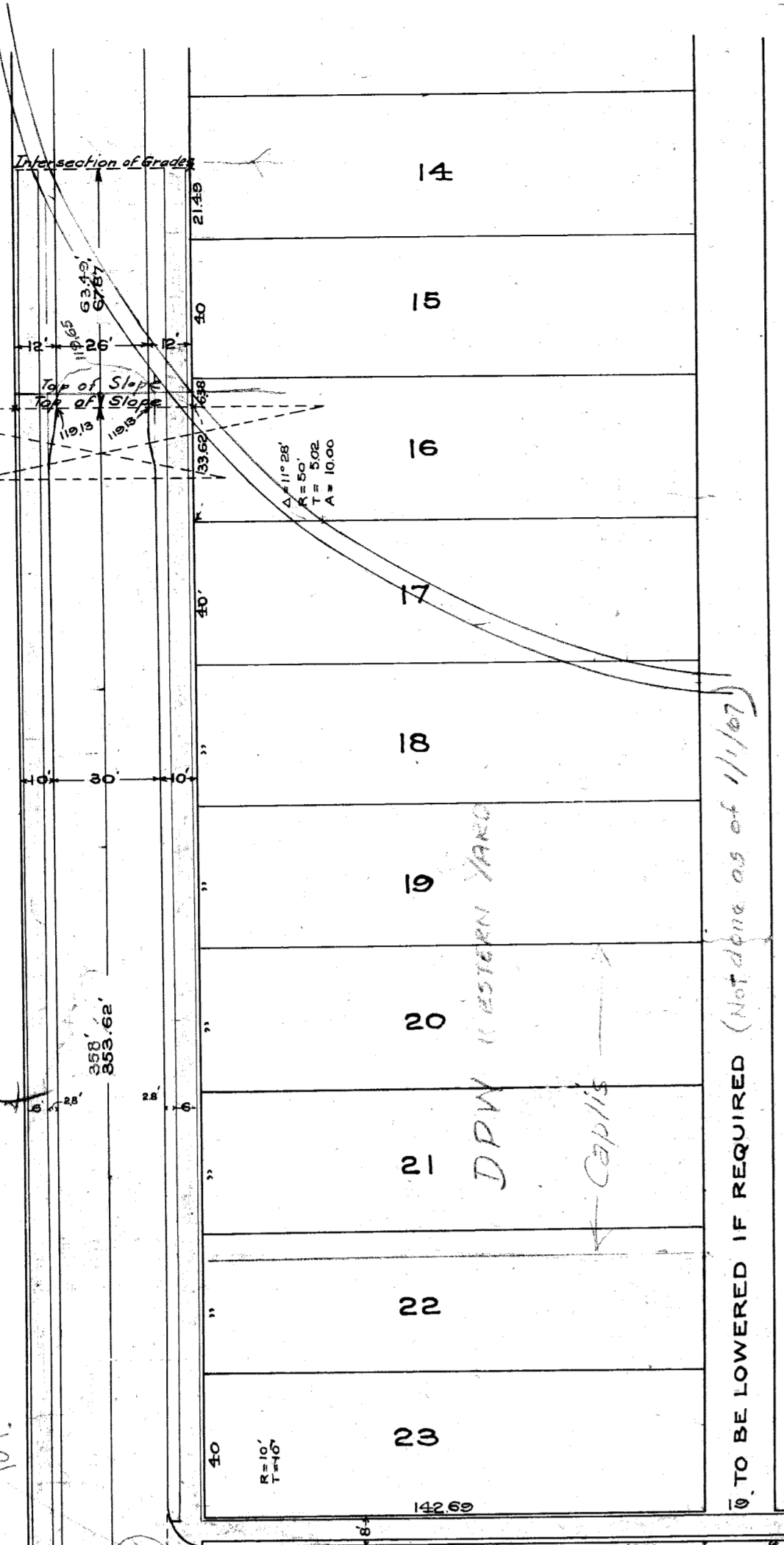


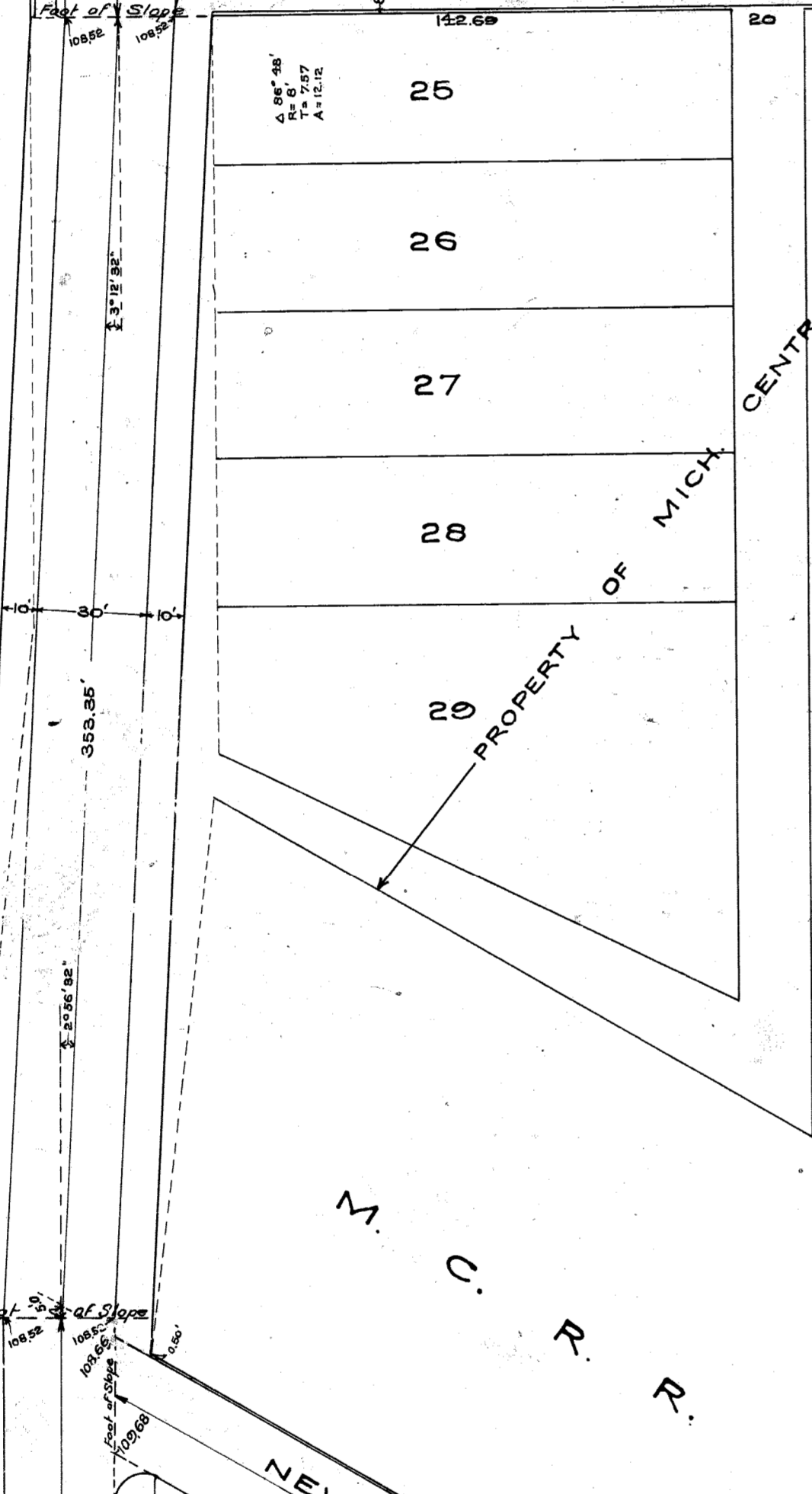
PROPOSED SUBWAY IN
 TWENTIETH STREET
 UNDER M.C.R.R.

Approved: *A.H. McCormick*
 City Engineer
W.M. [Signature]
 Chief Engineer, M.C.R.R.

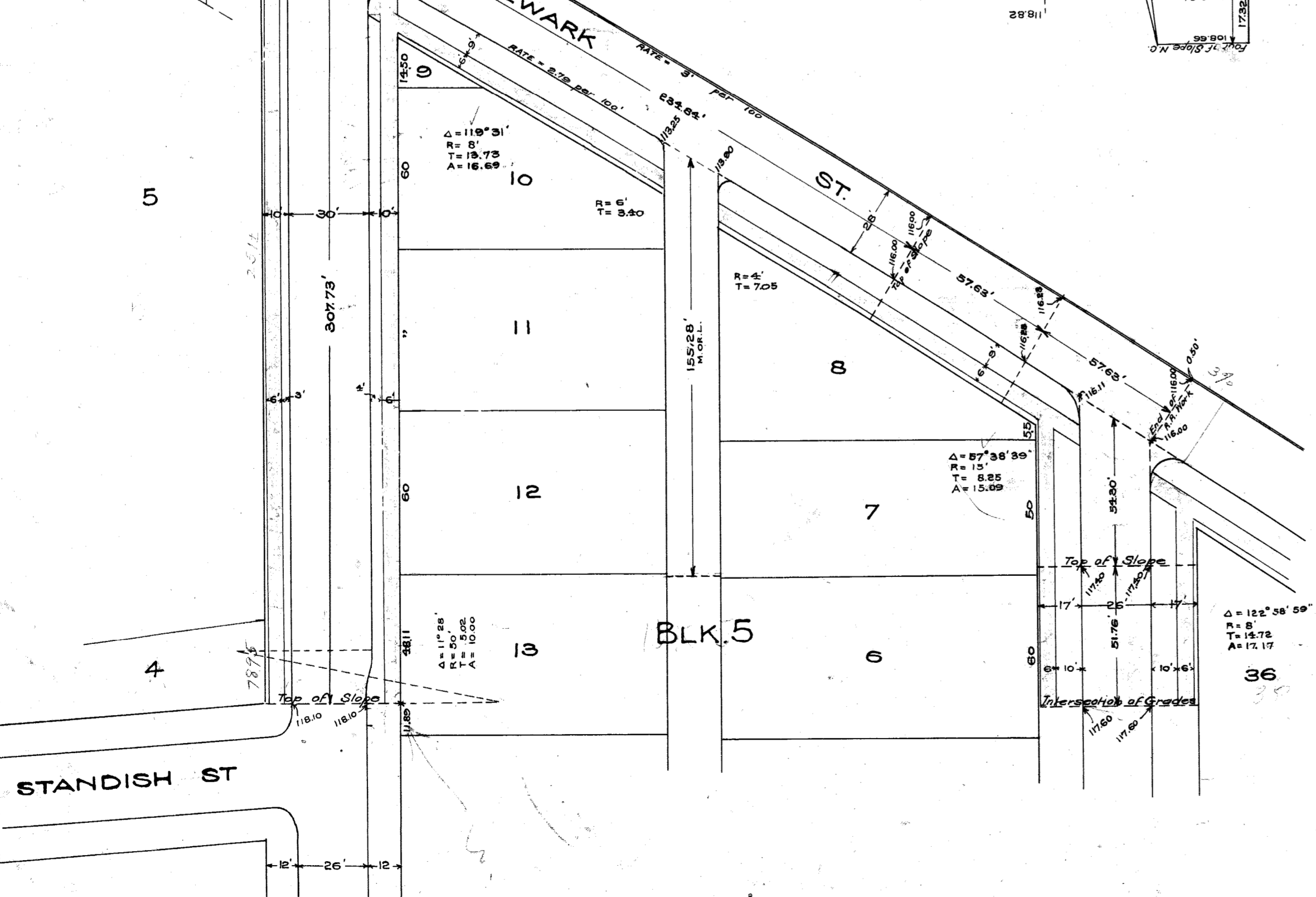
M. C. R. R. 20TH ST. YARD



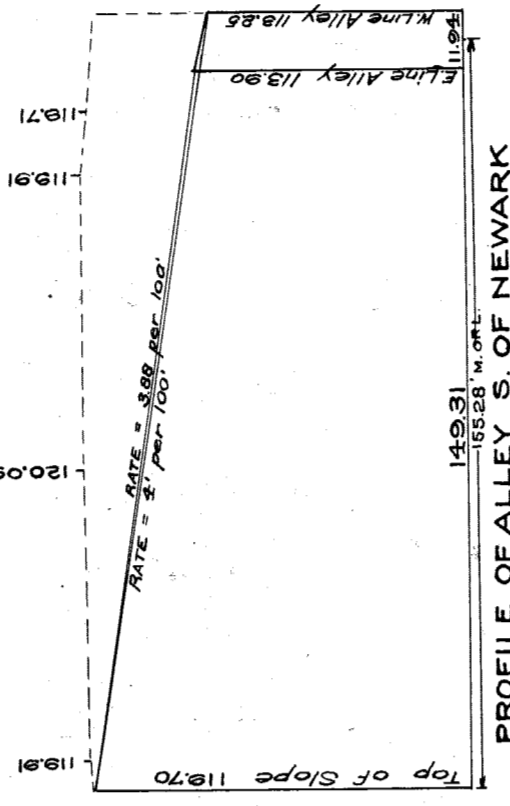
WESTERN STORAGE YARD
 D. P. W.



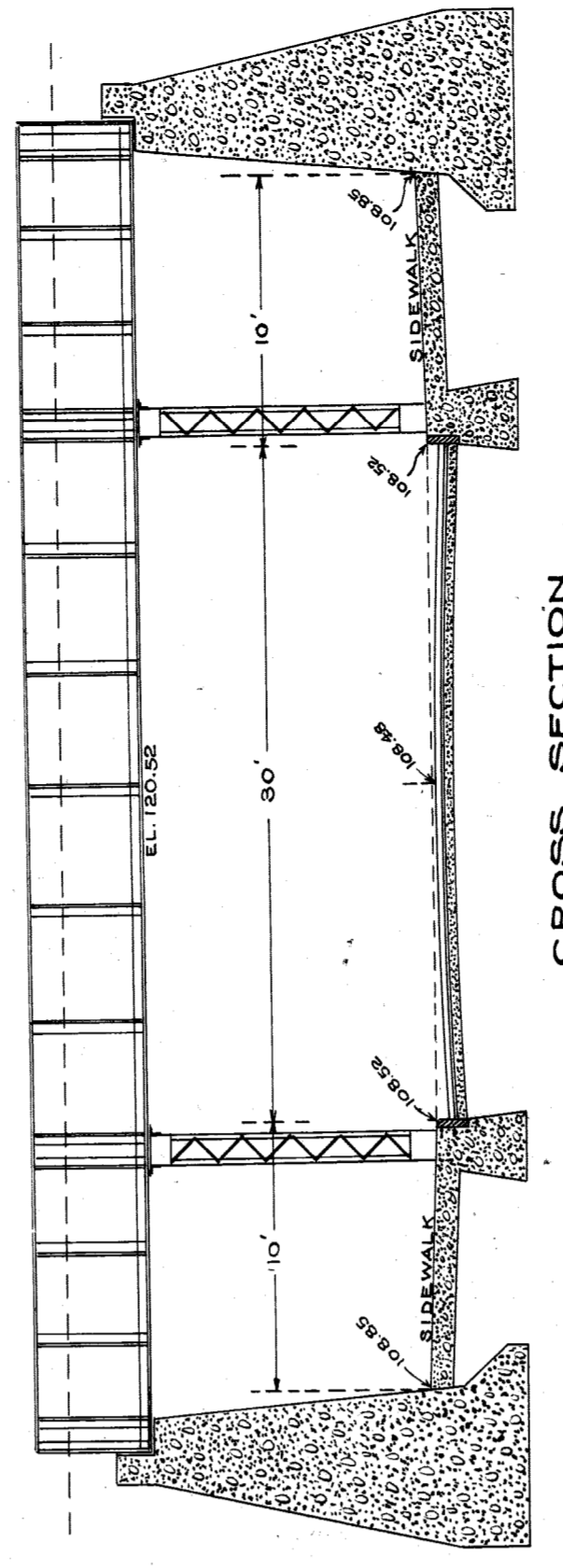
PLAN
 SCALE ONE INCH = 40 FEET



BLK. 5

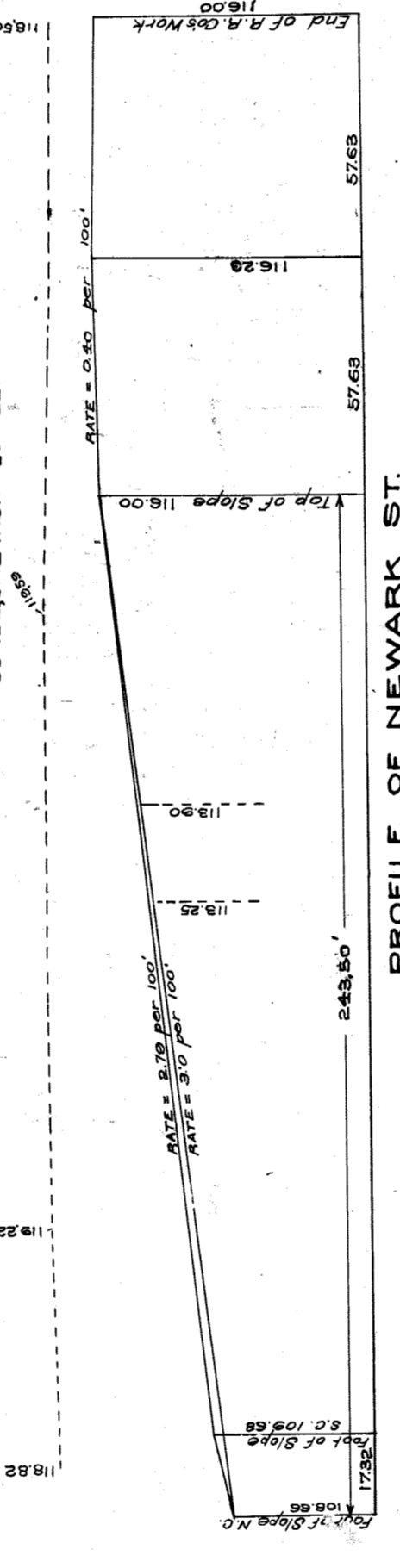


PROFILE OF ALLEY S. OF NEWARK

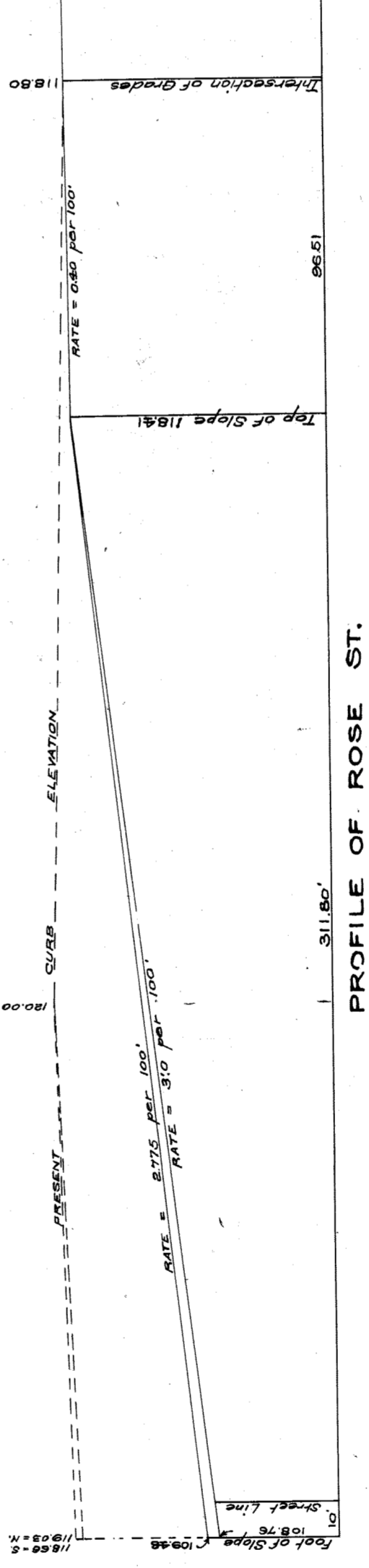


CROSS SECTION

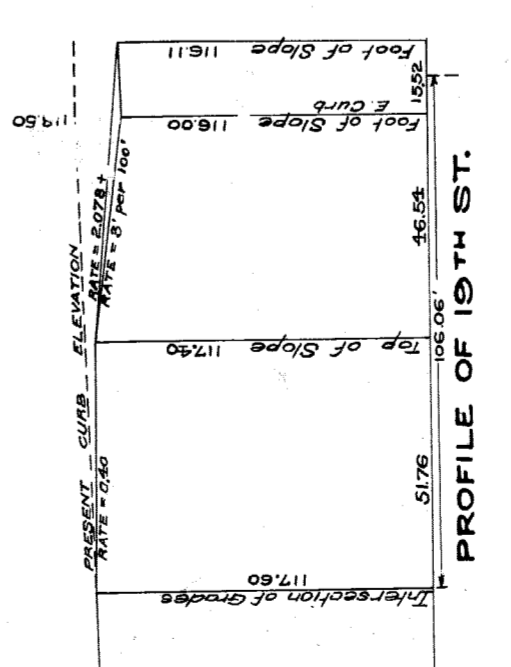
Aug. 1910
 Change of Grade made necessary
 by reason of relocating of track across
 20th Street entering Viger Coal Co's.
 Property & D. P. W. Storage Yard. See
 Council Pro. of July 25/10.
 J.M.R.



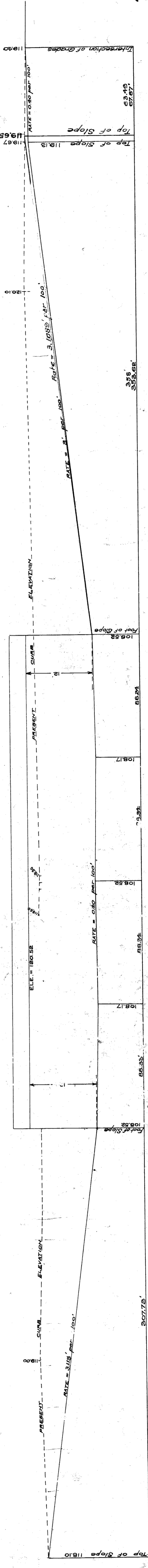
PROFILE OF NEWARK ST.



PROFILE OF ROSE ST.



PROFILE OF 19TH ST.



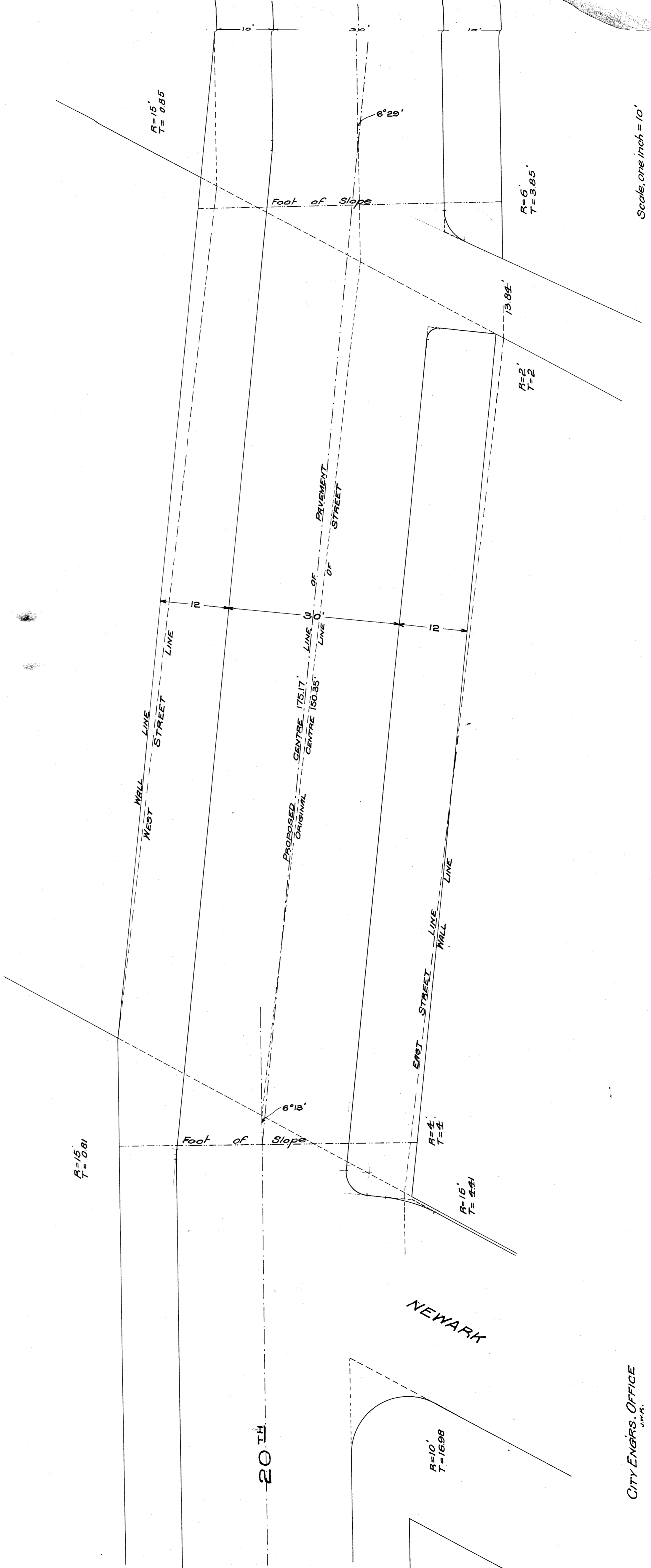
LONGITUDINAL SECTION
 HOR. SCALE ONE INCH = 40 FEET
 VER. " " = 10 "

CITY ENGINEER'S OFFICE
 CHAS. A. [Signature]
 AUG 21 1909

20TH ST.

City Engineer's Office.

A-2 J-3-a
 File XU 531



Scale, one inch = 10'

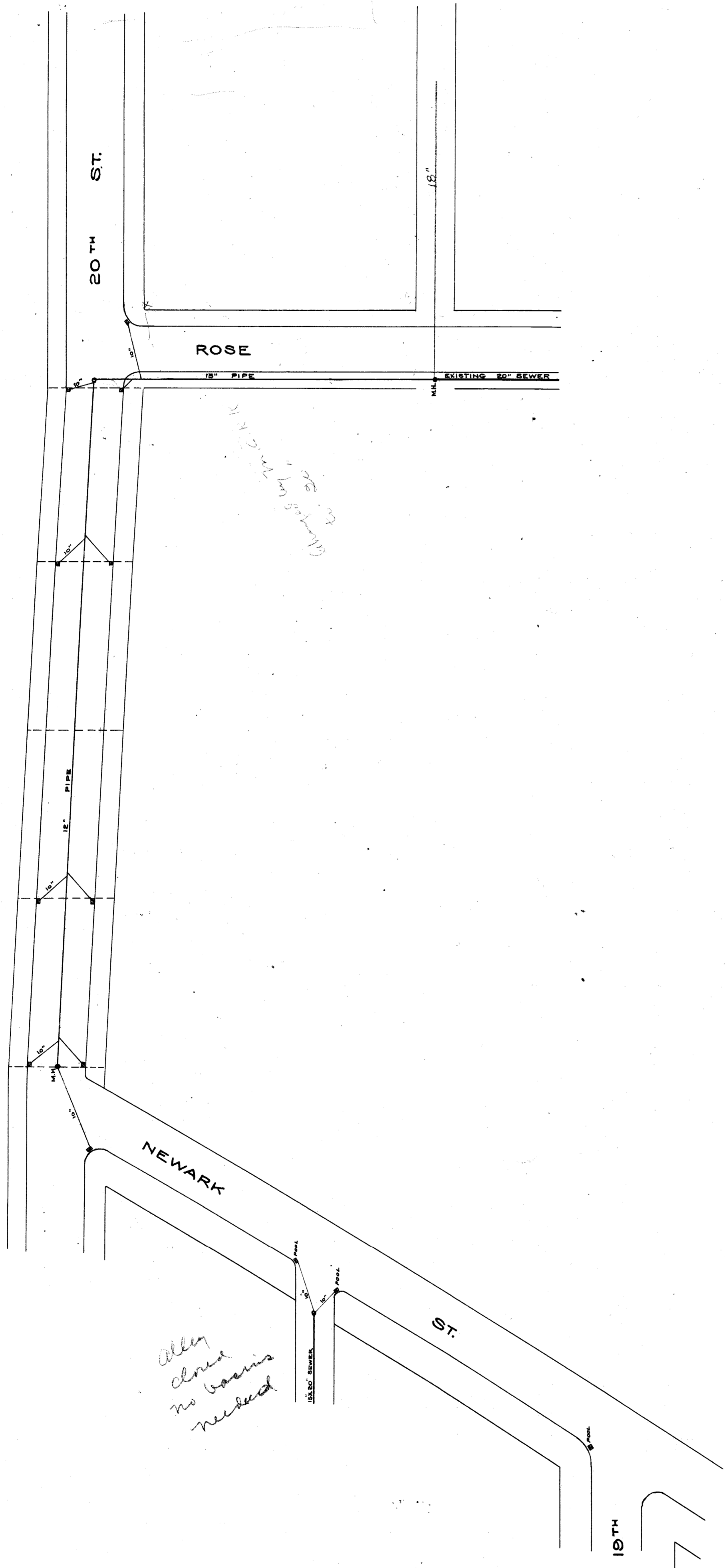
File XU 53-2

20TH

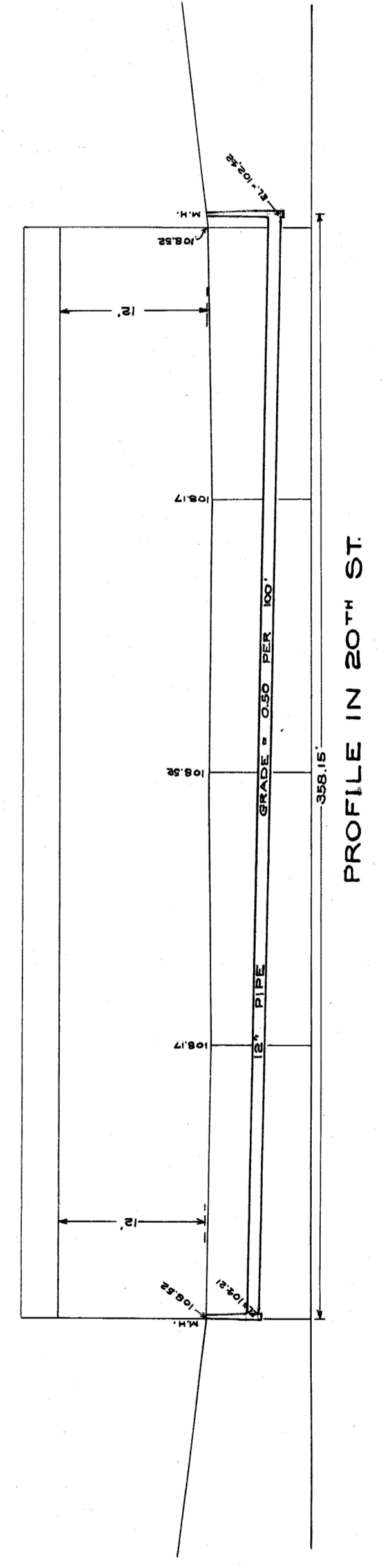
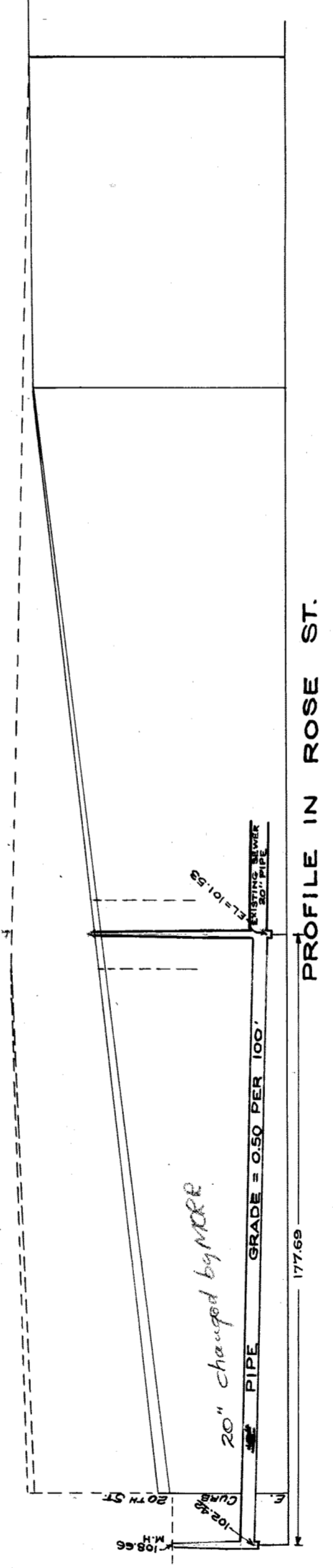
NEWARK

$R=10'$
 $T=16.98'$

CITY ENGRS. OFFICE
J.W.R.



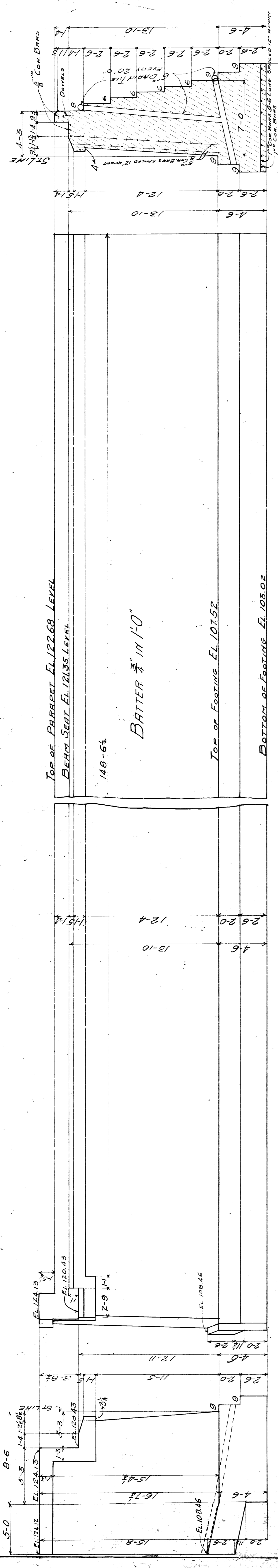
DRAINAGE PLAN
TWENTIETH ST. SUBWAY



20TH ST.

City Engineer's Office.

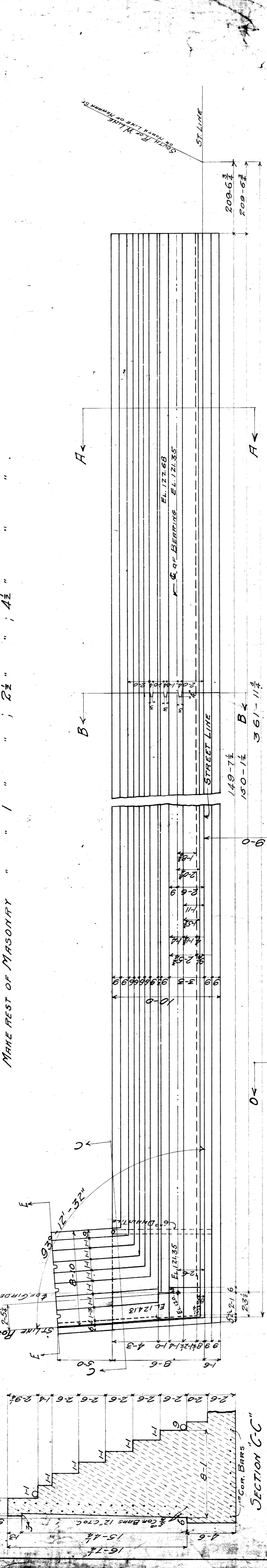
A-2 I-3-6
File XU53-3



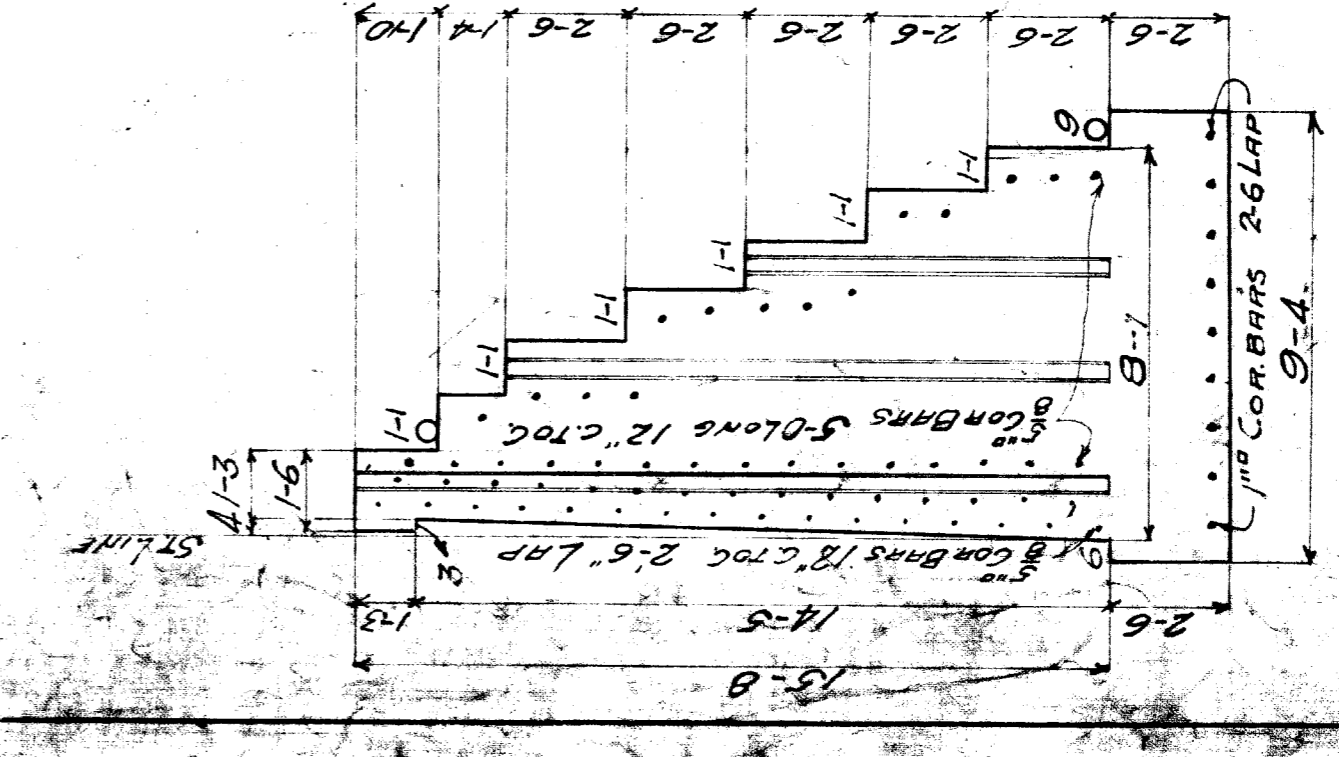
ELEVATION ALONG ROSE ST.

MAKE TOP 6" OF BRIDGE SEAT AND PIER 1 PART CEMENT, 2 PART SAND.
 MAKE NEXT 1/2" DOWN OF " " " " 2 " " " ; 3 PARTS BROKEN STONE.
 MAKE REST OF MASONRY " " " " 2 1/2 " " " ; 4 1/2 " " "

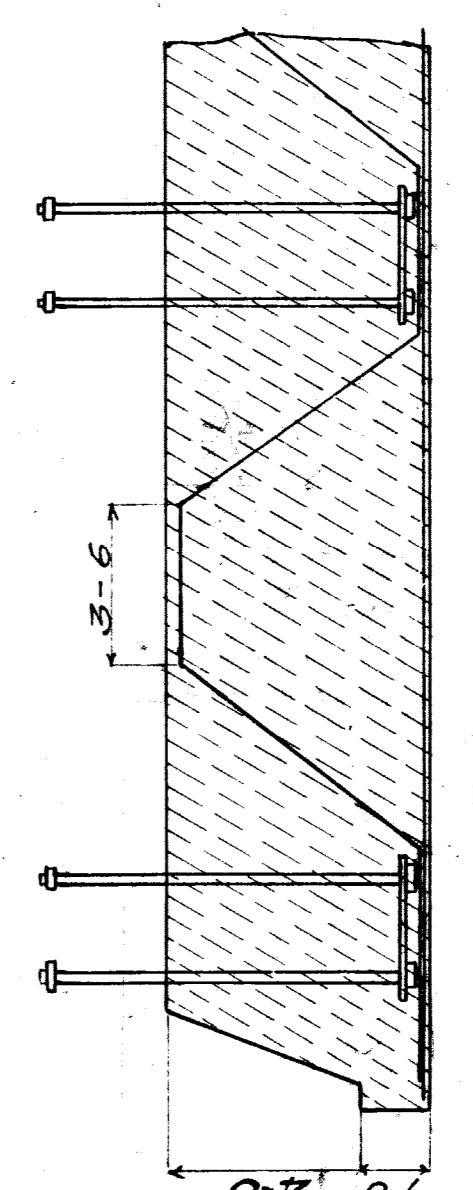
SECTION AA



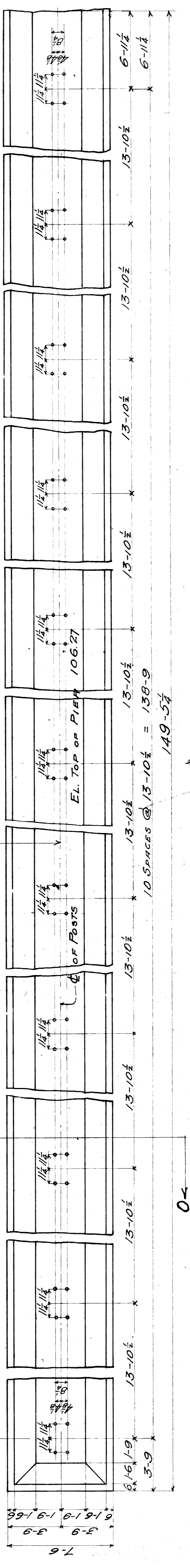
SECTION CC



SECTION EE



STRAIGHT 1/2" COR. BARS SPACED 12" APART.
 4 TONS OF 1/2" COR. BARS BENT AS SHOWN.



CONTENTS: ABUTMENT = 693.33 CU YDS.
 PIER = 172.10 CU YDS.
 TOTAL 865.43 CU YDS.
 CONTRACTORS VARIANCE = 858.43 CU YDS.

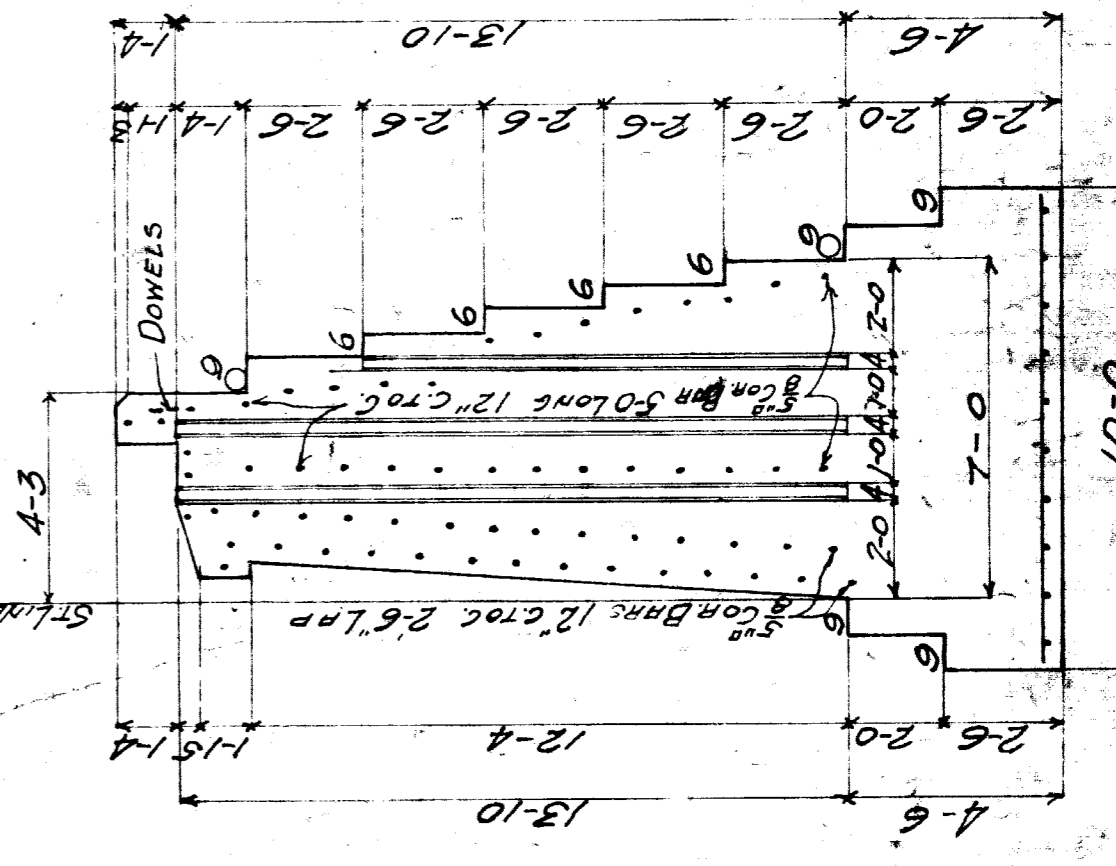
BACK FACE OF ABUTMENTS TO BE GIVEN 1 COAT OF SARCO PRIMER
 1 COAT OF SARCO #1
 WHEN JOINTS OCCUR IN WALL THEY ARE TO BE WATERPROOFED
 BESIDES AS NOTED ABOVE WITH 3 LAYERS OF BURLAP
 SATURATED WITH #6 SARCO

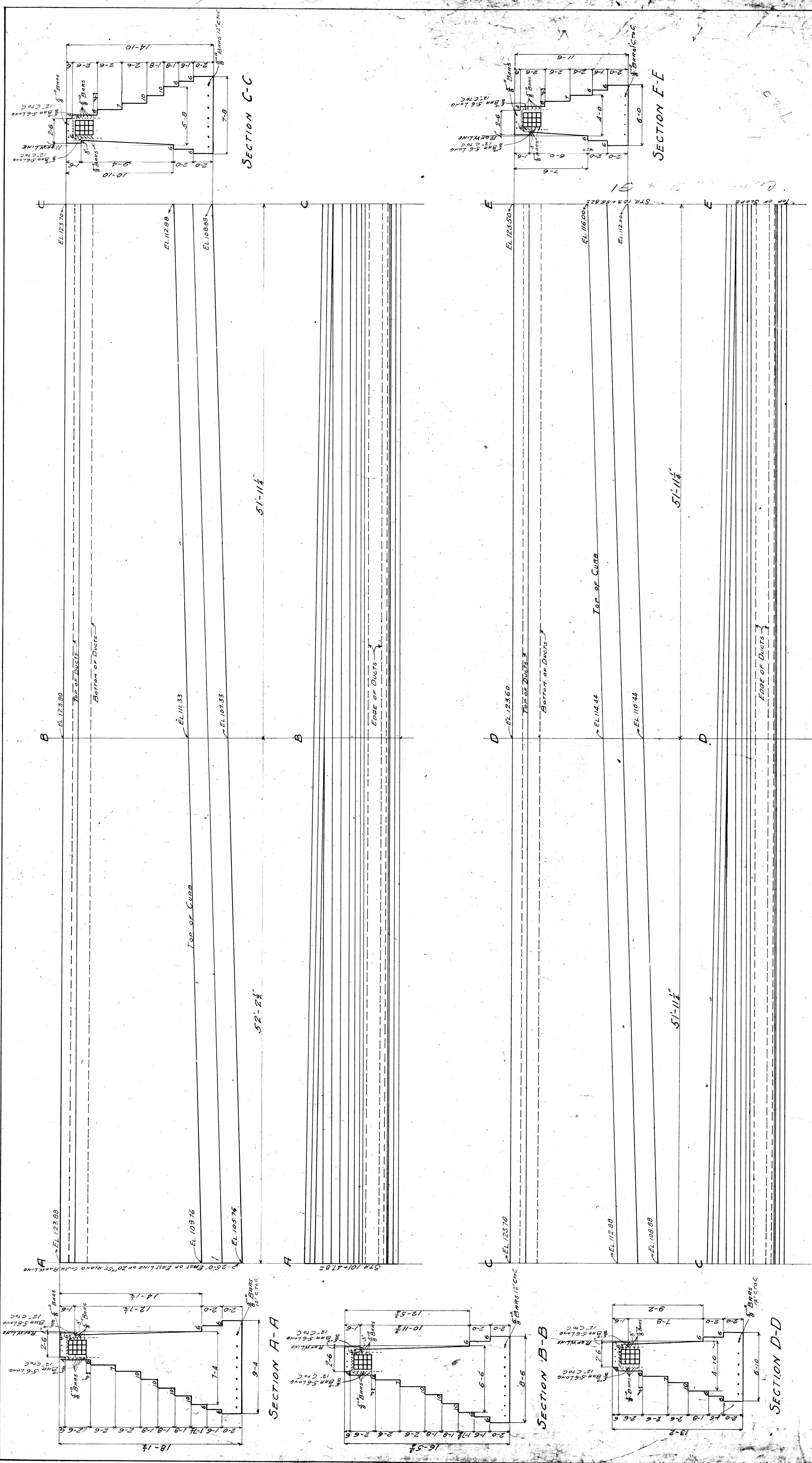
M.C.A.R. MAIN LINE.
 B.A. #151 20th ST.

NORTH SECTION OF
 EAST ABUTMENT AND PIER
 SCALE 1/4" = 1'-0"
 FEB. 1910

APPROVED:
 [Signature]
 BRIDGE ENGINEER

SECTION BB AT JOINTS





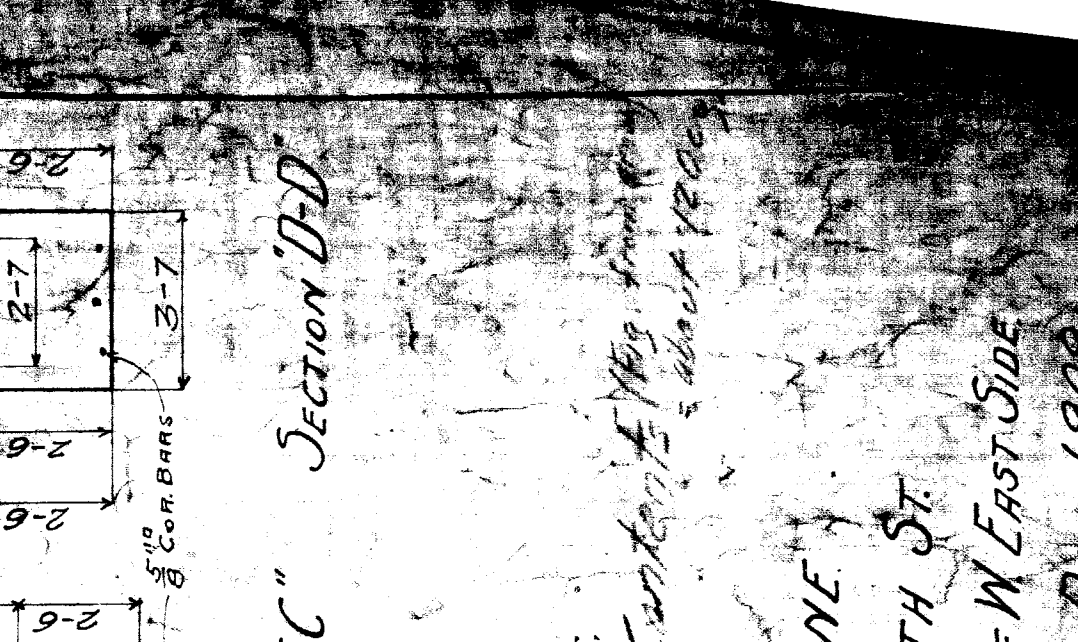
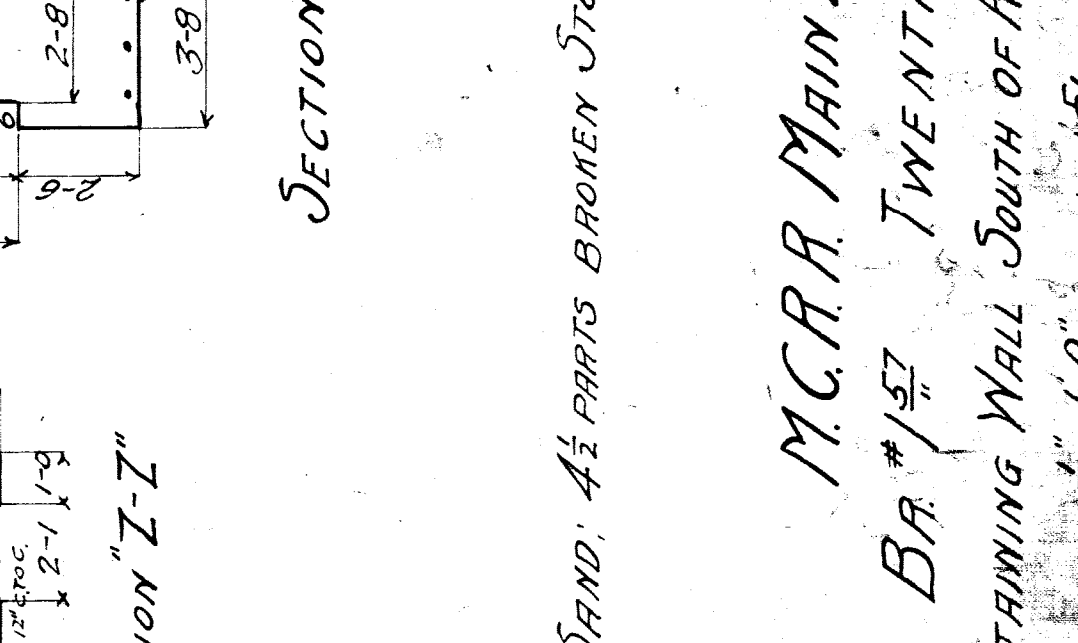
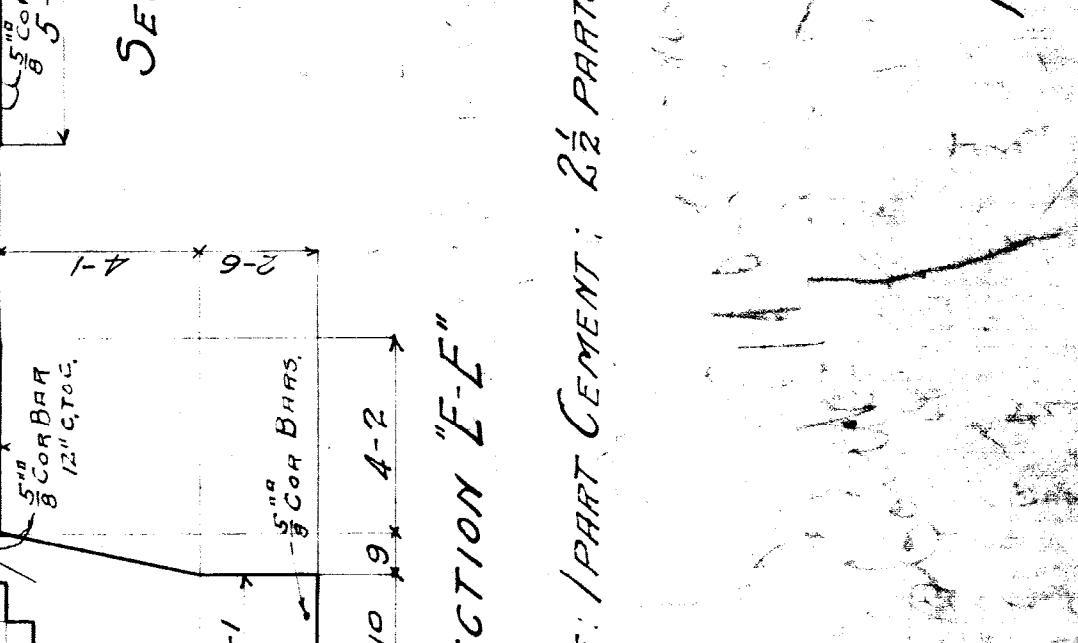
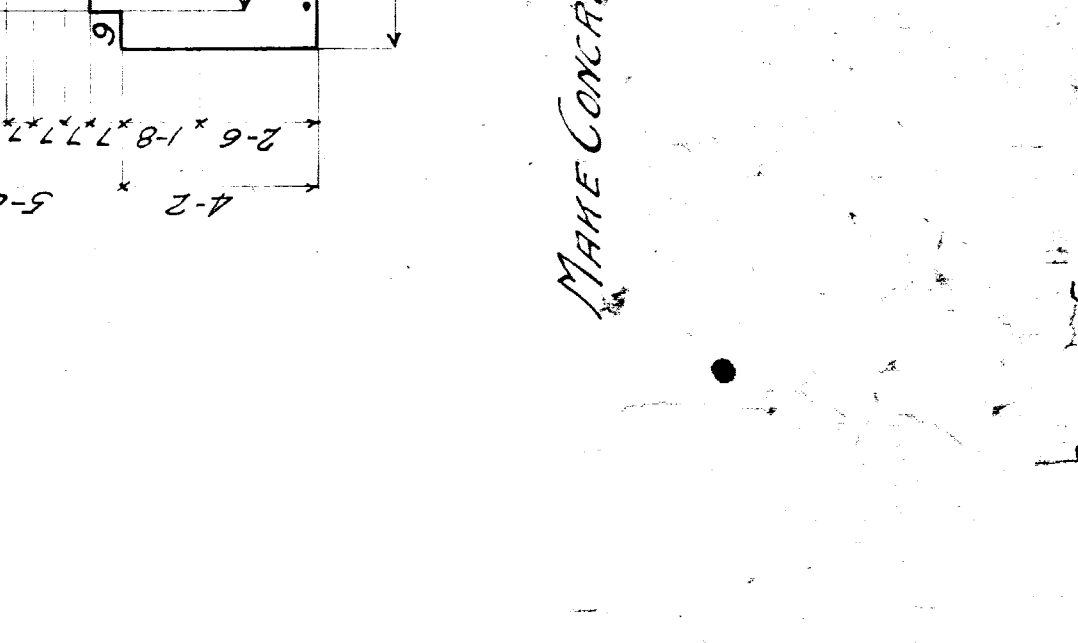
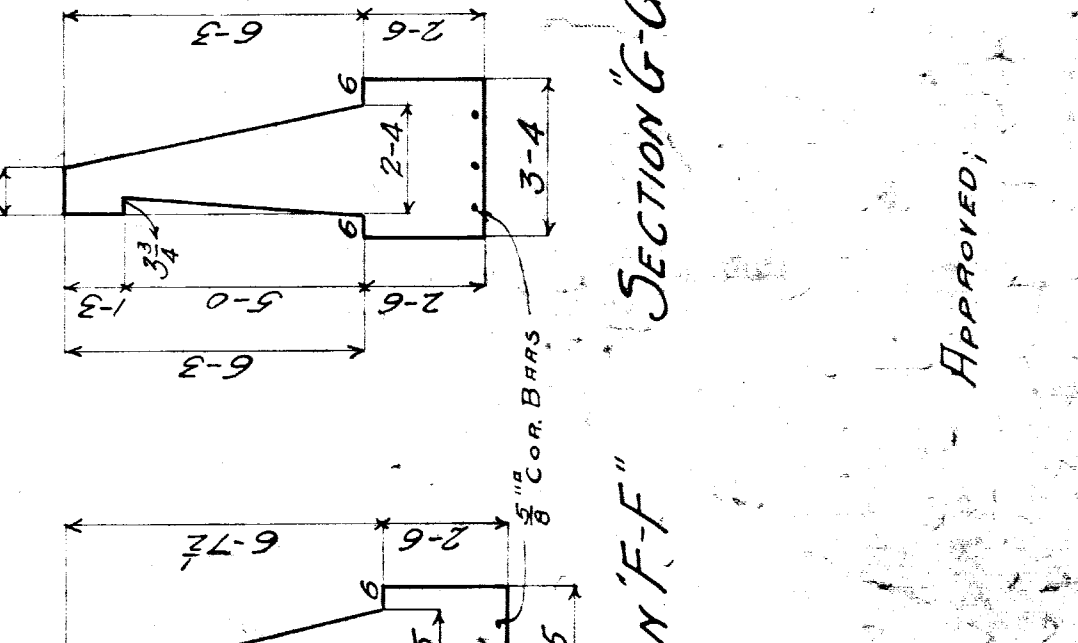
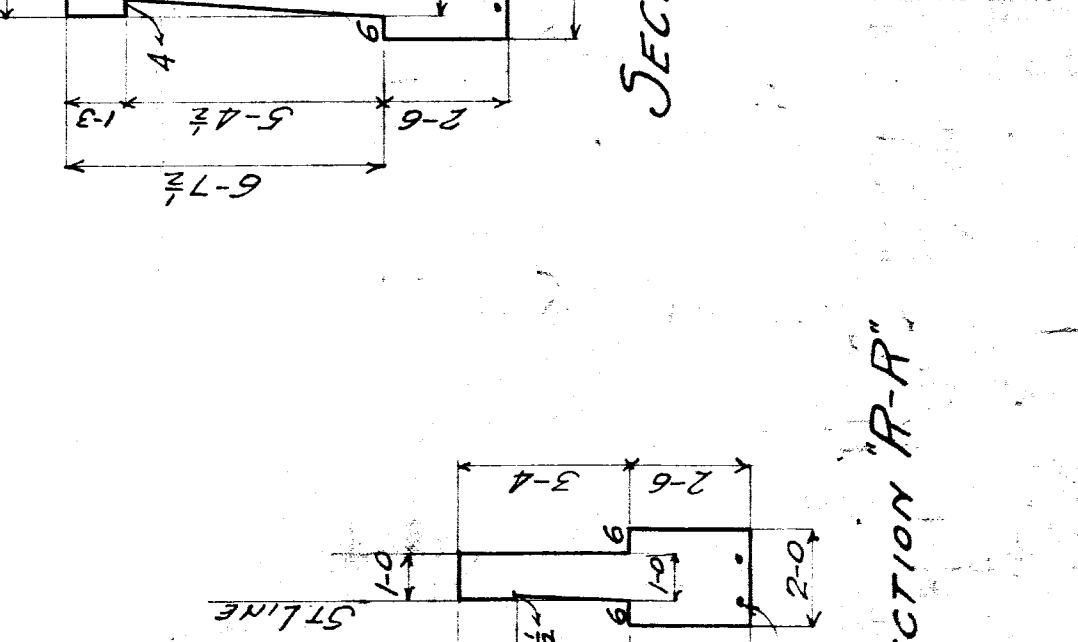
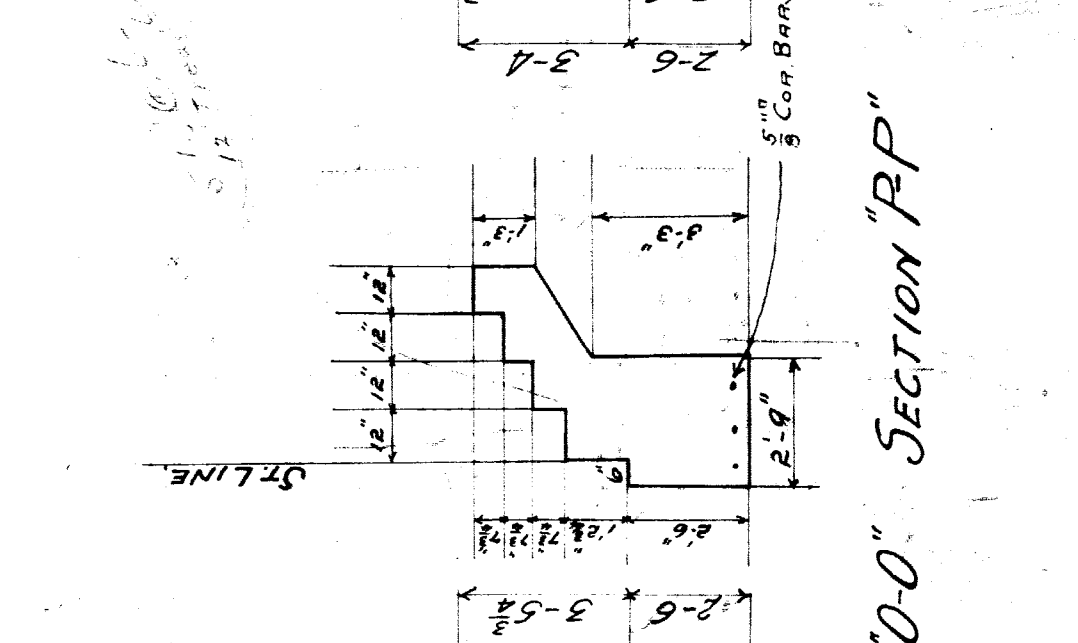
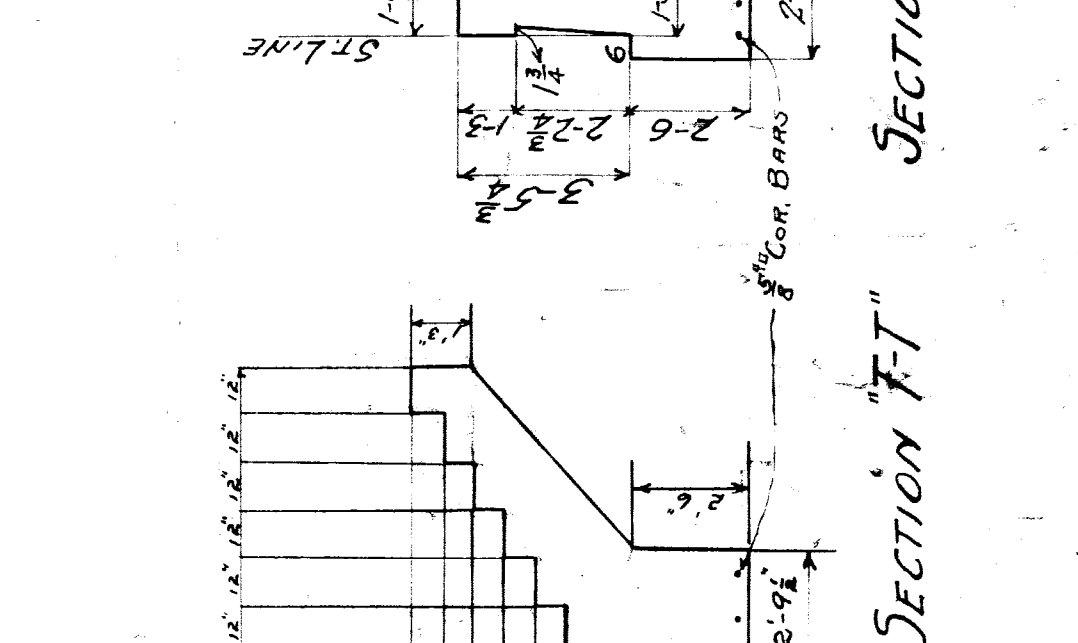
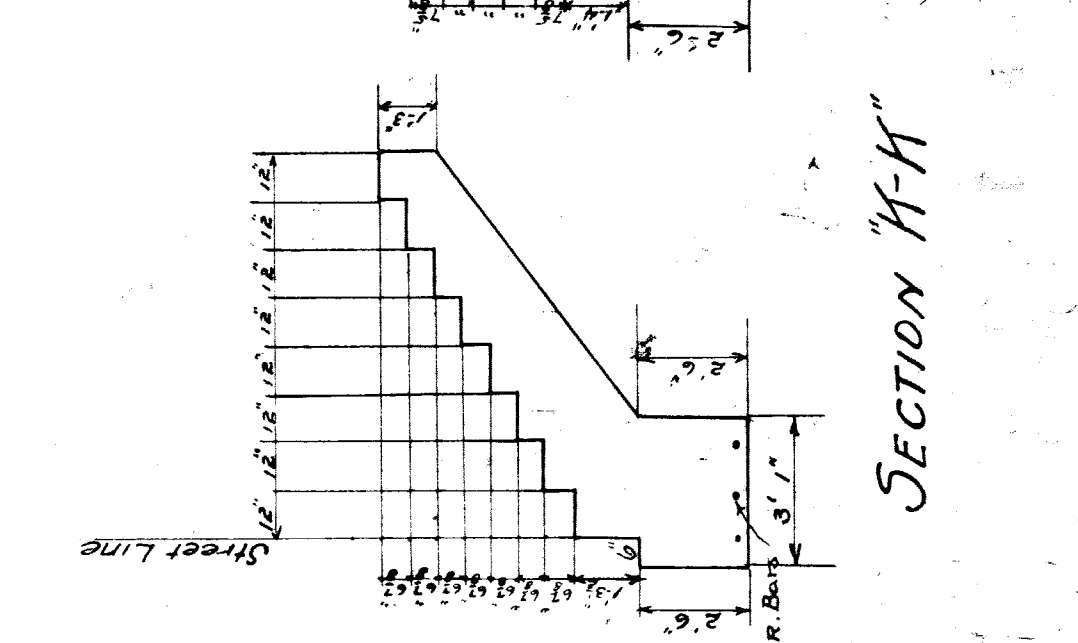
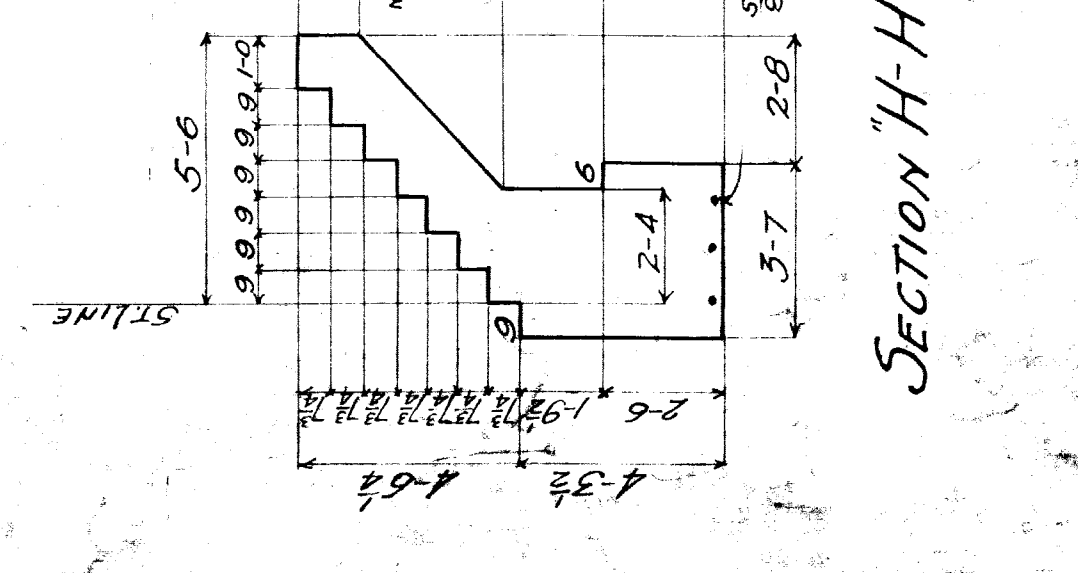
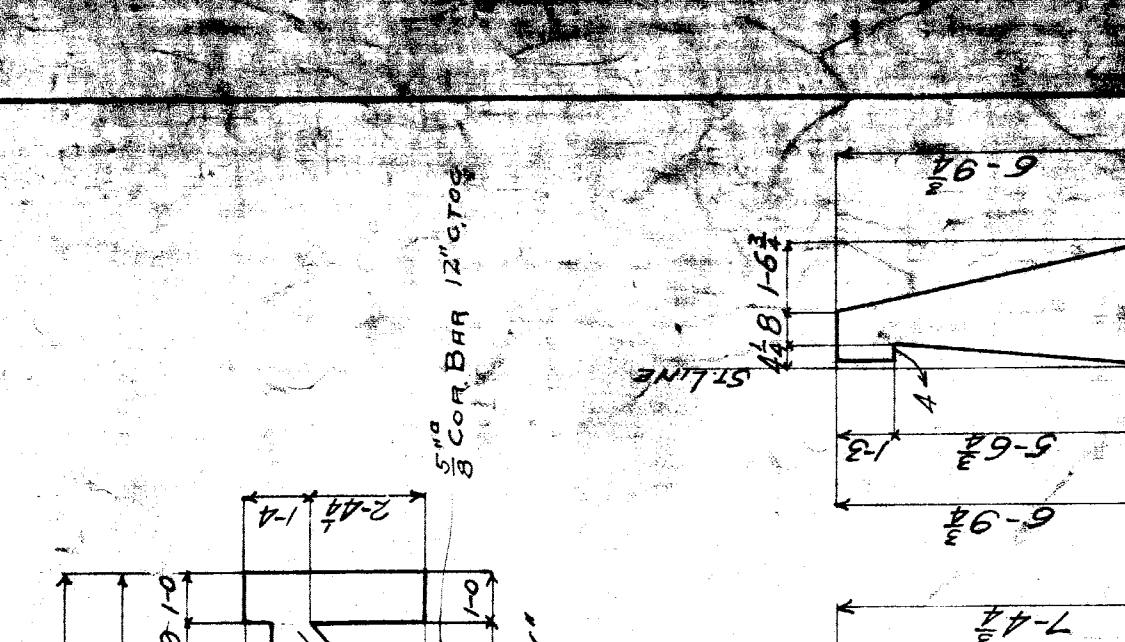
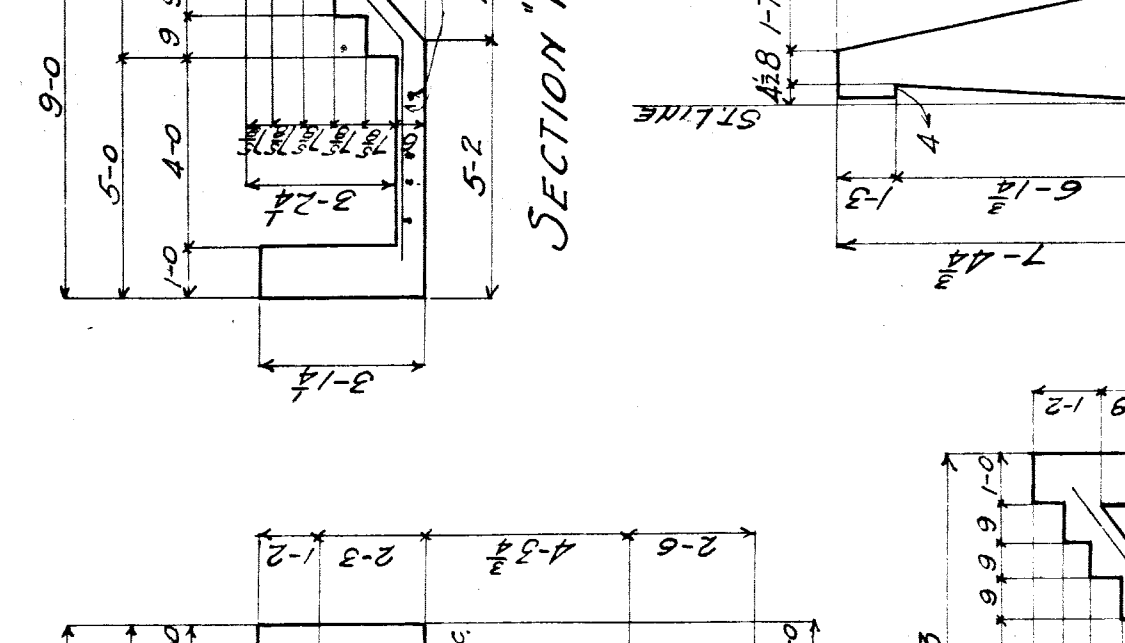
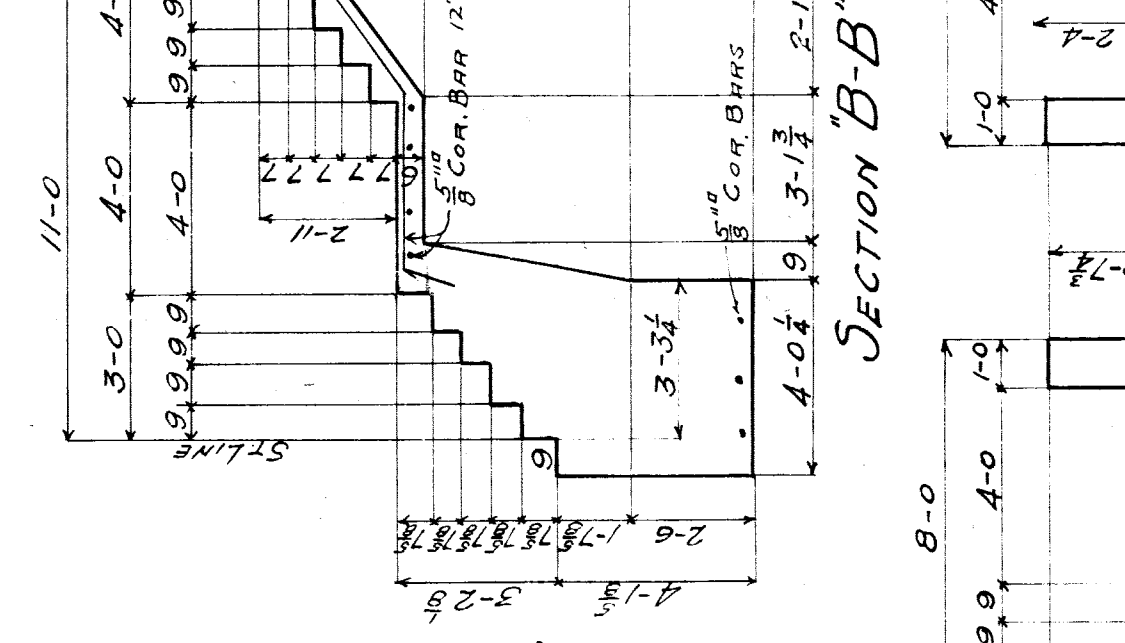
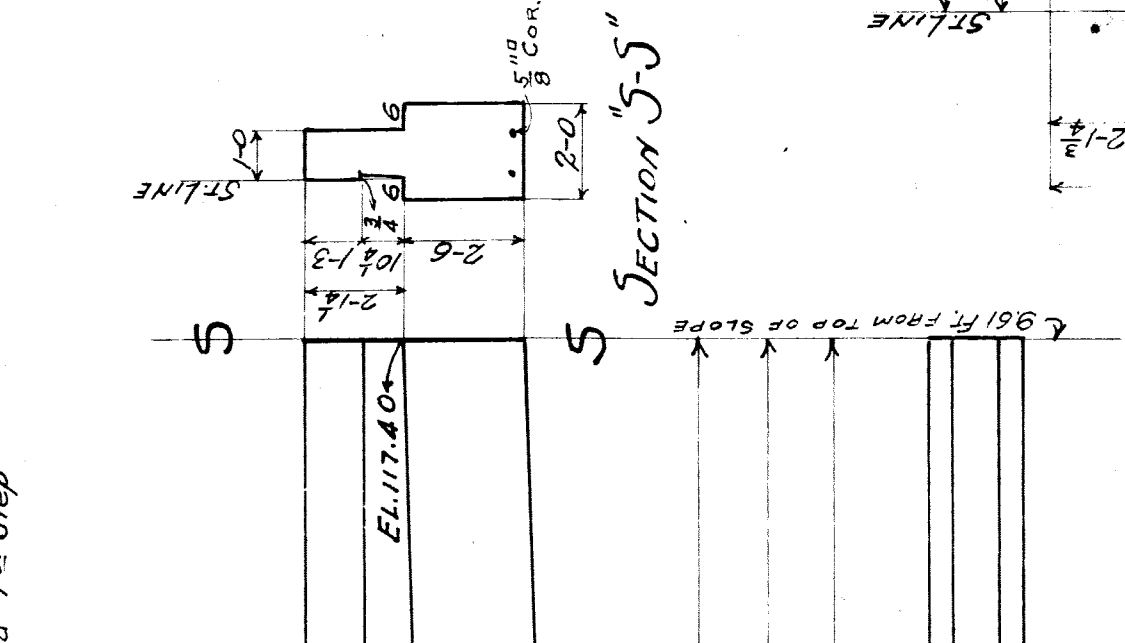
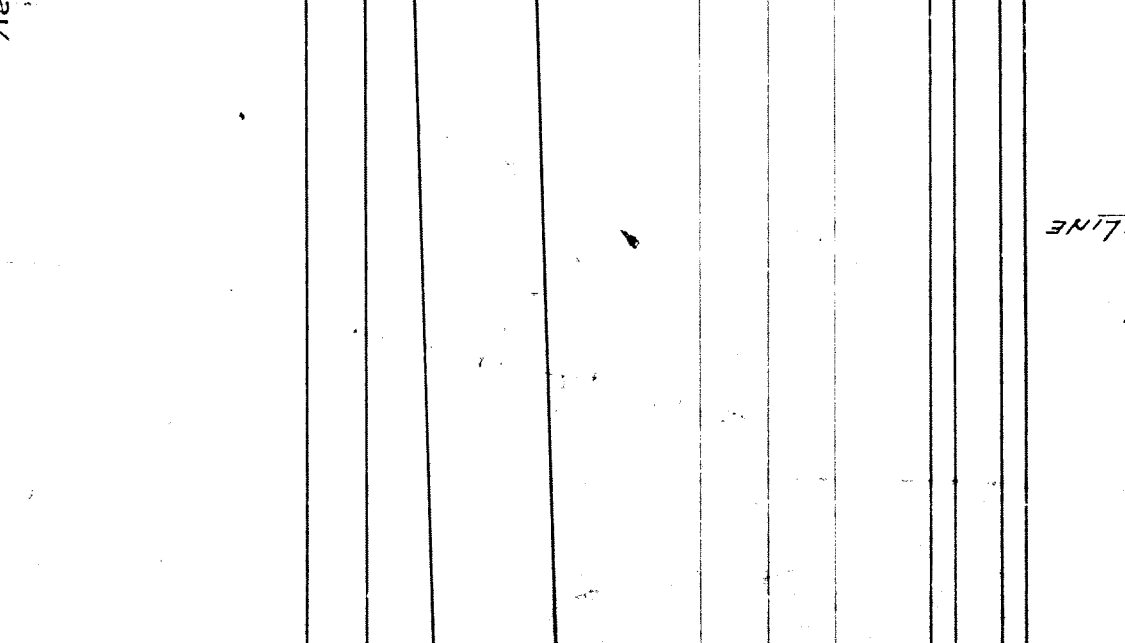
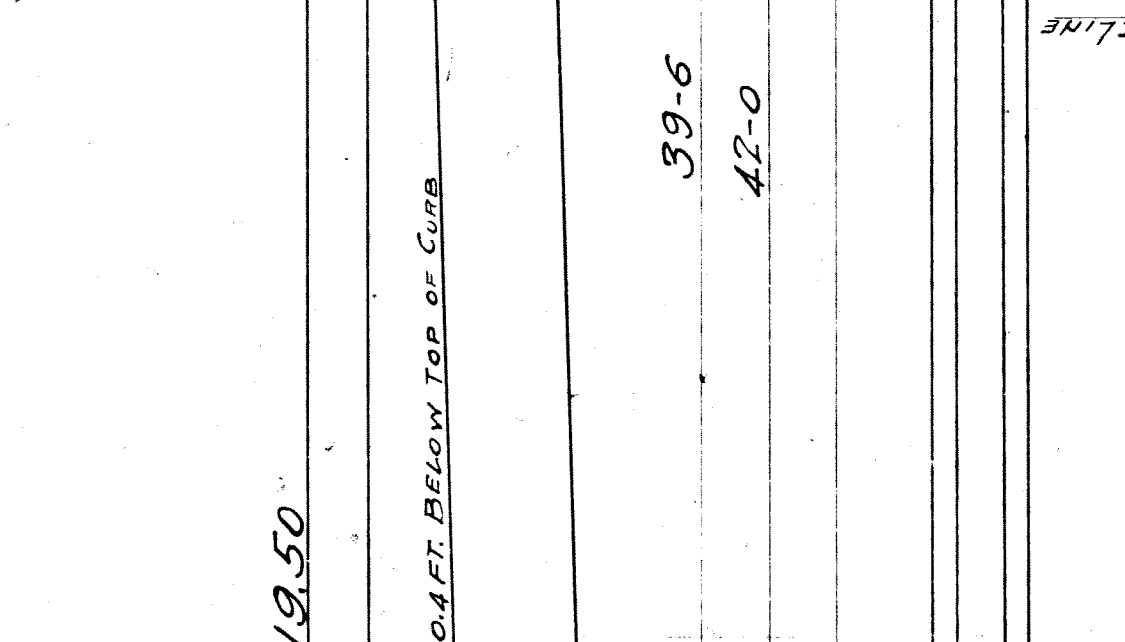
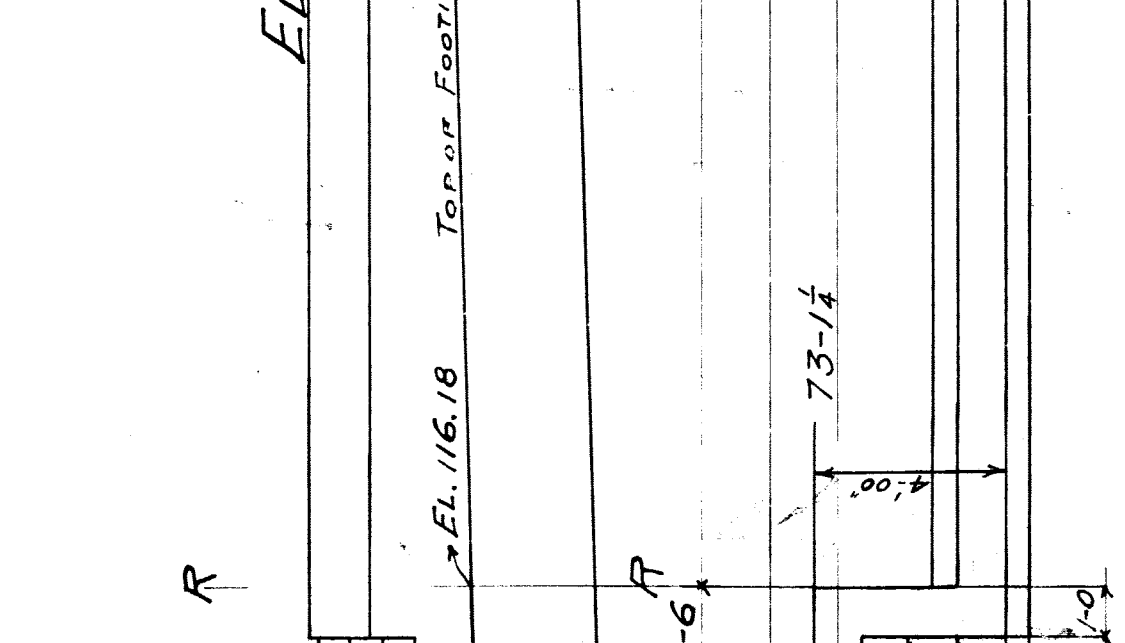
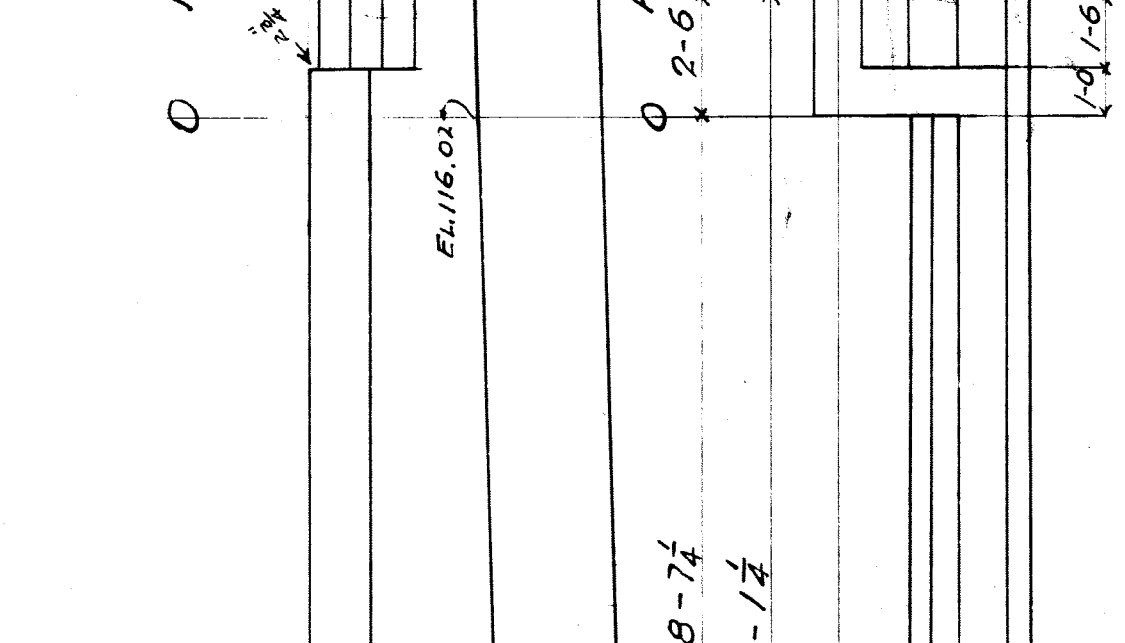
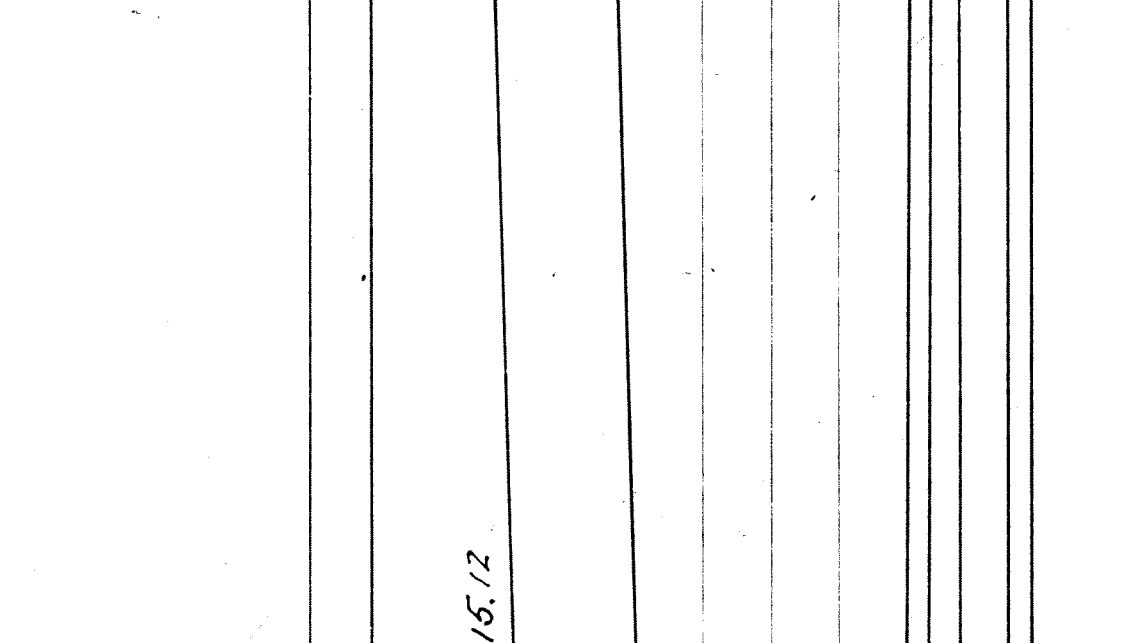
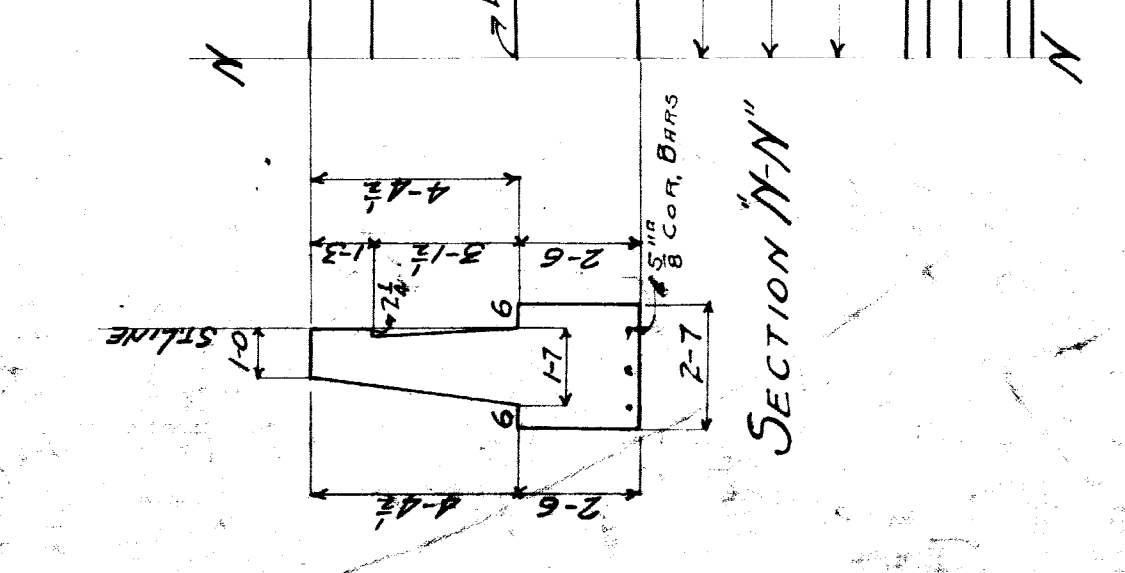
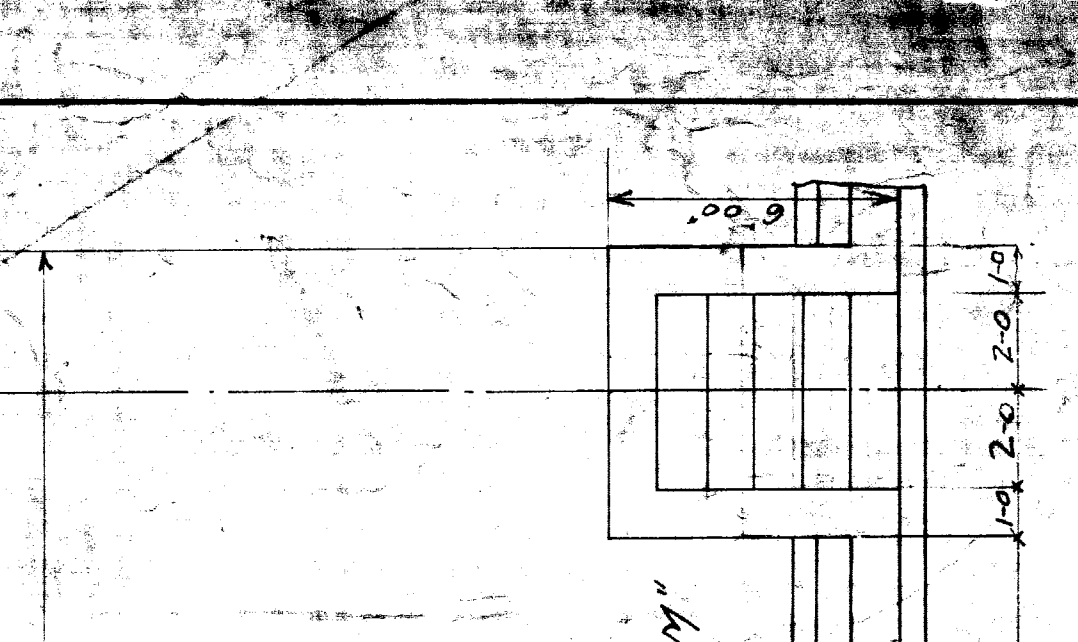
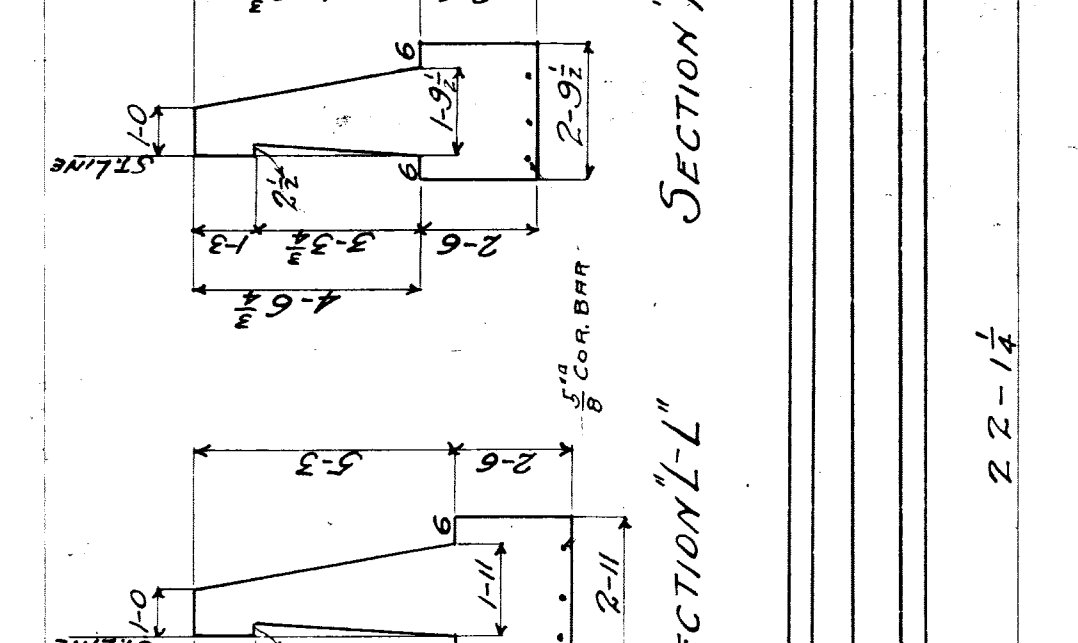
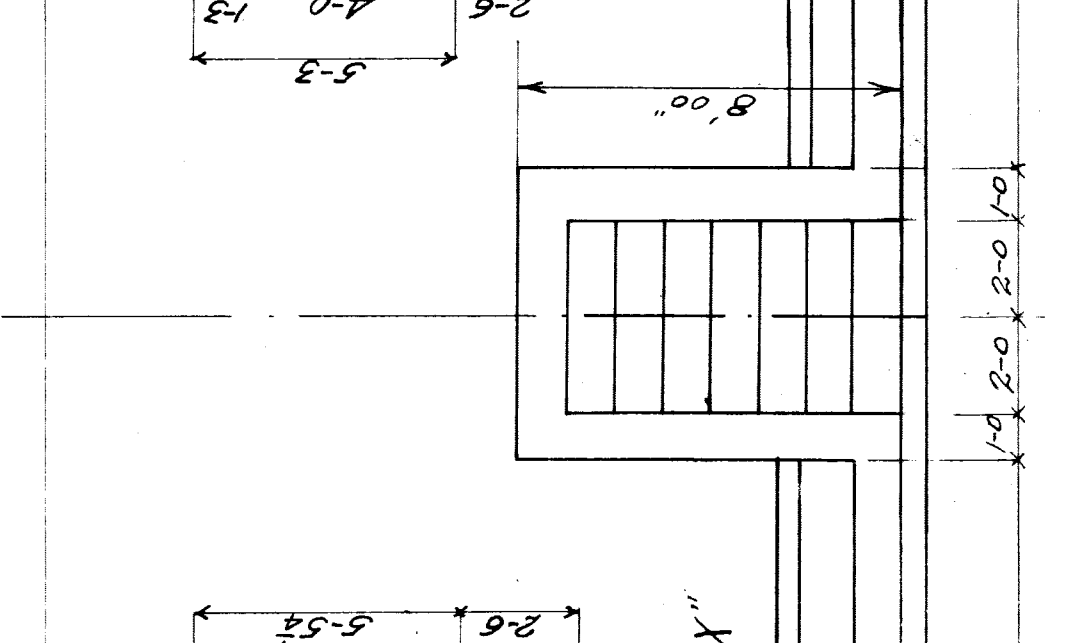
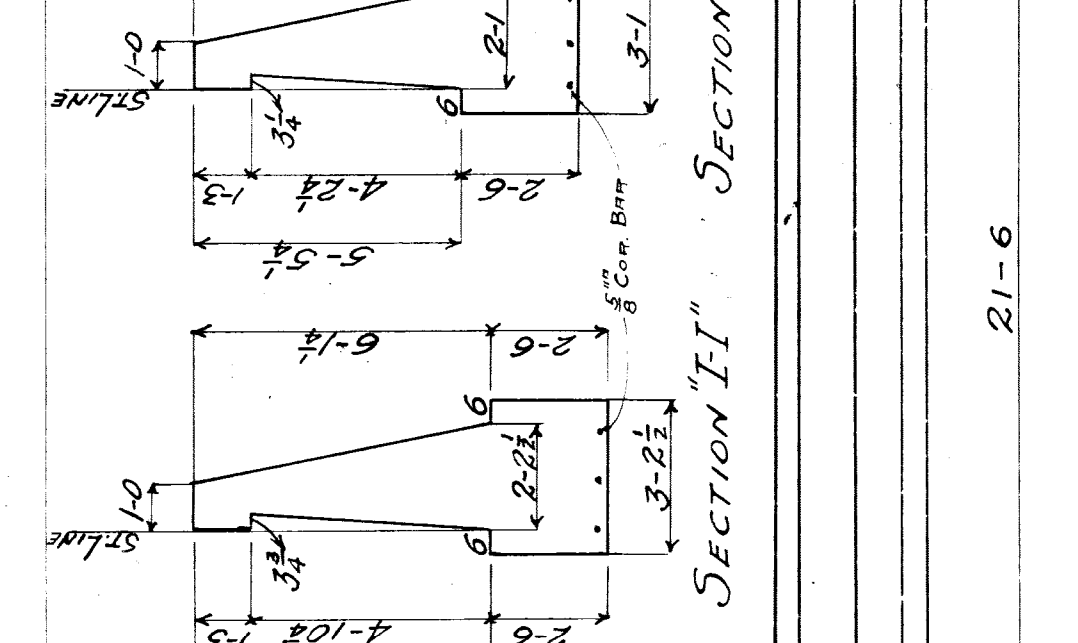
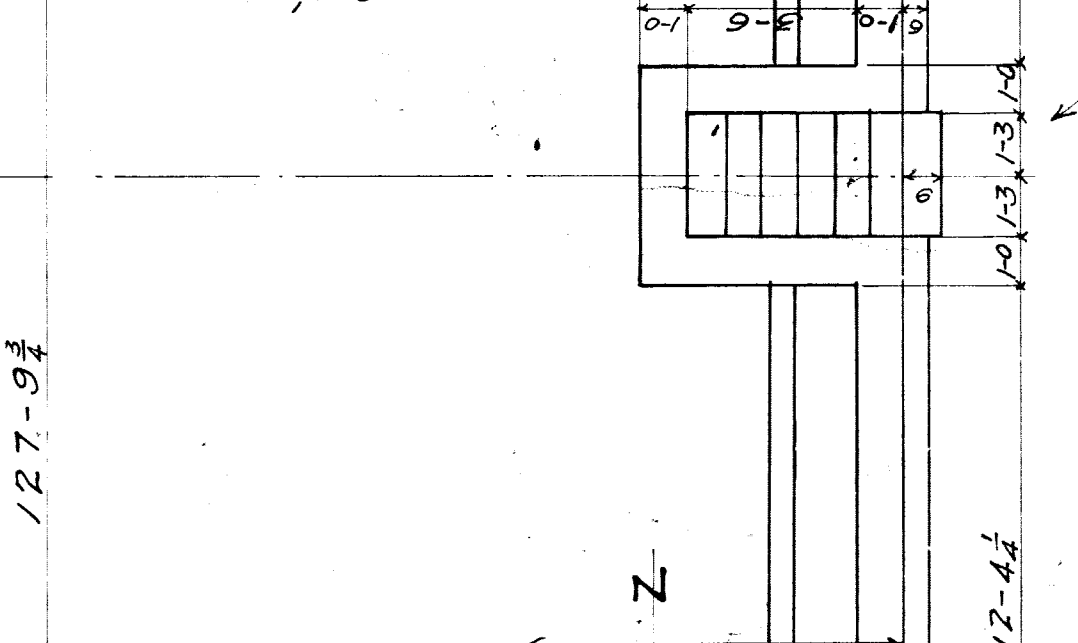
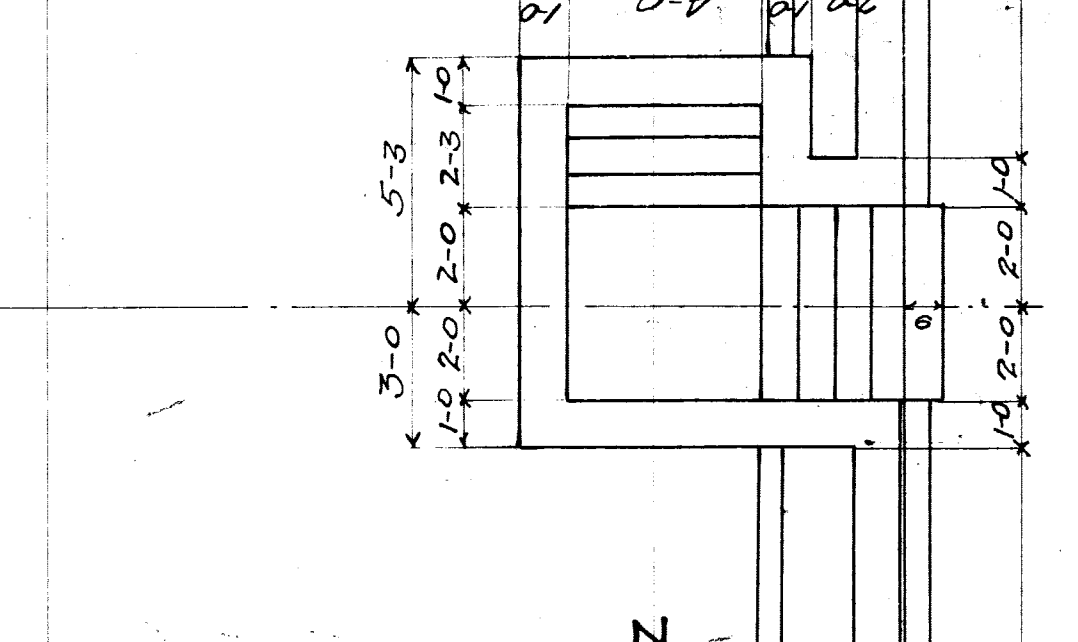
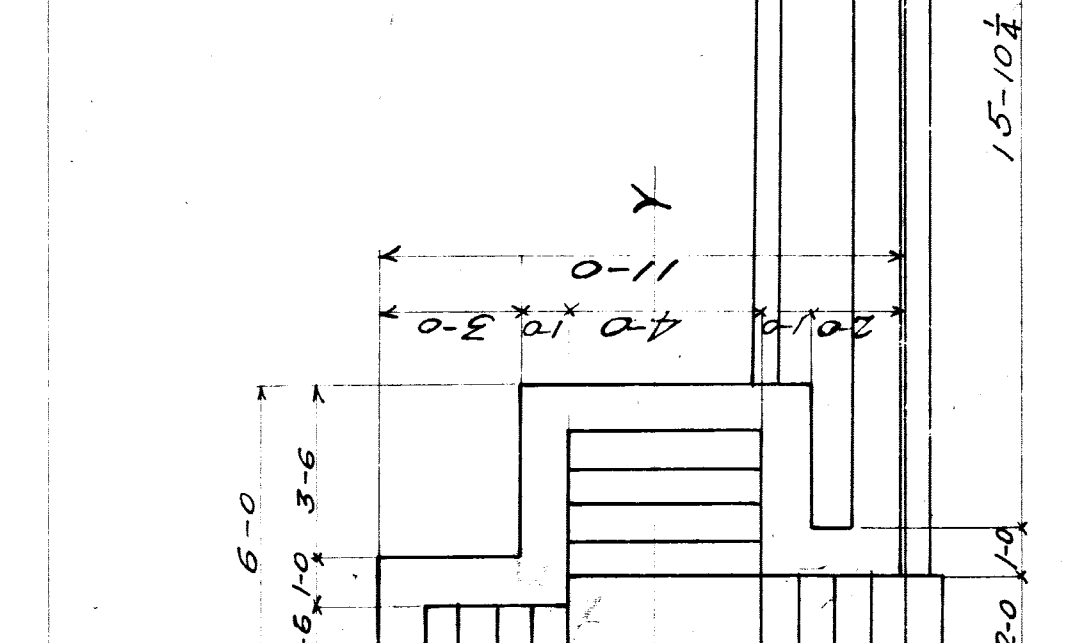
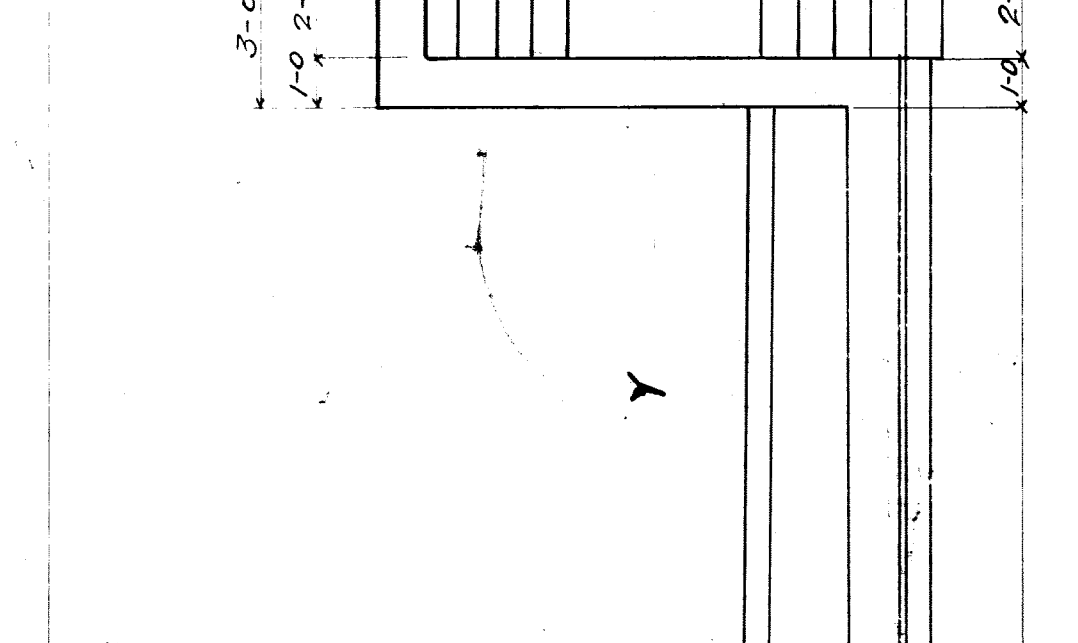
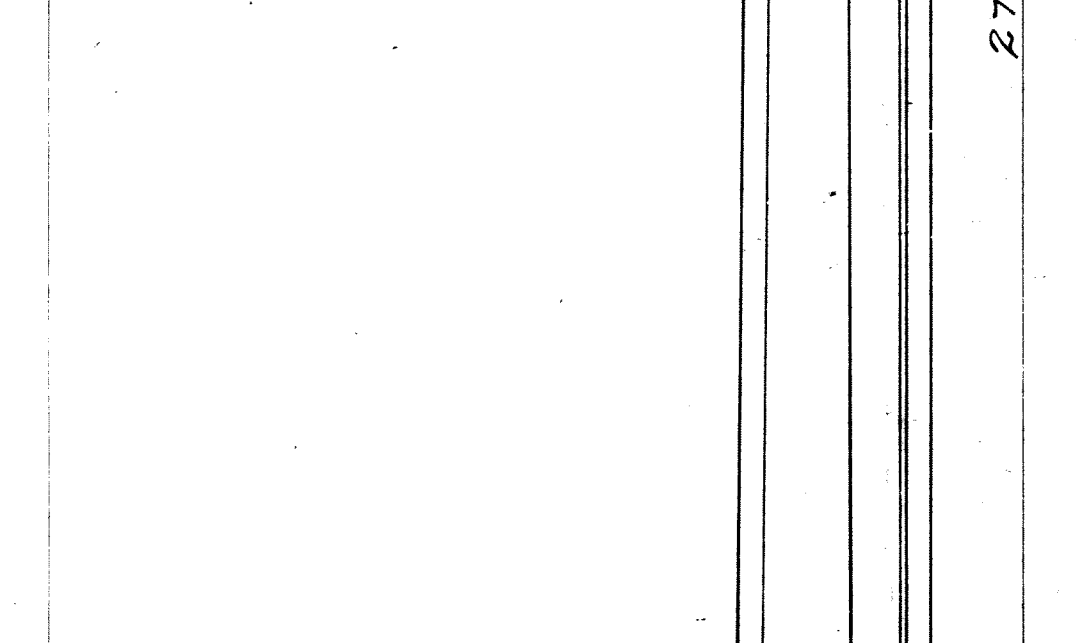
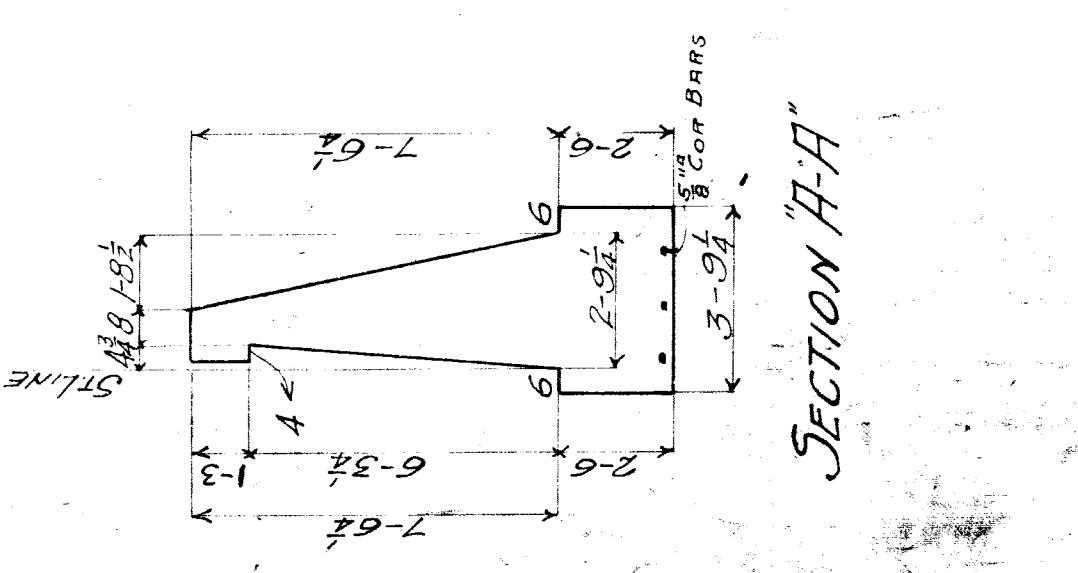
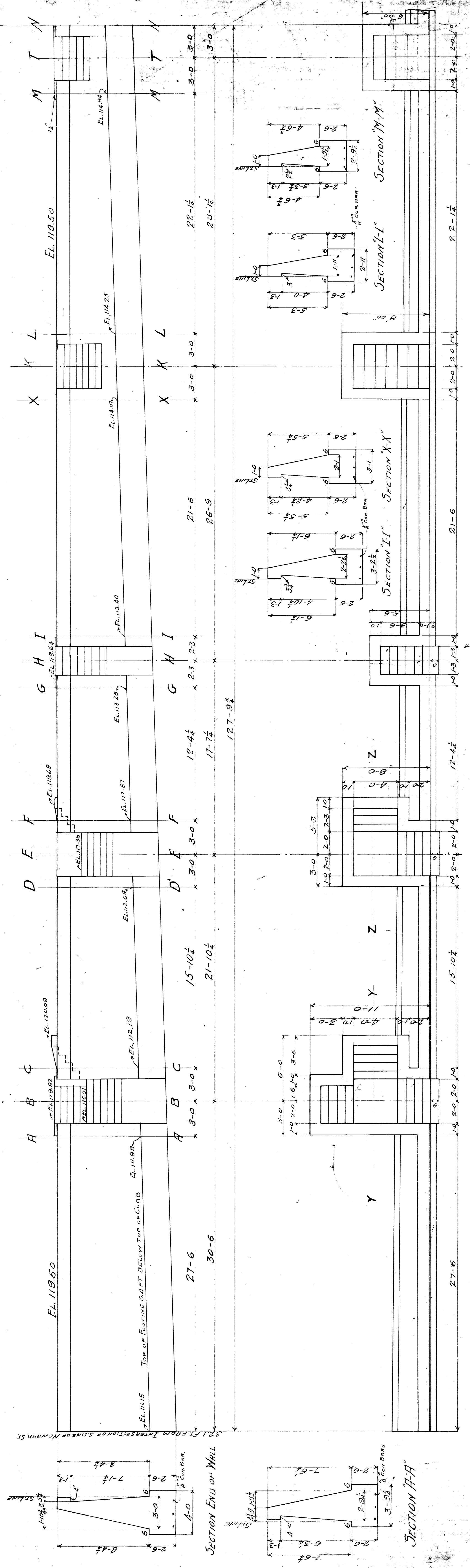
MADE CONCRETE 1 PART CEMENT: 2 1/2 PARTS SAND: 4 1/2 PARTS BROKEN STONE.

FROM STA 101+47.80 TO STA 103+55.82

M.C.R.R. MAIN LINE
 RETAINING WALL ALONG NEWARK ST.
 EAST OF 20th ST SOUTH OF RIGHT OF WAY
 SCALE 1"=10' JULY 1909

Approved
 BRIDGE ENGINEER

1579 File 4853-3



MADE CONCRETE 1 PART CEMENT 2 1/2 PARTS SAND 4 1/2 PARTS BROKEN STONE.

M.C.R.A. MAIN LINE

BA #157 TWENTIETH ST

RETAINING WALL SOUTH OF R.O.F. W. EAST SIDE

SCALE 1/2" = 1'-0"

161

APPROVED:

SECTION "R-R"

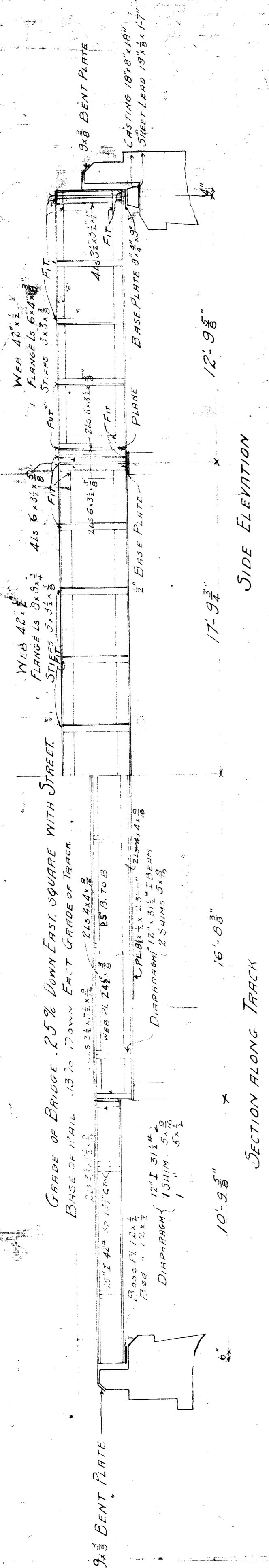
SECTION "T-T"

SECTION "K-K"

SECTION "H-H"

DEC. 1, 1928

FILE XUS33-9



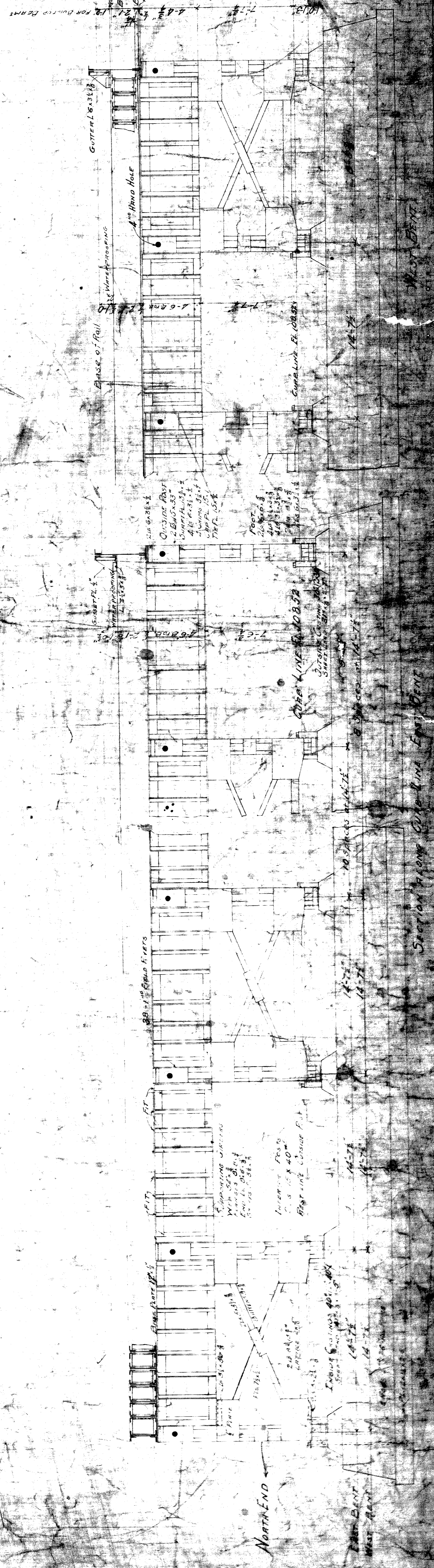
SECTION "A-A"

GENERAL DETAILS LINE THOSE OF BEECHER AVE BRIDGE

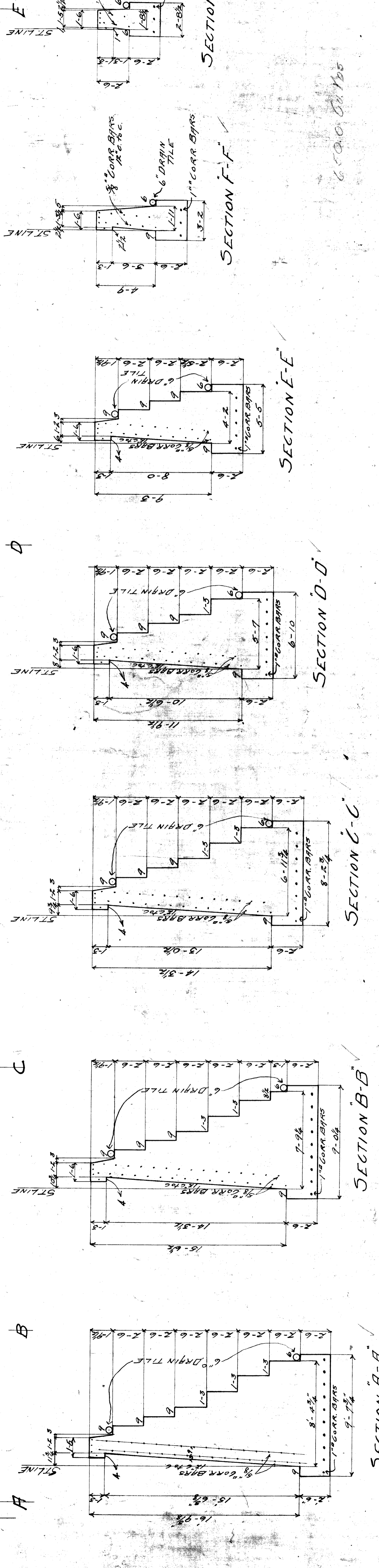
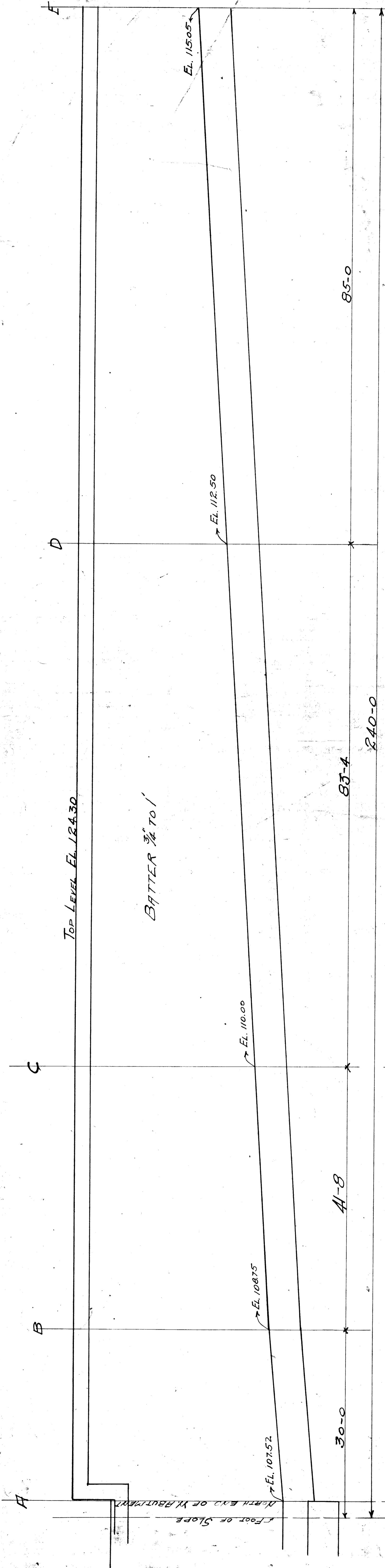
Material Steel - 1904 Specifications
 PLATES LESS THAN 36 WIDE TO HAVE ROLLED EDGES.
 FIT AND STRIP IS WELD SHIMS AT TOP OF SUPPORTING GIRDERS.
 FLANGE CASTINGS TOP AND BOTTOM LAP PLATES BOTTOM. ALL CASTINGS STEEL FINISHED.
 END CONNECTIONS IN SUPPORTING GIRDERS 1" FLANGE AND RISE TO 1/4" TO IRON TEMPERE.
 PLATES IN FLANGE OF 8 1/2" - FLANGE 1/2".
 DRILL HOLES IN MATERIAL MORE THAN 1/2" THICK
 OTHER HOLES 3" FROM HOLES IN BOTTOM FLANGES AND CORNERS OF WEB IN SUPPORTING AND FLANGE GIRDERS
 TO AND NEAR TO 3" BEFORE ASSEMBLING. HOLE HOLES FOR OTHER RIVETS 1/4" FACE IN 1/4" DISTANCE TO BE MADE.
 BEAM AFTER ASSEMBLING TO 1/2".
 REPAIR HOLES FOR FIELD RIVETS TO IRON TEMPERE EXCEPT IN FLANGE PLATES, TOP FLANGES OF
 FLOOR BEAMS, AND OUTSTANDING LEGS OF SIDE L'S
 RAIL CONNECTION LINES OF FLOOR BEAMS AND SUPPORTING GIRDER AFTER END L'S ARE RIVETED.
 BOLT LOOSE MATERIAL FOR SHIPMENT.
 PLATE POSTS TOP AND BOTTOM.
 PLATE SHARPER EDGES AND CORNERS OF WEB PLATES 1/4".
 PUNCH HOLES IN BUILT UP BEAMS 1/4" AND NEAR TO 1/2" AFTER ASSEMBLING.
 FLOOR PLATES ON SECTIONS WITH OBLIQUE END TO BE RIVETED TO BEAMS IN FIELD.

PAINTING
 25" RED LEAD. 1 GAL. FRANKLINSEED OIL 1/2 PINT TURP. JAPAN
 MIXED AS DIRECTED
 RIVETED SURFACES IN CONTACT ONE COAT EACH SURFACE
 PARTS INACCESSIBLE AFTER ERECTION 2 COATS
 BALANCE ONE COAT
 NOTE - DETAIL DRAWINGS TO BE MADE BY CONTRACTOR AND TRACINGS
 FURNISHED M.C.R.R. AFTER COMPLETION OF CONTRACT.

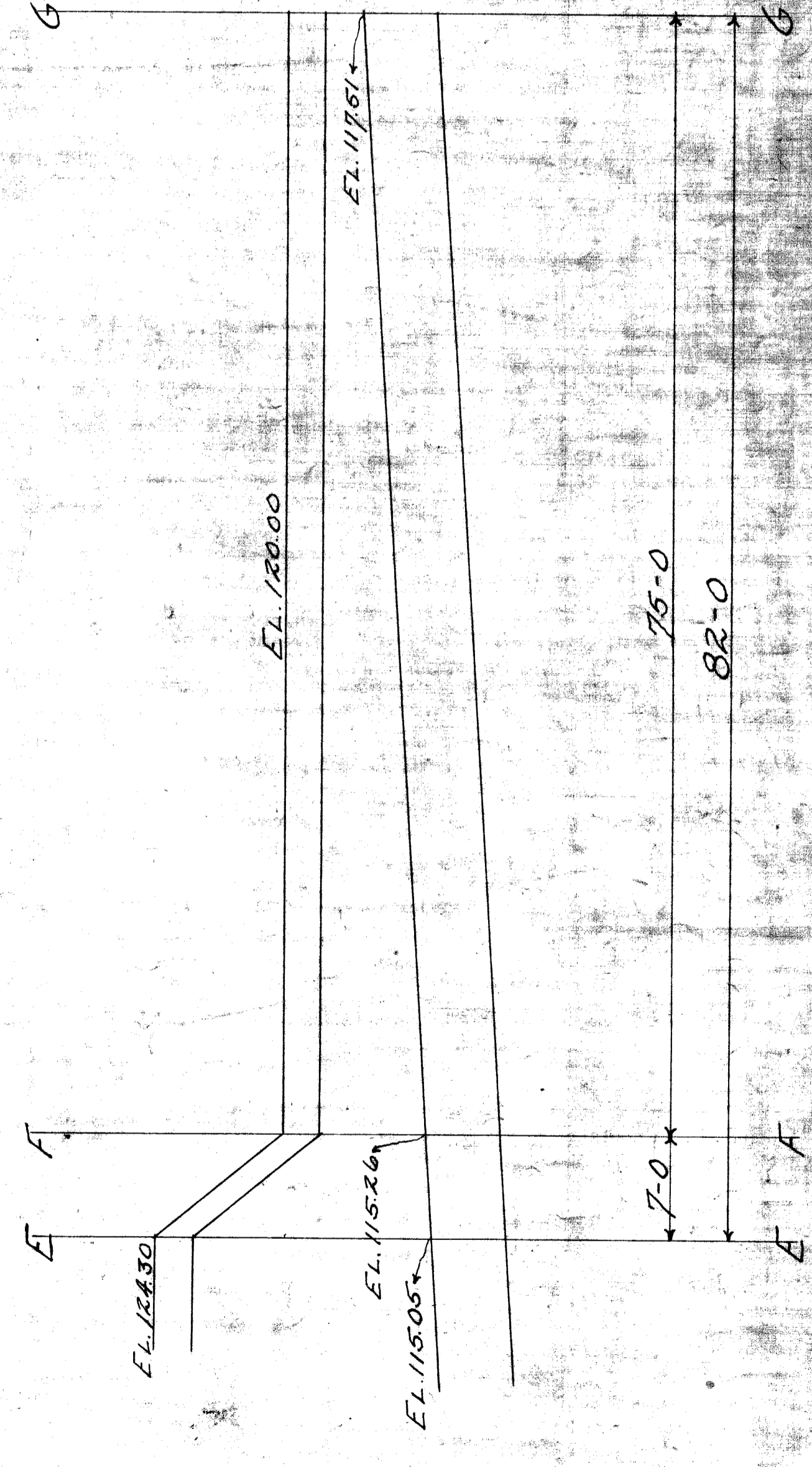
See 1.51 M
 for Nick



M.C.R.R. MAINLINE
 BRIDGE 203-77
 BECHER AVE BRIDGE
 1904



MAKE CONCRETE 1 PART CEMENT : 2 1/2 PARTS SAND : 4 1/2 PARTS CRUSHED STONE.
 PAINT BACK OF WALL WITH 1 COAT SARCO PRIMER, 1 COAT SARCO #1
 Contents 6500 Cu. Yds.



M. C. R. R. DIVISION, L. M. J. ENGINEERING
 Bridge #101
 Street Line of 20th St. - Abutment
 North of
 Bridge #101
 Drawn by M. E. G. 9/20/12
 Checked by
 Approved by
 Scale 1/4" = 1'-0"
 Date 9/20/12
 File XUS3-11 1 of 1