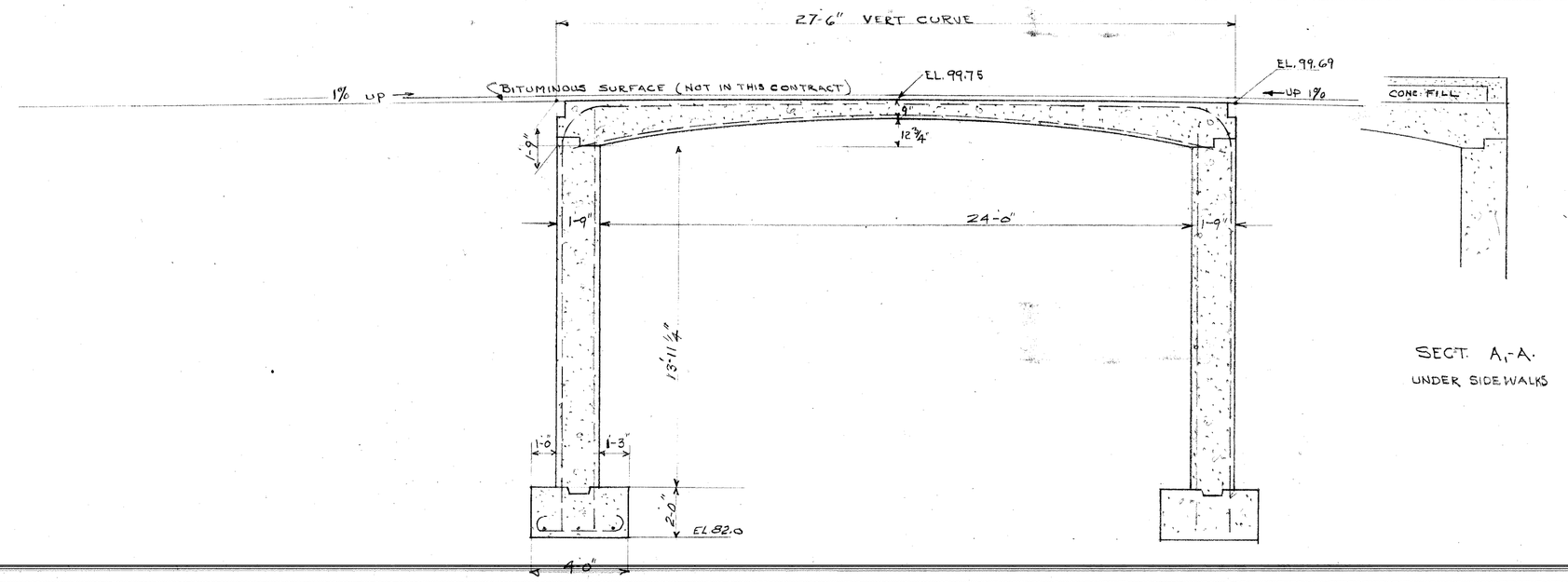
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
OFFICE OF CITY ENGINEER
BUREAU OF STRUCTURES
BELLE ISLE BRIDGE No 20
WING WALLS & RAILINGS

Scale As shown	Date.
Made by H.L. Joseph	Revision
Checked by	Sheet # 3 of 3

Draw. 4 B.I. 34 BW 220-3

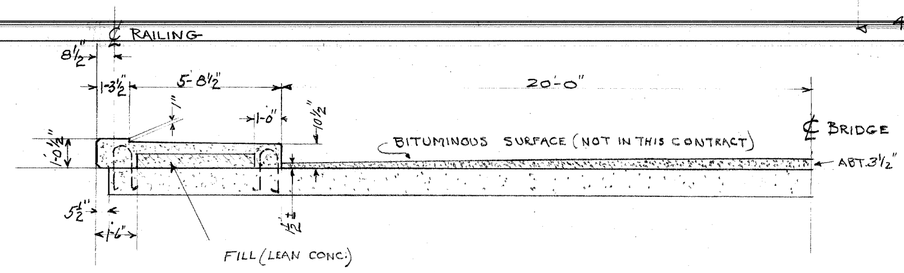


TOP PLAN
SCALE 3/16" = 1'-0"

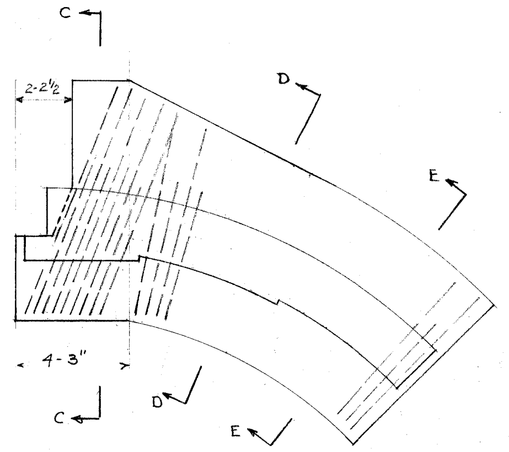


SECT. A-A.
UNDER SIDEWALKS

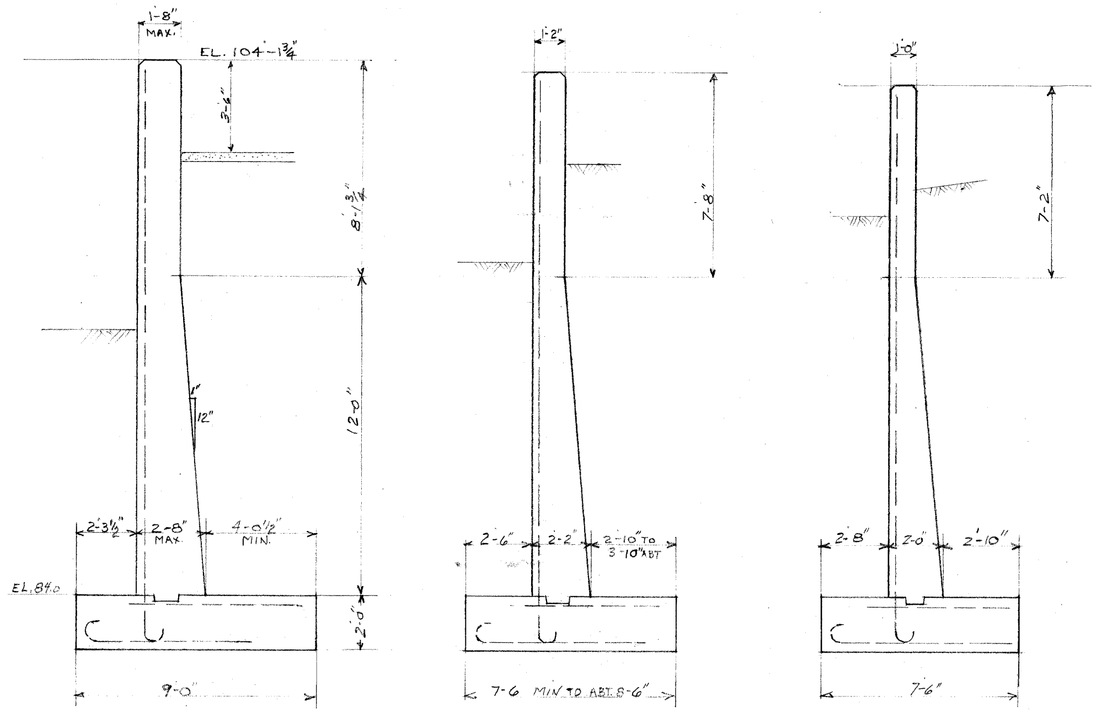
SECT. A-A
SHOWING BRIDGE STRUCTURE
SCALE ¼" = 1'-0"



SECT. B-B
SHOWING SIDEWALK CONSTRUCTION



WING WALL FOOTING PLAN
SCALE ¼" = 1'-0"

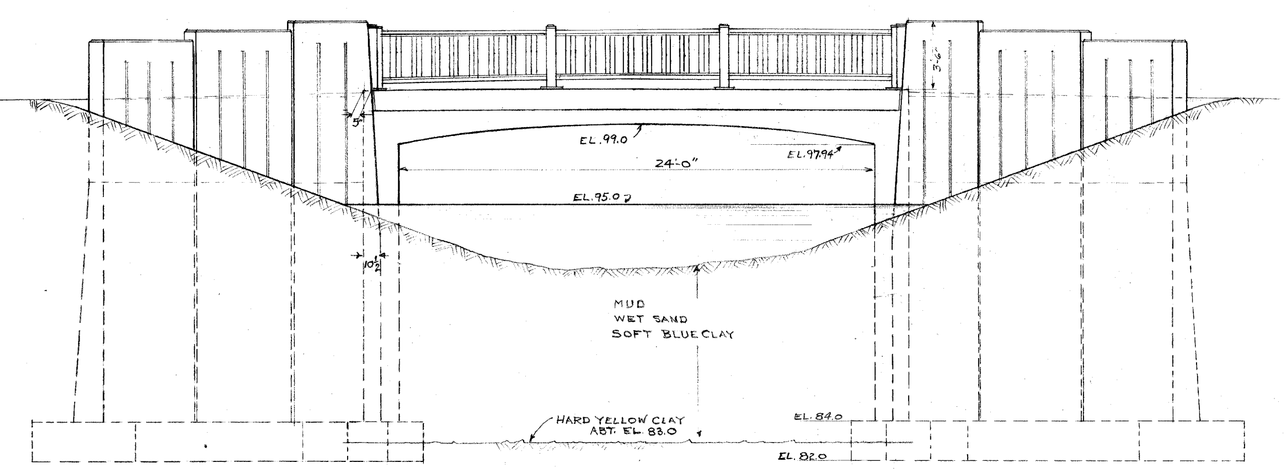


SECT. C-C

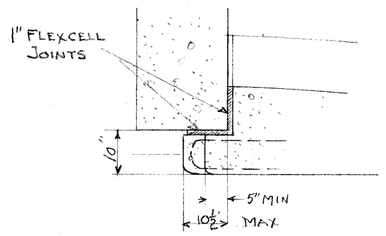
SECT. D-D

SECT. E-E

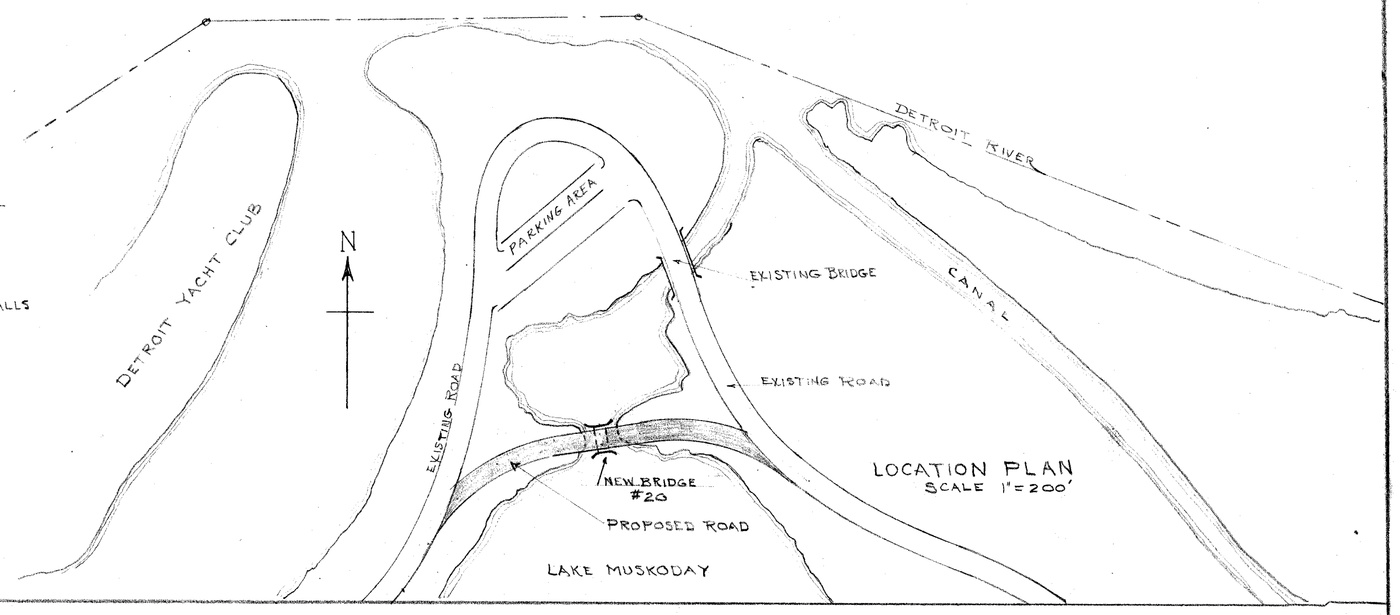
WING WALL SECTS
SCALE ¼" = 1'-0"



SIDE ELEVATION



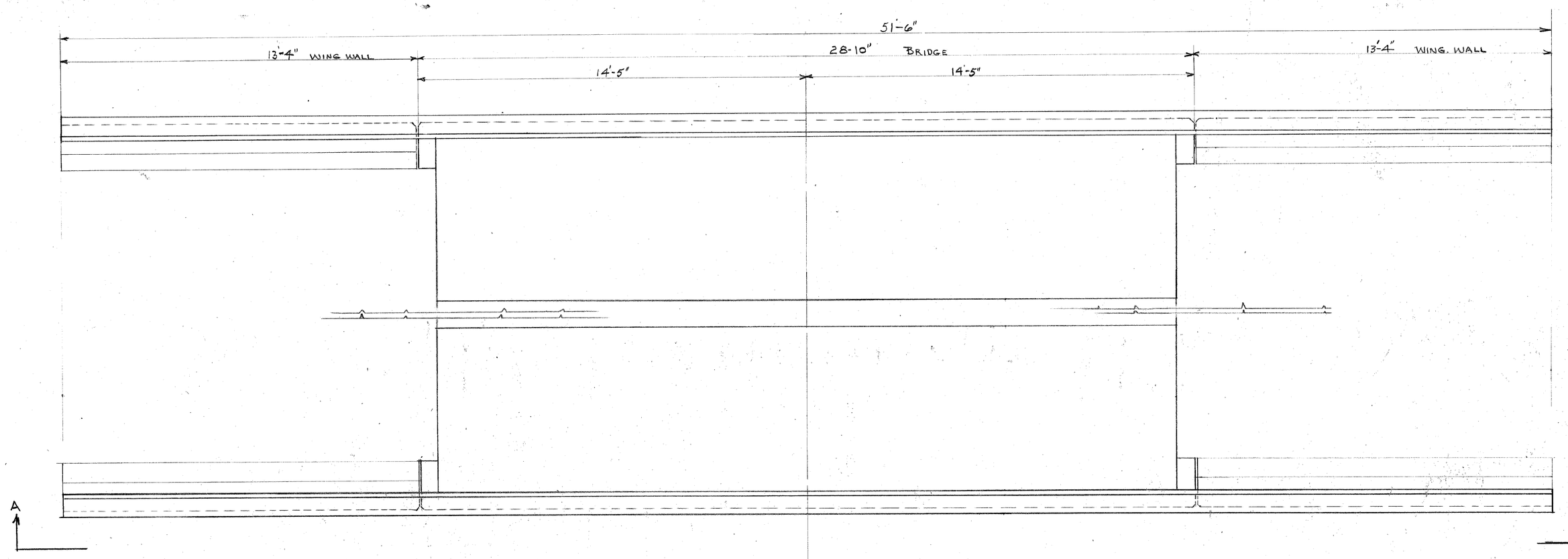
TYPICAL HOR. SECT.
SHOWING LIP ON WING WALLS
COVERING END OF BRIDGE
SCALE ½" = 1'-0"



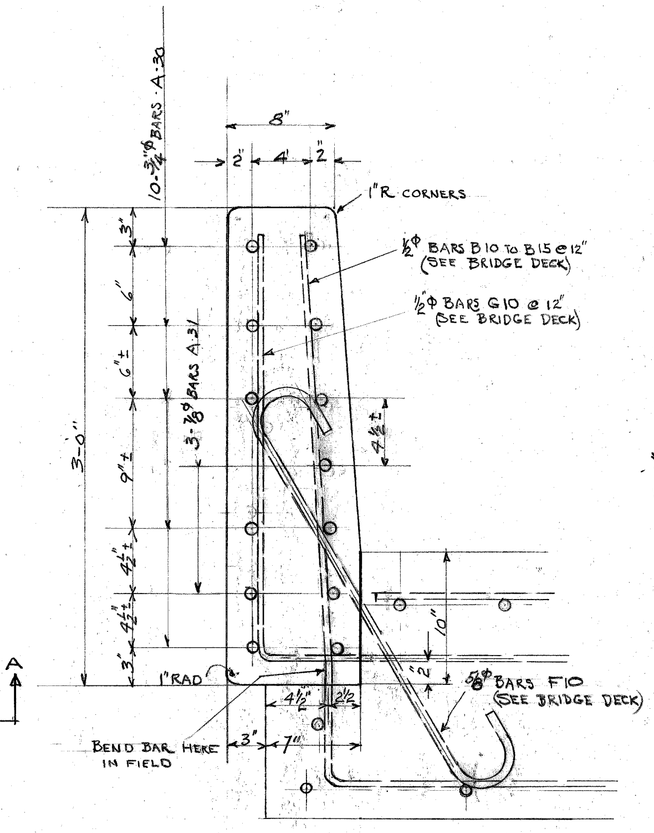
LOCATION PLAN
SCALE 1" = 200'

BRIDGE # 20

BW-220-4

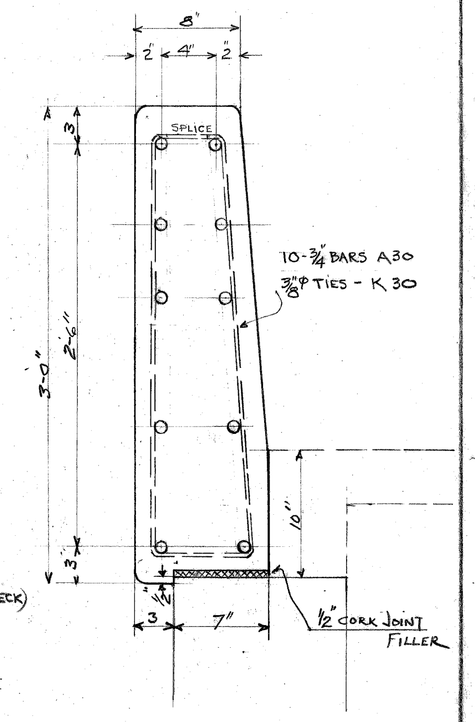


PLAN OF RAILINGS



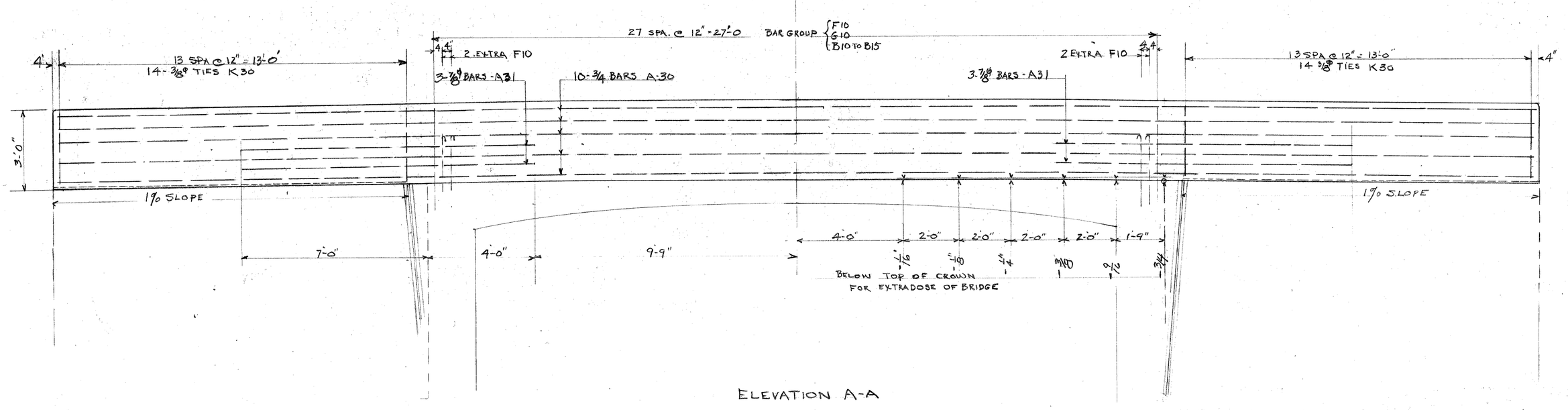
TYPICAL SECTION OF RAILING ON BRIDGE

SCALE 1½" = 1'-0"



TYPICAL SECTION OF RAILING ON WALLS

SCALE 1½" = 1'-0"



ELEVATION A-A

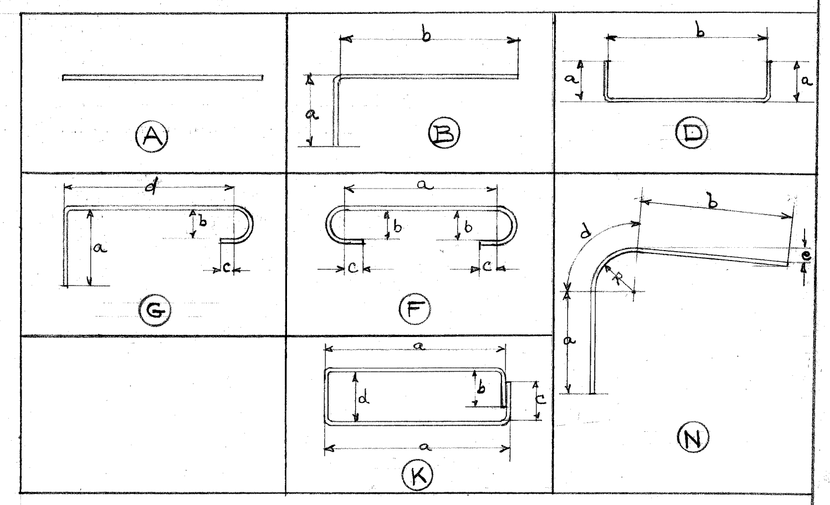
QUANTITIES

CONCRETE = 8.5 CU. YDS.
REIN. STEEL = 2000 LBS.

BAR LIST

MARK	NO.	SIZE	LENGTH	a	b,c	d
A30	20	3/4" Φ	51'-0"			
A31	12	7/8" Φ	11'-0			
K30	56	3/8" Φ	6'-6"	2'-7½"	4"	7"

STANDARD REINFORCING BAR TYPES



BRIDGE NO 20
sht. No 4 of 4

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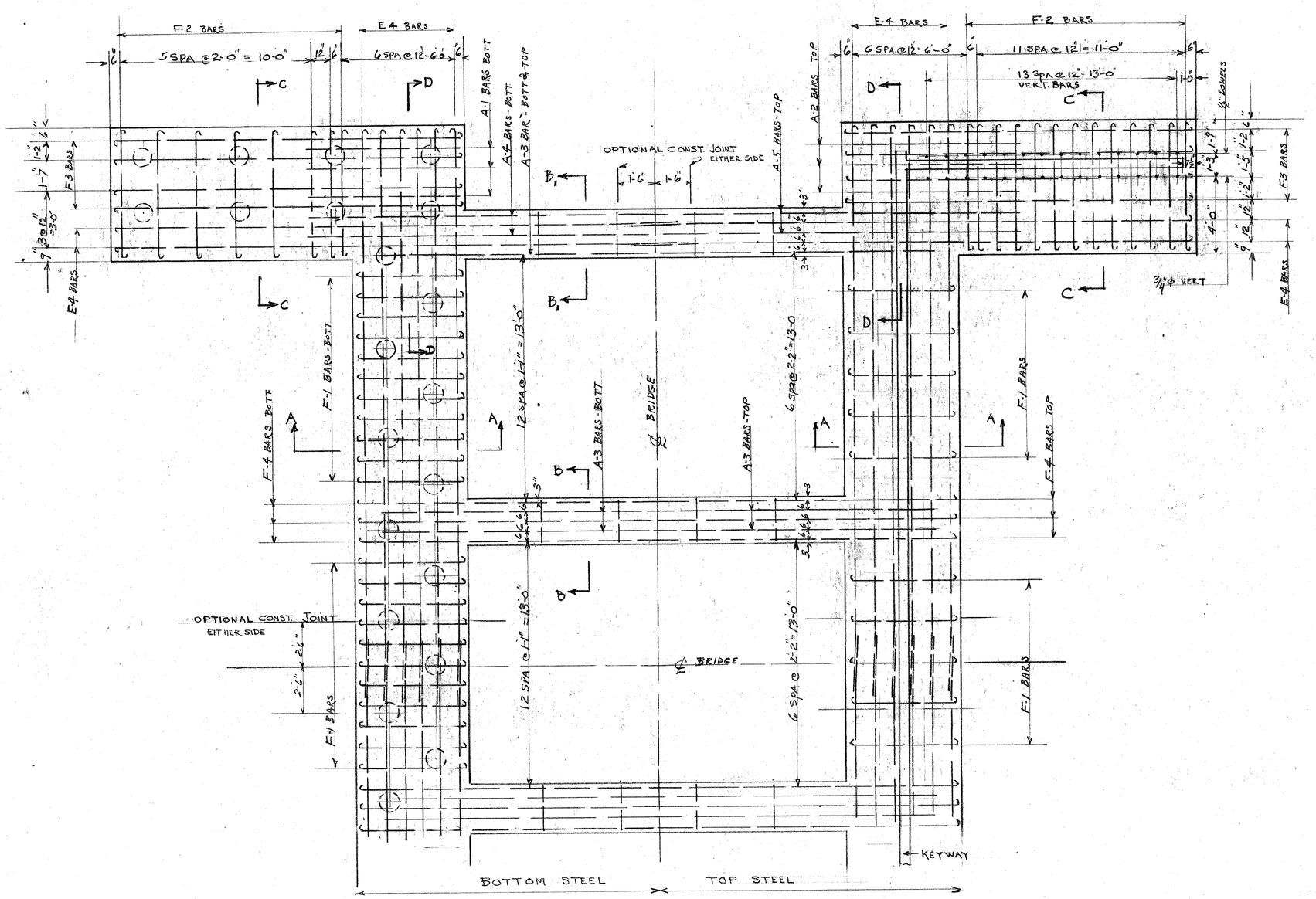
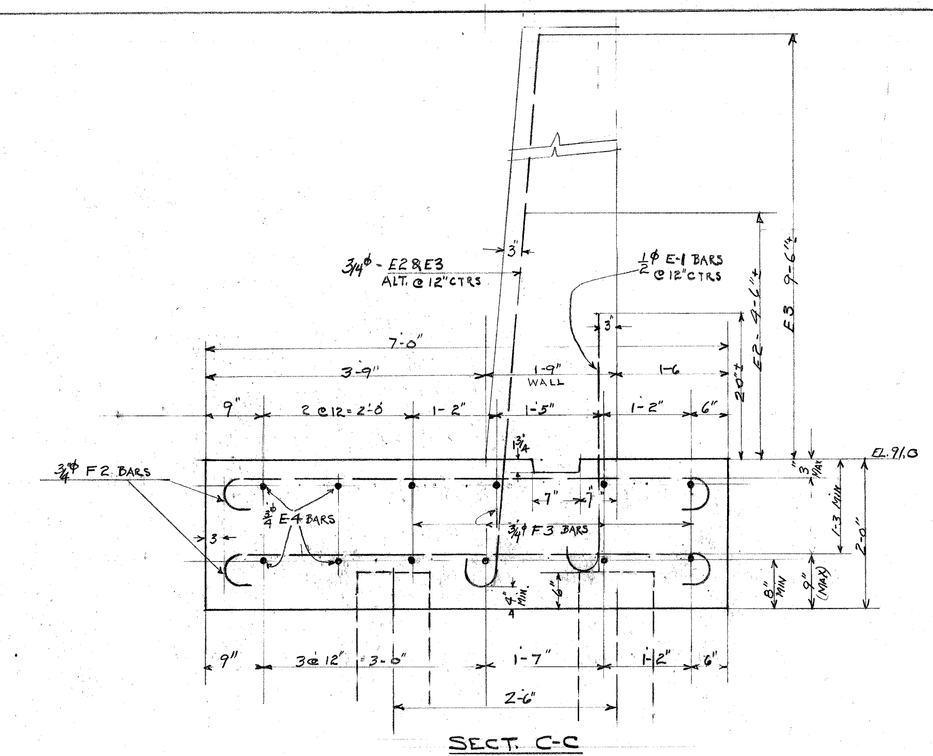
IBP 4/4/46



HALF PLAN OF REINFORCING OF FOOTINGS

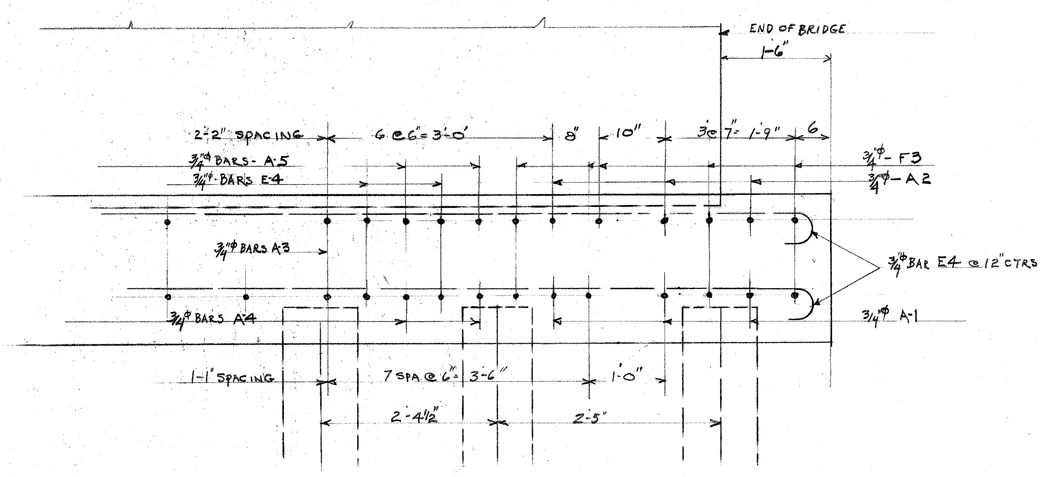
SYMETRICAL ABT. BRIDGE ℄S

SCALE 1/4" = 1'-0"



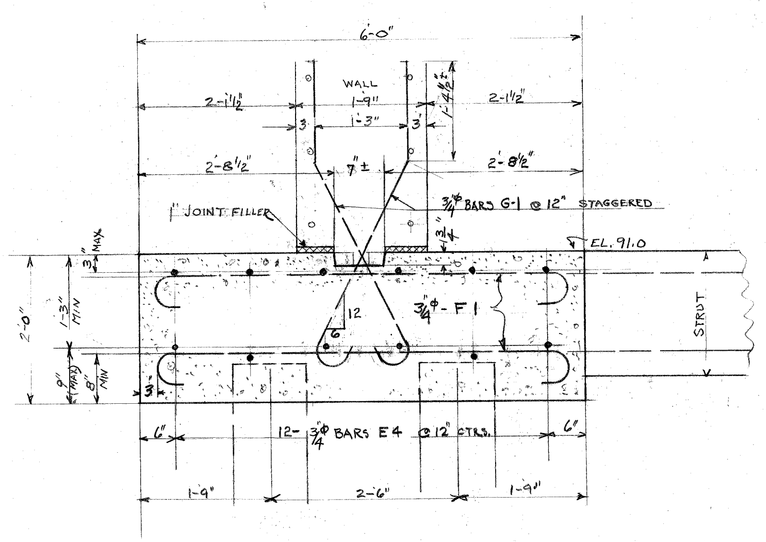
SECT. C-C

SCALE 3/4" = 1'-0"



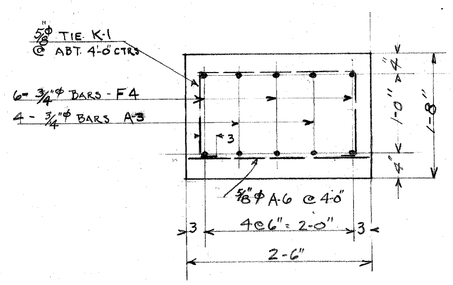
SECT. D-D

SCALE 3/4" = 1'-0"



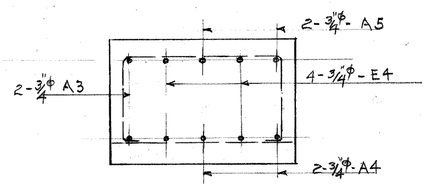
SECT. A-A

SCALE 3/4" = 1'



SECT. B-B

SCALE 3/4" = 1'-0"



SECT. B1-B1

QUANTITIES

CONCRETE = 2500 CU FT = 92 CU YDS

REIN. STEEL 9600 LBS.

REINFORCING STEEL - BAR LIST

MARK	NUMBER	SIZE	LENGTH	DIMENSIONS a	b	c	d	e	LOCATION
A1	12	3/4 φ	8'-0"						BOTT OF FTG. WING WALL
A2	12	"	9'-0						TOP OF FTG WING WALL
A3	12	"	29'-0						TOP & BOTT OF STRUTS
A4	4	"	36'-0						BOTT OF EXT. STRUTS & WING WALL FTG.
A5	4	"	38'-0						TOP OF EXT. STRUTS & WING WALL FTG
A6	16	5/8 φ	2'-6"						BOTT. OF STRUTS
E1	56	1/2 φ	4'-0	3'-4 1/2"	3"	2"			DOWELS - WING WALL-FTG
E2	28	3/4 φ	6'-9	5'-10"	4 1/2	3"			"
E3	28	"	11'-9	10'-10"	4 1/2	3"			"
E4	64	"	30'-0"	29'-1	"	"			TOP & BOTT. OF EXT. STRUTS & BRIDGE FTGS.
F1	96	3/4 φ	6'-9"	4'-11"	4 1/2	3"	3"	4 1/2"	TOP & BOTT. BRIDGE FTGS.
F2	84	"	7'-9"	5'-11"	"	"	"	"	TOP & BOTT WG. WALL FTGS.
F3	32	"	19'-3"	17'-5"	"	"	"	"	"
F4	12	"	32'-6"	30'-8	"	"	"	"	TOP & BOTT. INT. STRUTS
G1	108	3/4 φ	5'-0	2'-8 1/2"	4 1/2"	3"	1'-3"	7 1/2	DOWELS BRIDGE FTG.
K1	16	5/8 φ	5'-6"	1'-2 1/2"	3	3	2'-7		TIES - STRUTS
	6124' of 3/4" φ			128' of 5/8"		224' of 1/2 φ			

CONCRET BASE CONSTRUCTION

BRIDGE No. 20

Sht. No. 2 of 4

AP69

PRELIMINARY

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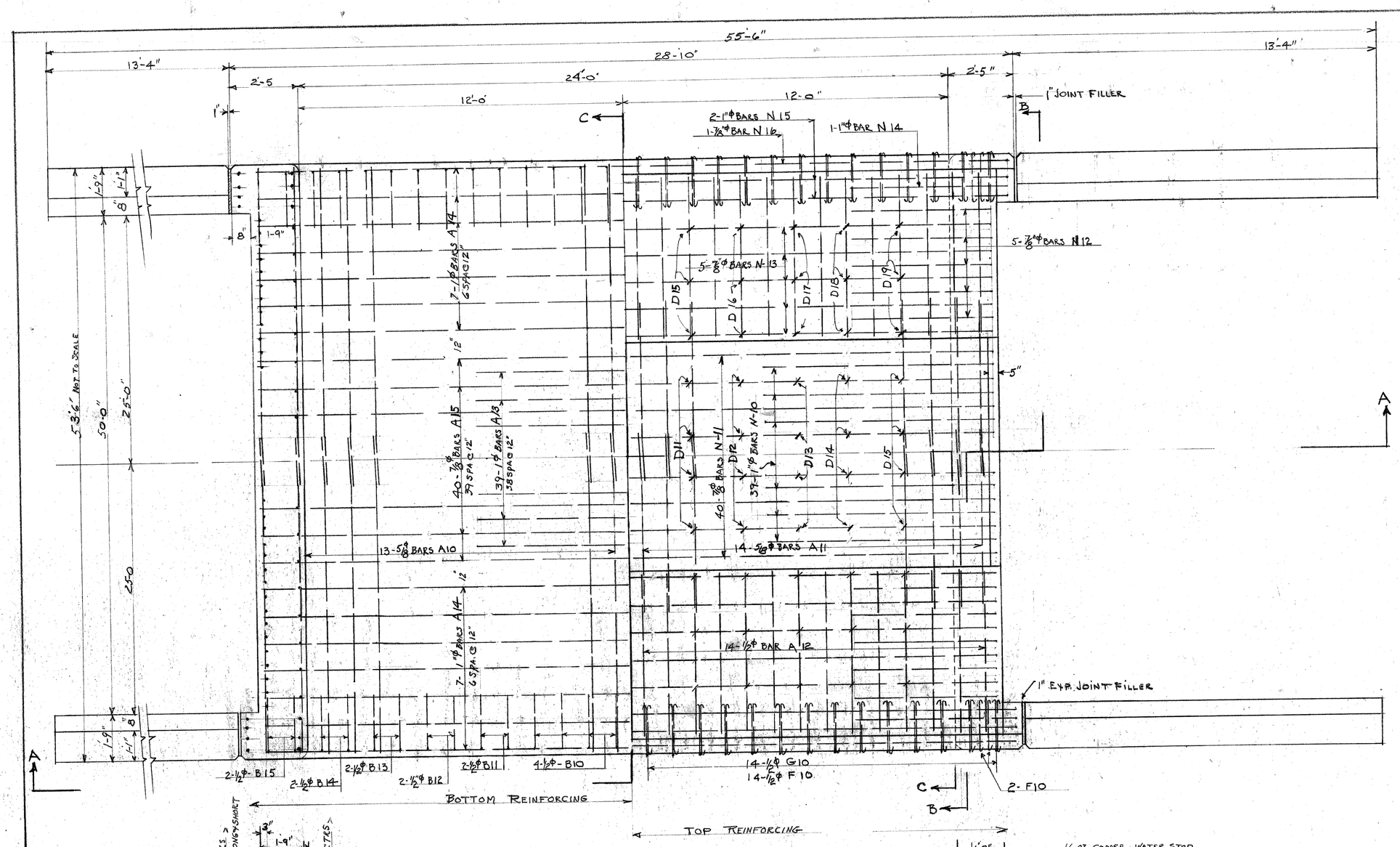
BW 220-6

Draw. 4

B.I. 10

IBP 4/4/46

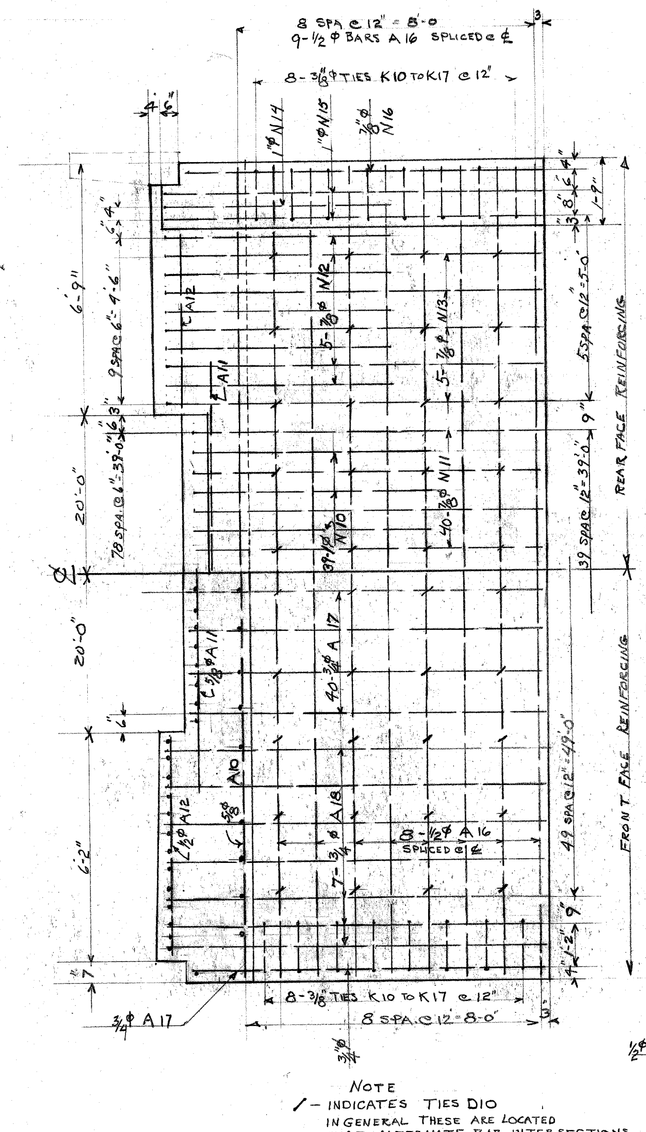


PLAN OF DECK REINFORCING STEEL

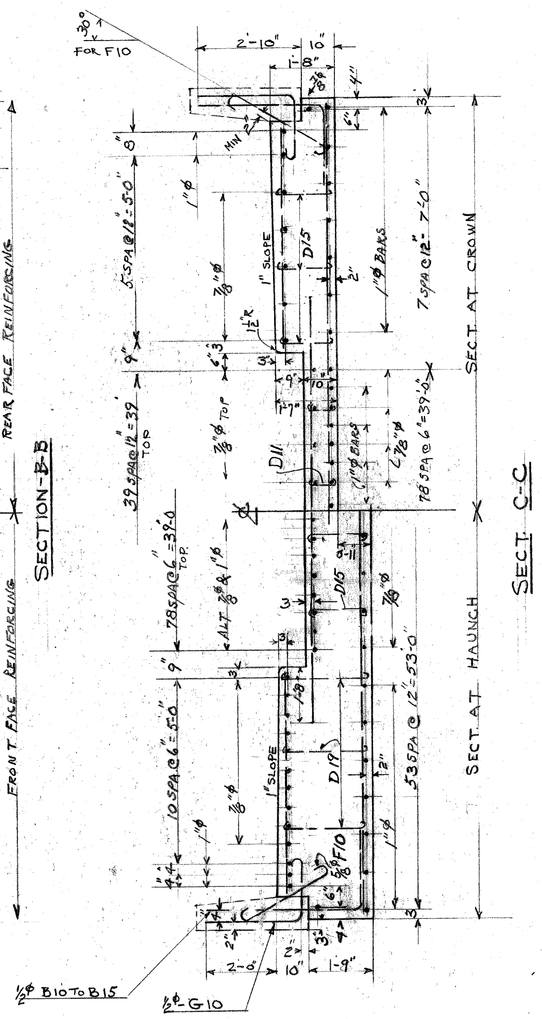
SYMETRICAL ABT ℄

NOTE

/ - INDICATES TIES D11 TO D19
IN GENERAL TIES ARE LOCATED
AT ALTERNATE BAR INTERSECTIONS



SECTION B-B

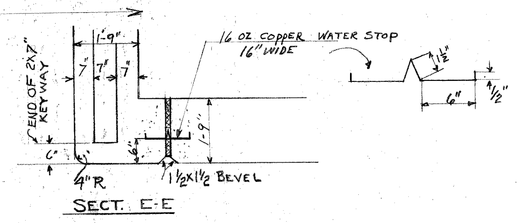


SECT. C-C

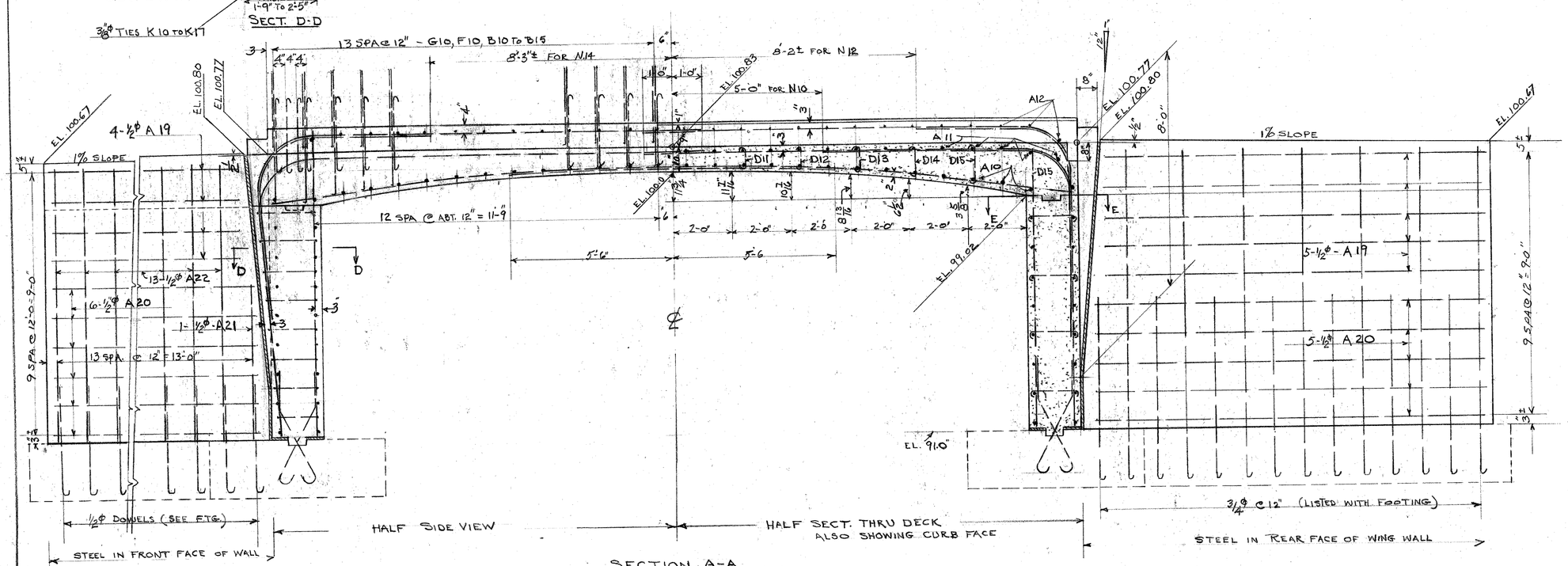
NOTE

/ - INDICATES TIES D10
IN GENERAL THESE ARE LOCATED
AT ALTERNATE BAR INTERSECTIONS

SECT. D-D

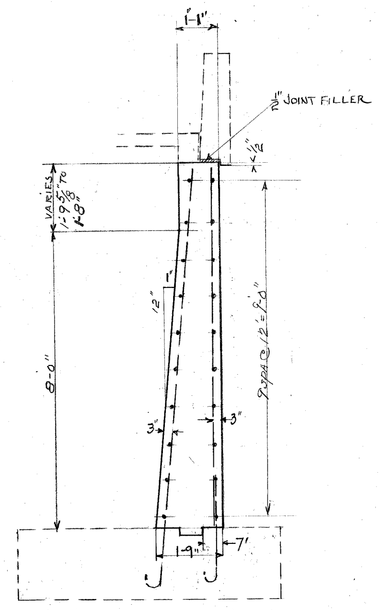


SECT. E-E



SECTION A-A

SYMETRICAL ABT ℄



SECT. F-F

BAR LISTS

MARK	No.	SIZE	LENGTH	a	b	R	d	c
A10	52	5/8φ	27'-6					
A11	56	5/8φ	22'-6					
A12	56	1/2φ	6'-0					
A13	39	1φ	11'-0					
A14	14	1φ	27'-0					
A15	40	7/8φ	27'-0"					
A16	68	1/2φ	27'-6					
A17	84	3/4φ	9'-6					
A18	28	3/4φ	10'-3"					
A19	36	1/2φ	13'-0					
A20	44	"	13'-6"					
A21	4	"	5'-6"					
A22	52	"	9'-3"					
				MINIMUM THIS BAR				
N10	78	1φ	14'-3"	4'-11	7'-0±	1'-6"	2'-4"	0
N11	80	7/8φ	23'-3"	7'-11"	13'-0±	"	"	0
N12	20	7/8φ	10'-0"	3'-10	3'-10"	"	"	0
N13	20	7/8φ	24'-0"	8'-8"	13'-0±	"	"	0
N14	4	1φ	11'-0"	4'-0	4'-0±	1'-9"	3'-0	3 1/2"
N15	8	1φ	24'-6"	8'-5"	13'-3±	"	"	1'-1"
N16	4	7/8φ	23'-9"	7'-6"	13'-3±	"	"	1'-1"
				a	b	c	d	
G10	56	1/2φ	5'-0"	2'-8"	3"	2"	1'-8 1/2"	

MARK	No.	SIZE	LENGTH	a	b	c
F10	64	5/8φ	4'-3"	2'-5"	1 3/4"	2 1/2
					MINIMUM THIS BAR	
D10*	208	3/8φ	2'-6"	5 1/2±	1'-7"	–
D11	40	"	1'-6"	5 1/2 ±	7"	–
D12	40	"	1'-9	6 1/2 ±	8 1/2"	–
D13	40	"	2'-0"	6 3/4±	10 1/2"	–
D14	40	"	2'-0"	5 3/4±	1'-0 1/2"	–
D15	52	"	2'-3"	5 3/4 ±	1'-3 1/2"	–
D16	12	"	2'-6"	6 1/4±	1'-5 1/2	–
D17	12	"	2'-6	5 3/4±	1'-7 1/2	–
D18	12	"	2'-9"	5 3/4±	1'-9 1/2	–
D19	12	"	3'-0	5 3/4	1'-0 1/2	–
					MINIMUM	
B10	16	1/2φ	5'-8"	2'-3±	2'-5	
B11	8	"	5'-10	"	2'-7	
B12	8	"	6'-0"	"	2'-9	
B13	8	"	6'-2"	"	2'-11	
B14	8	"	6'-5"	"	3'-2	
B15	8	"	6'-8"	"	4'-5	
				a	b	d
K10	4	3/8φ	5'-9"	1'-9"	11 1/2	1'-3
K11	4	"	5'-11"	1'-5"	"	"
K12	4	"	6'-1"	1'-6"	"	"
K13	4	"	6'-3"	1'-7"	"	"
K14	4	"	6'-5"	1'-8"	"	"
K15	4	"	6'-7"	1'-9"	"	"
K16	4	"	6'-9"	1'-10"	"	"
K17	4	"	6'-11"	1'-11"	"	"

* BEND ENDS OF D BARS IN FIELD.

QUANTITIES

CONCRETE 160 CU. YDS
REINFORCING STEEL = 21,800 LBS

BRIDGE SUPERSTRUCTURE + WING WALLS

BRIDGE NO 20
sht No 3 of 4

AP69

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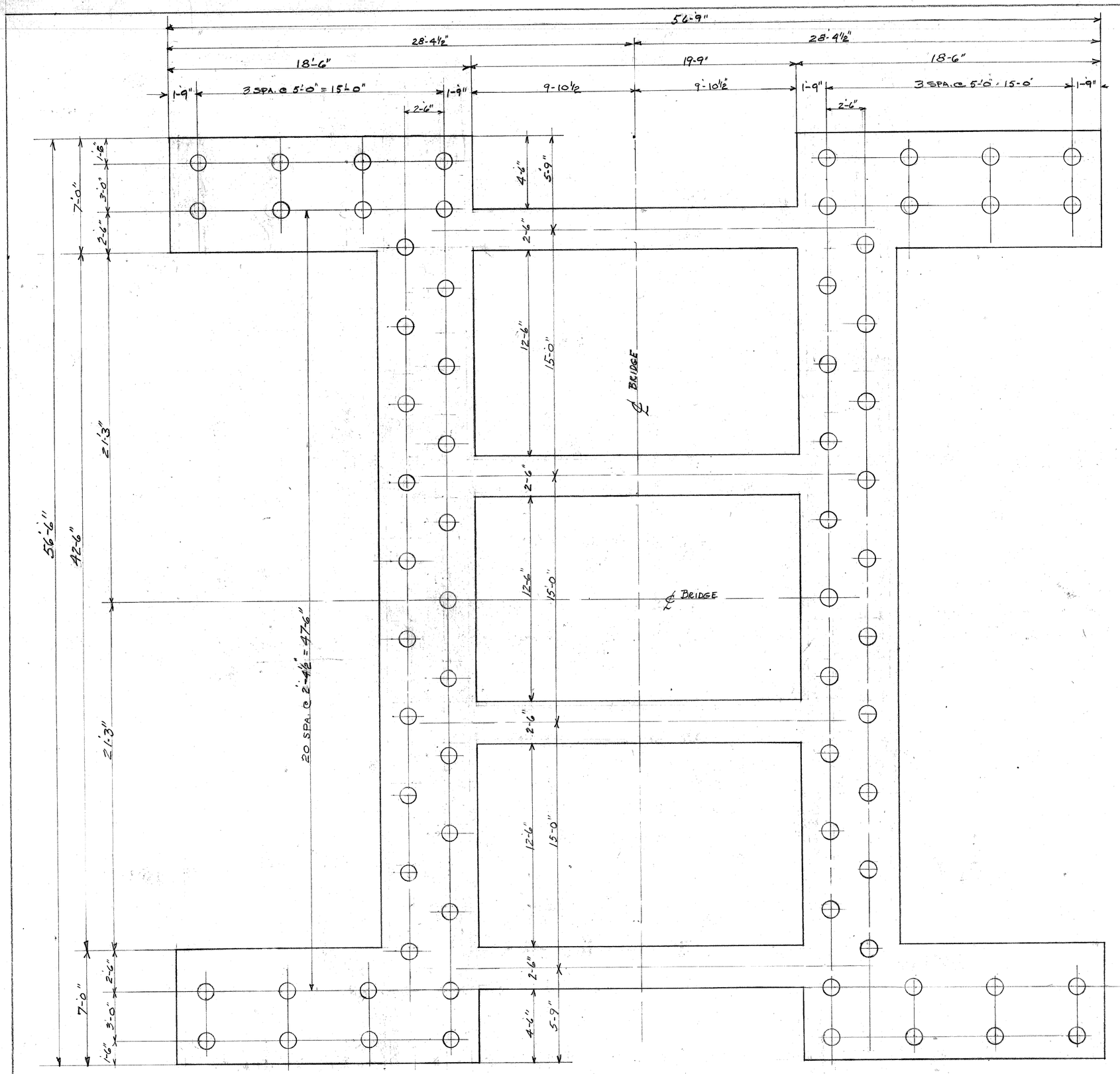
SCALE = 3/8" = 1'-0"

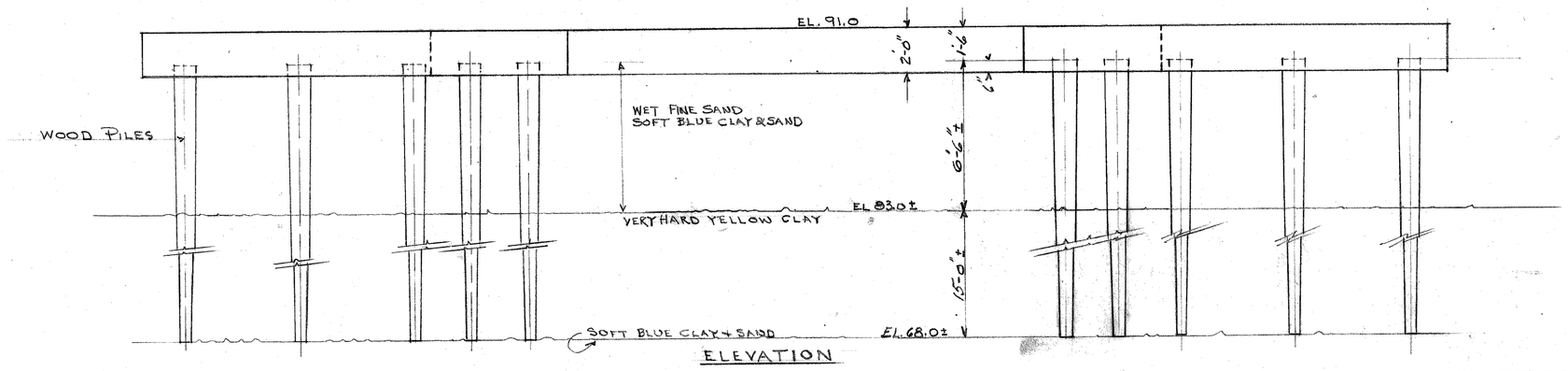
BW 220-7

Draw. 4 B.I.11

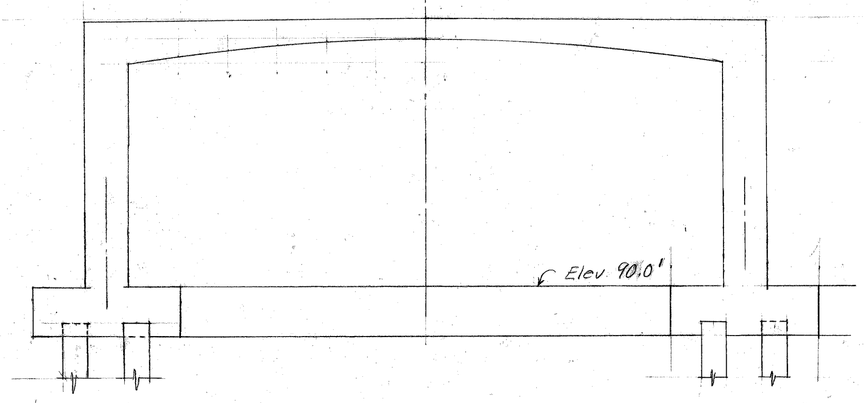
IBP 4/6/46



FOUNDATION PLAN
SHOWING PILING LOCATION



ELEVATION



BRIDGE No. 20.
Sht. No. 1 of 4

PRELIMINARY
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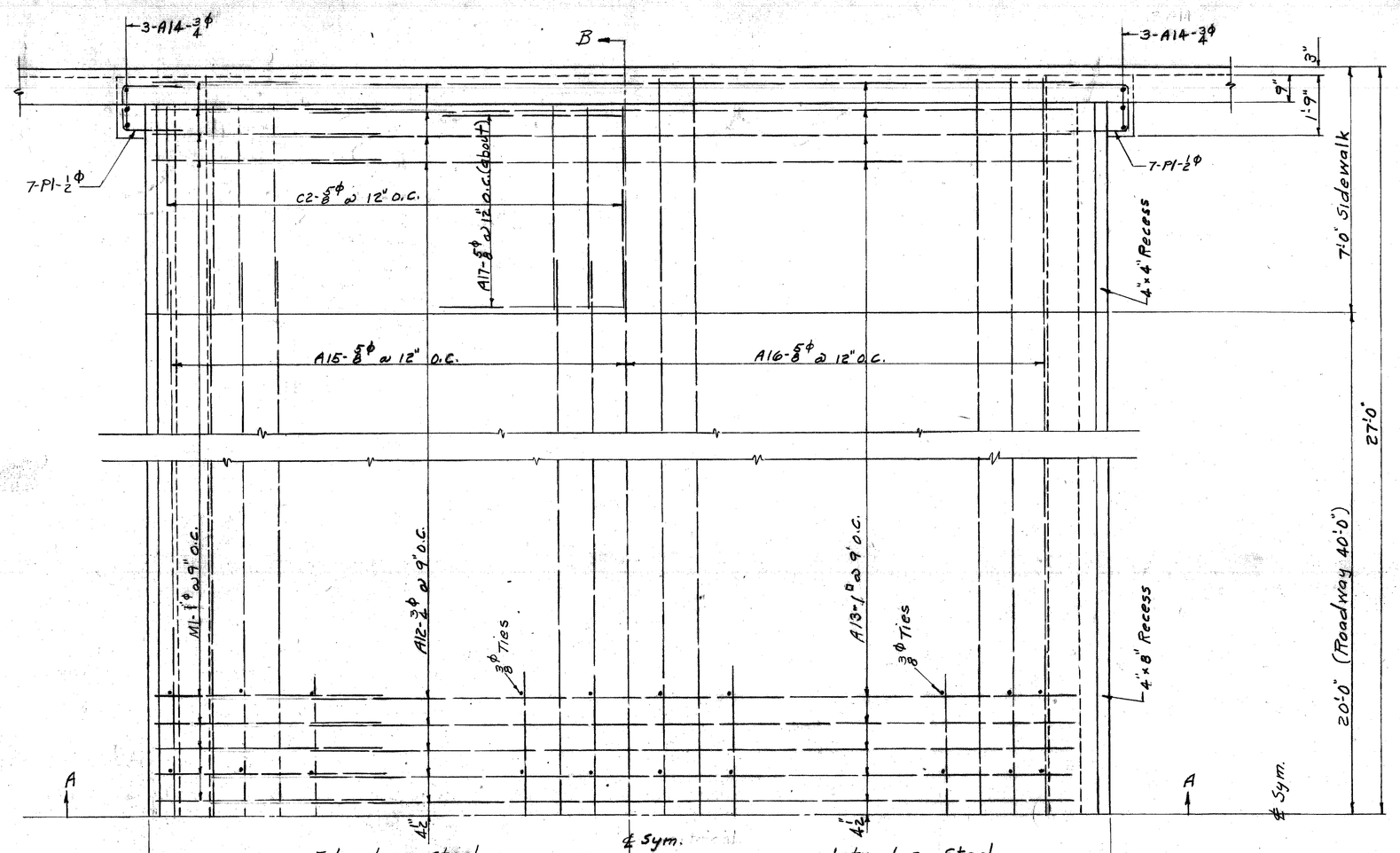
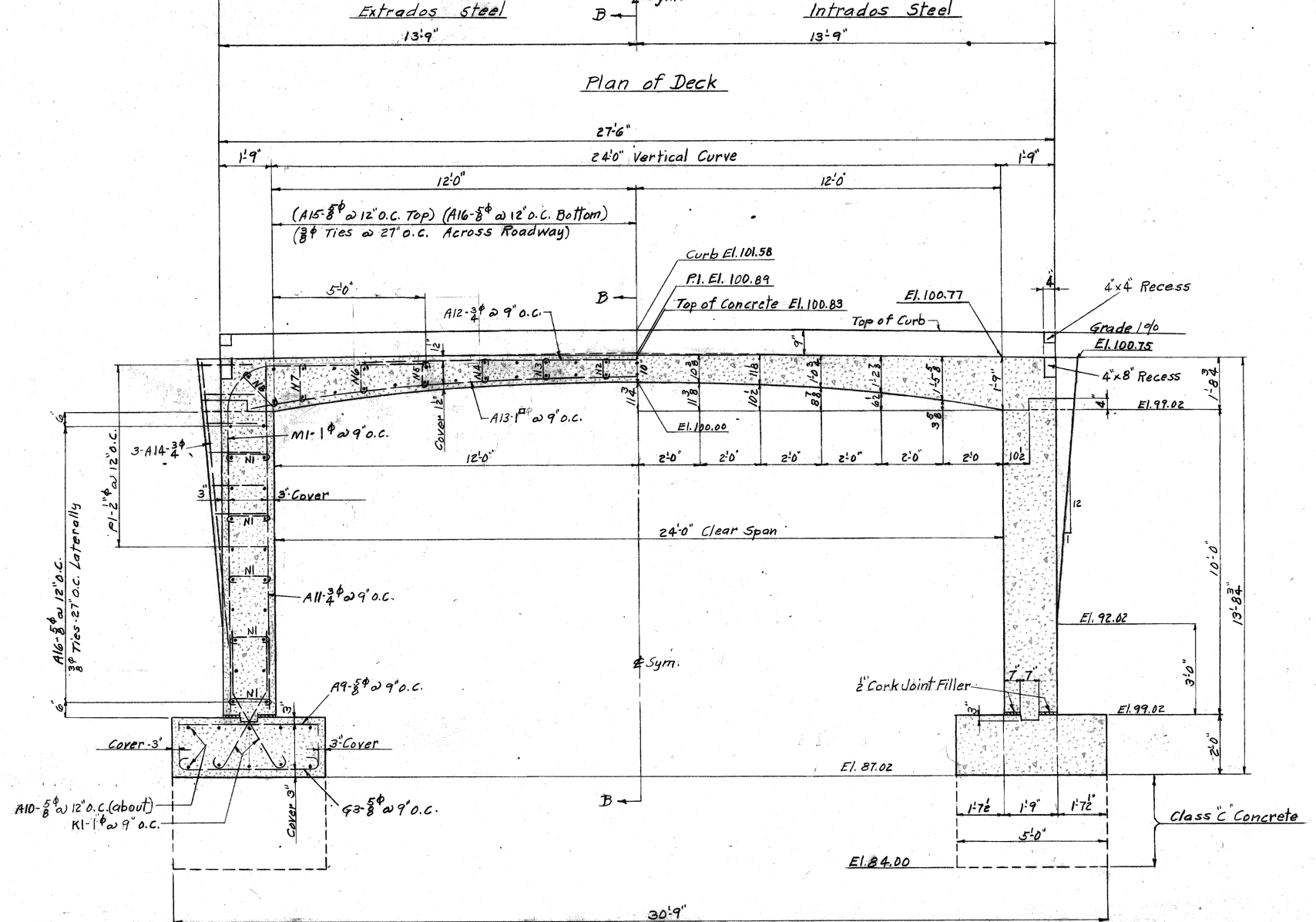
AP69 Draw 4 B.I. 12

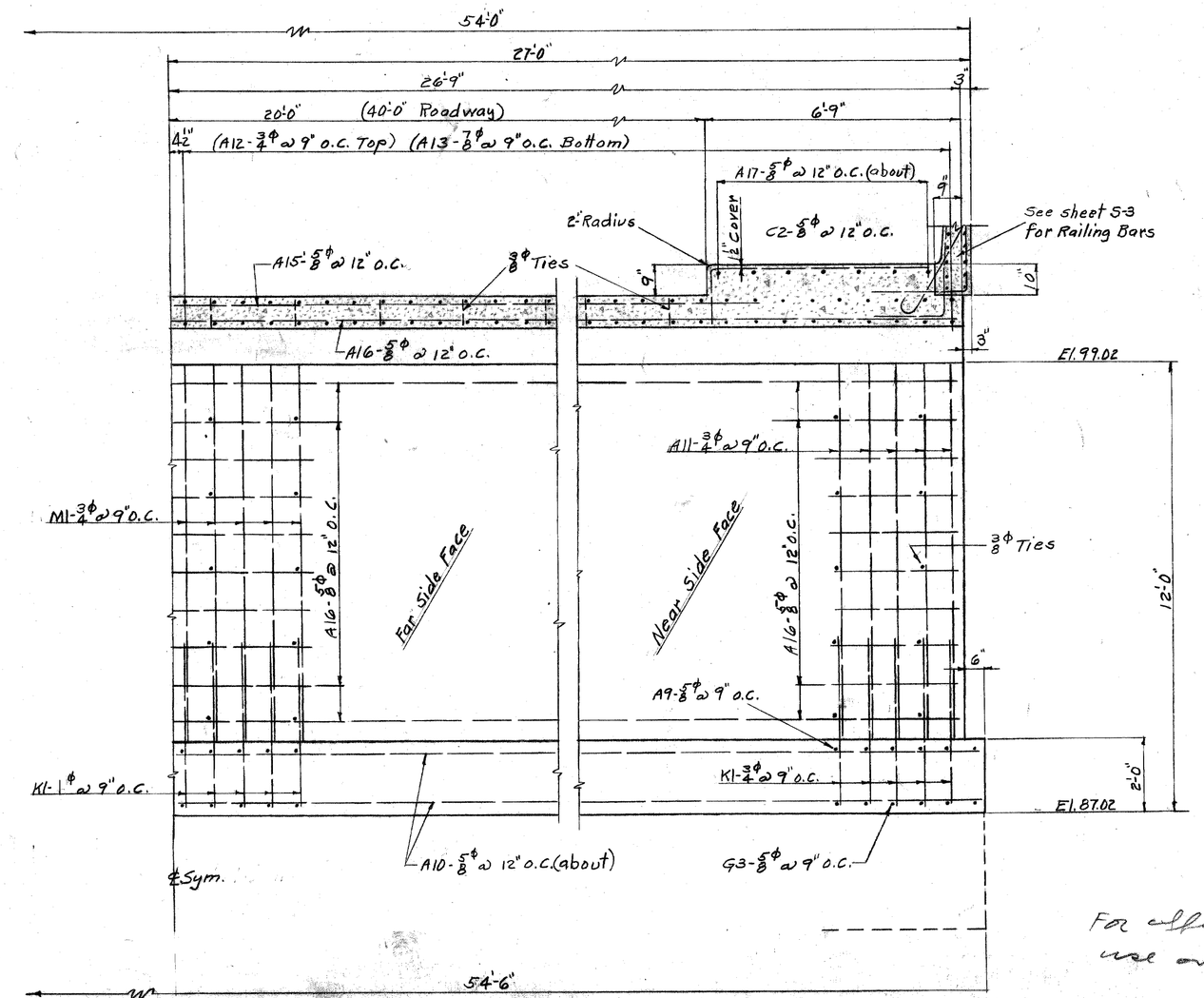
BW 220-8



Plan of Deck



Section "A-A"



Section "B-B"

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G						
F						
E						
D						
C						
B						
A						
NOTED BY	DESCRIPTION	DR'N	CK'D	AP'VD	DATE	
	REVISIONS					

REFERENCE DRAWINGS

DESIGNED BY	R. H. Speck
DRAWN BY	R. H. Speck
TRACED BY	R. H. Speck
CHECKED BY	

APPROVED:

SR. ASSOC. STRUCT. ENGINEER

ENGINEER OF DESIGN

ASST. CITY ENGINEER

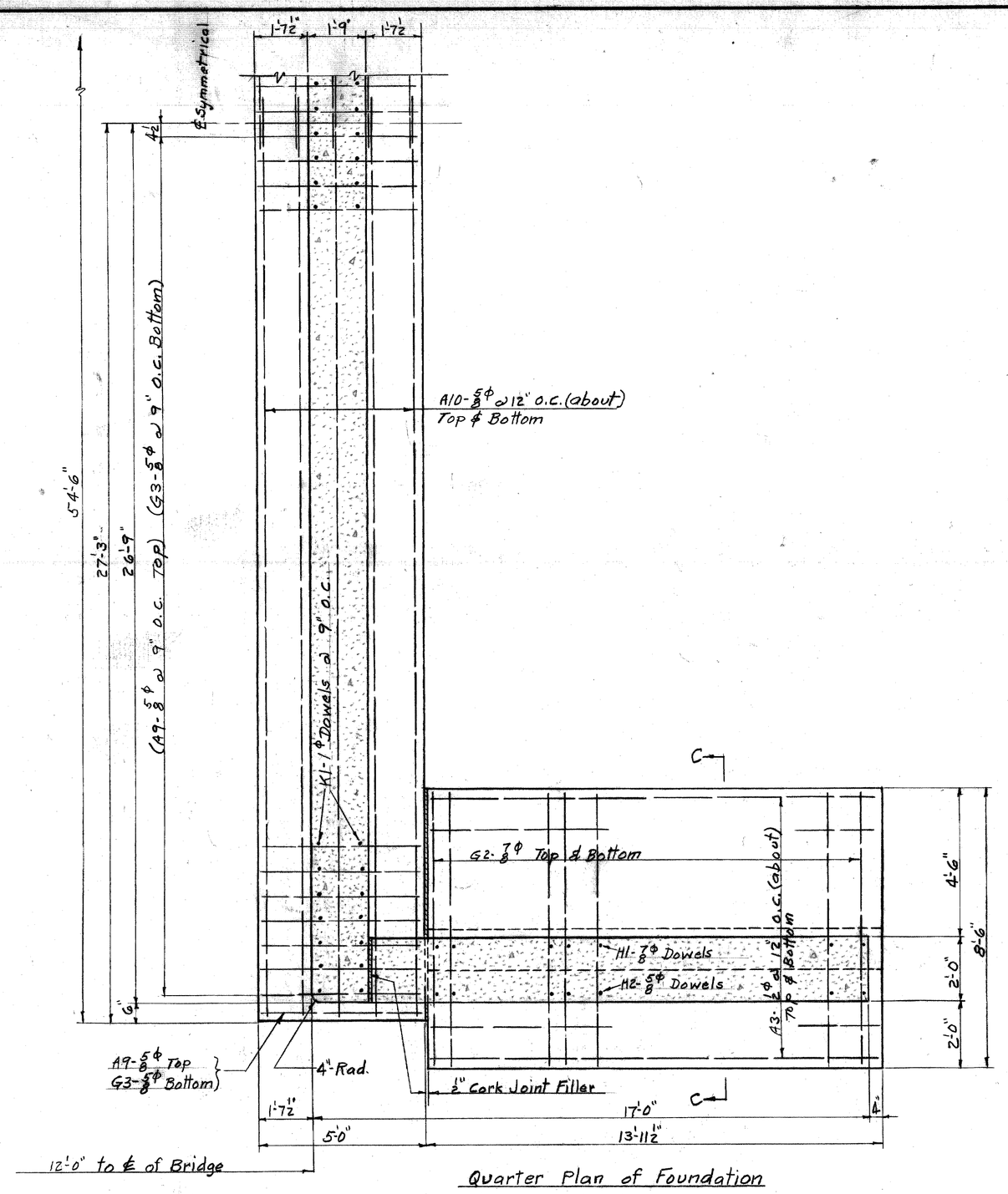
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE
BUREAU OF DESIGN

BELLE ISLE BRIDGES
BRIDGE NO. 20
ARCH DETAILS

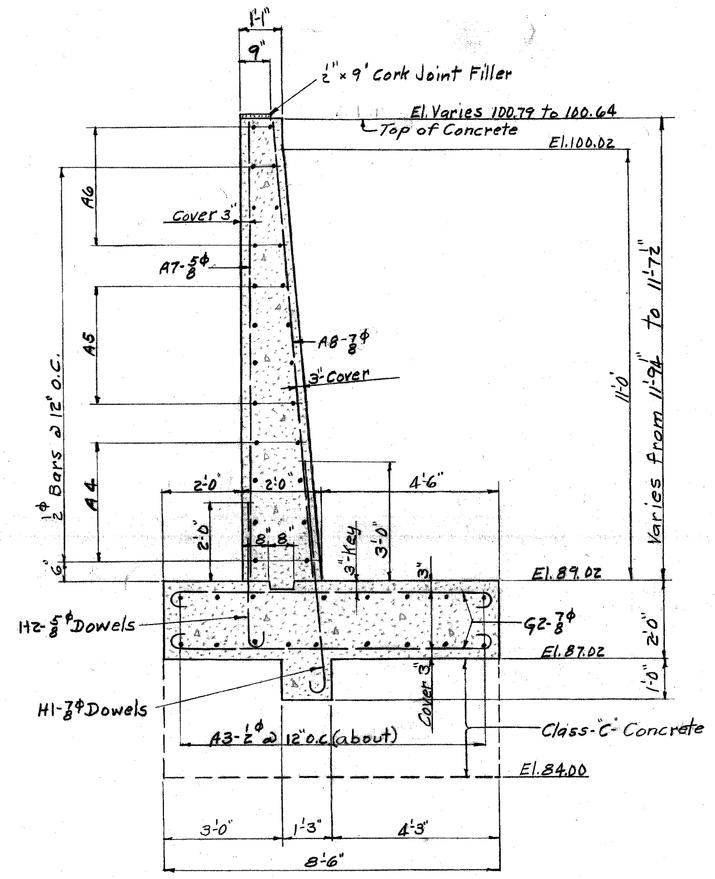
BOOK NO. S-6688, S-5664, 5749. Drg. 6-664 PAGE SCALE 3/8" = 1'-0"

SHEET 1 OF 3 SHEETS
JOB NO.
DRWG No. S-1
DATE

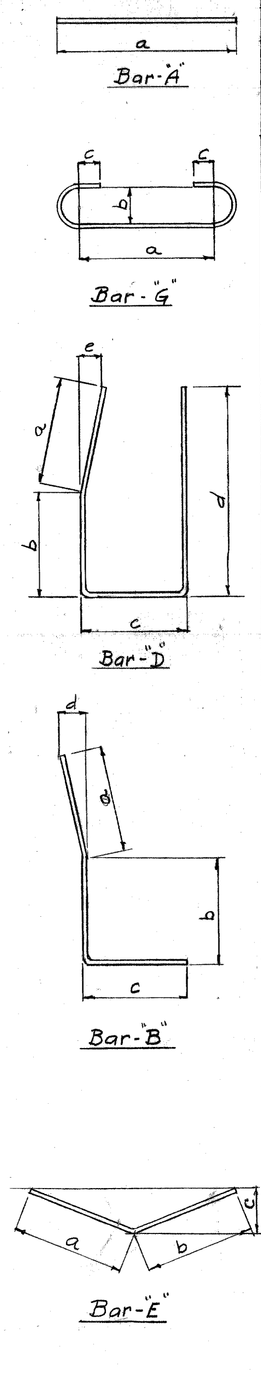
Draw. #4 QW 220-9 AP69



Quarter Plan of Foundation

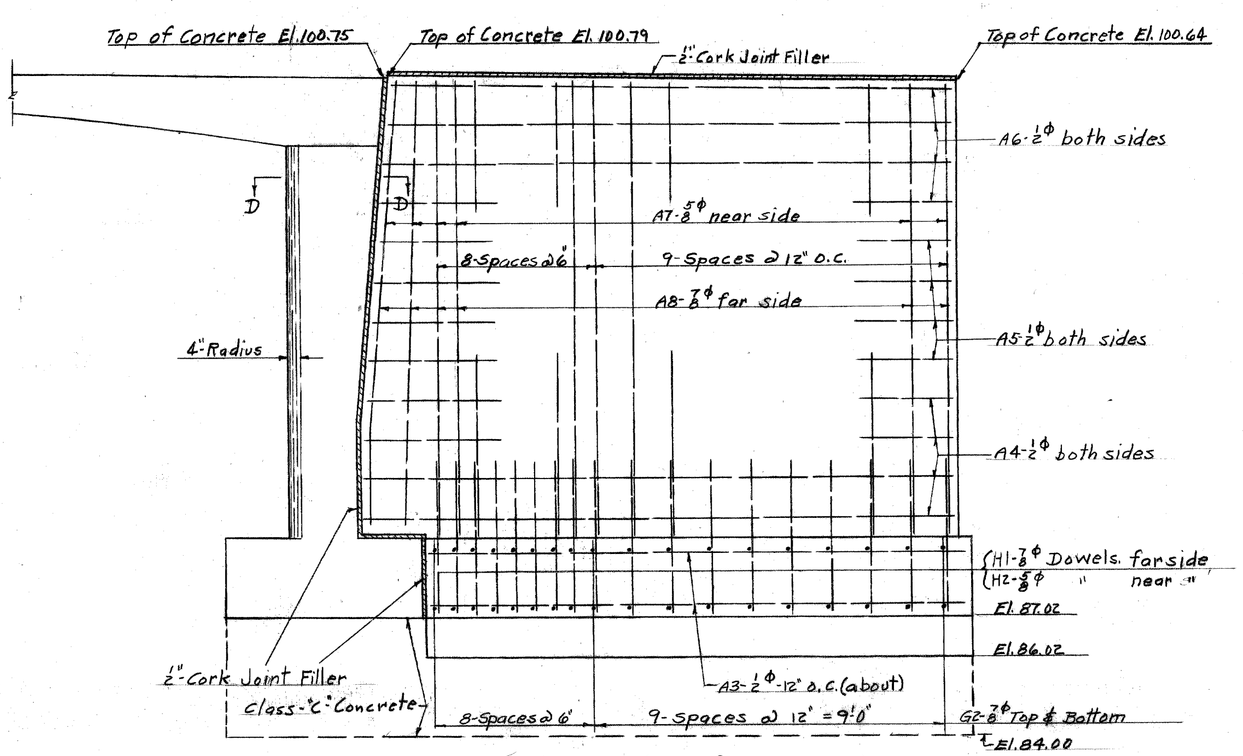


Section C-C

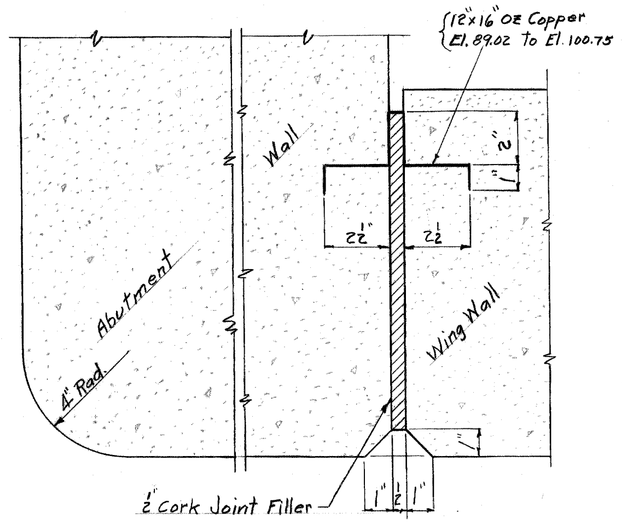


Mark	Size	No.	a	b	c	d	e	f	Length	Remarks
A1	1/2φ	8	30'-0"						30'-0"	Railing
A2	7/8φ	48	30'-0"						30'-0"	"
B1	5/8φ	56	1'-10½"	1'-5½"	1'-8"	2"			5'-0"	"
C1	5/8φ	56	2'-6"	2'-6					5'-0"	"
D1	5/8φ	64	1'-10½"	7½"	7"	2'-6"	2"		5'-7"	"
E1	5/8φ	36	2'-0"	2'-0"	4½"				4'-0"	"
F1	5/8φ	8	2'-0"	10"	3"	4½"	2"		3'-1"	"
G1	3/4φ	80	2'-8½"	3"	3"				4'-3"	"
A3	1/2φ	68	13'-6"						13'-6"	Wing Wall Footing
G2	7/8φ	144	7'-5"	5½	4½				9'-9"	" " "
A4	1/2φ	32	14'-9"						14'-9"	Wing Wall
A5	1/2φ	32	14'-6"						14'-6"	" "
A6	1/2φ	32	14'-3"						14'-3"	" "
A7	5/8φ	80	11'-3"						11'-3"	" "
A8	7/8φ	80	11'-3"						11'-3"	" "
H1	7/8φ	72	5'-5½	5½	4"				6'-7"	Wing Wall Footing
H2	5/8φ	72	3'-6½	4"	4½				4'-6"	" " "
A9	5/8φ	148	4'-6"						4'-6"	Abutment Footing
G3	5/8φ	148	4'-1	4"	3				5'-9"	" "
K1	1φ	288	2'-11"	6	4"	1'-0½	1'-10"	2'-1"	6'-3"	" "
A10	5/8φ	40	28'-0"						28'-0"	" "
M1	1φ	144	9'-11½	5'-0	2'-3½				17'-3"	Abutment
A11	3/4φ	144	11'-6						11'-6"	"
A12	3/4φ	144	14'-0"						18'-0	Deck
A13	1φ	144	25'-6"						25'-6"	"
A14	3/4φ	12	10'-0"						10'-0"	Abutment
P1	1/2φ	24	1'-6"	1'-6"	1'-6"				4'-6"	Abutment & Deck
N1	3/8φ	240	1'-11½"	4"	2"				1'-9½"	Abutment
N2	3/8φ	36	5½"	4"	2"				1'-1½"	Deck
N3	3/8φ	36	6¼"	4"	2"				1'-2¼"	"
N4	3/8φ	36	7¼	4"	2"				1'-3¼	"
N5	3/8φ	36	9¼	4"	2"				1'-5¼	"
N6	3/8φ	36	11¾	4"	2"				1'-7¾	"
N7	3/8φ	36	1'-2¾	4"	2"				1'-10¾	"
N8	3/8φ	36	1'-4½"	4"	2"				2'-0½	"
A15	5/8φ	54	22'-6						22'-6"	"
A16	5/8φ	130	27'-6"						27'-6	Abutment
A17	5/8φ	14	26'-6"						26'-6"	Sidewalk
C2	5/8φ	54	1'-6"	5'-9"					7'-3"	"

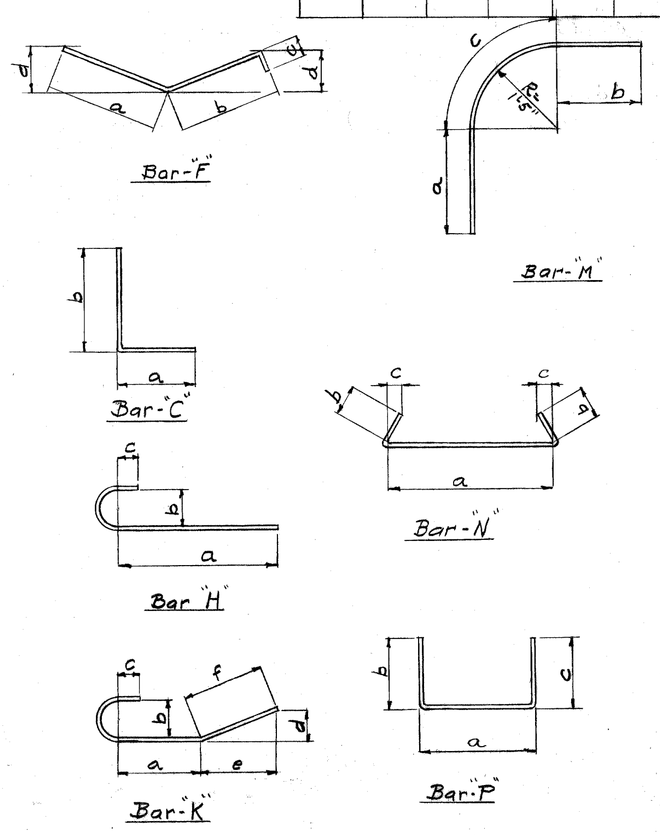
+1"
-1"



Front Elevation of Wing Wall



Section "D-D"
Scale - 3" = 1'-0"



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F								
E								
D								
C								
B								
A								
NOTED BY	DESCRIPTION	DR'N	CK'D	AP'VD	DATE			
	REVISIONS							

REFERENCE DRAWINGS

DESIGNED BY [illegible]
DRAWN BY [illegible]
TRACED BY [illegible]
CHECKED BY

APPROVED:
SR. ASSOC. STRUCT ENGINEER
ENGINEER OF DESIGN
ASST. CITY ENGINEER

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE
BUREAU OF DESIGN

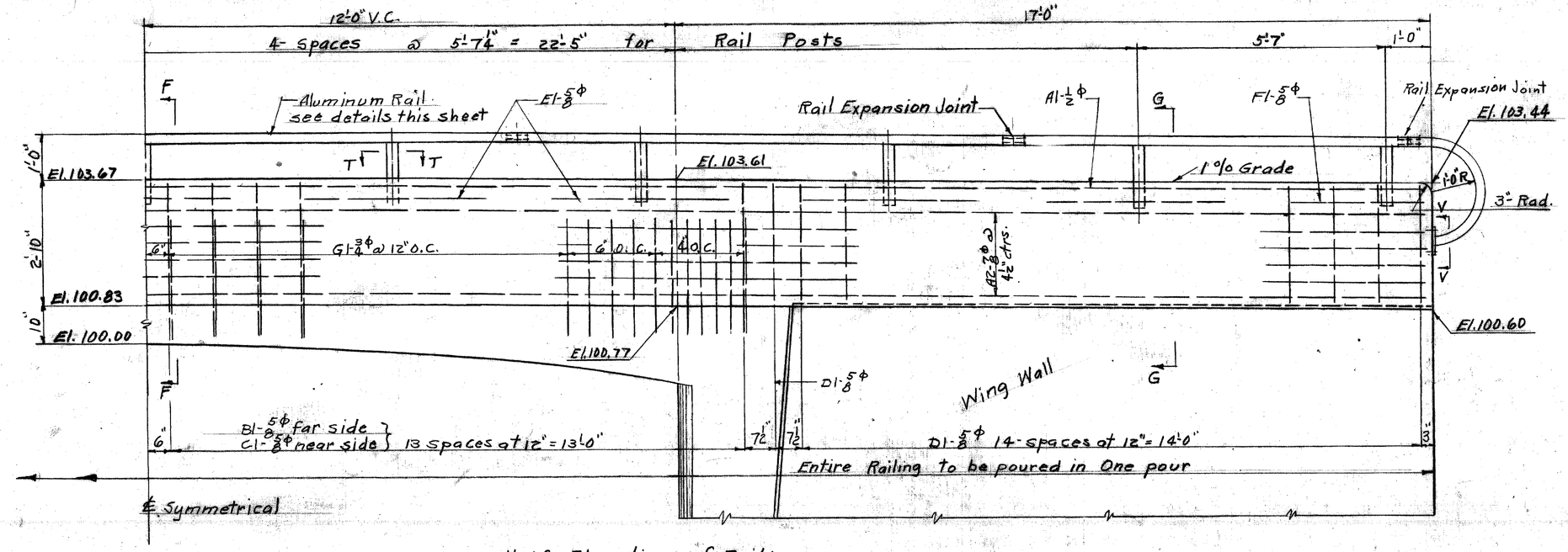
BELLE ISLE BRIDGES
BRIDGE NO. 20
WING WALL DETAILS

BOOK NO. S-668-B, S-566-A, S-749 Drg. C-664 PAGE

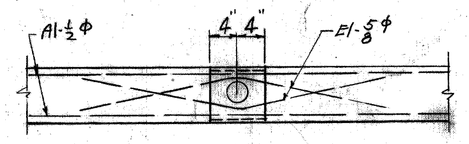
SCALE 3/8" = 1'-0" Except Noted.

SHEET 2 OF 3 SHEETS
JOB NO.
DRWG NO. S-2
DATE

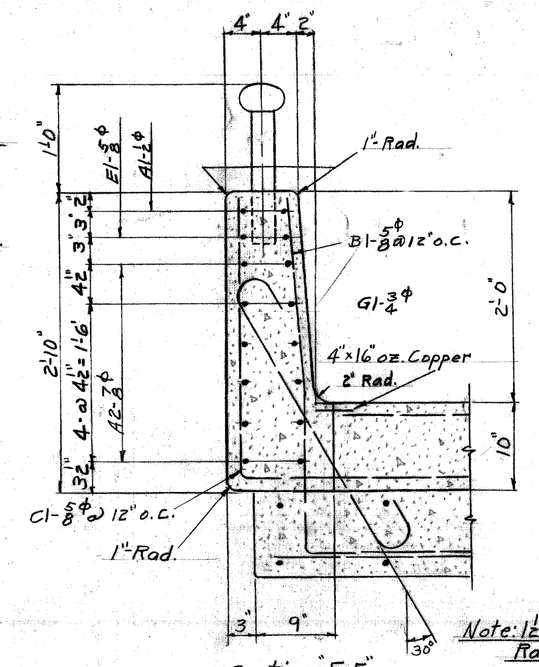
Drawn. # 4 BW 220-10 AP69



Half Elevation of Railing
Scale ½" = 1'-0"

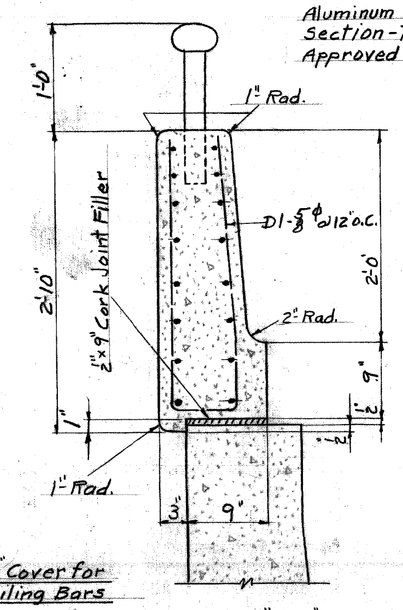


Plan "T-T"
Scale ¾" = 1'-0"

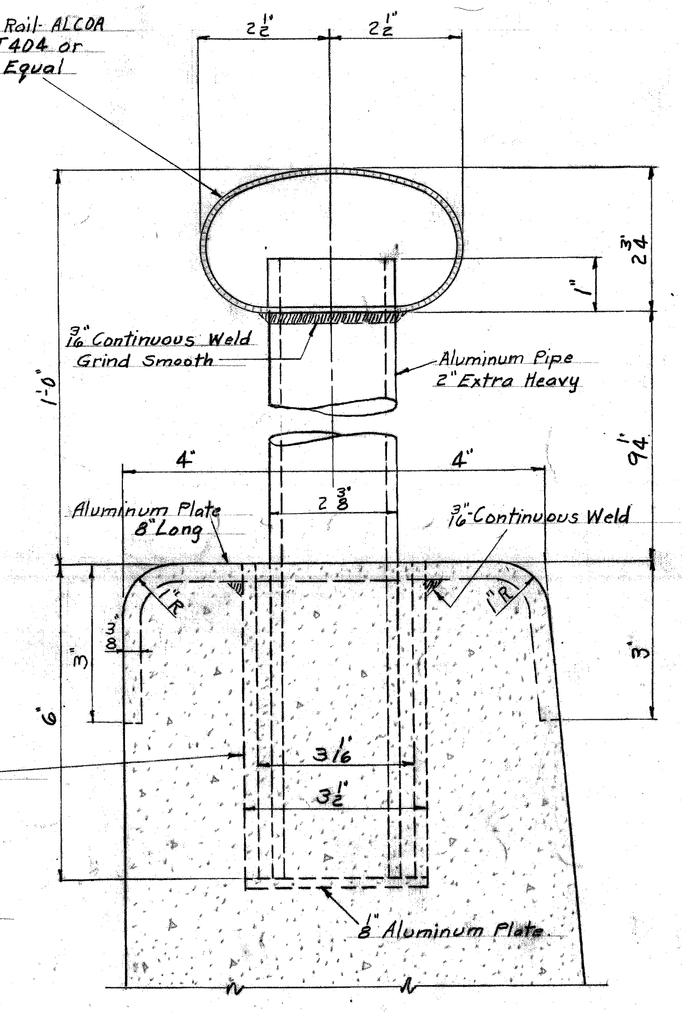


Section "F-F"
Scale 1" = 1'-0"

Note: 1½" Cover for Railing Bars

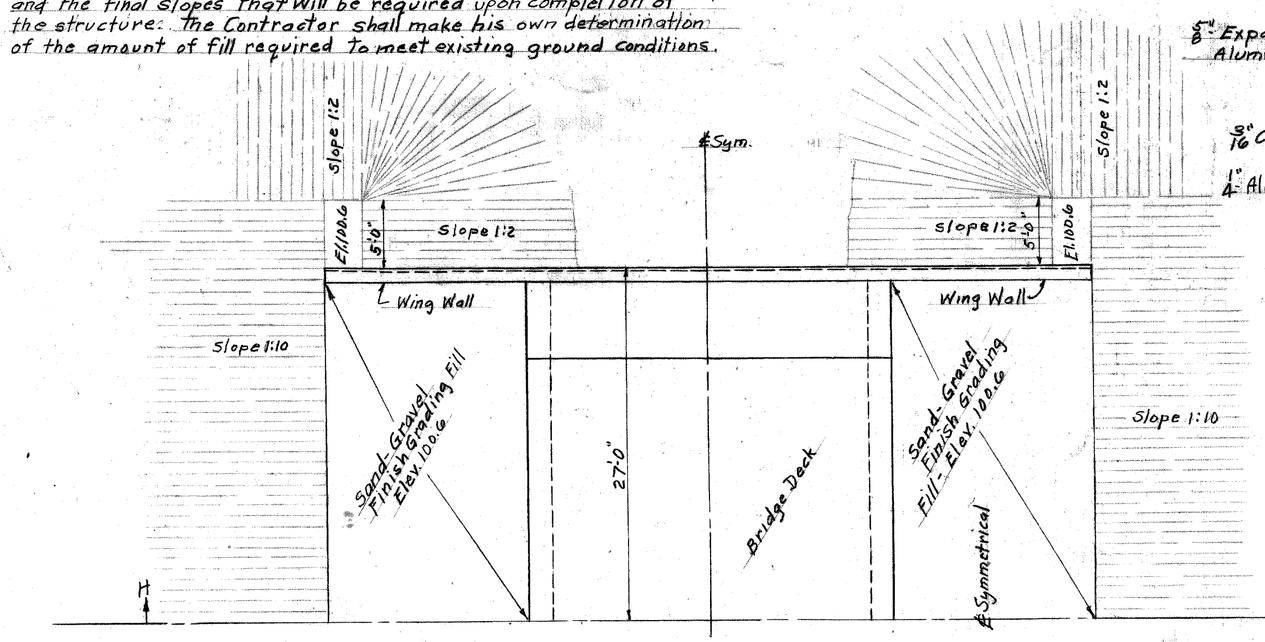


Section "G-G"
Scale 1" = 1'-0"

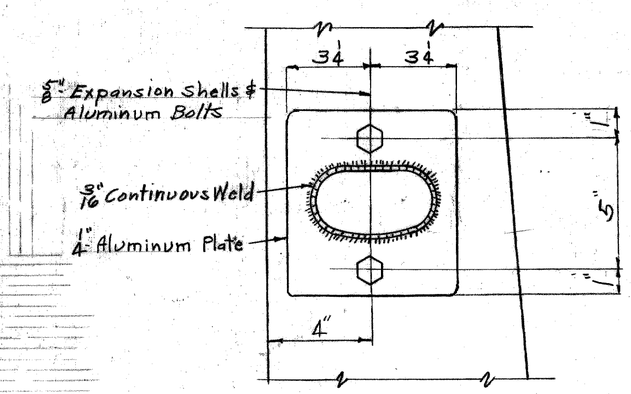


Detail of Aluminum Rail
Scale-Half Size

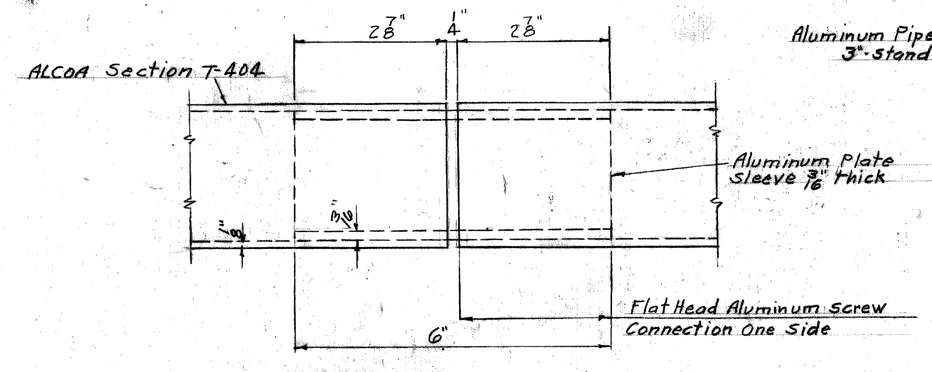
Note:
Asphalt pavement on bridge is not included in this Contract. Existing ground lines, channel bottom and lines indicating where fill slopes meet the existing ground surface are only rough approximations. This plan of backfill and Section H-H are intended only to indicate the top elevations of the backfill and the final slopes that will be required upon completion of the structure. The Contractor shall make his own determination of the amount of fill required to meet existing ground conditions.



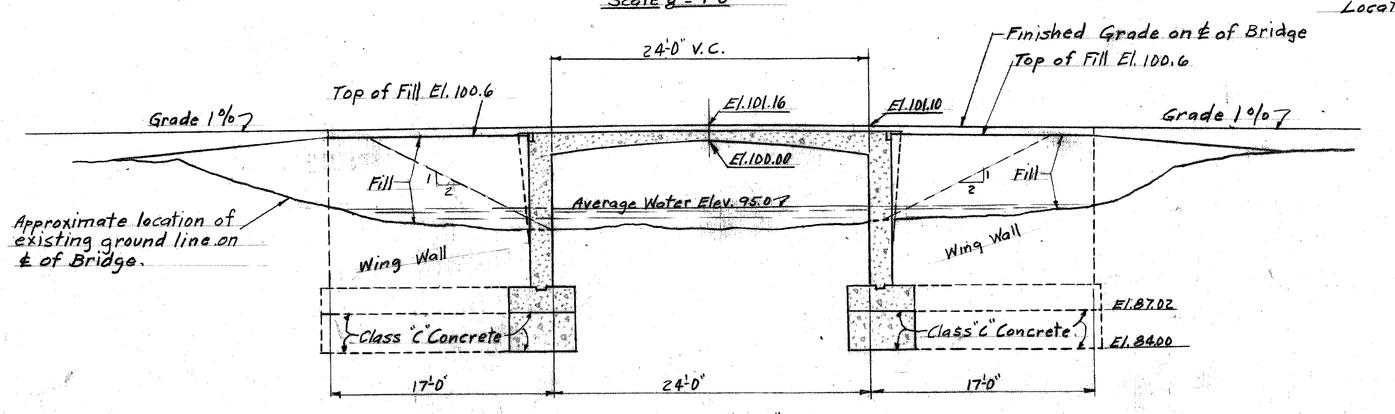
Half Plan of Bridge showing Backfill
Scale ⅛" = 1'-0"



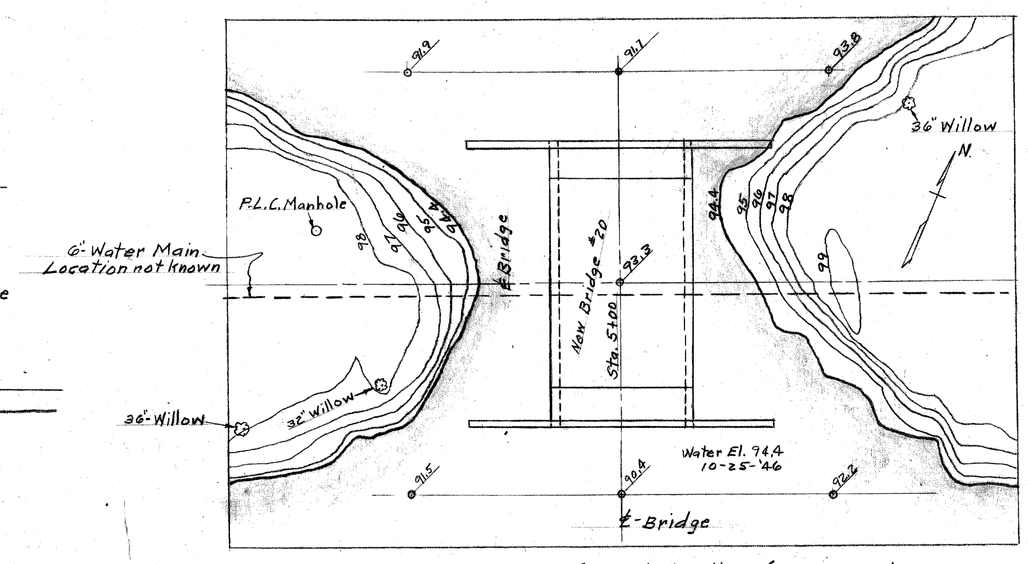
Section "V-V"
Scale 3" = 1'-0"



Detail of Expansion Joint Sleeve
Scale-Half Size

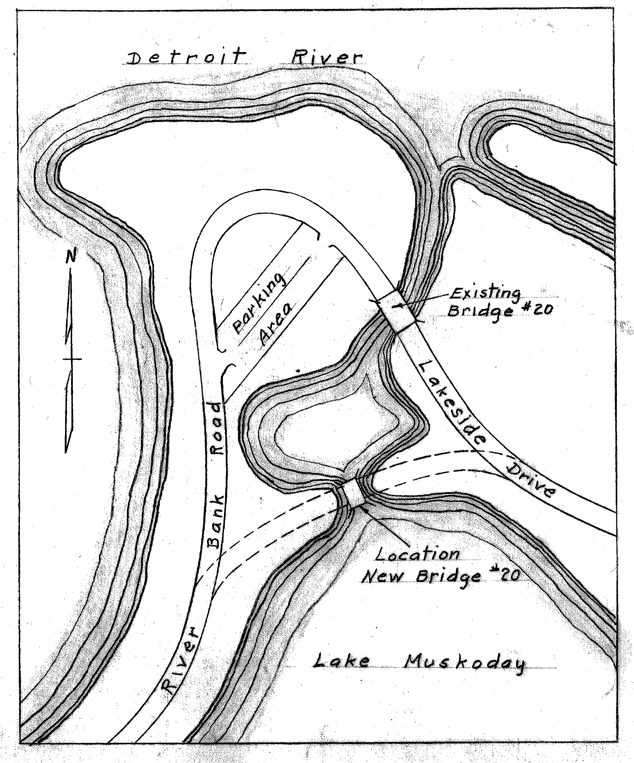


Section "H-H"
Scale ⅛" = 1'-0"



Note: All surface or sub-surface obstructions (trees, shrubs, manholes, etc) whether or not shown on this drawing shall be removed by the Contractor to a minimum depth of two feet below finished grades or construction grades.

Contour Map of Bridge Site
Scale 1" = 20'



Location Plan Bridge #20
Scale 1" = 200'

For office use only

G						
E						
D						
C						
B						
A						
NOTED BY	DESCRIPTION	DR'N	CK'D	AP'VD	DATE	
	REVISIONS					

REFERENCE DRAWINGS

DESIGNED BY	RHSpeck
DRAWN BY	RHSpeck
TRACED BY	RHSpeck
CHECKED BY	

APPROVED:
SR. ASSOC. STRUCT. ENGINEER
ENGINEER OF DESIGN
ASST CITY ENGINEER

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE
BUREAU OF DESIGN

BELLE ISLE BRIDGES
BRIDGE NO. 20
RAILING AND BACKFILL

BOOK NO. S-668-B, S-566-A, S-749 PAGE
Drg. C-664
SCALE As Noted.

SHEET 3 OF 3 SHEETS
JOB NO.
DRWG NO. S-3
DATE

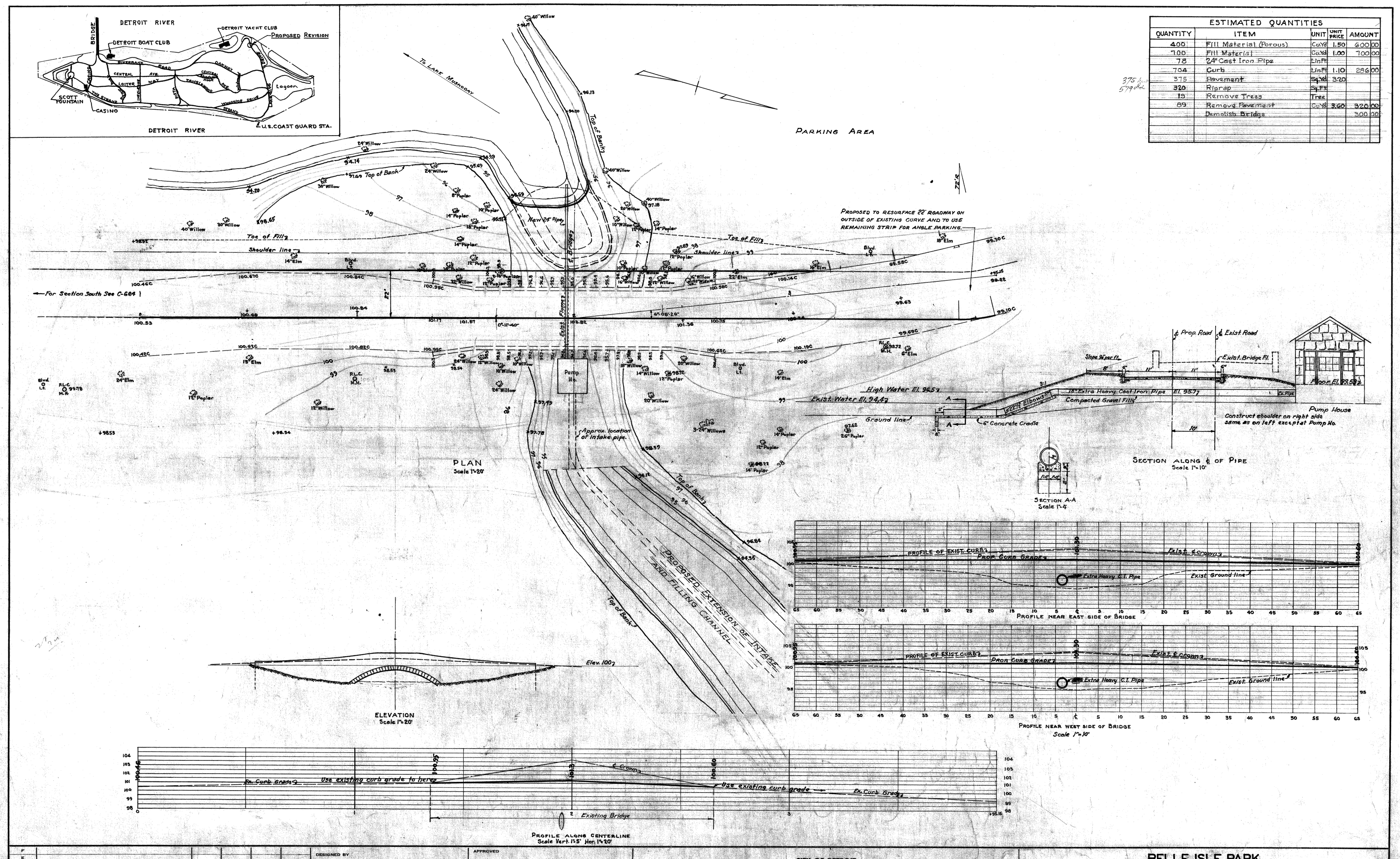
Draw #4 BW 220-11 AP69

2 BP 4-26-45

300 7-12-43 POST 121

ESTIMATED QUANTITIES				
QUANTITY	ITEM	UNIT	UNIT PRICE	AMOUNT
400	Fill Material (Porous)	Cu.Yd.	1.50	600 00
700	Fill Material	Cu.Yd.	1.00	700 00
78	24" Cast Iron Pipe	Lin.Ft.		
704	Curb	Lin.Ft.	1.10	286 00
375	~~Pavement~~	Sq.Yd.	3.20	
320	Riprap	Sq.Ft.		
15	Remove Trees	Tree		
89	Remove Pavement	Cu.Yd.	3.60	320 00
	Demolish Bridge			300 00

375 L.F. 579 Sq.Yd.



PLAN
Scale 1"=20'

ELEVATION
Scale 1"=20'

SECTION ALONG ℄ OF PIPE
Scale 1"=10'

SECTION A-A
Scale 1"=4'

F					
E					
D					
C					
B					
A					
	DESCRIPTION	DRW.	CKD.	APR.	DATE
	REVISIONS				

DESIGNED BY
DRAWN BY G.B. Yousett
TRACED BY
CHECKED BY

APPROVED
ENGINEER OF
CITY ENGINEER

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE
BUREAU OF

BELLE ISLE PARK
BRIDGE NO. 20

BOOK NO. 1973
PAGE NO. 35
SCALE As Noted
DATE Aug. 25, 1945
DWG. NO. C 667
A.P.G.S.

BW 220-12

Drw. 4

11-19-45 95%