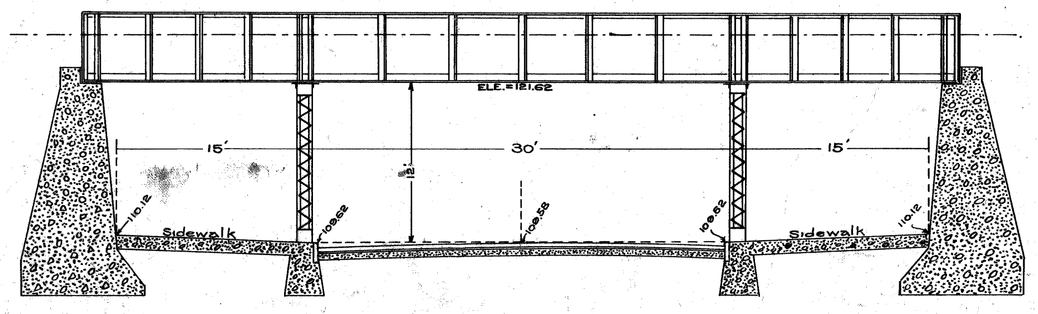
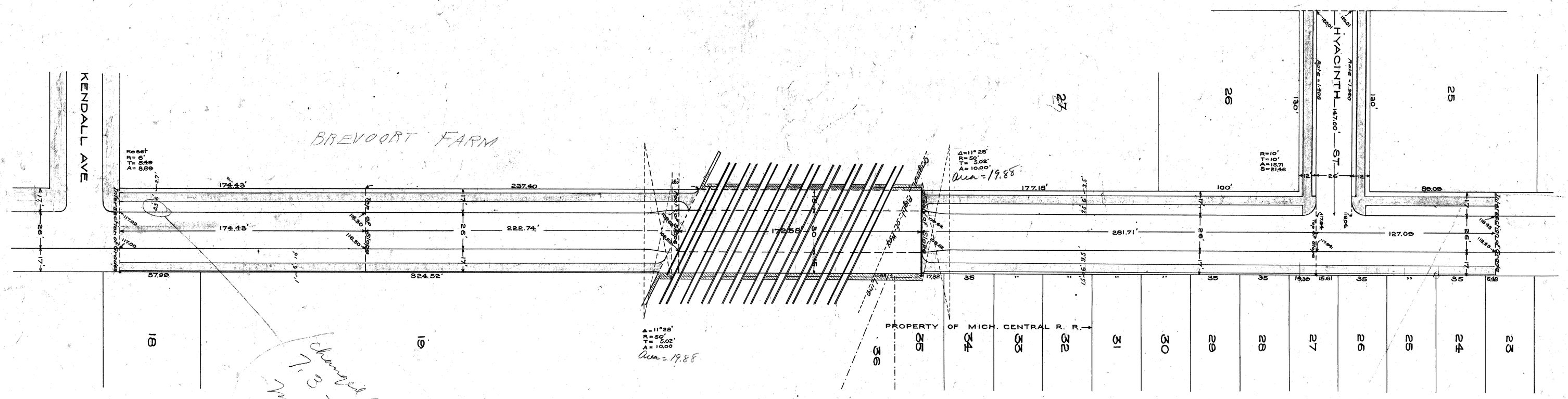
Approved:
City Engineer
Chief Engineer, M.C.R.R.

PROPOSED SUBWAY IN

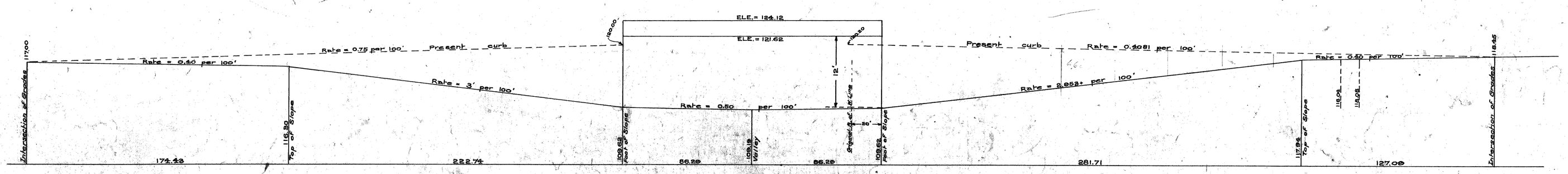
BEECHER STREET
UNDER M. C. R. R.



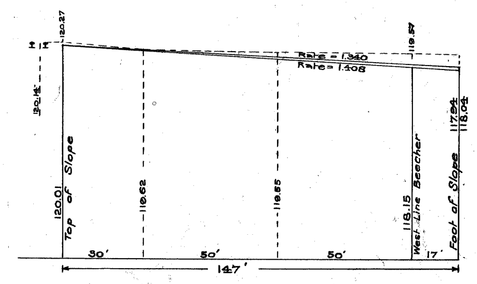
CROSS SECTION
Scale, one inch = 8 Feet.



PLAN
Scale, one inch = 40 Feet.



LONGITUDINAL SECTION.
Hor. Scale, one inch = 40 feet
Ver. " " " = 10 "



PROFILE OF HYACINTH ST.

BEECHER ST.

281.71
12
269.71

277.18

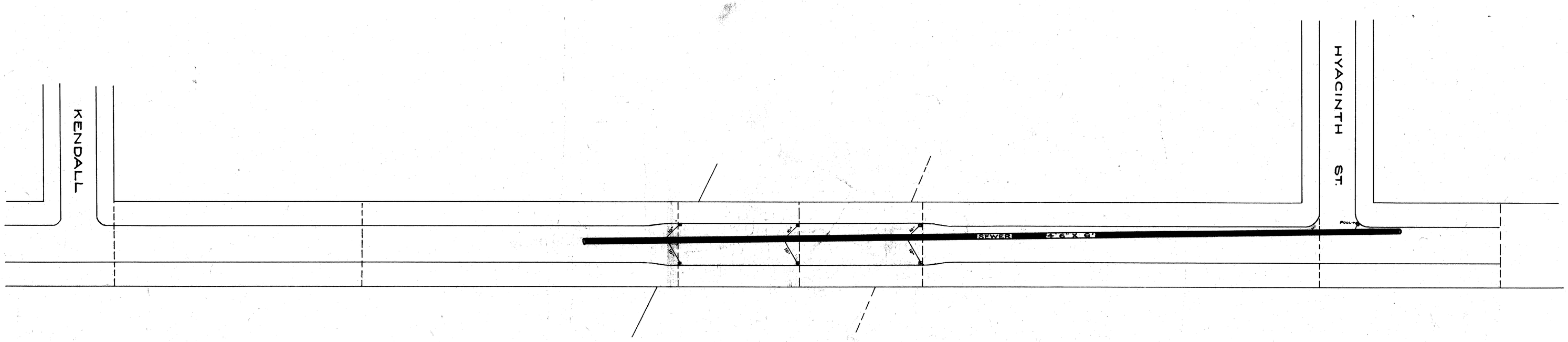
Changed to 7.3' per Letter to Chief Engr. this Comp. Bridge Co. made to conform to Opinion Engineers M.C.R.R.

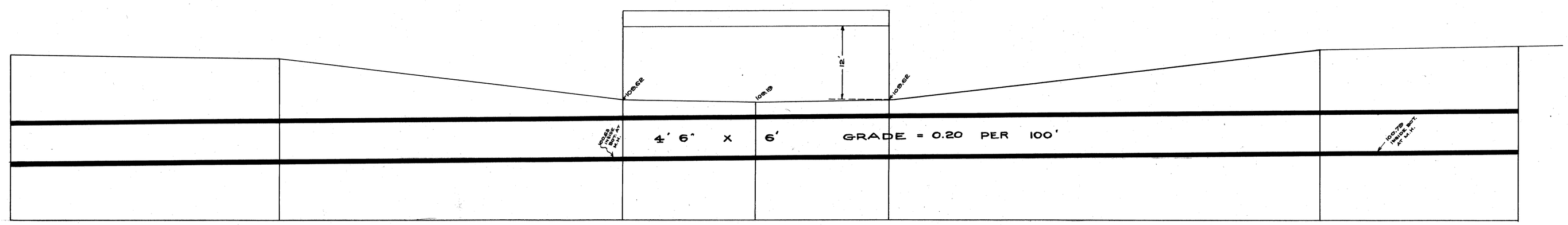
CITY ENGINEER'S OFFICE
GRADE SEPARATION & BRIDGES
Case A - Drawer 2 No. I-4a
Drawn by J.W. Reid — Aug. 13, 1908.

City Engineer's Office.

File XU52-1 4-2 I-4a

DRAINAGE PLAN
BEECHER AVE. SUBWAY





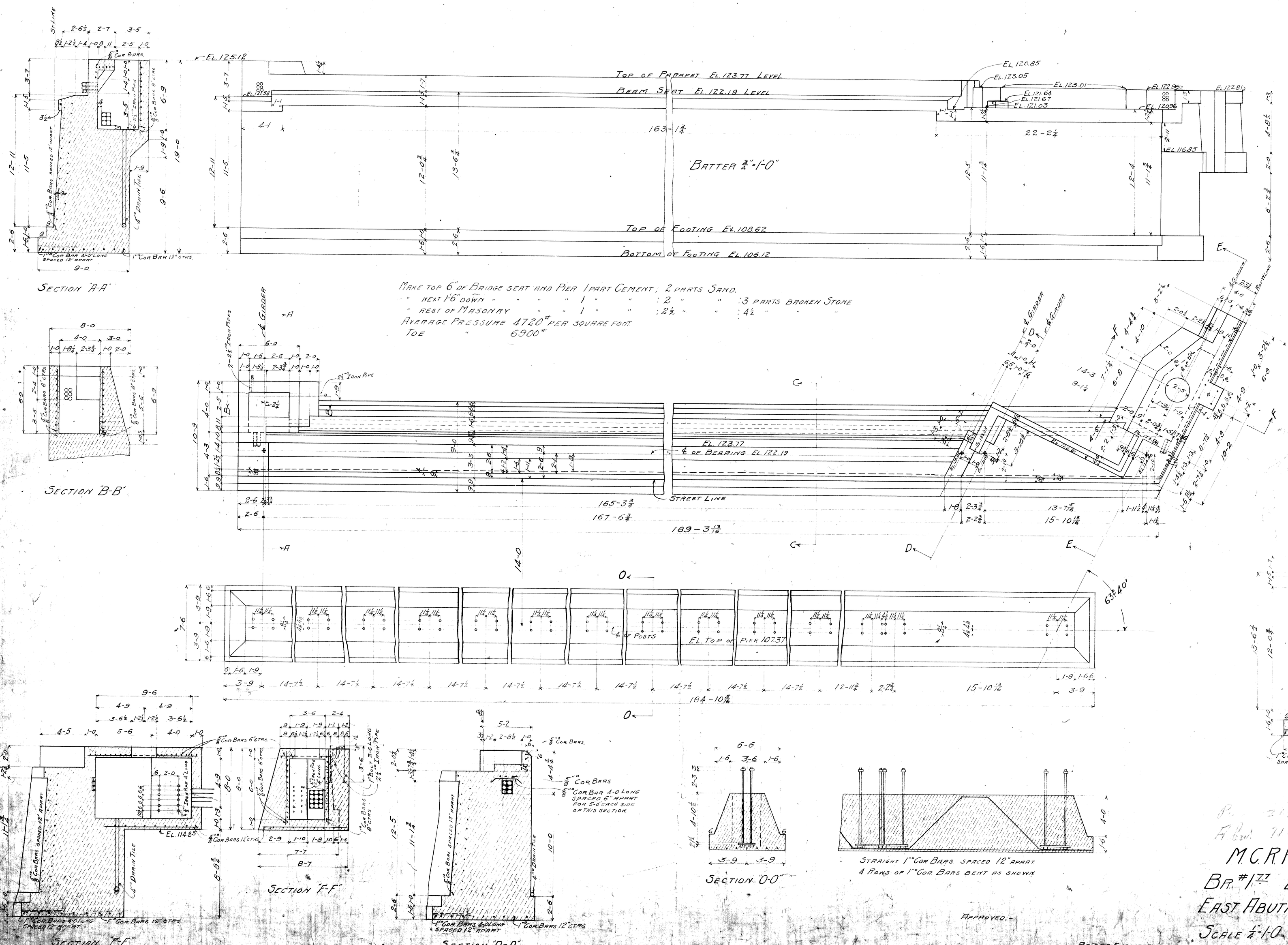
CITY ENGINEER'S OFFICE
GRADE SEPARATION & BRIDGES
Case A Drawer 2 No. I-4-b

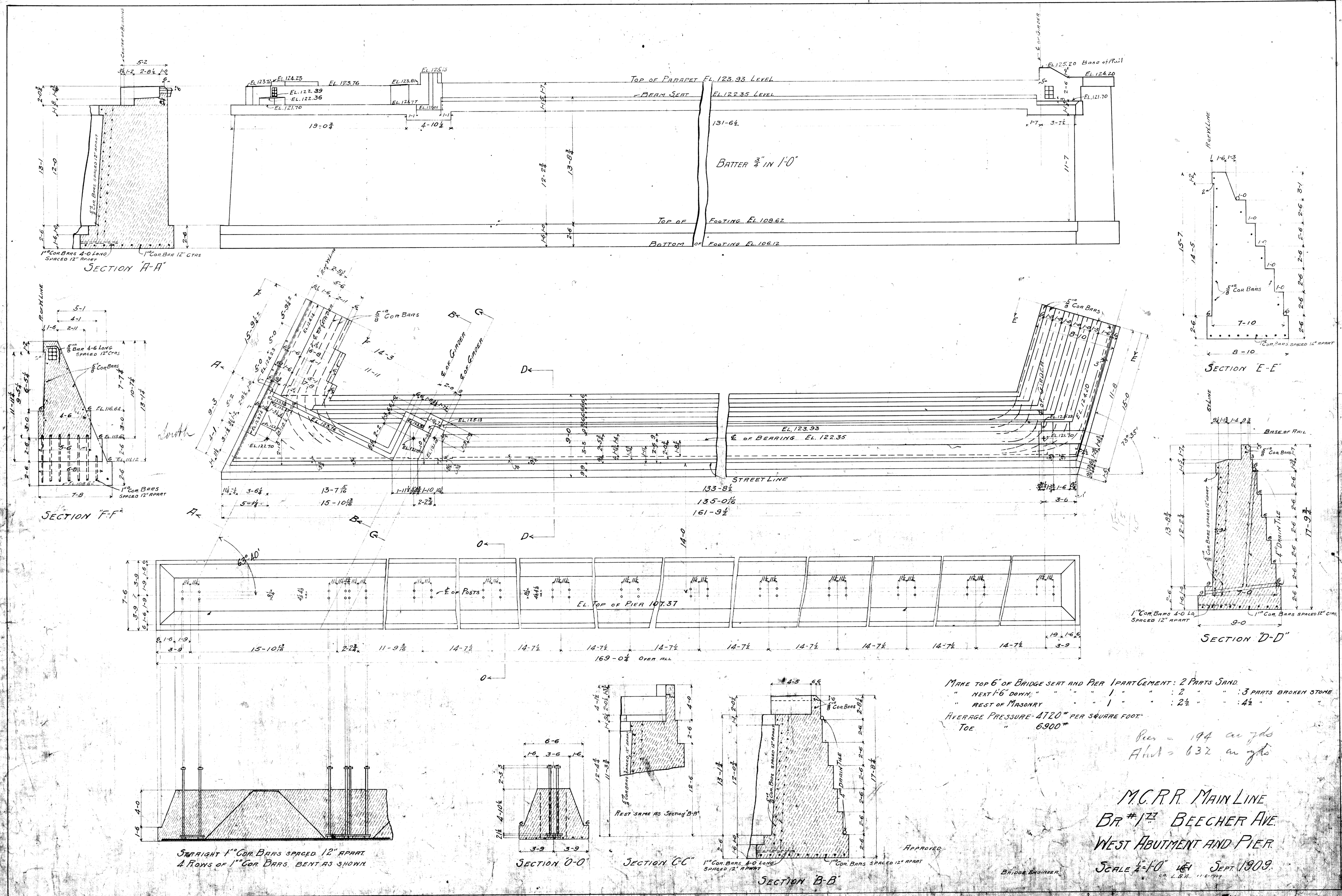
Drawn by J.W.Reid Aug 25,1908.

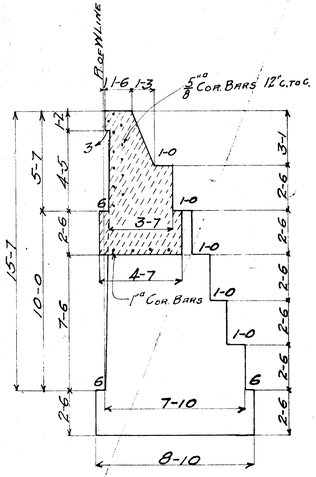
BEECHER AVE.

City Engineer's Office.

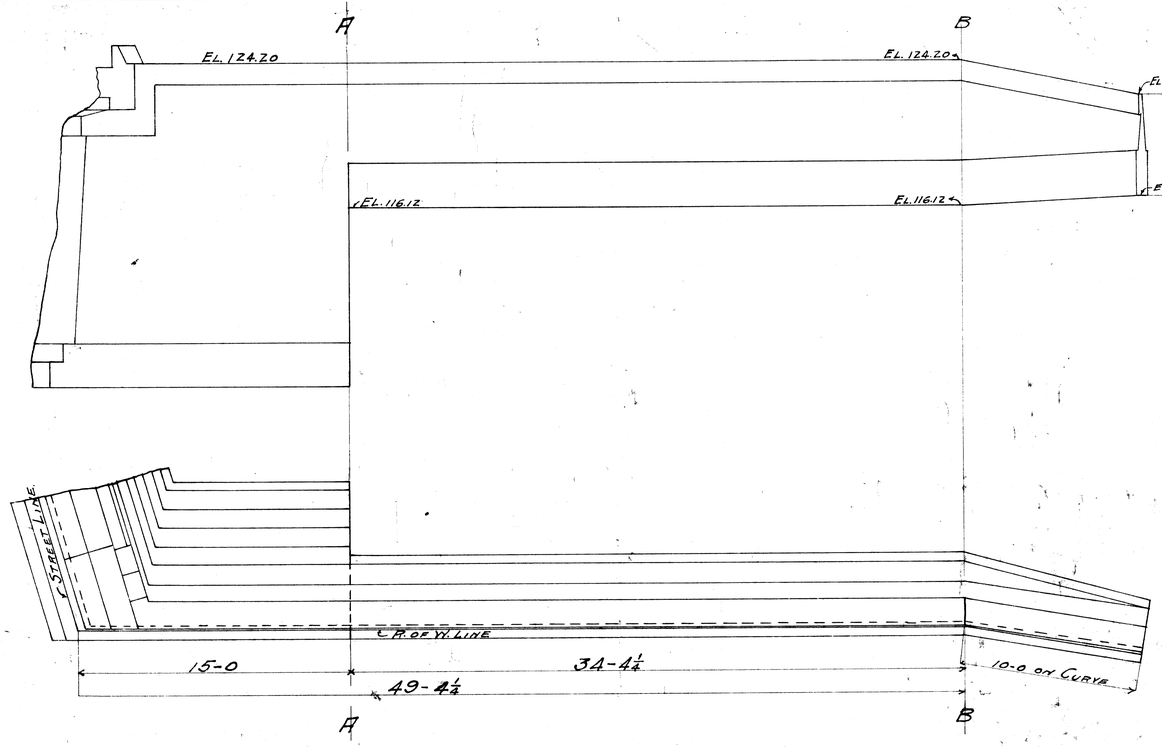
File XU52-2 A-2-I-4b

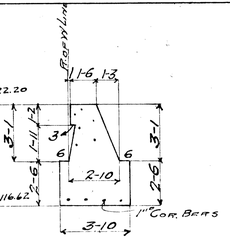

Top of Parapet El. 123.77 Level
Beam Seat El. 122.19 Level
Batter 3/4" = 1'-0"
Top of Footing El. 108.62
Bottom of Footing El. 106.12
Section "A-A"
Section "B-B"
Make top 6" of Bridge Seat and Pier 1 part Cement; 2 parts Sand.
" next 1'-6" down " " " 1 " " : 2 " " : 3 parts Broken Stone
" rest of Masonry " " 1 " " : 2½ " " : 4½ " " "
Average Pressure 4720# per square foot
Toe " 6900#
Street Line
Section "C-C"
Section "E-E"
Section "F-F"
Section "D-D"
Section "O-O"
Straight 1" Cor. Bars spaced 12" apart.
4 Rows of 1" Cor. Bars bent as shown.
Approved.-
Bridge Engineer.
M.C.R.R. Main Line
Br. #1.77 Beecher Ave.
East Abutment and Pier
Scale 1/4" = 1'-0"
Oct. 1909.
File XU52-3


Section "A-A"
Top of Parapet El. 123.93 Level
Beam Seat El. 122.35 Level
Batter 3/4" in 1'-0"
Top of Footing El. 108.62
Bottom of Footing El. 106.12
Base of Rail
Section "E-E"
Section "F-F"
Section "D-D"
Section "O-O"
Section "C-C"
Section "B-B"
Rest same as Section "B-B"
Straight 1" Cor. Bars spaced 12" apart
4 Rows of 1" Cor. Bars, bent as shown
El. Top of Pier 107.37
El. 123.93
℄ of Bearing El. 122.35
Street Line
169-0 7/8 Over all
Make top 6" of Bridge Seat and Pier 1 part Cement : 2 parts Sand
" next 1'-6" down " " " 1 " " : 2 " " : 3 parts broken stone
" rest of Masonry " " 1 " " : 2 1/2 " " : 4 1/2 " " "
Average Pressure 4720# per square foot
Toe " 6900#
Pier = 194 cu yds
Abut = 632 cu yds
M.C.R.R. Main Line
Br. #1 "Beecher Ave."
West Abutment and Pier
Scale 1/4"=1'-0"
Sept. 1909
Approved
Bridge Engineer
File XU52-4

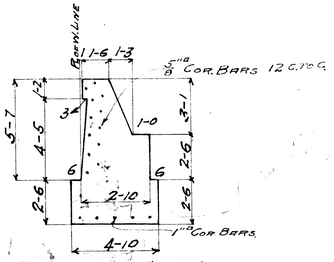


SECTION "A-A"





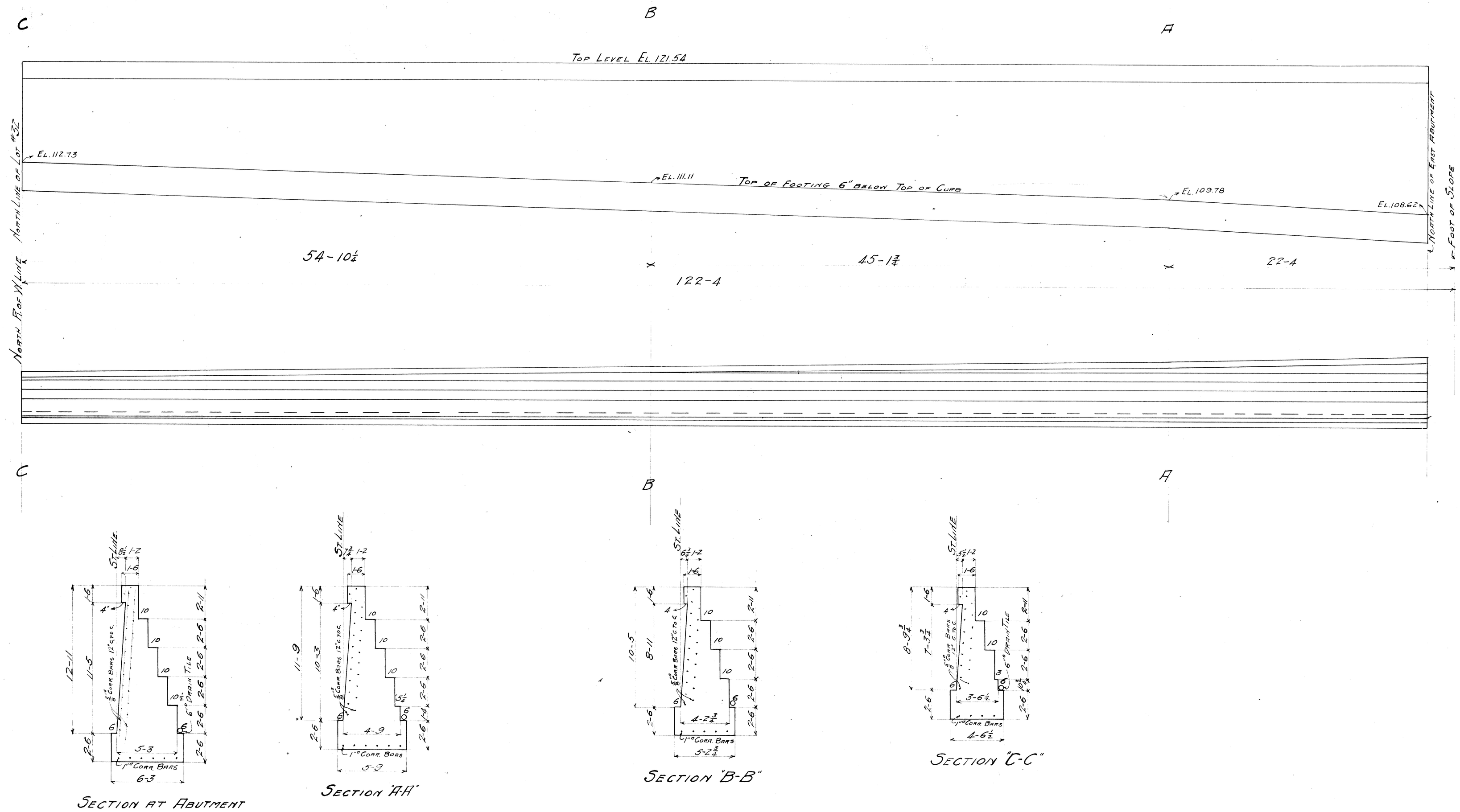
END VIEW



SECTION "B-B"

M.C.R.R. MAIN LINE.
BR # 177 BEECHER AVE.
NORTH WING OF WEST ABUTMENT.
SCALE 1/4" = 1-0 APR. 1910.

File XU52-5



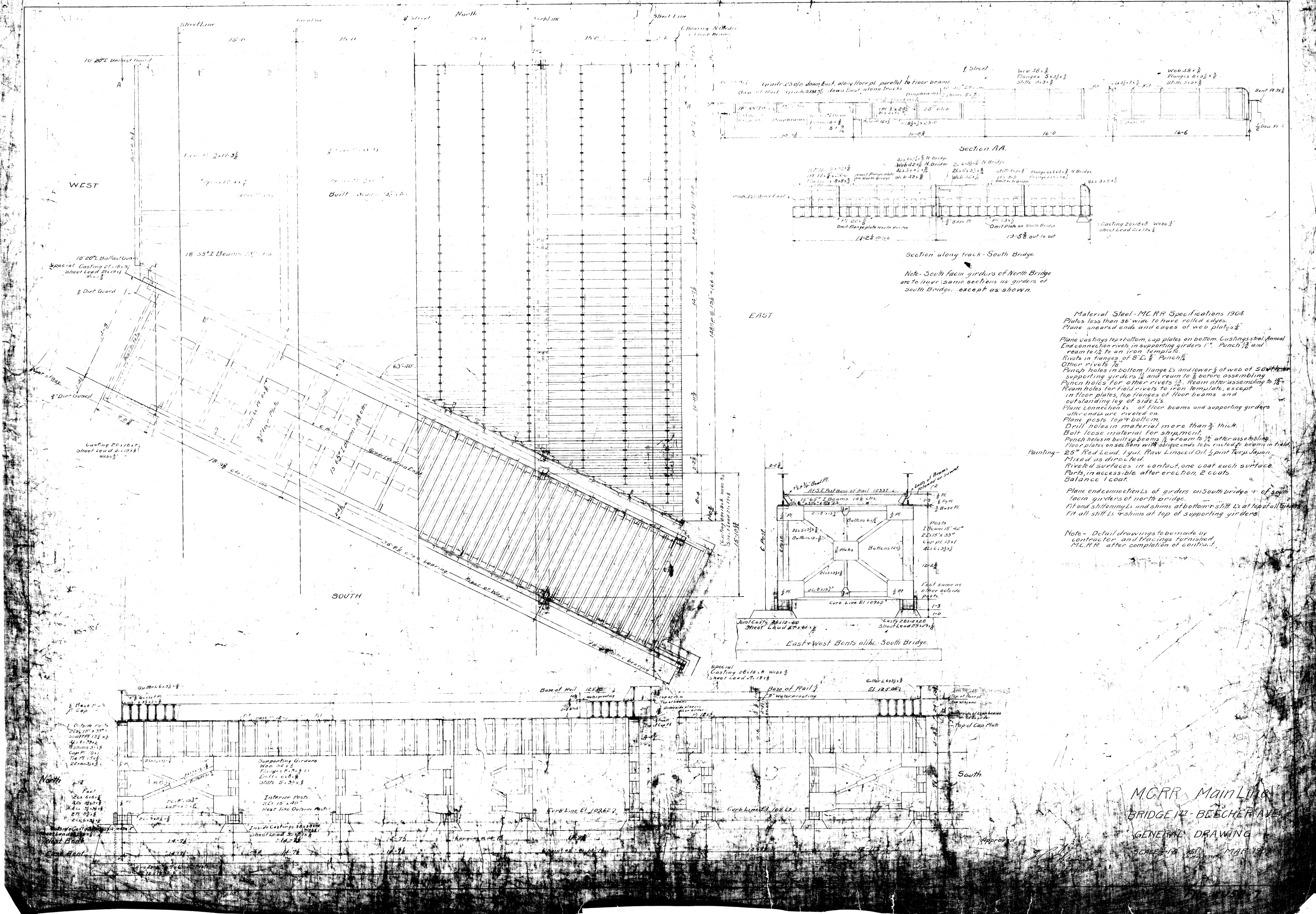
Mass Concrete, 1 part Cement; 2½ parts Sand; 4½ parts Broken Stone.

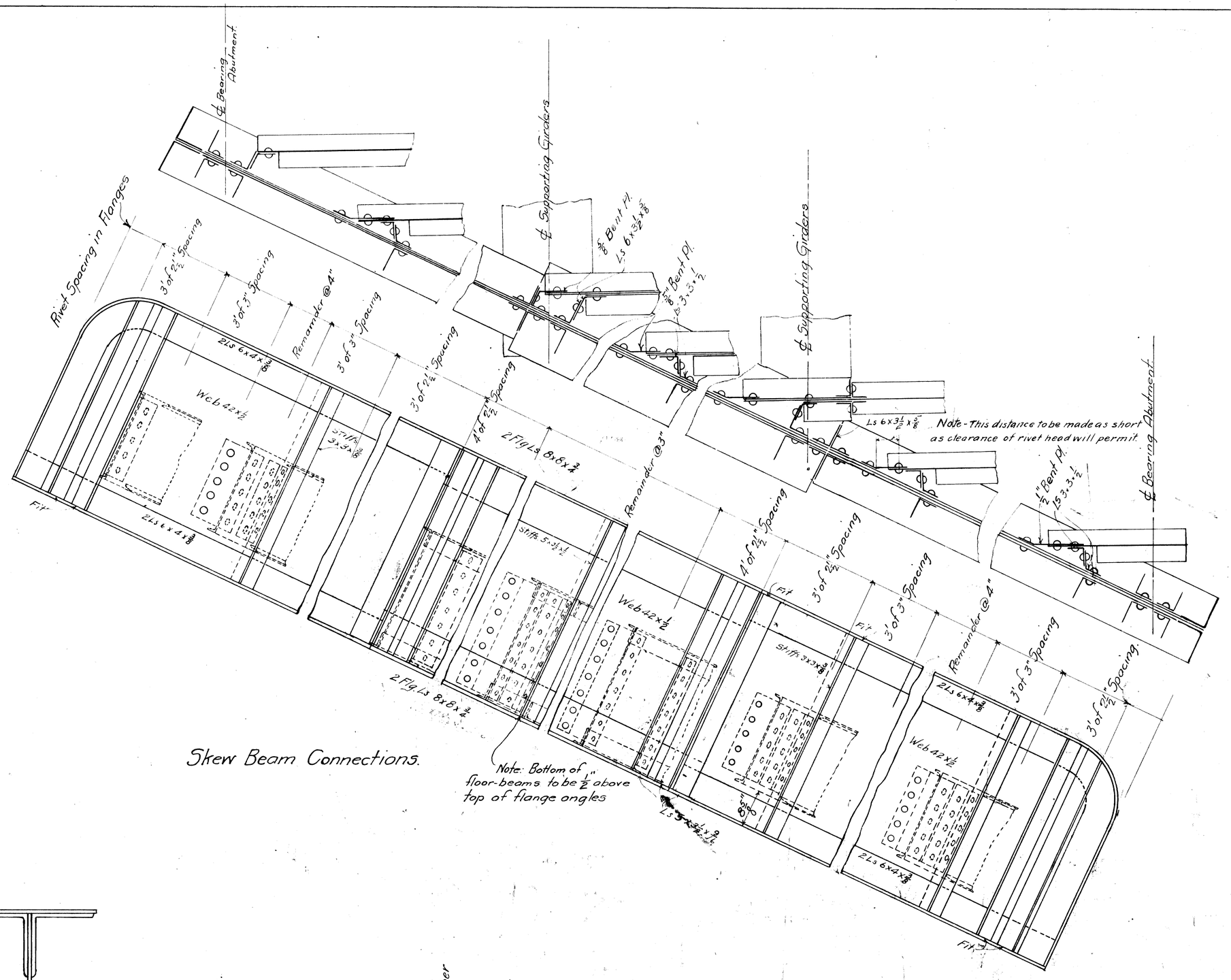
M.C.R.R.-Div.- Main Line
Bridge #177 Beecher St.
Wall North of East Abut. E. side of St.

Approved:-
Bridge Engineer.
Chief Engineer.

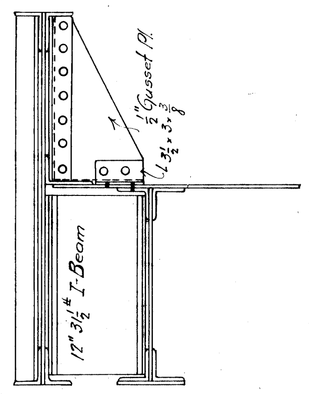
Scale ___ in. = 1 foot.
Drawn by 6/9 1910
Checked by 19
Traced by 6/9 1910
Revised
Sheet ___ of ___

File XU52-6

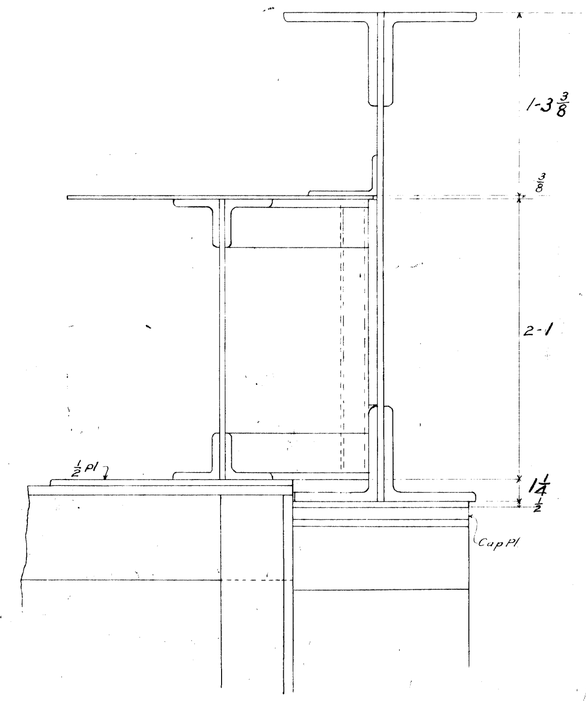

WEST
EAST
SOUTH
North
Street Line
Centre
Curb Line
Grade 1.5% down East, along floor pl. parallel to floor beams.
Base of Rail Grade 0.134% down East, along Trucks
Section AA.
Section along track - South Bridge.
Note - South facia girders of North Bridge are to have same sections as girders of South Bridge, except as shown.
Material Steel - M.C.R.R. Specifications 1904
Plates less than 36" wide to have rolled edges.
Plane sheared ends and edges of web plates 1/4"
Plane castings top + bottom, cap plates on bottom. Castings steel. Anneal
End connection rivets in supporting girders 1". Punch 1 3/16" and ream to 1 1/16" to an iron template.
Rivets in flanges of 8" Ls 7/8" Punch 11/16"
Other rivets 7/8"
Punch holes in bottom flange Ls and lower 1/2" of web of South girders supporting girders 1/16" and ream to 7/8" before assembling
Punch holes for other rivets 1/16". Ream after assembling to 15/16"
Ream holes for field rivets to iron template, except in floor plates, top flanges of floor beams and outstanding leg of side Ls.
Plane connection Ls of floor beams and supporting girders after ends are riveted on.
Plane posts top + bottom.
Drill holes in material more than 3/4" thick.
Bolt loose material for shipment.
Punch holes in built up beams 1/16" + ream to 15/16" after assembling.
Floor plates on sections with oblique ends to be riveted to beams in field.
Painting - 25% Red Lead, 1 gal. Raw Linseed Oil, 1/2 pint Turp. Japan. Mixed as directed.
Riveted surfaces in contact, one coat each surface.
Parts, in accessible after erection, 2 coats.
Balance 1 coat.
Plane end connection Ls of girders on South bridge + of south facia girders of north bridge.
Fit end stiffening Ls and shims at bottom + stiff. Ls at top of all girders.
Fit all stiff Ls + shims at top of supporting girders.
Note - Detail drawings to be made by contractor and tracings furnished M.C.R.R. after completion of contract.
East + West Bents alike. South Bridge.
Supporting Girders
Interior Posts
Inside Castings
Sheet Lead
Base of Rail
Waterproofing
Top of Cap Plate
Curb Line El. 103.62
Approved
M.C.R.R. Main Line
BRIDGE 17 - BEECHER AVE.
GENERAL DRAWING
SCALE 1/8" = 1'-0"
MAR. 1913



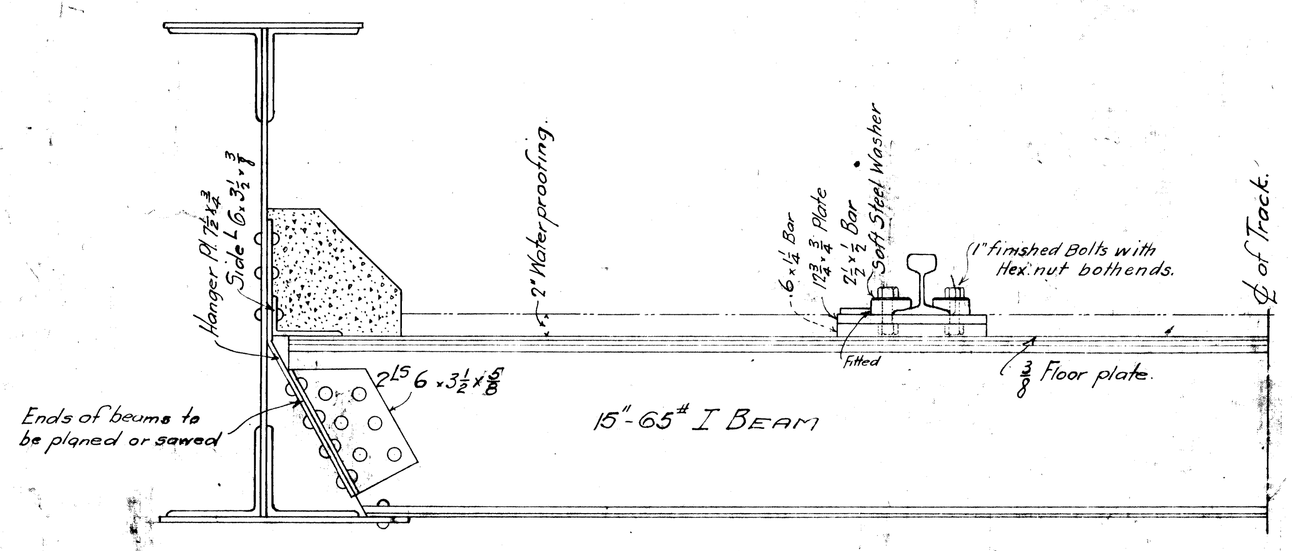
Skew Beam Connections.



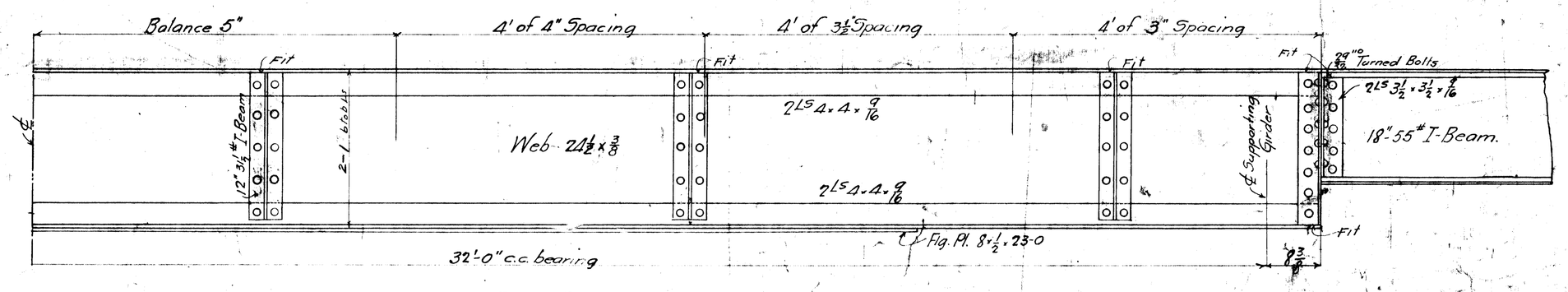
Section thro' North Girder



Post connections to skew Girder & floor connections.



Section thro' South Bridge



Main Floor Beam

Approved:
G. H. Shaw
Bridge Engineer.

M.C.R.R. Main Line
Bridge 1.77 Beecher Ave.
Sketch of Details
Scale 1" = 1'-0" Mar. 1909
File XU52-8