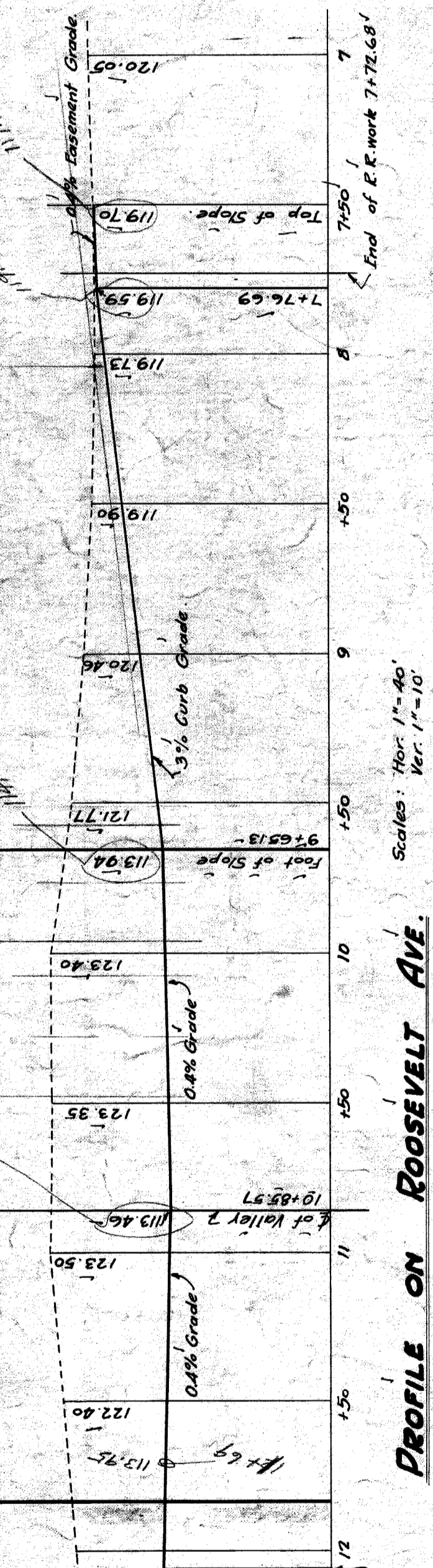
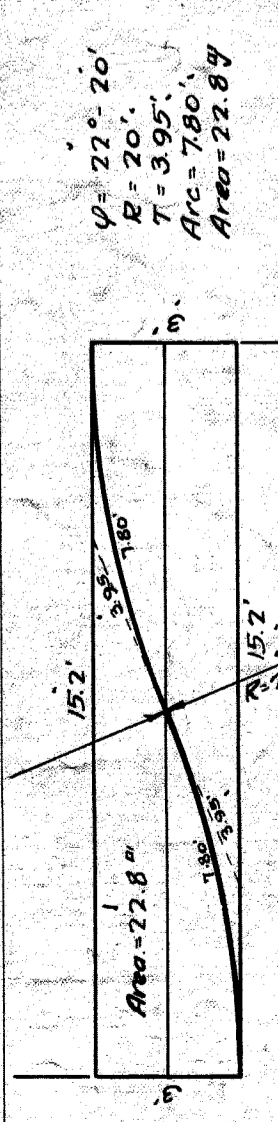
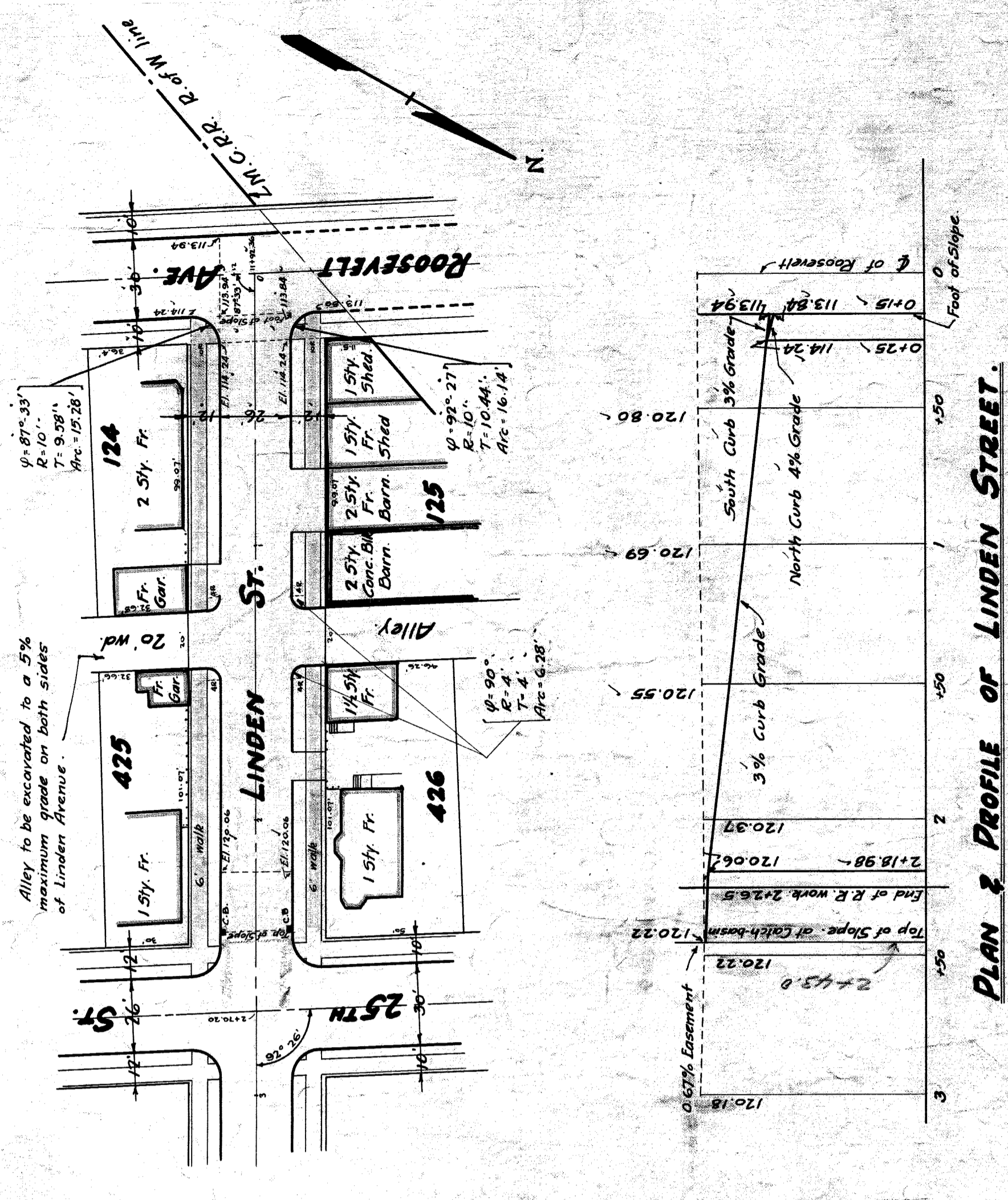


**REVERSE CURVE FOR WIDENING PAVEMENT 24' TO 30'.**

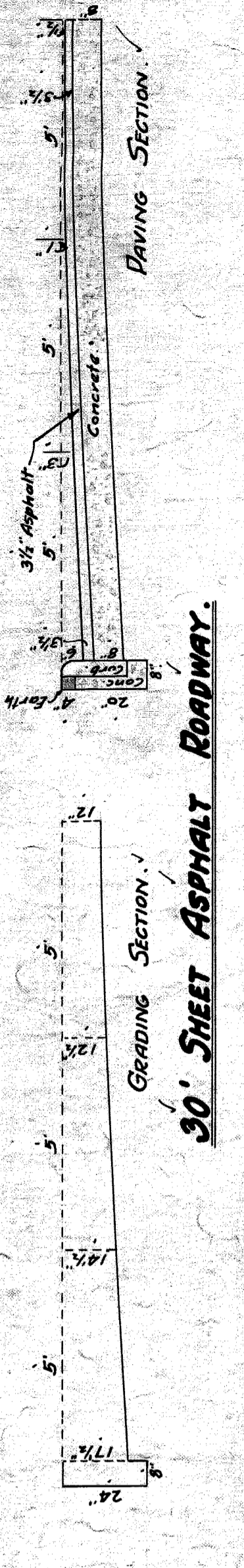


**PROFILE ON ROOSEVELT AVE.**

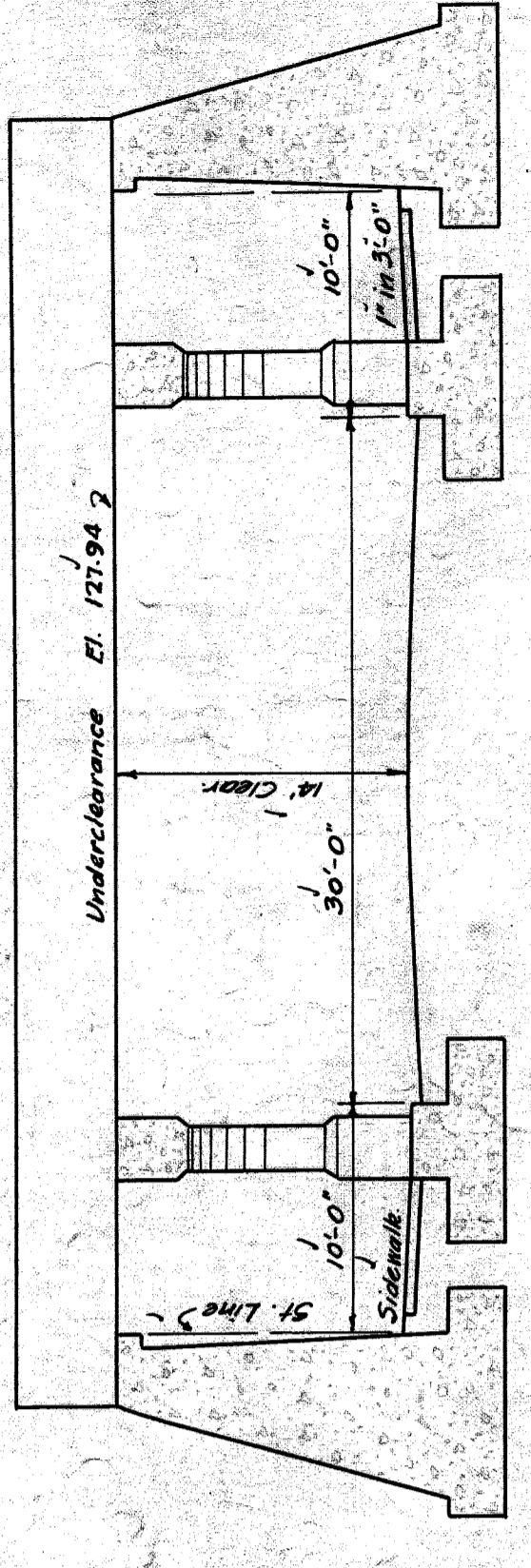
Scales: Hor. 1"=40'  
Ver. 1"=10'



**PLAN & PROFILE OF LINDEN STREET.**

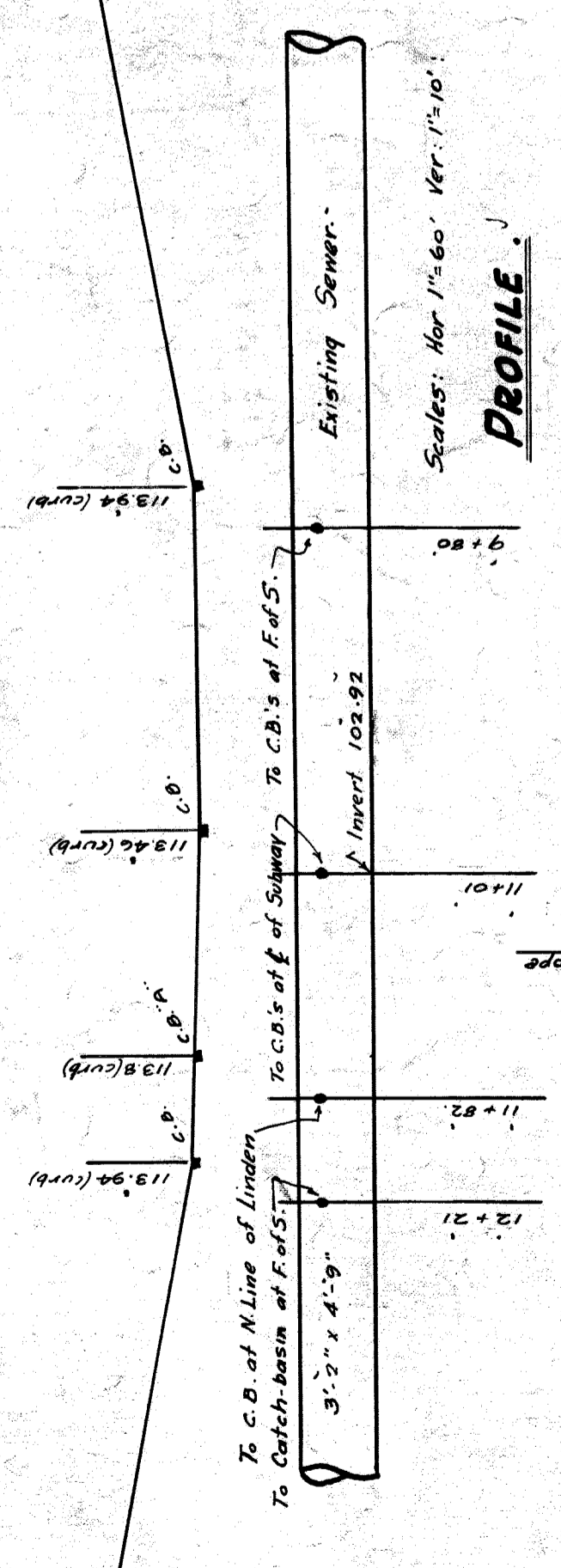


**30' SHEET ASPHALT ROADWAY.**



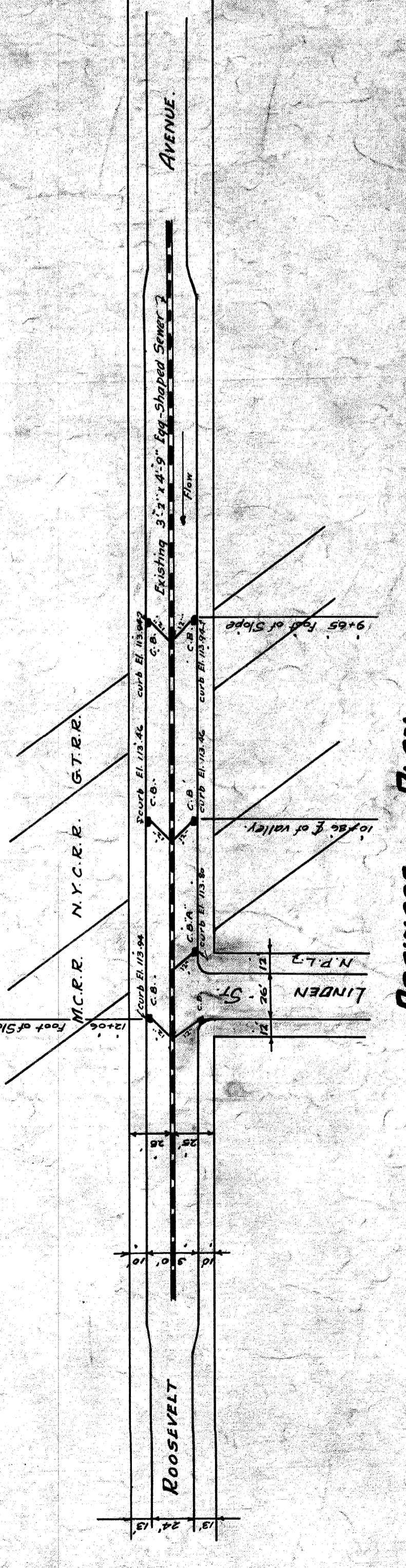
**SUBWAY - SECTIONAL ELEVATION.**

Scale 1/8"=1'-0"



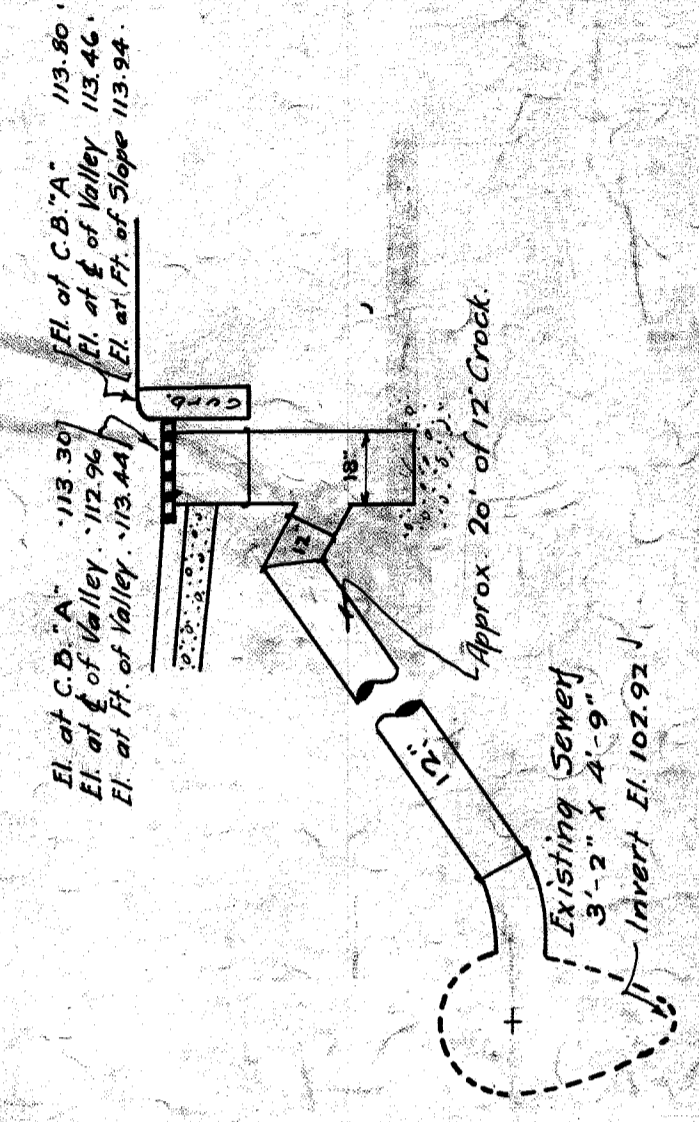
**CATCHBASIN DETAIL.**

Scales: Hor. 1"=60'  
Ver. 1"=10'



**DRAINAGE PLAN.**

Scale 1"=60'



**EXISTING SEWER.**

Approx. 20' of 12' Creek

El. of C.B. A. 113.50  
El. of Valley 112.94  
El. of H. of Valley 113.44  
El. of H. of Valley 113.54

Approved:

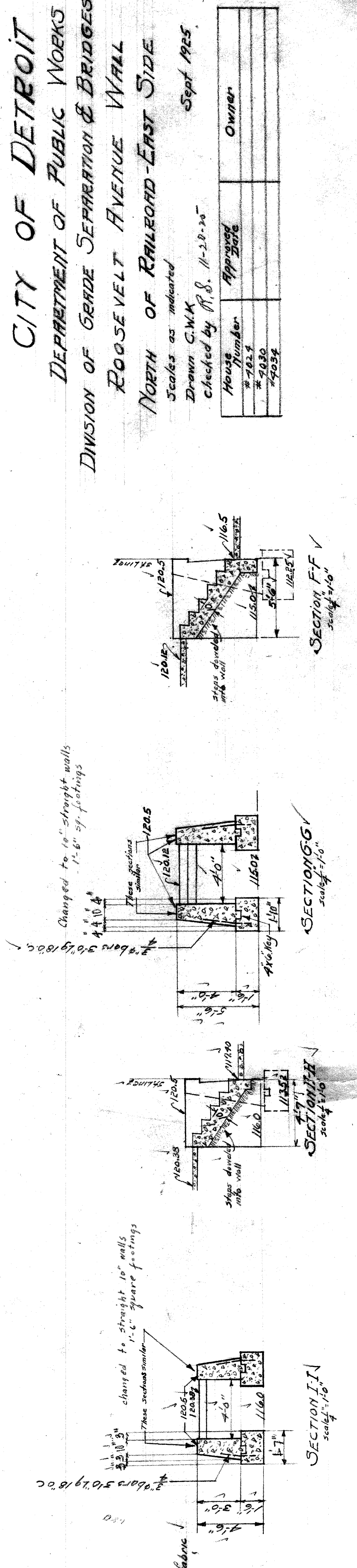
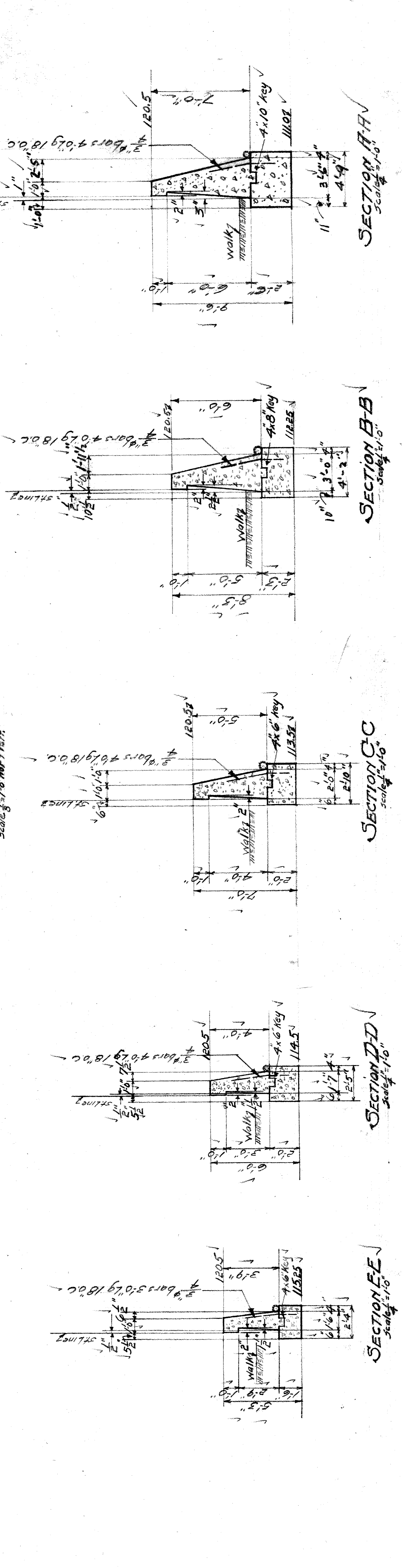
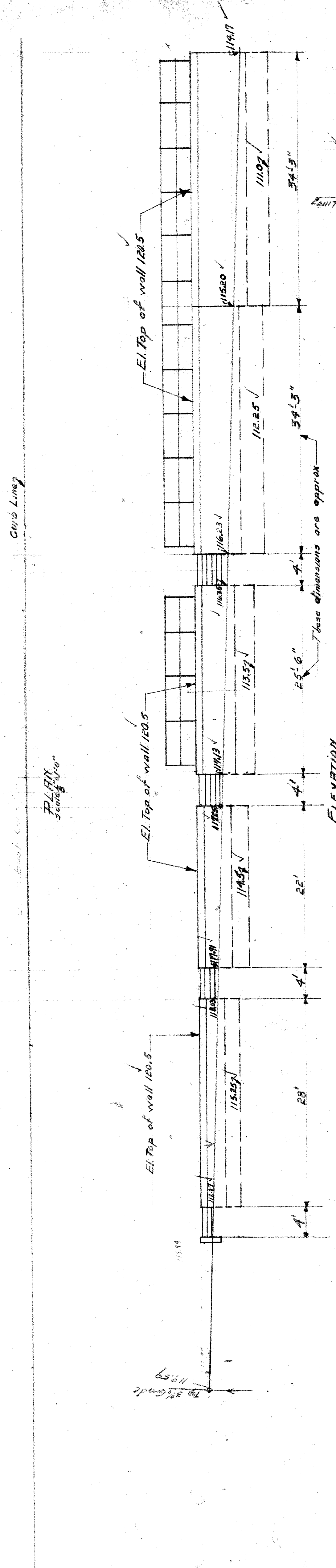
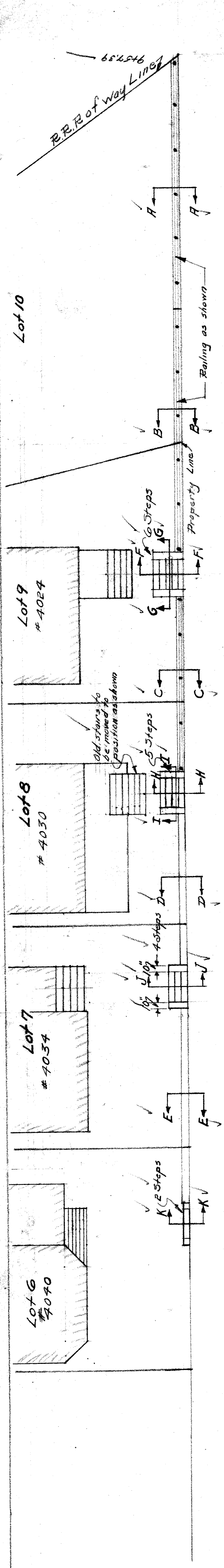
City Engineer: *Perry J. Freeman*  
Asst. Chief Engineer M.C.R.R.: *Edw. H. ...*  
Chief Engineer S.T.E.P.: *J. J. ...*

**CITY OF DETROIT.**  
DEPARTMENT OF PUBLIC WORKS.  
OFFICE OF CITY ENGINEER.  
DIVISION OF GRADE SEPARATION & BRIDGES.

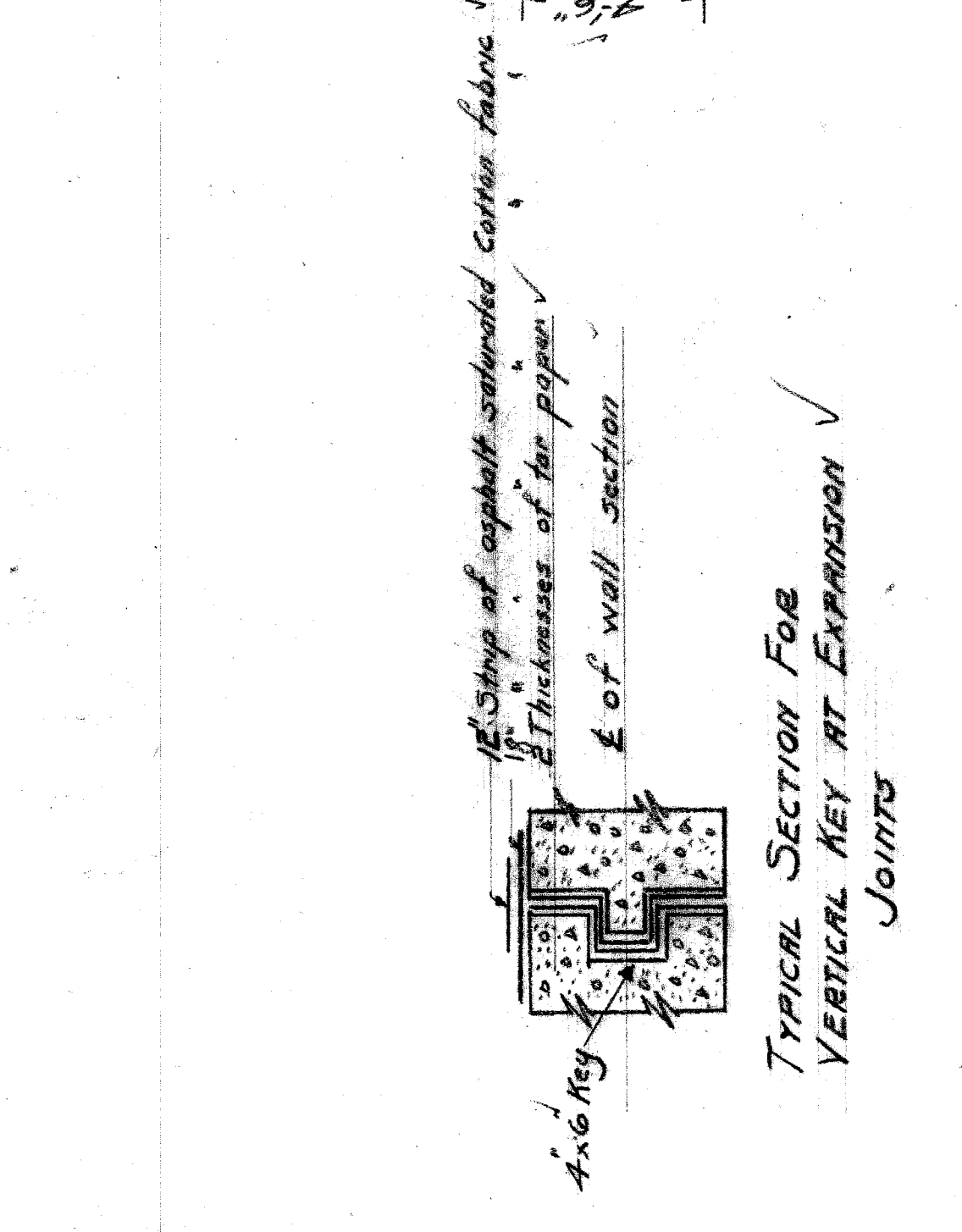
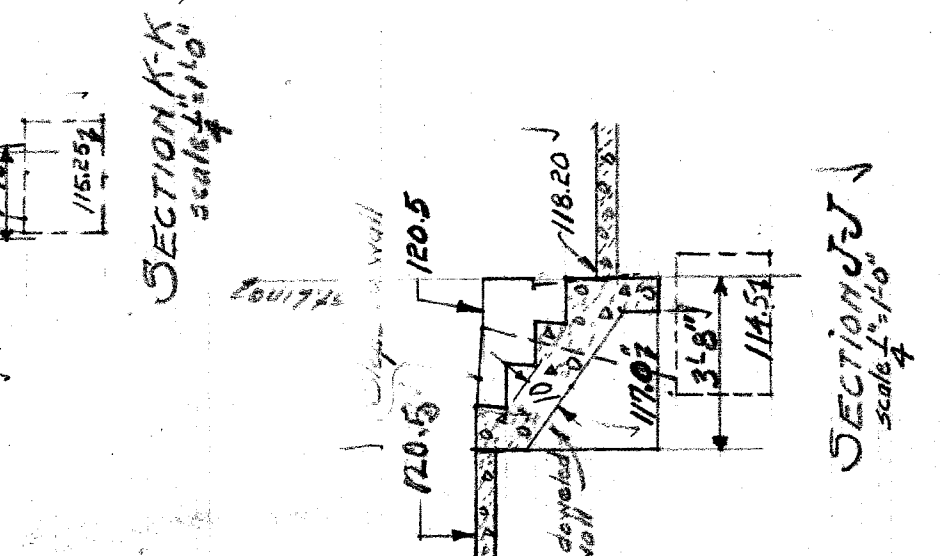
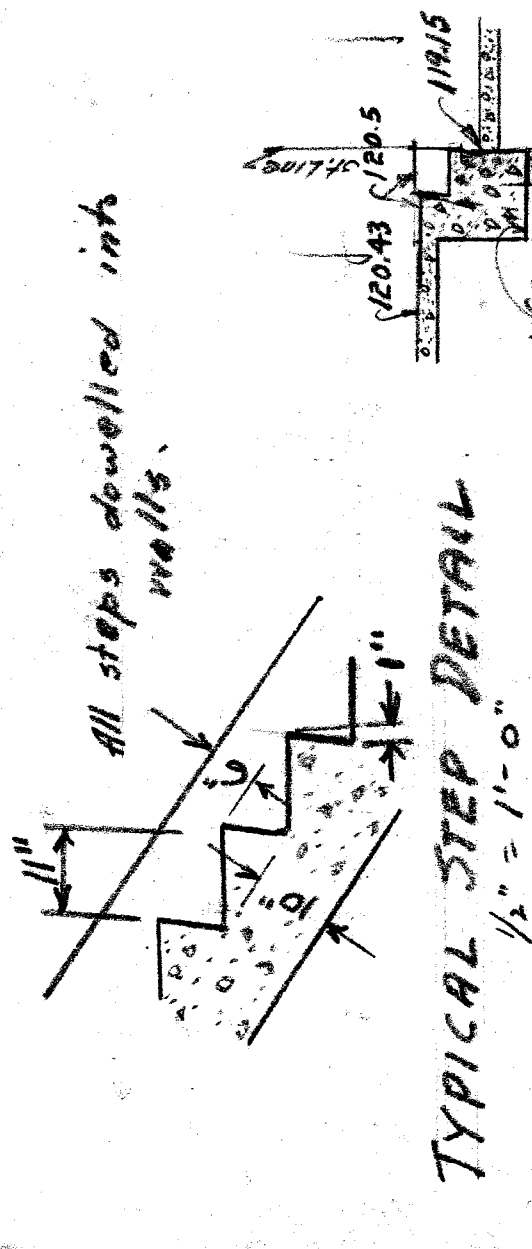
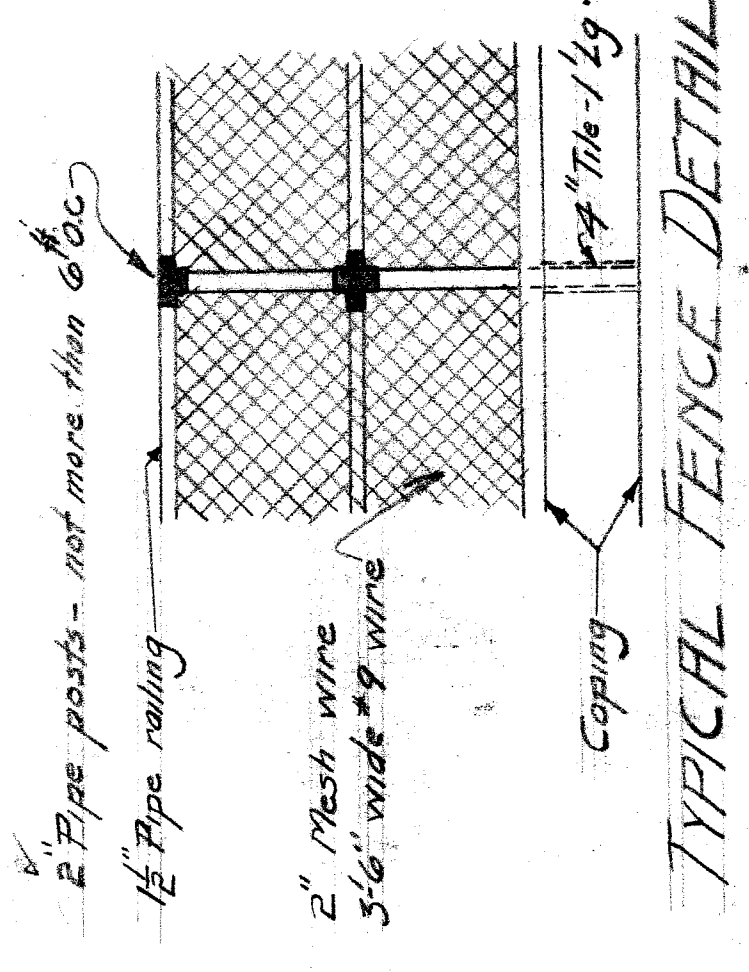
**ROOSEVELT AVE.**

Scales as indicated.  
Designed: August 8-6-25.  
C.B. 5-24-25.  
C.B. at 52' on Union St. proposed street 9-28-29.  
Field Books: W-101, W-102, W-103.





**NOTES**  
 All exposed corners to be chamfered to 1" ✓  
 All concrete mix 1:2:4 ✓  
 Back of walls to receive two brick coats of asphalt waterproofing ✓  
 Connect all drains to sewer ✓  
 All drains to be 4" crack-joints covered with tar paper.

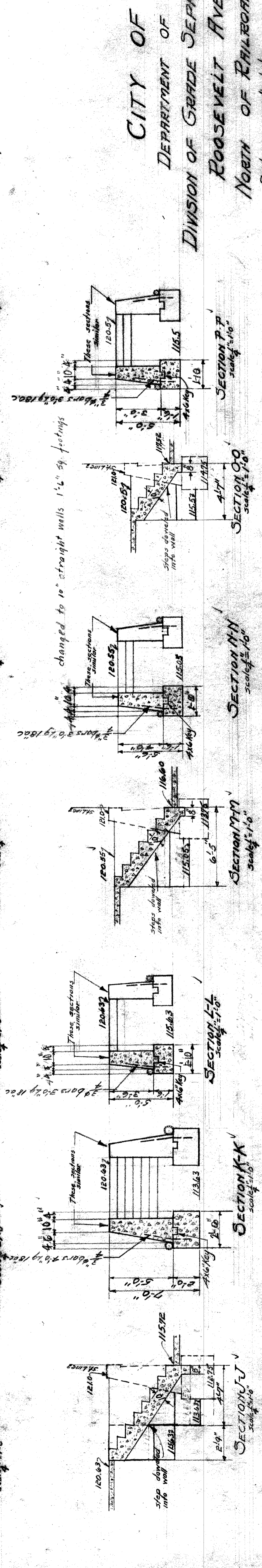
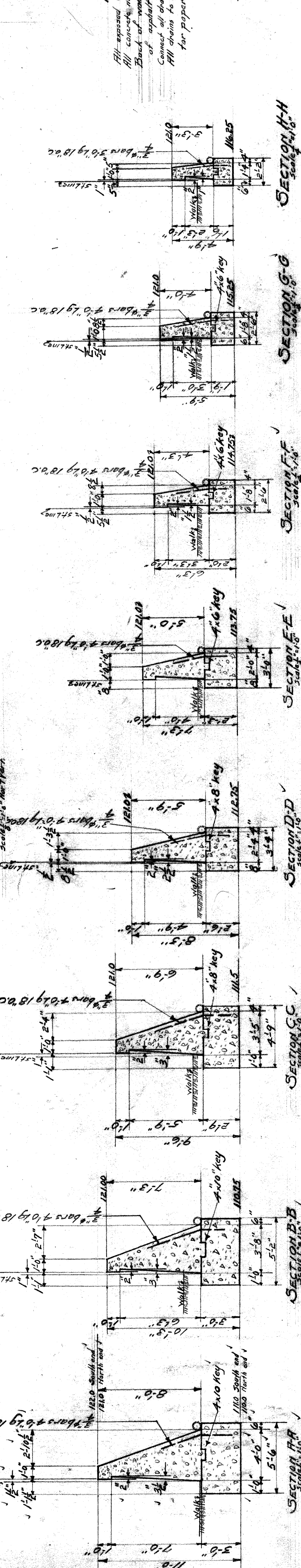
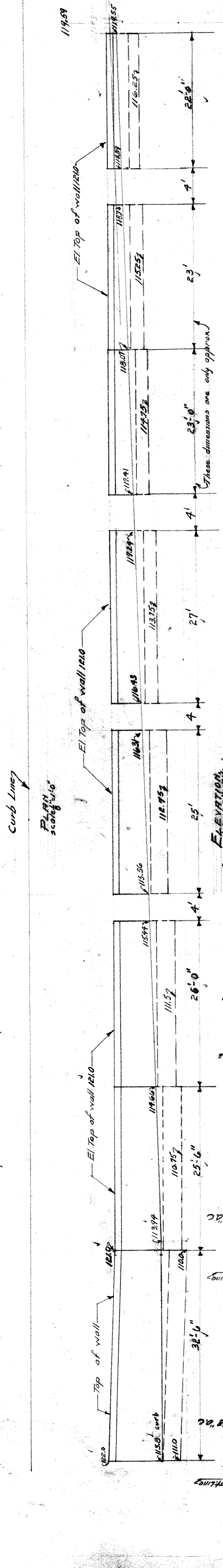
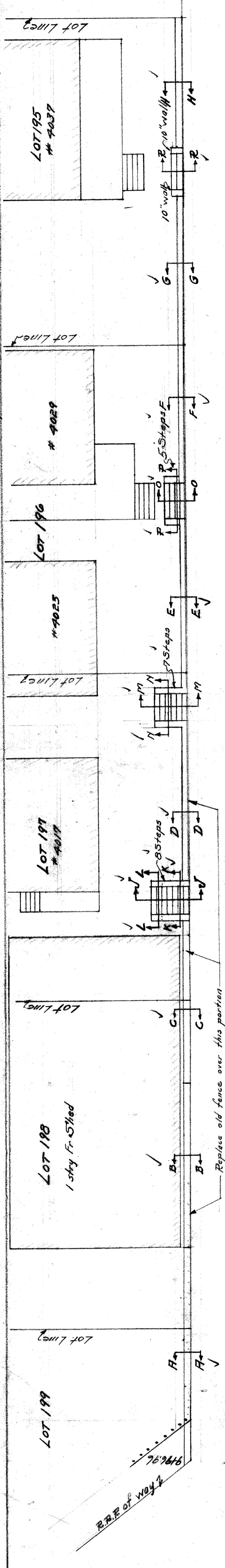


**CITY OF DETROIT**  
 DEPARTMENT OF PUBLIC WORKS  
 DIVISION OF GRADE SEPARATION & BRIDGES  
 ROOSEVELT AVENUE WALL  
 NORTH OF RAILROAD-EAST SIDE

Scales as indicated  
 Drawn G.M.K.  
 Checked by S.S. 11-20-20  
 Sept 1925

House Number	Appraised Value	Owner
# 7854		
# 7830		
# 7834		





**NOTES**

- Fill exposed corners to be classified to 1"
- All concrete mix 1:2:4
- Back of walls to receive two-brust coats
- Back of asphalt waterproofing
- Connect all drains to sewer
- All chains to be 4" crack. Joints covered with tar paper.

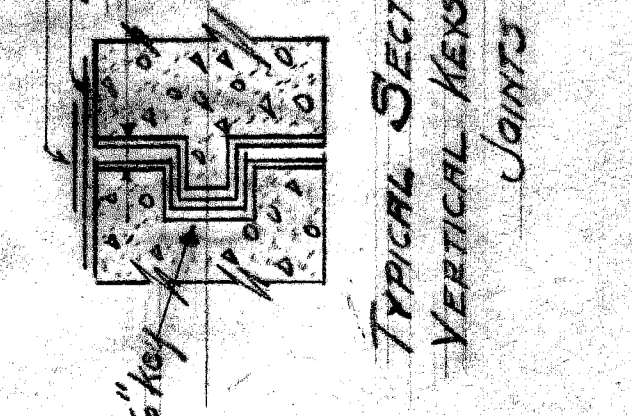
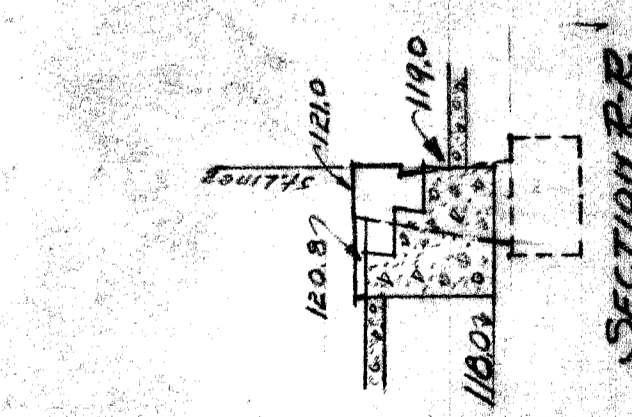
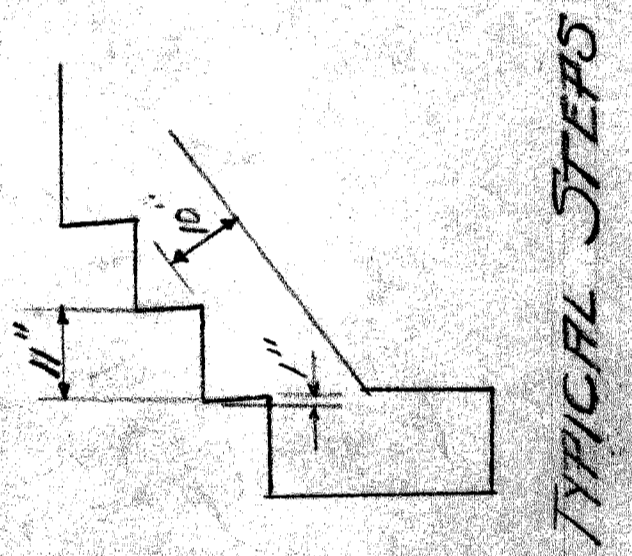
**CITY OF DETROIT**  
**DEPARTMENT OF PUBLIC WORKS**  
**DIVISION OF GRADE SEPARATION & BRIDGES**  
**ROOSEVELT AVENUE WALL**  
**NORTH OF RAILROAD WEST SIDE**

Scales as indicated

Oct. 1925

Drawn CWB  
 Checked by R.S. 11-20-25

Hour	Number	Approved Date	Owner



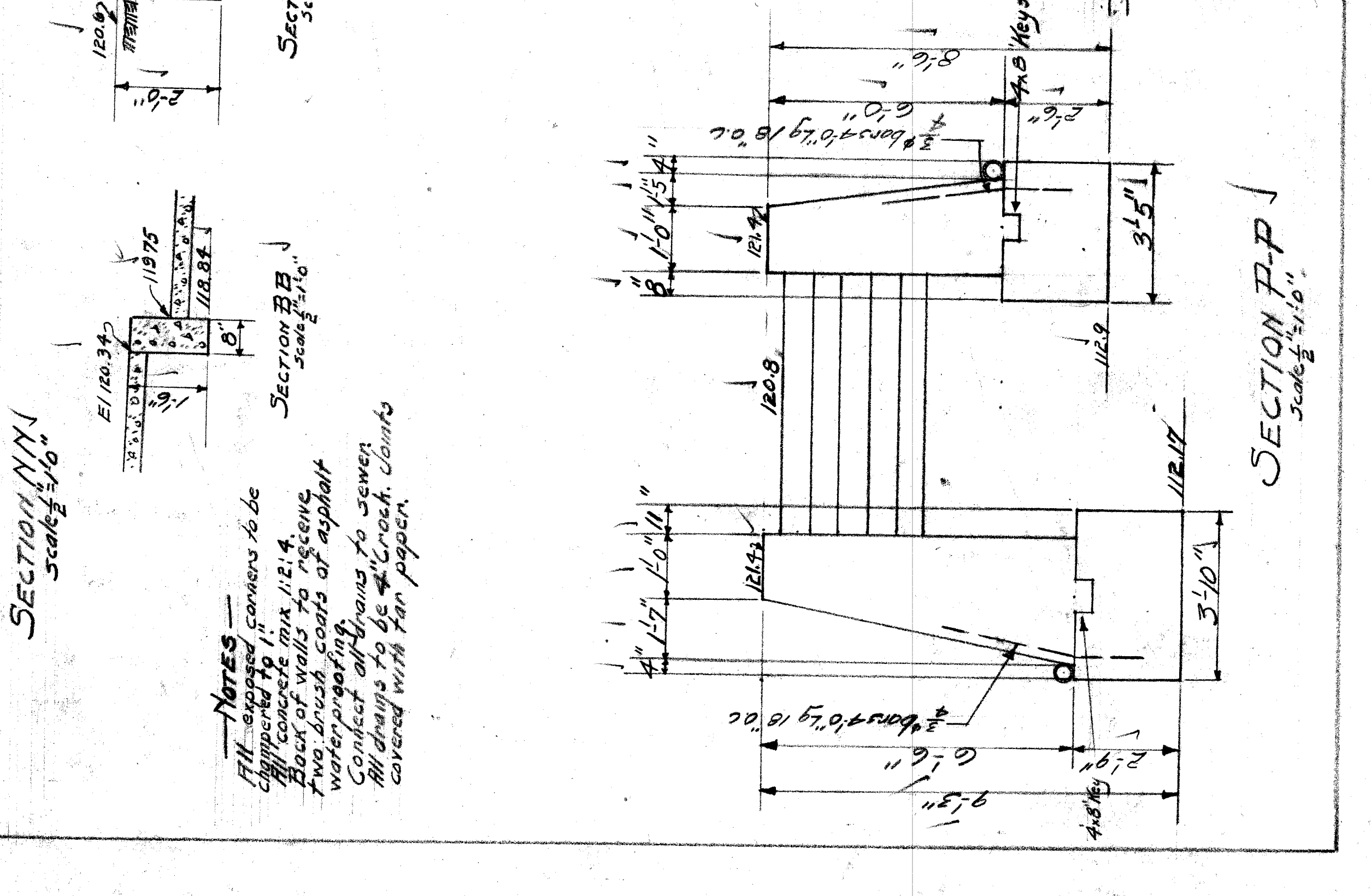
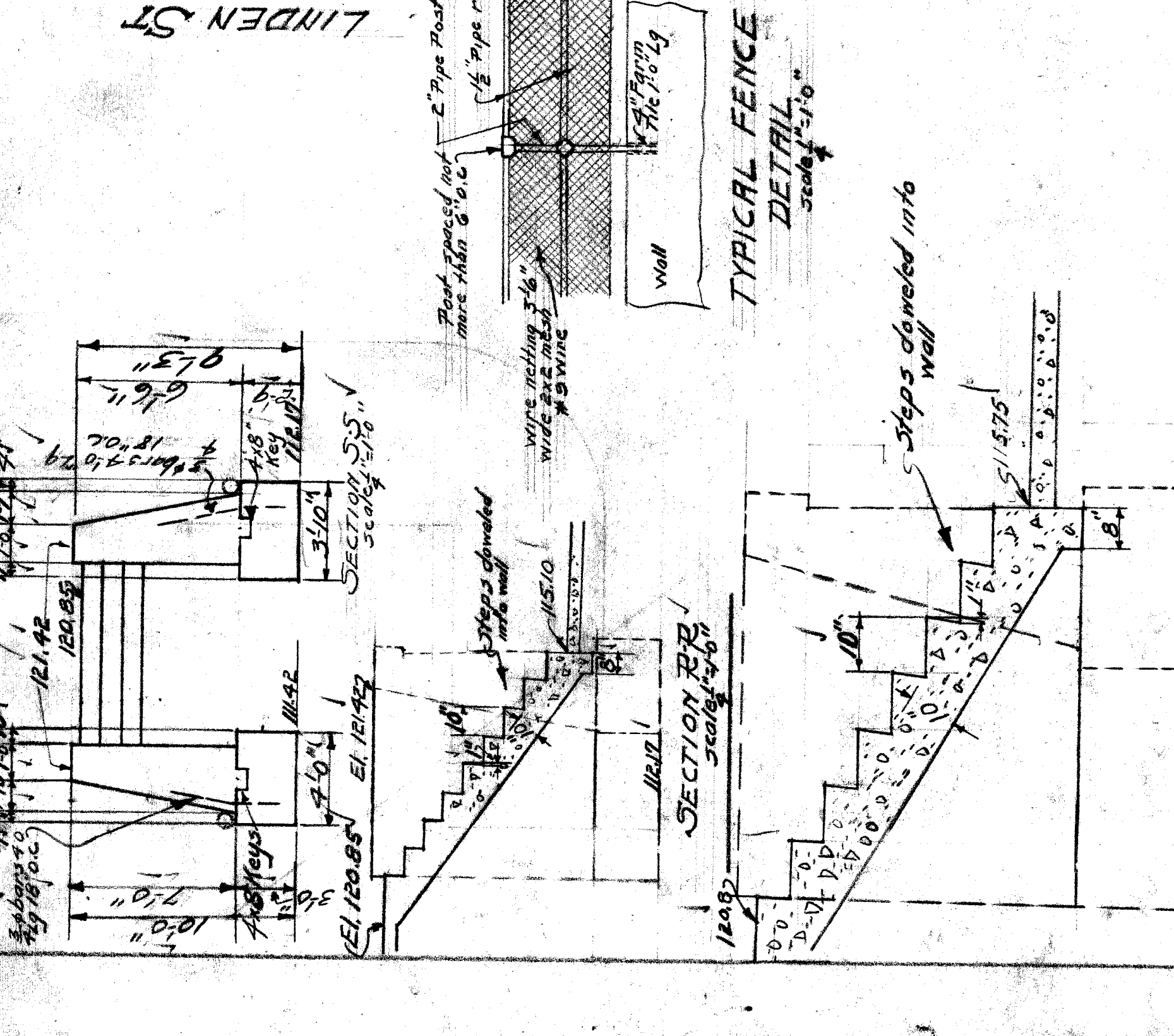
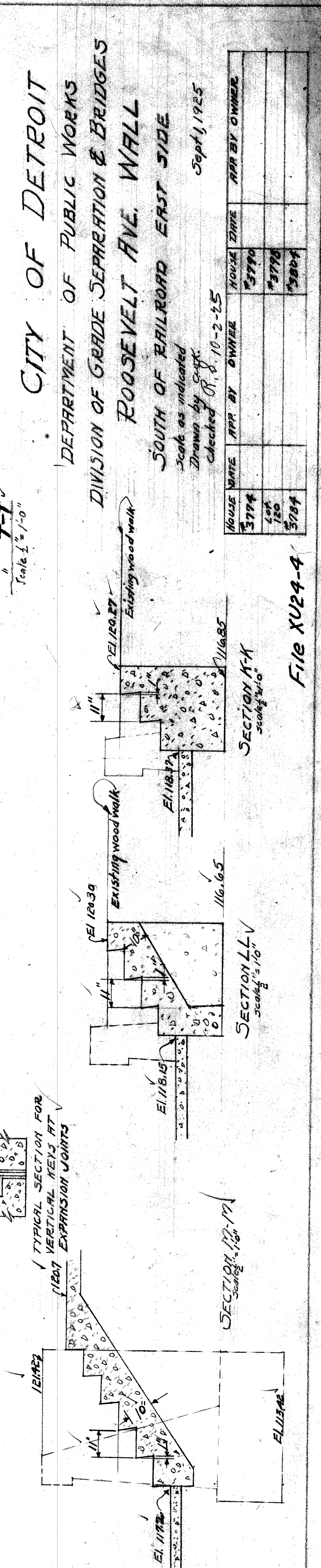
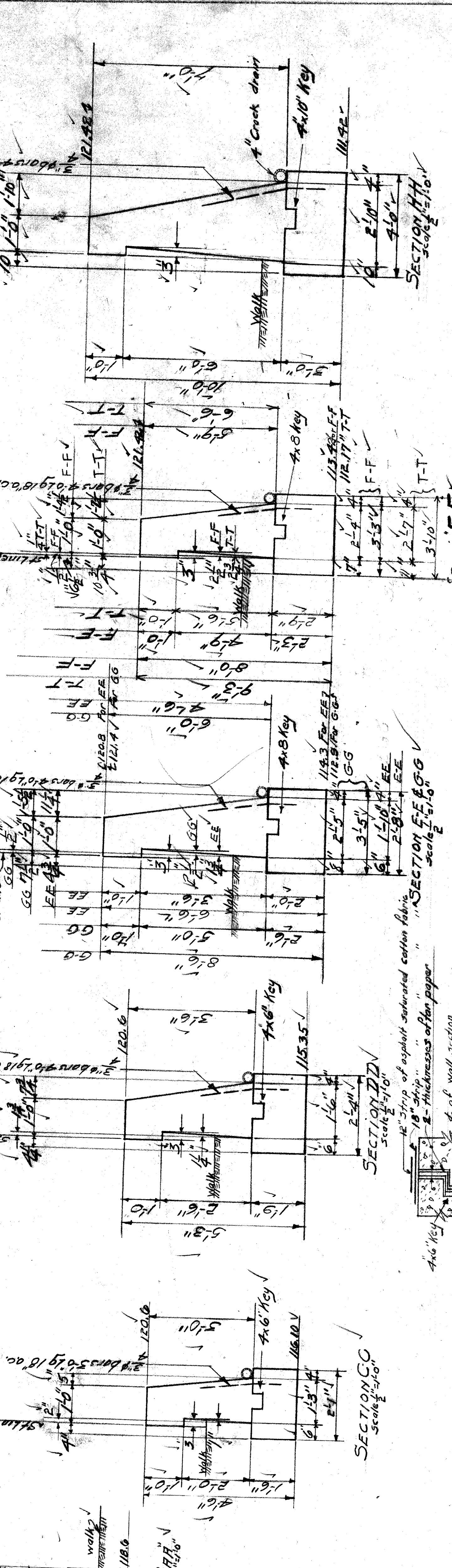
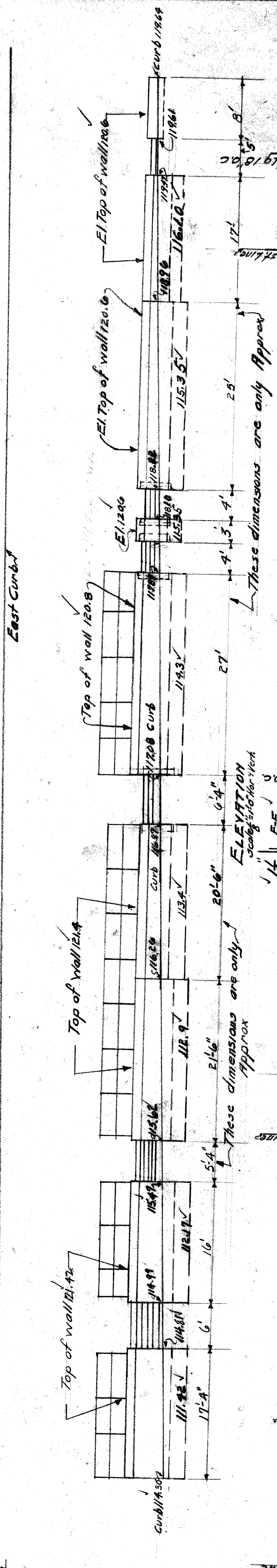
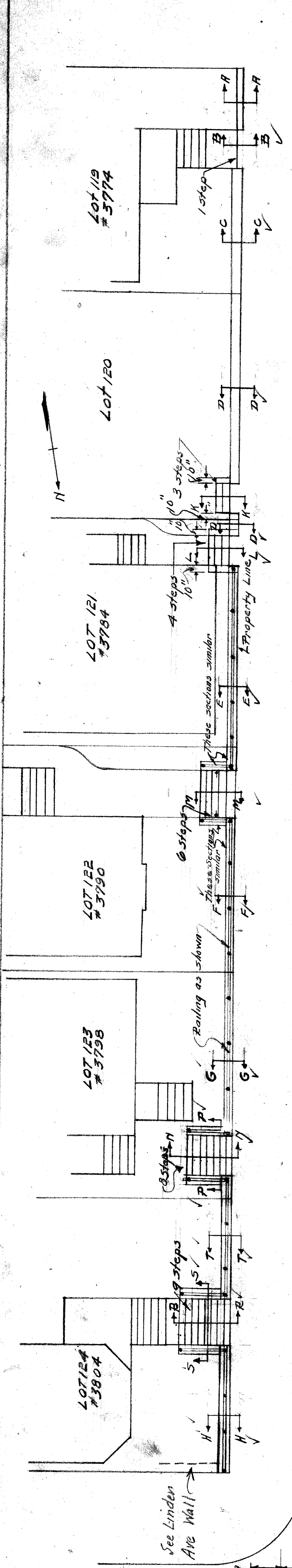


**CITY OF DETROIT**  
**DEPARTMENT OF PUBLIC WORKS**  
**DIVISION OF GRADE SEPARATION & BRIDGES**  
**ROOSEVELT AVE. WALL**  
**SOUTH OF RAILROAD EAST SIDE**

Scale as indicated  
 Drawn by S.G.K.  
 Checked R.C. 10-2-25  
 Sept. 1, 1925

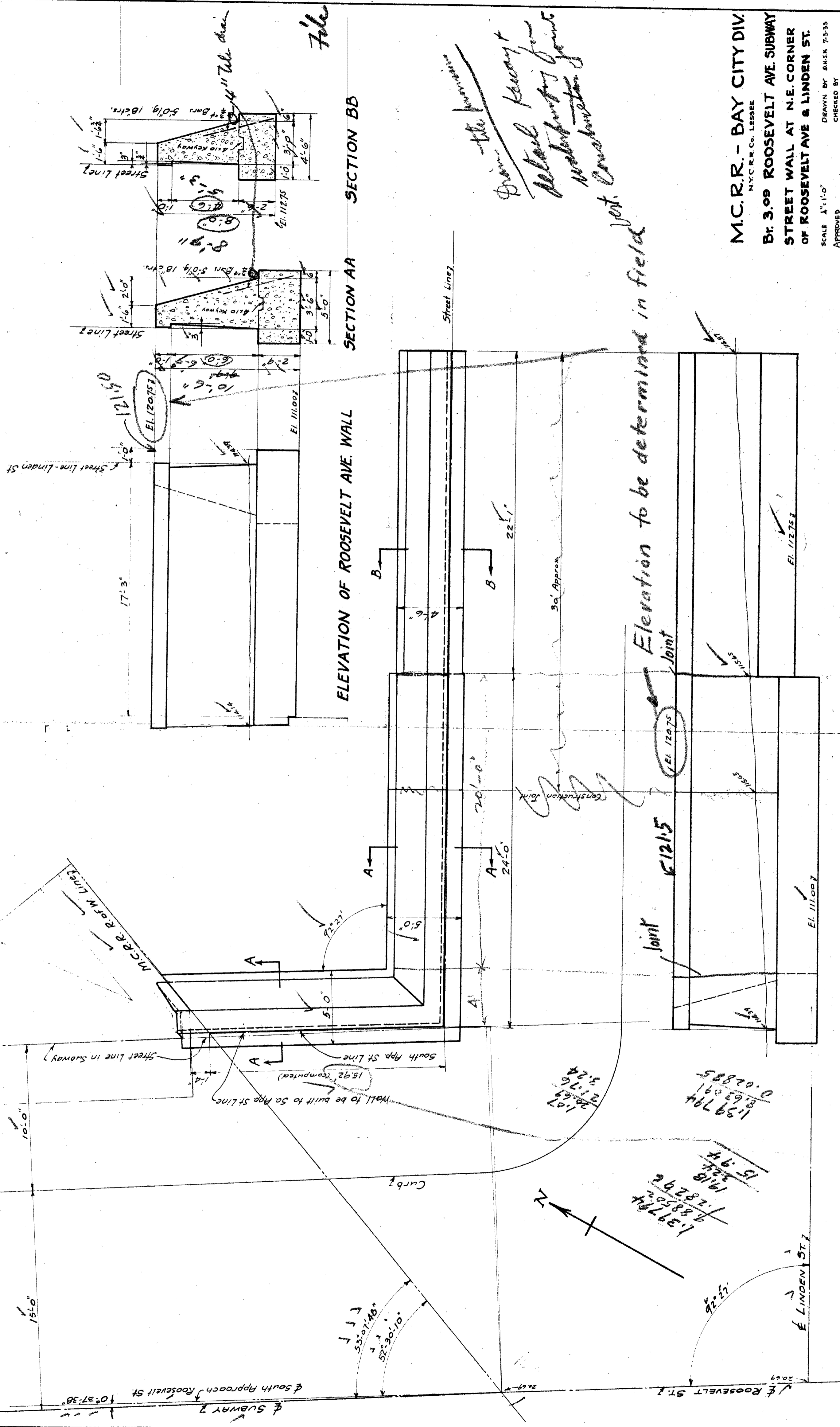
HOUSE DATE	APP. BY	OWNER	HOUSE DATE	APP. BY	OWNER
3794			3790		
120			3798		
3084			3084		

File XU24-4

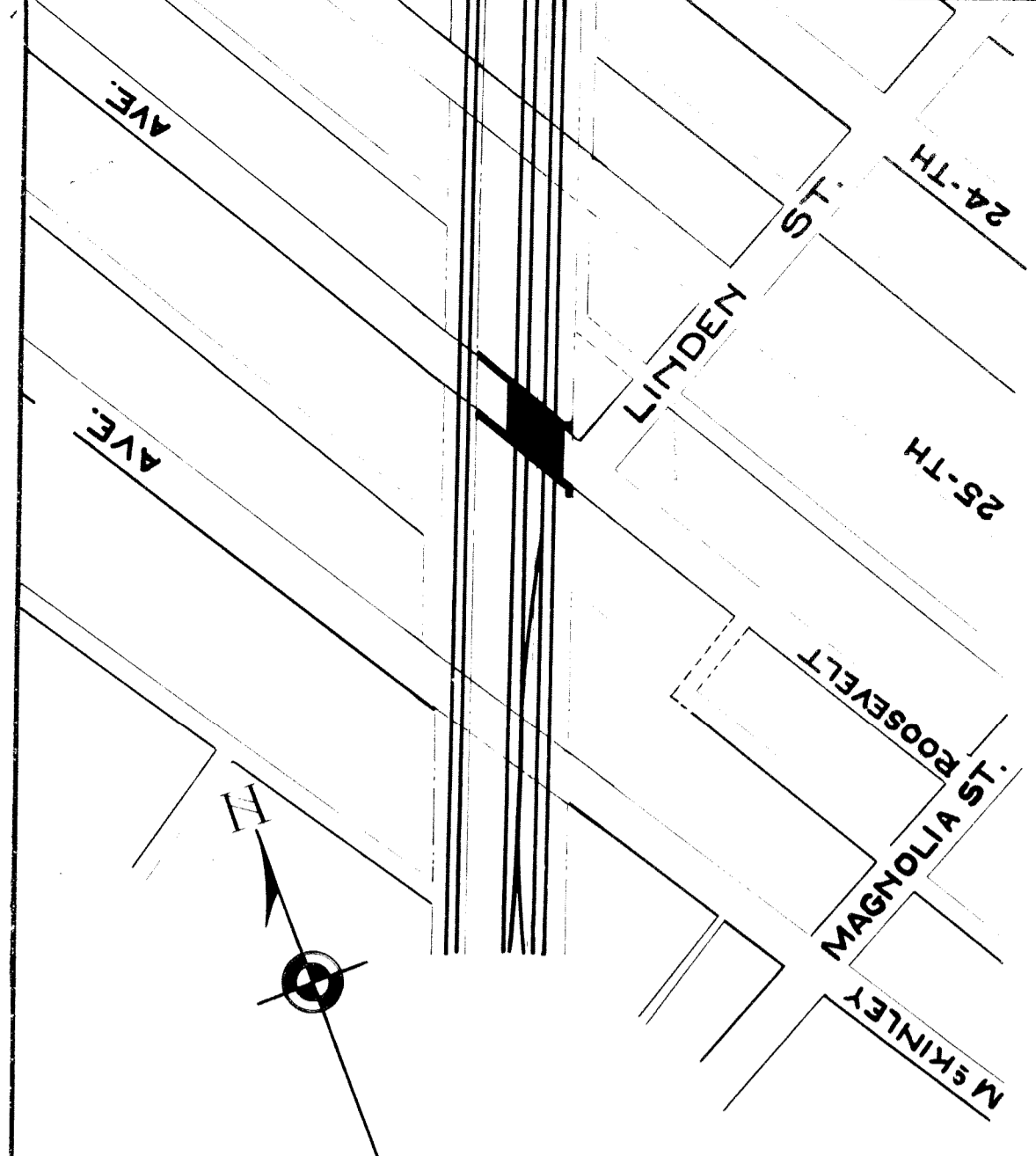




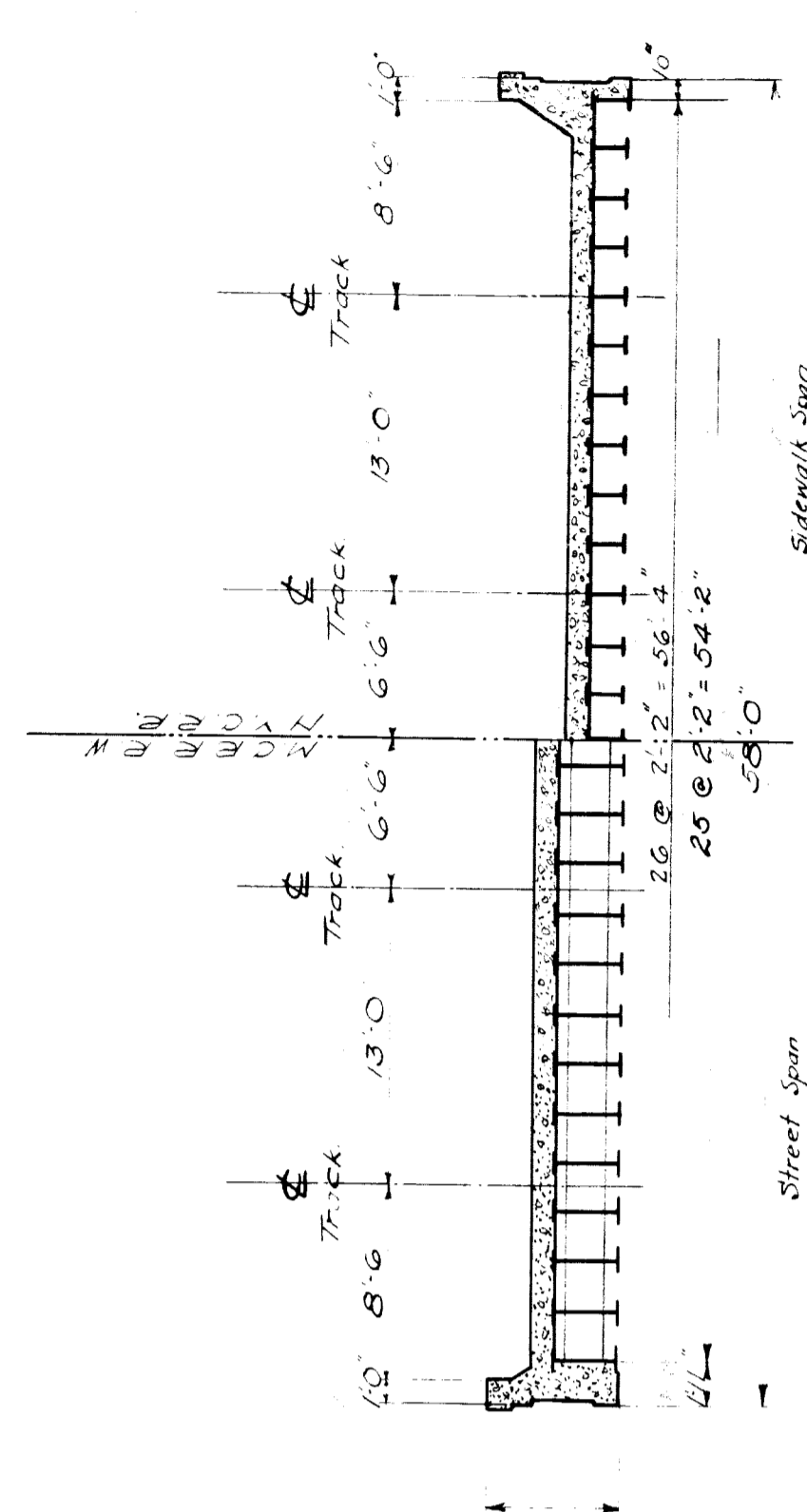
File 4-C



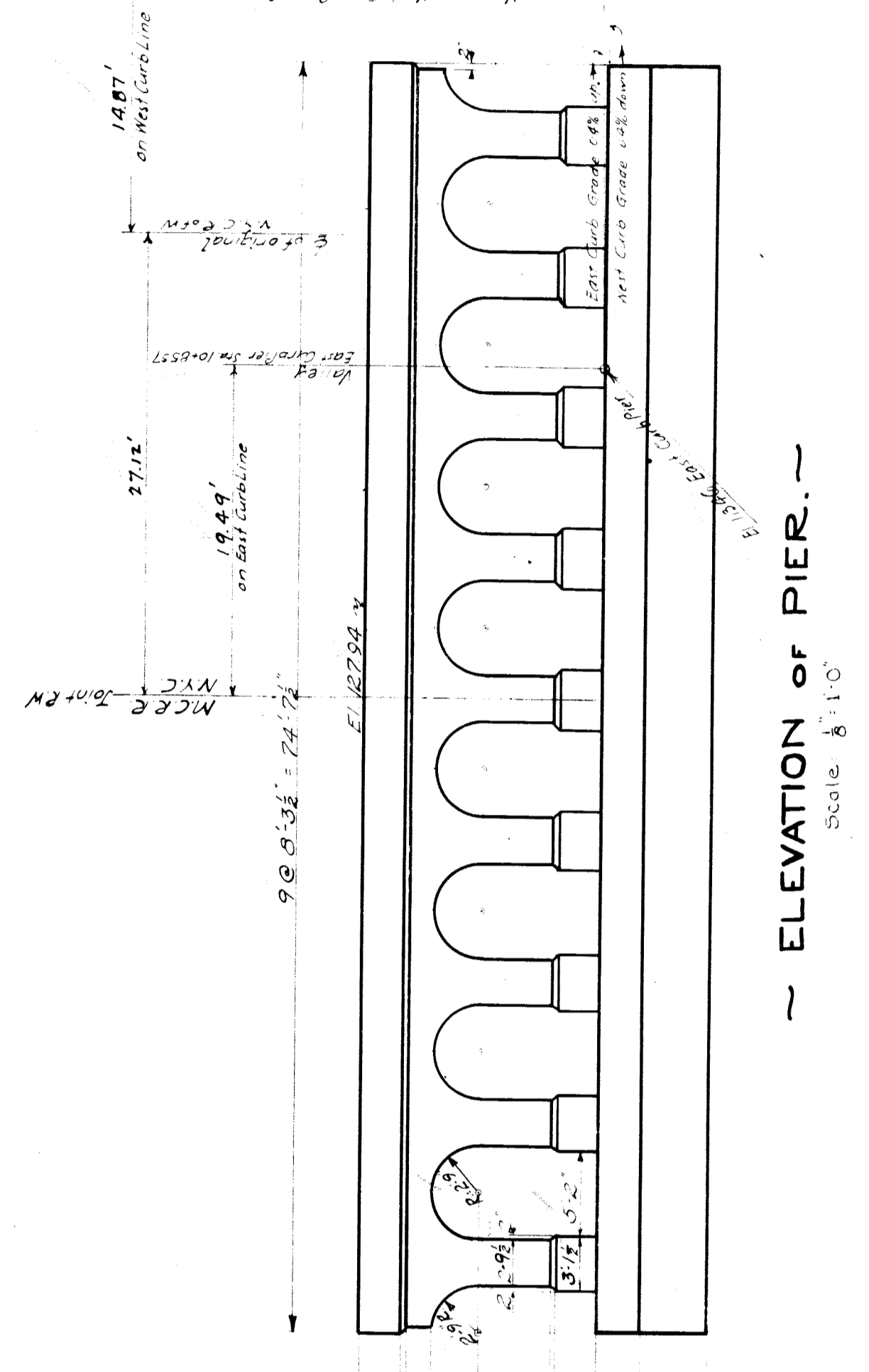




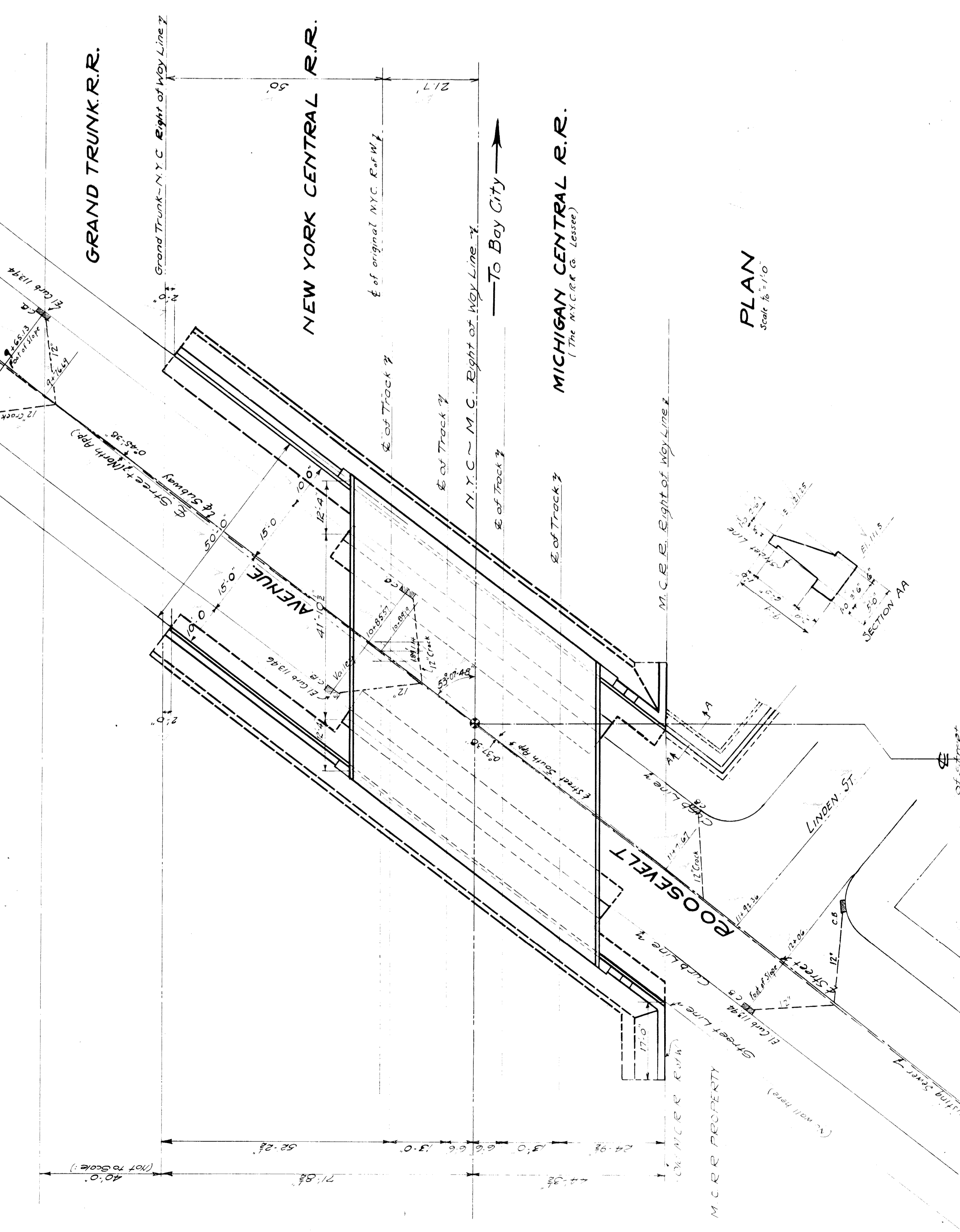
~ LOCATION PLAN ~  
Scale 1/8" = 1'-0"



~ CROSS SECTION OF FLOOR AT RIGHT ANGLES TO TRACKS. ~  
Scale 3/16" = 1'-0"



~ ELEVATION OF PIER. ~  
Scale 3/16" = 1'-0"



~ LONGITUDINAL SECTION ~  
Scale 1/8" = 1'-0"

REVISIONS

**M.C.R.R.-BAY CITY-DIV.**  
BRIDGE 309 ROOSEVELT AVE. SUBWAY

~ GENERAL PLAN ~

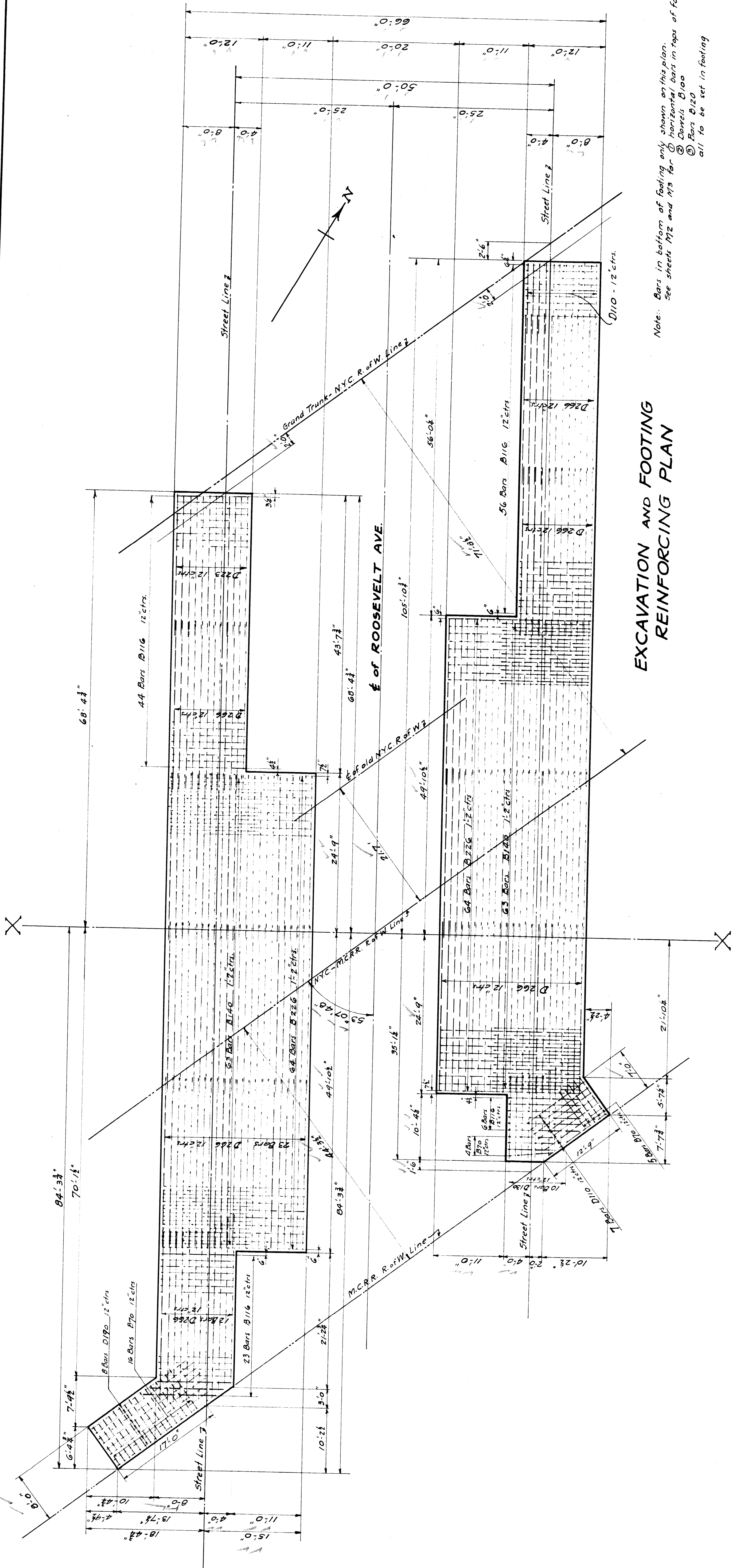
SCALE 1/8" = 1'-0"  
DRAWN BY: [Signature]  
CHECKED BY: [Signature]  
TRACED BY: [Signature]  
APPROVED: [Signature]  
BRIDGE ENGINEER

SHEET NO. [Blank]  
DATE [Blank]

SHEET 61 OF 1

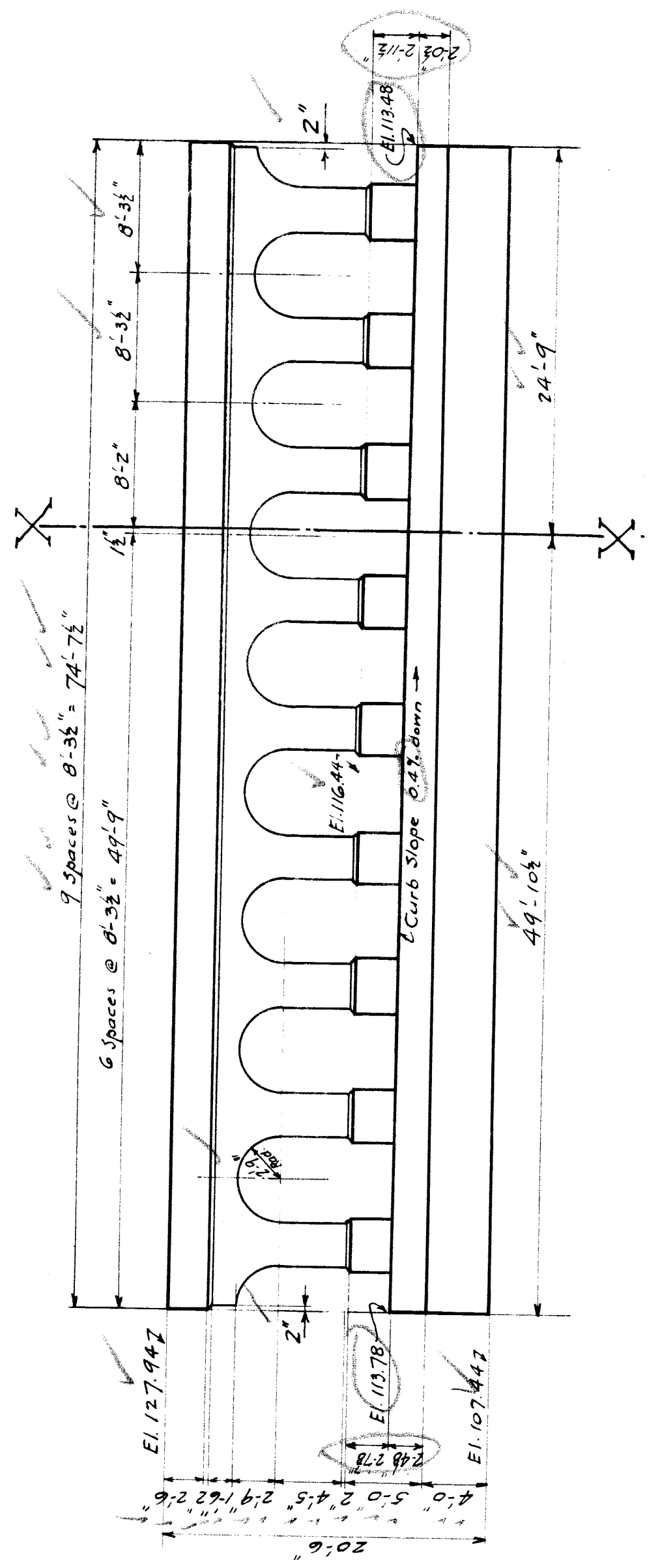
File XU 24-6



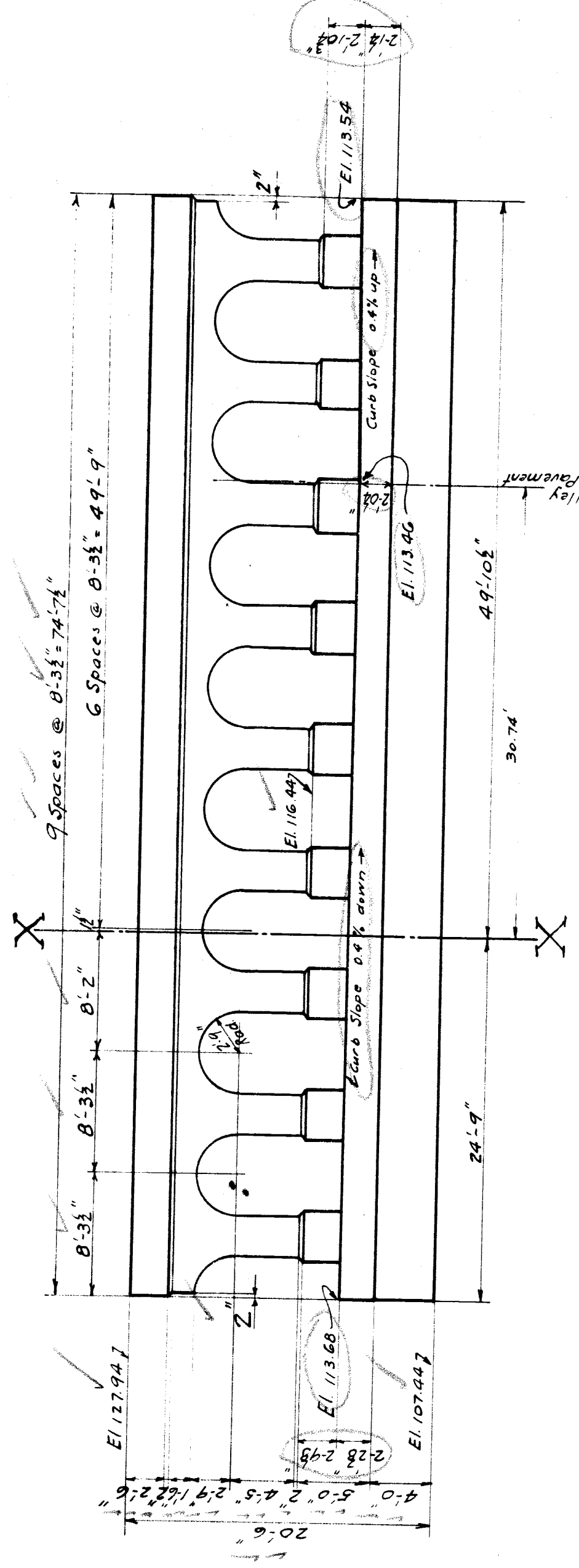


**EXCAVATION AND FOOTING REINFORCING PLAN**

Note: Bars in bottom of footing only shown on this plan. See sheets M12 and M13 for:  
 (1) Horizontal bars in tops of footings  
 (2) Bars B100  
 (3) Bars B120  
 all to be set in footing



**ELEVATION OF WEST CURB PIER**  
 (Looking West)



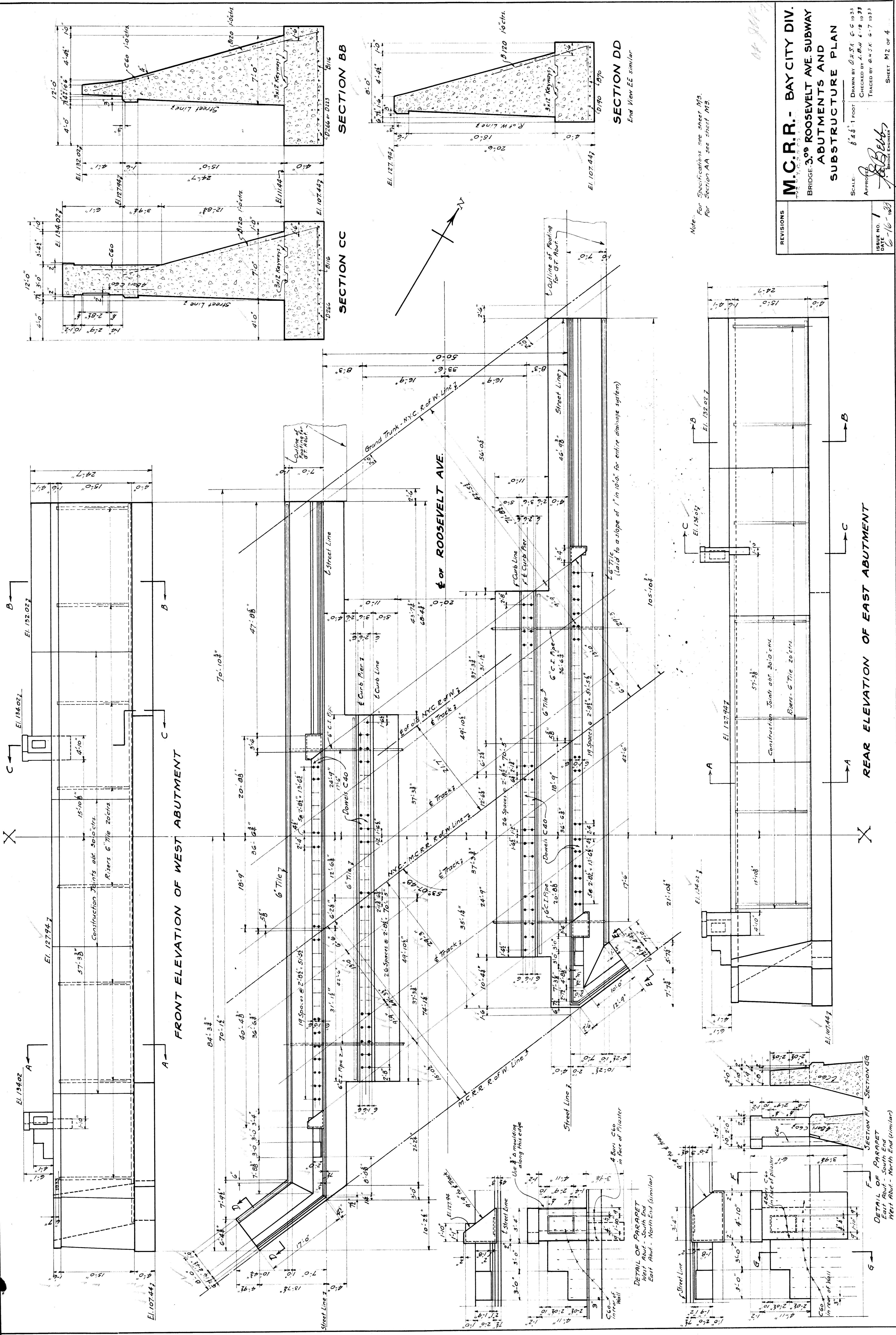
**ELEVATION OF EAST CURB PIER**  
 (Looking East)

Note: For specifications see sheet M13.

<b>M.C.R.R. - BAY CITY DIV.</b> THE N.Y.C.R.R. CO. LESSEE <b>BRIDGE-300 ROOSEVELT AVE. SUBWAY</b> <b>FOOTING PLAN AND</b> <b>PIER ELEVATIONS</b>		SCALE: 1" = 10' DRAWN BY: W.S.K. 4-7-33 CHECKED BY: L.M. 4-12-33 TRACED BY: W.S.K. 4-9-33
REVISIONS:	APPROVED: <i>[Signature]</i> BRIDGE ENGINEER	SHEET M1 OF 4

File XU 24-7





Note: For Specifications see sheet M3.  
For Section AA see sheet M3.

<b>M.C.R.R. - BAY CITY DIV.</b> BRIDGE 3.09 ROOSEVELT AVE. SUBWAY ABUTMENTS AND SUBSTRUCTURE PLAN	
SCALE: 1/8" = 1' FOOT DRAWN BY: G.H.S. G.C. 10/33 CHECKED BY: L.B.M. L.B. 10/33 TRACED BY: G.W.S.K. G.W. 7/1933	SHEET M2 OF 4 FILE XU 24-8
APPROVED: <i>[Signature]</i> BRIDGE ENGINEER	ISSUE NO. 1 DATE 6-16-1933

REAR ELEVATION OF EAST ABUTMENT

FRONT ELEVATION OF WEST ABUTMENT

SECTION DD  
End View EE similar

SECTION BB

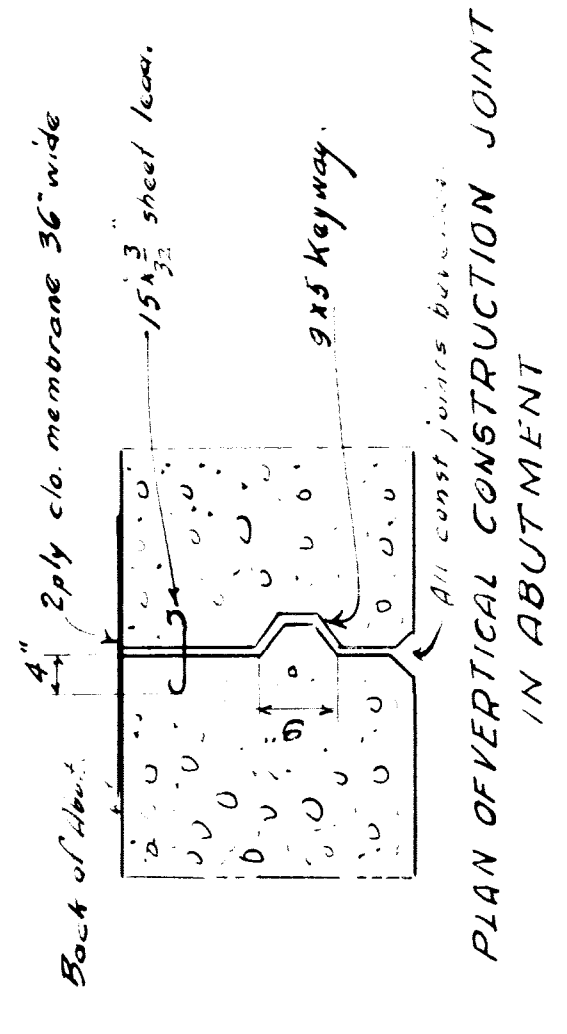
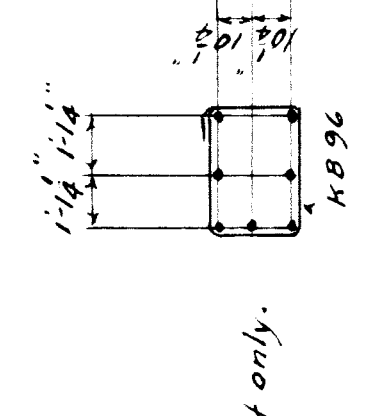
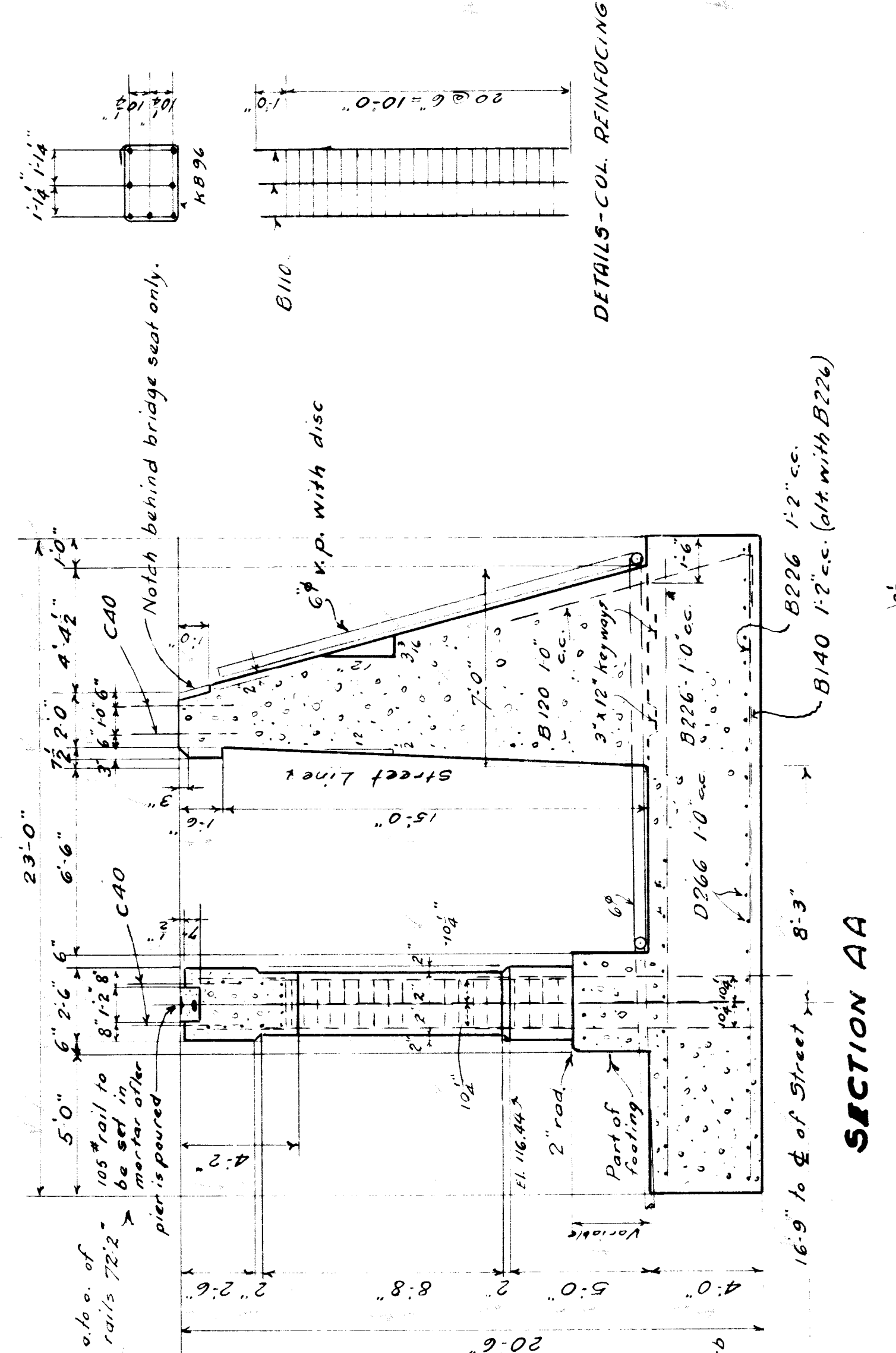
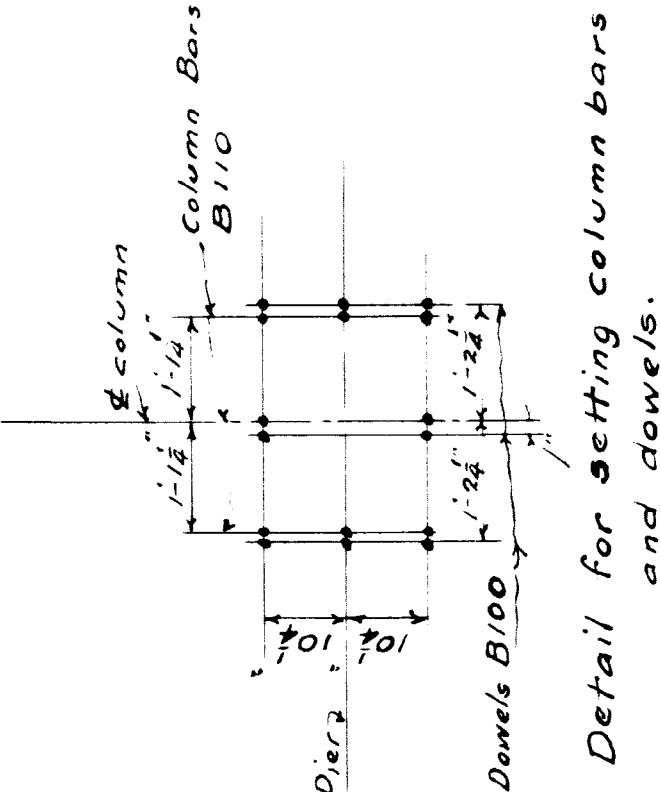
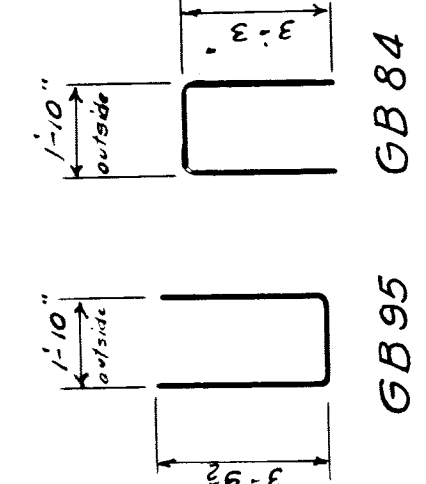
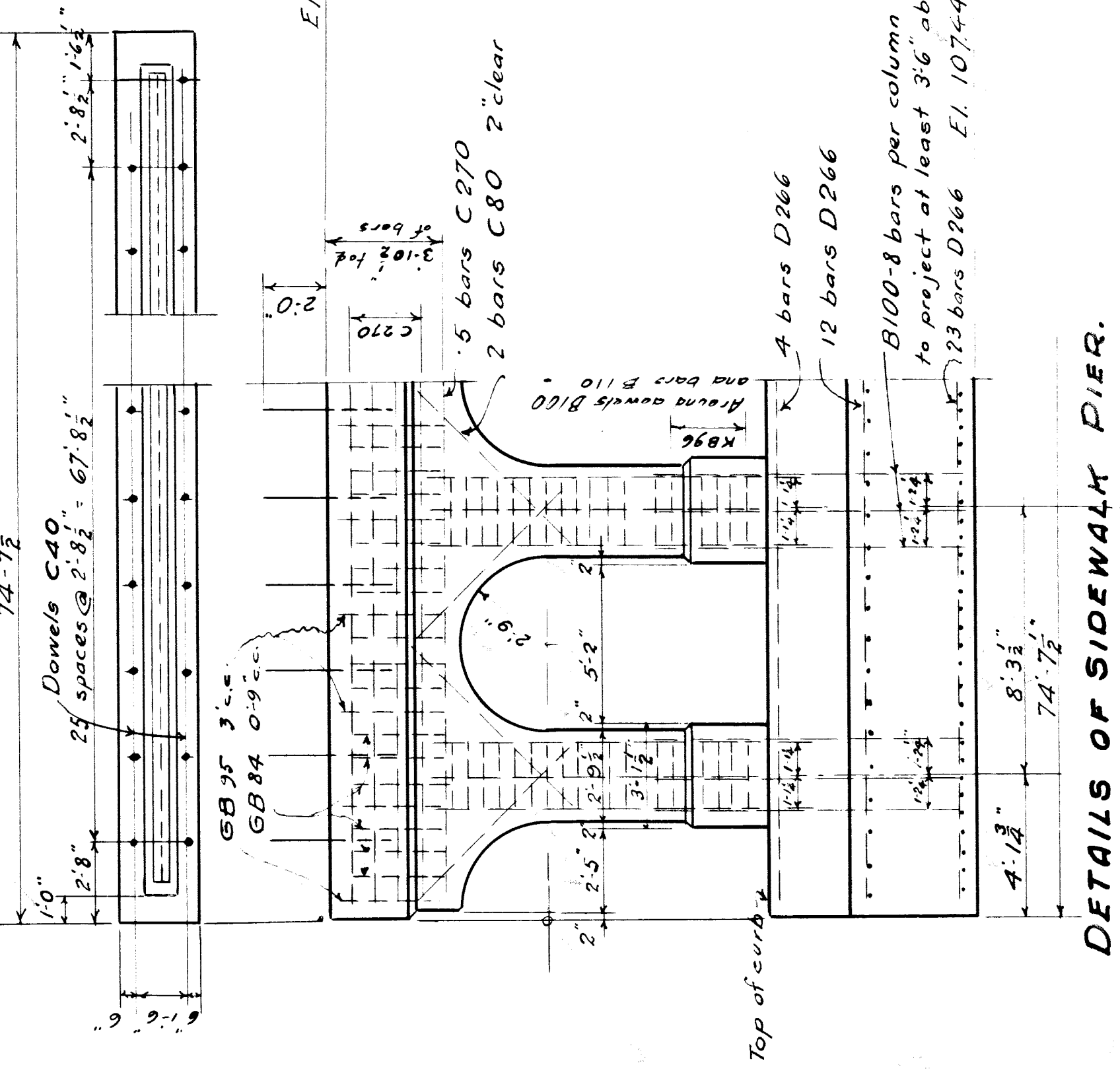
SECTION CC

SECTION FF SECTION GG

DETAIL OF PARAPET  
East Abut. - South End  
West Abut. - North End (similar)

DETAIL OF PARAPET  
East Abut. - North End (similar)





**BILL OF BARS (Substructure only)**

MARK NO.	SIZE	LENGTH	REMARKS.
D110	1/2"	11.0	Long in E. Abut. Footing.
D130	1/2"	11.0	" " " " " " " "
D190	1/2"	11.0	" " " " " " " "
D223	1/2"	22.3	" " " " " " " "
D266	3/4"	26.6	Long in all footings.
C40	7/8"	4.0	Dowels in top of piers & walls.
C60	1/2"	6.0	" " " " " " " "
C80	7/8"	8.0	Diagonals over arches.
C270	7/8"	27.0	Long tops of piers.
B70	1/2"	7.0	Transv. Abut. footings.
B100	1/2"	10.0	Dowels Col.
B110	1/2"	11.0	Vertical in cols.
B116	1/2"	11.6	Transv. Abut. footings.
B120	1/2"	12.0	Back Dowels in back of arches.
B140	1/2"	14.0	Transv. Abut. footings.
B226	1/2"	22.6	" " " " " " " "
GB 84	1/2"	8.4	Stirrups in pier tops, dem.
GB 95	1/2"	9.5	" " " " " " " "
KB 96	3/8"	9.6	Hoops in cols.

**GENERAL NOTES**

Specifications: - N.Y.C. Lines for Concrete Masonry 1928.  
 Concrete: For Piers above elevation of top of curb to be Class "A" (4.75 gals. of water per sack of cement and 2.25 sacks of cement per cu. yd. of concrete).  
 Other concrete to be Class "B" (6.25 gals. of water per sack of cement and 5.25 sacks of cement per cu. yd. of concrete).  
 Bevel all exposed corners 3/4" unless otherwise shown.  
 Top surfaces to have a sidewalk finish.  
 No horizontal construction joints to be made except at top of footings and at copings. Exposed surfaces to be rubbed as soon as forms are removed. Neat cement grout not to be used in patching or rubbing.  
 Reinforcing: All bars to be of a deformed type. They shall be securely wired together at intersections.  
 At splices they shall lap for 40 diameters and be securely bound with wire. For placing see 8.509 of specs.  
 Waterproofing: Backs of abutments and walls to be given 1 coat of concrete primer and 2 mop coats of asphaltic waterproofing cement.  
 Drains: All drains shall be laid with sufficient fall to drain properly and be connected to City sewer by Contractor.

**M.C.R.R. - BAY CITY DIV.**  
 THE N. Y. C. R. R. CO. LESSEE  
 BRIDGE 309 ROOSEVELT AVE. SUBWAY

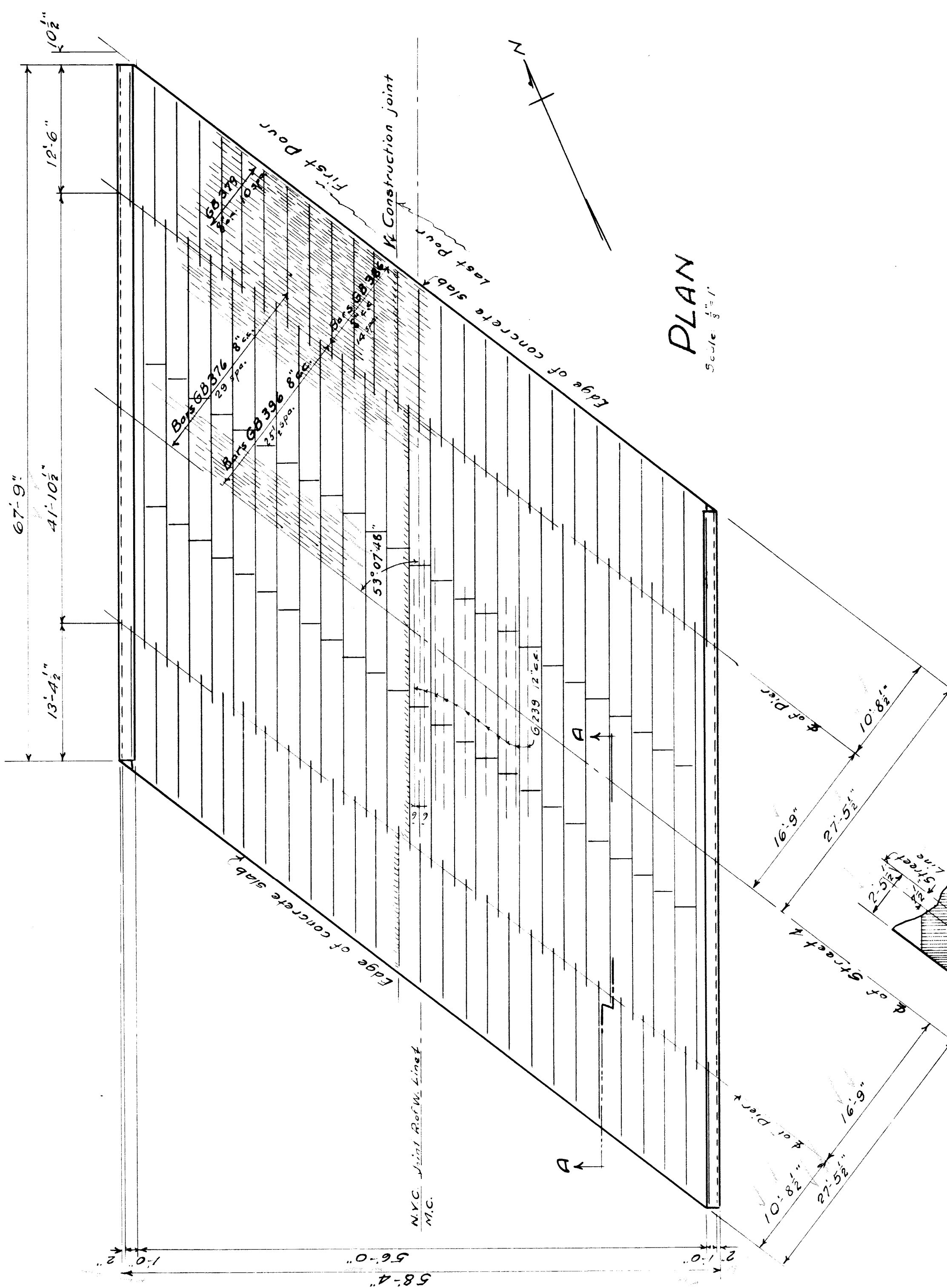
**MASONRY DETAILS**

SCALE: 1" = 1 FOOT  
 DRAWN BY: L.A.E.-1933  
 CHECKED BY: G.H.J. E.C. 1933  
 TRACED BY: M.J. OF A

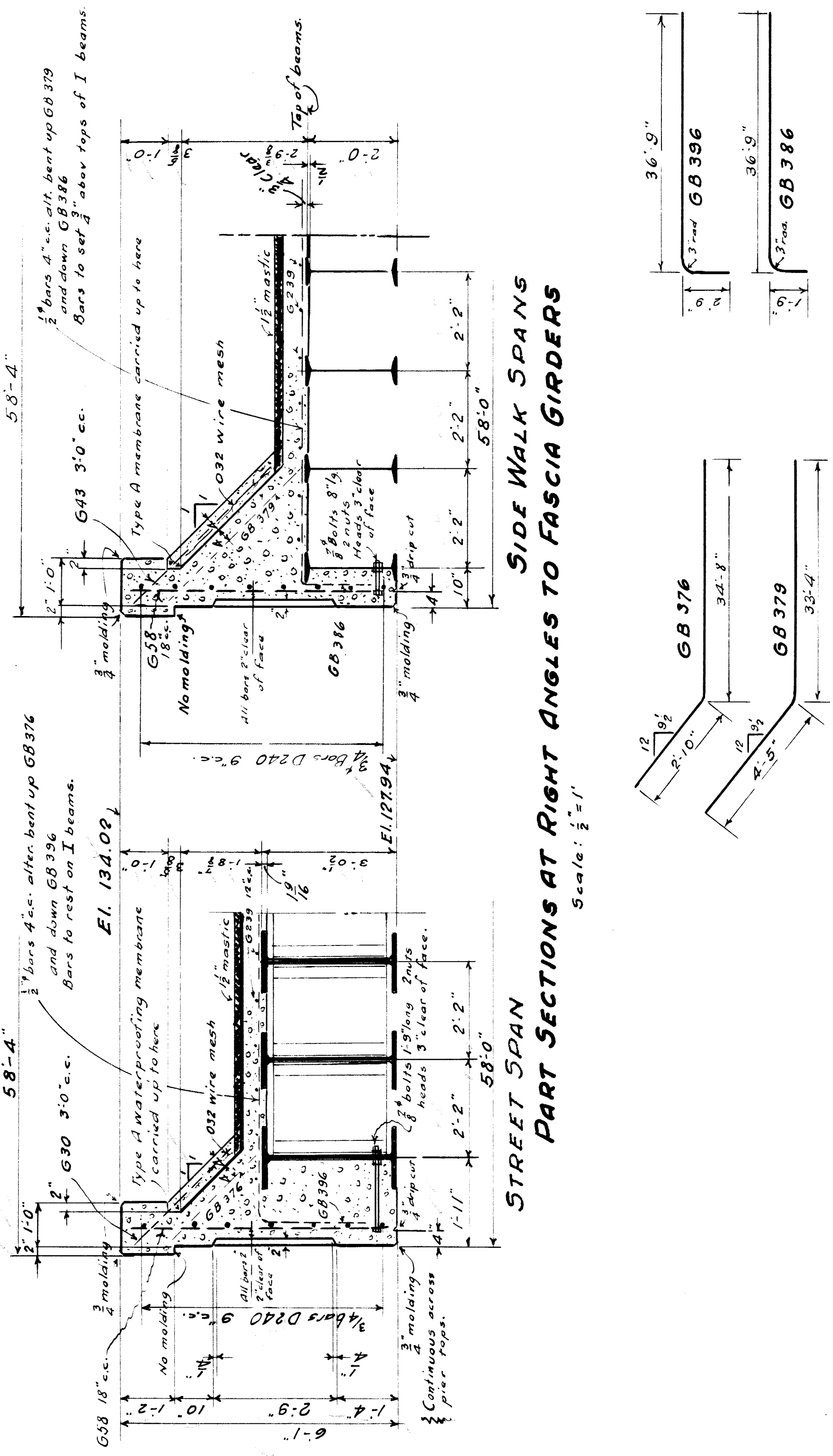
ISSUE NO. 19  
 DATE

REVISIONS

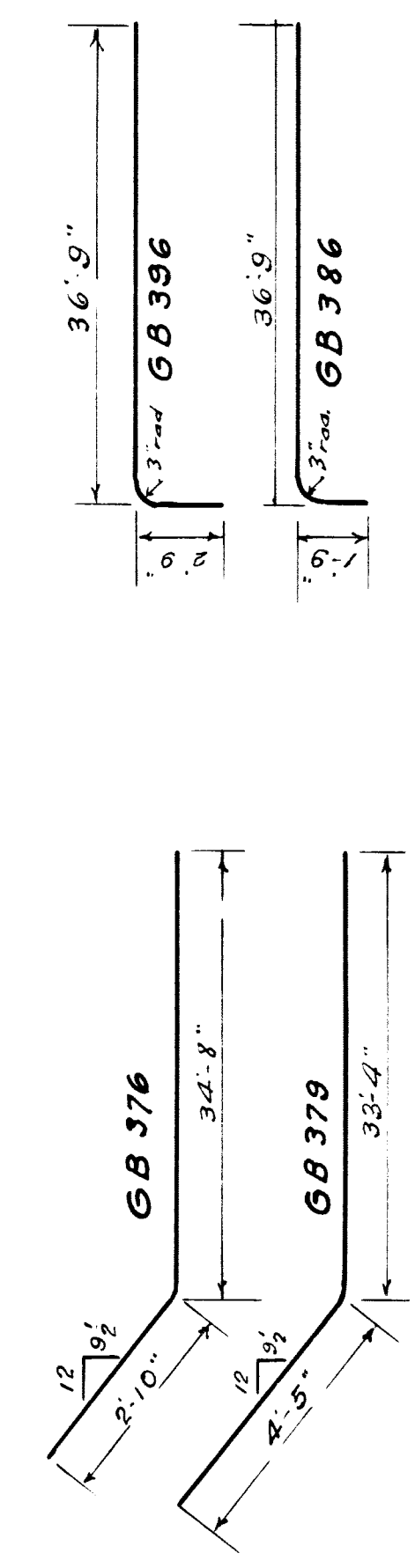




PLAN  
Scale: 3/8" = 1'



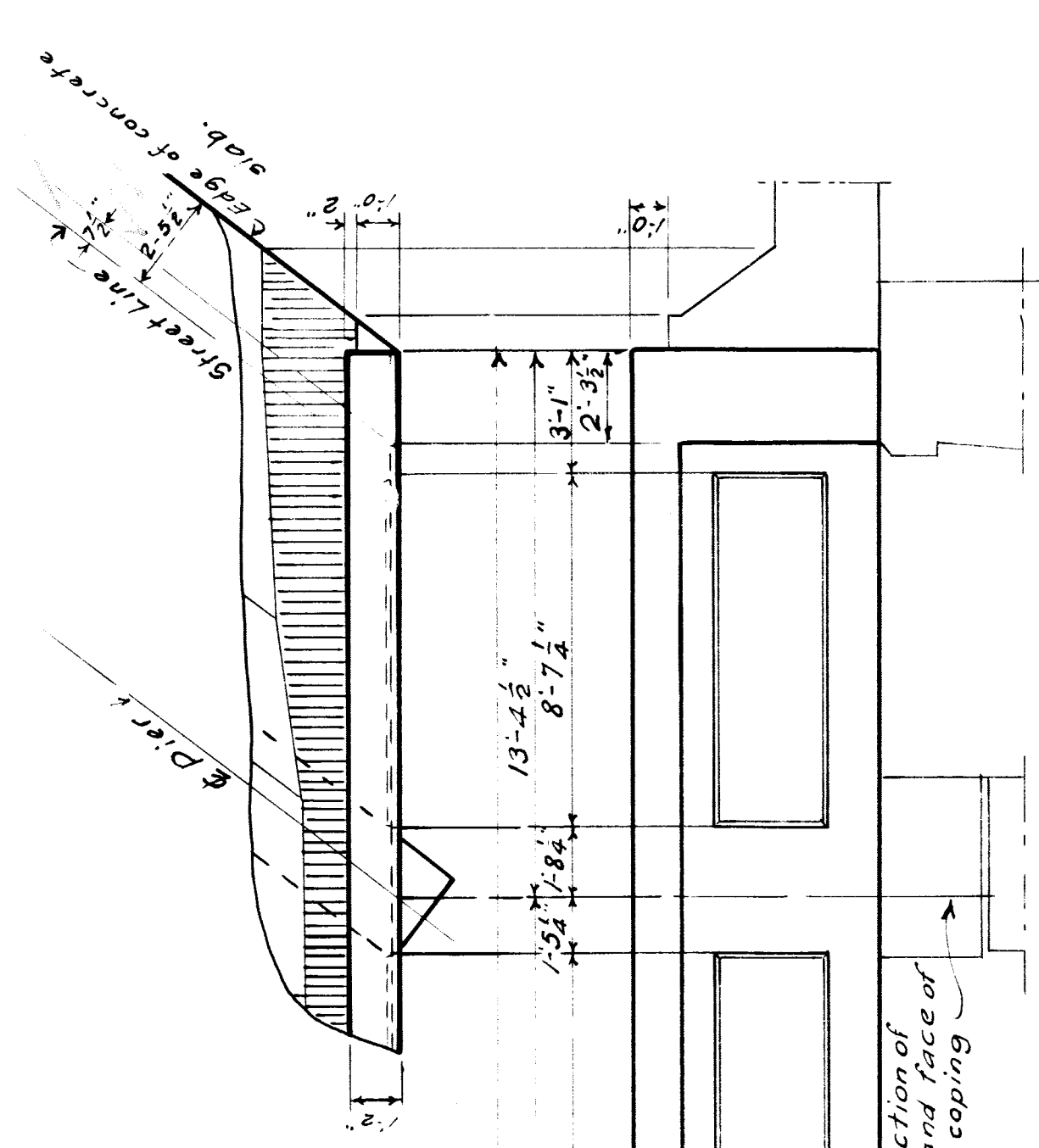
STREET SPAN  
PART SECTIONS AT RIGHT ANGLES TO FASCIA GIRDERS  
Scale: 1/2" = 1'



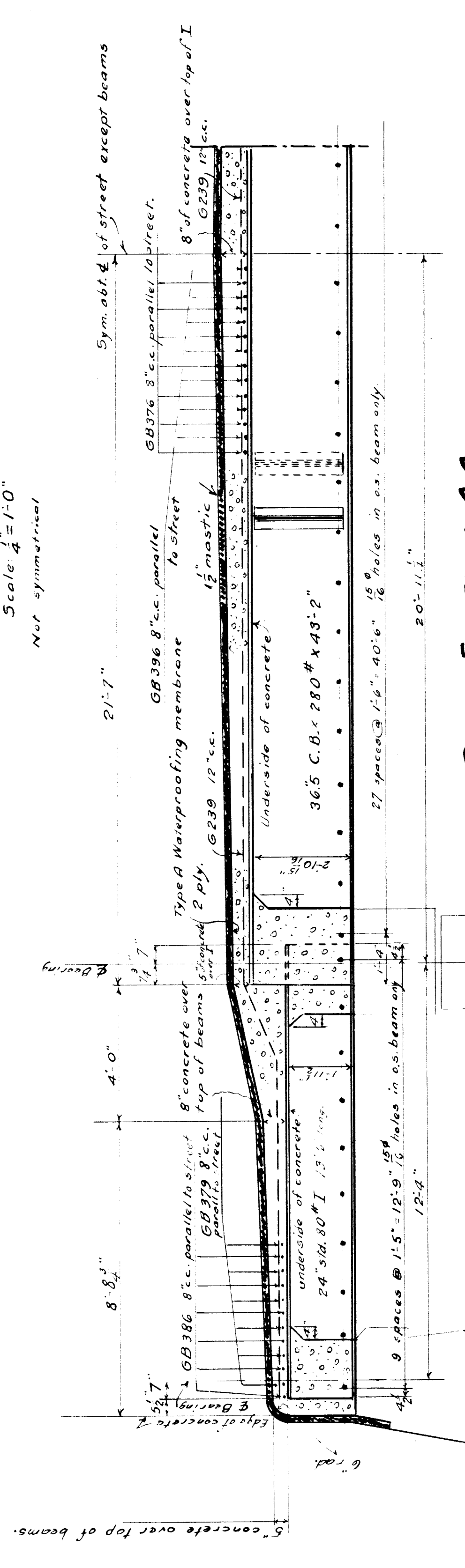
DETAILS OF BENT BARS

MARK	NO.	SIZE	LENGTH	REMARKS
G30	36	1/2"	3'-0"	Diagonal wire seal, Long span
G43	12	4'-3"	5'-8"	Short span
G58	90	5'-8"	23'-9"	Vertical Fascia girders
G239	168	23'-9"	37'-9"	Transv. Slab - Long span
GB376	44	37'-9"	38'-6"	Short span
GB386	60	38'-6"	39'-6"	Long "
GB296	104	39'-6"	24'-0"	Longitud. Fascia
D240	48	3/8"	150'-0"	24" width
Boles	40	3/8"	8"	4" Heads 2 bars out/s
"	56	3/8"	1'-9"	4" " " 2 " " "

All reinforcing bars to be of deformed type.



ELEVATION OF FASCIA GIRDERS  
Scale: 1/4" = 1'-0"  
Not symmetrical



PART SECTION AA  
Scale: 3/8" = 1'

**GENERAL NOTES**  
 Specifications: N.Y.C. Lines, Concrete Masonry, 1928.  
 Concrete to be class A, see 8801 and 8803.  
 Bevel all exposed corners 3/4" unless otherwise noted.  
 Exposed top surfaces to have a sidewalk finish.  
 All exposed surfaces to be rubbed as seen as forms or rubbing.  
 Neat cement grout must not be used in patching or rubbing.  
 Reinforcing: All bars to be securely wired together at intersections 12" or more cc.  
 At splices bars shall lap for a length of 40 diams. and be securely wired together. See 8509 for placing.  
 Waterproofing: N.Y.C. Lines 1925 Specifications for placing waterproofing floors of railroad bridges. Membrane Type A 821 Mastic 837.

REVISIONS

**M.C.R.R. - BAY CITY DIV.**  
 THE N.Y.C.R.R. CO. LESSEE  
 BRIDGE 399 ROOSEVELT AV. SUBY

FLOOR

SCALE: 1/4" = 1'-0"  
 DRAWN BY: L.B.A. 5/11/32  
 CHECKED BY: J.E.B. 5/28/32  
 TRACED BY: L.B.A. 19

APPROVED: *J. E. B.*  
 BRIDGE ENGINEER

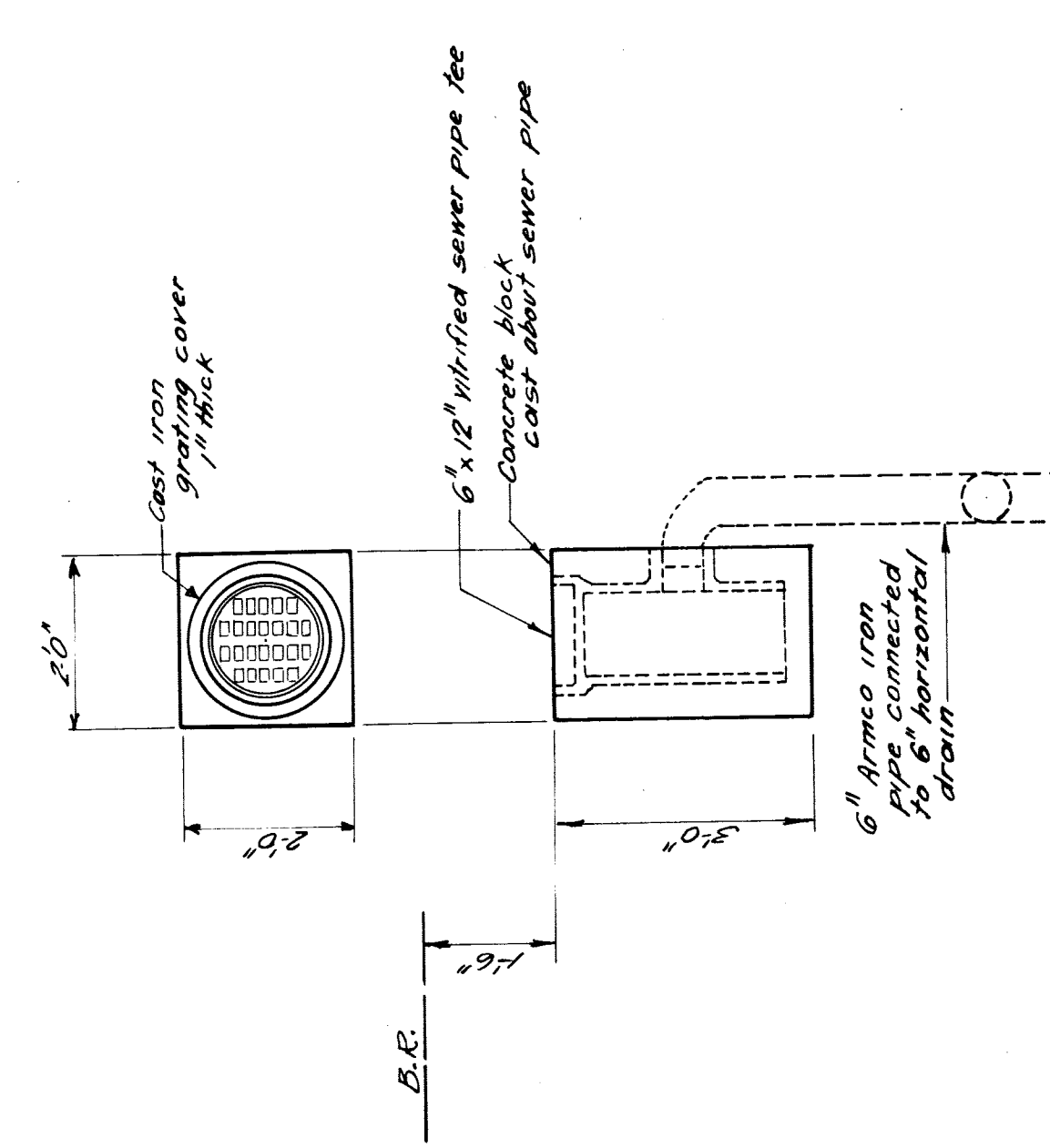
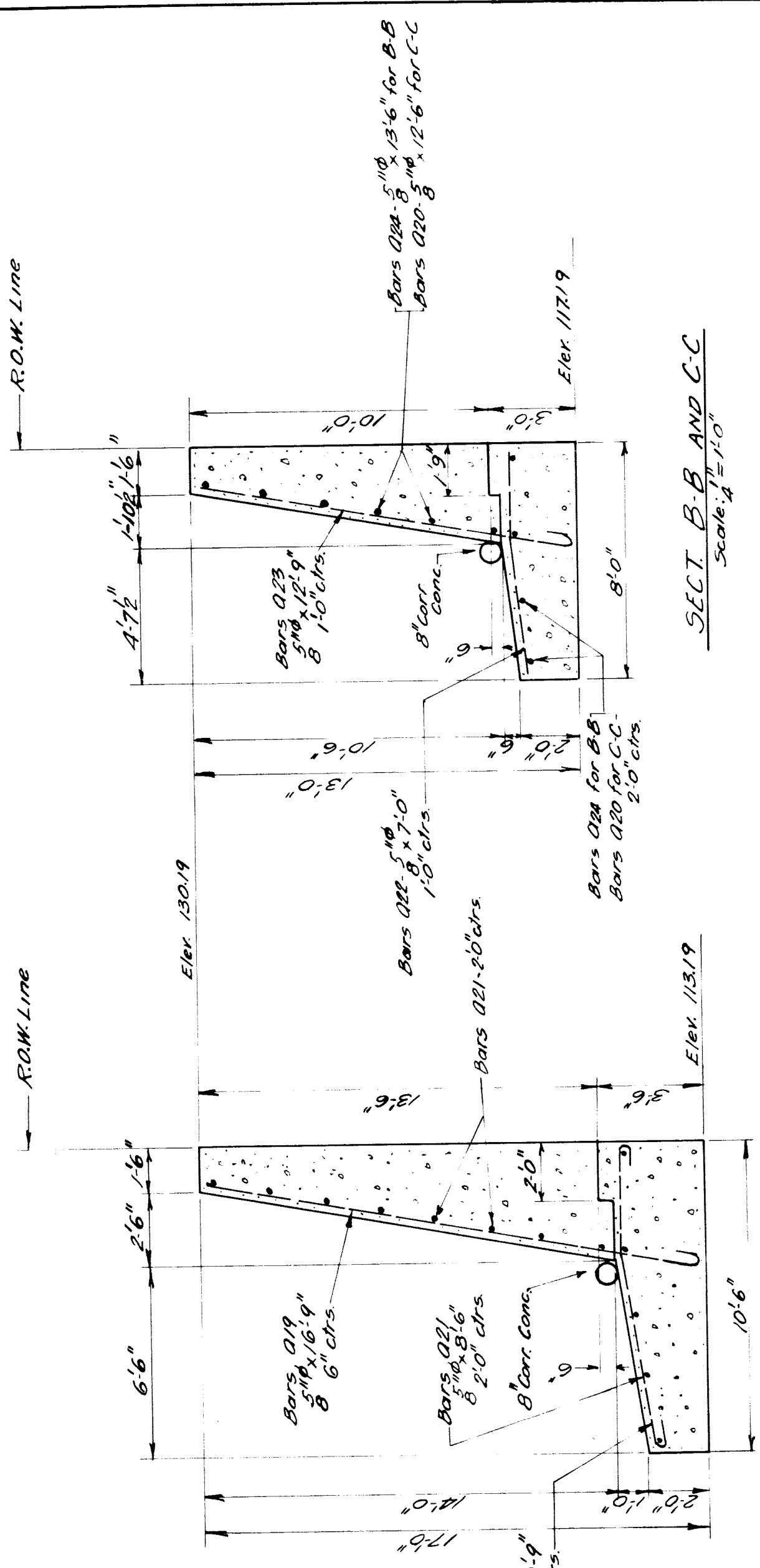
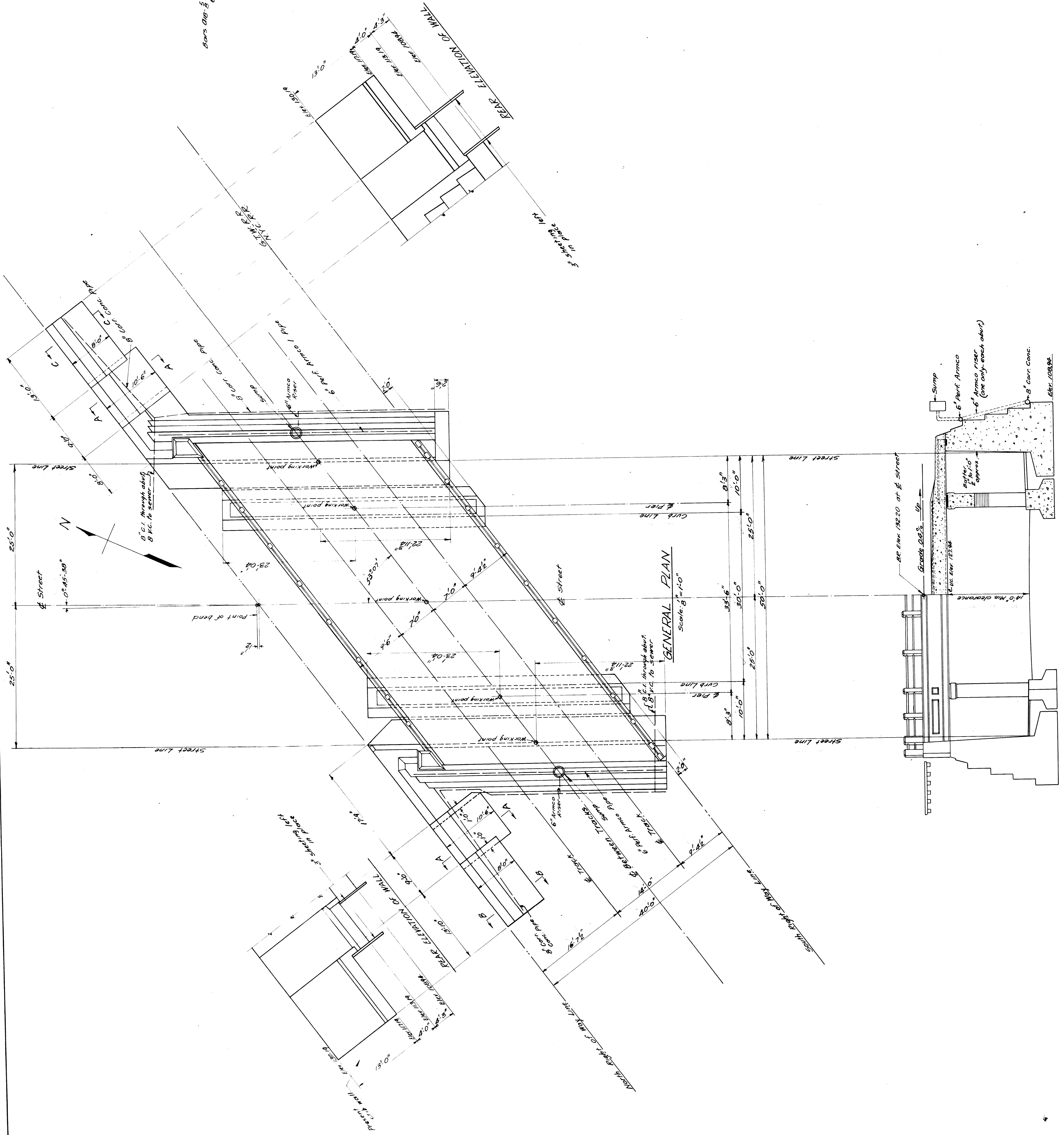
ISSUE NO. 1  
 DATE: 5/11/32

SHEET 14 OF 4  
 FILE XU 24-10







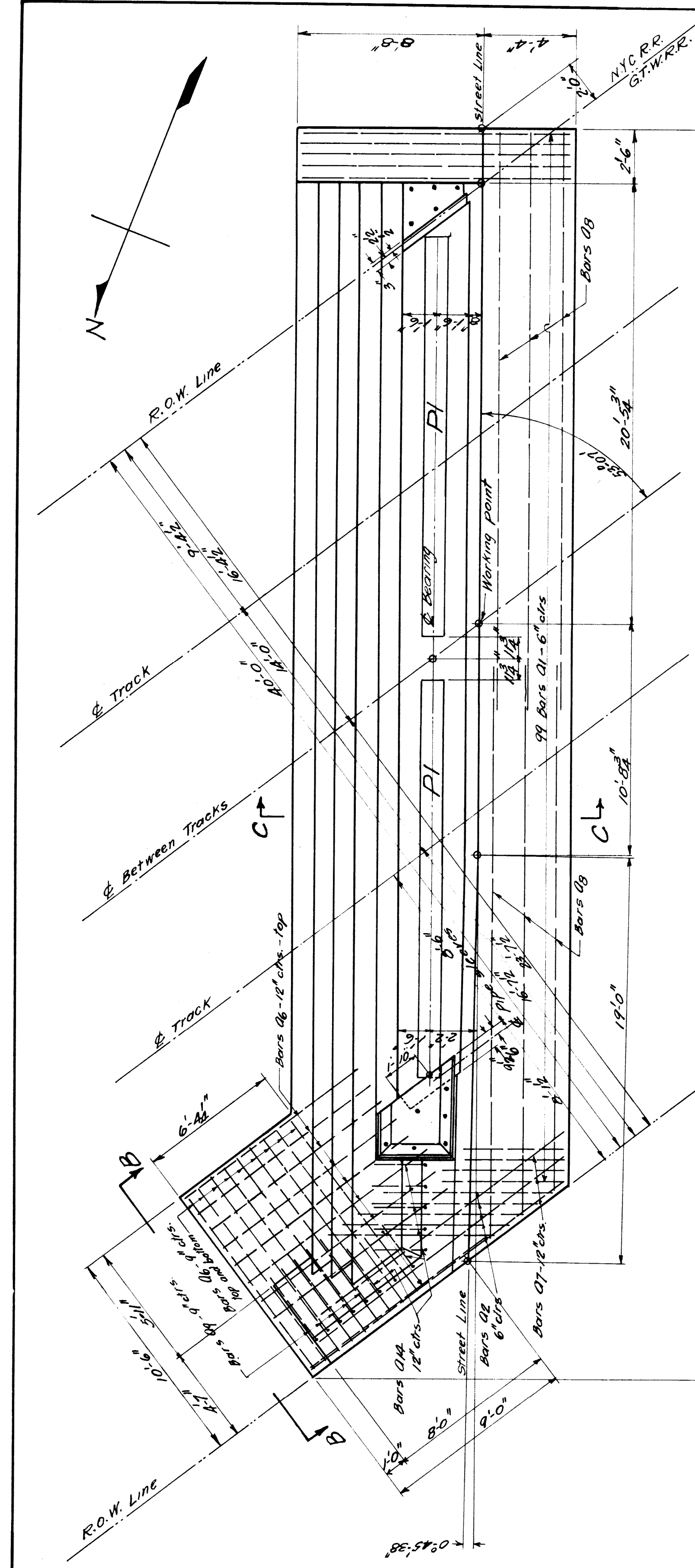


NOTE: All exposed top surfaces are to be given a slight slope for drainage.

GRAND TRUNK WESTERN R.R.  
GENERAL PLAN AND SECTIONS  
ROOSEVELT AVE. GRADE SEP.  
WEST DETROIT, MICHIGAN

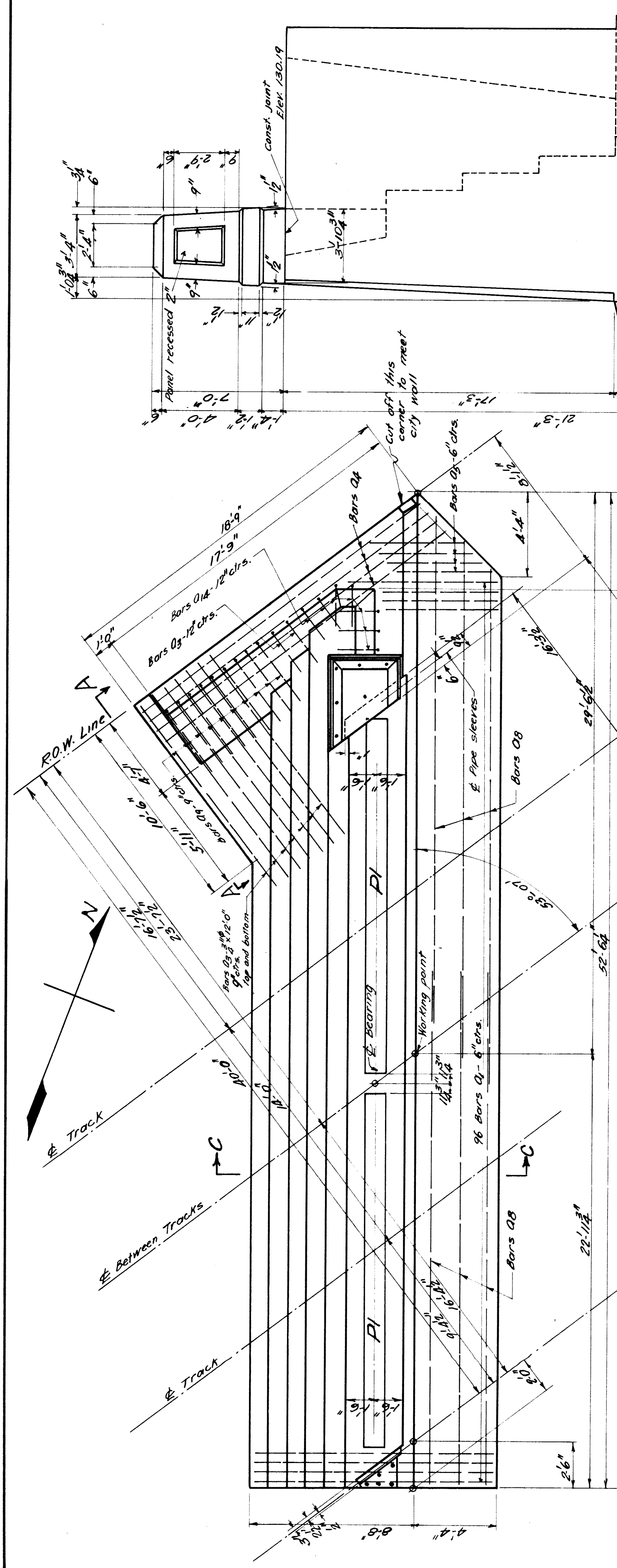
DR. R.E.M.	OFFICE OF CHIEF ENGINEER	J.M.C.	NO.
TR. R.E.M.	MICHIGAN	D.T.R.	M-6721
CH. R.E.M.	Detroit	APR. 5, 1928	





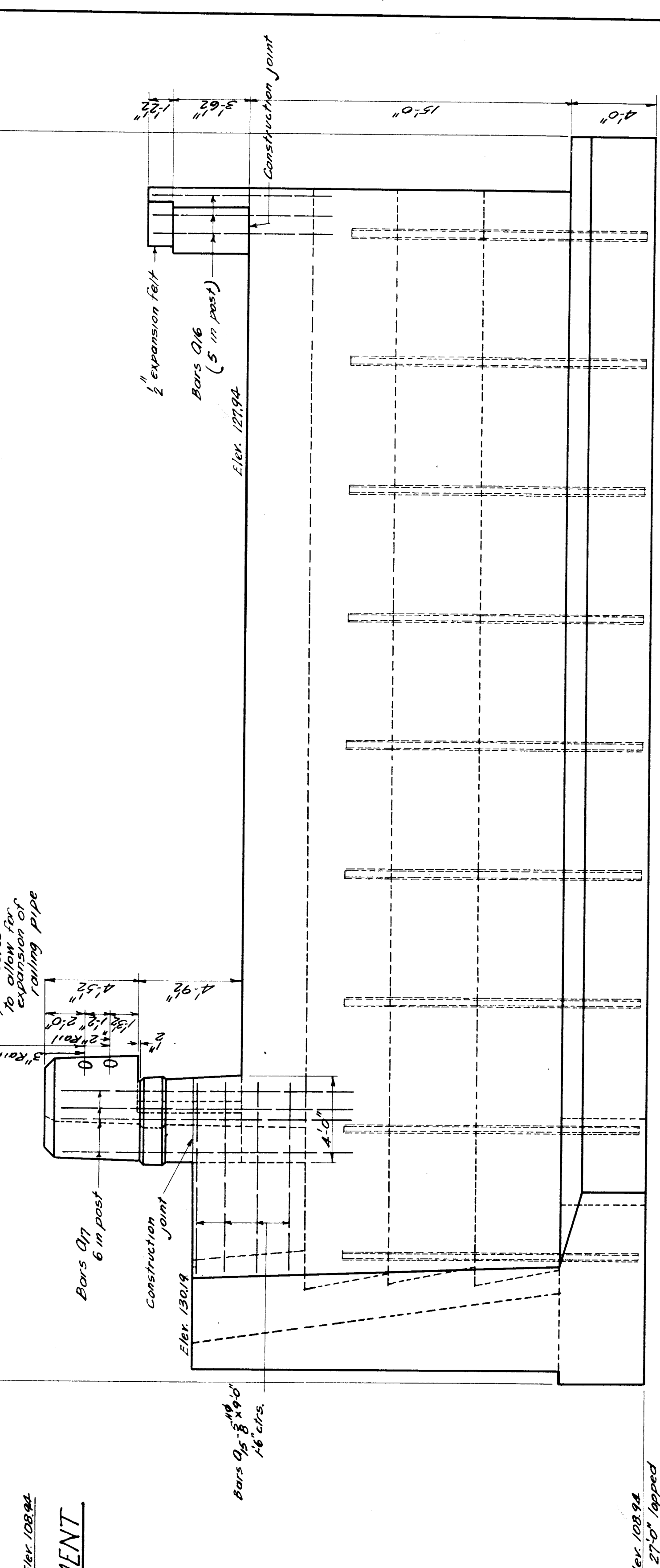
PLAN OF WEST ABUTMENT

PLAN OF EAST ABUTMENT

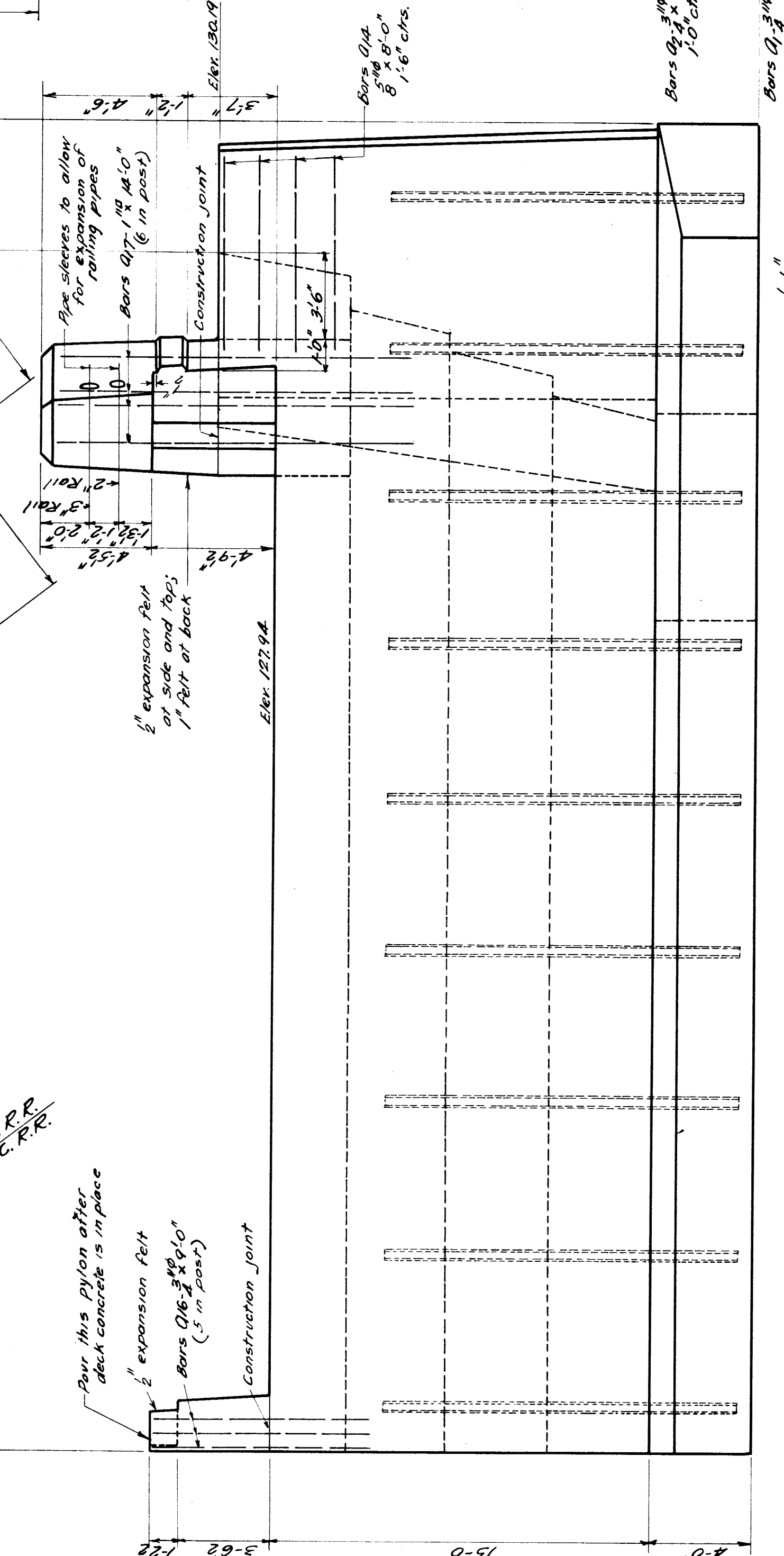


PLAN OF WEST ABUTMENT

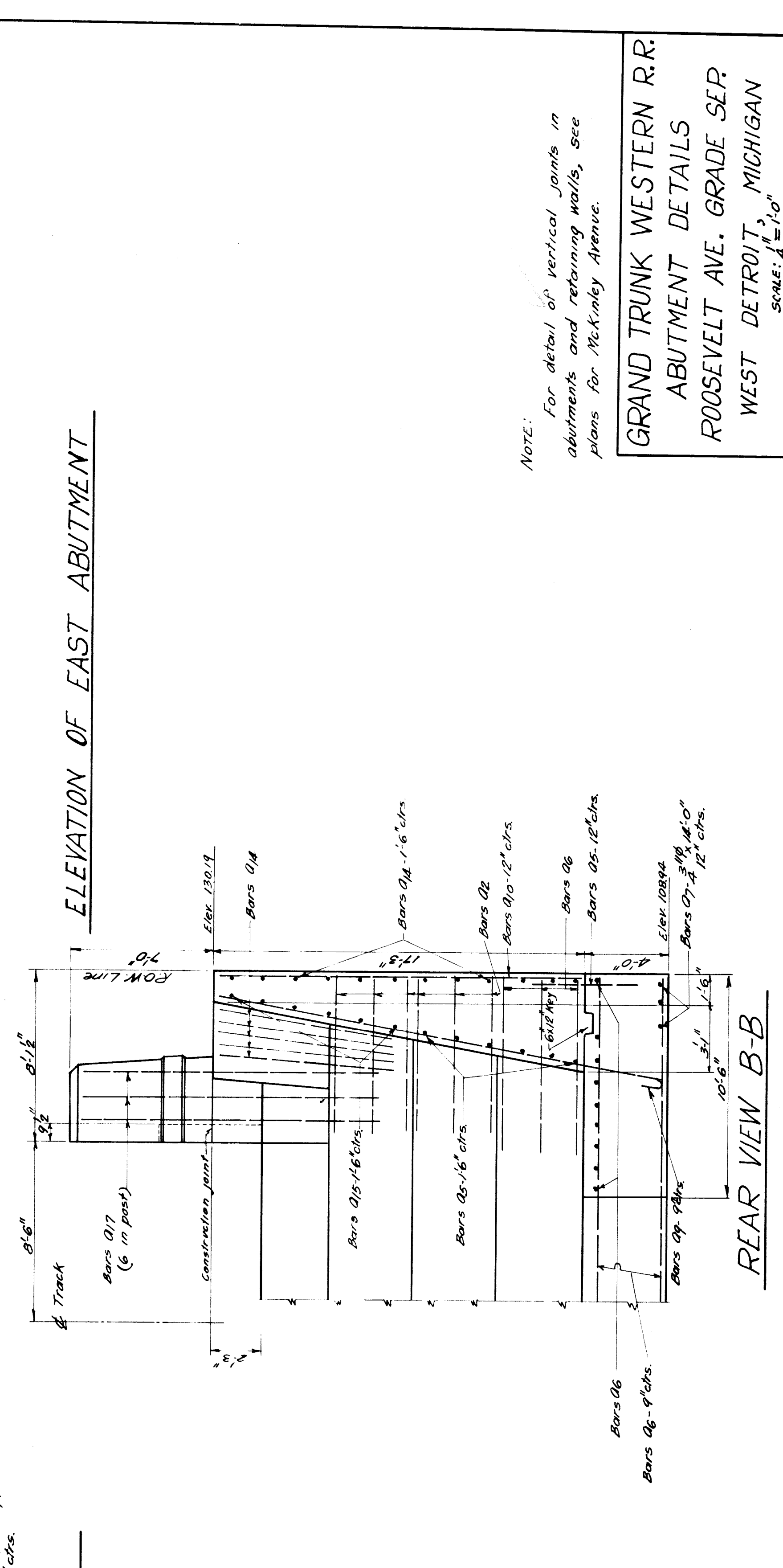
PLAN OF EAST ABUTMENT



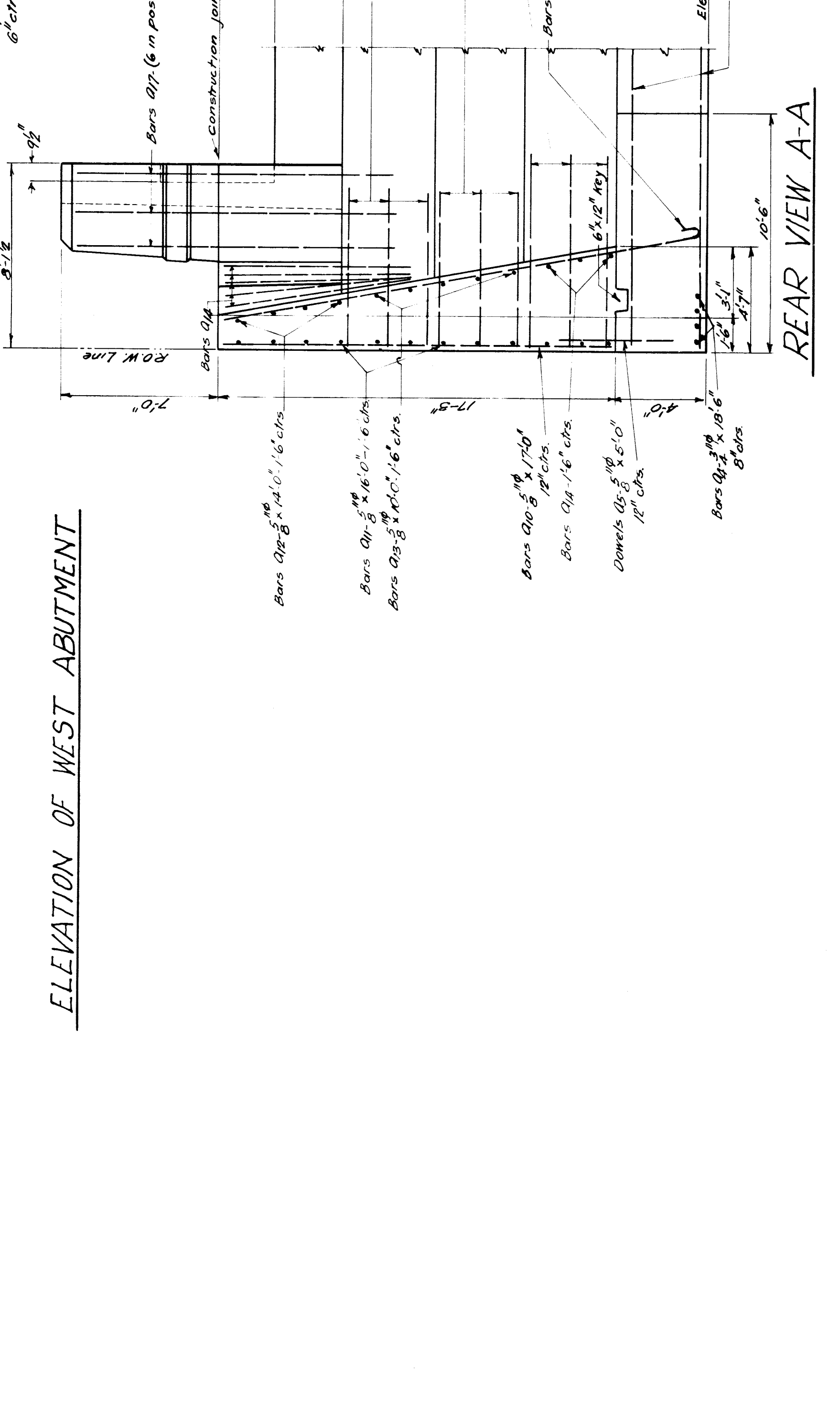
ELEVATION OF WEST ABUTMENT



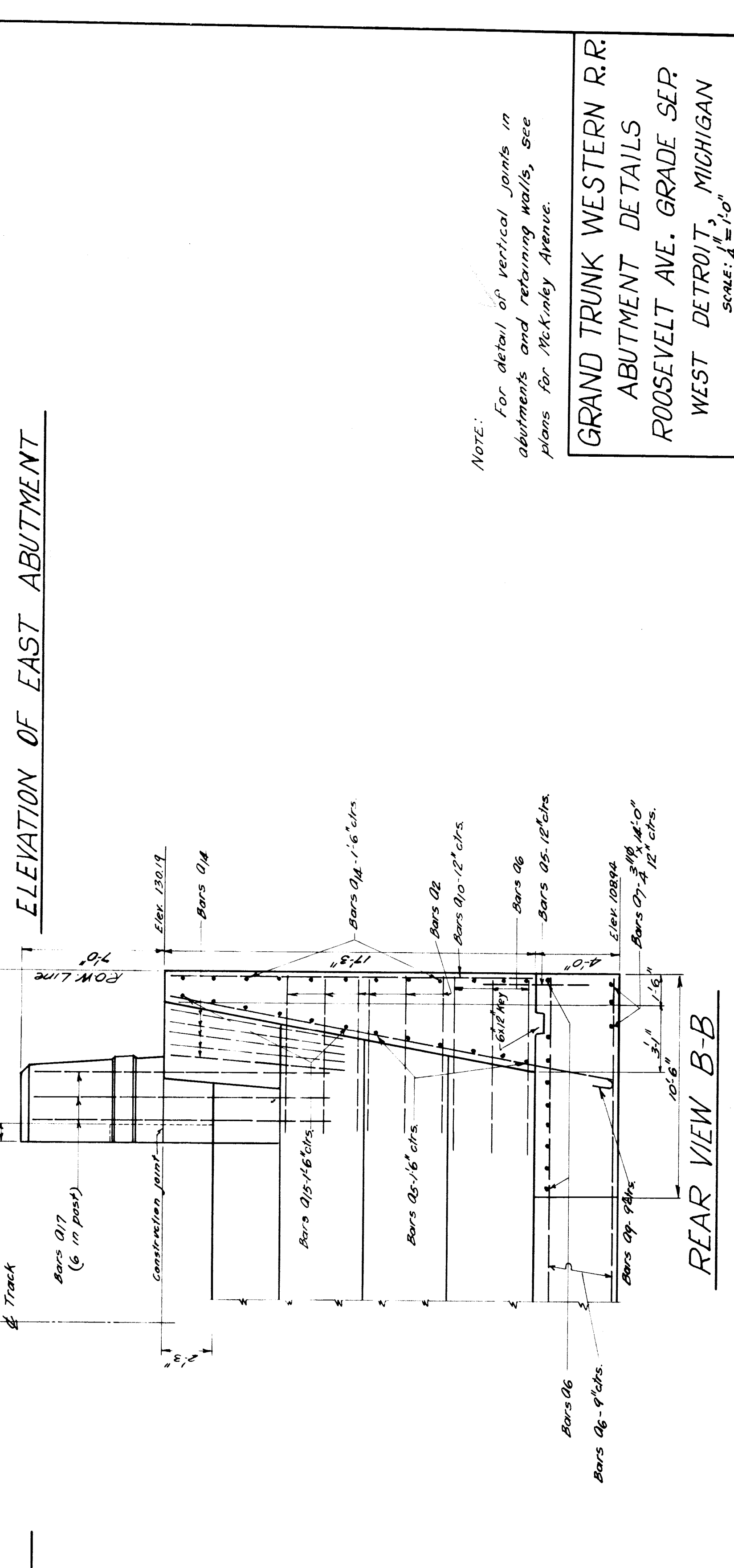
ELEVATION OF EAST ABUTMENT



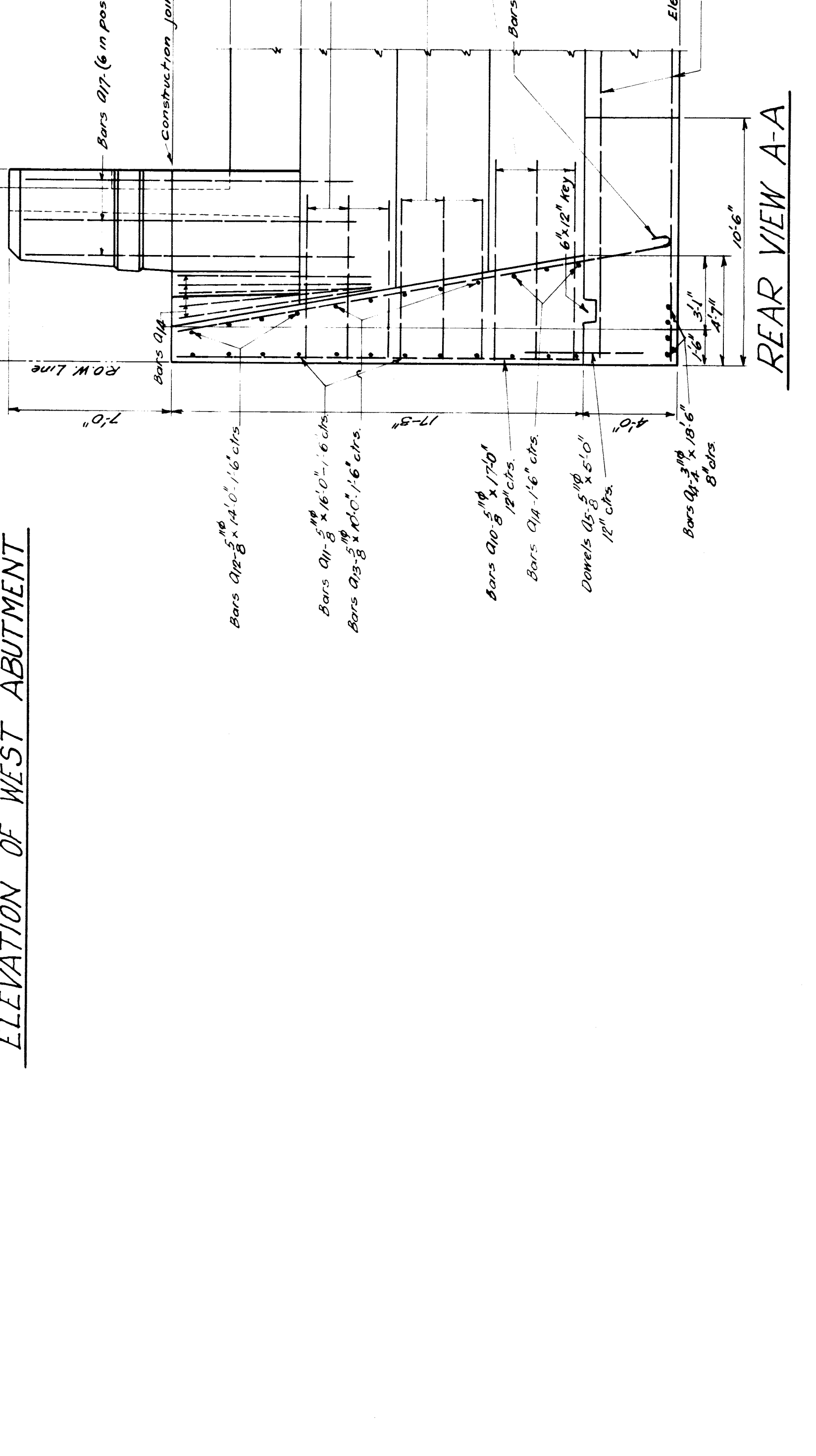
REAR VIEW A-A



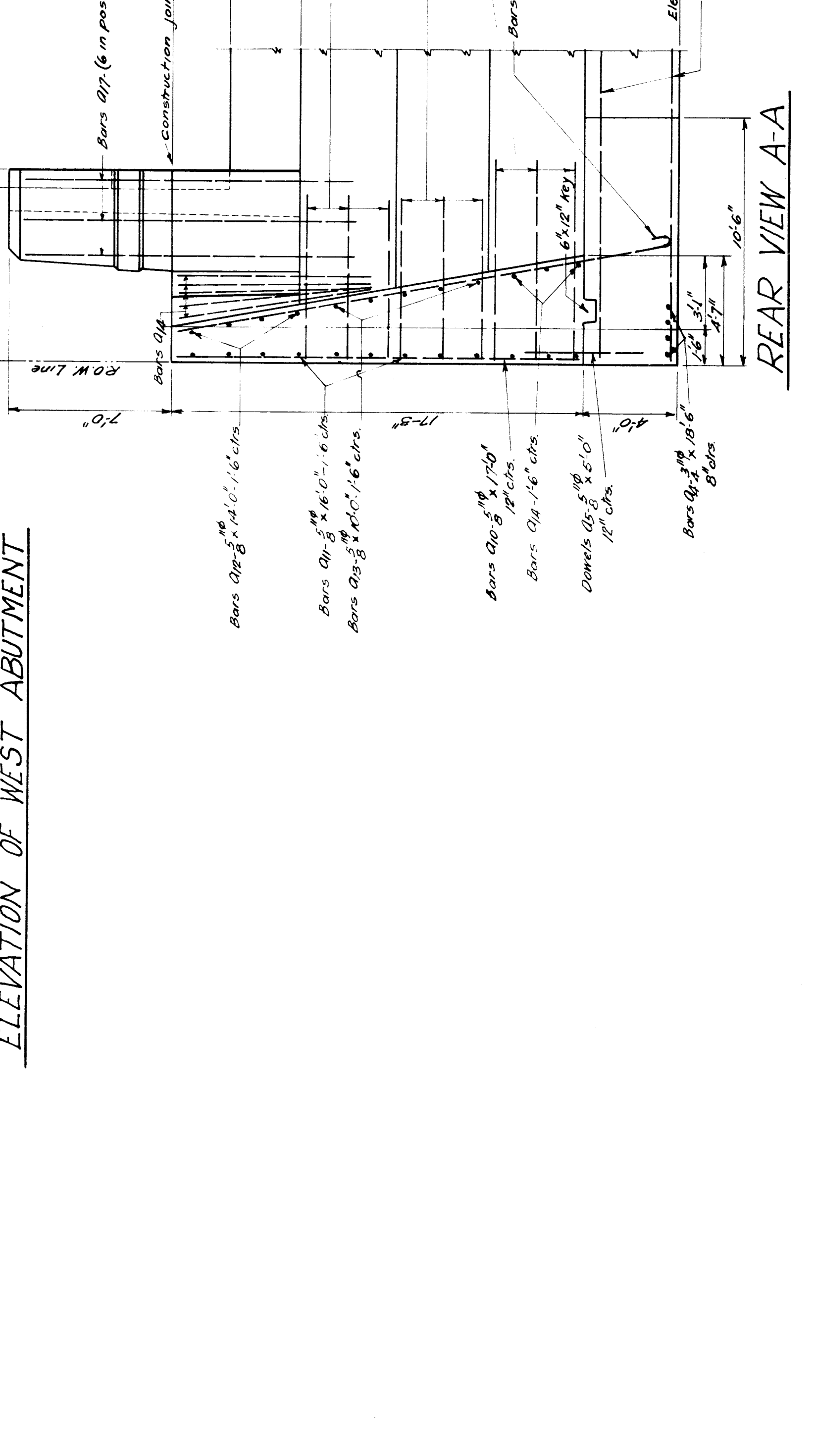
REAR VIEW B-B



CROSS SECTION C-C



END VIEW OF WEST ABUTMENT



ELEVATION OF EAST ABUTMENT

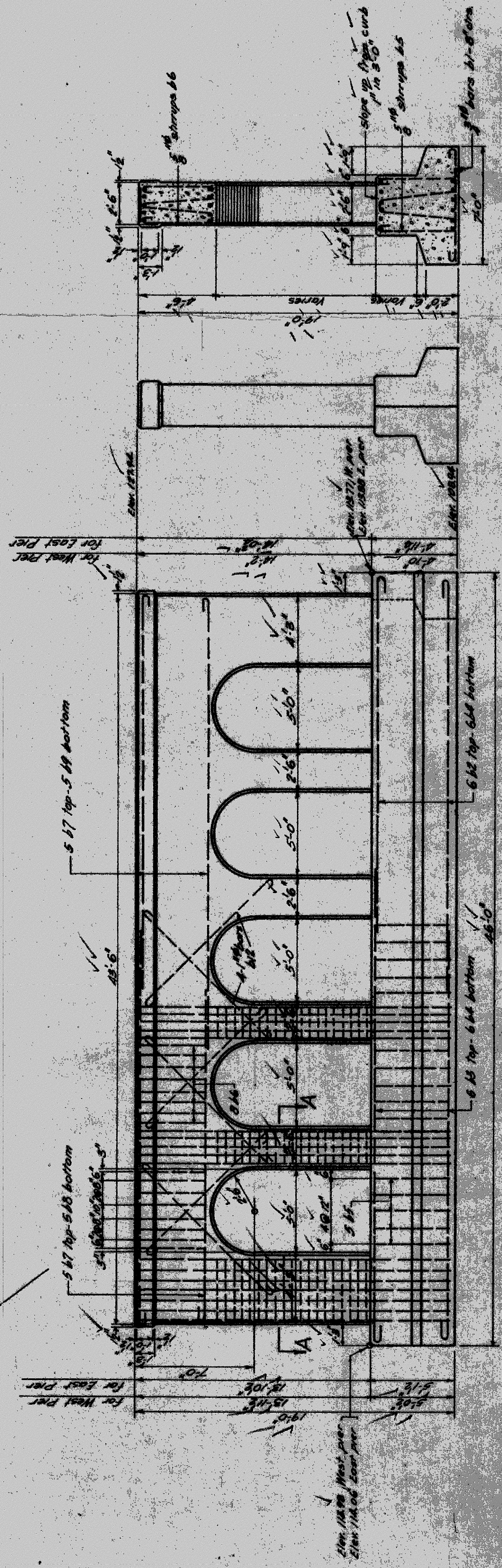
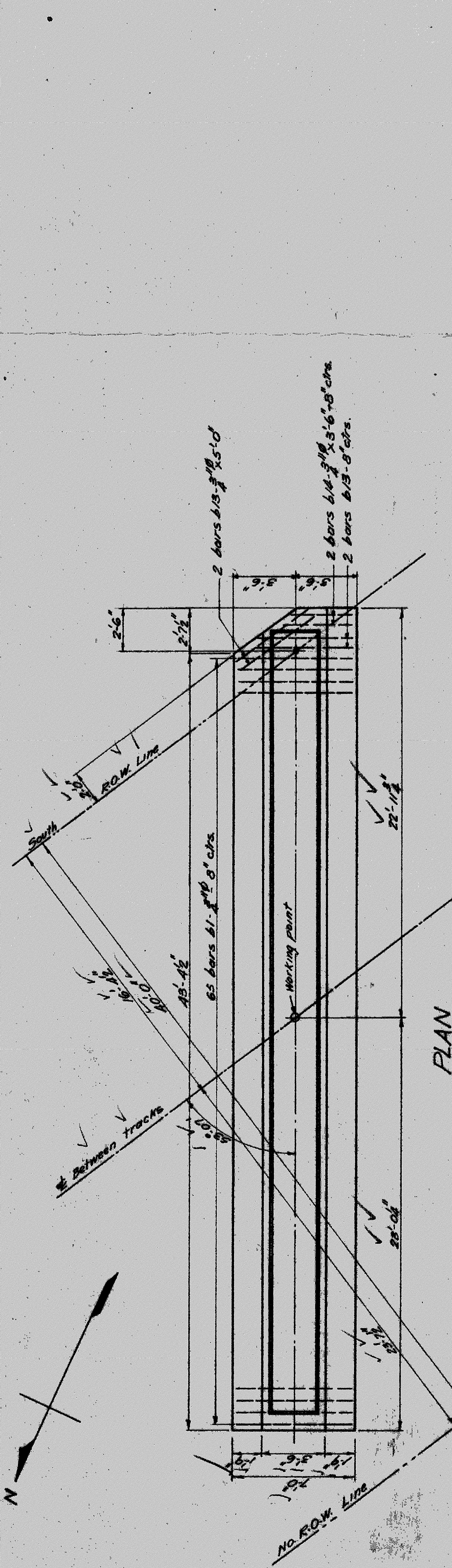
NOTE: For detail of vertical joints in abutments and retaining walls, see plans for McKinley Avenue.

GRAND TRUNK WESTERN R.R.  
 ABUTMENT DETAILS  
 ROOSEVELT AVE. GRADE SER.  
 WEST DETROIT, MICHIGAN

SCALE: 1/4" = 1'-0"  
 OFFICE OF CHIEF ENGINEER  
 DETROIT, MICHIGAN  
 APR. 13, 1933

JNL NO. W-6122  
 CH. P.M.  
 SHEET 2 OF 5





ELEVATION

CROSS SECTION

DETAILS OF BENTS

SECTION A-A

BILL OF REINFORCING STEEL			BENDING DIAGRAM
LOCATION	WK. NO.	SIZE/LENGTH	
Main footing	01	18" x 18" x 15'-6"	straight
Wing wall and abutment	02	10" x 7'-6"	straight
Wing wall	03	16" x 12'-0"	straight
Wing wall	04	18" x 18'-0"	straight
Footings, wing walls and abutments	05	5/8" x 18'-0"	straight
Wing walls	06	5/8" x 18'-0"	straight
Footings of abutments	07	2" x 14'-0"	straight
Wing wall footings	08	2" x 14'-0"	straight
Wing wall	09	14" x 10'-0"	straight
Wing wall	10	14" x 10'-0"	straight
Wing wall	11	14" x 10'-0"	straight
Wing wall	12	14" x 10'-0"	straight
Wing wall	13	14" x 10'-0"	straight
Wing wall	14	14" x 10'-0"	straight
Wing wall	15	14" x 10'-0"	straight
Wing wall	16	14" x 10'-0"	straight
Wing wall	17	14" x 10'-0"	straight
Wing wall	18	14" x 10'-0"	straight
Wing wall	19	14" x 10'-0"	straight
Wing wall	20	14" x 10'-0"	straight
Wing wall	21	14" x 10'-0"	straight
Wing wall	22	14" x 10'-0"	straight
Wing wall	23	14" x 10'-0"	straight
Wing wall	24	14" x 10'-0"	straight
Wing wall	25	14" x 10'-0"	straight
Wing wall	26	14" x 10'-0"	straight
Wing wall	27	14" x 10'-0"	straight
Wing wall	28	14" x 10'-0"	straight
Wing wall	29	14" x 10'-0"	straight
Wing wall	30	14" x 10'-0"	straight
Wing wall	31	14" x 10'-0"	straight
Wing wall	32	14" x 10'-0"	straight
Wing wall	33	14" x 10'-0"	straight
Wing wall	34	14" x 10'-0"	straight
Wing wall	35	14" x 10'-0"	straight
Wing wall	36	14" x 10'-0"	straight
Wing wall	37	14" x 10'-0"	straight
Wing wall	38	14" x 10'-0"	straight
Wing wall	39	14" x 10'-0"	straight
Wing wall	40	14" x 10'-0"	straight
Wing wall	41	14" x 10'-0"	straight
Wing wall	42	14" x 10'-0"	straight
Wing wall	43	14" x 10'-0"	straight
Wing wall	44	14" x 10'-0"	straight
Wing wall	45	14" x 10'-0"	straight
Wing wall	46	14" x 10'-0"	straight
Wing wall	47	14" x 10'-0"	straight
Wing wall	48	14" x 10'-0"	straight
Wing wall	49	14" x 10'-0"	straight
Wing wall	50	14" x 10'-0"	straight
Wing wall	51	14" x 10'-0"	straight
Wing wall	52	14" x 10'-0"	straight
Wing wall	53	14" x 10'-0"	straight
Wing wall	54	14" x 10'-0"	straight
Wing wall	55	14" x 10'-0"	straight
Wing wall	56	14" x 10'-0"	straight
Wing wall	57	14" x 10'-0"	straight
Wing wall	58	14" x 10'-0"	straight
Wing wall	59	14" x 10'-0"	straight
Wing wall	60	14" x 10'-0"	straight
Wing wall	61	14" x 10'-0"	straight
Wing wall	62	14" x 10'-0"	straight
Wing wall	63	14" x 10'-0"	straight
Wing wall	64	14" x 10'-0"	straight
Wing wall	65	14" x 10'-0"	straight
Wing wall	66	14" x 10'-0"	straight
Wing wall	67	14" x 10'-0"	straight
Wing wall	68	14" x 10'-0"	straight
Wing wall	69	14" x 10'-0"	straight
Wing wall	70	14" x 10'-0"	straight
Wing wall	71	14" x 10'-0"	straight
Wing wall	72	14" x 10'-0"	straight
Wing wall	73	14" x 10'-0"	straight
Wing wall	74	14" x 10'-0"	straight
Wing wall	75	14" x 10'-0"	straight
Wing wall	76	14" x 10'-0"	straight
Wing wall	77	14" x 10'-0"	straight
Wing wall	78	14" x 10'-0"	straight
Wing wall	79	14" x 10'-0"	straight
Wing wall	80	14" x 10'-0"	straight
Wing wall	81	14" x 10'-0"	straight
Wing wall	82	14" x 10'-0"	straight
Wing wall	83	14" x 10'-0"	straight
Wing wall	84	14" x 10'-0"	straight
Wing wall	85	14" x 10'-0"	straight
Wing wall	86	14" x 10'-0"	straight
Wing wall	87	14" x 10'-0"	straight
Wing wall	88	14" x 10'-0"	straight
Wing wall	89	14" x 10'-0"	straight
Wing wall	90	14" x 10'-0"	straight
Wing wall	91	14" x 10'-0"	straight
Wing wall	92	14" x 10'-0"	straight
Wing wall	93	14" x 10'-0"	straight
Wing wall	94	14" x 10'-0"	straight
Wing wall	95	14" x 10'-0"	straight
Wing wall	96	14" x 10'-0"	straight
Wing wall	97	14" x 10'-0"	straight
Wing wall	98	14" x 10'-0"	straight
Wing wall	99	14" x 10'-0"	straight
Wing wall	100	14" x 10'-0"	straight

GRAND TRUNK WESTERN R.R.  
 DETAILS OF BENTS AND REINFORCING  
 ROOSEVELT AVE. GRADE SEP  
 WEST DETROIT, MICHIGAN

SCALE AS SHOWN  
 CHECKED BY: [Signature]  
 DRAWN BY: [Signature]  
 DATE: [Date]

File XU 24-14  
 6/10/33

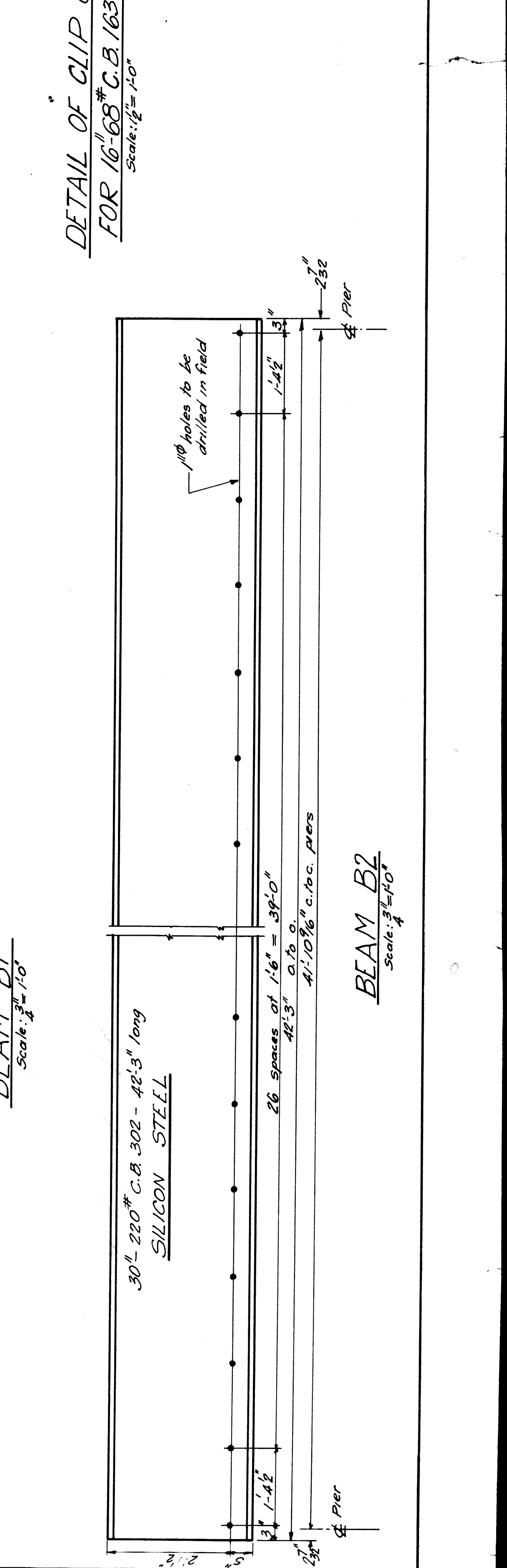
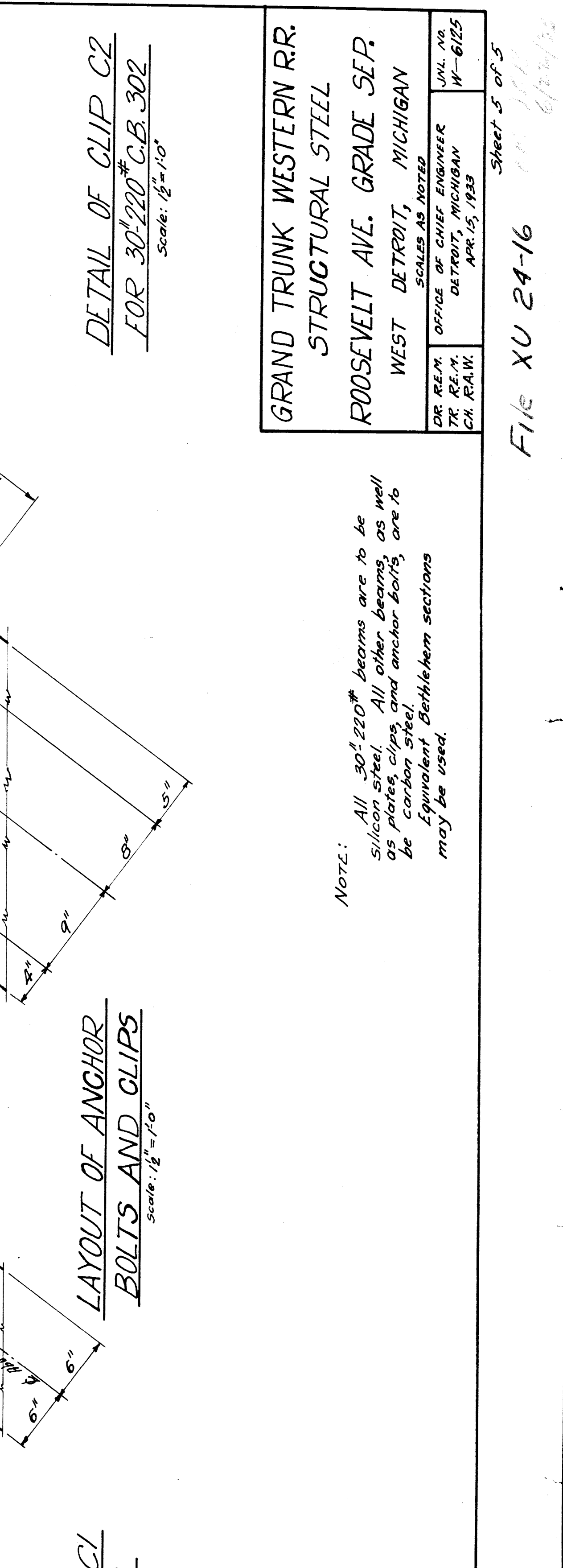
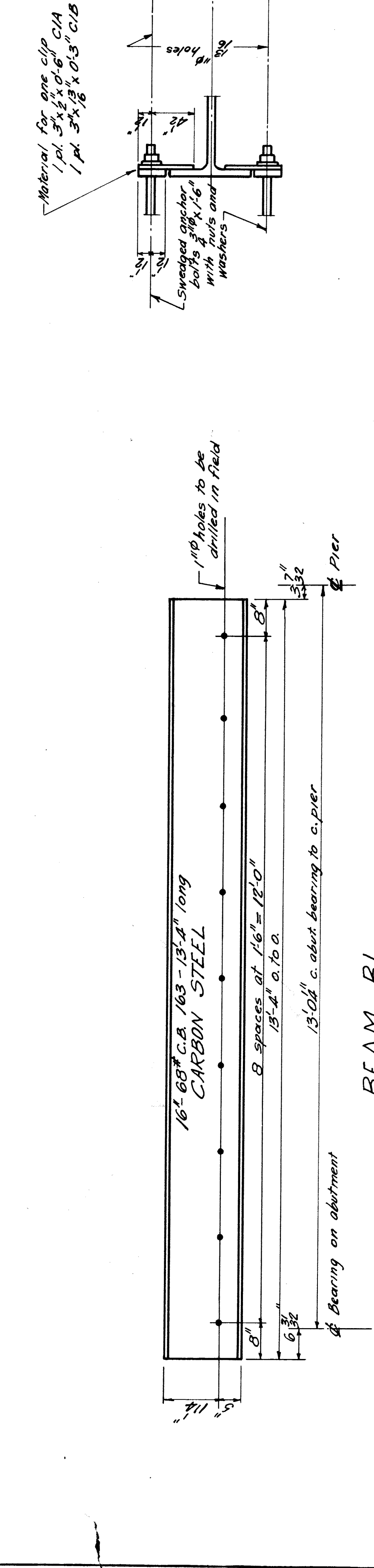
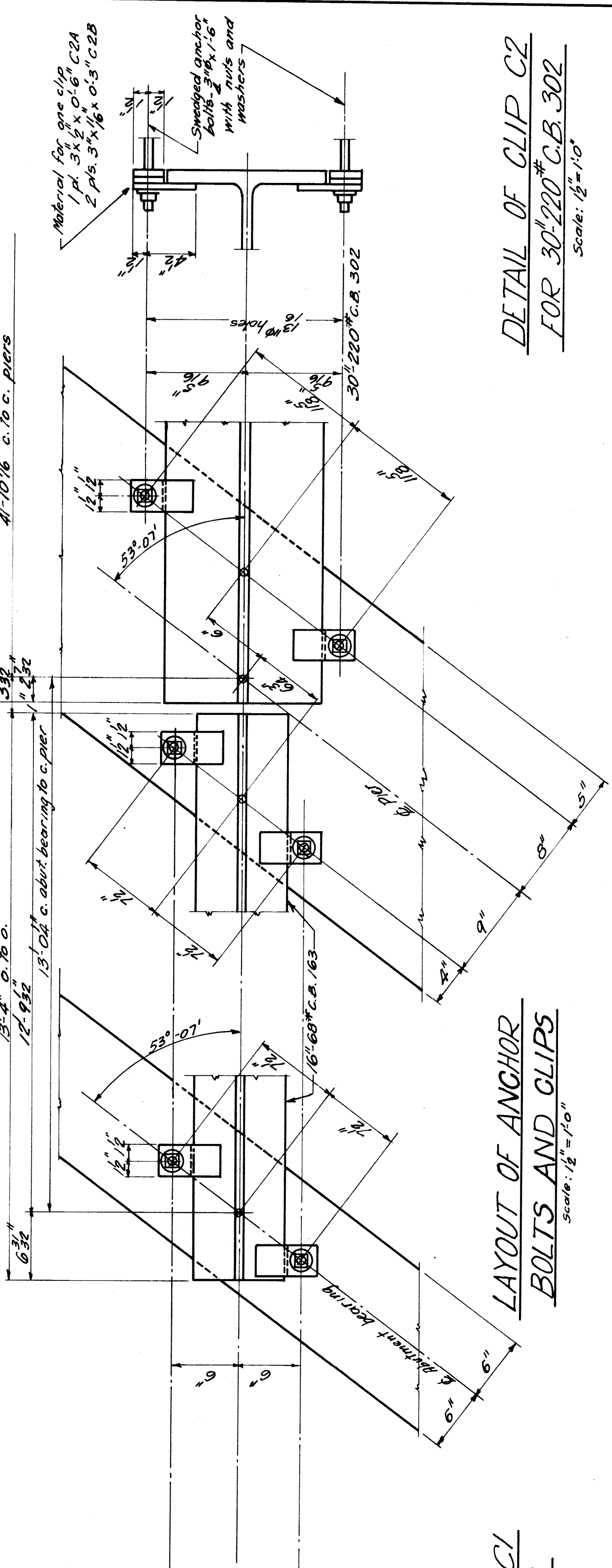
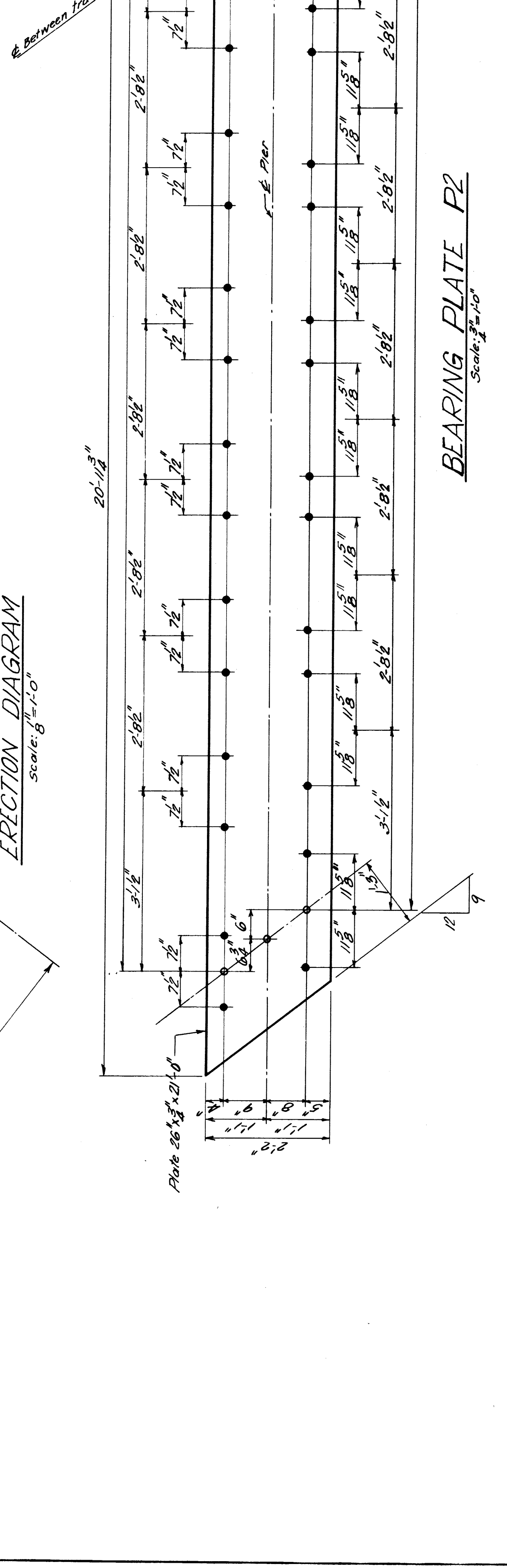
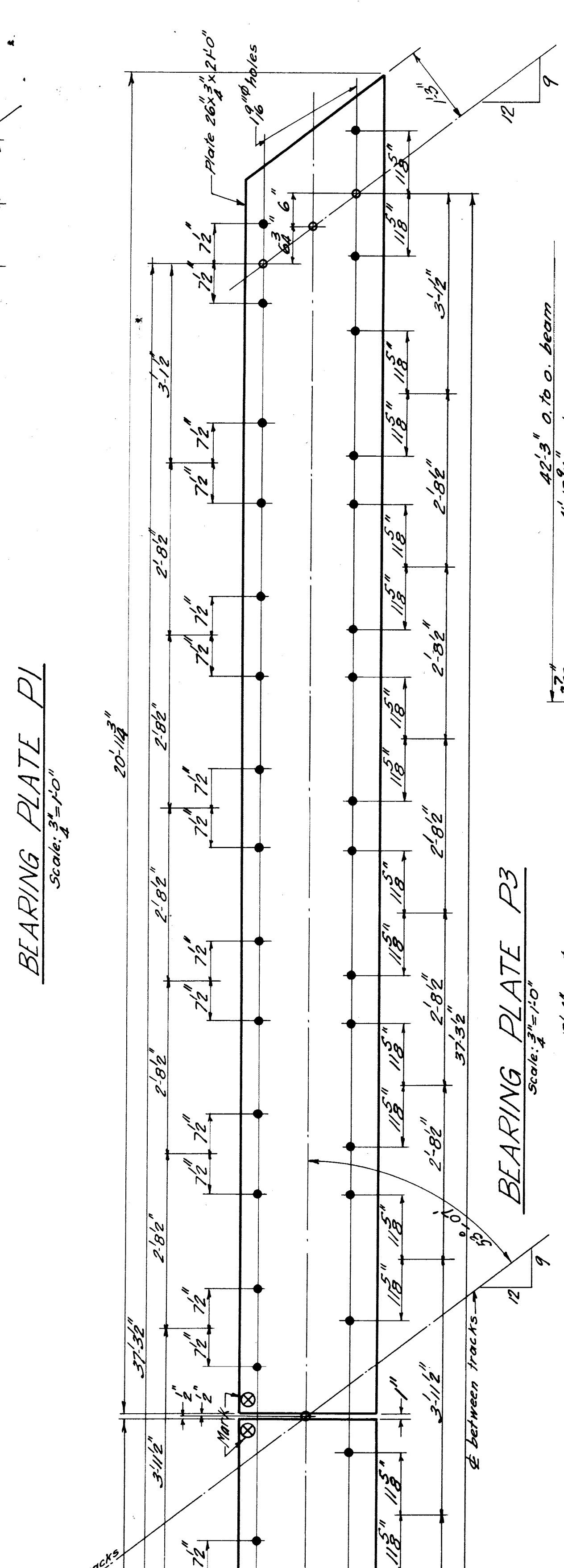
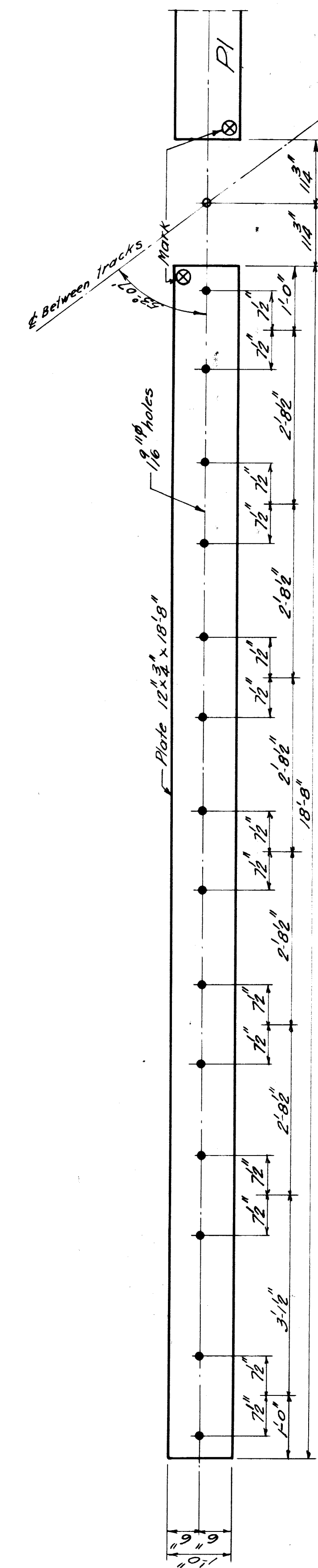






**BILL OF STRUCTURAL STEEL**

NUMBER	MARK	DESCRIPTION	REMARKS	SPECIAL	NOTE
4	B1	16" 68# C.B. 163-13" 4" 1/2	To be shipped plain (drilled in field)		
2	B2	30" 220# C.B. 302-42" 3" 1/2	" " " " " "	SILICON STEEL	
12	B3	30" 220# C.B. 302-42" 3" 1/2	Plain beams	SILICON STEEL	
24	B4	16" 68# C.B. 163-13" 4" 1/2	" " " " " "		
4	P1	Plate 26" 1/2 x 18" 9"	Abutment bearing plates		
2	P2	Plate 26" 1/2 x 21" 0"	Pier bearing plates		
2	P3	Plate 26" 1/2 x 21" 0"	" " " " " "		
112	C1	Clips for C.B. 163	Two plates each		
56	C2	Clips for C.B. 302	Three plates each		
168		3/8" 16" swaged anchor bolts	With nuts and washers		Not included in steel requisition; will be furnished by Railroad.



NOTE: All 30" 220# beams are to be silicon steel. All other beams, as well as plates, clips, and anchor bolts, are to be equivalent Bethlehem sections may be used.

GRAND TRUNK WESTERN R.R.  
STRUCTURAL STEEL  
ROOSEVELT AVE. GRADE SEP.  
WEST DETROIT, MICHIGAN  
SCALE AS NOTED  
OFFICE OF CHIEF ENGINEER  
DETROIT, MICHIGAN  
W-6125  
CH. R.A.W.  
APR. 15, 1933  
J.H. VA  
M.L. VA  
Sheet 5 of 5



