

ESTIMATE OF QUANTITIES			
Item	Description	UNIT	QUANTITY
1.	Concrete in walls (later proposed with castings) removed and replaced.	Cu. Yds.	83
2.	Furnish and install conduits, anchor bolts and bases for street lighting poles.		Lump
3.	4 1/2" (Average thickness) Plain concrete walk	Cu. Yds.	70
4.	6" Reinforced concrete slab removed and replaced	Cu. Yds.	152
5.	Concrete curb and walk at ends	Cu. Yds.	12
6.	Reinforcing steel	Lbs.	13,418

City of Columbus, Ohio  
Division of Electricity conduits  
3 - 2" Fibre Conduits (Item 2)  
1 - 2" Fibre Conduit (Lighting) (Item 2)

**APPROVED**

*Richard J. Zander*  
Supervisor, Div. of Elect., Columbus, Ohio  
Date: 24 MARCH 1960

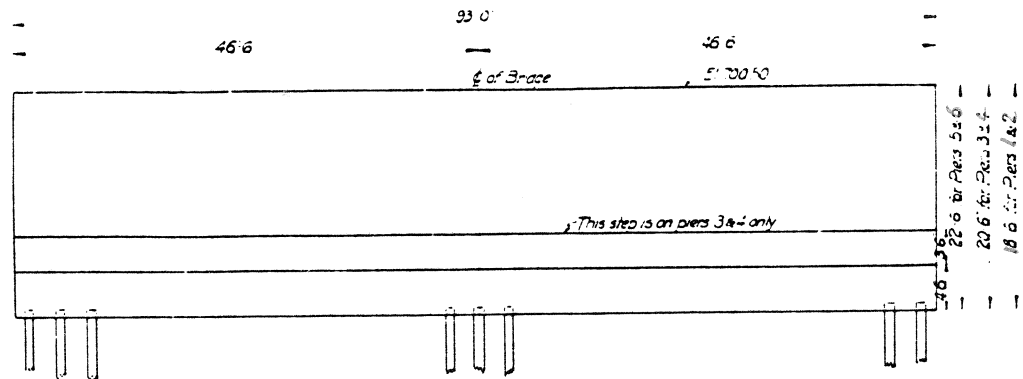
*Thomas R. Edwards*  
Principal Civil Engineer, Columbus, Ohio  
Date: 3/25/1960

*Robert J. W. ...*  
Chief Engineer, Columbus, Ohio  
Date: 3-28-60

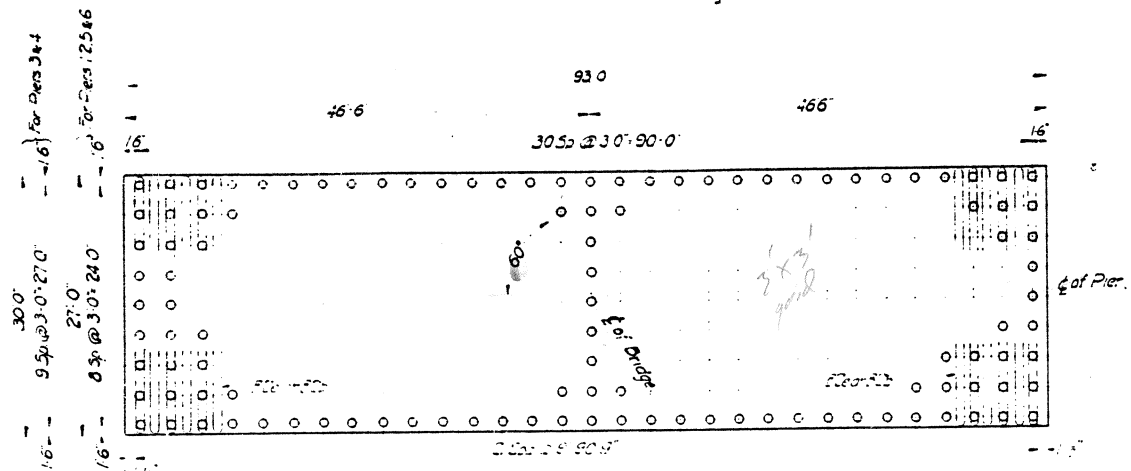
*...*  
Date: 3/28/60

**CITY OF COLUMBUS, OHIO**  
DEPARTMENT OF PUBLIC SAFETY  
OFFICE OF ENGINEERING & CONSTRUCTION

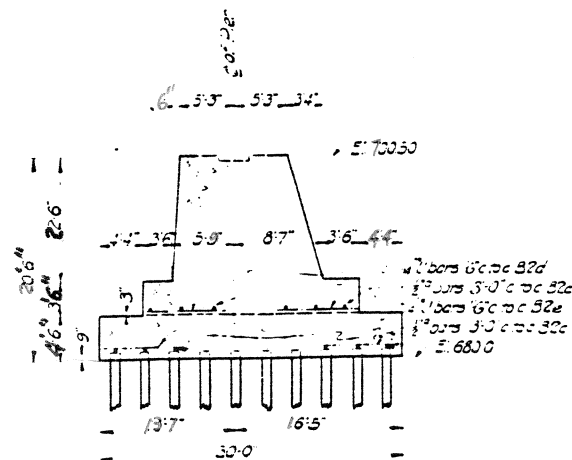
**REGISTRATION OF THE CONTRACTOR**  
THE TOWN STREET PROJECT  
Over the City of Columbus, Ohio



Elevation for all Pier Footings



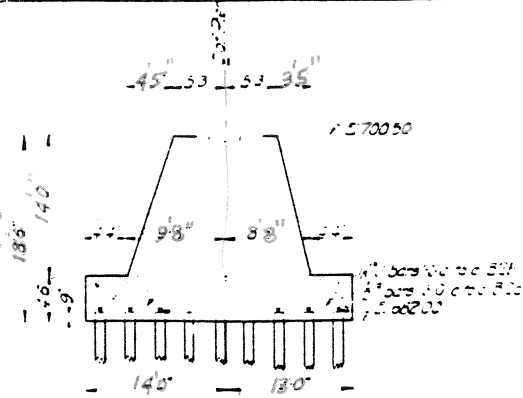
Plan for all Pier Footings



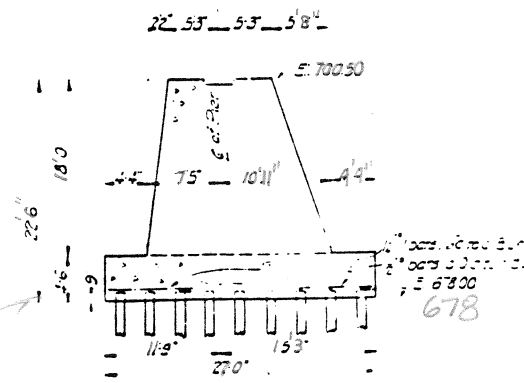
Right Section of Footing for Pier No. 4-Looking North  
Right Section of Footing for Pier No. 3-Looking South

Schedule of Piles for all Foundations

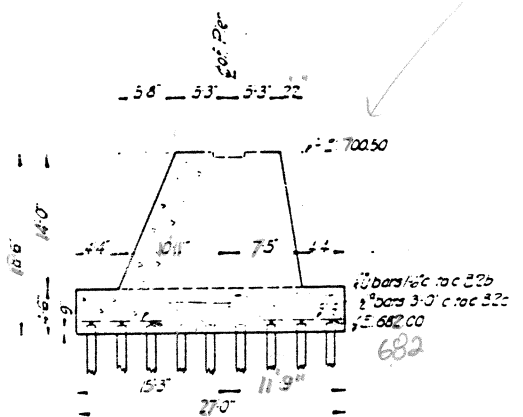
Foundation	No. of Piles	Length of Piles	Remarks
Pier No. 1	27	27.9	
" 2	27	27.9	
" 3	30	30.0	
" 4	30	30.0	
" 5	27	27.9	
" 6	27	27.9	
Abutment	20	26.0	
Wall	28	14.2	
SW. Wall	5	16.0	
Abut.	15	11.0	
Total	235		



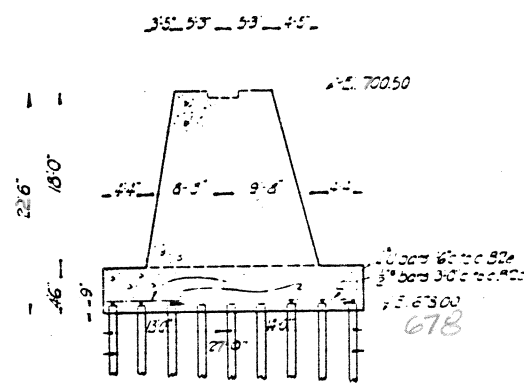
Right Section of Footing for Pier No. 1-Looking North



Right Section of Footing for Pier No. 5-Looking North



Right Section of Footing for Pier No. 2-Looking North



Right Section of Footing for Pier No. 6-Looking North

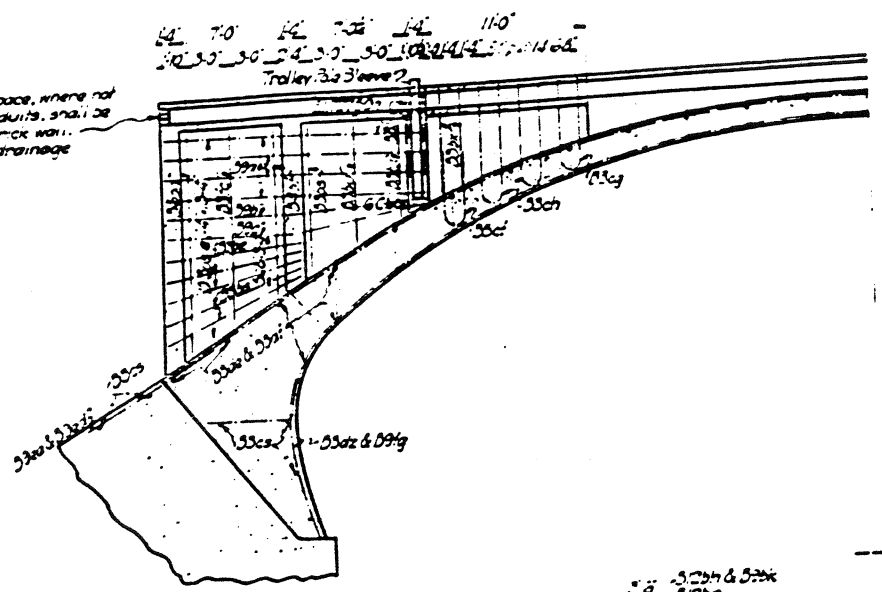
Note: All foundations are to be constructed on the maximum bearing capacity of the soil as shown on the plan.

Approved: *Henry M. Metzel*  
 Director of Public Works  
*Henry M. Metzel*  
 Chief Engineer  
*William*  
 Engineer in Charge

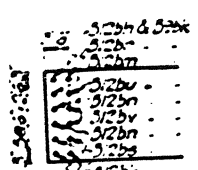
River Channel Improvement  
 Town Street Bridge over the Scioto River.  
 Details of Pier Footings  
 Scale 3/4" = 1'-0" Unless Noted  
 Brown, Fleming & Knicker  
 Designing Engineers Columbus, Ohio  
 1917

Sheet No. 2 of 2

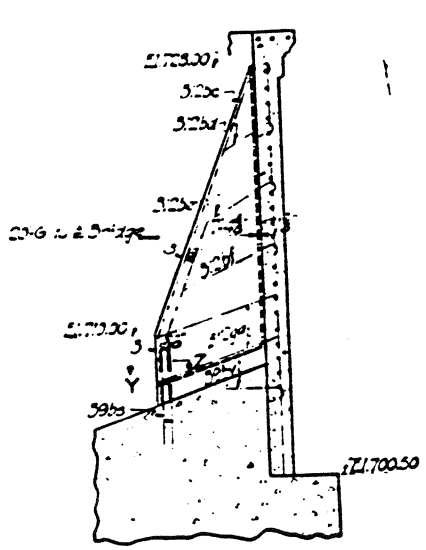
End of conduit space, where not occupied by conduits, shall be closed with brick wall. Leave hole for drainage.



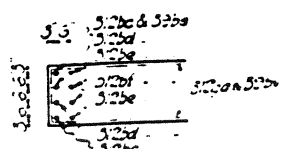
Section mm



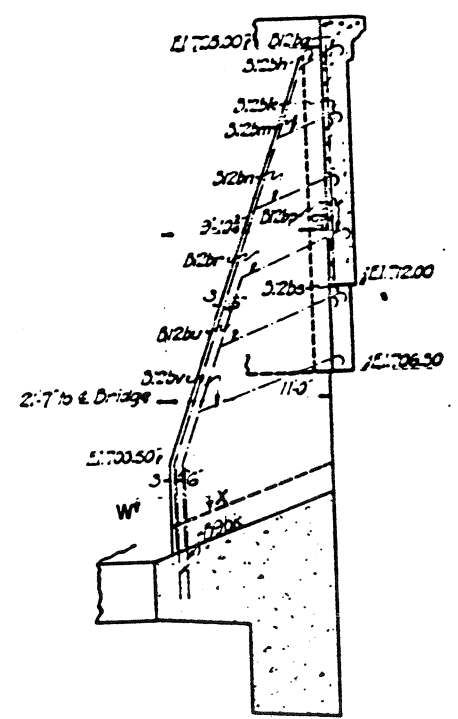
Section WX



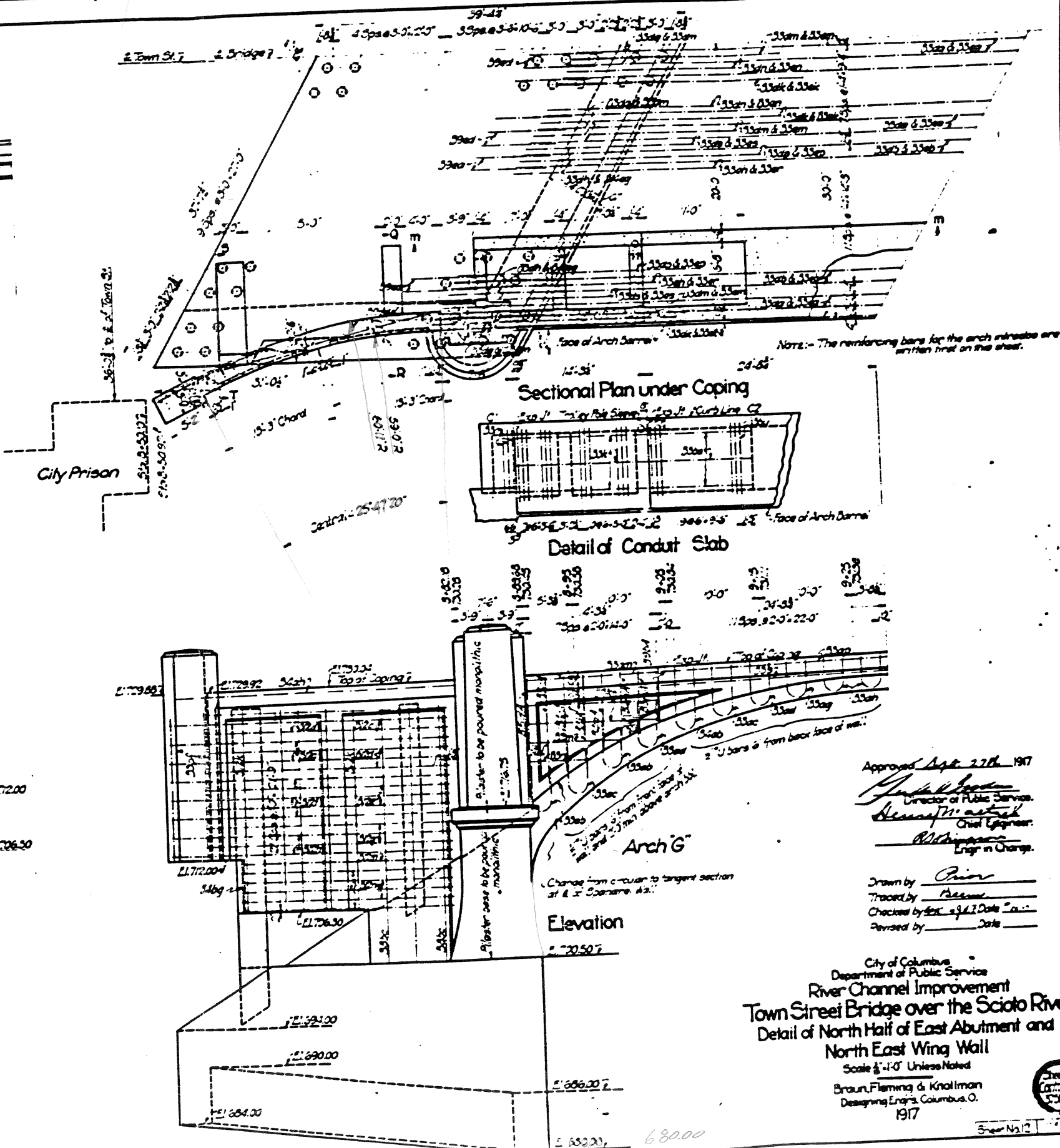
Section QR



Section YZ



Section ST



Sectional Plan under Coping

Detail of Conduit Slab

Elevation

Arch G

Note: - The reinforcing bars for the arch intrados are written first on the sheet.

Change from circular to tangent section at E. Spanline A2.

Pillaster base to be poured monolithic.

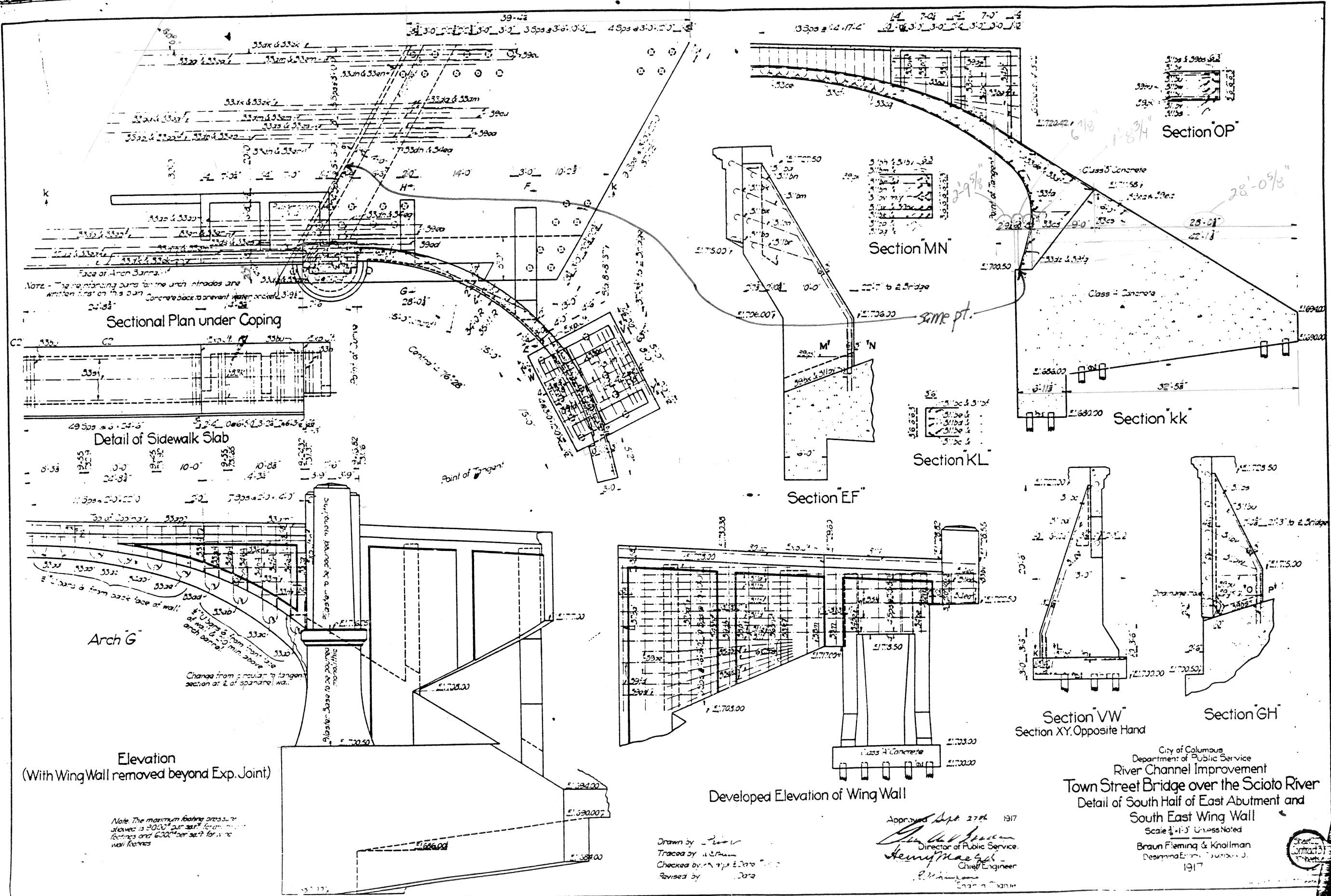
Approved Apr 27th 1917  
Frank J. Brown  
 Director of Public Service  
Responsible  
 Chief Engineer  
W. H. ...  
 Engineer in Charge

Drawn by Prior  
 Traced by Reese  
 Checked by ... Date ...  
 Revised by ... Date ...

City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River  
 Detail of North Half of East Abutment and  
 North East Wing Wall  
 Scale 3/4" = 1'-0" Unless Noted  
 Braun, Fleming & Knollman  
 Designing Engineers, Columbus, O.  
 1917



Sheet No. 12



NOTE - The reinforcing bars for the arch intrados are written first on the plan. Concrete back to prevent water seepage.

Elevation  
(With Wing Wall removed beyond Exp. Joint)

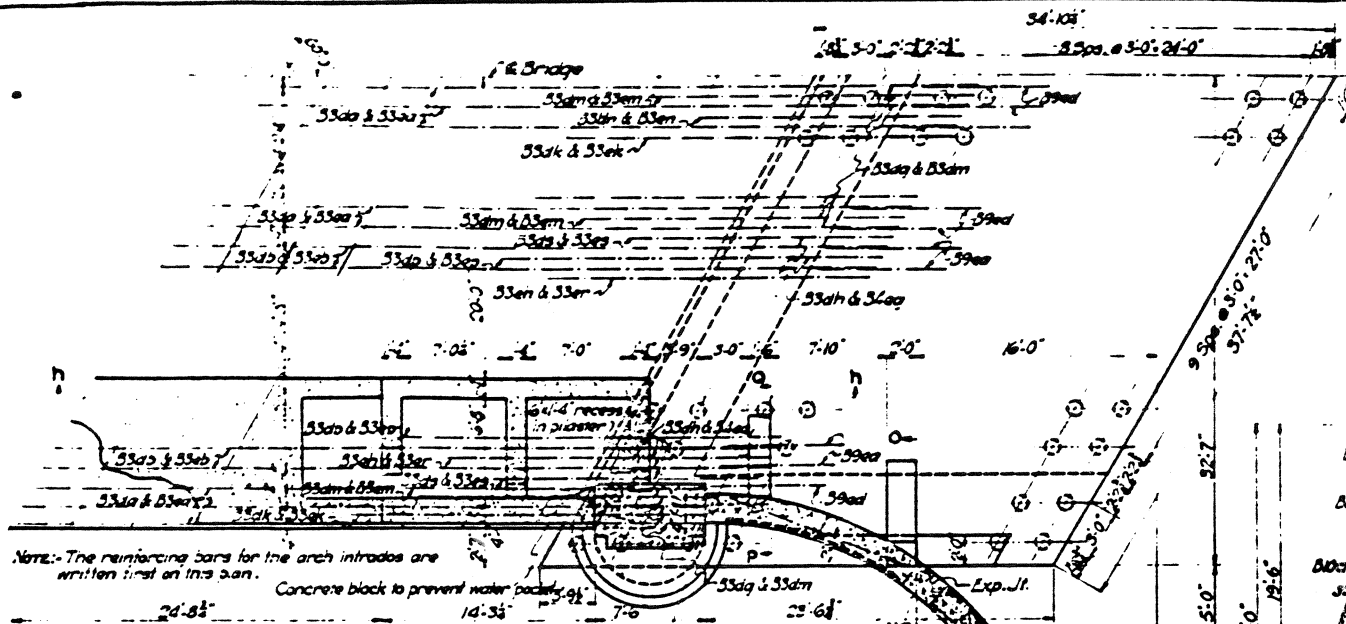
Note: The maximum loading pressure allowed is 3000 lbs per sq ft for the footings and 6000 lbs per sq ft for the wall footings.

Drawn by  
Traced by  
Checked by  
Revised by

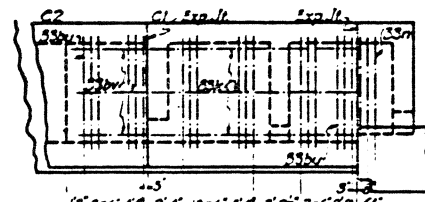
Approved Sept 27th 1917  
 Director of Public Service  
 Chief Engineer

City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River  
 Detail of South Half of East Abutment and  
 South East Wing Wall  
 Scale 1/4" = 1'-0" Unless Noted  
 Braun Fleming & Knollman  
 Des Moines, Iowa  
 1917

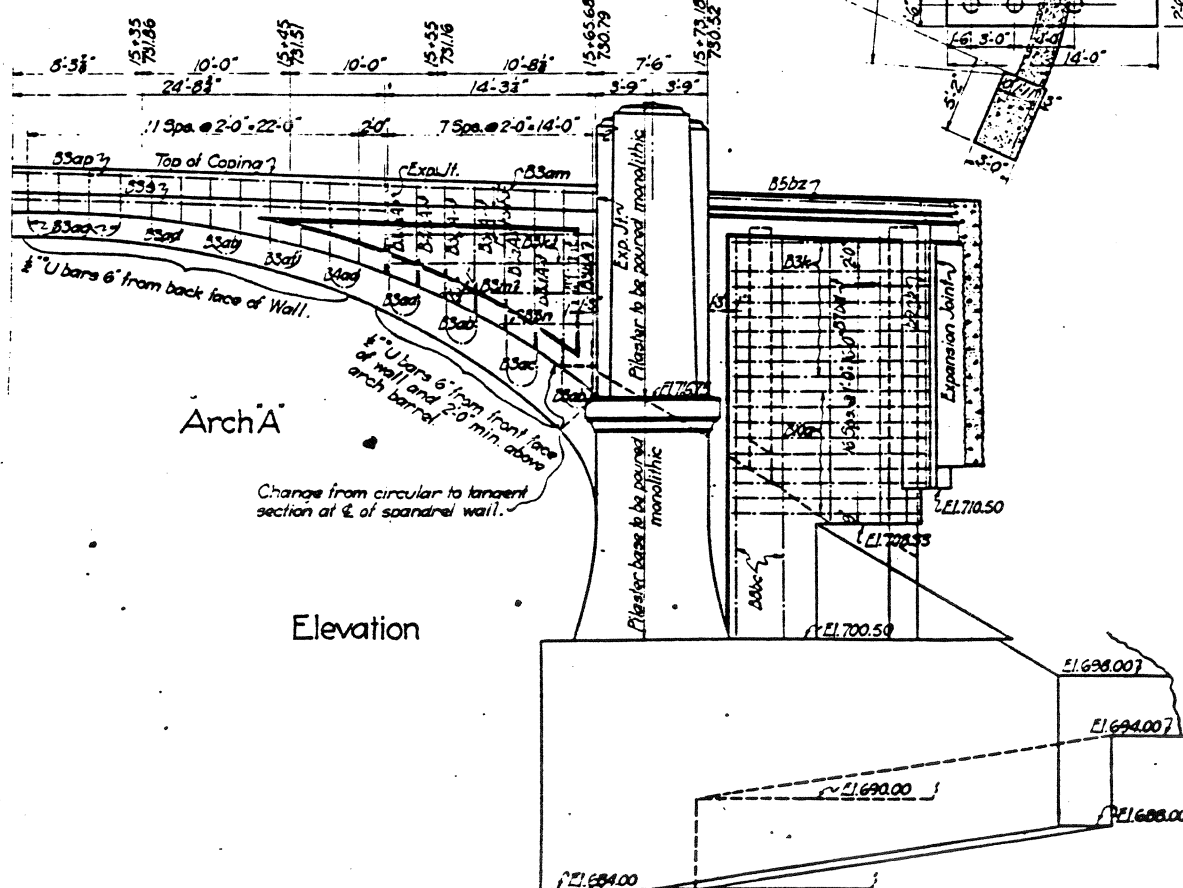




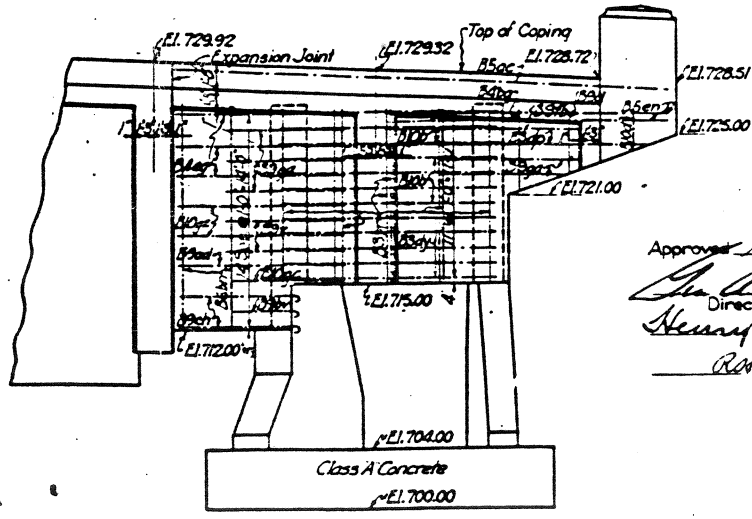
Sectional Plan under Coping



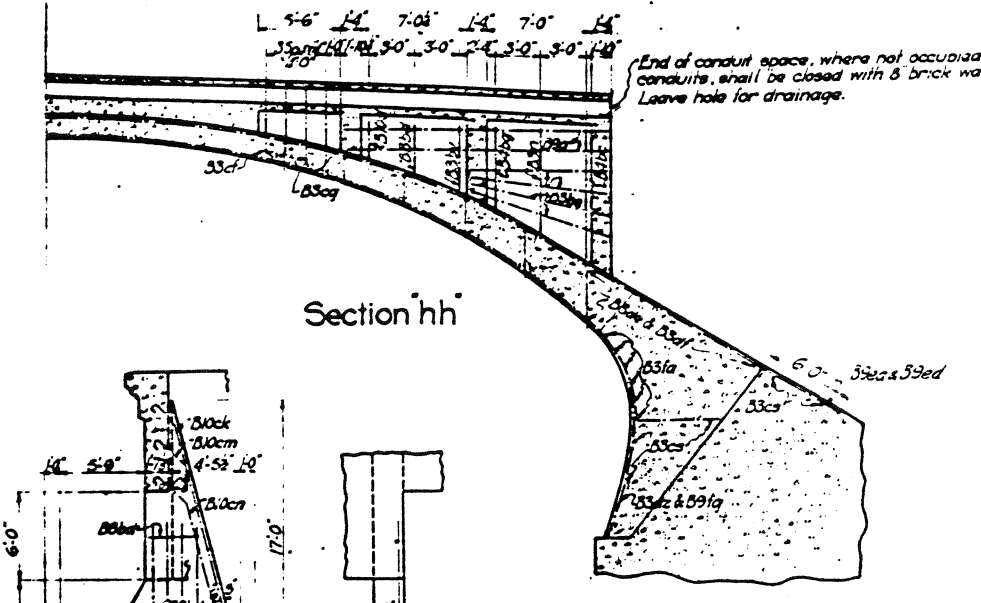
Detail of Conduit Slab



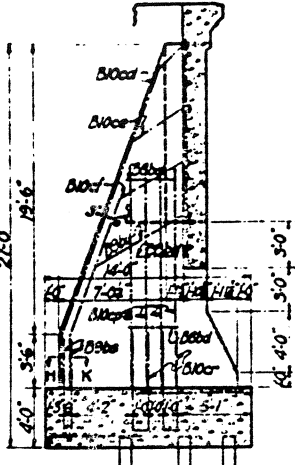
Elevation



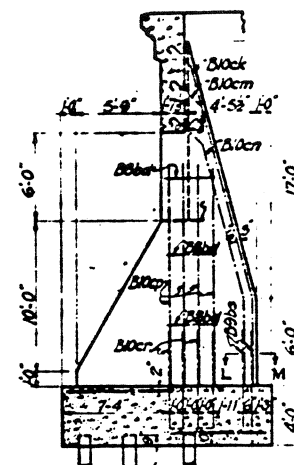
Developed Elevation of Wing Wall



Section hh

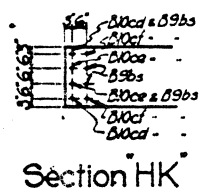


Section DE

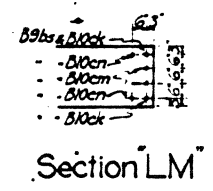


Section FG

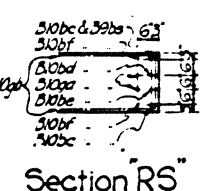
Front Elevation Showing Position of bars B10cp in both Counterforts.



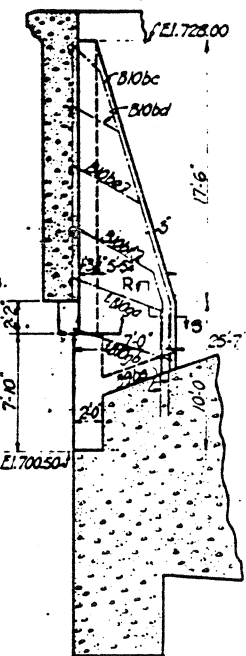
Section HK



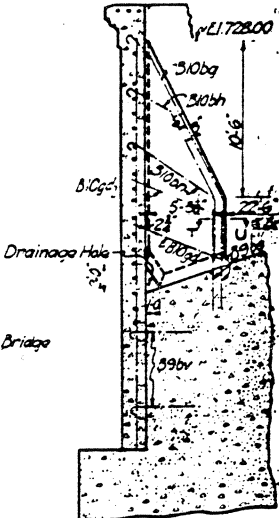
Section LM



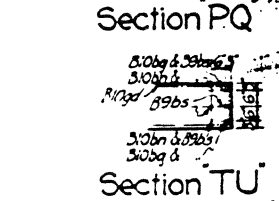
Section RS



Section NO



Section PQ



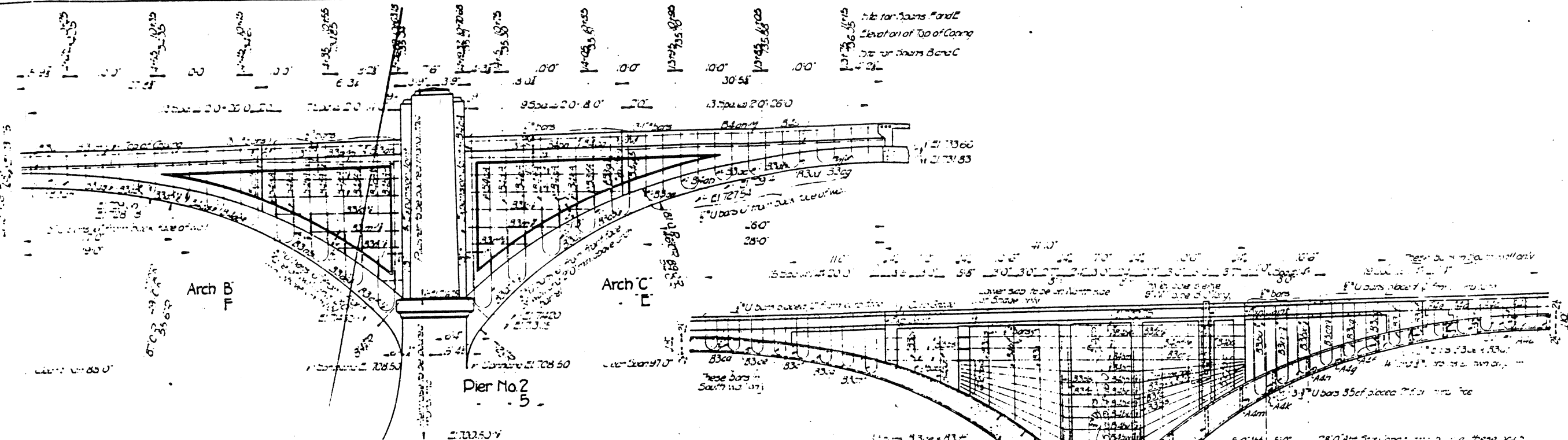
Section TU

Approved Apr 27 1917  
*John W. ...*  
 Director of Public Service.  
*Henry ...*  
 Chief Engineer.  
*R.W. ...*  
 Engr in Charge.

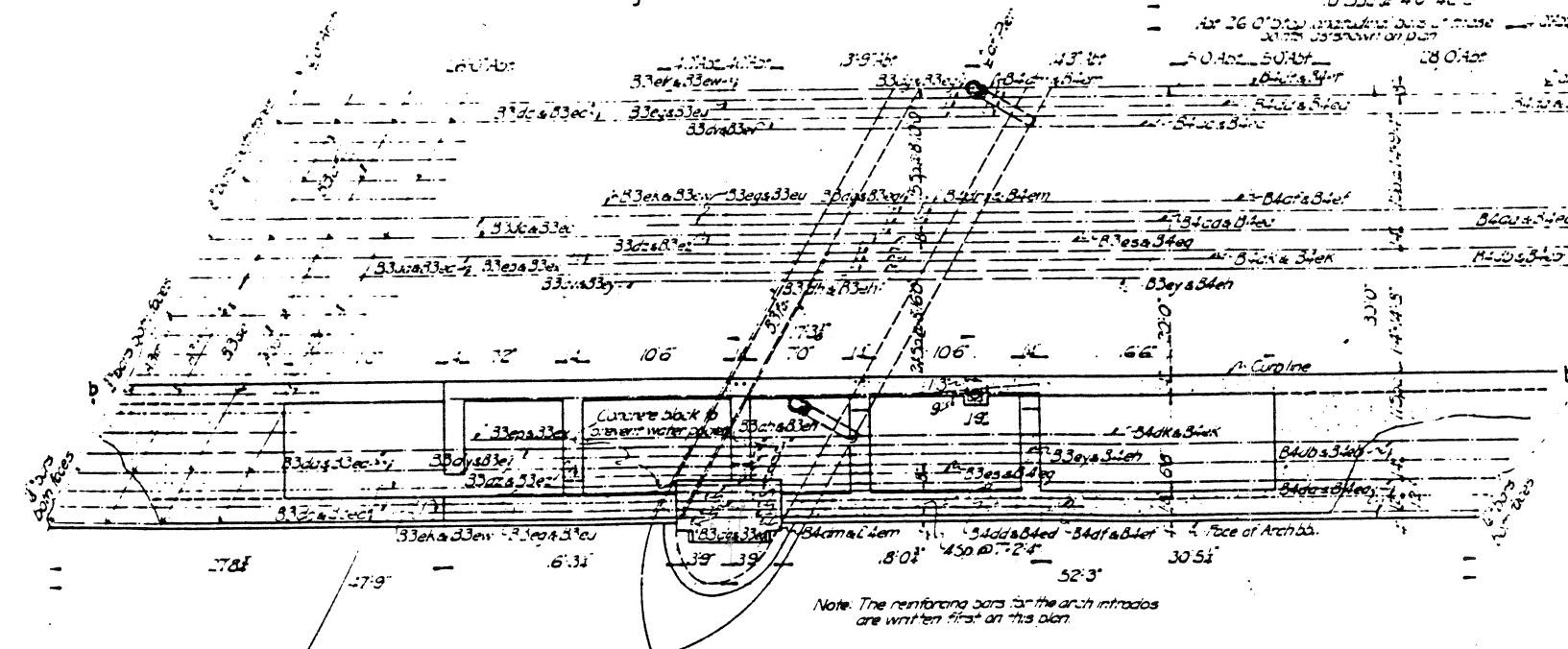
Drawn by P. ...  
 Traced by P. ...  
 Checked by W. I. ...  
 Revised by ...

City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River  
 Detail of North Half of West Abutment and  
 North West Wing Wall  
 Scale 1/2" = 1'-0" Unless Noted  
 Braun Fleming & Knollman  
 Designing Engrs. Columbus, O.  
 1917

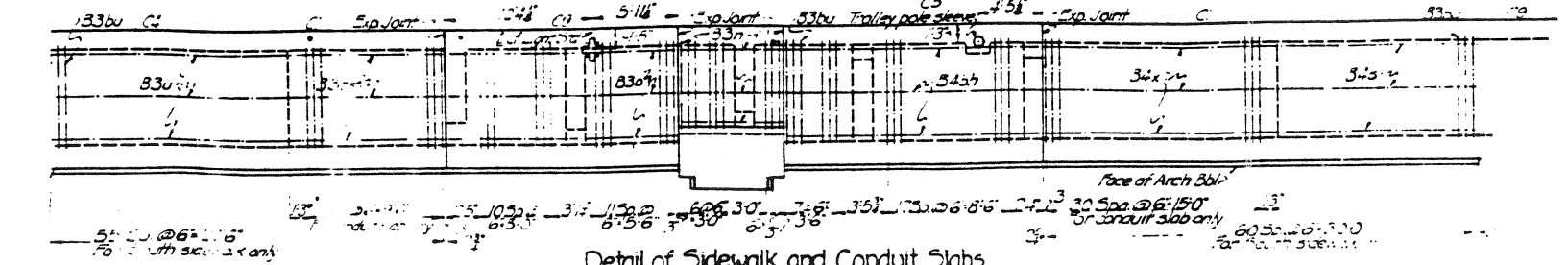




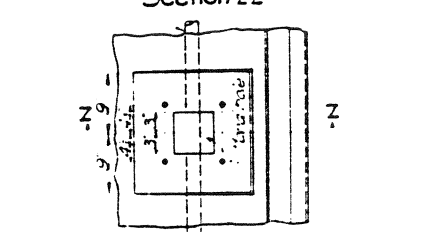
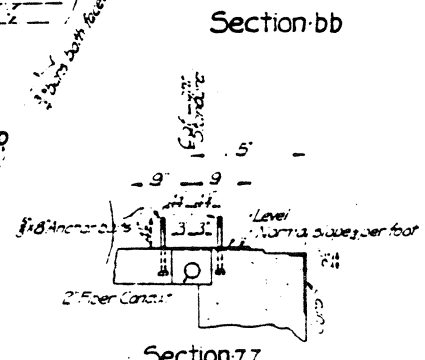
Elevation - Looking North for Pier No. 2 - South for Pier No. 5



Sectional Plan Under Sidewalk and Conduit Slabs



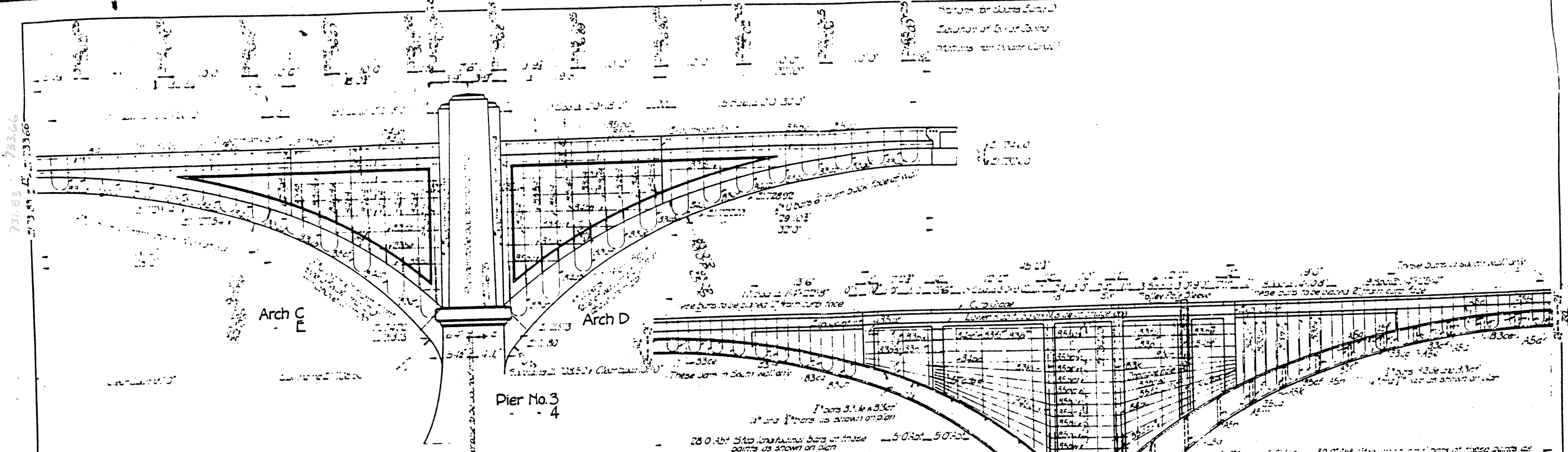
Detail of Sidewalk and Conduit Slabs



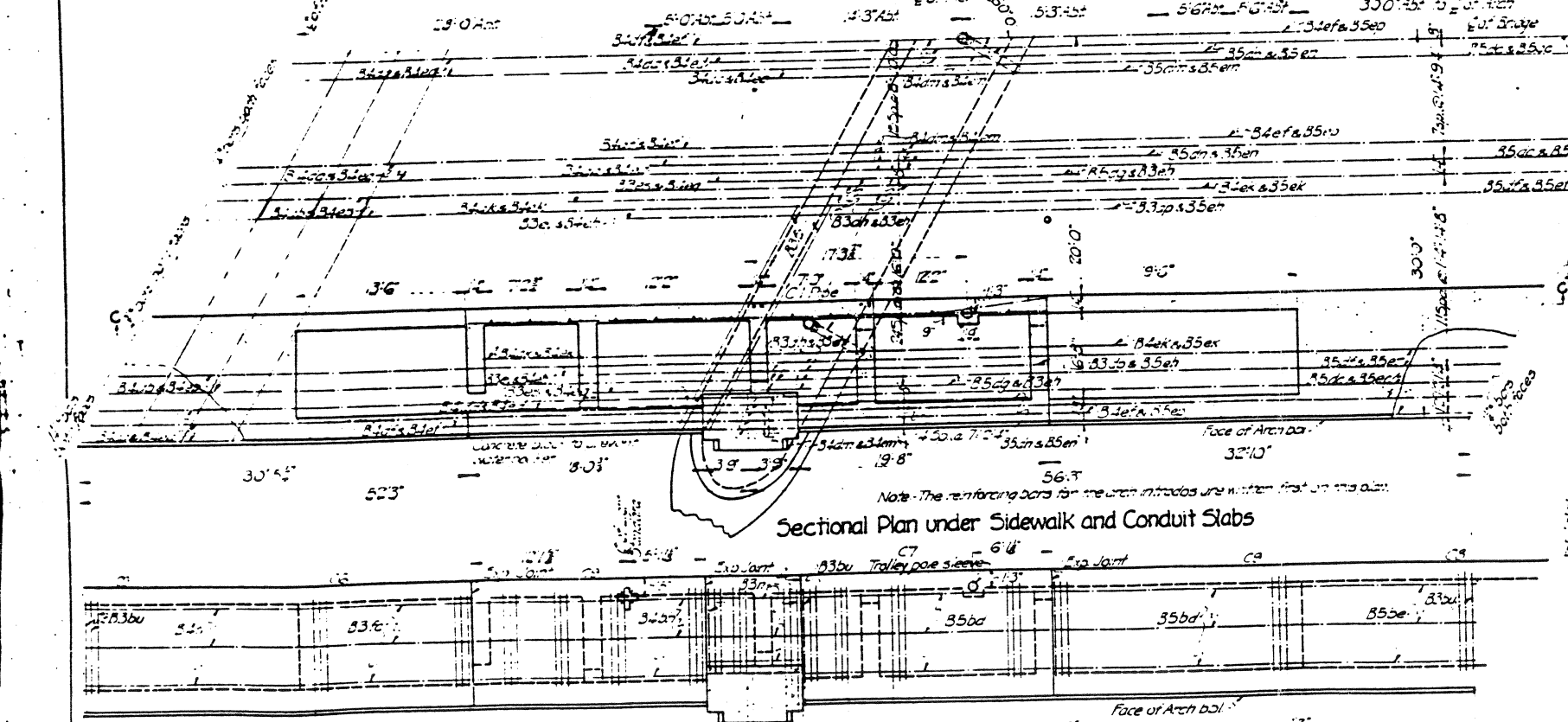
Plan Detail of Light Standard Base

Approved: *[Signature]* 1917  
 Director of Public Service  
 Checked by: *[Signature]*  
 Chief Engineer  
*[Signature]*  
 Engineer in Charge

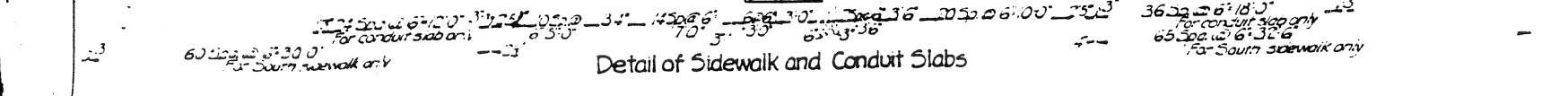
River Channel Improvement  
 Town Street Bridge over the Scioto River.  
 Details of Arches BC & FE  
 Scale: 1/4" = 1'-0" Unless Noted  
 Sheet 15  
 Contract 3  
 17 Sheet



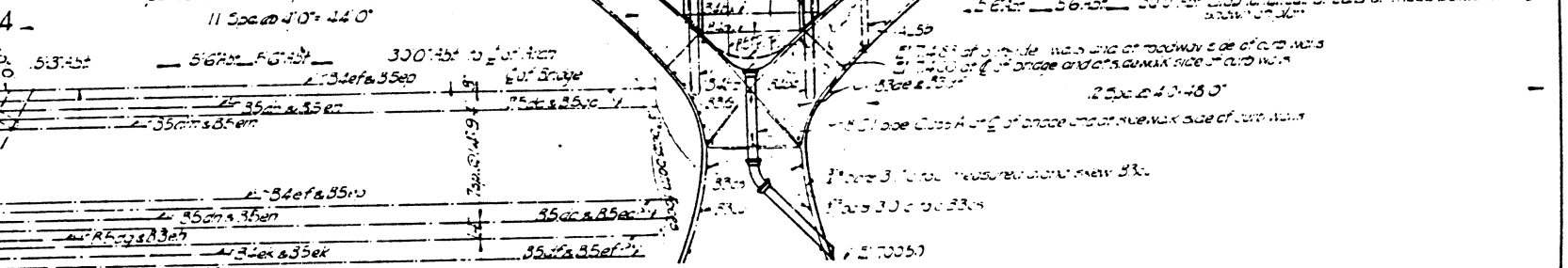
Elevation, Looking North for Pier No. 3 for Pier No. 4



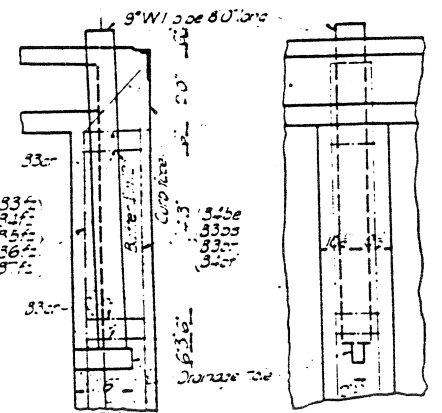
Sectional Plan under Sidewalk and Conduit Slabs



Detail of Sidewalk and Conduit Slabs



Section cc



Section Thru Sleeve Sidewalk Side Elevation

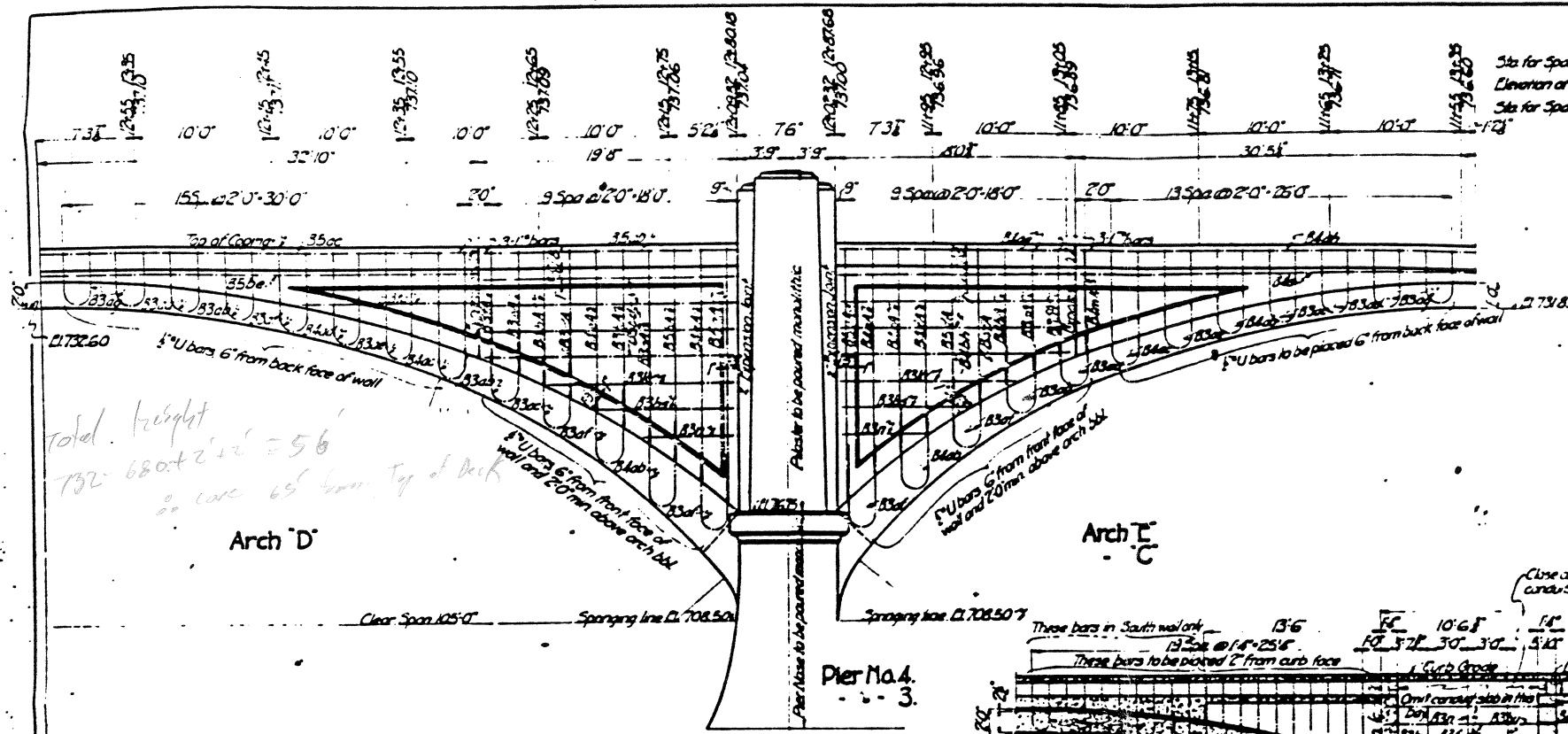
Typical Detail of Trolley Pole Sleeve

Drawn by \_\_\_\_\_  
 Checked by \_\_\_\_\_  
 Revised by \_\_\_\_\_

Approved \_\_\_\_\_ 2.7.16 1917  
 Director of Public Service  
 Chief Engineer  
 Eng. in Charge

City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River  
 Details of Arches CD & ED  
 Scale 1/2" = 1'-0" Unless Noted  
 Brown, Fleming & Knollman  
 Designing Engineers Columbus, O.  
 1917





Total height  
 732: 680 + 2' 10" = 56'  
 20' over 6' from top of deck

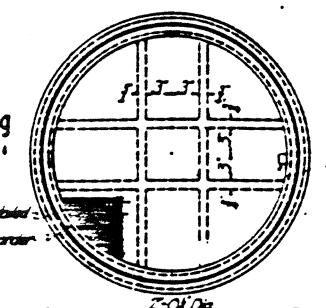
Arch D

Arch C

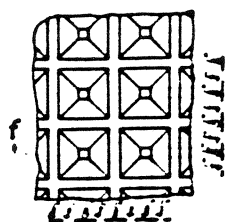
Pier No. 4  
 3

Elevation Looking North for Pier No. 4 South

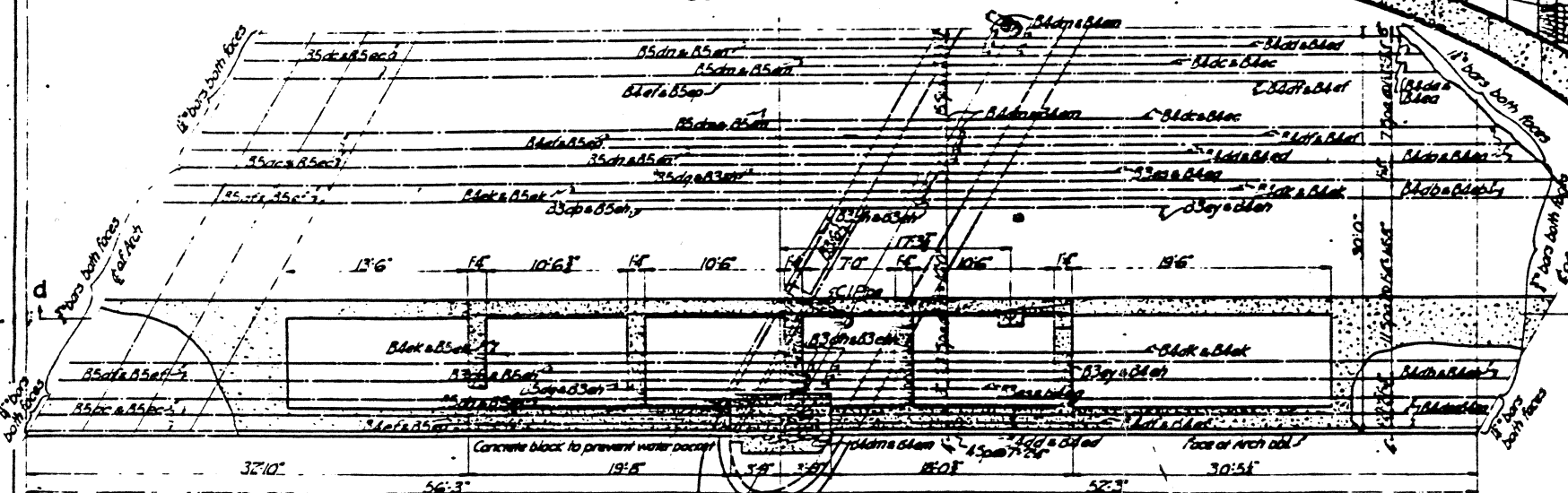
Sta for Spans D and C  
 Elevation of top of Coping  
 Sta for Spans D and C



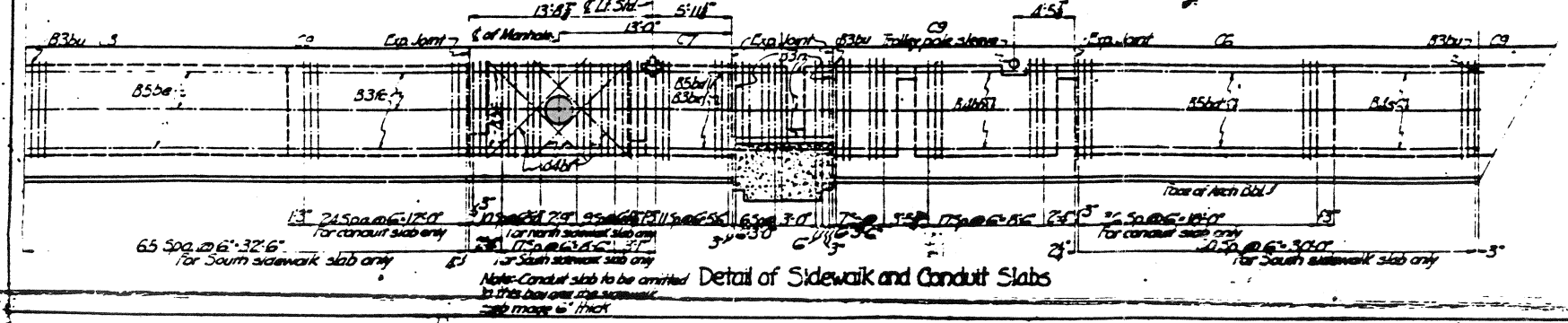
Section gg  
 Cast Iron Manhole Frame and Cover  
 1 Foot  
 Scale 1" = 1'-0"



Section ff  
 Detail of Checkering for Manhole Cover  
 Full Size



Sectional Plan under Sidewalk and Conduit Slabs



Detail of Sidewalk and Conduit Slabs

Close conduit space where not occupied by conduits with 1/2" brick wall (leave hole for drainage)

These bars in South wall only  
 These bars to be placed 2" from curb face  
 These bars to be placed 2" from curb face

Section dd

Approved: *[Signature]* 1917  
 Director of Public Service  
*[Signature]*  
 Chief Engineer  
*[Signature]*  
 Engr. in Charge

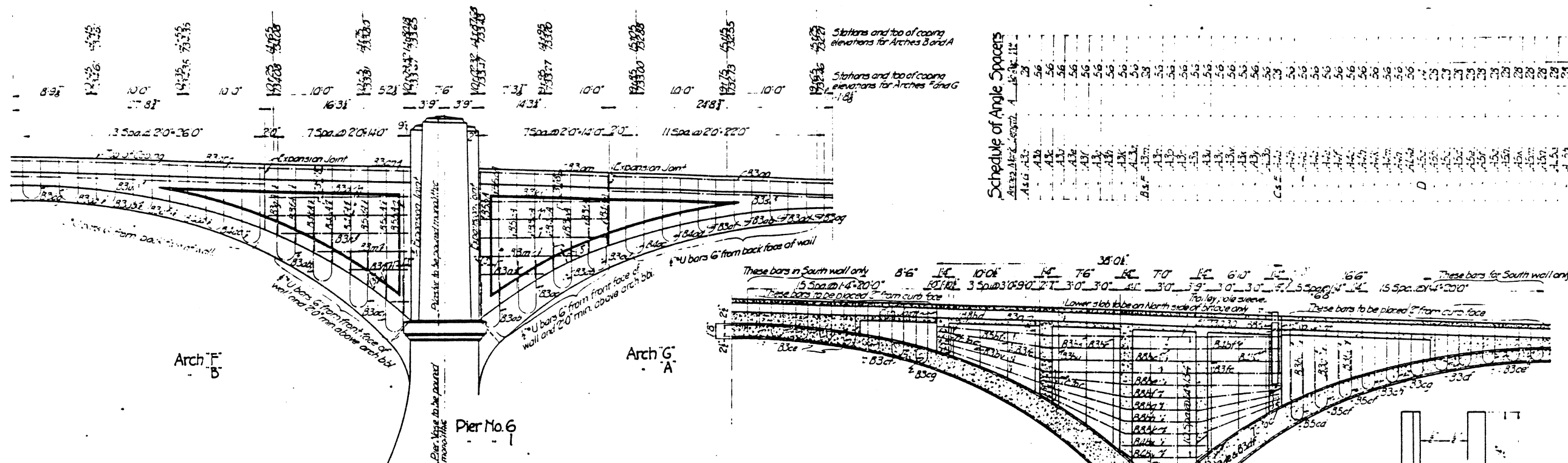
City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River  
 Detail of Arches DE and DC  
 Scale 1/4" = 1'-0" Unless Noted  
 Brown, Fleming & Knottman,  
 Designing Engineers, Columbus, O.  
 1917

Drawn by *[Signature]*  
 Traced by *[Signature]*  
 Checked by *[Signature]*  
 Approved by *[Signature]*



Sheet No. 6 of 7

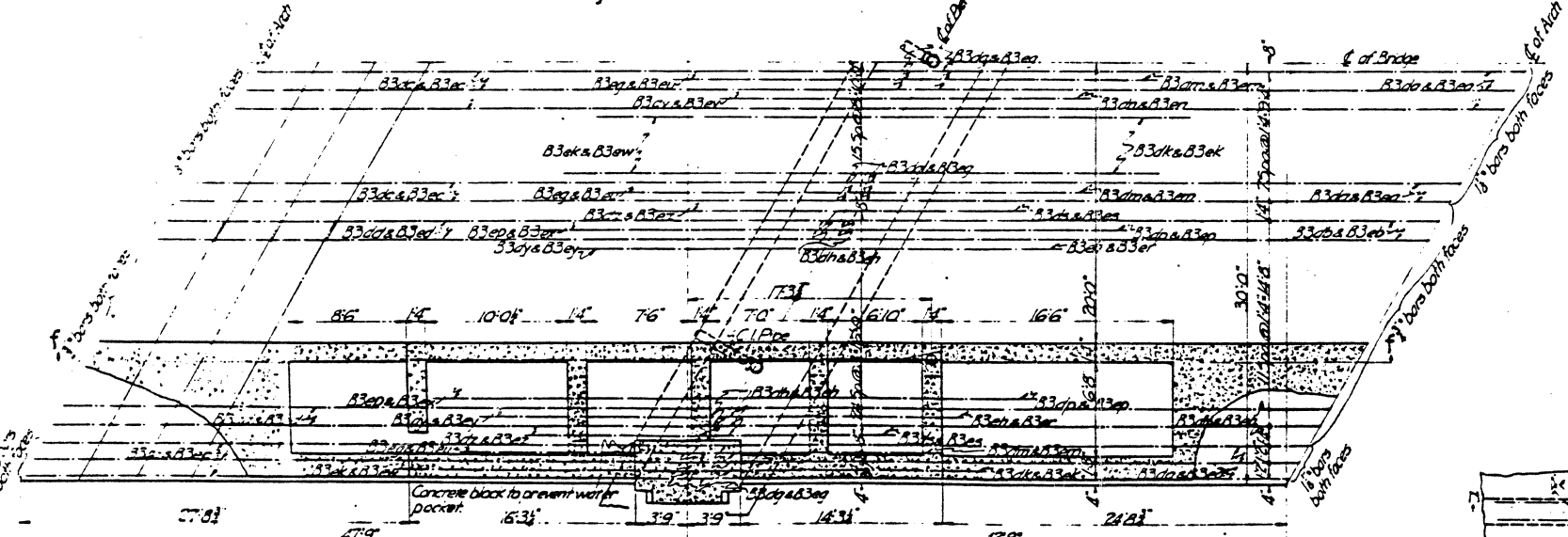




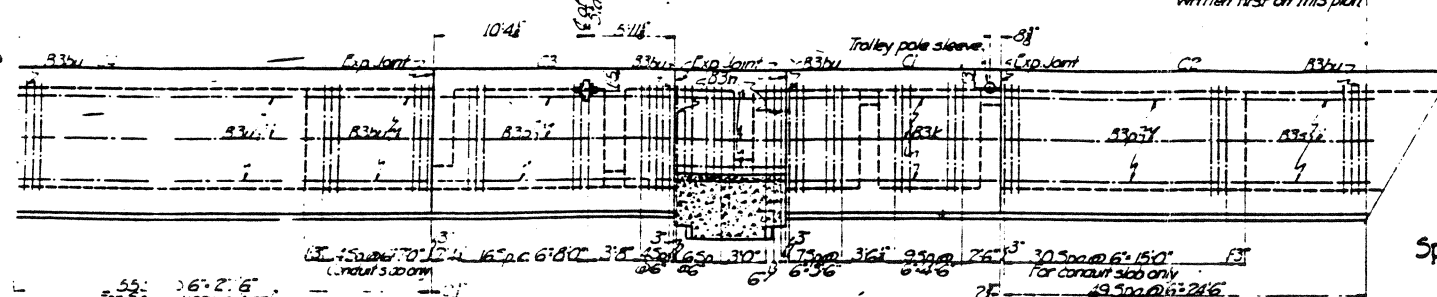
**Schedule of Angle Spacers**

Arch F	Arch G	Arch H	Arch I	Arch J	Arch K	Arch L	Arch M	Arch N	Arch O	Arch P	Arch Q	Arch R	Arch S	Arch T	Arch U	Arch V	Arch W	Arch X	Arch Y	Arch Z
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12

Elevation - Looking North for Pier No. 6 - South for Pier No. 1

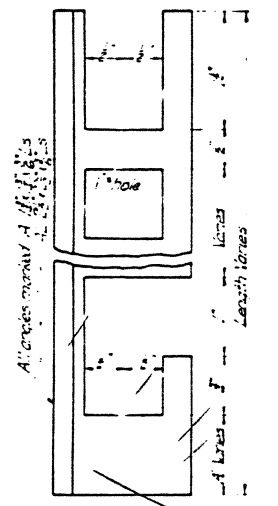


Sectional Plan under Sidewalk and Conduit Slab

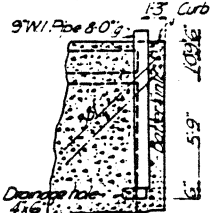
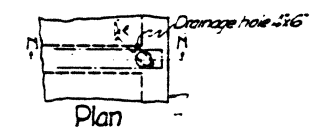


Detail of Sidewalk and Conduit Slabs

Section ff



Detail of Angle Spacers

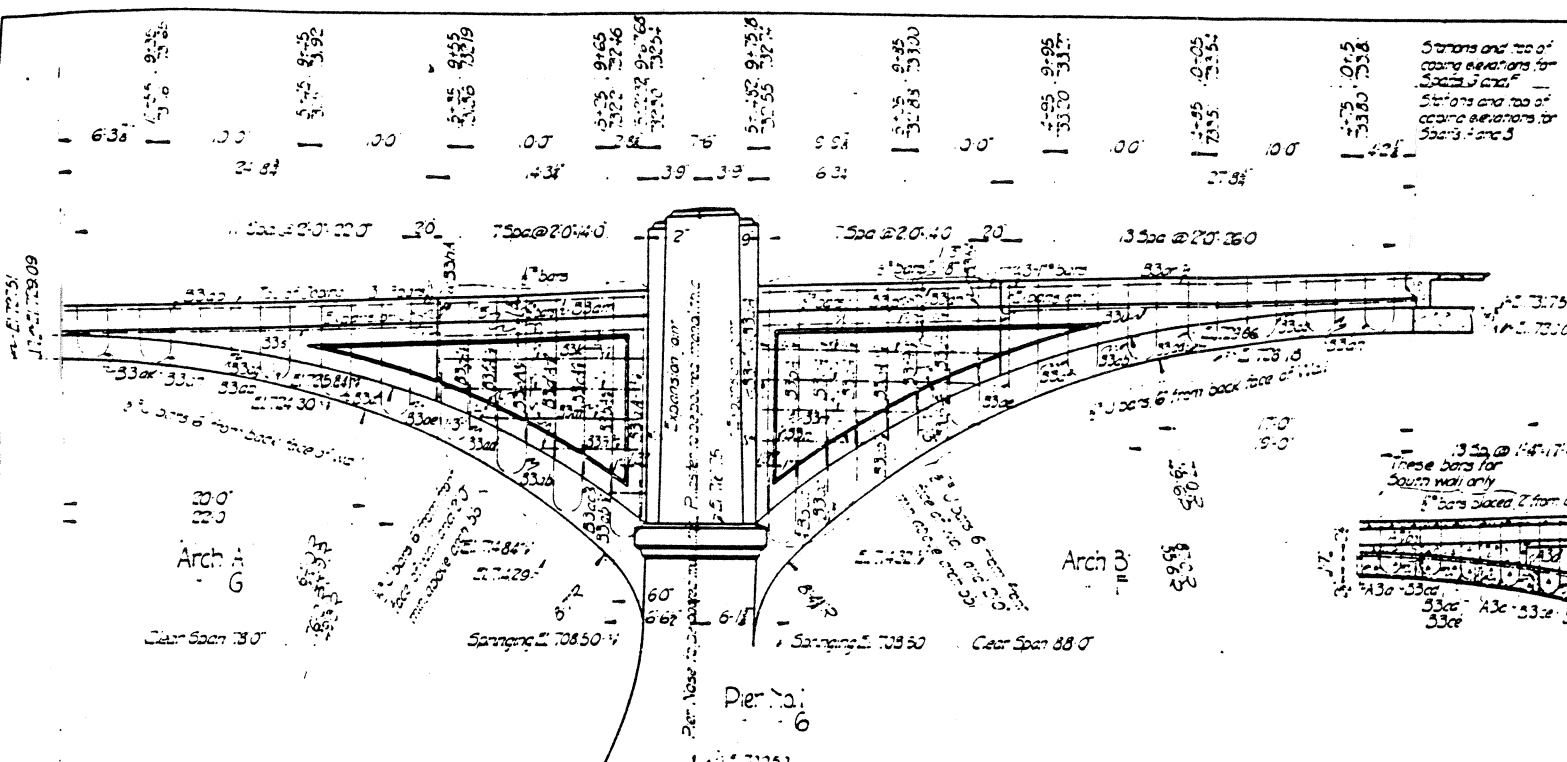


Special Detail of Trolley Pole Sleeve at Buttress

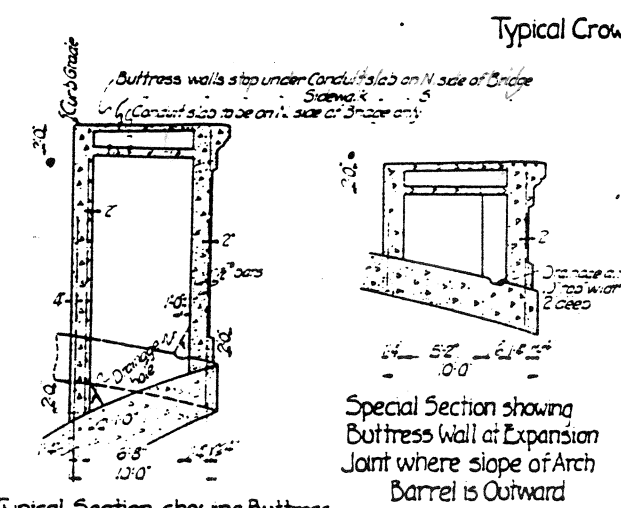
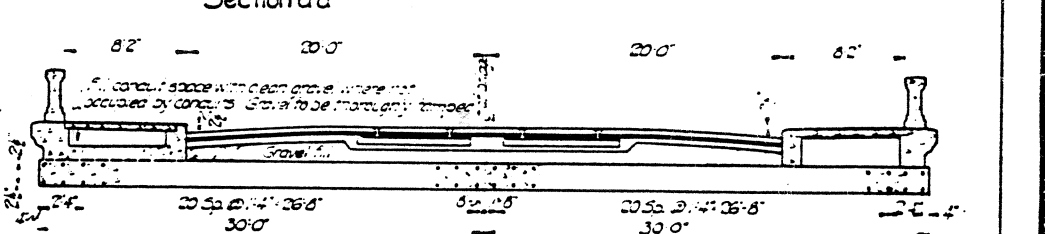
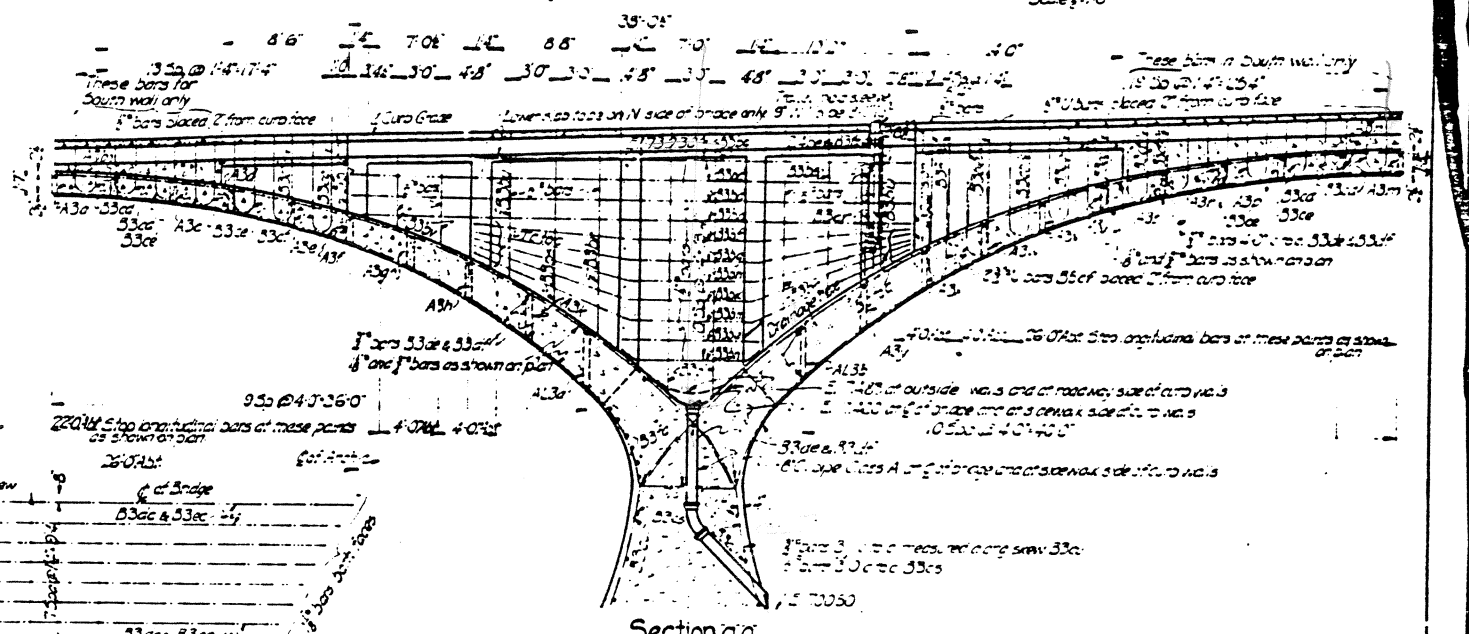
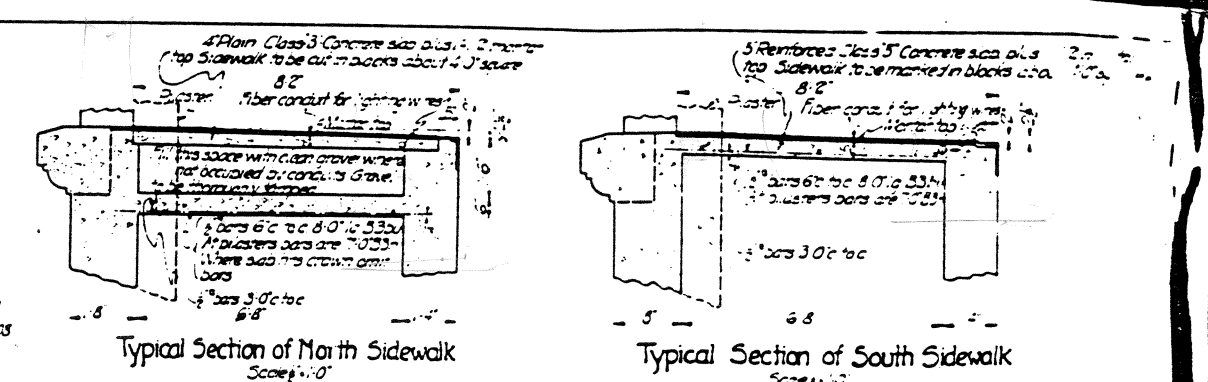
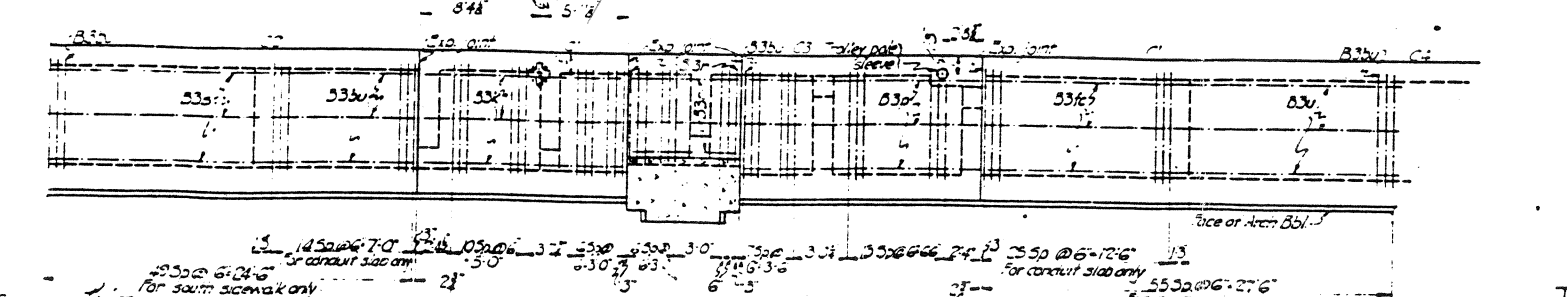
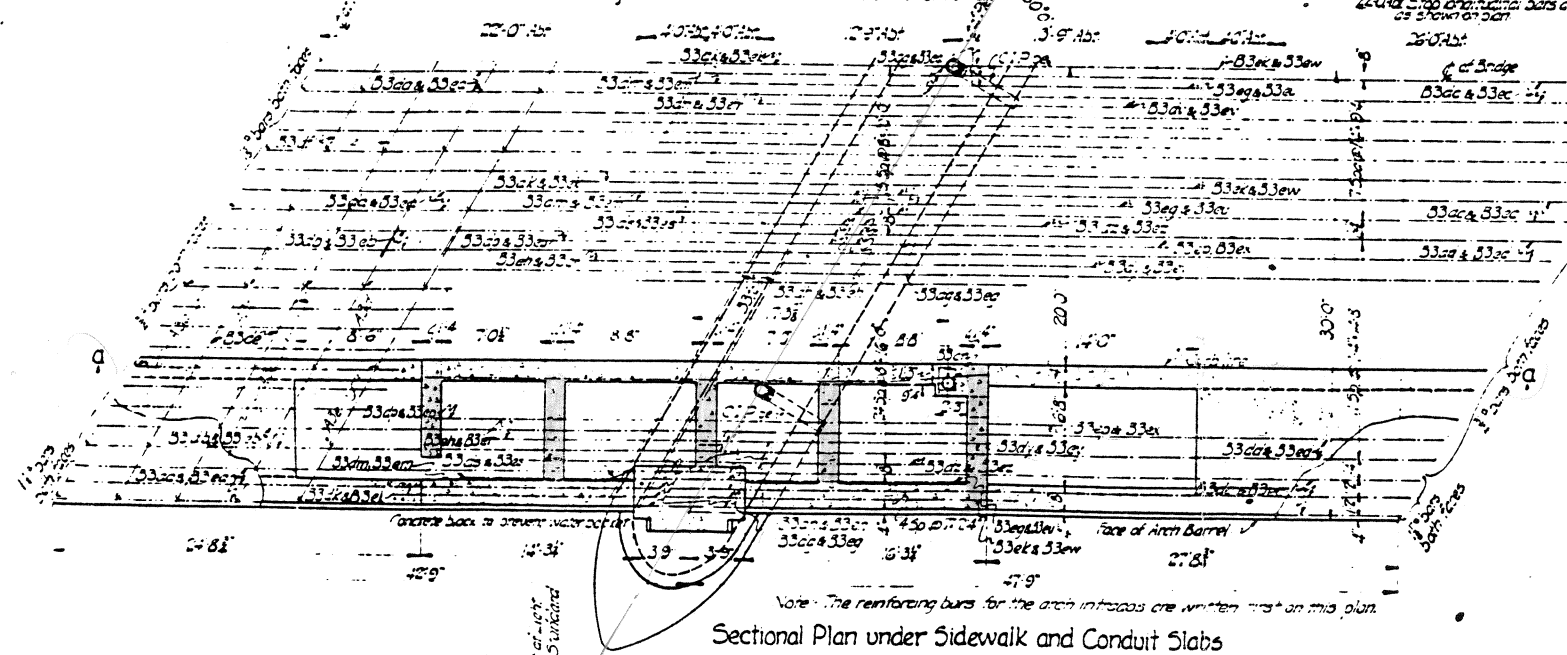
Approved: *Henry Mastell*  
 Chief Engineer  
 City of Columbus  
 Department of Public Service

City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River  
 Detail of Arches FG and BA



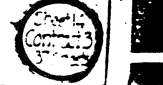


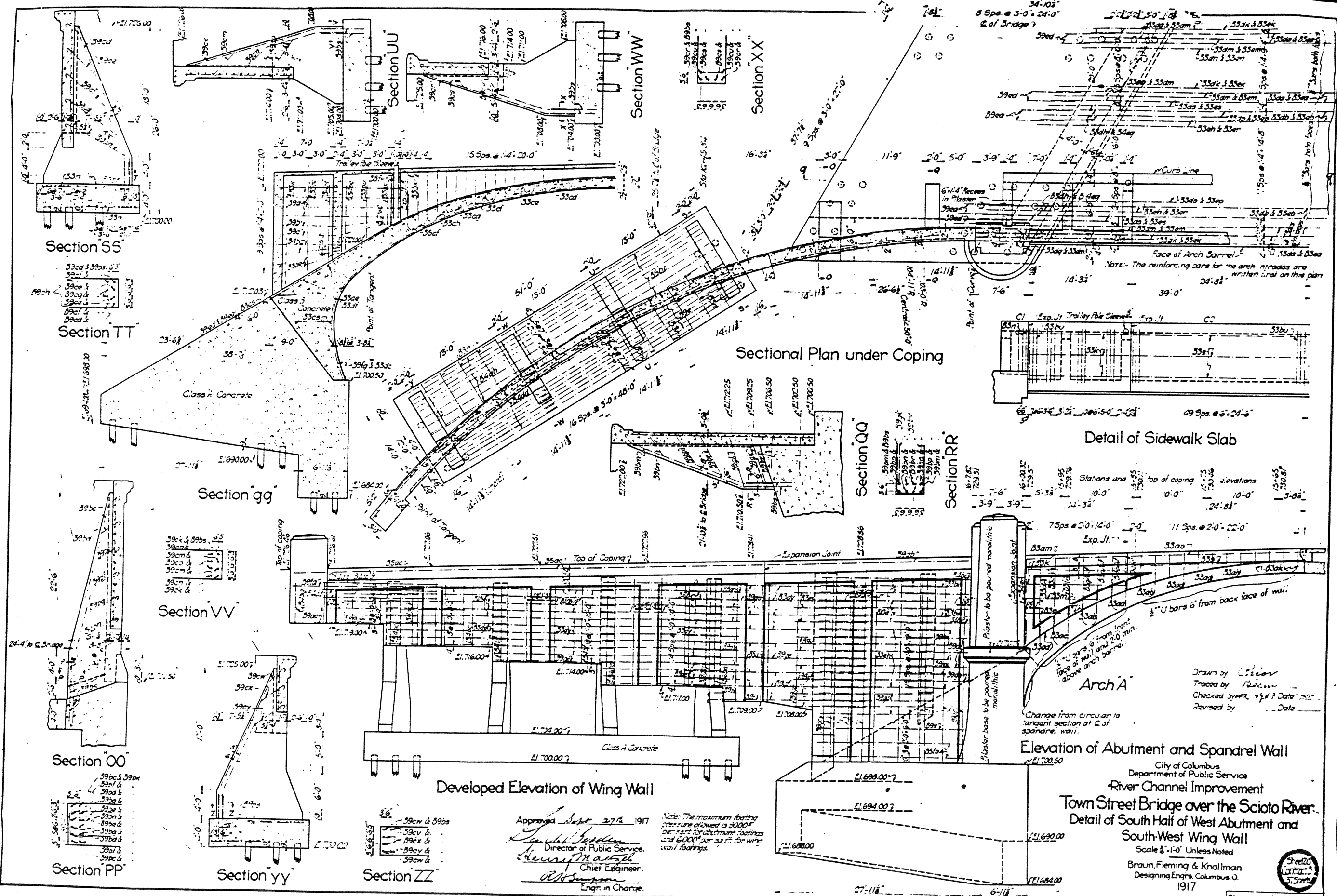
Elevation Looking North for Pier No. 1 - South for Pier No. 6



Typical Section showing Buttress Walls, Curb Wall, Outside Wall, Conduit and Sidewalk Slabs

Approved: *[Signature]*  
 Director of Public Service  
 City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River  
 Detail of Arches AB and GF  
 Scale 1/2" = 1'-0" Unless Noted  
 Drawn: Fleming & Knottman  
 Des Moines, Iowa  
 1917





Note: The reinforcing bars for the arch intrados are written first on this plan

Stations	una	top of coping	elevations
15+95	10.0'	15.0'	15.05
16+00	10.0'	15.0'	15.07
16+05	10.0'	15.0'	15.08
16+10	10.0'	15.0'	15.09
16+15	10.0'	15.0'	15.10
16+20	10.0'	15.0'	15.11
16+25	10.0'	15.0'	15.12
16+30	10.0'	15.0'	15.13
16+35	10.0'	15.0'	15.14
16+40	10.0'	15.0'	15.15
16+45	10.0'	15.0'	15.16
16+50	10.0'	15.0'	15.17
16+55	10.0'	15.0'	15.18
16+60	10.0'	15.0'	15.19
16+65	10.0'	15.0'	15.20
16+70	10.0'	15.0'	15.21
16+75	10.0'	15.0'	15.22
16+80	10.0'	15.0'	15.23
16+85	10.0'	15.0'	15.24
16+90	10.0'	15.0'	15.25
16+95	10.0'	15.0'	15.26
17+00	10.0'	15.0'	15.27
17+05	10.0'	15.0'	15.28
17+10	10.0'	15.0'	15.29
17+15	10.0'	15.0'	15.30
17+20	10.0'	15.0'	15.31
17+25	10.0'	15.0'	15.32
17+30	10.0'	15.0'	15.33
17+35	10.0'	15.0'	15.34
17+40	10.0'	15.0'	15.35
17+45	10.0'	15.0'	15.36
17+50	10.0'	15.0'	15.37
17+55	10.0'	15.0'	15.38
17+60	10.0'	15.0'	15.39
17+65	10.0'	15.0'	15.40
17+70	10.0'	15.0'	15.41
17+75	10.0'	15.0'	15.42
17+80	10.0'	15.0'	15.43
17+85	10.0'	15.0'	15.44
17+90	10.0'	15.0'	15.45
17+95	10.0'	15.0'	15.46
18+00	10.0'	15.0'	15.47
18+05	10.0'	15.0'	15.48
18+10	10.0'	15.0'	15.49
18+15	10.0'	15.0'	15.50
18+20	10.0'	15.0'	15.51
18+25	10.0'	15.0'	15.52
18+30	10.0'	15.0'	15.53
18+35	10.0'	15.0'	15.54
18+40	10.0'	15.0'	15.55
18+45	10.0'	15.0'	15.56
18+50	10.0'	15.0'	15.57
18+55	10.0'	15.0'	15.58
18+60	10.0'	15.0'	15.59
18+65	10.0'	15.0'	15.60
18+70	10.0'	15.0'	15.61
18+75	10.0'	15.0'	15.62
18+80	10.0'	15.0'	15.63
18+85	10.0'	15.0'	15.64
18+90	10.0'	15.0'	15.65
18+95	10.0'	15.0'	15.66
19+00	10.0'	15.0'	15.67
19+05	10.0'	15.0'	15.68
19+10	10.0'	15.0'	15.69
19+15	10.0'	15.0'	15.70
19+20	10.0'	15.0'	15.71
19+25	10.0'	15.0'	15.72
19+30	10.0'	15.0'	15.73
19+35	10.0'	15.0'	15.74
19+40	10.0'	15.0'	15.75
19+45	10.0'	15.0'	15.76
19+50	10.0'	15.0'	15.77
19+55	10.0'	15.0'	15.78
19+60	10.0'	15.0'	15.79
19+65	10.0'	15.0'	15.80
19+70	10.0'	15.0'	15.81
19+75	10.0'	15.0'	15.82
19+80	10.0'	15.0'	15.83
19+85	10.0'	15.0'	15.84
19+90	10.0'	15.0'	15.85
19+95	10.0'	15.0'	15.86
20+00	10.0'	15.0'	15.87

Arch A  
 Change from circular to tangent section at E of spanline wall.  
 Plaster base to be poured monolithic  
 Plaster to be poured monolithic  
 1/2" U bars 6' from back face of wall.  
 1/2" U bars 6' from iron face of wall and 2.0 min. above arch barrel.

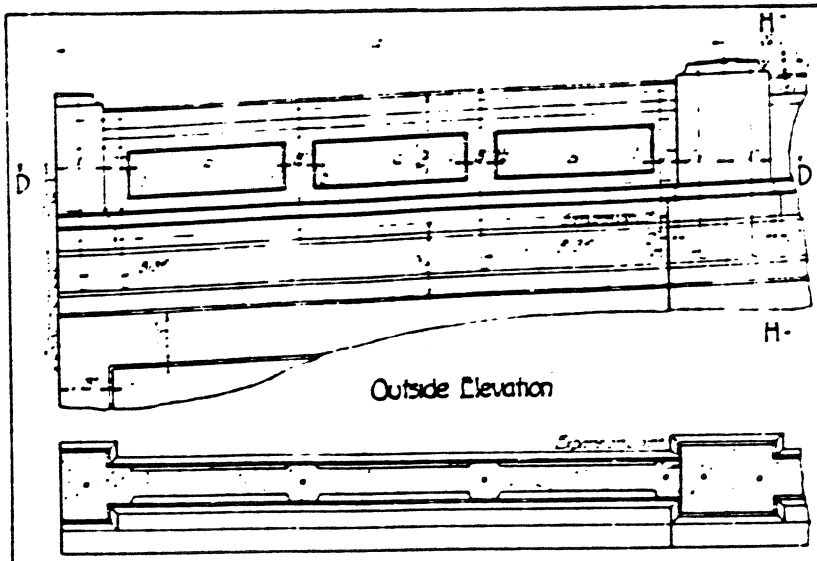
Elevation of Abutment and Spandrel Wall

City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River.  
 Detail of South Half of Abutment and South-West Wing Wall  
 Scale 1/4" = 1'-0" Unless Noted  
 Braun, Fleming & Knollman  
 Designing Engrs. Columbus, O.  
 1917

Approved Sept 27th 1917  
 Director of Public Service.  
 Chief Engineer.  
 Engr. in Charge.

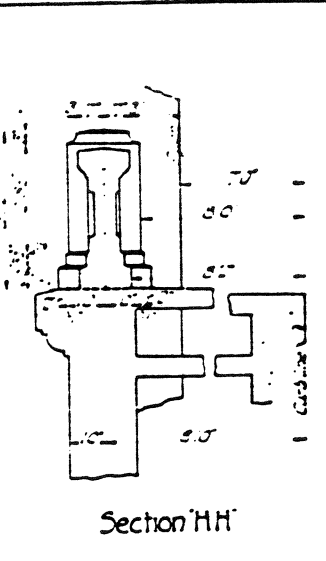
Note: The maximum footing pressure allowed is 3000 lbs per sq ft for abutment footings and 6000 lbs per sq ft for wing wall footings.



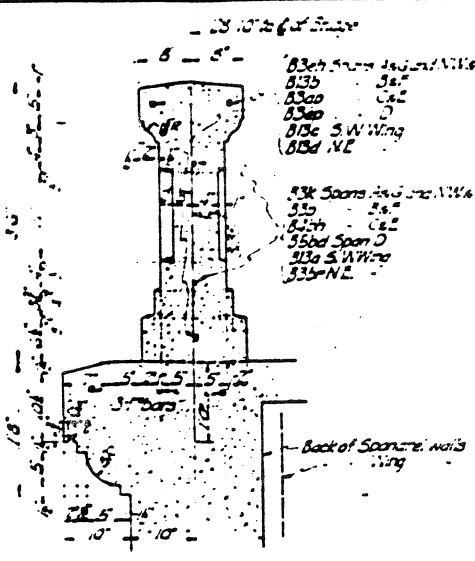


Outside Elevation

Sectional Plan DD

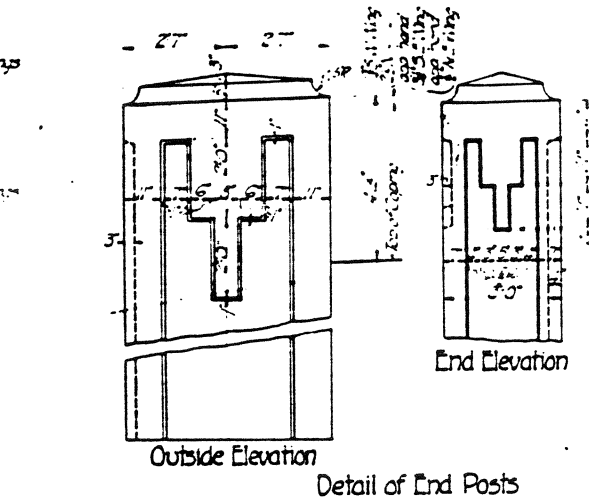


Section HH



Section of Rail and Coping  
Scale 1/4"

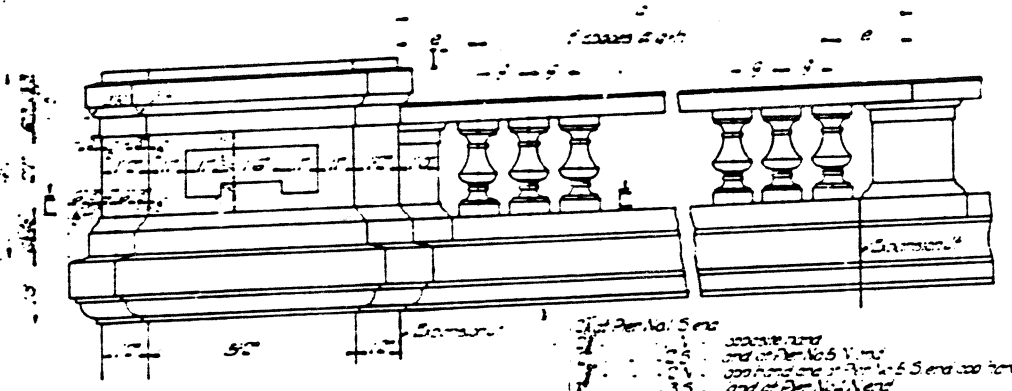
- 83rd Stone 1/2" dia. 1/2" x 1/2" W/S
- 83b 3/4"
- 83c 1/2"
- 83d 1/2"
- 83e S.W. Wing
- 83d N.E.
- 83k Spans 1/2" dia. 1/2" x 1/2" W/S
- 83l 3/4"
- 83m 1/2"
- 83n S.W. Wing
- 83o S.W. Wing
- 83p N.E.



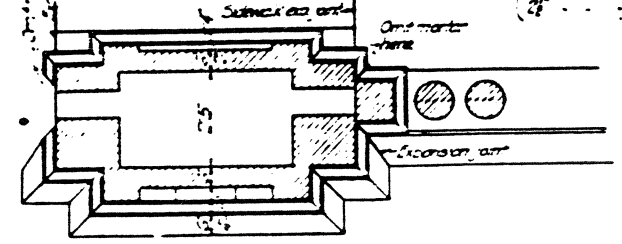
Detail of End Posts

Location	a	b	c
On Spans A & G	5'7"	3'6"	3'6"
B & F	7'7"	4'2"	4'2"
C & E	19'4"	4'9"	4'10"
Span D	2'0"	5'4"	5'4"
S.W. Wing	15'11"	3'4"	3'4"
N.E.	15'8"	3'7"	3'7"
S.E.	15'6"	3'6"	3'6"
N.W.	13'5"	2'10"	2'10"

Measured along C of Rail 103/103R



Outside Elevation



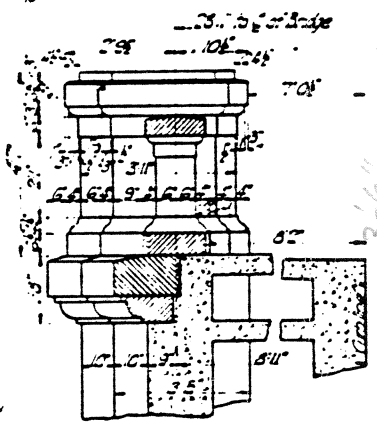
Sectional Plan EE

Detail of Pylon and Railing  
Scale 1/4"

- 1. 1/2" dia. 1/2" x 1/2" W/S
- 2. 3/4"
- 3. 1/2"
- 4. 1/2"
- 5. 1/2"
- 6. 1/2"
- 7. 1/2"
- 8. 1/2"
- 9. 1/2"
- 10. 1/2"
- 11. 1/2"
- 12. 1/2"
- 13. 1/2"
- 14. 1/2"
- 15. 1/2"
- 16. 1/2"
- 17. 1/2"
- 18. 1/2"
- 19. 1/2"
- 20. 1/2"
- 21. 1/2"
- 22. 1/2"
- 23. 1/2"
- 24. 1/2"
- 25. 1/2"
- 26. 1/2"
- 27. 1/2"
- 28. 1/2"
- 29. 1/2"
- 30. 1/2"
- 31. 1/2"
- 32. 1/2"
- 33. 1/2"
- 34. 1/2"
- 35. 1/2"
- 36. 1/2"
- 37. 1/2"
- 38. 1/2"
- 39. 1/2"
- 40. 1/2"
- 41. 1/2"
- 42. 1/2"
- 43. 1/2"
- 44. 1/2"
- 45. 1/2"
- 46. 1/2"
- 47. 1/2"
- 48. 1/2"
- 49. 1/2"
- 50. 1/2"
- 51. 1/2"
- 52. 1/2"
- 53. 1/2"
- 54. 1/2"
- 55. 1/2"
- 56. 1/2"
- 57. 1/2"
- 58. 1/2"
- 59. 1/2"
- 60. 1/2"
- 61. 1/2"
- 62. 1/2"
- 63. 1/2"
- 64. 1/2"
- 65. 1/2"
- 66. 1/2"
- 67. 1/2"
- 68. 1/2"
- 69. 1/2"
- 70. 1/2"
- 71. 1/2"
- 72. 1/2"
- 73. 1/2"
- 74. 1/2"
- 75. 1/2"
- 76. 1/2"
- 77. 1/2"
- 78. 1/2"
- 79. 1/2"
- 80. 1/2"
- 81. 1/2"
- 82. 1/2"
- 83. 1/2"
- 84. 1/2"
- 85. 1/2"
- 86. 1/2"
- 87. 1/2"
- 88. 1/2"
- 89. 1/2"
- 90. 1/2"
- 91. 1/2"
- 92. 1/2"
- 93. 1/2"
- 94. 1/2"
- 95. 1/2"
- 96. 1/2"
- 97. 1/2"
- 98. 1/2"
- 99. 1/2"
- 100. 1/2"

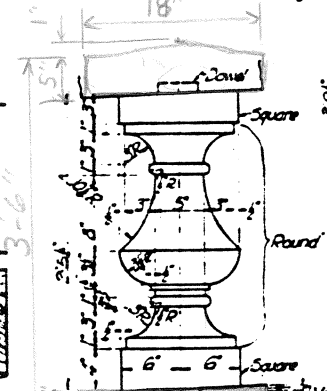
Location	a	b	c
On Spans A & G	5'7"	10'7"	11'8"
B & F	7'7"	11'3"	13'9"
C & E	19'4"	13'0"	15'5"
Span D	2'0"	4'10"	7'0"
S.W. Wing	15'11"	9'13"	10'11"
N.E.	15'8"	10'10"	10'11"
S.E.	15'6"	9'13"	10'11"
N.W.	13'5"	8'13"	9'11"

Measured along C of Rail 103/103R

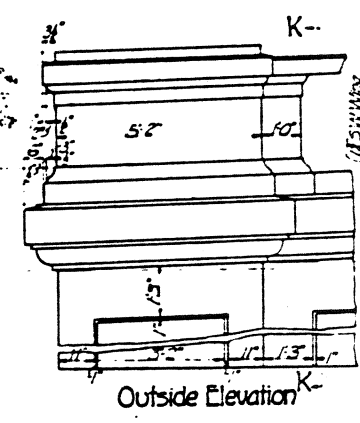


Sectional Elevation II

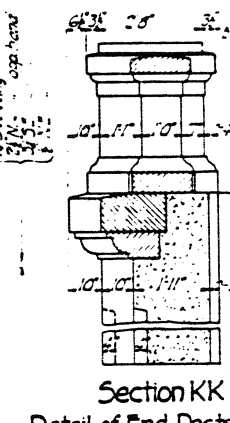
Details of Concrete Railing



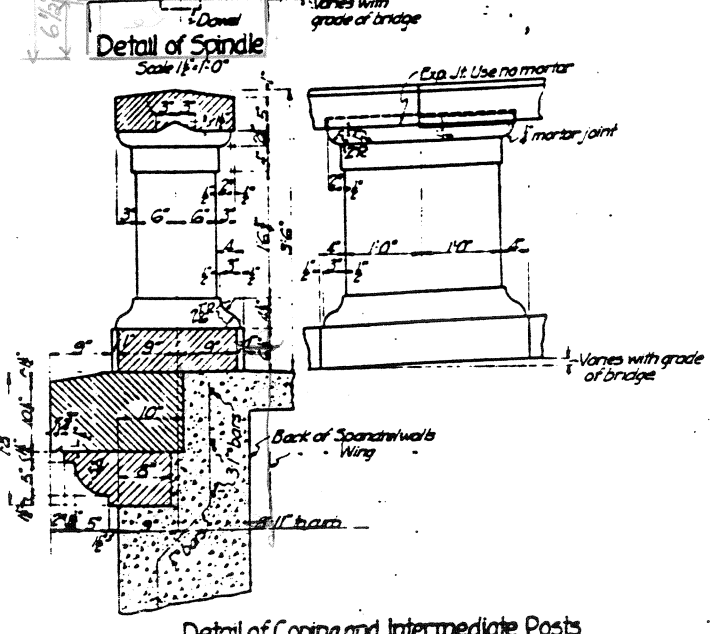
Detail of Spindle  
Scale 1/4"



Section KK  
Detail of End Posts



End Elevation



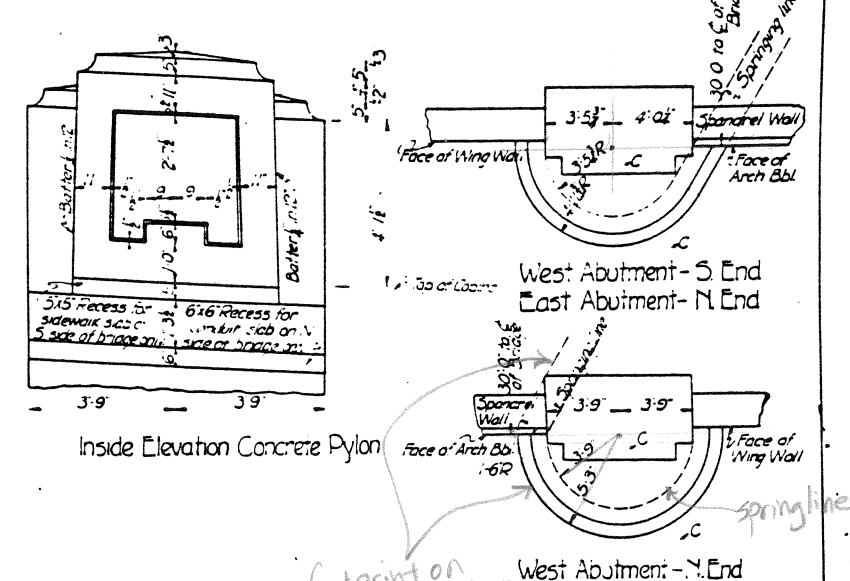
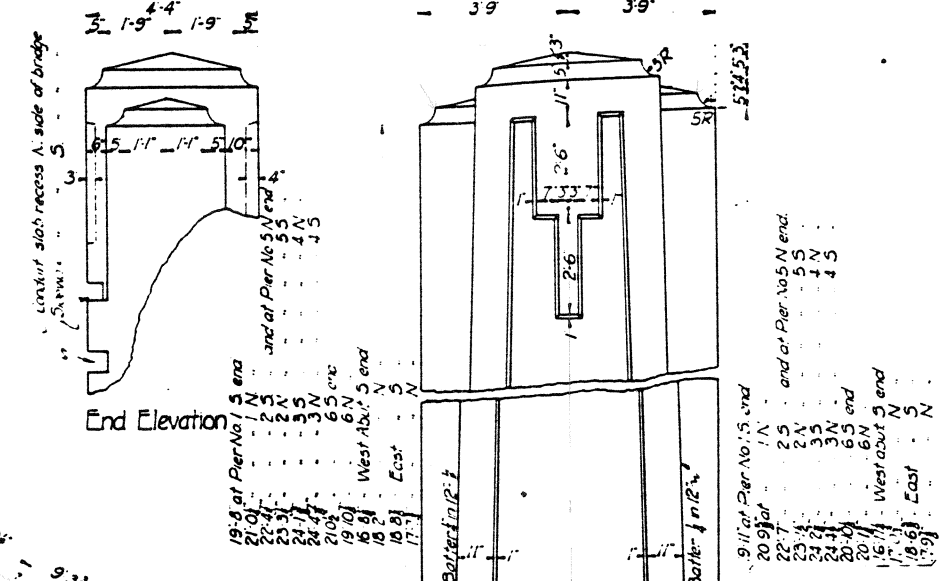
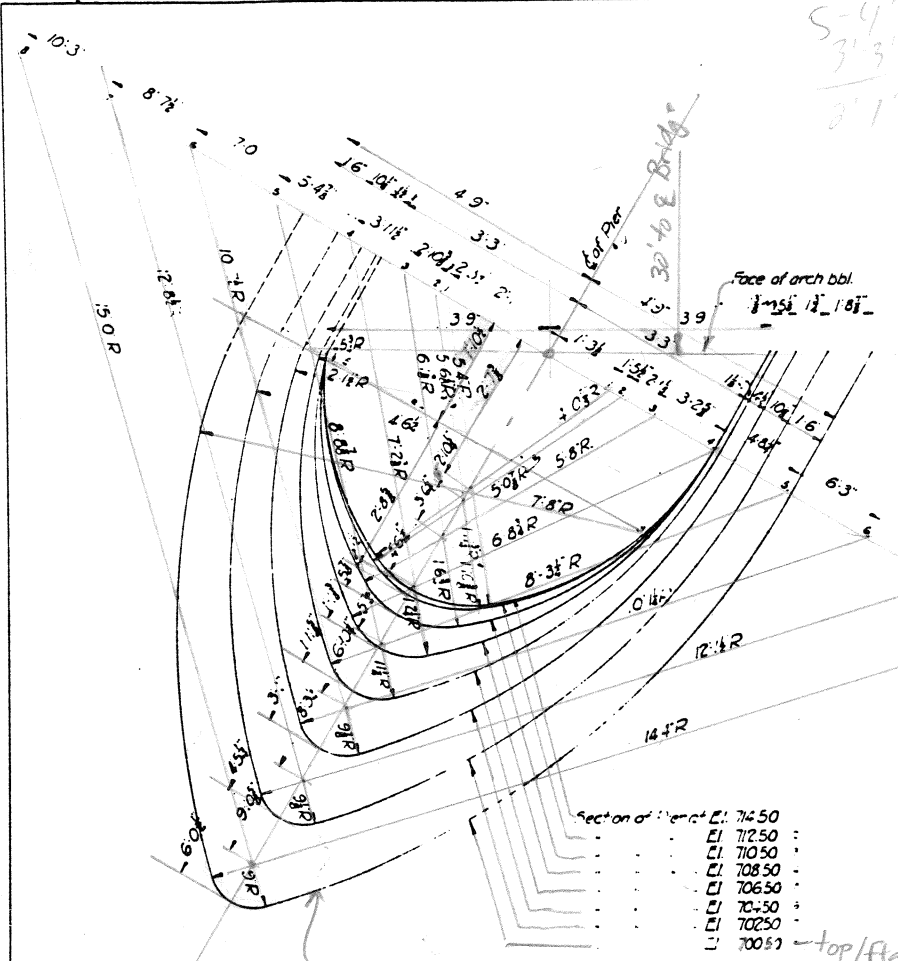
Detail of Coping and Intermediate Posts  
Scale 1/4"

Approved: *[Signature]* 1917  
 Director of Public Service  
*[Signature]*  
 Chief Engineer  
*[Signature]*  
 Engr. in Charge

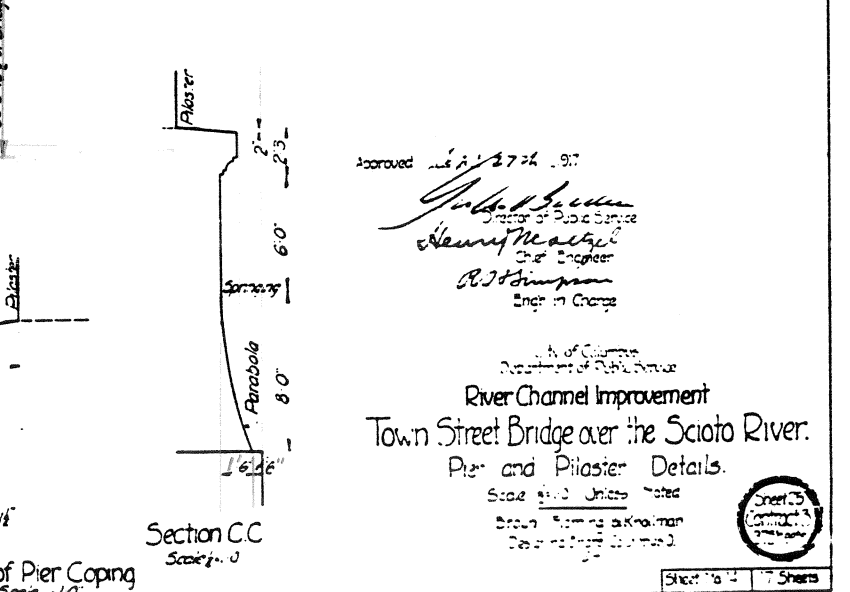
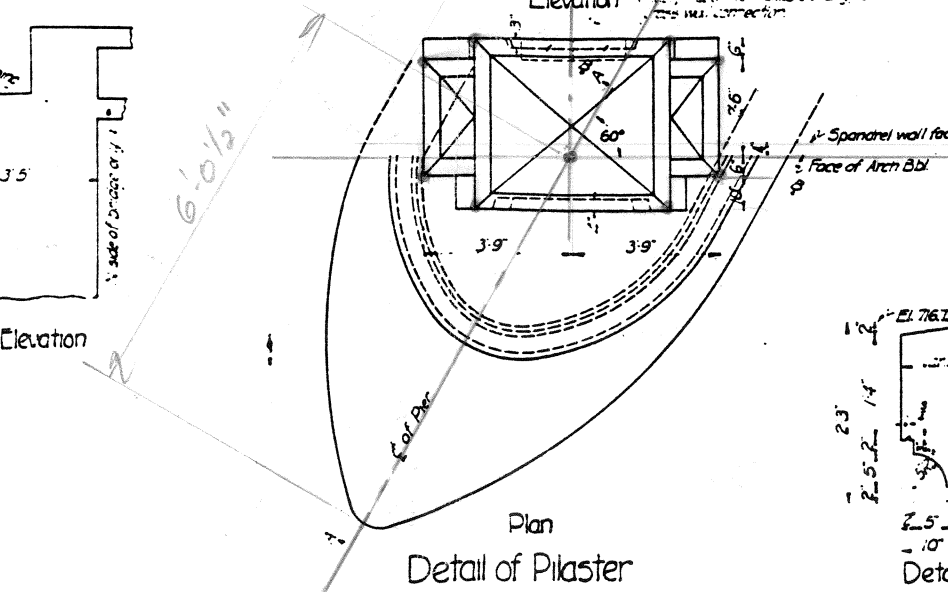
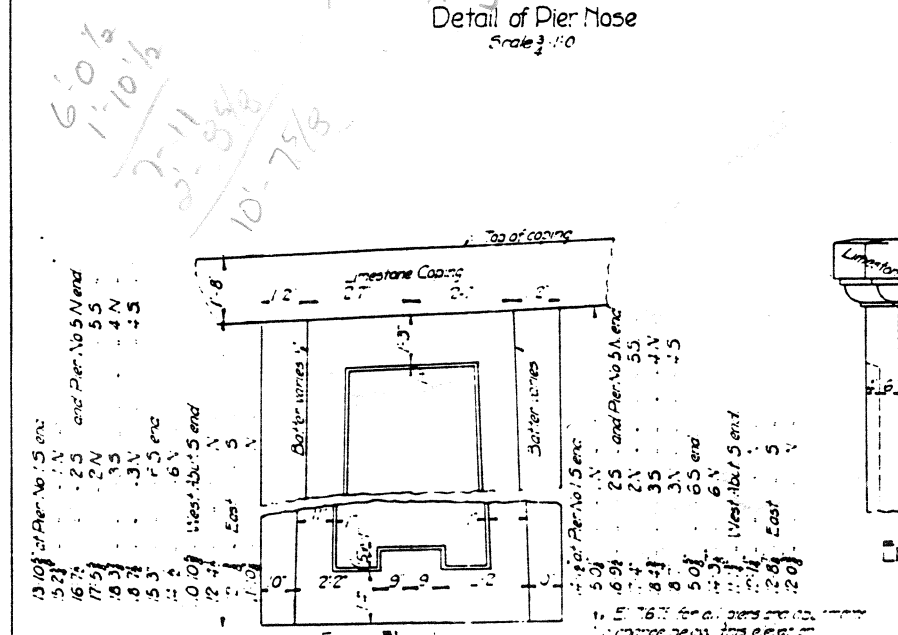
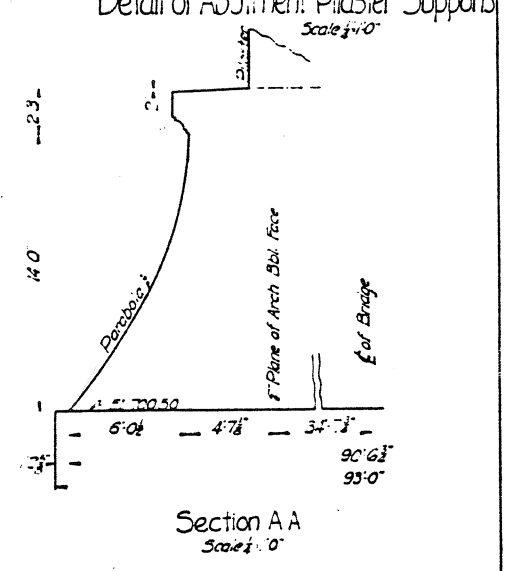
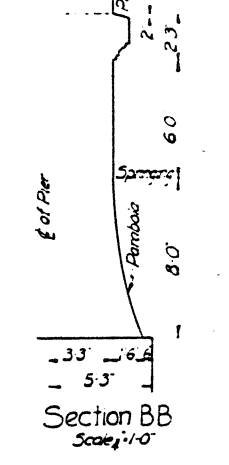
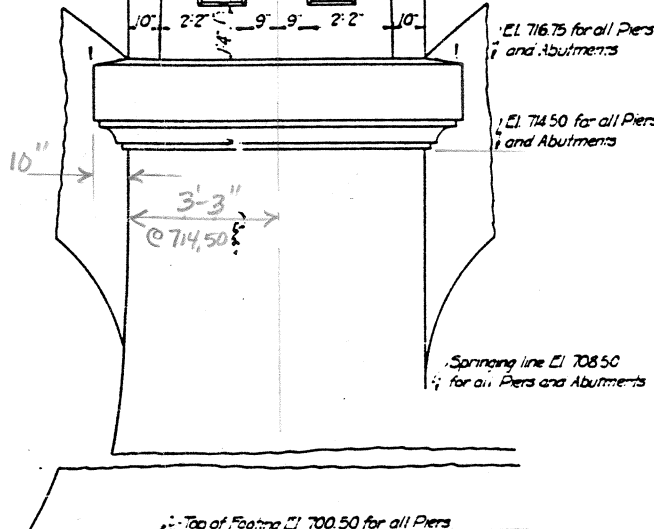
City of Columbus  
 Department of Public Service  
 River Channel Improvement  
 Town Street Bridge over the Scioto River  
 Railing Details  
 Scale 1/4" Unless Noted  
 Braun, Fleming & Knott  
 Designing Engrs. Columbus  
 1917



Details of Limestone Railing



Detail of Pier Nose  
Scale 1/4" = 1'-0"



Checked by  
Approved by

Approved  
Chief Engineer  
Chief in Charge

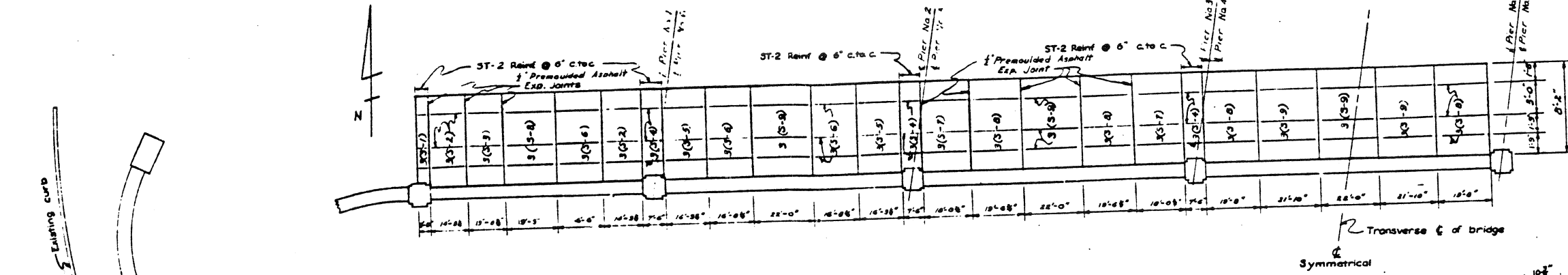
Department of Public Works  
River Channel Improvement  
Town Street Bridge over the Scioto River.  
Pier and Pilaster Details.  
Scale 1/4" = 1'-0"  
Drawn by  
Checked by



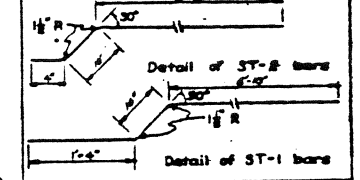




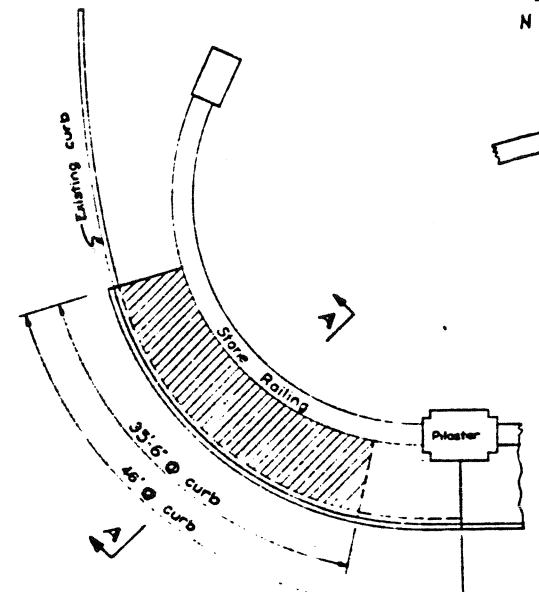




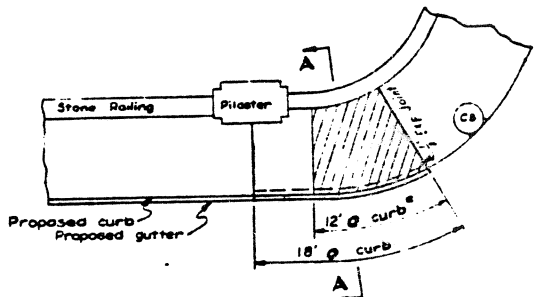
REINFORCING STEEL SCHEDULE					
Item	Size	Quantity	Length	Weight	Notes
S-1	#5	6	1.000	7.5	45.0
S-2	#12	1	14.0	178.0	
S-3	#8	6	15.0	84.0	
S-4	#8	18	7.0	108.0	
S-5	#12	12	15.0	200.0	
S-6	#8	18	15.0	216.0	
S-7	#12	12	15.0	162.0	
S-8	#2	24	2.0	48.0	
S-9	#2	24	2.0	48.0	
ST-1	#12	107	8.0	1033.0	
ST-2	#10	107	7.0	749.0	
Total (Items)					13419.0



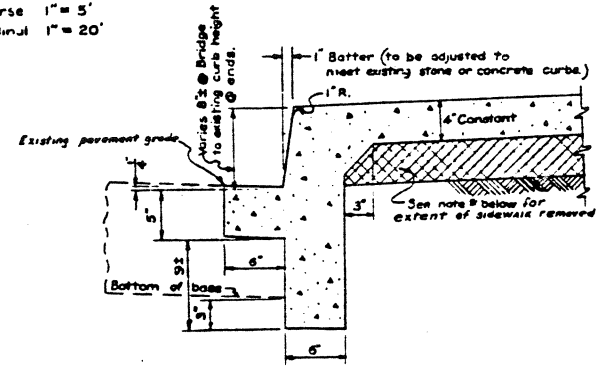
**SOUTH SIDEWALK REINFORCING DIAGRAM**  
SHOWING EXPANSION JOINTS  
Scale Transverse 1" = 5"  
Longitudinal 1" = 20"



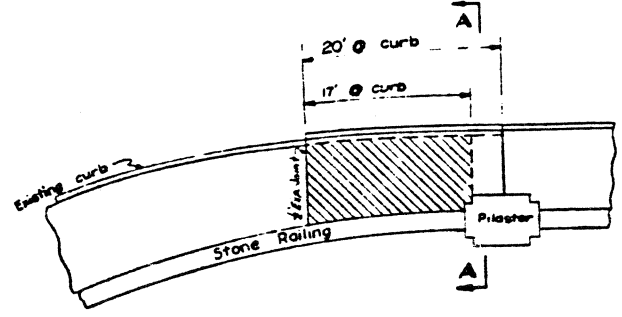
**PROPOSED SIDEWALK N.W. CORNER (Item 5)**  
Scale 1/8" = 1'-0"



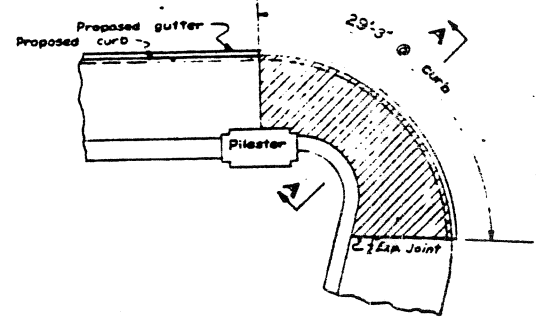
**PROPOSED SIDEWALK N.E. CORNER (Item 5)**  
Scale 1/8" = 1'-0"



**SECTION A-A**  
**PROPOSED SECTION OF SIDEWALK TRANSITION AT ENDS**  
Scale 1/2" = 1'-0"

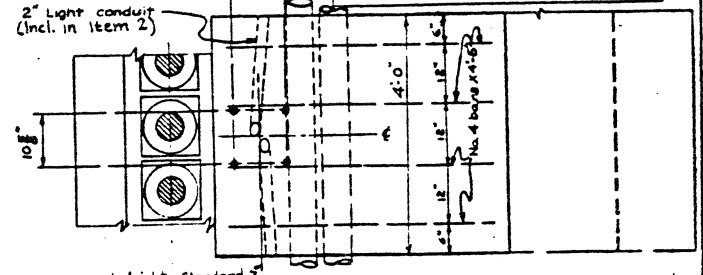


**PROPOSED SIDEWALK S.W. CORNER (Item 5)**  
Scale 1/8" = 1'-0"



**PROPOSED SIDEWALK S.E. CORNER (Item 5)**  
Scale 1/8" = 1'-0"

Note: Hatched areas show approximate area of existing work to be removed to obtain A.A. thickness.



**DETAIL OF LAMP STANDARD BASE AND ANCHOR RODS (Item 2)**  
(Typical for 5 standards on bridge)  
(Note: See sheet #1 for the locations of Light Standards)  
Scale 1/2" = 1'-0"

**GENERAL NOTES**

The conduit work in the North walk, proposed by the Columbus and Southern Ohio Electric Co. is shown in general on the plans. The contractor performing work for the city under this contract will be invited to bid on this work. Should another contractor perform the work for the C. & S. O. E. Co. he shall start operations within ten days after receipt of bids by the City and be completed in thirty days thereafter. The contractor doing work under city contract shall start his work sometime during this period as ordered by the Engineer.

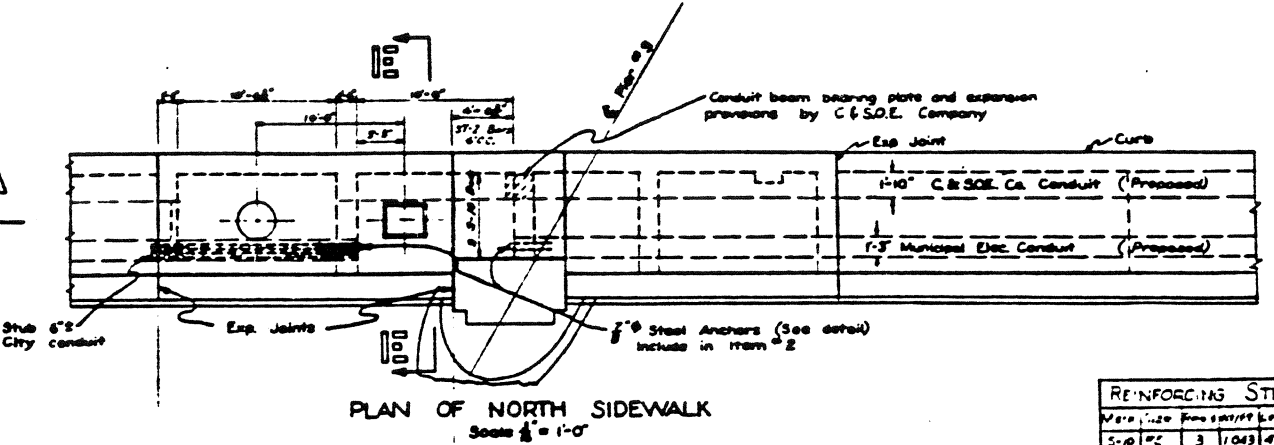
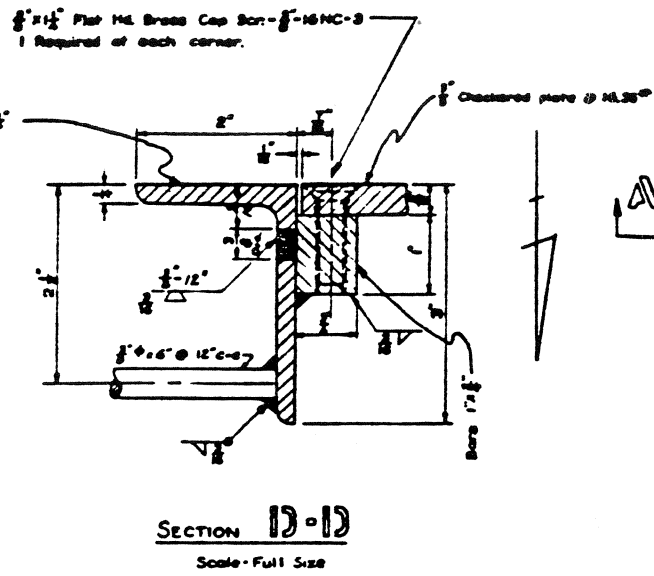
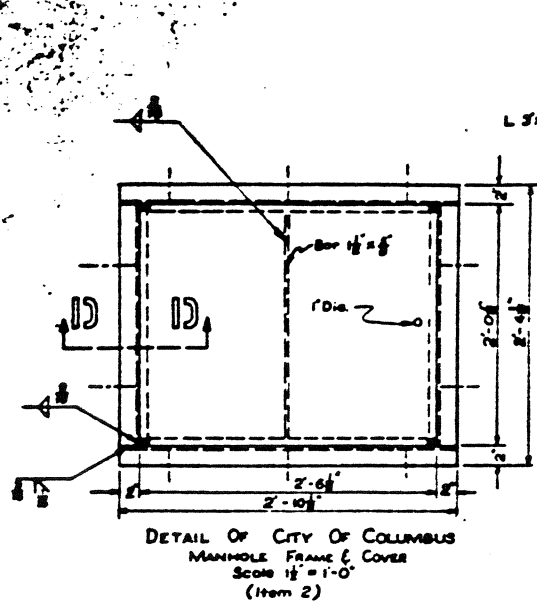
The work shall be scheduled in such a way that one sidewalk will be kept open at all times.

The contractor will be given use of the curb lane on one side of the bridge during working hours. No materials or equipment shall be stored or parked over night in the street. Barricades shall be moved against the curb except during working hours.

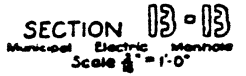
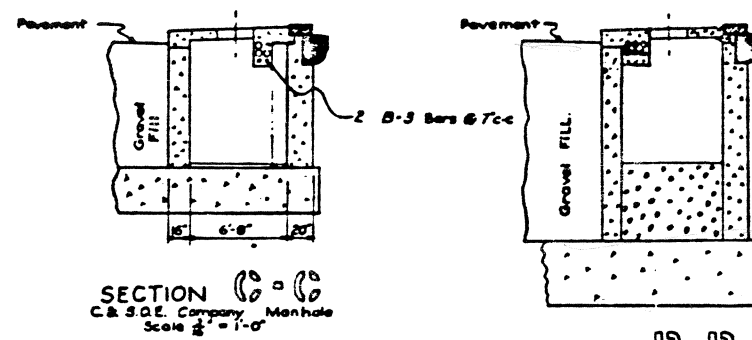
In addition to routine signs, such as "Men Working" etc, signs shall be placed at each end of the work bearing legend "WALK CLOSED" - "USE OTHER WALK - DO NOT WALK IN STREET". All barricades, lights, and signs shall be furnished and placed by the contractor and approved by the Engineer.

The stone balustrade shall be protected during the concrete removal and concreting operations. All stone damaged shall be repaired or replaced, and all mortar splashed on the stone shall be cleaned off with dry brushes during the finishing operations and washed with water no later than 5 hours after finishing. Payment for such work shall be included in the price bid per cubic yard for Items 3 and 4.

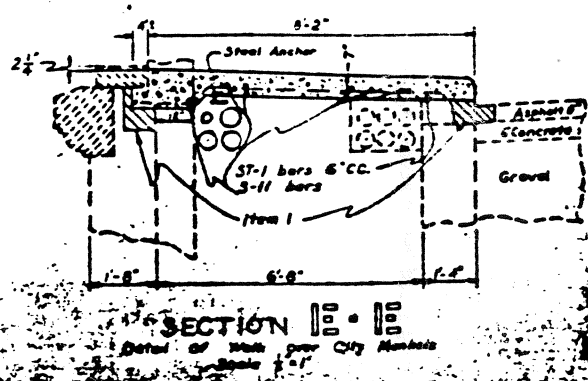
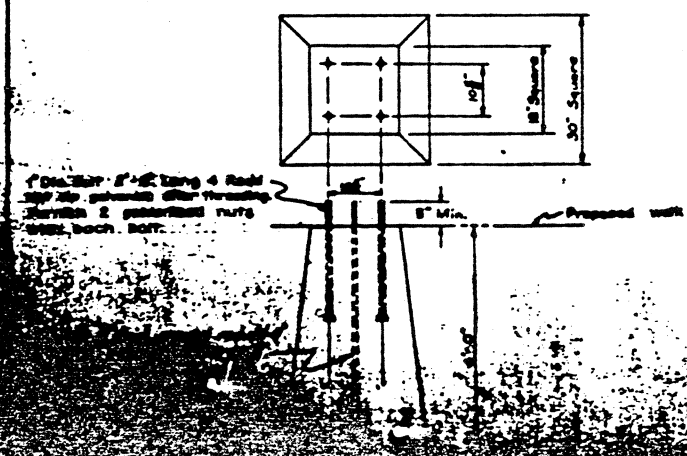
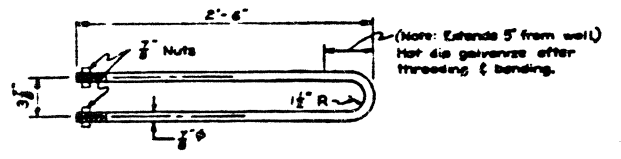
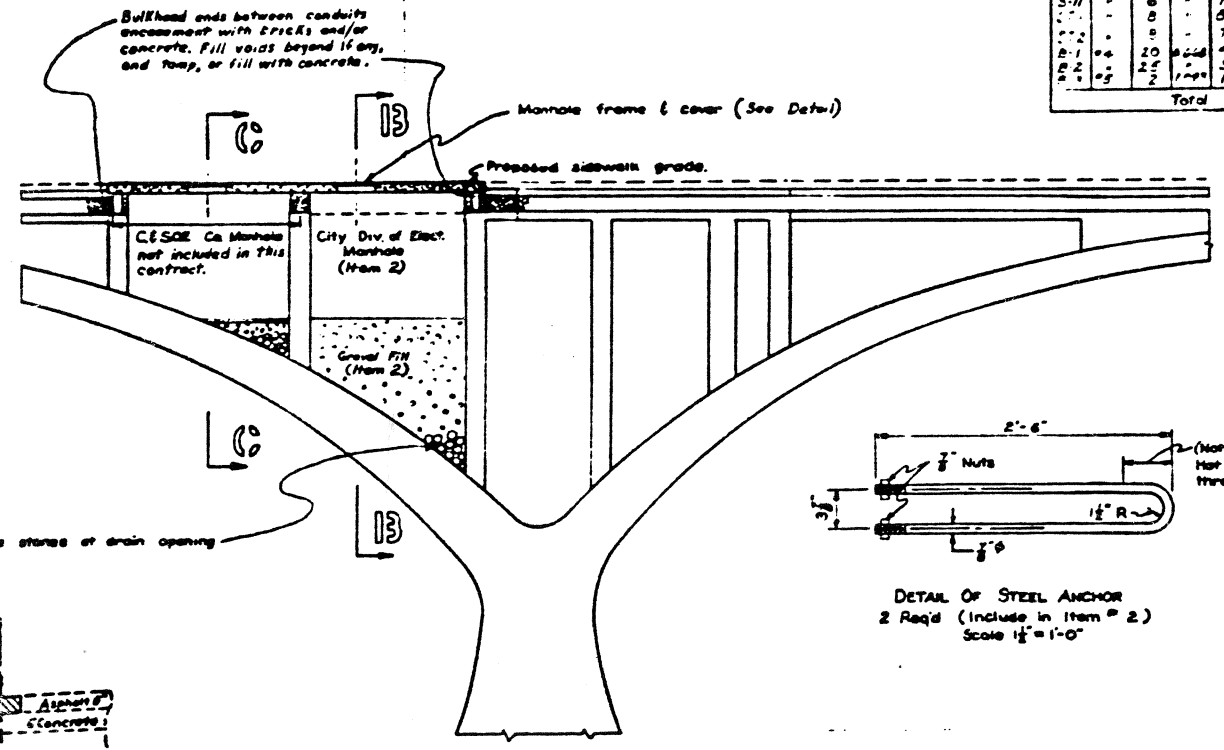
89  
00-52

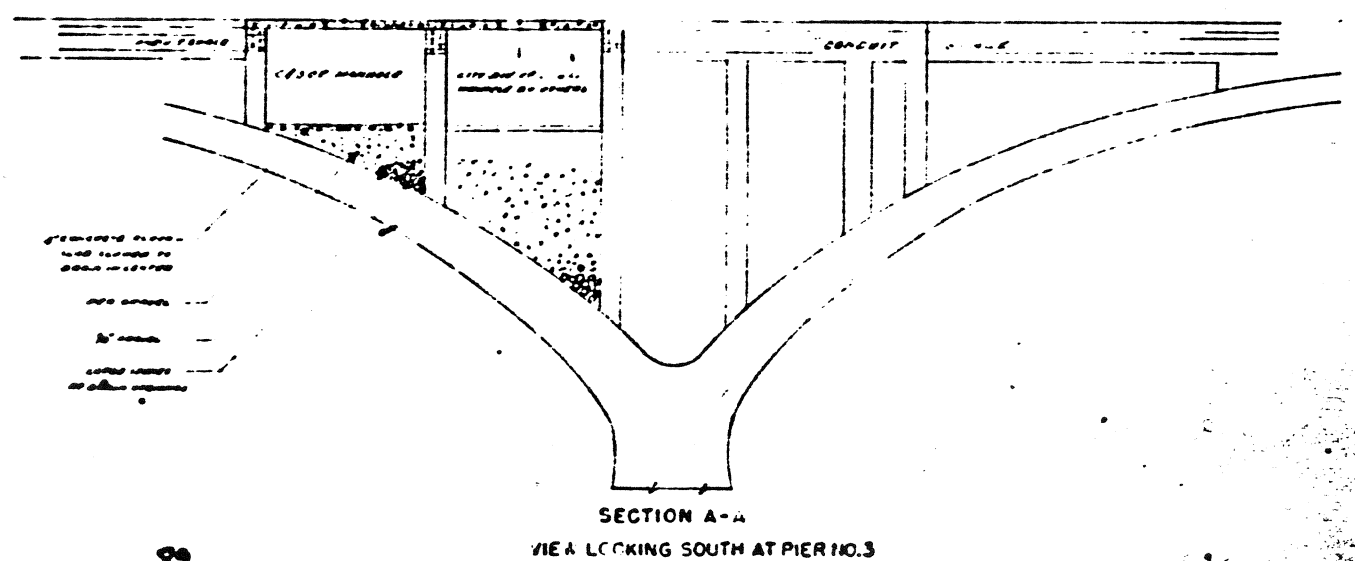
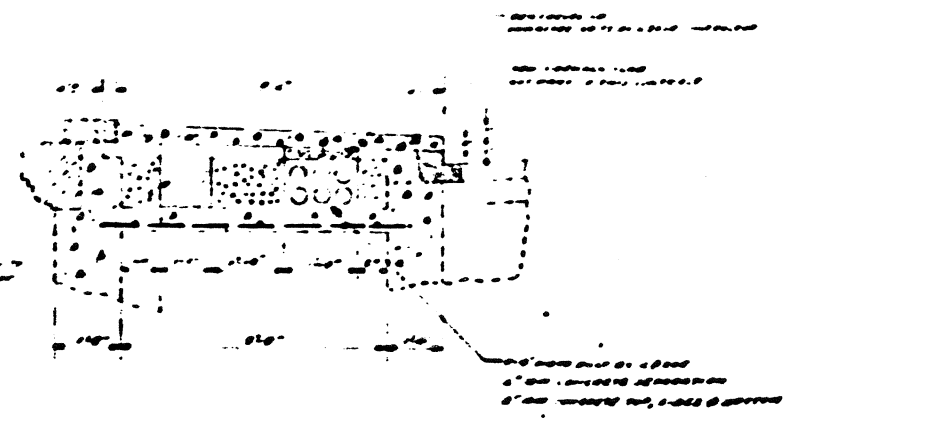
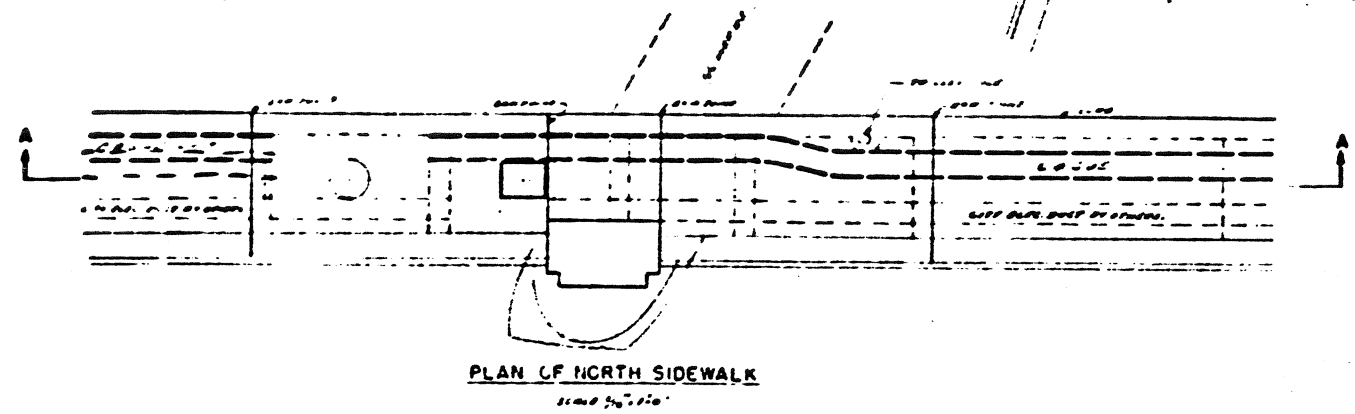
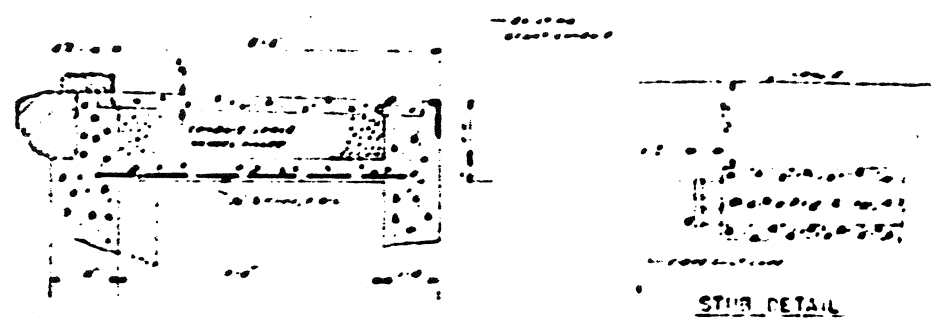
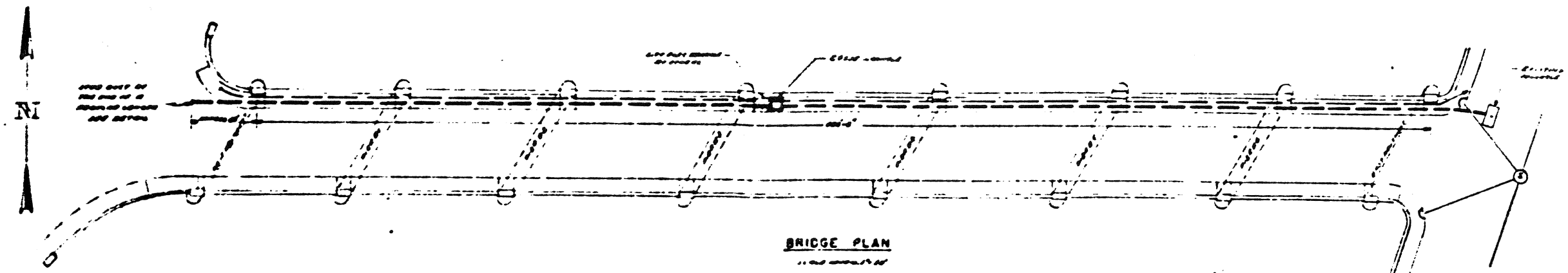


REINFORCING STEEL (Included in Item 2)					
Size	No.	Length	Weight	Shape	
5-10	3	10.03	4.6	14	Str.
5-11	6	7.0	4.4	67	Bar
5-12	8	5.0	3.8	58	"
5-13	20	4.4	6.0	60	Str.
5-14	2	5.1	6.3	63	"
5-15	2	11.9	2.3	11	"
Total				32.9	ds



Note: The C.S.O.E. Co. will furnish and install the conduits and reinforcing steel in the conduit space thru the manhole area at the City Division of Electricity. Construction of this manhole area is included in the price bid for Item 2, which item also includes furnishing and installing the City Division of Electricity conduits and reinforcing steel in the conduit space thru the manhole area provided by and for the C.S.O.E. Co.





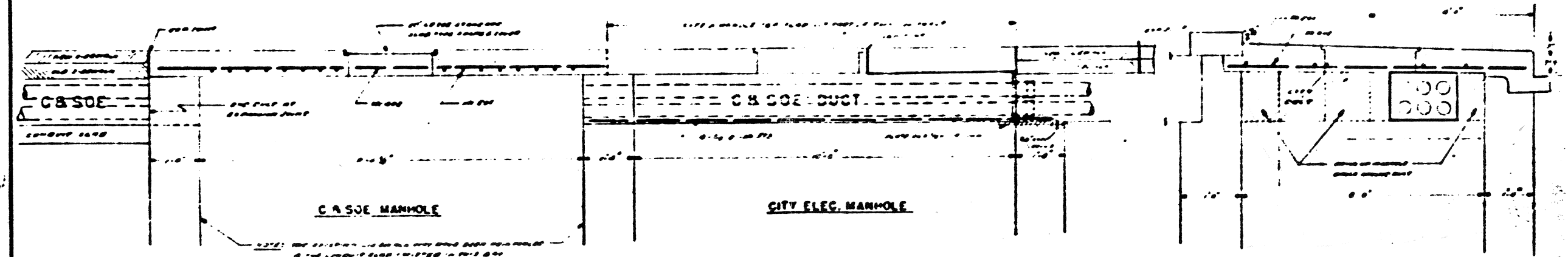
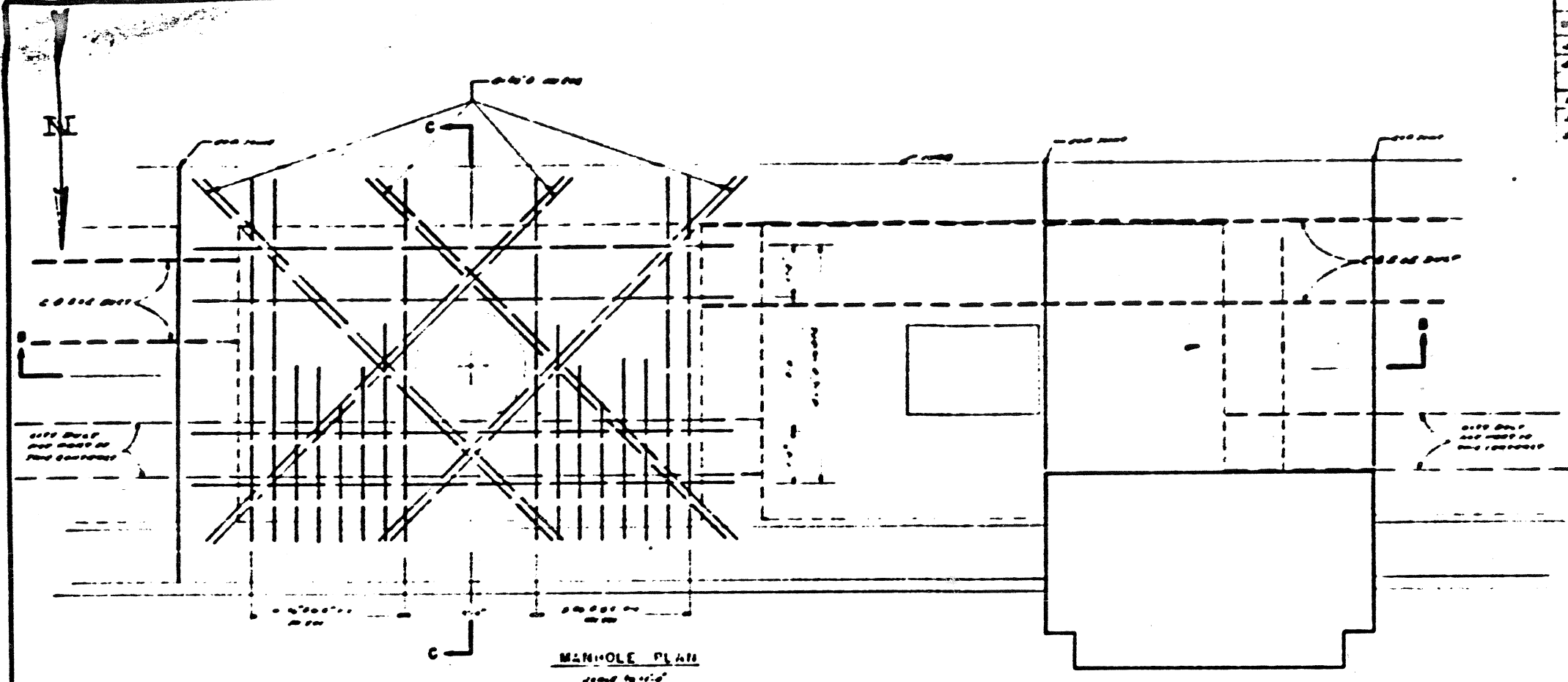
89  
00 St

CO. 60-214-007

	<p>COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY</p>	<p>MATERIALS AND DUCT TOWN OF BRIDGE VENUE POWER</p>	<p>U-5456-E 1 2</p>
--	--	--	---------------------



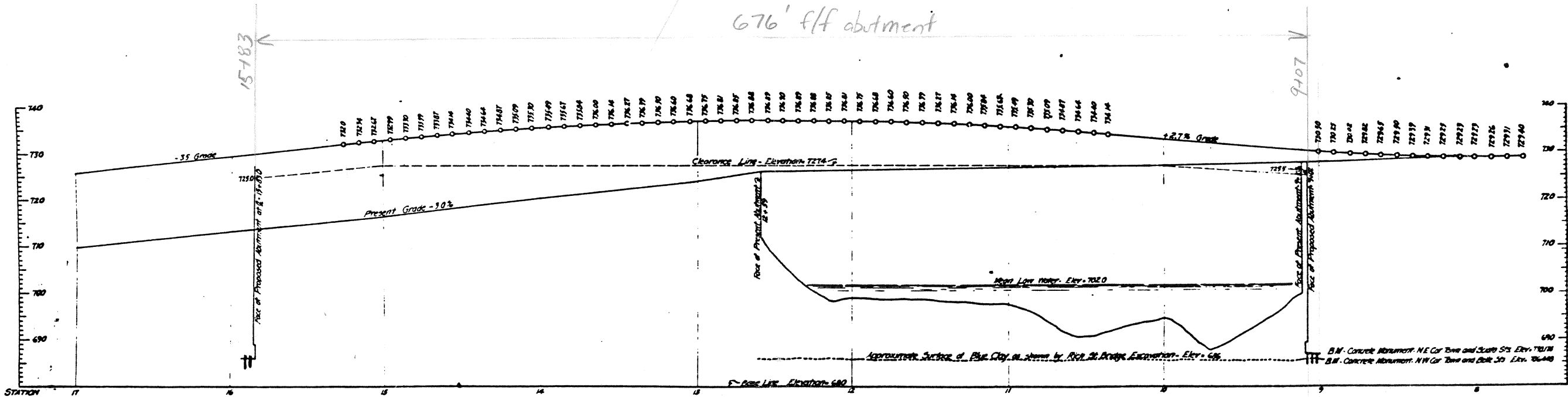
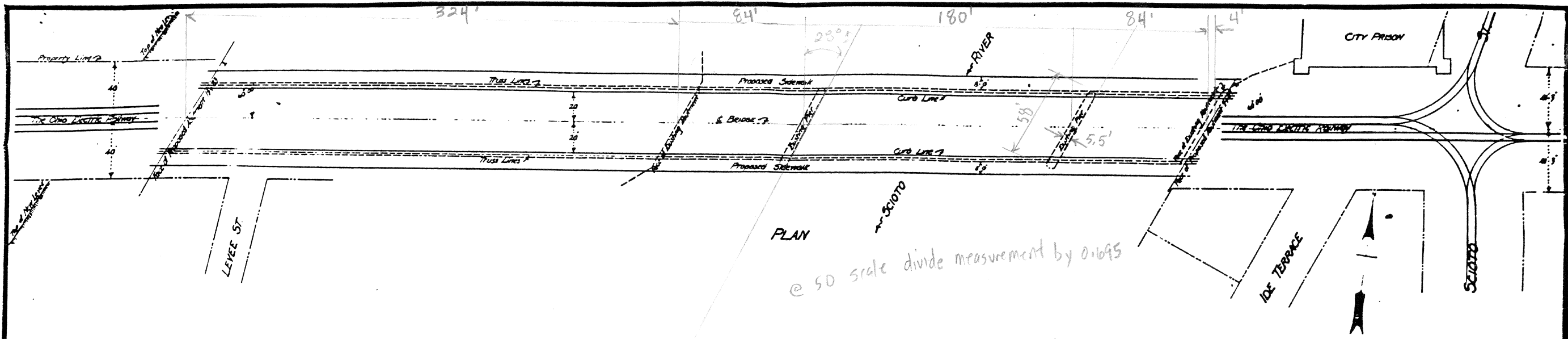
REINFORCING SCHEDULE									
NO.	BAR	SIZE	LENGTH	NO.	A	B	C	D	E
1	4	#4	10'-0"	1					
2	4	#4	10'-0"	1					
3	4	#4	10'-0"	1					
4	4	#4	10'-0"	1					
5	4	#4	10'-0"	1					
6	4	#4	10'-0"	1					
7	4	#4	10'-0"	1					
8	4	#4	10'-0"	1					
9	4	#4	10'-0"	1					
10	4	#4	10'-0"	1					



39  
00 St

CO. 60-214-007

	<p>COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY</p>	<p>MANHOLE AND DUCT TOWN ST BRIDGE OVER SCOTTS RIVER</p>	<table border="1"> <tr> <td>DATE</td> <td>BY</td> <td>CHECKED</td> </tr> <tr> <td>1-2-54</td> <td>J. H. ...</td> <td>...</td> </tr> <tr> <td>NO.</td> <td>2</td> <td>2</td> </tr> </table>	DATE	BY	CHECKED	1-2-54	J. H. ...	...	NO.	2	2
DATE	BY	CHECKED										
1-2-54	J. H. ...	...										
NO.	2	2										



**TYPE OF STRUCTURES.** A riveted truss or plate girder bridge will be accepted, not to exceed seven spans. Distance between abutments and spans as shown on design. Foundations shall not exceed three and one half tons per square foot and load on piling not to exceed twenty tons per pile. Substructure to be of concrete conforming to that specified for Class "A" concrete. Concrete in floor of superstructure to conform to that classified as Class "B" concrete.

**LEAD LOADS.** Weight of steel to be determined by trial design. Weight of paving including sand cushion, 70 pounds per square foot. Weight of concrete floor, 145 pounds per square foot.

**LIVE LOADS.** Roadway to be designed for two street railway tracks, each track to carry a series of cars weighing sixty tons each, the load being equally divided between two trucks twenty feet center. Each truck having five axles, five foot centers with the rear gauge. Each car is assumed to occupy a width of ten feet and a length of forty feet. The roadway also to be designed to carry a series of motor trucks having double twelve foot axles with six foot gauge, weighing twenty five tons each, twenty feet center of the load being carried on the rear axle. Each truck is assumed to occupy a width of twelve feet and a length of thirty feet. It is desirable to be designed for a live load of one hundred pounds per square foot. An impact allowance shall be added to the computed maximum live load stresses as determined by the following formula:  $I = \frac{1}{10} \sqrt{L}$ , where  $L$  equals impact to be added to maximum live load stresses,  $I$  = calculated maximum live load static stress, and  $L$  equals loaded length in feet.

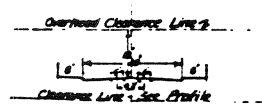
**HAND RAIL.** To be provided equal to the hand rail manufactured by the Bestway Iron Works and shall be of their catalogue design or when steel shall be furnished with the proposal.

Design, material, construction and load to not otherwise specified shall conform to the General Specifications for Steel Highway Bridges of the Ohio State Highway Department. Specifications for truss bridges or other types shall be provided. Proposal shall be made for lighting, including standards, etc., of which shall be primary data furnished in the proposal.

Data submitted with proposal shall include stress sheets, elevation cross section showing floor system and such other details as may be required to show methods of construction proposed. Successful bidder will be required to furnish complete detailed shop and erection drawings, also complete detail plans of masonry, which plans must be approved by the Engineer before any work is started.

Steel to be over three coats of paint of approved quality. In designing concrete floor any single wheel load may be considered uniformly distributed over a space four feet square.

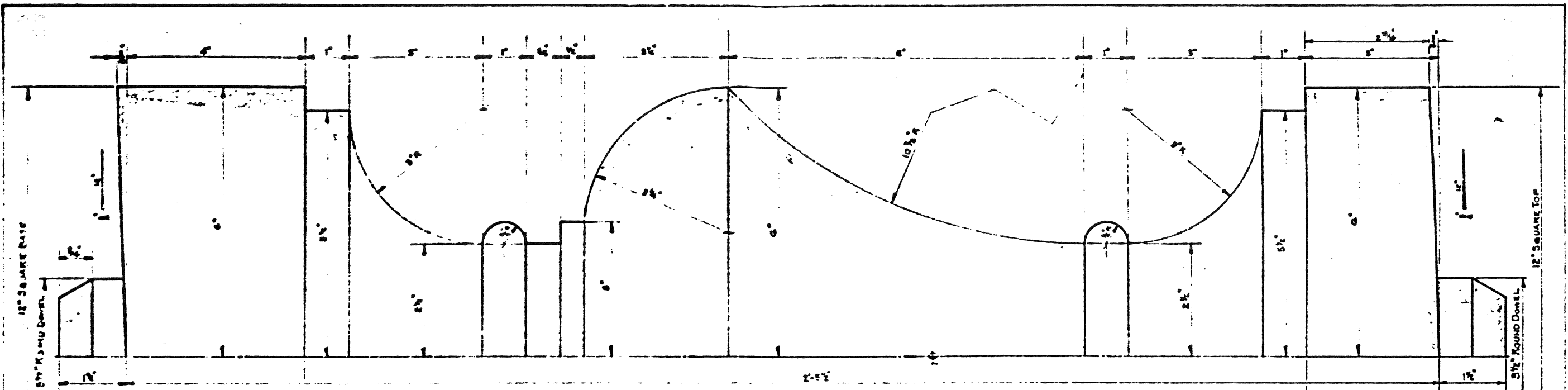
**PROFILE**  
SCALE: 1" = 10' VERT  
1" = 100' HORIZ



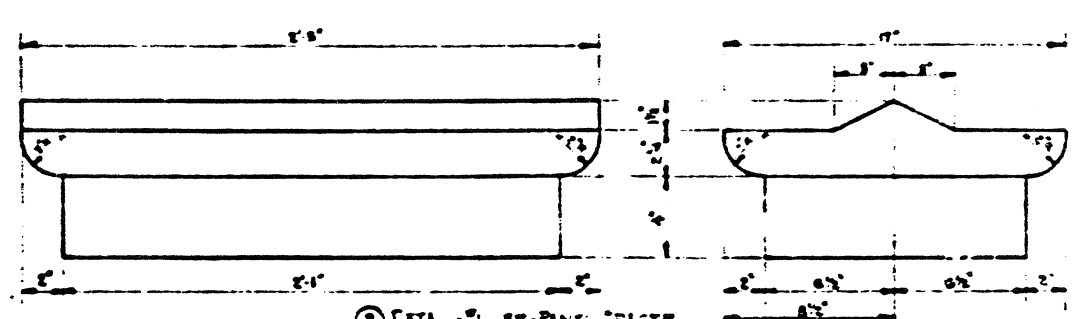
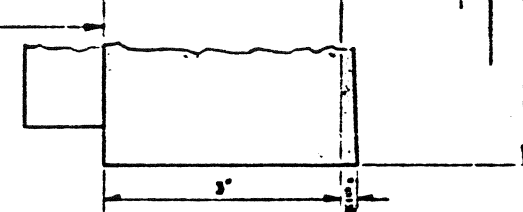
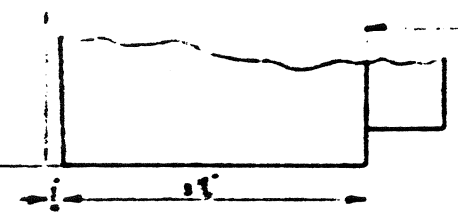
**CROSS SECTION**  
SCALE: 1" = 10' VERT  
1" = 100' HORIZ

Approved: *[Signature]* 1917  
*[Signature]*  
 Director of Public Service  
*[Signature]*  
 Chief Engineer  
*[Signature]*  
 Engineer in Charge

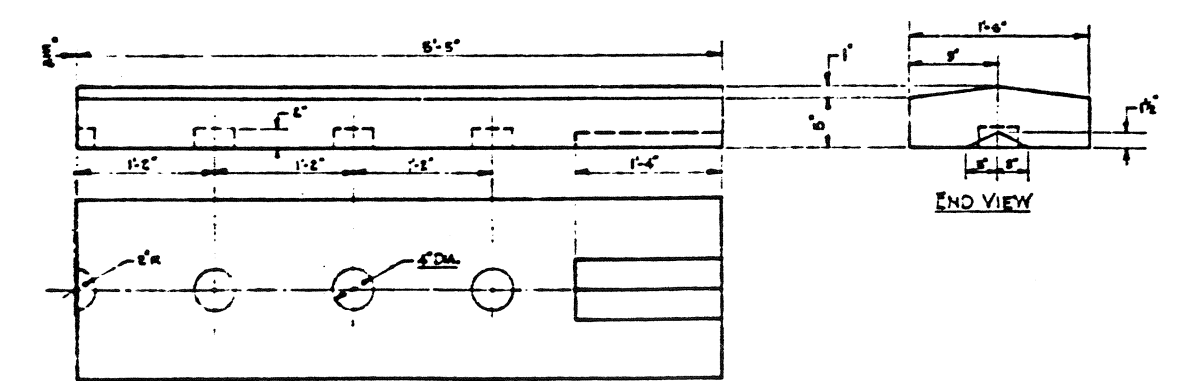
CONTRACT NO. 3  
 CITY OF COLUMBUS, OHIO  
 DEPARTMENT OF PUBLIC SERVICE  
 RIVER CHANNEL IMPROVEMENT  
 ALTERNATE DESIGN-TOWN STREET BRIDGE



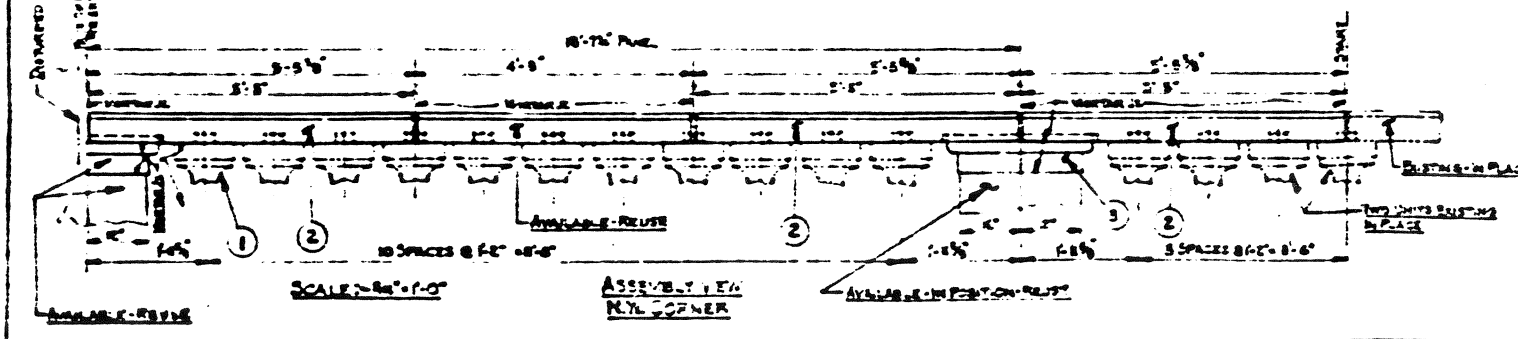
ROUND  
 ① DETAIL - SPINDLE - FULL SCALE



③ DETAIL - PANEL SPACER  
 SCALE: 1/2\"/>



BOTTOM VIEW  
 ② DETAIL - CAPSTONE  
 SCALE: 1/2\"/>

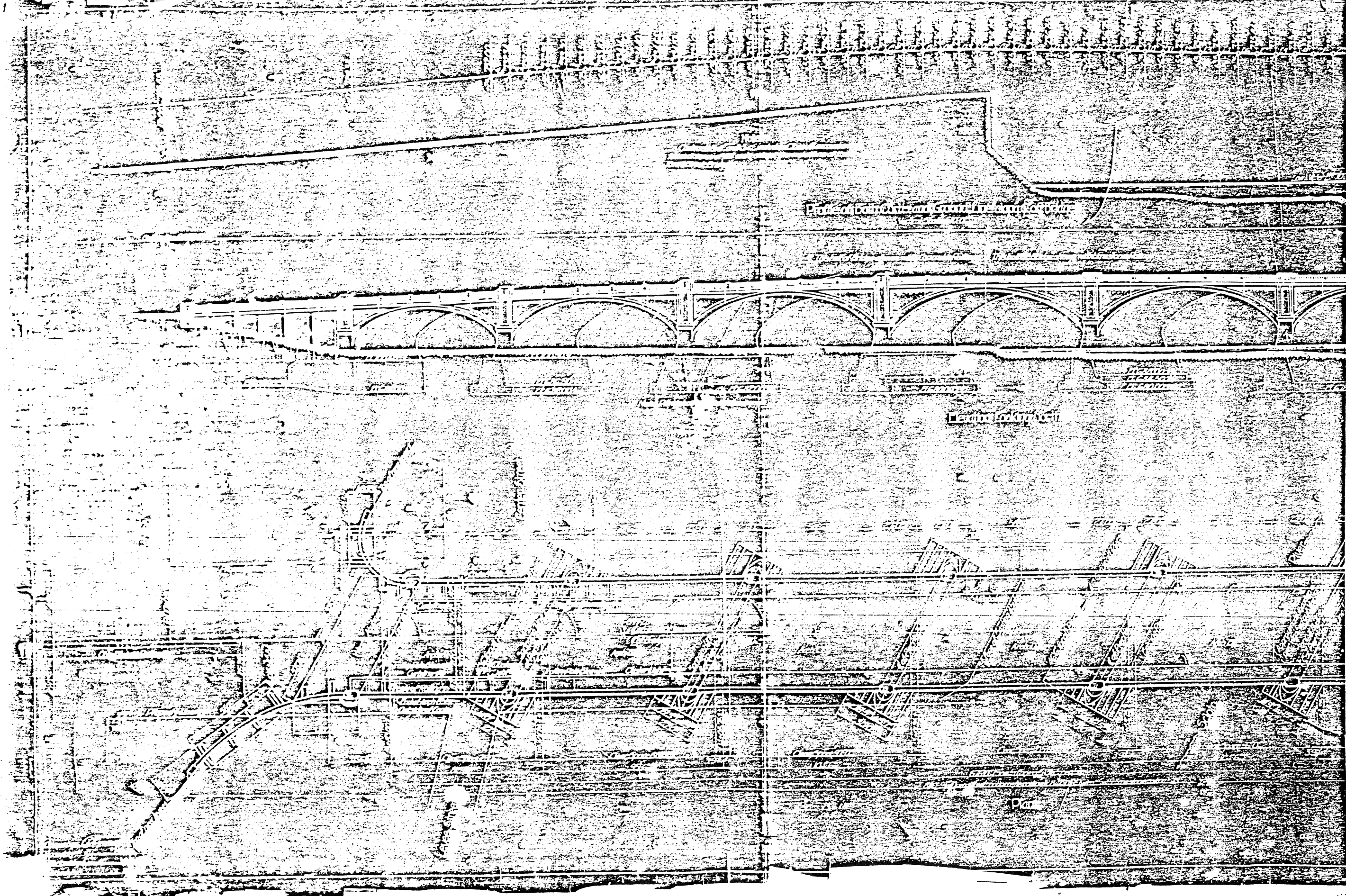


SCALE: 3/4\"/>
 ASSEMBLY VIEW  
 N.Y.L. CORNER

DEPARTMENT OF PUBLIC SERVICE  
 DIVISION OF ENGINEERING (CONSTRUCTION)  
 CITY OF COLUMBUS, OHIO  
 DETAILS - LIMESTONE RAILING, TOWN ST. BRIDGE  
 DATE: - MAY 1970 DWR. 1112-E  
 E.E.G.

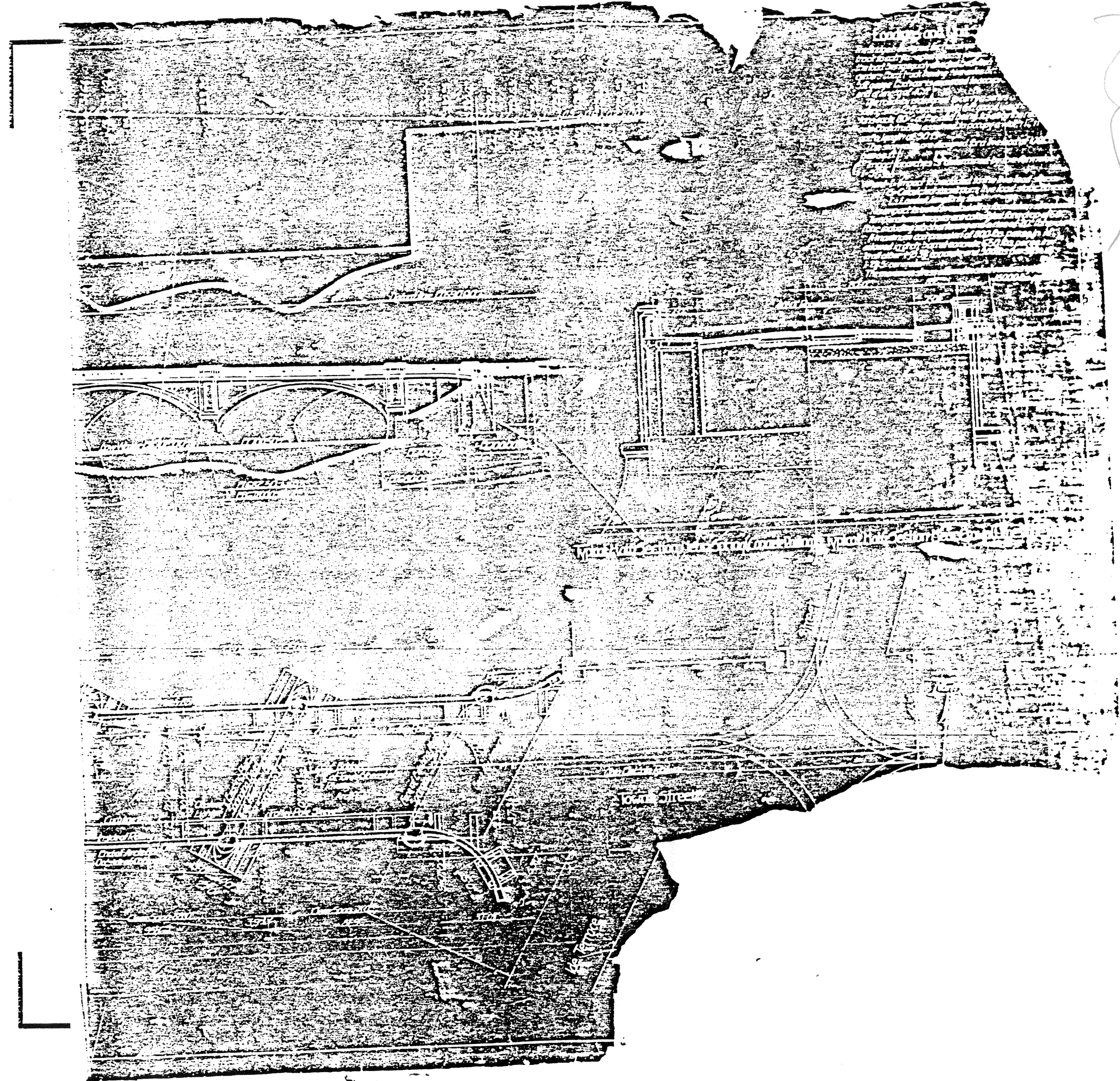
008384

1112 DR.E



Plan of the bridge structure

Section of the bridge structure



Illegible