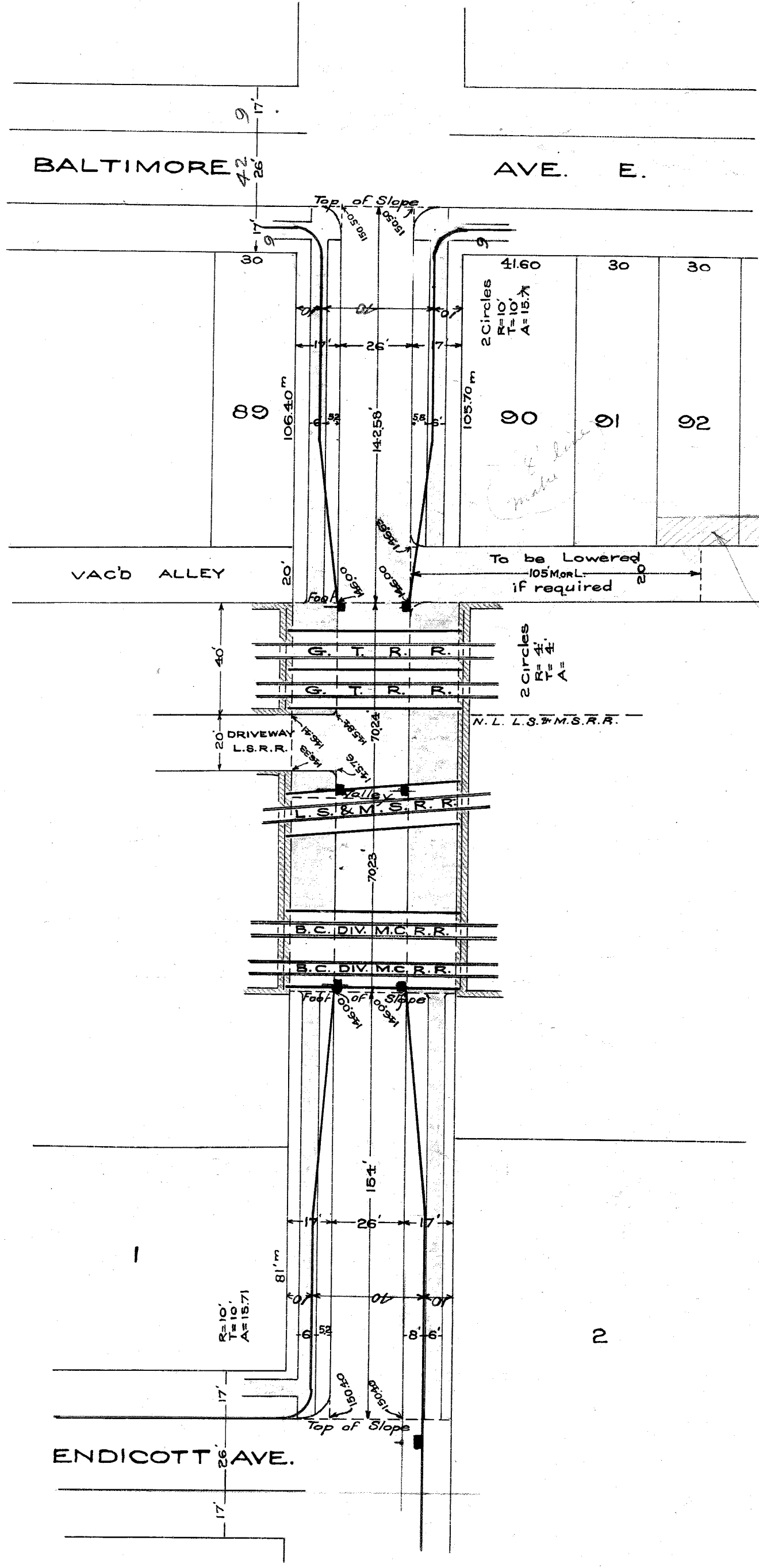


PROPOSED SUBWAY IN  
JOHN R ST.  
UNDER D. & B. C. DIV., M. C. R. R.,  
L. S. & M. S. R. R. & G. T. R. R.

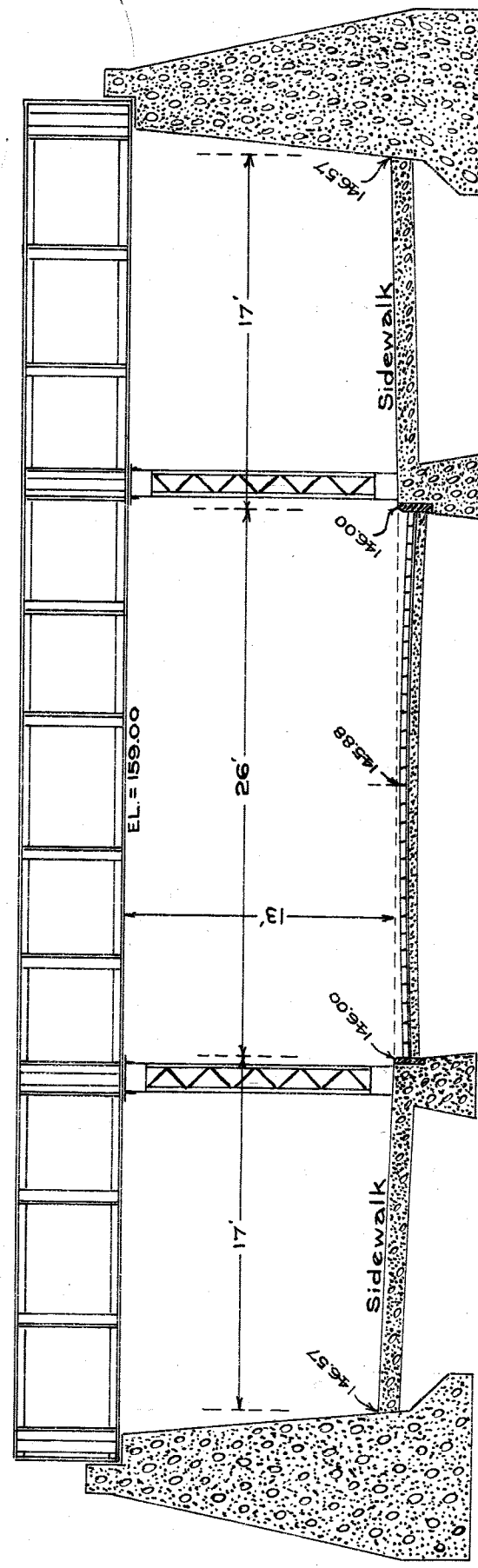
Approved April 1910  
W. H. Conroy City Engineer.  
Chas. H. W. Chief Engineer M.C.R.R.



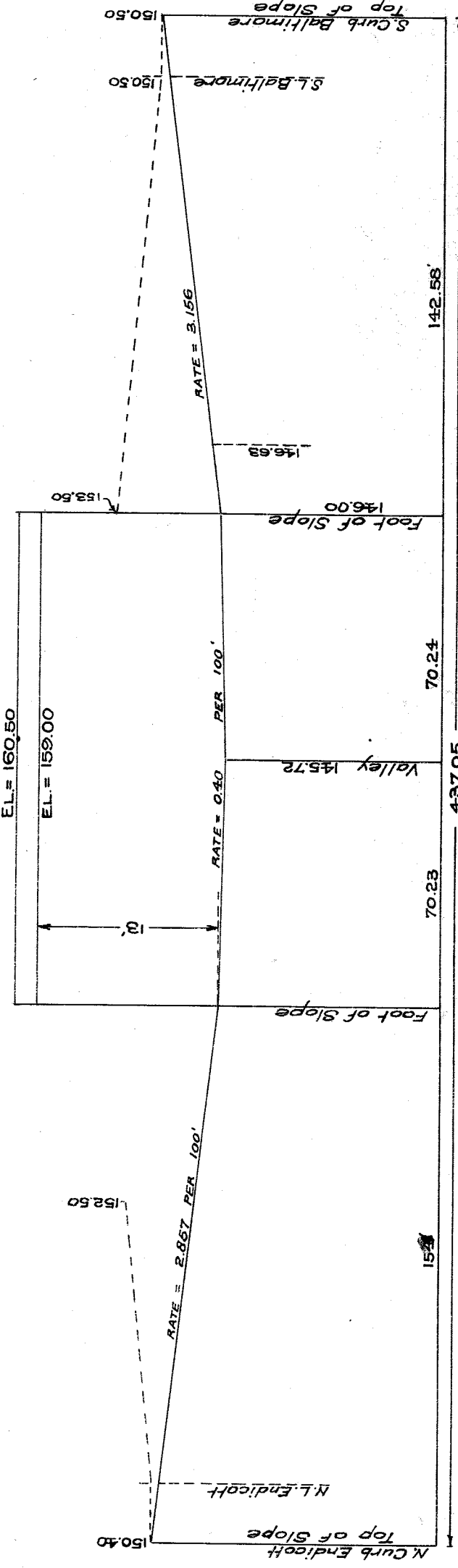
PLAN  
SCALE, ONE INCH = 40 FT.

NOTE: LINES SHOWING THE INDICATED PRESENT CURB IS 200956677

*See plan in Rec. let. for widening alley - 4' x 10'*



CROSS SECTION  
SCALE, ONE INCH = 8 FEET.



LONGITUDINAL SECTION  
HOR. SCALE, ONE INCH = 40 FEET.  
VER. " " = 10 "

CITY ENGINEER'S OFFICE  
GRADE SEPARATION & BRIDGES  
Drawn by John W. Reid, Jan. 6, 1910.  
Disc. A  
Drawn by J. W. Reid  
No. II-1-b

Drawn by John W. Reid, Jan. 6, 1910.

CITY ENGINEER'S OFFICE.

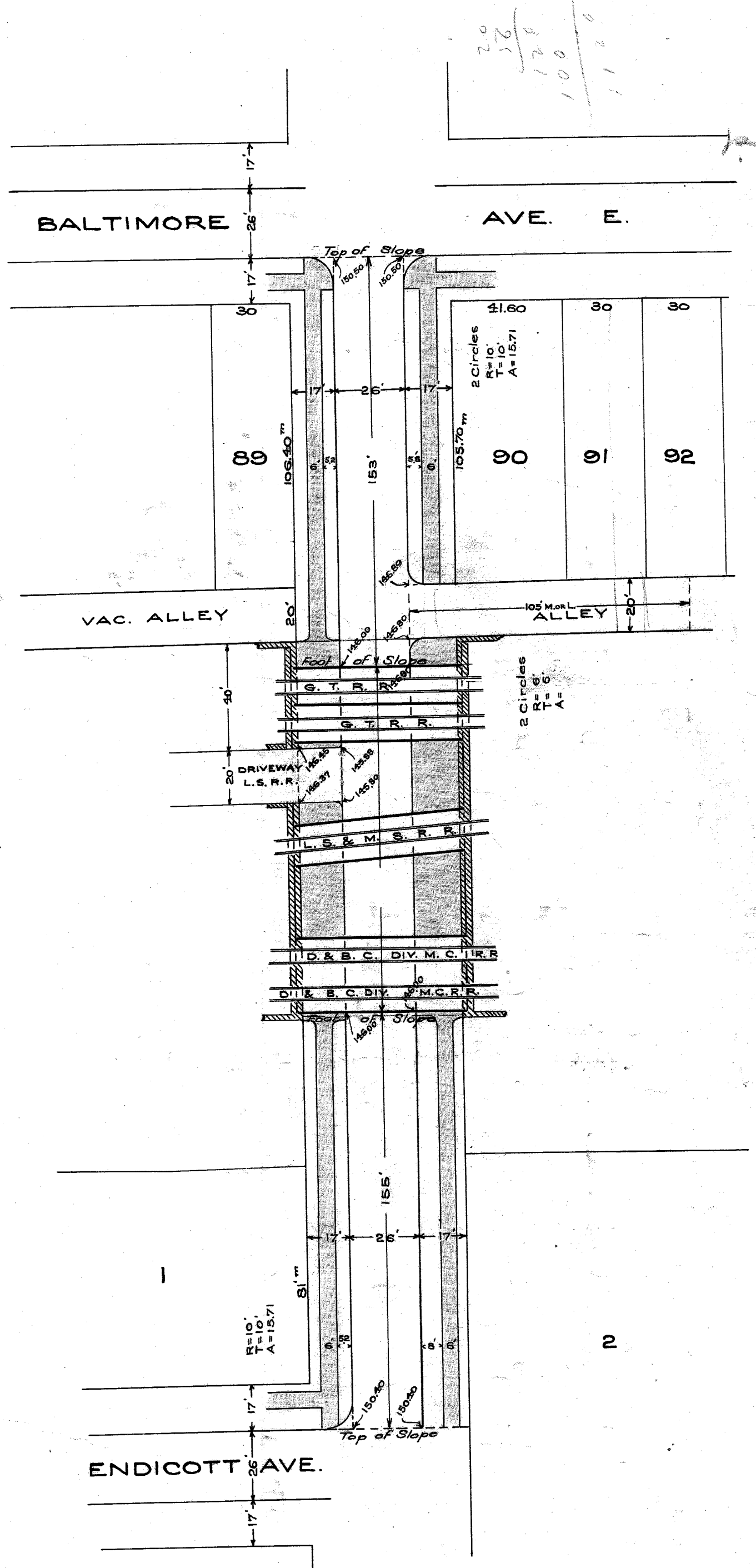
7-9 II-1-b  
File XU88-1



PROPOSED SUBWAY IN  
JOHN R ST.

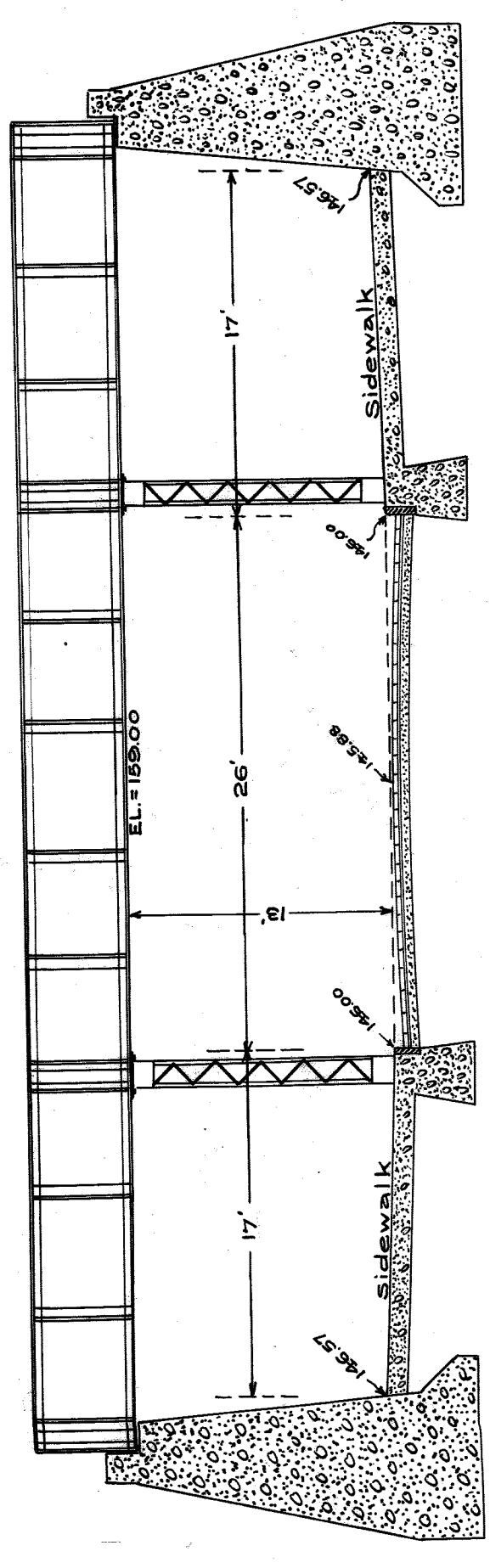
UNDER D. & B. C. DIV., M. C. R. R.,  
L. S. & M. S. R. R. & G. T. R. R.

Approved: *W. W. Conway* City Engineer.

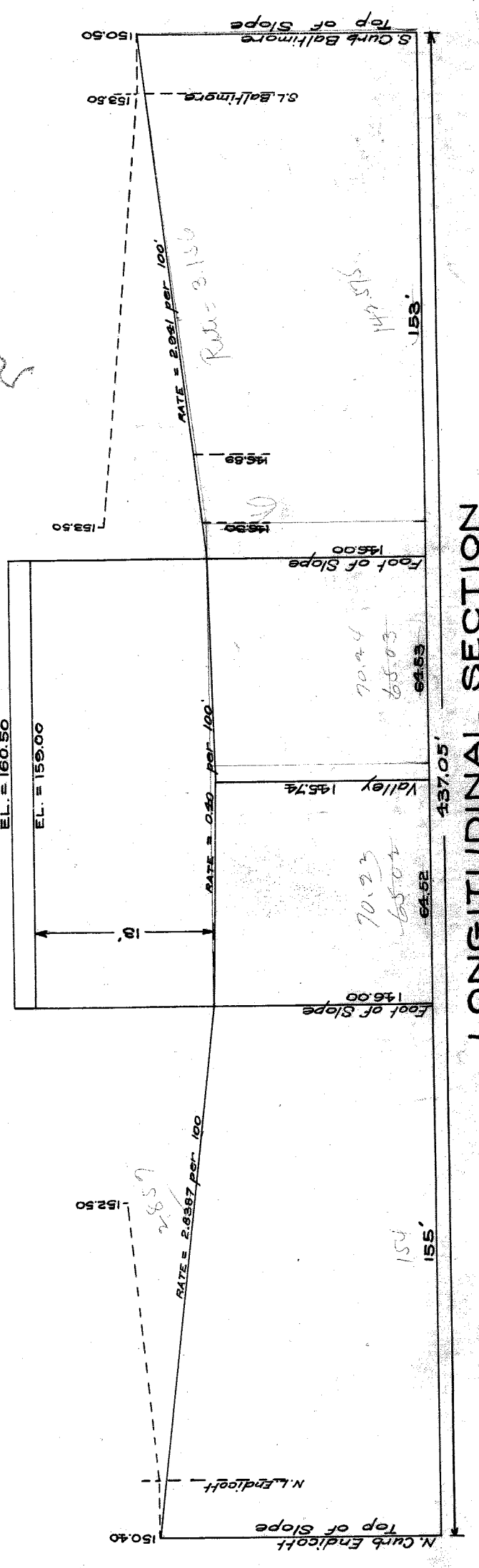


PLAN  
SCALE, ONE INCH = 40 FT.

*See from Plan  
make necessary on account  
of many marks for slopes  
of G.T.R.R. or for adjustment  
of water engineering -  
fair*



CROSS SECTION  
SCALE, ONE INCH = 8 FEET

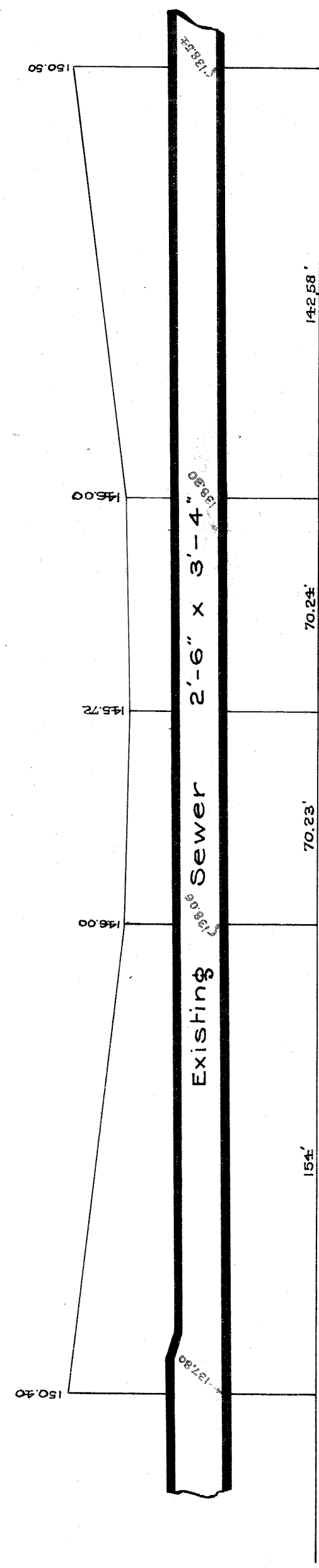
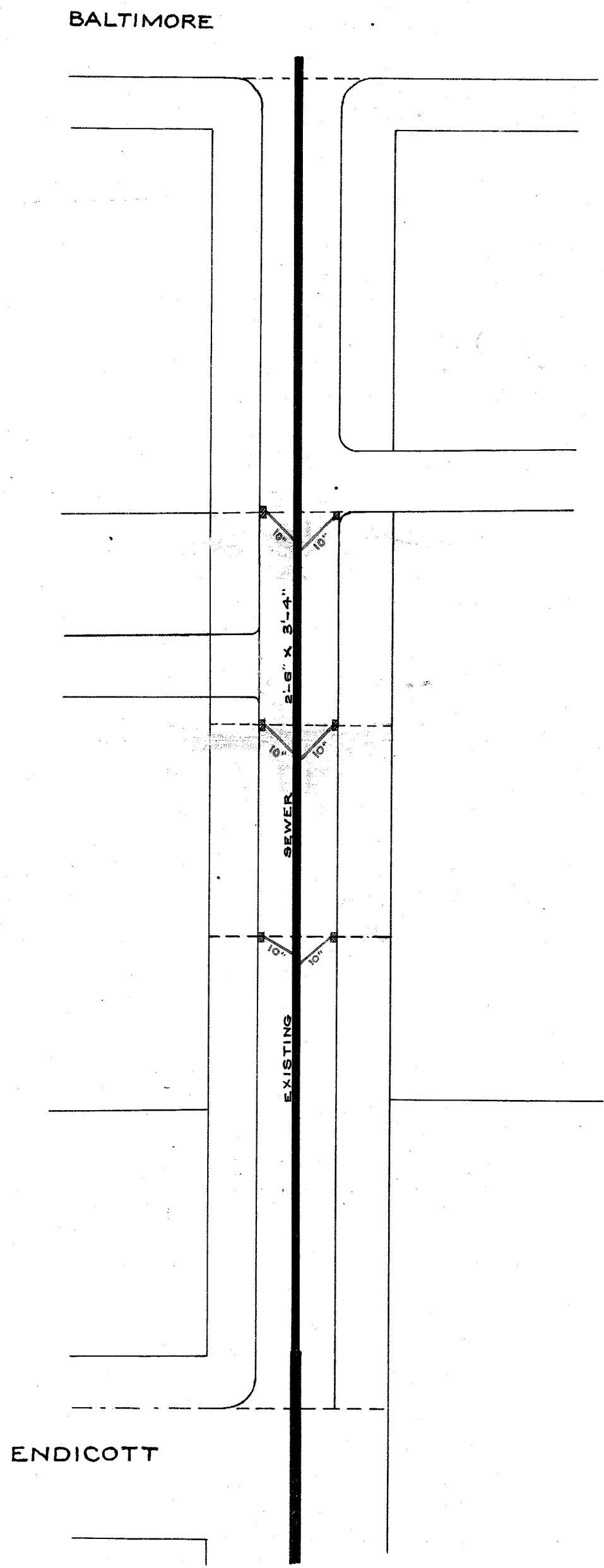


LONGITUDINAL SECTION  
HOR. SCALE, ONE INCH = 40 FEET.  
VER. " " = 10 "

CITY ENGINEERS' OFFICE  
GRADE SEPARATION & BRIDGES  
Case A  
Drawer 4  
No. 1114  
Drawn by John W. Reid, Aug. 26, 1909.



DRAINAGE PLAN  
 PROPOSED SUBWAY IN  
 JOHN R ST.



HOR. SCALE, ONE INCH = 40 FEET.  
 VER. " " = 10 " "

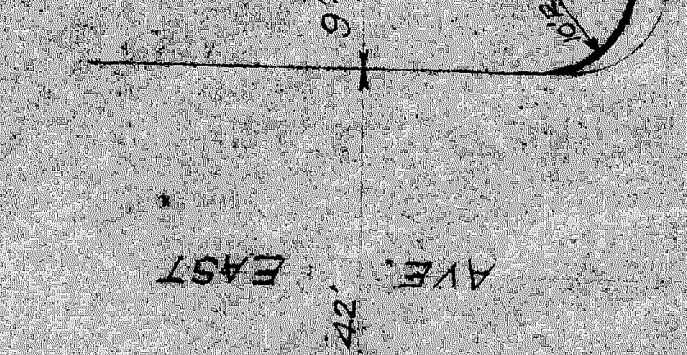
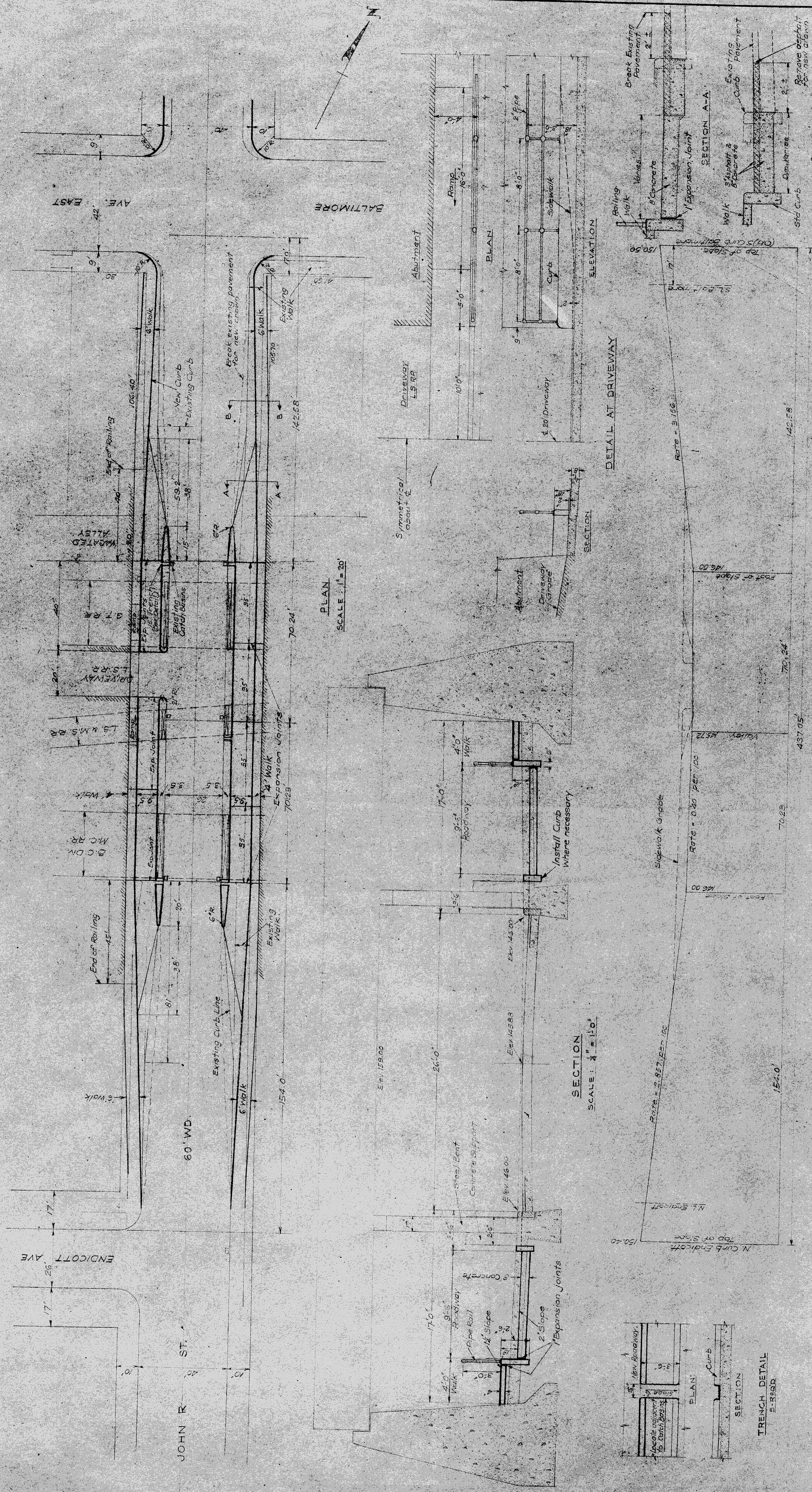
CITY ENGINEER'S OFFICE  
 GRADE SEPARATION & BRIGGS  
 Case A  
 Drawn by J.W. Reid  
 No. 1111c

Drawn by J.W. Reid, JAN. 7, 1910.

CITY ENGINEER'S OFFICE

A-4 II-1c





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

ROADWAY ADDITIONS  
UNDER PASS AT JOHN R. & M.C.G.T.R.R.  
SCALE AS SHOWN  
JULY 12, 1940

NO.	DATE	DESCRIPTION	BY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY	APPROVED
DRAWN BY	L. J. Krotz
TRACED BY	
CHECKED BY	H. M. Deitz



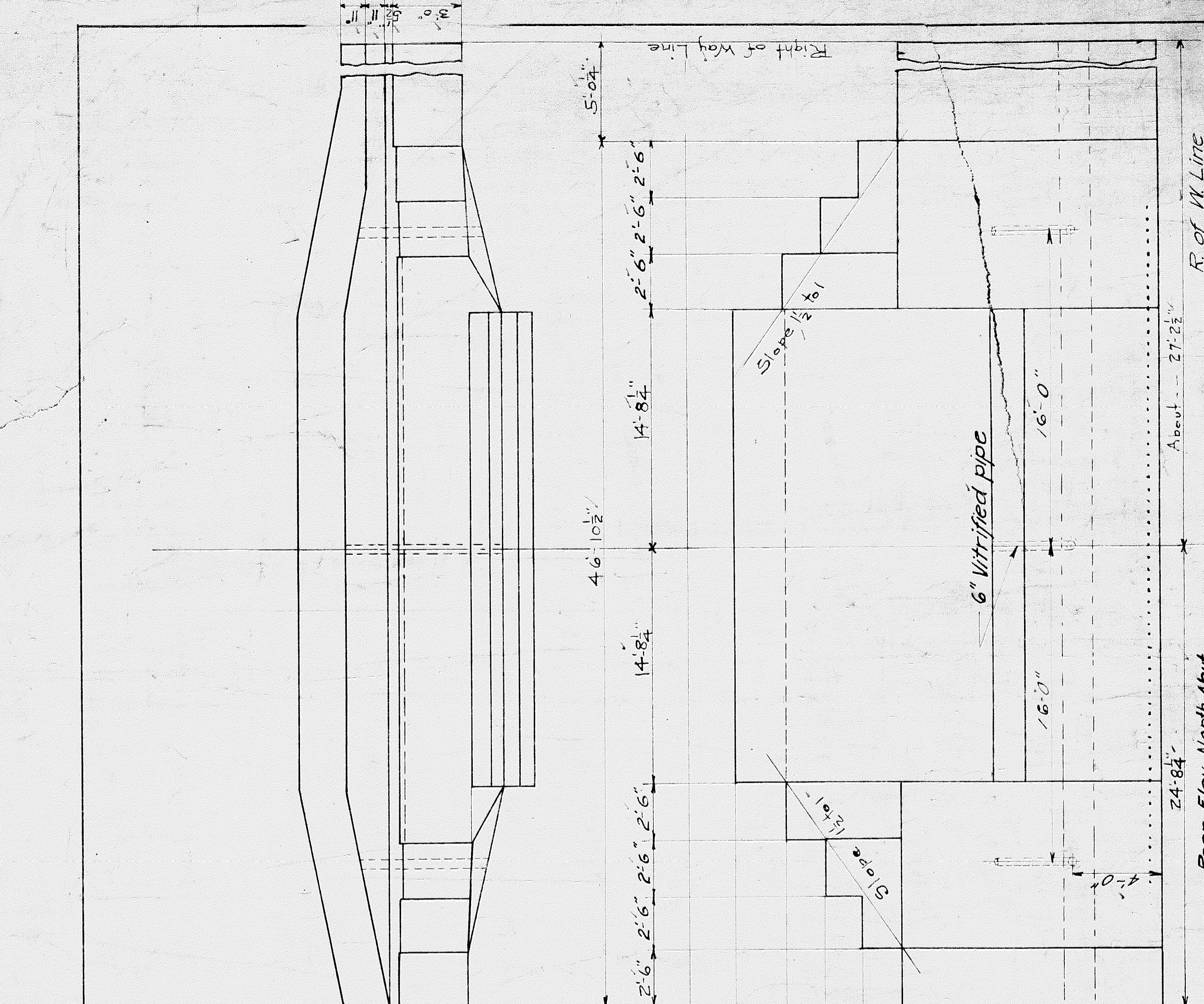
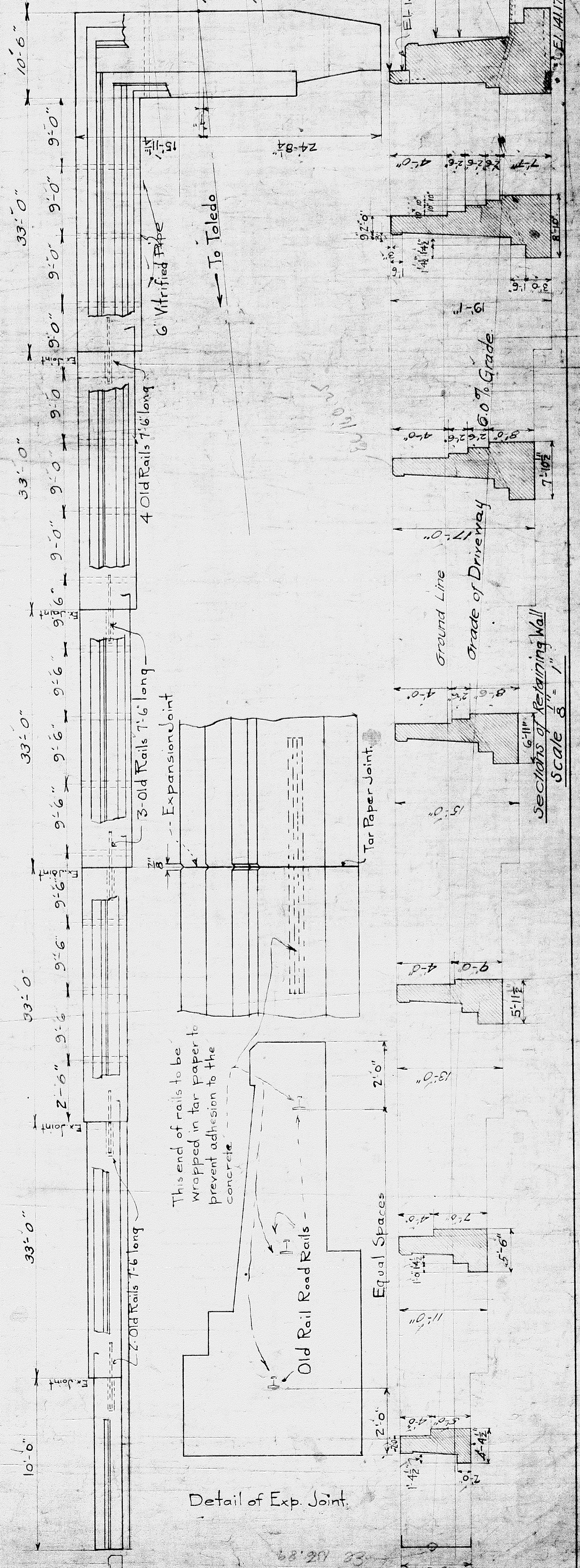
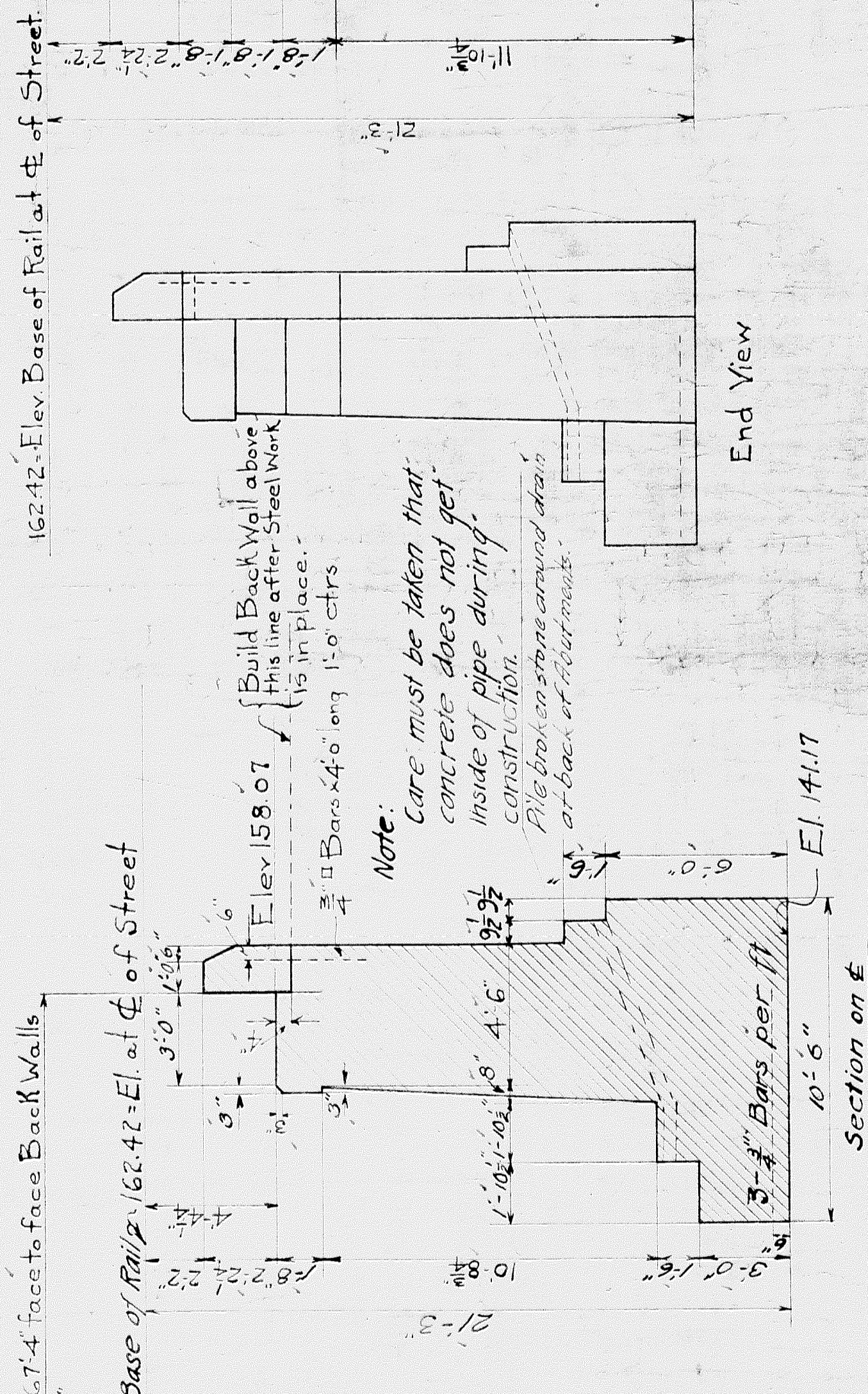
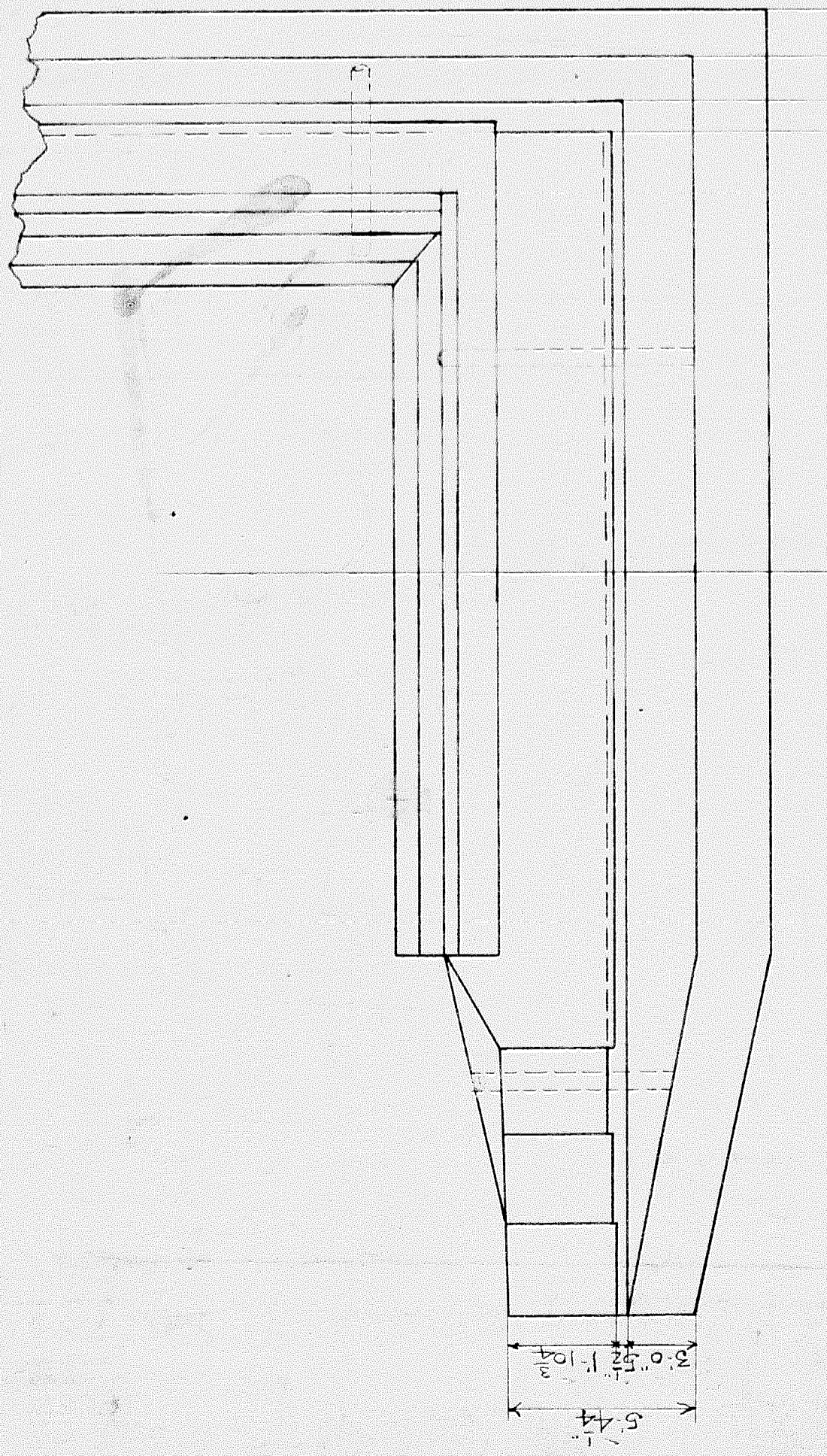
Mixture	Cu. Yds.	Cement	Sand	Stone
1-3-6	7.30	3240 Sacks	343 cu-yds	6.86 cu-yds
1-2-4	3.5	220 "	16 "	32 "

For Retaining Wall and Abutments.  
For Piers

Bill of Corr. Bars, Vit. Pipe, and Old R.R. Rails:

- 52  $\frac{3}{4}$ " Corr Bars 6'-6" long
- 62 " " " 8'-6" "
- 50 " " " 10'-3" "
- 58 " " " 4'-0" "
- 200 " " " 8'-0" "
- 130 lin. ft. of 6" Vit. Pipe
- 14 Old Rail Rails x 7'-6" long

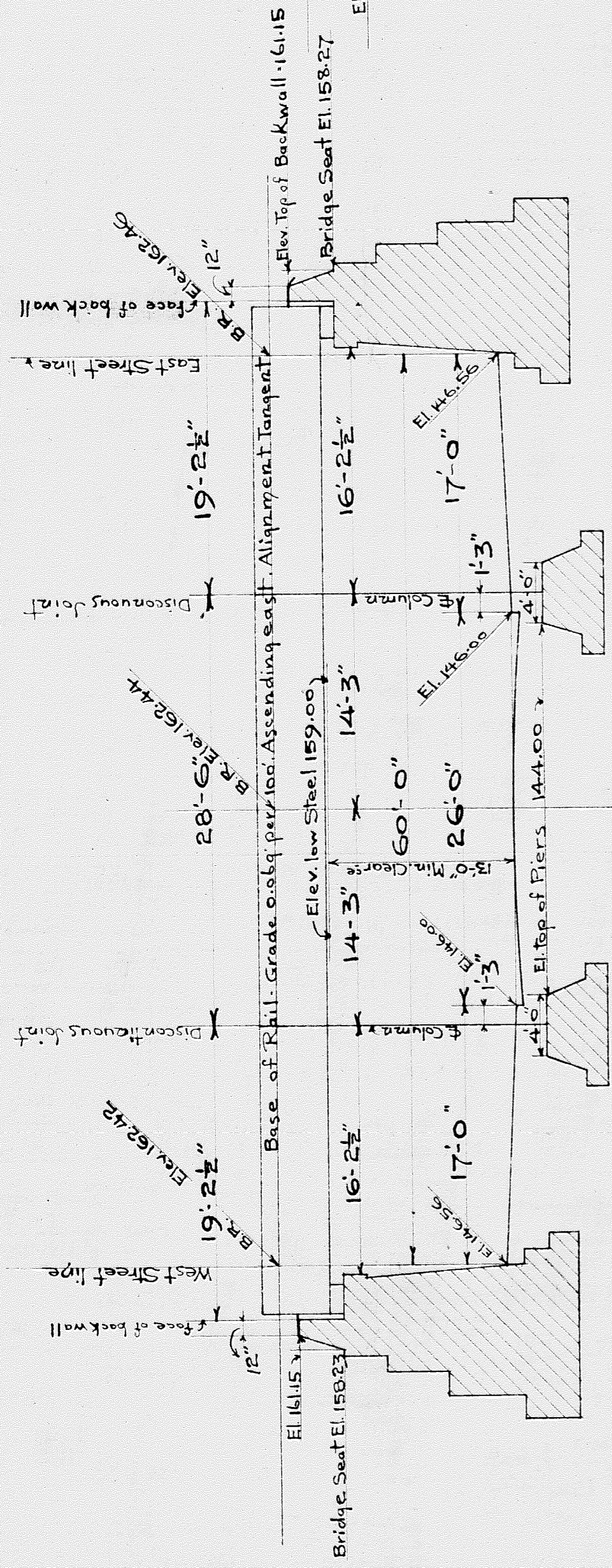
Notes:  
Carry masonry down as shown or as much farther as necessary to reach firm material. All exposed surfaces to have a dense, smooth and hard finish.  
Chamfer all exposed edges.  
Build Back Wall above Bridge Seat after Steel Work is in place.



REV. 7-28-10  
L.S. & M.S.A. Bridge Dept. S. Rackwell/C.E.  
Bridge No. Detroit B.C.  
Over John R. St. Detroit  
Masonry Plan  
Sheet 1 of 1  
Scale 3/8" = 1' Date 7-29-10 Draw. No. B-3670

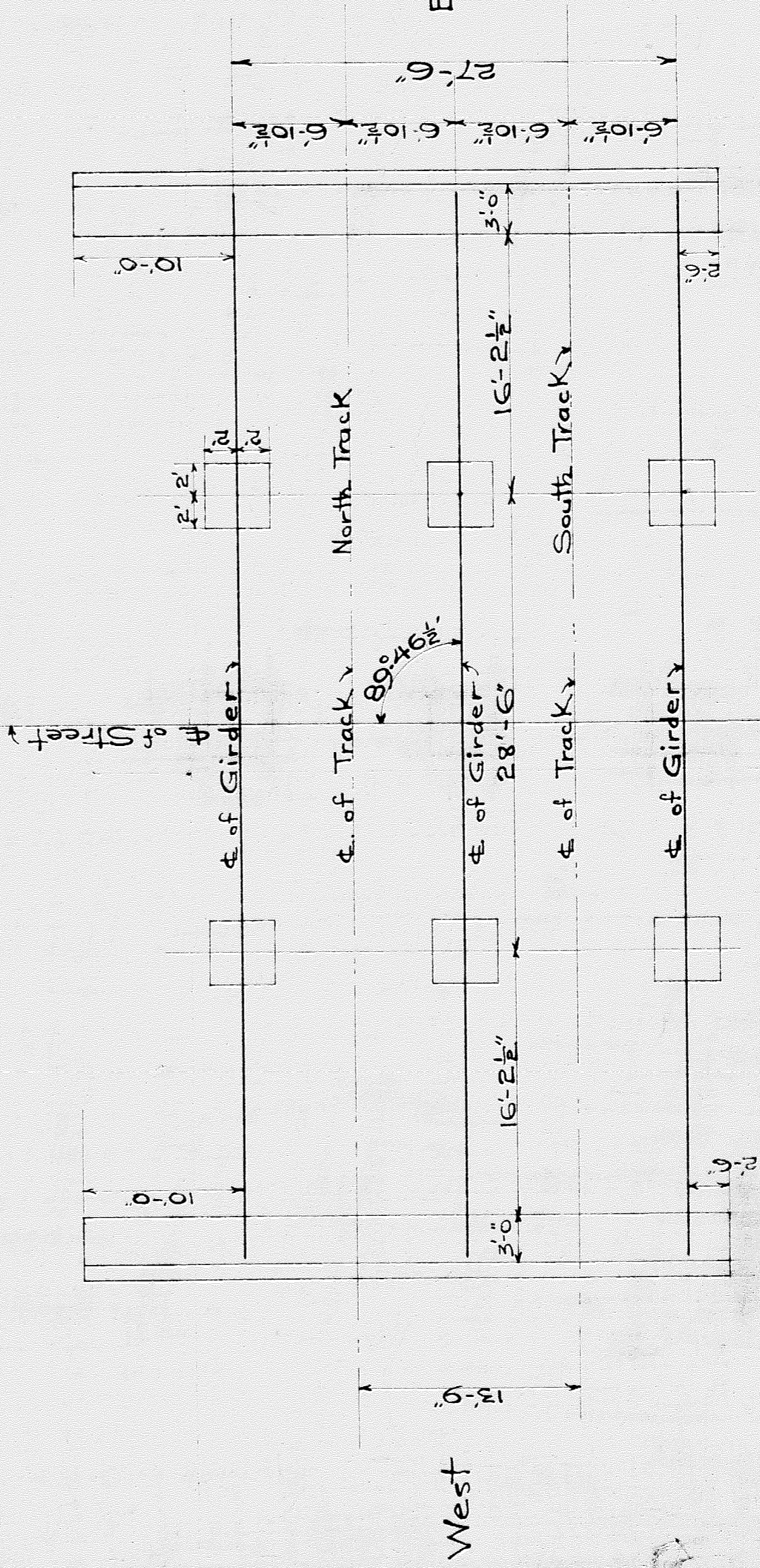
R16 Y088-5





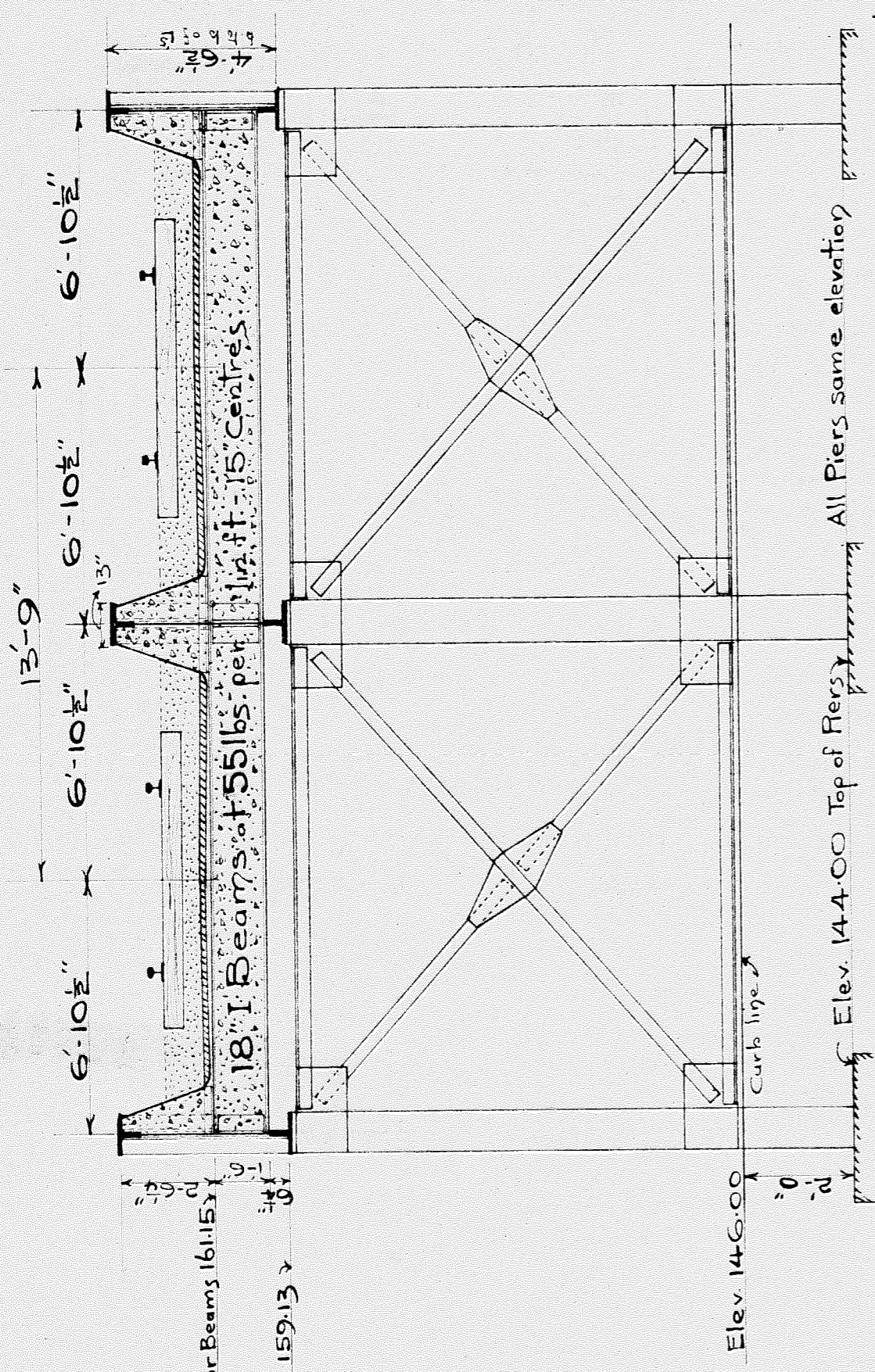
Note: All Steelwork shall be made level. Grade of track shall be arranged for in the ballast.

Elevation



Plan

Concrete: - Shall be placed by the Railway Company. It shall consist of Portland cement mixed in the proportion 1-2 1/2-5 by volume, the stone to pass through a 2" ring. All dust to be screened out.  
 Waterproofing: - Upon the top of the floor beams place a layer of cement mortar in the proportion of 1-2 and graded to drain in each direction to the drain holes over the curb lines. Upon the top of this shall be placed 3 ply of 10 oz tarred roofing felt thoroughly cemented together with coal tar pitch. The top surface to be well swabbed over with coal tar pitch applied hot and sprinkled with sand before cooling. Finish with one inch of cement mortar in the proportion of 1 of cement and 2 of sand.



Cross-Section

Specification: - G.T. Ry. 1910. All material to be subpunched and reamed.  
 Painting: - Steelwork before leaving shop shall be given one coat of pure red lead mixed with pure linseed oil. After erection field rivet heads shall be given one coat of shop paint. All surfaces not coming into contact with concrete filling and waterproofing shall be given two coats of Patterson-Sargeant Nobrac Black Carbon Paint or other black carbon paint of approved brand.  
 The design must incorporate ballast aprons extending over the back walls.  
 The successful Bidder will be required to guarantee its total estimated weight of the steel structure, within two percent (2%) of the shipping weight.  
 Tenders shall be accompanied by stress sheets with sufficient details shown to enable the proposed design to be properly considered and checked. The successful Bidder shall send complete shop drawings to the office of the Chief Engineer for examination and approval before commencing shopwork, and all features of the design and workmanship shall be subject to his approval. Upon completion of the work the Bridge Company shall furnish to the Chief Engineer complete set of tracings of shop drawings on linen.

This plan was prepared from information contained in a blue print prepared by Resident Engineer, Detroit, Michigan, dated Jan. 5th 1910.

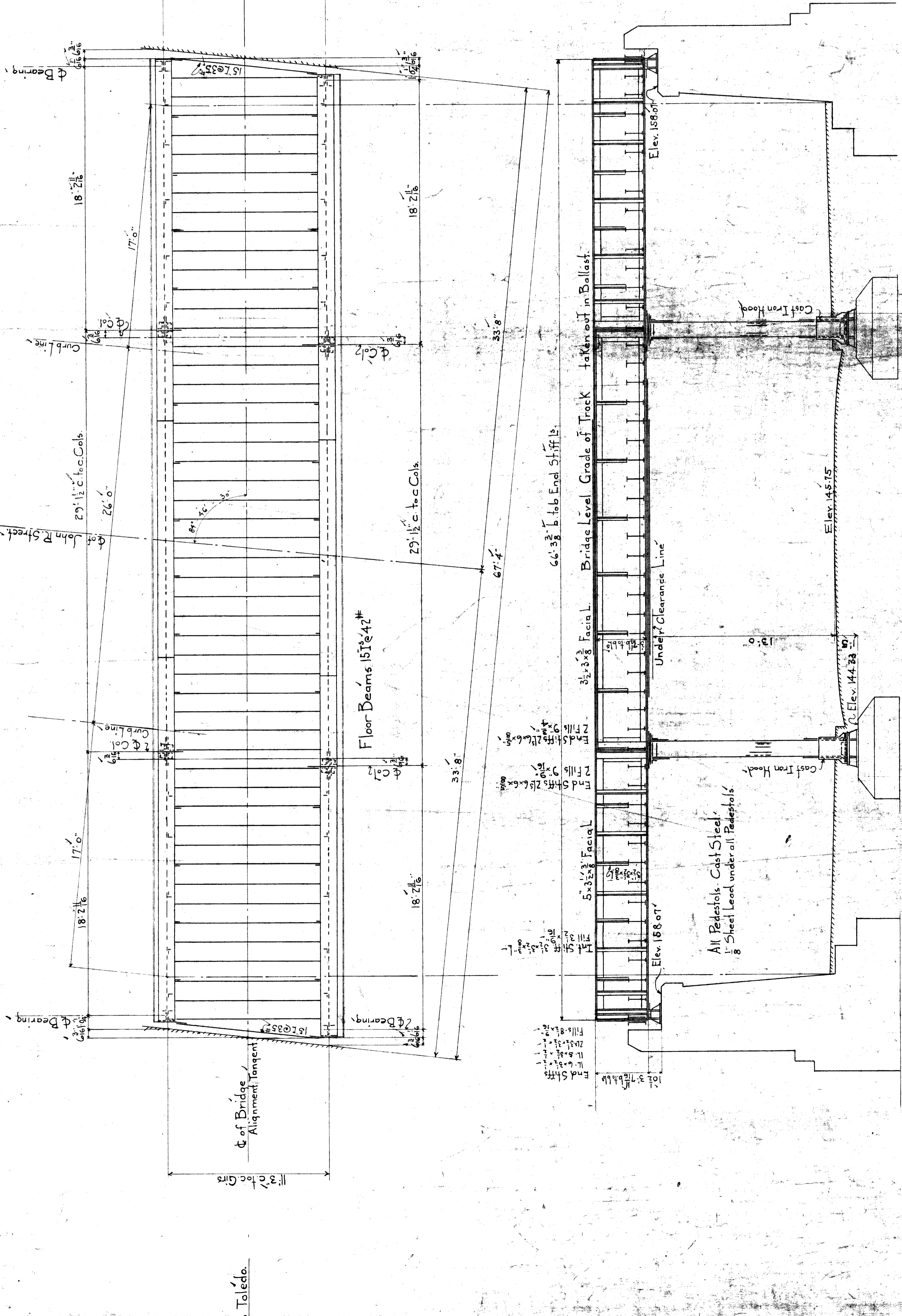
G. T. Ry.  
 Western Division - 29th District  
 Bridge over John R. Street.  
 Detroit - Michigan

Approved: *Stewart*  
 Chief Engineer  
 July 20 1910  
 Span Diagram  
 Scales: 1" and 1/4" = 1 foot.

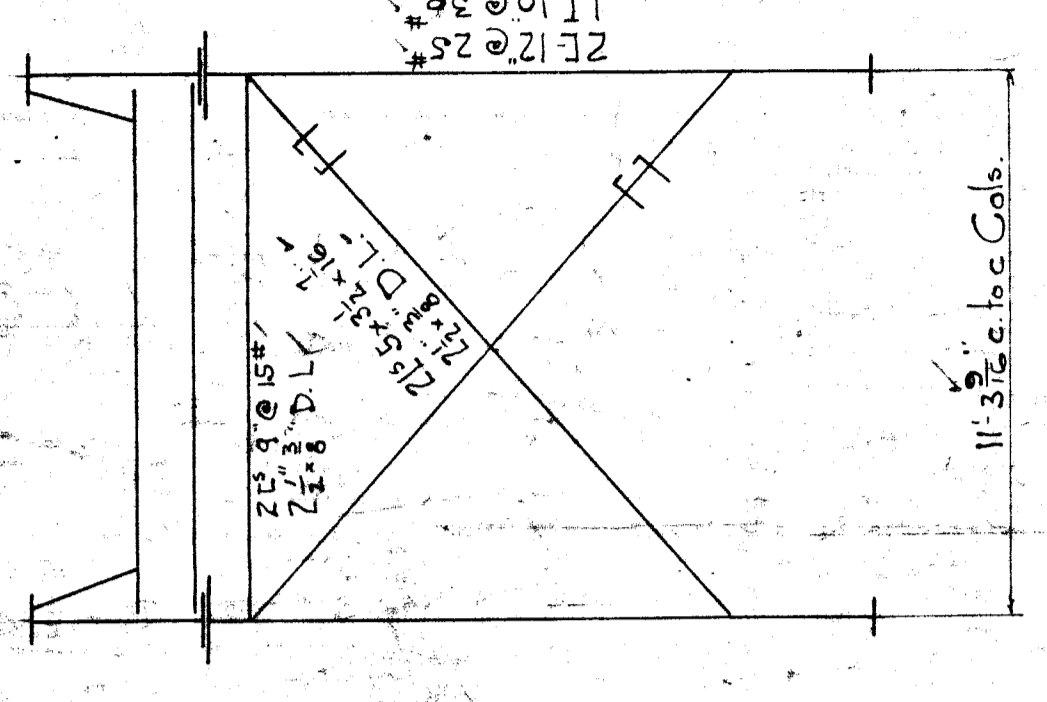
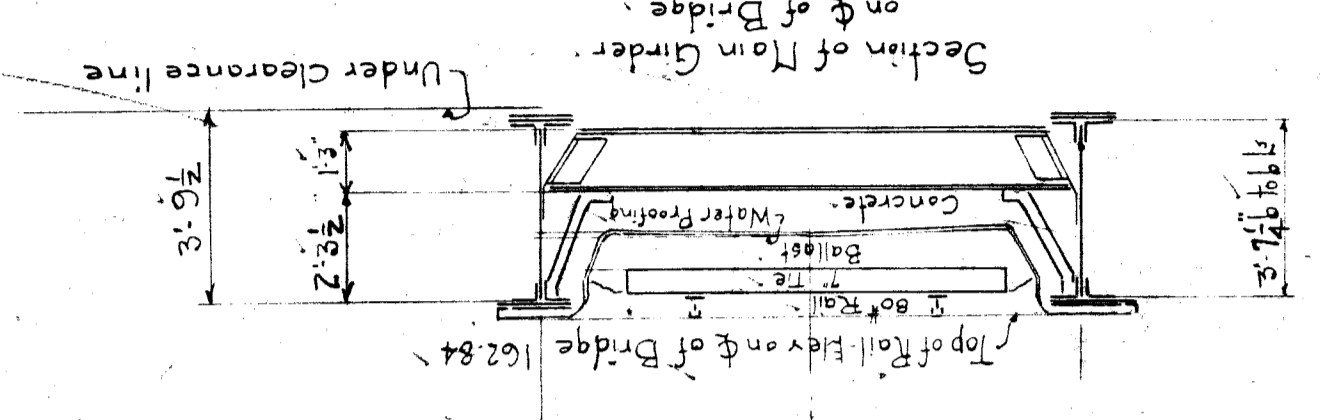








To Toledo.  
 Main Girders 29 1/2 c.l.c. Designed for E50 L.L.  
 5300# per lin.ft (single track L.L.)  
 D.L.  
 15I @ 42# Fl. Bm.  
 Section parallel to track  
 End Ribnet Plich 24  
 5800# per lin.ft D.L.  
 Street Girders 18 1/2 c.l.c. Designed for E50 L.L.  
 5700 lb per lin. ft D.L.  
 End Ribnet Plich 24  
 11-8 1/2 c.l.c. Top Flg.  
 15-0 c.l.c. Bottom Flg.  
 21-6 1/2 c.l.c. Bottom Flg.  
 43 x 5/8 Web without Stiffs.  
 17 1/4 c.l.c. Full Length Top Flg.  
 14 x 3/8 c.l.c. Bottom Flg.  
 14 x 1/2 x 16-3 Top & Bot Flg.  
 21-6 1/2 c.l.c. Each Flg.  
 15-0 c.l.c. Top Flg.  
 11-8 1/2 c.l.c. Bottom Flg.  
 21-6 1/2 c.l.c. Bottom Flg.



Set Bents parallel with Street.

For Steel Plan Details see Brush St. Bridge # Sh. 2, Draw. # B3860  
 Specifications. New York Central Lines. Steel Railroad Bridges 1910.

Rivets 7/8 except where noted.  
 Erection by L. S. & M. S. Ry.  
 Add 8 lb per sq ft of lamp black to each gallon of shop paint.  
 Unit Stresses used 16000 tension  
 11000 shear



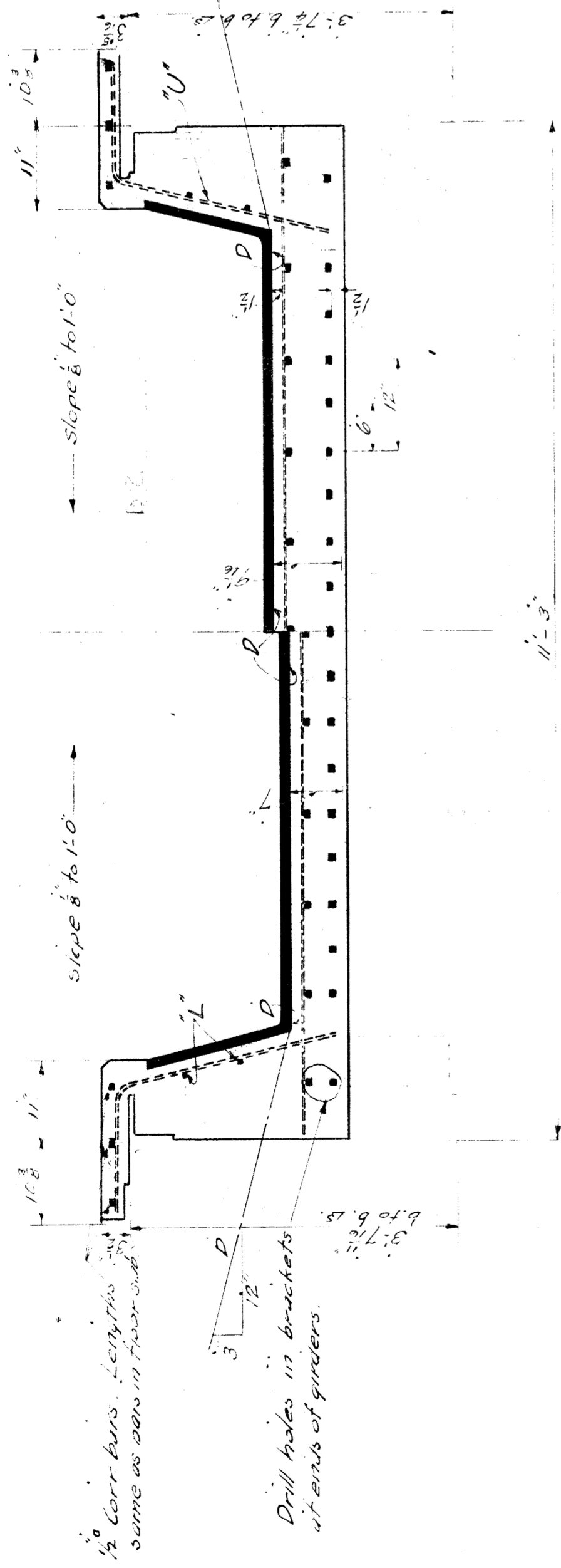




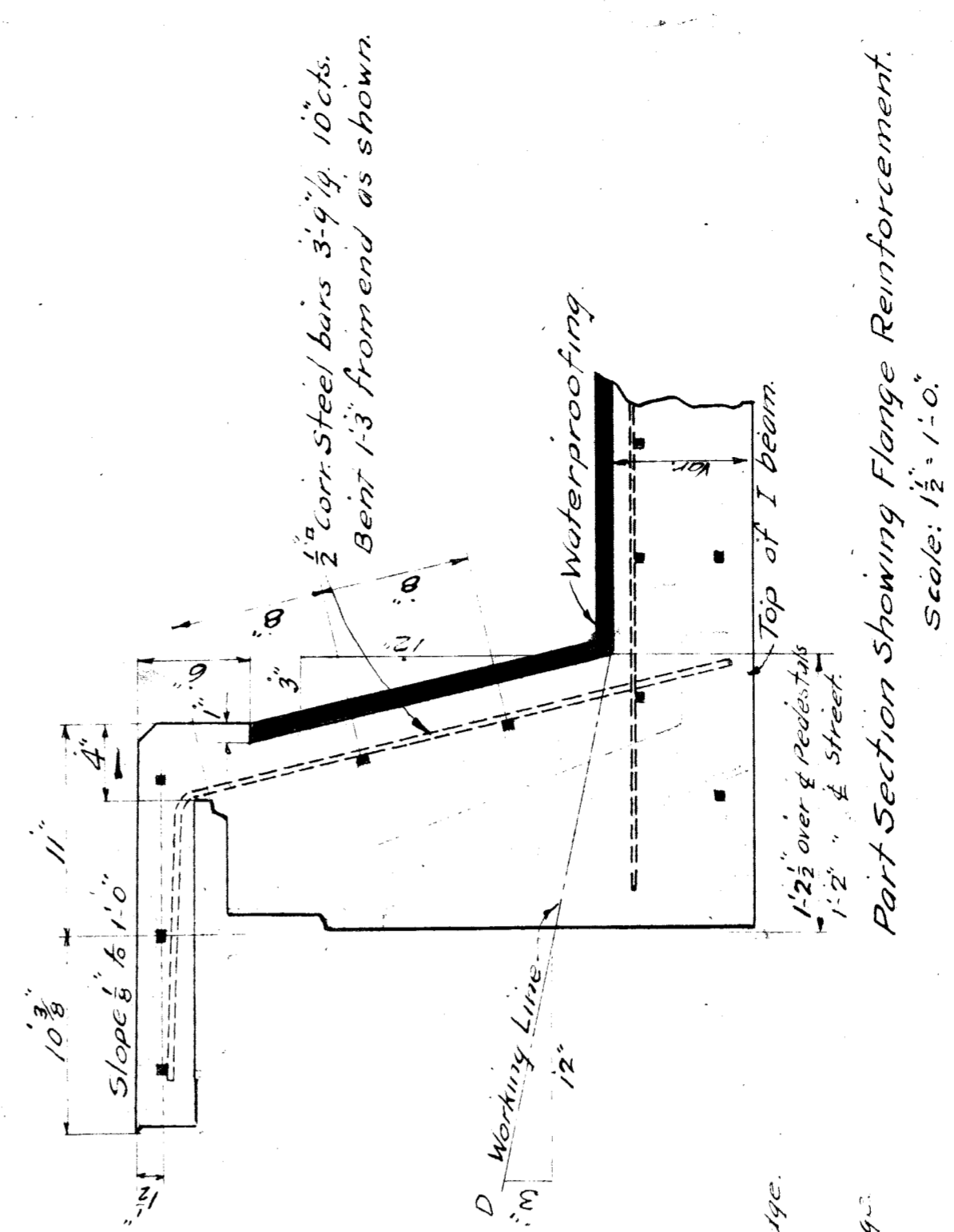
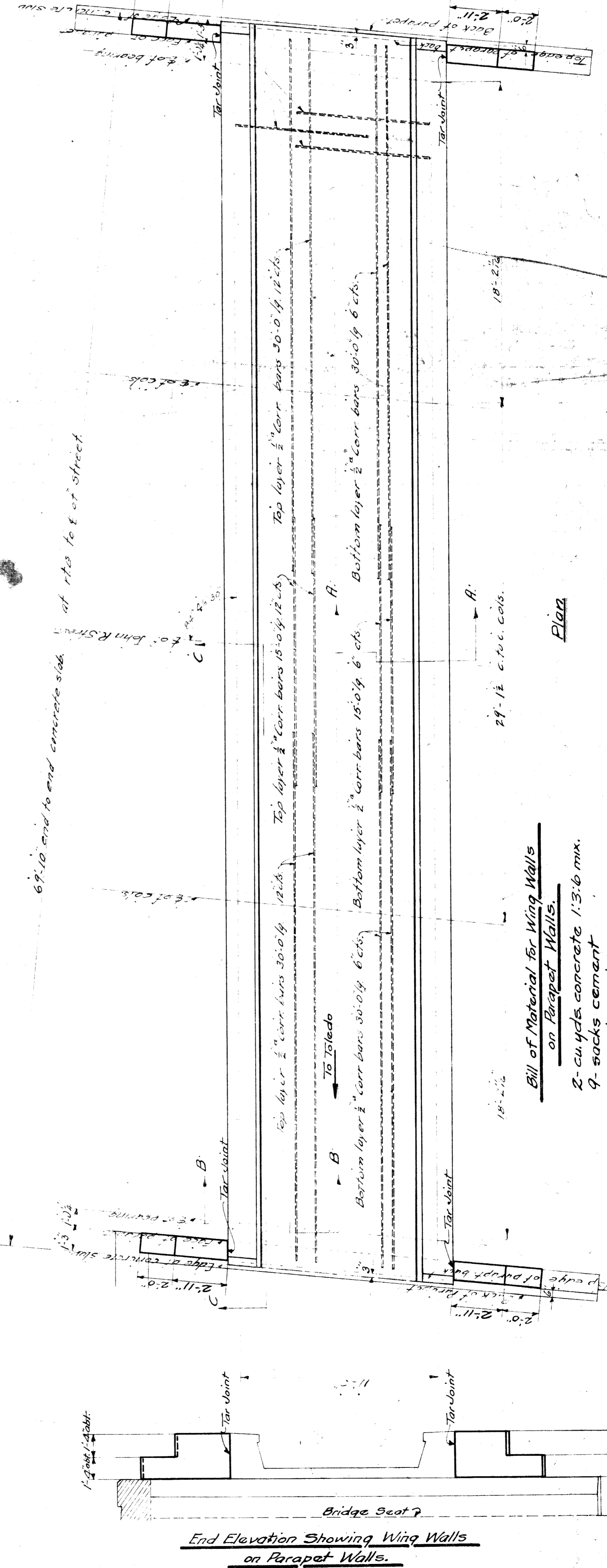
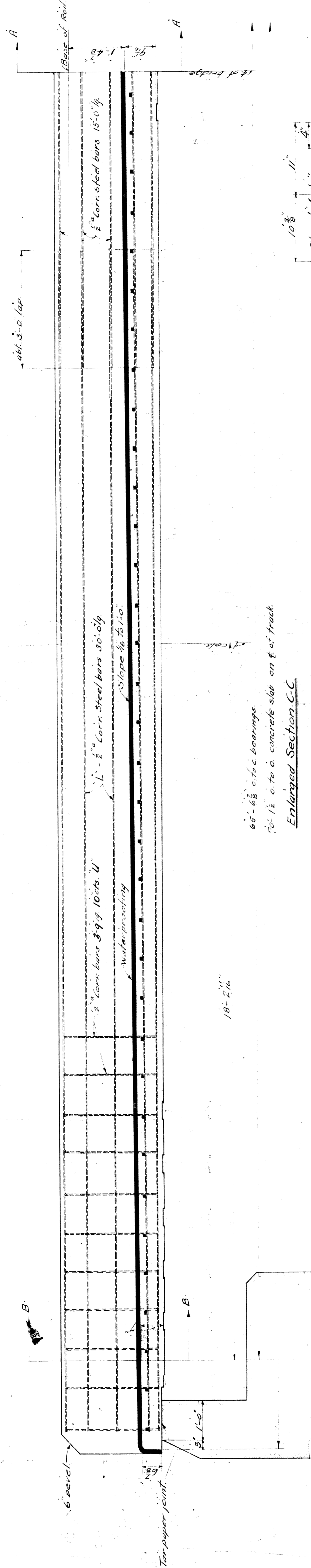
Bill of Material (Track)

- Concrete
  - 32 cu yds concrete 1:2-4 mix.
  - 50 sacks cement
  - 14 cu yds sand
  - 28 cu yds crushed stone (1 1/2")
  - Waterproofing
  - 853 sq ft of
  - Steel
  - 80-3/4" corr bars 30-0-1/4 (long)
  - 40-3/4" corr bars 15-0-1/4
  - 70-3/4" corr bars 7-6-1/4 (transverse)
  - 168-3/4" corr bars 3-9-1/4 (upright)
- These bars can be cut from 139-30 pcs.

Note  
Chamber all exposed edges. Fasten upright bars U to L. Floor slab below line D-D must be completed in one continuous operation. Whenever a part of the concreting is finished and allowed to stand for any length of time, on joining with new concrete the joint must be thoroughly cleaned of all dirt and broken concrete and then thoroughly wetted and slushed with rich cement mortar before proceeding with the new concreting.



Enlarged Section B-B



L.S. & M.S. Ry. Bridge Dept. S. Rockwell, C.E.  
 Bridge No. Detroit Branch  
 Over John R Street  
 Detroit, Mich.  
 Plan of Concrete Floor Slab  
 Sheet 1 of 1  
 Scales: 1/2" = 1'-0" (April 5, 1911) Draw. B-4142-B  
 Revised Aug. 12, 1912. J.M.K.