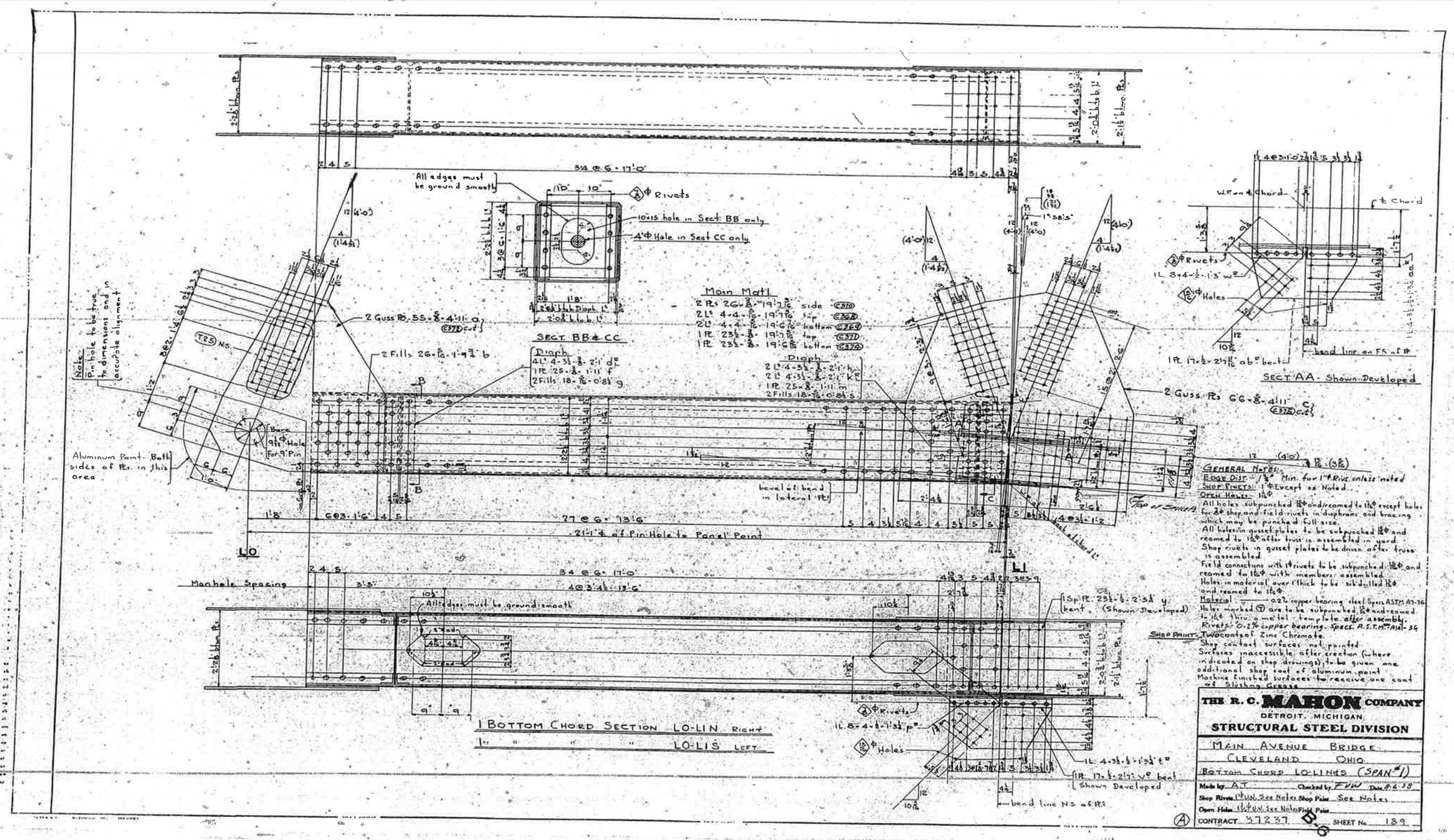
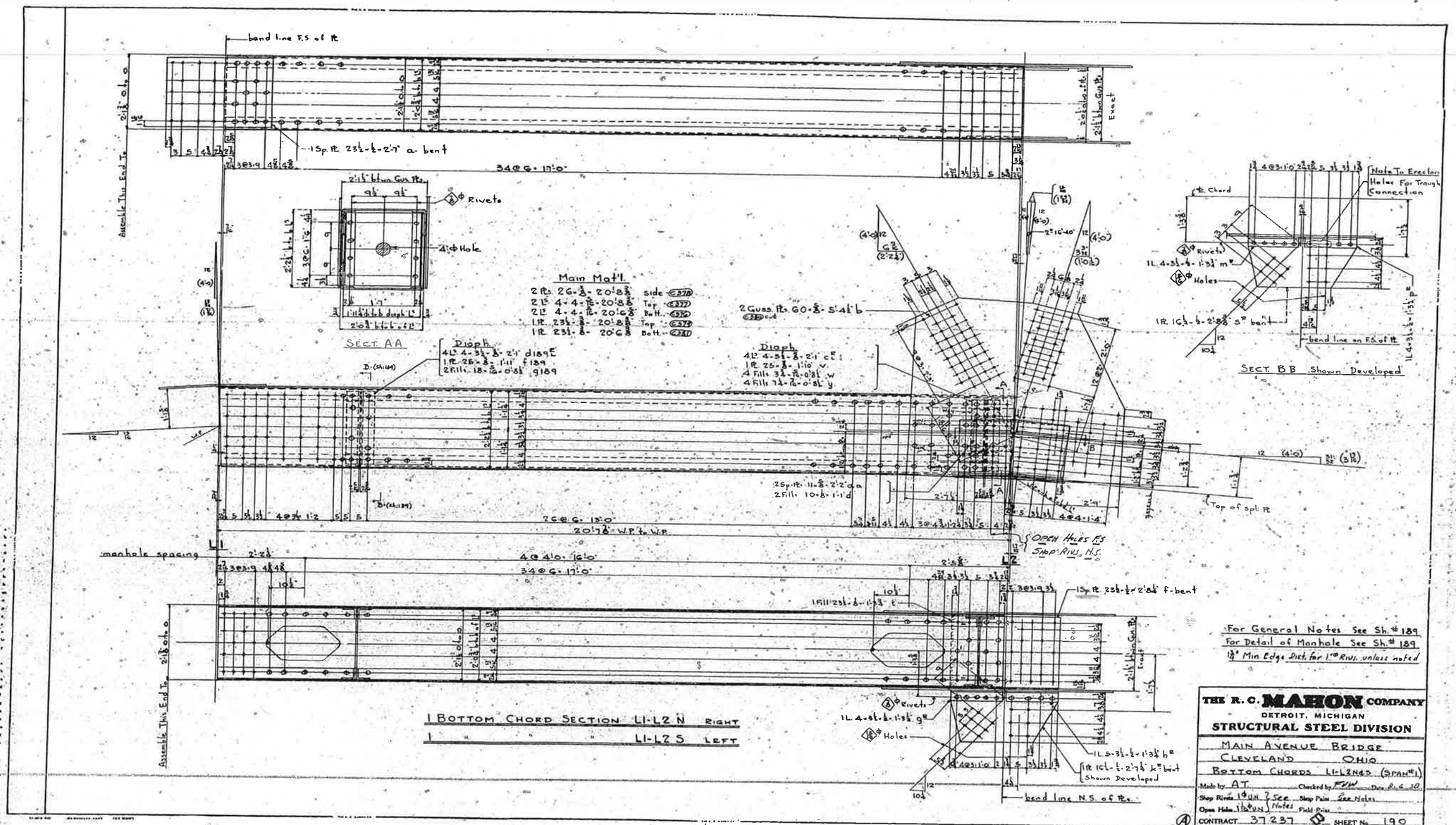
2
320



LO N&S
L1 N&S

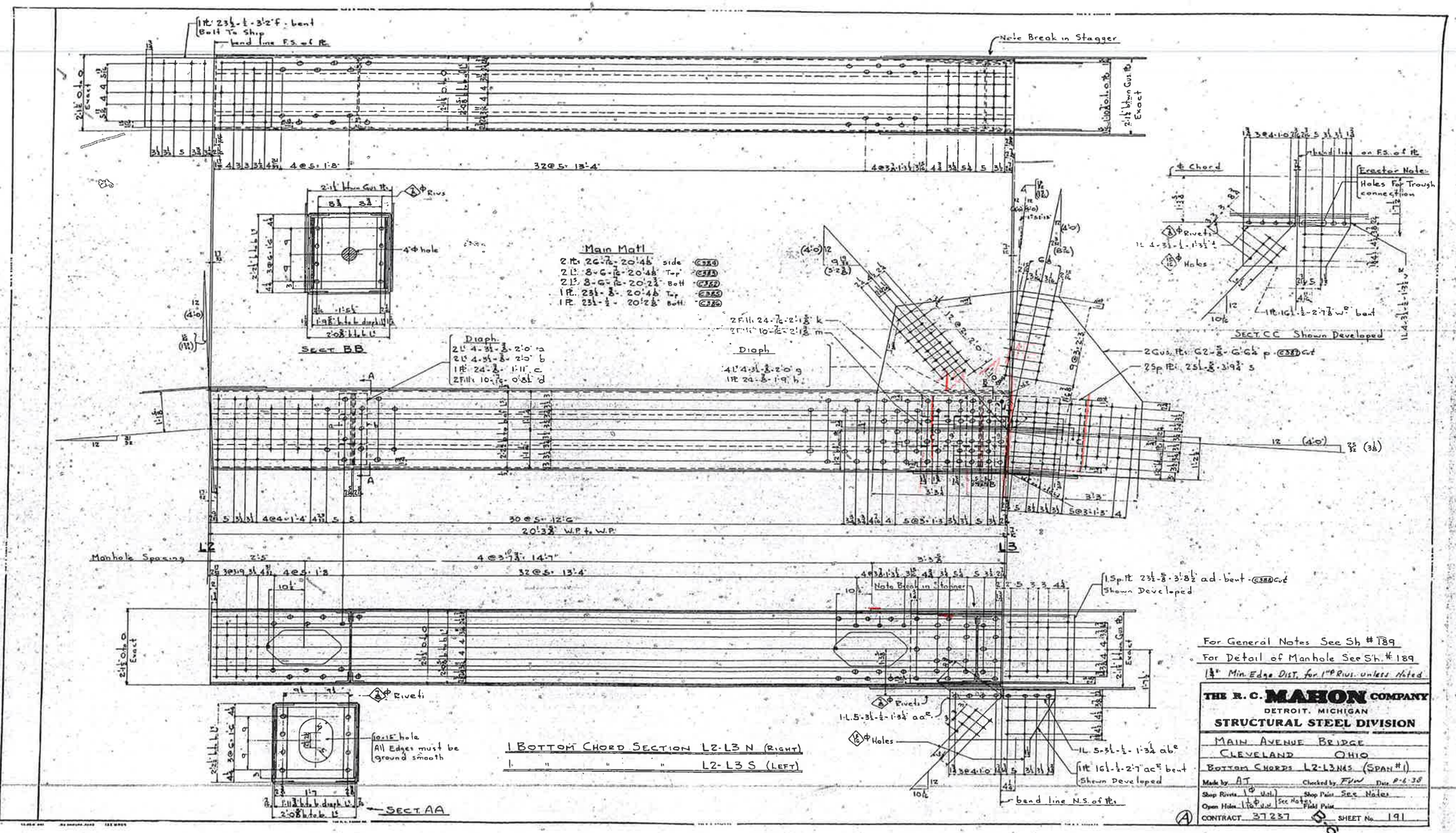
L1 = NO SPLICE PLATE

2
319


Main Mat'l.
Diaph.
Diaph.
SECT. AA
SECT. BB Shown Developed
1 BOTTOM CHORD SECTION L1-L2 N RIGHT
1 " " " L1-L2 S LEFT
manhole spacing
Assemble This End To
Note To Erector: Holes For Trough Connection
For General Notes See Sh. # 189
For Detail of Manhole See Sh. # 189
1/8" Min Edge Dist. for 1" Rivs. unless noted
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTTOM CHORDS L1-L2N&S (SPAN #1)
Made by AT Checked by FWW Date 8-6-10
Shop Rivets 19/32 N } See Notes Shop Pins See Notes
Open Holes 17/32 N Field Pins
CONTRACT 37237 SHEET No. 190

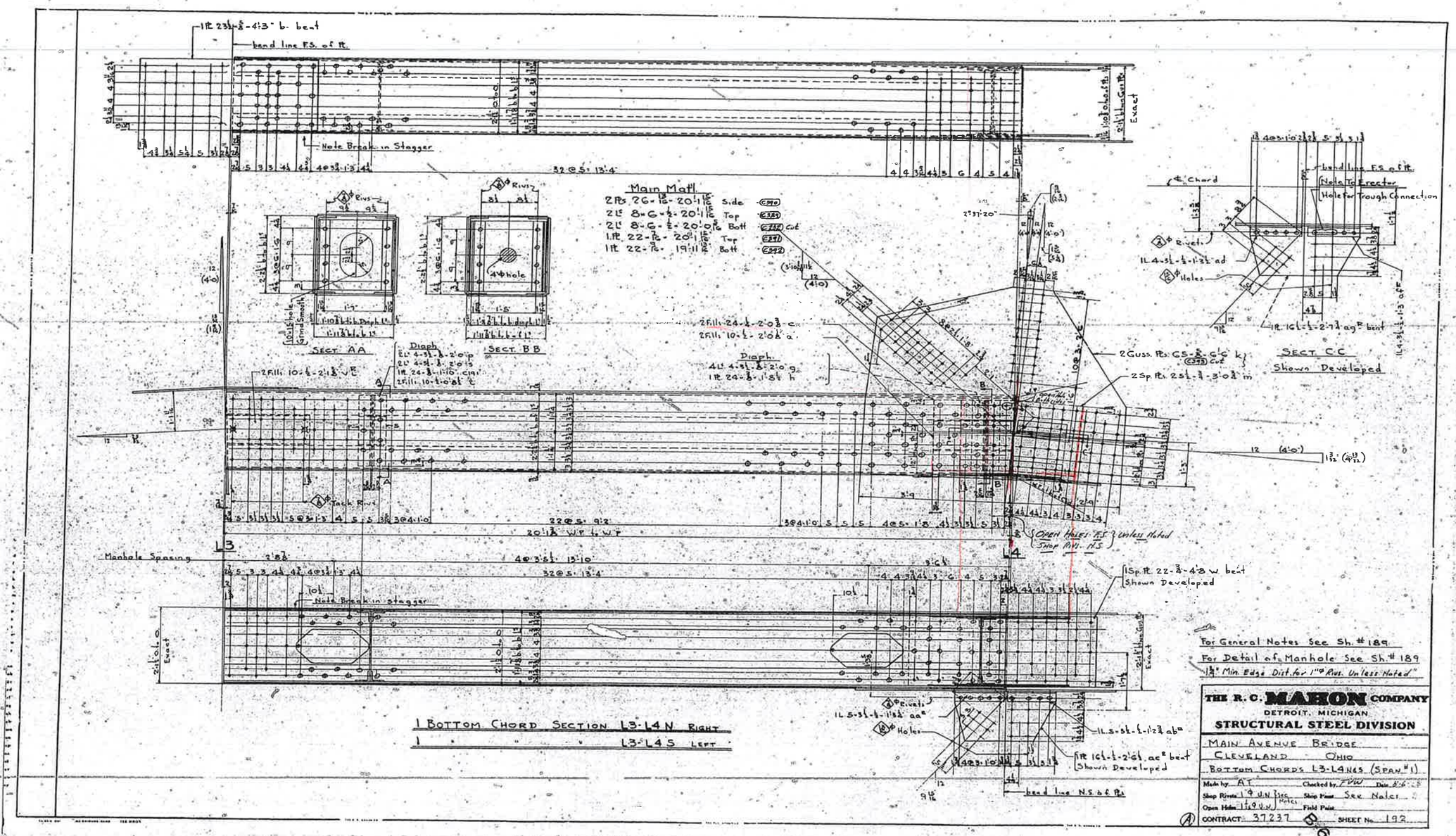
L2 N&S

2
318


Note Break in Stagger
Main Matl
Diaph.
Sect BB
Sect AA
Sect C C Shown Developed
Exactor Note:
Holes For Trough connection
1 Bottom Chord Section L2-L3 N (Right)
1 " " " L2-L3 S (Left)
All Edges must be ground smooth
Manhole Spacing
L2
L3
For General Notes See Sh # 189
For Detail of Manhole See Sh. # 189
1¼" Min. Edge Dist. for 1" Rivs. unless noted
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTTOM CHORDS L2-L3 N&S (SPAN #1)
Made by AJ
Checked by
Date 8-6-38
Shop Rivets
Shop Paint See Notes
Open Holes
Field Paint
CONTRACT 37237
SHEET No. 191

L3 N&S

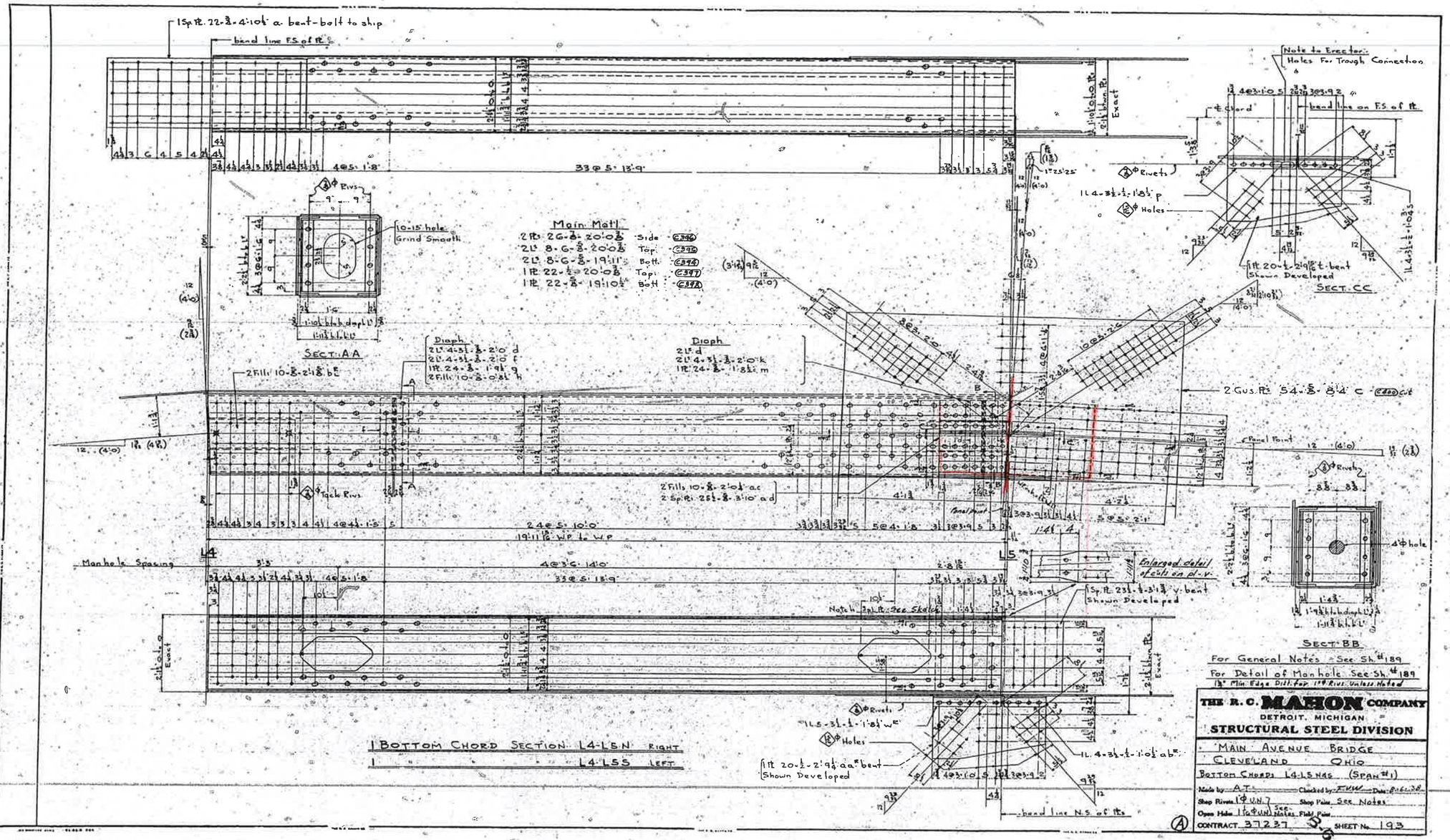
2
317



1 BOTTOM CHORD SECTION L3-L4 N RIGHT
1 " " " L3-L4 S LEFT

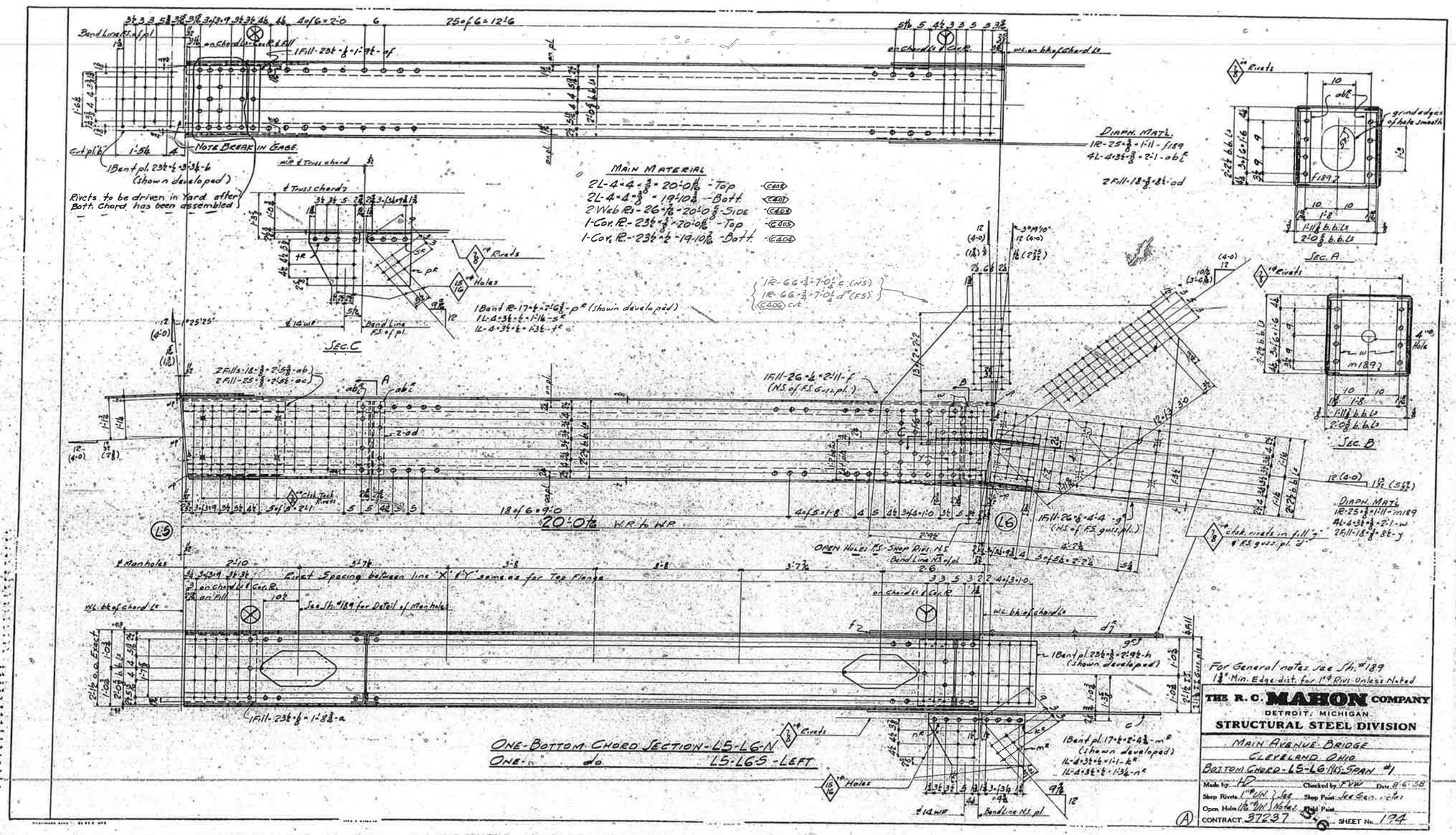
L4 N&S

2
316


Main Mat'l
Side
Top
Bott.
Top
Bott
Dioph
Dioph
SECT. AA
SECT. CC
SECT. BB
Note to Erector: Holes For Trough Connection
Manhole Spacing
Enlarged detail of cut on pl. v.
Sp. Pl. 23 1/2 - 1/2 - 3 1/2 v. bent Shown Developed
Pl. 20 - 1/2 - 2 1/2 t. bent Shown Developed
Pl. 20 - 1/2 - 2 1/2 aa bent Shown Developed
head line N.S. of Pls.
1 Bottom Chord Section L4-L5N Right
1 L4-L5S Left
For General Notes See Sh. #189
For Detail of Manhole See Sh. #189
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTTOM CHORD: L4-L5 N&S (SPAN #1)
Made by A.T. Checked by
Shop Rivets
Shop Pins See Notes
Open Holes
Field Pins
CONTRACT 37237
SHEET No. 193

L5 N&S

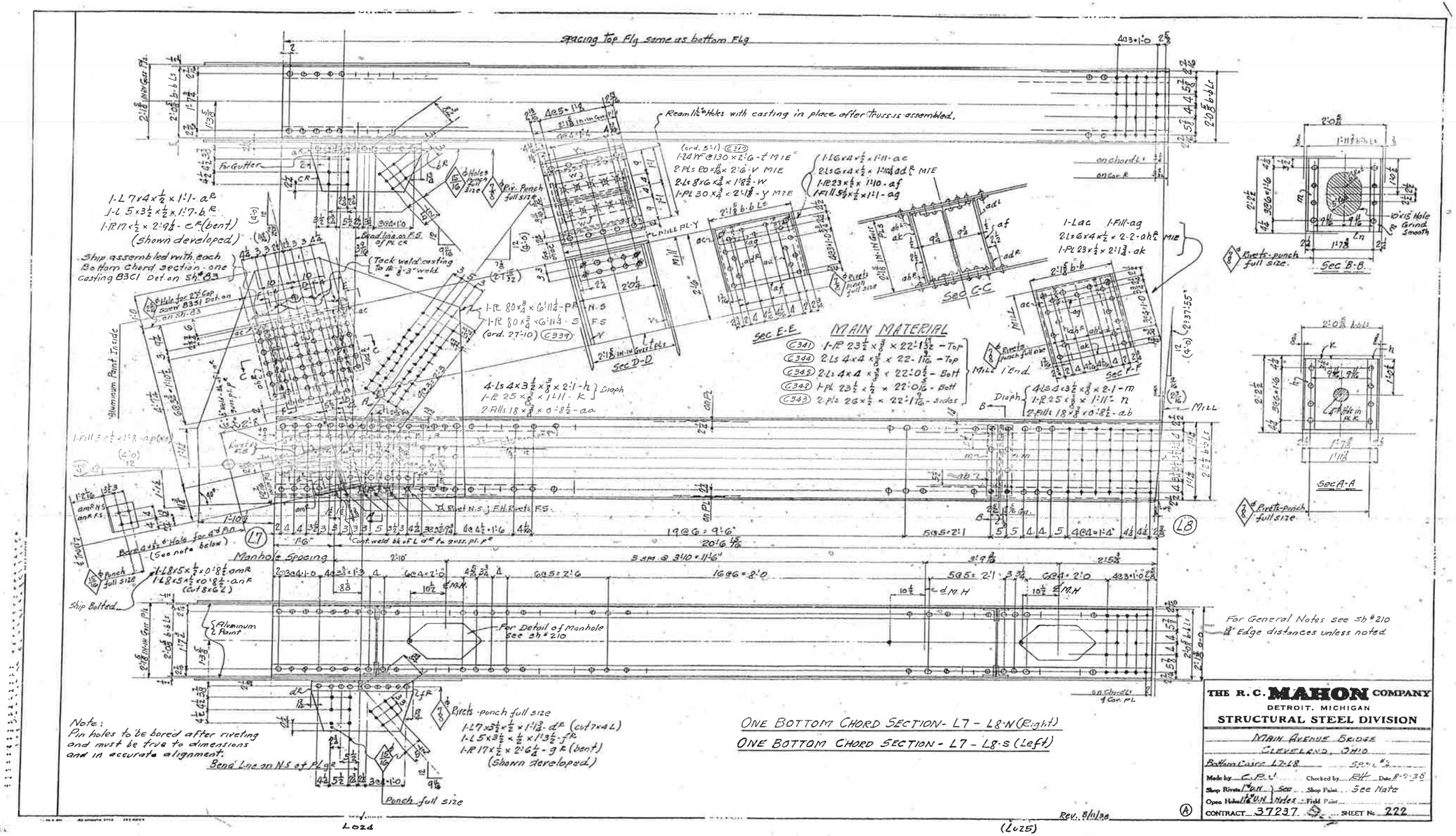
2
315


MAIN MATERIAL
2L-4"x4"x3/8" = 20'-0 1/16" - Top (C402)
2L-4"x4"x3/8" = 19'-10 3/4" - Bott. (C401)
2 Web Rs - 26"x7/16" = 20'-0 5/8" - Side (C403)
1-Cov. Pl. - 23 1/2"x3/8" = 20'-0 1/16" - Top (C405)
1-Cov. Pl. - 23 1/2"x3/8" = 19'-10 1/16" - Bott. (C404)
DIAPH. MAT'L.
1R-25"x3/8" = 1'-11" - f189
4L-4"x3 1/2"x3/8" = 2'-1" - abE
2 Fill-18"x3/8"x8'-0" - od
SEC. A
SEC. B
SEC. C
Rivets
Holes
Bend Line R.S. of pl.
Note Break in Gage
1 Bent pl. 23 1/2"x3/8"x3'-3 1/2" - b (shown developed)
Rivets to be driven in Yard after Bott. Chord has been assembled
1 Bent R-17"x7/16"x2'-6 3/8" - p^R (shown developed)
1L-4"x3 1/2"x7/16"x1'-1 1/4" - s^R
1L-4"x3 1/2"x7/16"x1'-3 1/2" - t^R
1R-66"x3/4"x7'-0 1/4" c (NS)
1R-66"x3/4"x7'-0 1/4" d (FS) (C406) cut
1 Fill-26"x7/16"x2'-11" - f (NS of FS Gus. pl.)
1 Fill-26"x7/16"x4'-4" - g (NS of FS gus. pl.)
1 Bent pl. 23 1/2"x3/8"x2'-9 1/2" - h (shown developed)
1 Bent pl. 17"x7/16"x2'-4 1/2" - m^R (shown developed)
1L-4"x3 1/2"x7/16"x1'-1" - k^R
1L-4"x3 1/2"x7/16"x1'-3 1/2" - n^R
2 Fills-18"x3/8"x2'-5 3/8" - ab
2 Fill-25"x3/8"x2'-3 1/2" - ac
1 Fill-23 1/2"x3/8"x1'-8 3/8" - a
18 of 6"=9'-0"
20'-0 1/16" W.R. to W.R.
Manholes
First Spacing between line "X" & "Y" same as for Top Flange
See Sh. #189 for Detail of Manhole
Open Holes NS - Shop Rivs. NS
Bend Line NS of pl.
For General notes see Sh. #189
1 3/4" Min. Edge dist. for 1" Rivs. Unless Noted
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTTOM CHORD - L5-L6 - N&S SPAN #1
Made by HP
Checked by FPW
Date 8-6-38
Shop Rivets 1" Dia. & Less
Shop Paint See Specs.
Open Holes 13/16" Dia. Noted
Field Paint
CONTRACT 37237
SHEET No. 174
ONE-BOTTOM CHORD SECTION - L5-L6-N
ONE-" do. L5-L6-S - LEFT

L6 N&S

3
561

L7 N&S



ONE BOTTOM CHORD SECTION - L7 - L8-N (Right)
ONE BOTTOM CHORD SECTION - L7 - L8-S (Left)

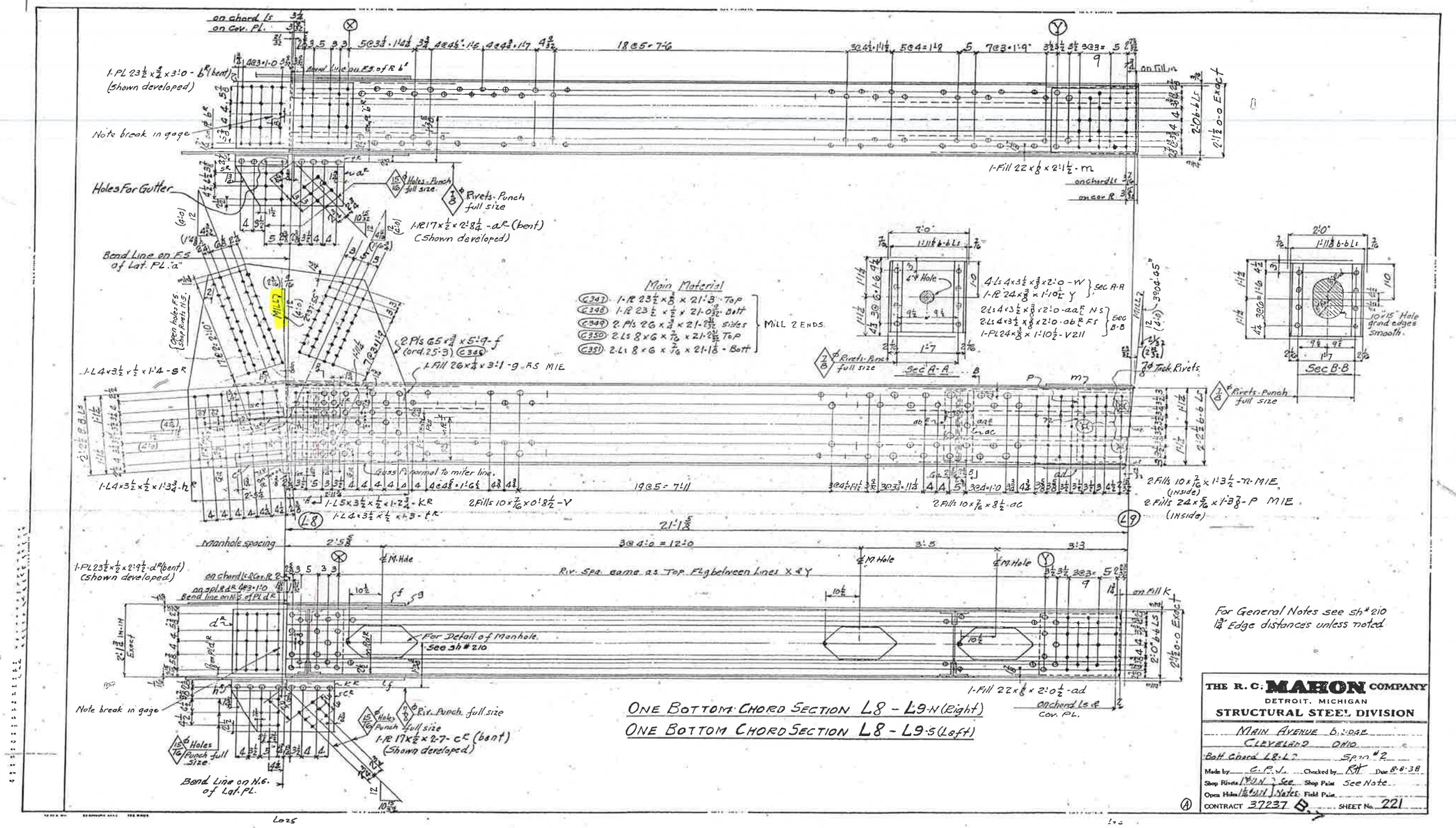
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND, OHIO

Bottom Chord L7-L8 — Sp. L #2
Made by C.P.V. — Checked by RH — Date 8-9-38
Shop Rivets 7/8" Ush } Std. — Shop Paint — See Note
Open Holes 13/16" U.N. } Notes — Field Paint
CONTRACT 37237 — SHEET No. 222

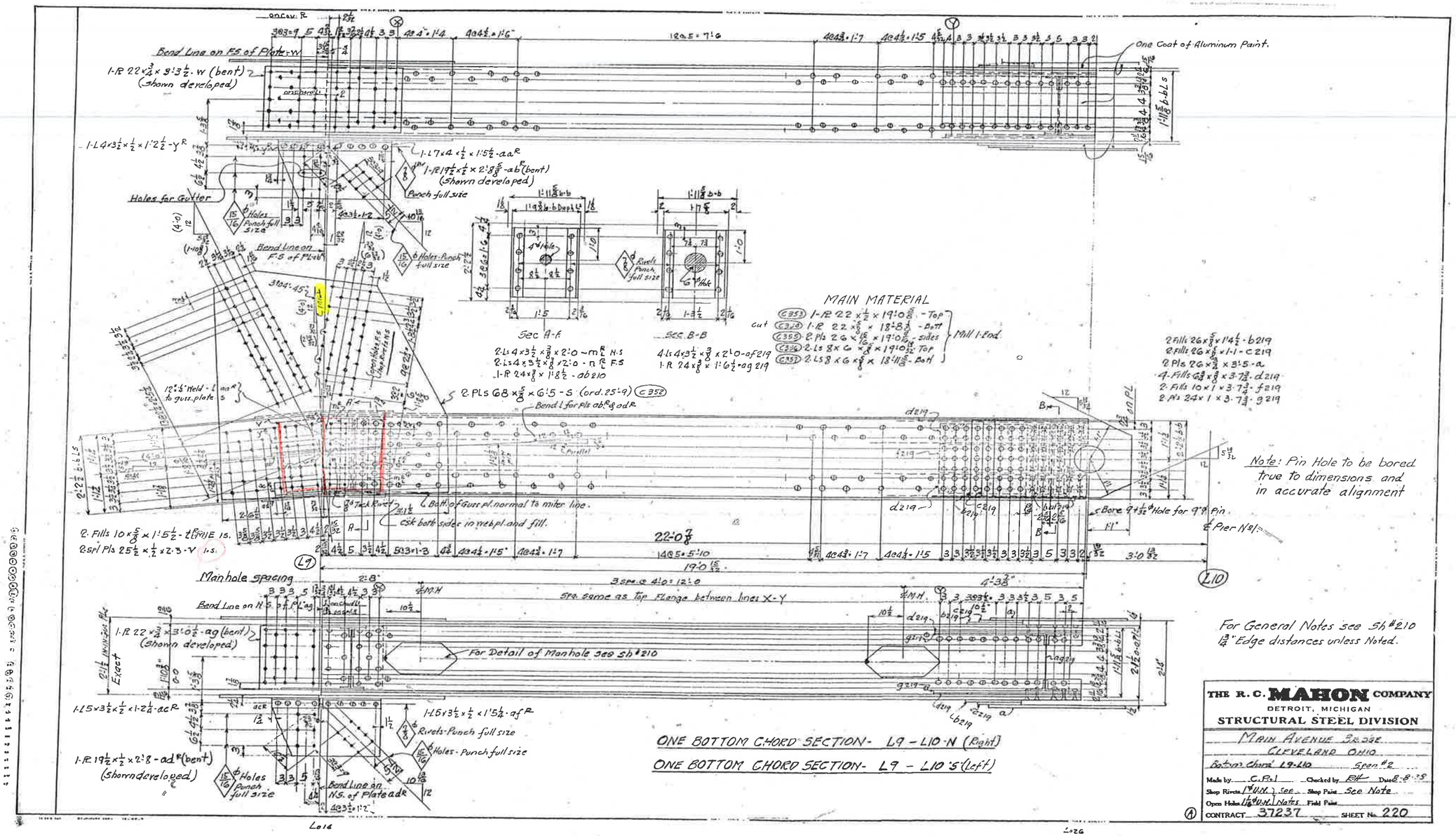
L024 (L025)

3
562


Holes For Gutter
Note break in gage
Bend Line on F.S. of Lat. PL. a
Main Material
(C341) 1-PL 23½ x ⅝ x 21'-3" - Top
(C348) 1-PL 23½ x ½ x 21'-0 29/32" - Bott
(C349) 2 Pls 26 x ¾ x 21'-0 29/32" Sides
(C350) 2 Ls 8 x 6 x 7/16 x 21'-0 29/32" Top
(C351) 2 Ls 8 x 6 x 7/16 x 21'-1⅛ - Bott
MILL 2 ENDS
Sec A-A
Sec B-B
Rivets-Punch full size
Holes-Punch full size
Tack Rivets
Manhole spacing
Rivet Spa. same as Top Flg between lines X & Y
For Detail of Manhole See Sh # 210
Bend Line on N.S. of Lat. PL.
Note break in gage
ONE BOTTOM CHORD SECTION L8 - L9-N (Right)
ONE BOTTOM CHORD SECTION L8 - L9-S (Left)
For General Notes see Sh # 210
1¾" Edge distances unless noted
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
Bott Chord L8-L9 Span #2
Made by C.P.J. Checked by RJT Date 8-8-38
Shop Rivets ¾" & 7/8" See Shop Paint See Note
Open Holes 13/16" & 15/16" Notes Field Paint
CONTRACT 37237 SHEET No. 221

LB N/S

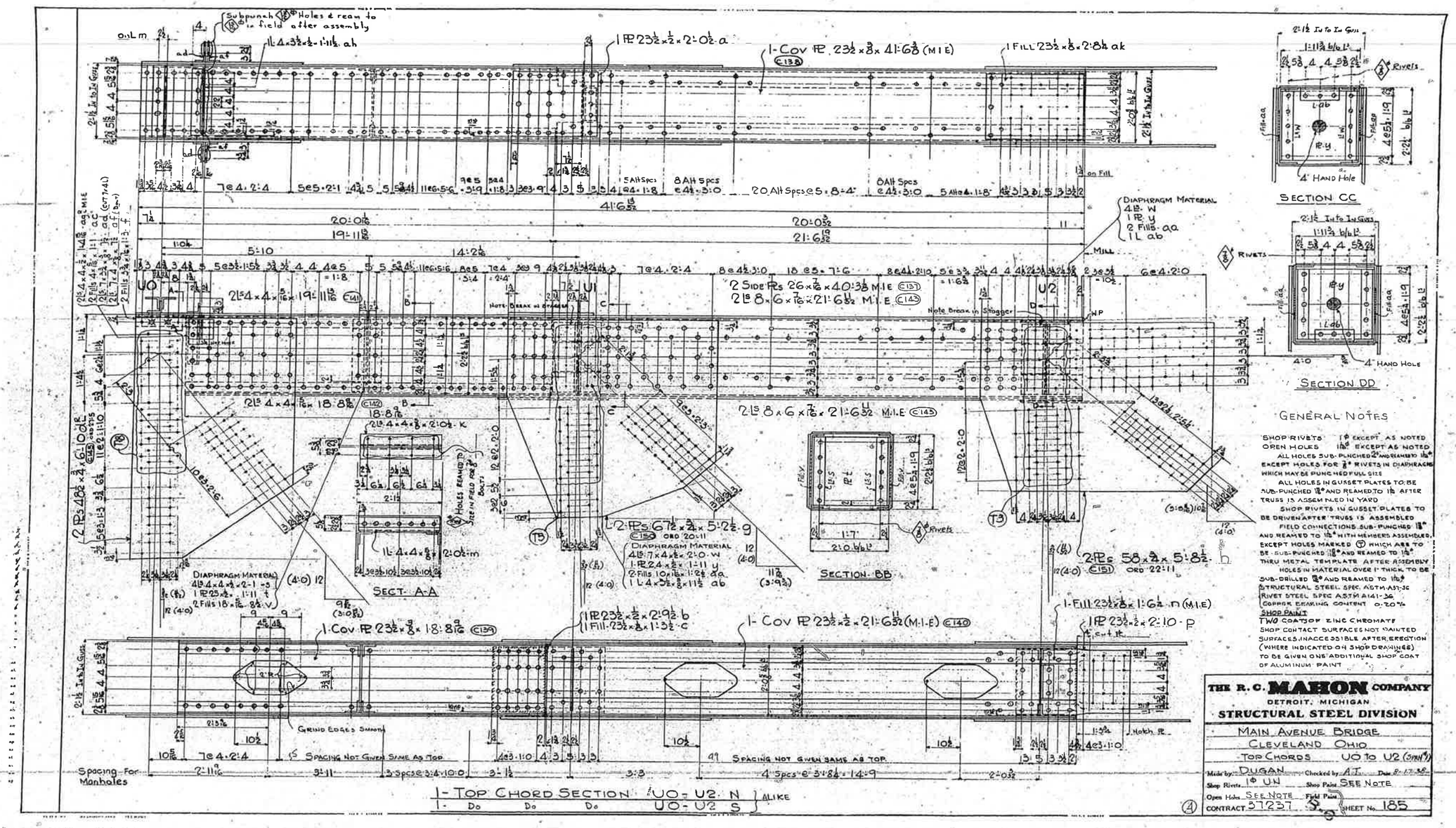
3
563



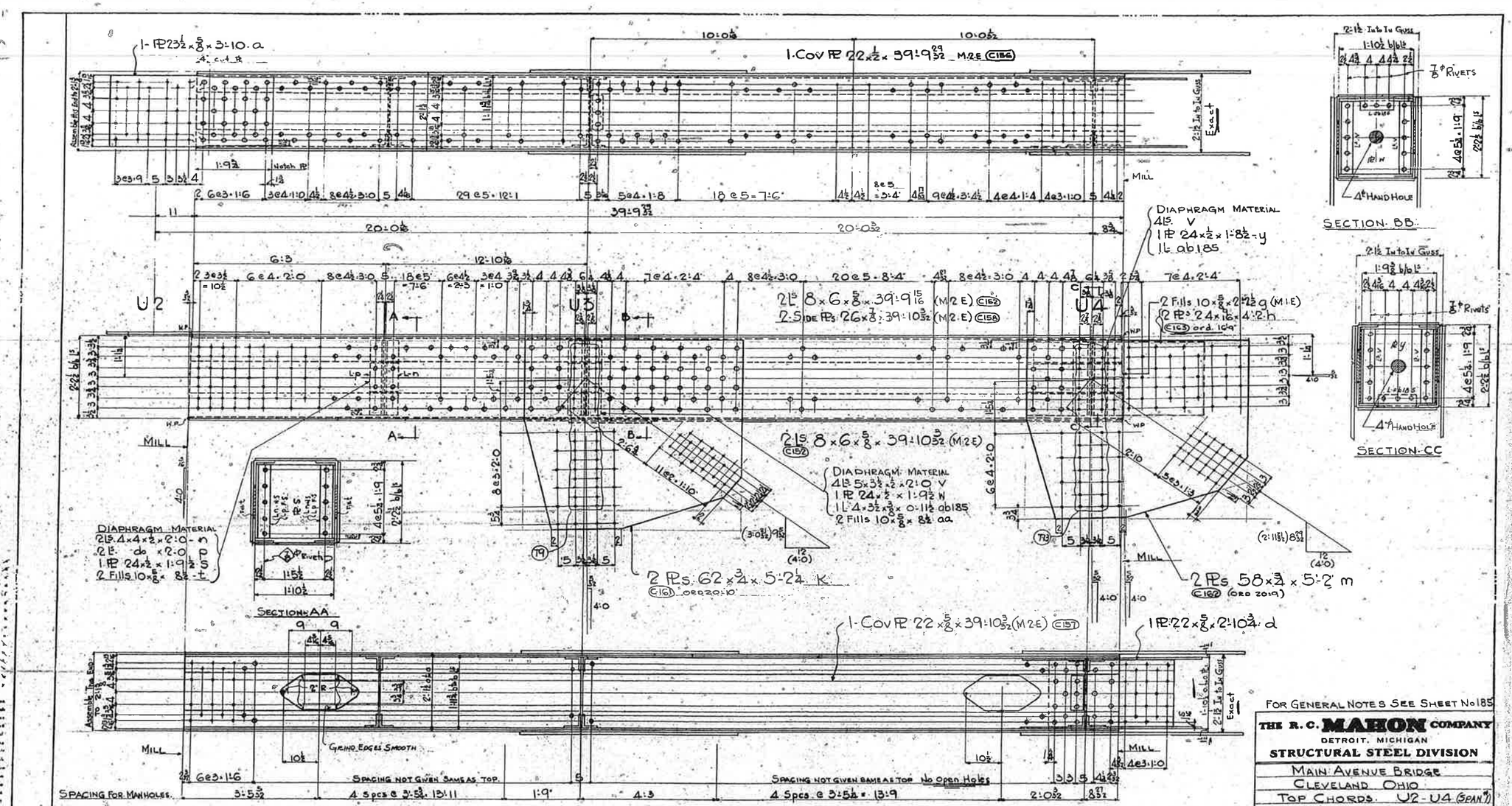
L9 N&S

SPLICE PLATE

2
324


SECTION CC
SECTION DD
SECTION BB
SECT. A-A
1-TOP CHORD SECTION U0-U2 N
1- Do Do Do U0-U2 S
ALIKE
GENERAL NOTES
SHOP RIVETS 1⅛" EXCEPT AS NOTED
OPEN HOLES 1 1/16" EXCEPT AS NOTED
ALL HOLES SUB-PUNCHED 1/16" AND REAMED TO 1⅛" EXCEPT HOLES FOR ⅞" RIVETS IN DIAPHRAGM WHICH MAY BE PUNCHED FULL SIZE
ALL HOLES IN GUSSET PLATES TO BE SUB-PUNCHED 13/16" AND REAMED TO 1⅛" AFTER TRUSS IS ASSEMBLED IN YARD
SHOP RIVETS IN GUSSET PLATES TO BE DRIVEN AFTER TRUSS IS ASSEMBLED
FIELD CONNECTIONS SUB-PUNCHED 13/16" AND REAMED TO 1⅛" WITH MEMBERS ASSEMBLED, EXCEPT HOLES MARKED (P) WHICH ARE TO BE SUB-PUNCHED 13/16" AND REAMED TO 1⅛" THRU METAL TEMPLATE AFTER ASSEMBLY
HOLES IN MATERIAL OVER 1" THICK TO BE SUB-DRILLED ¾" AND REAMED TO 13/16"
STRUCTURAL STEEL SPEC. ASTM-A31-36
RIVET STEEL SPEC ASTM A141-36
COPPER BEARING CONTENT 0.20%
SHOP PAINT
TWO COATS OF ZINC CHROMATE
SHOP CONTACT SURFACES NOT PAINTED
SURFACES INACCESSIBLE AFTER ERECTION (WHERE INDICATED ON SHOP DRAWINGS) TO BE GIVEN ONE ADDITIONAL SHOP COAT OF ALUMINUM PAINT
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
TOP CHORDS U0 TO U2 (SHT 4)
Made by DUGAN Checked by A.T. Date 8-17-36
Shop Rivets 1⅛" UN Shop Paint SEE NOTE
Open Holes SEE NOTE Field Paint
CONTRACT 37237 SHEET No. 185
Spacing For Manholes
Grind Edges Smooth
Note Break in Stagger
Diaphragm Material
Spacing Not Given Same As Top
Notch PL
U0 N&S
U1 N&S
U2 N&S

2
323



U3 N & S
U4 N & S

1- Top Chord Section U2 - U4 - N
1- Do Do Do U2 - U4 - S } Alike

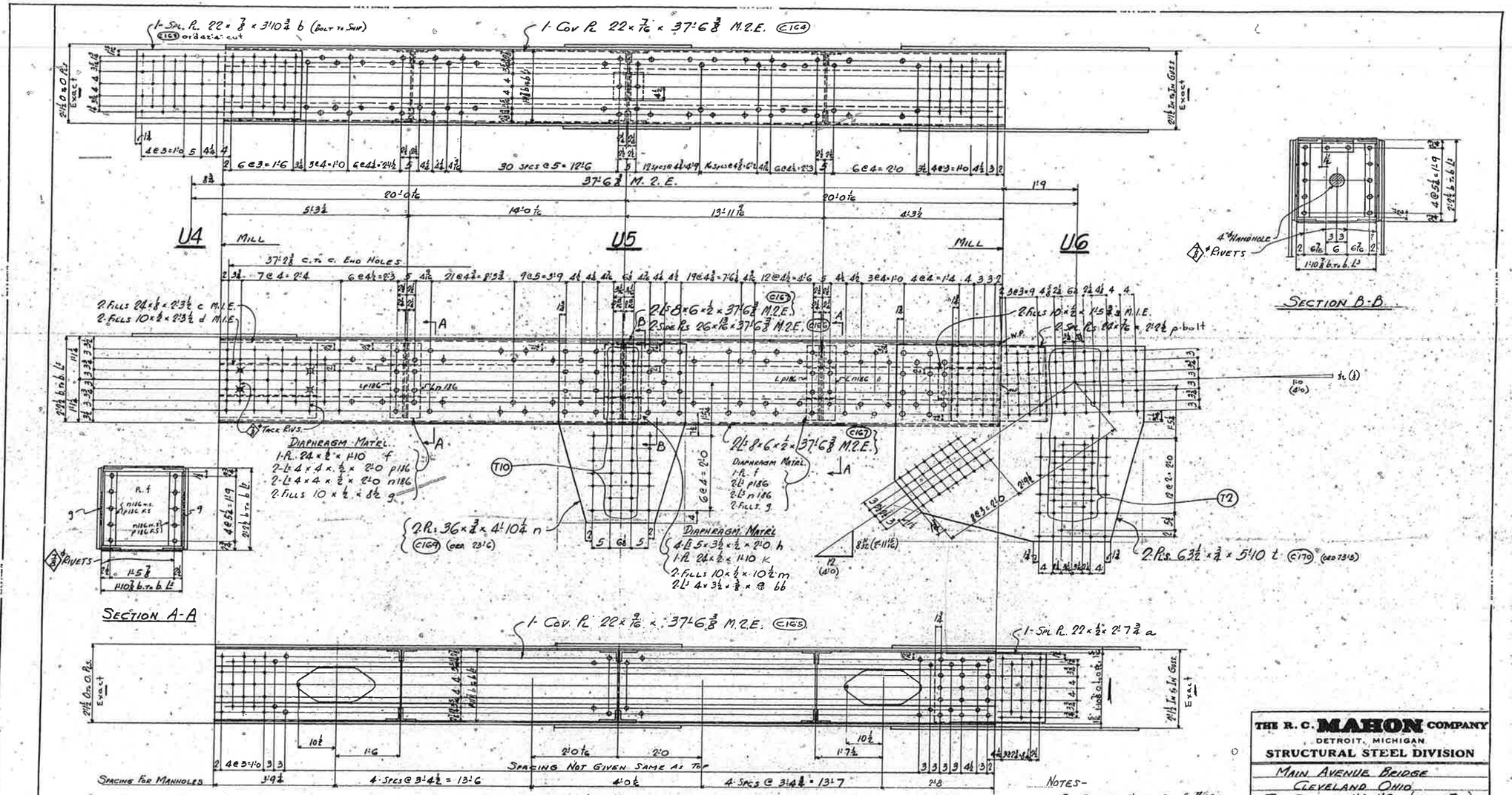
For General Notes See Sheet No 185

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland Ohio
Top Chords U2 - U4 (Span 1)

Made by DUGAN Checked by A.T. Date 8-17-38
Shop Rivets 1 Φ U.N. See Note Shop Paint See Notes.
Open Holes 1 7/8 Φ U.N. Field Paint
Contract 37237 Sheet No. 186

2
322



U5 N&S
U6 N&S

1- Top Chord Section U4-U6-N
1- do do U4-U6-S } Alike

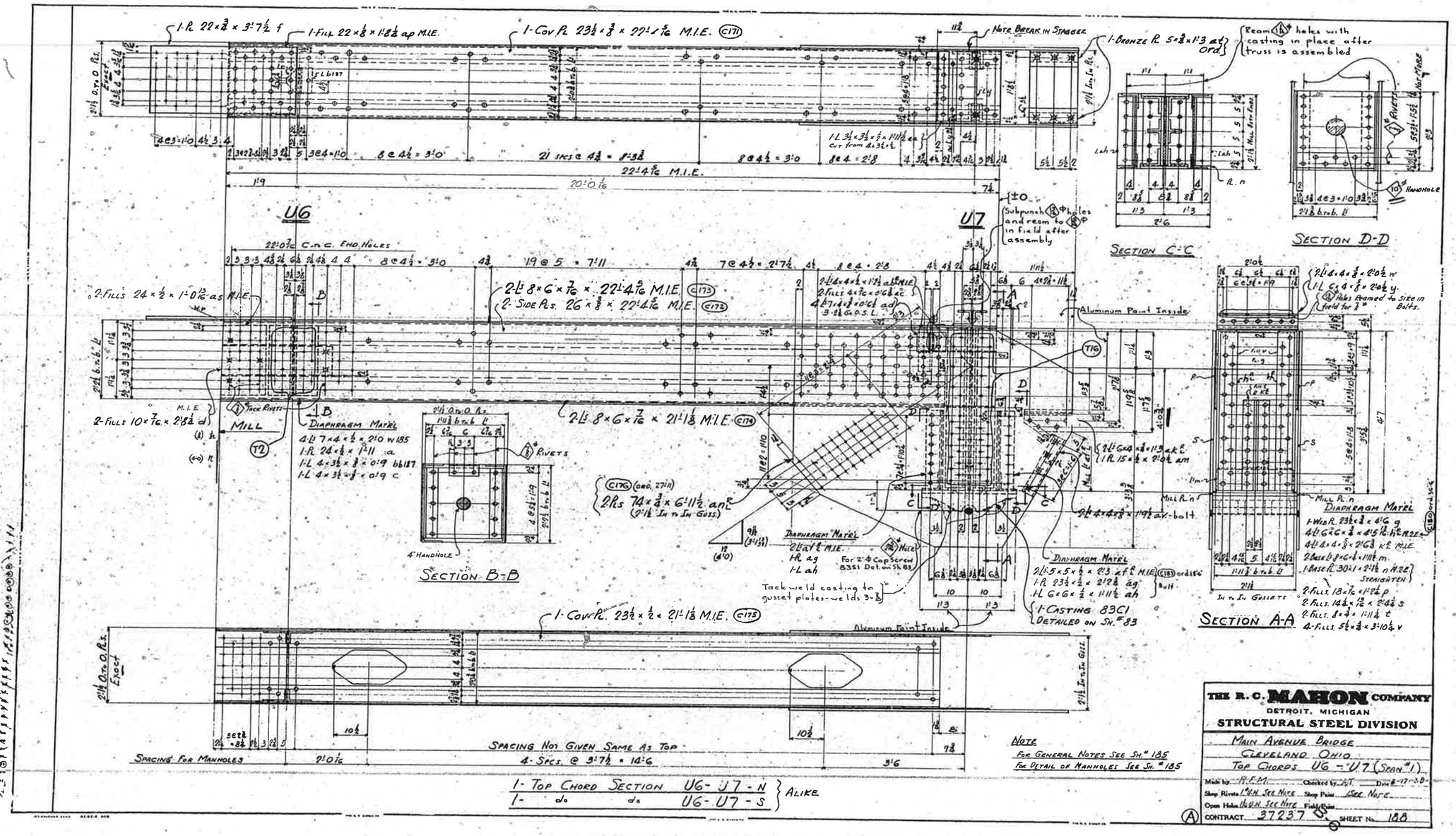
Notes-
For General Notes See Sh. # 185
For Detail of Manhole See Sh. # 185

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland, Ohio
Top Chords U4-U6 (Span # 1)

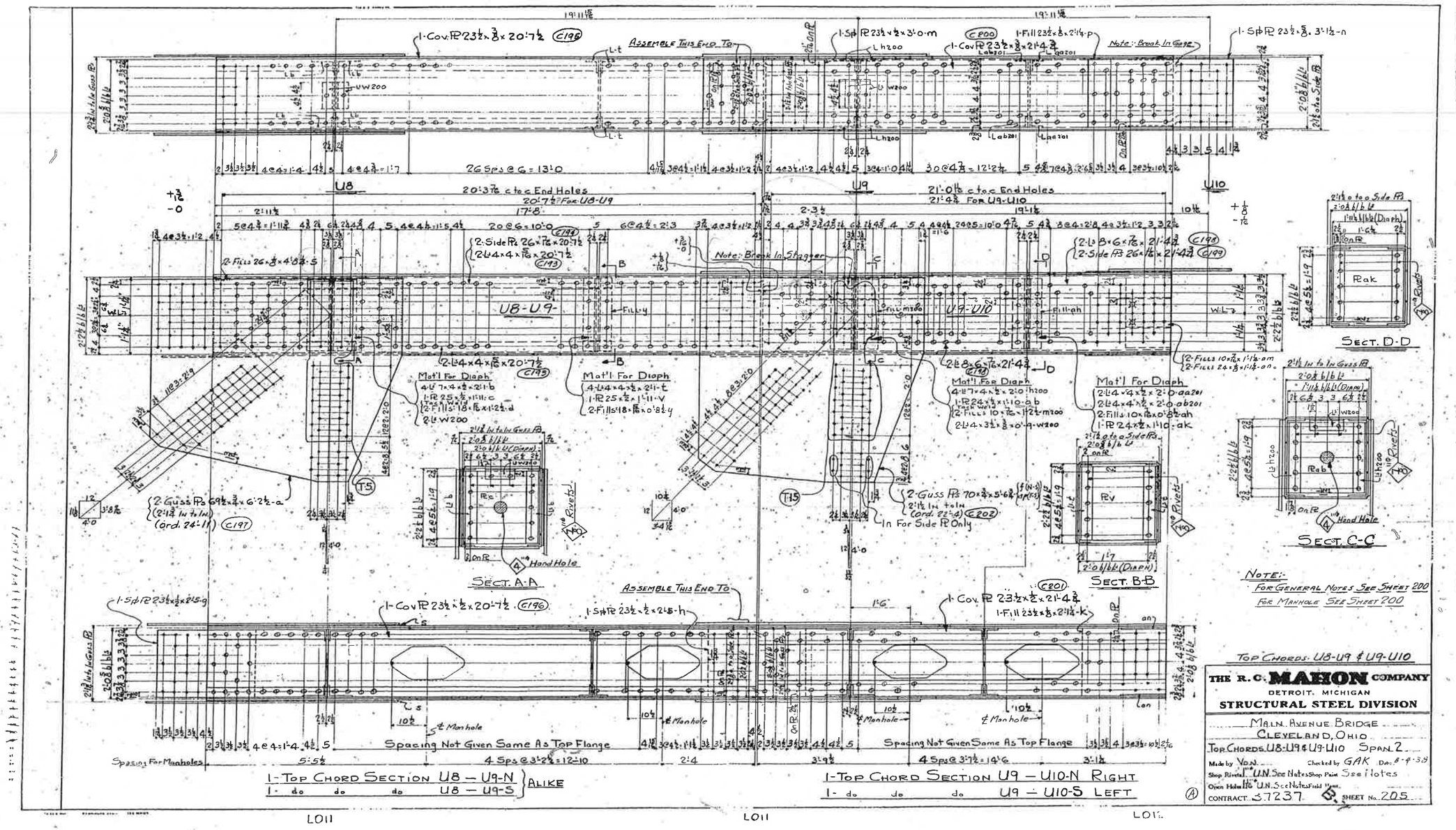
Made by H.F.M. Checked by A.T. Date 8-17-38
Shop Rivets UN. See Note Shop Paint See Note
Open Holes UN. See Note Field Paint
CONTRACT 37237 SHEET No. 187

2
321


U6
U7
SECTION B-B
SECTION C-C
SECTION D-D
SECTION A-A
Diaphragm Matl
Mill
Aluminum Paint Inside
Note Break in Stagger
Ream holes with casting in place after truss is assembled
Subpunch holes and ream to ⊕ in field after assembly
Spacing Not Given Same As Top
Spacing For Manholes
1-Top Chord Section U6-U7-N
1- do do U6-U7-S
Alike
Note
For General Notes See Sh. # 185
For Detail of Manholes See Sh. # 185
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
Main Avenue Bridge
Cleveland Ohio
Top Chords U6 - U7 (Span #1)
Made by H.F.M.
Checked by A.T.
Date 8-17-38
Shop Rivets 1/4" N See Note
Shop Paint See Note
Open Holes 11/16" N See Note
Field Paint
CONTRACT 37237
SHEET No. 188

U7 N#5

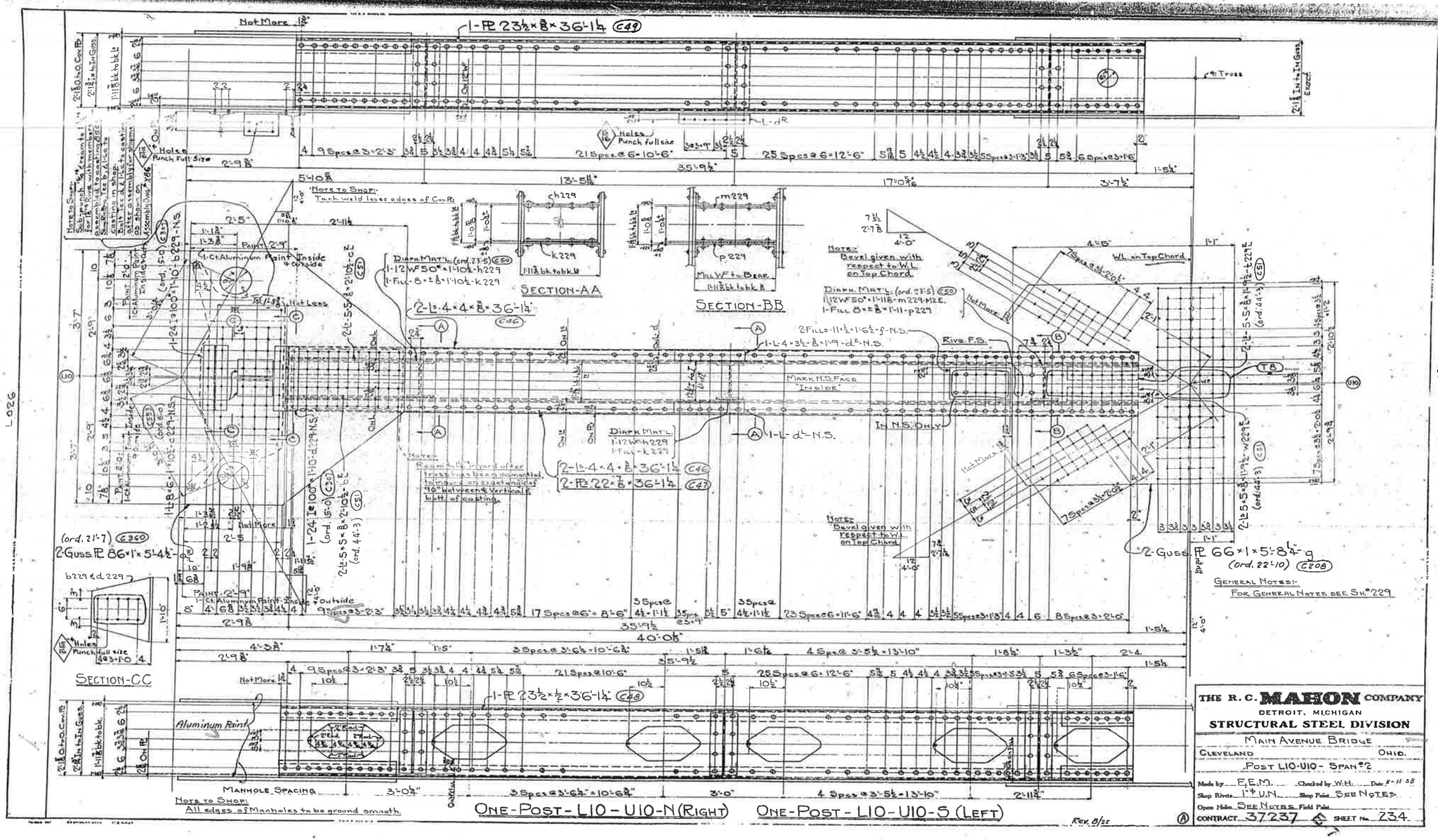
3
578



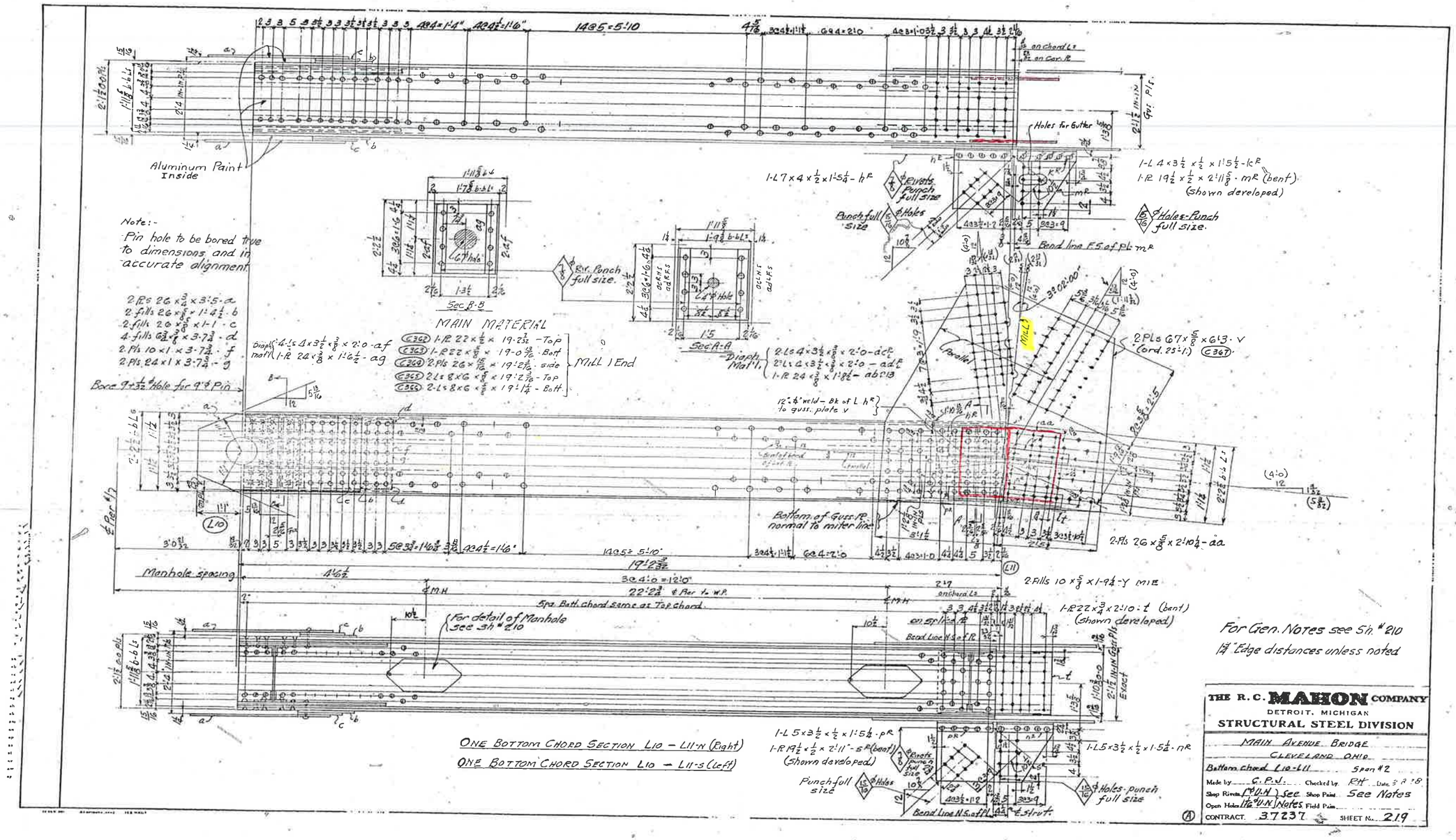
U8 N&S
U9 N&S

3
549

L10 N&S
U10 N&S

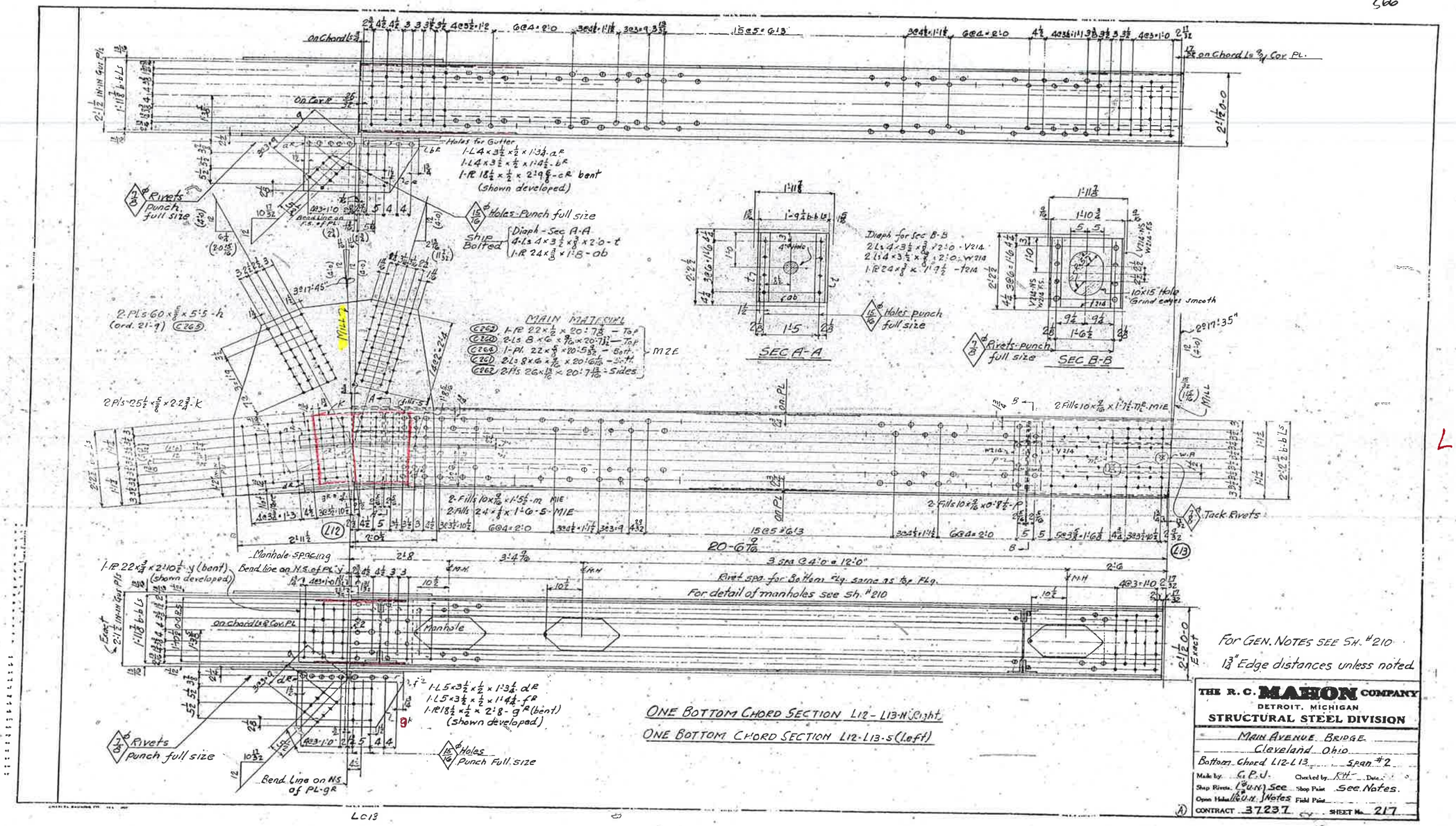


3
564


Aluminum Paint Inside
Note:-
Pin hole to be bored true to dimensions and in accurate alignment
Sec B-B
Sec A-A
MAIN MATERIAL
Mill End
Holes for Gutter
Bend line F.S. of Pl. mR
Bottom of Guss. Pl. normal to miter line
Manhole spacing
For detail of Manhole see Sh. #210
5pa Bott. chord same as Top chord
ONE BOTTOM CHORD SECTION L10 – L11-N (Right)
ONE BOTTOM CHORD SECTION L10 – L11-S (Left)
For Gen. Notes see Sh. #210
1/4" Edge distances unless noted
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
Bottom chord L10-L11 Span #2
Made by G.P.J. Checked by RH Date 3-8-58
Shop Rivets (L10-N) See Notes Shop Paint See Notes
Open Holes (L10-N) Notes Field Paint
CONTRACT 37237 SHEET No. 219

L11 N&S

3
566



ONE BOTTOM CHORD SECTION L12-L13-N (Right)

ONE BOTTOM CHORD SECTION L12-L13-S (left)

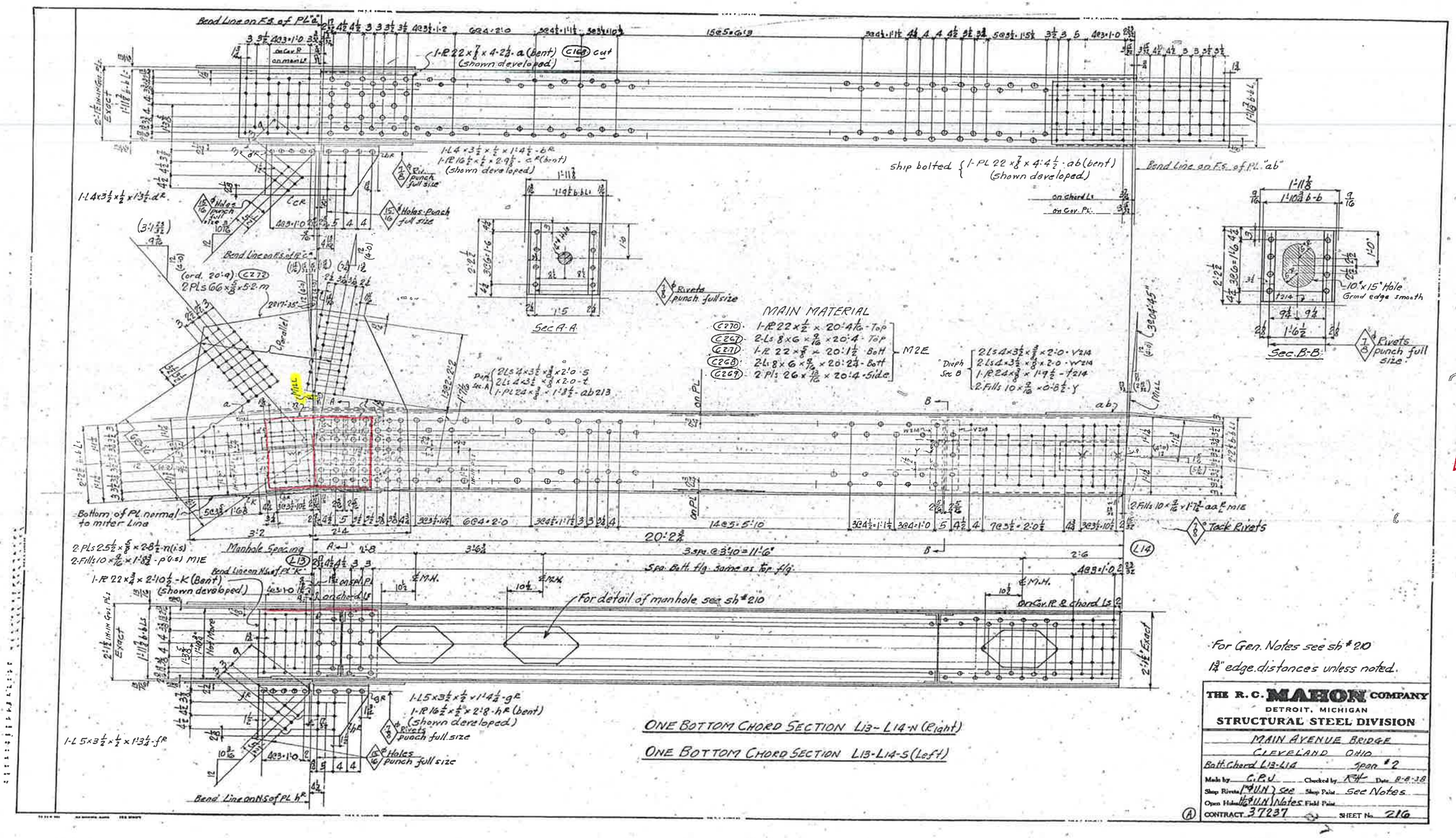
For GEN. NOTES SEE SH. #210

1½" Edge distances unless noted.

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

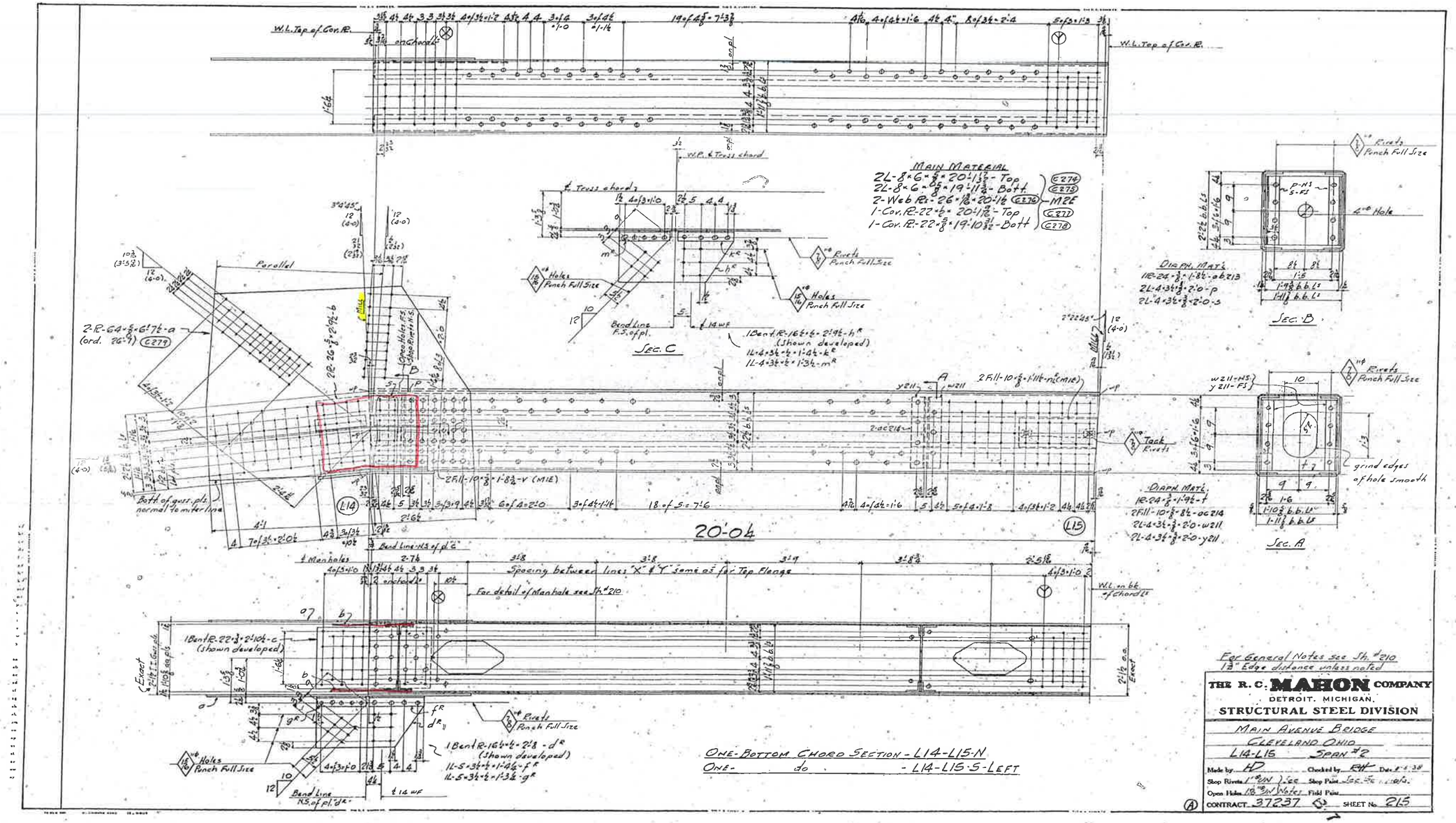
MAIN AVENUE BRIDGE
Cleveland Ohio
Bottom Chord L12-L13 Span #2
Made by: G.P.J. Checked by: KH Date:
Shop Rivets: 15/16 U.N. See Shop Paint: See Notes.
Open Holes: 15/16 U.N. Notes Field Paint:
CONTRACT 37237 SHEET No. 217

3
567


Bend Line on Fs. of PL "a"
1-PL 22 x 7/8 x 4-2 1/2 · a (bent) C168 cut
(shown developed)
1-L 4 x 3 1/2 x 1/2 x 1'-4 1/2 · b^R
1-PL 16 1/2 x 1/2 x 2'-9 1/2 · c^R (bent)
(shown developed)
1-L 4 x 3 1/2 x 1/2 x 1'-3 1/2 · d^R
Holes punch full size
Rivets punch full size
Holes punch full size
Bend Line on Fs. of PL "c"
(ord. 20'-9) C272
2 Pls 66 x 5/8 x 5'-2 · m
Sec A-A
Rivets punch full size
MAIN MATERIAL
C270 1-PL 22 x 1/2 x 20'-4 Top
C267 2-Ls 8 x 6 x 9/16 x 20'-4 Top
C271 1-PL 22 x 5/8 x 20'-1 1/2 Bott
C268 2-Ls 8 x 6 x 9/16 x 20'-2 1/2 Bott
C269 2 Pls 26 x 9/16 x 20'-4 Side
M2E
Diaph Sec B
2 Ls 4 x 3 1/2 x 5/8 x 2'-0 · V214
2 Ls 4 x 3 1/2 x 5/8 x 2'-0 · W214
1-PL 24 x 3/8 x 1'-9 1/2 · t214
2 Fills 10 x 7/16 x 0'-8 1/2 · Y
Diaph Sec A
2 Ls 4 x 3 1/2 x 5/8 x 2'-0 · S
2 Ls 4 x 3 1/2 x 5/8 x 2'-0 · t
1-PL 24 x 3/8 x 1'-8 1/2 · ab213
Ship bolted {1-PL 22 x 7/8 x 4'-4 1/2 · ab (bent)
(shown developed)
Bend Line on Fs. of PL "ab"
on chord Ls
on Cov. Pl.
10" x 15" Hole
Grind edge smooth
Sec. B-B
Rivets punch full size
2 Fills 10 x 7/16 x 1'-7 1/2 · aa^R M1E
Tack Rivets
Bottom of PL normal to miter Line
2 Pls 25 1/2 x 5/8 x 28 1/2 · n (i.s)
2 Fills 10 x 7/16 x 1'-8 3/8 · p (o.s) M1E
Manhole Spacing
Bend Line on N.S. of PL "K"
1-PL 22 x 3/8 x 2'-10 1/2 · K (Bent)
(Shown developed)
3 spa. @ 3'-10" = 11'-6"
Spa. Bett. flg. same as top flg.
For detail of manhole see sh # 210
1-L 5 x 3 1/2 x 1/2 x 1'-3 1/4 · f^R
1-L 5 x 3 1/2 x 1/2 x 1'-4 1/4 · g^R
1-PL 16 1/2 x 1/2 x 2'-8 · h^R (bent)
(shown developed)
Rivets punch full size
Holes punch full size
Bend Line on N.S. of PL h^R
ONE BOTTOM CHORD SECTION L13-L14-N (Right)
ONE BOTTOM CHORD SECTION L13-L14-S (Left)
For Gen. Notes see sh # 210
1 3/4" edge distances unless noted.
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
Bott. Chord L13-L14 Span # 2
Made by C.P.V. Checked by R.H. Date 8-8-38
Shop Rivets (#4 U.N.) See Shop Paint See Notes
Open Holes (1 1/16 # U.N.) Notes Field Paint
CONTRACT 37237 SHEET No. 216

L13 N&S

3
568



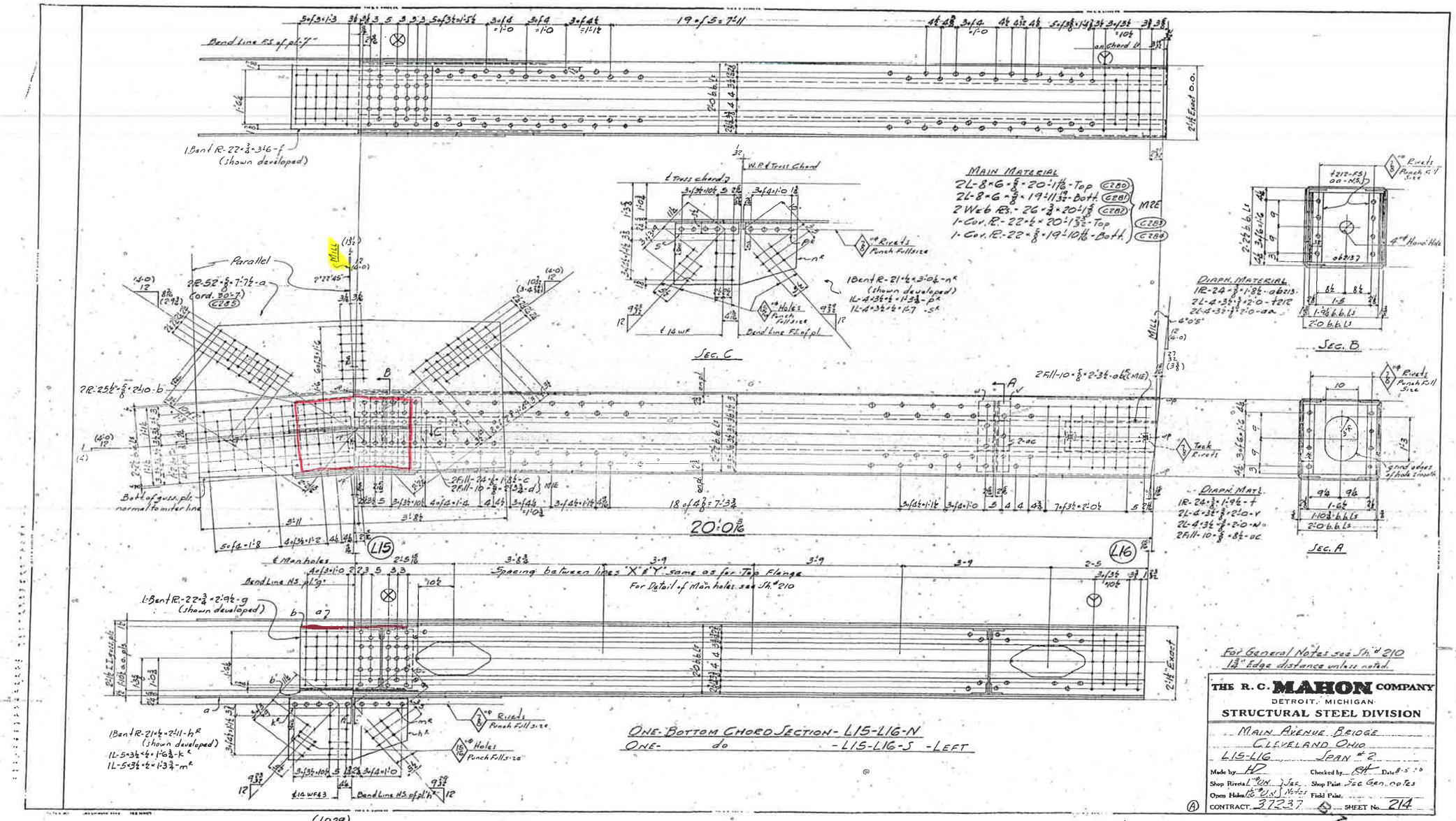
ONE-BOTTOM CHORD SECTION - L14-L15-N
ONE- do. - L14-L15-S-LEFT

For General Notes see Sh. #210
1 3/8" Edge distance unless noted

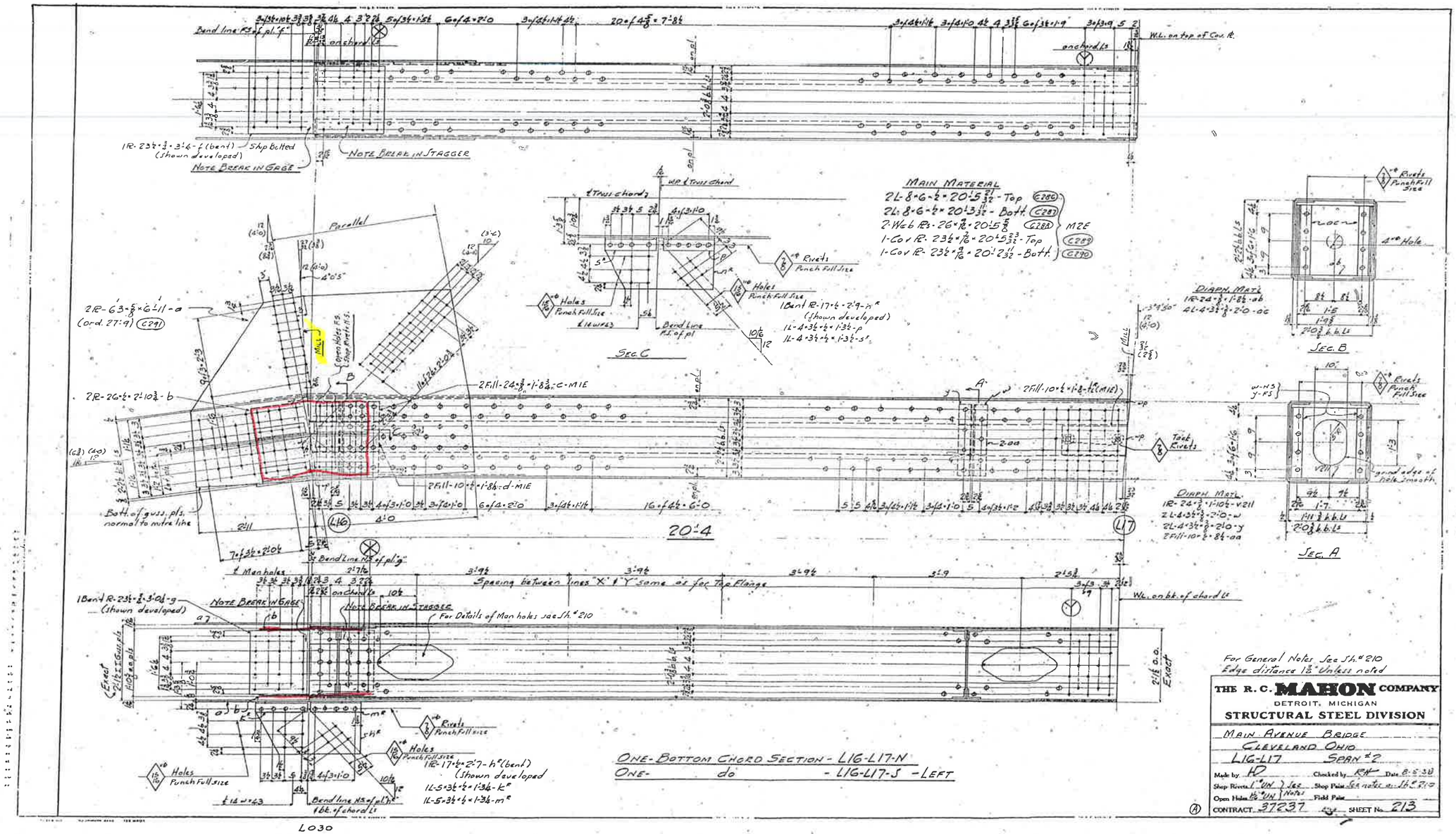
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN.
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
L14-L15 SPAN #2

Made by HD Checked by RH Date 8-5-38
Shop Rivets 1 3/8" N Sec Shop Paint See Sp. Sp. 1015
Open Holes 1 3/8" N Notes Field Paint
(A) CONTRACT 37237 SHEET No. 215


MAIN MATERIAL
2L-8×6×⅝×20'-1⅞-Top (C280)
2L-8×6×⅝×19'-11 31/32-Bott. (C281)
2 Wt 6 Rs.-26×⅜×20'-1⅞ (C282) M2E
1-Cov. Pl.-22×¼×20'-1 31/32-Top (C283)
1-Cov. Pl.-22×⅜×19'-10⅞-Bott. (C284)
DIAPH. MATERIAL
1R-24×⅜×1'-8¼-a6213.
2L-4×3½×½×2'-0-t212
2L-4×3½×⅜×2'-0-aa
DIAPH. MAT'L.
1R-24×⅜×1'-9¼-t
2L-4×3½×⅜×2'-0-v
2L-4×3½×⅜×2'-0-n
2Fill-10×⅜×1'-8¼-ac
Sec. C
Sec. B
Sec. A
Parallel
2R-52×⅝×7'-7¼-a (ord. 30'-7) (C285)
2R-25¼×⅝×2'-10-b
2Fill-10×⅝×2'-3¼-a6 (MIE)
Bent of guss. pls. normal to inter line
20'-0 3/16
Spacing between lines 'X' & 'Y' same as for Top Flange
For Detail of Man holes see Sh. #210
1-Bent R-22×¾×2'-9¼-g (shown developed)
1-Bent R-21¼×2'-11-h (shown developed)
1L-5×3½×½×1'-6¾-k
1L-5×3½×½×1'-3¾-m
ONE-BOTTOM CHORD SECTION-L15-L16-N
ONE- do -L15-L16-J -LEFT
(L029)
(L030)
For General Notes see Sh. #210
1¾" Edge distance unless noted.
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
L15-L16 SPAN #2
Made by AD Checked by RH Date 8-5-26
Shop Rivets 7/8" UN } Jac. Shop Paint See Gen. Notes
Open Holes 13/16" UN } Notes Field Paint
CONTRACT 37237 SHEET No. 214

L15 N&S



L16 N&S

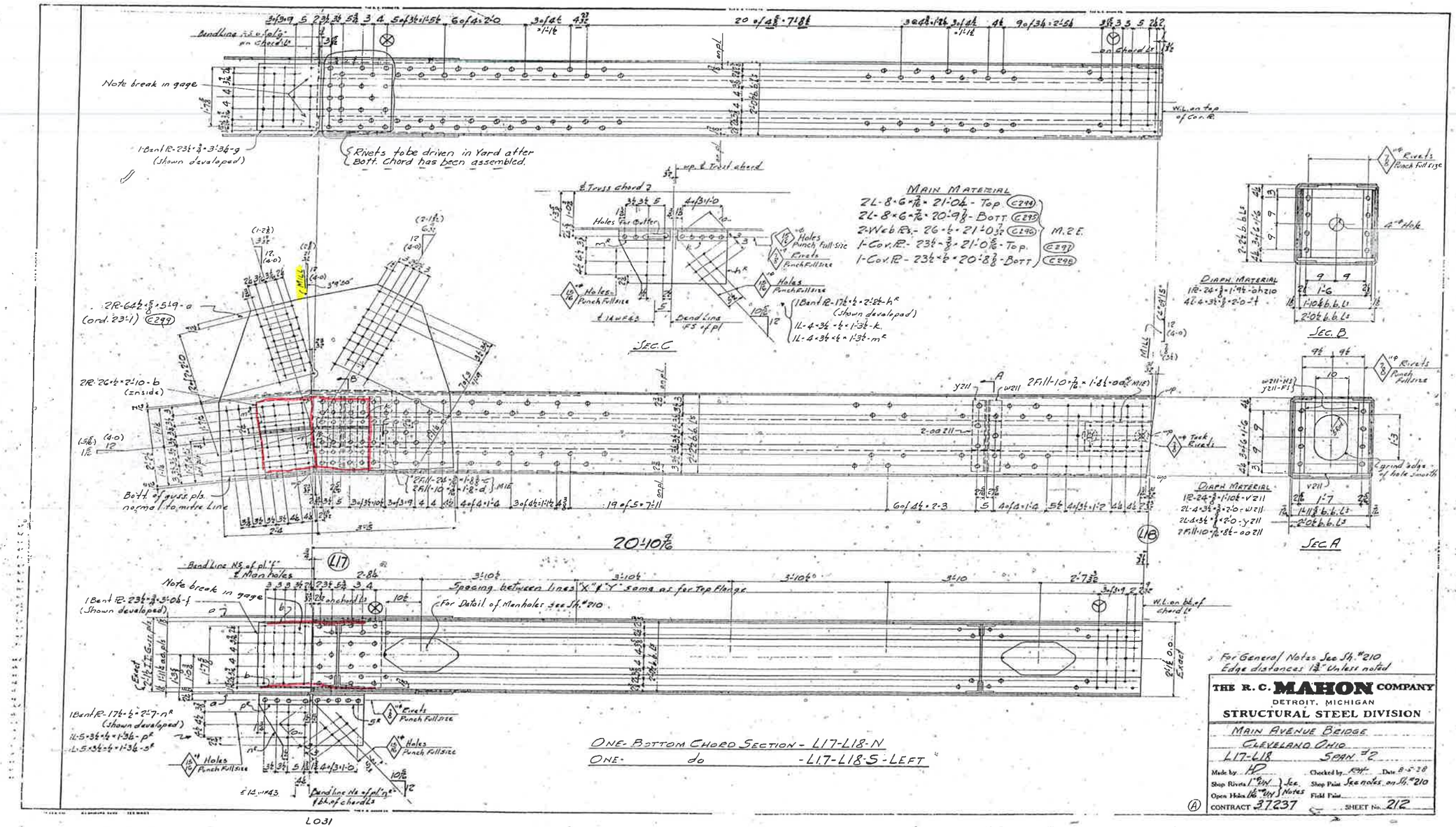
For General Notes See Sh. # 210
Edge distance 1¾" Unless noted

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
L16-L17 SPAN #2

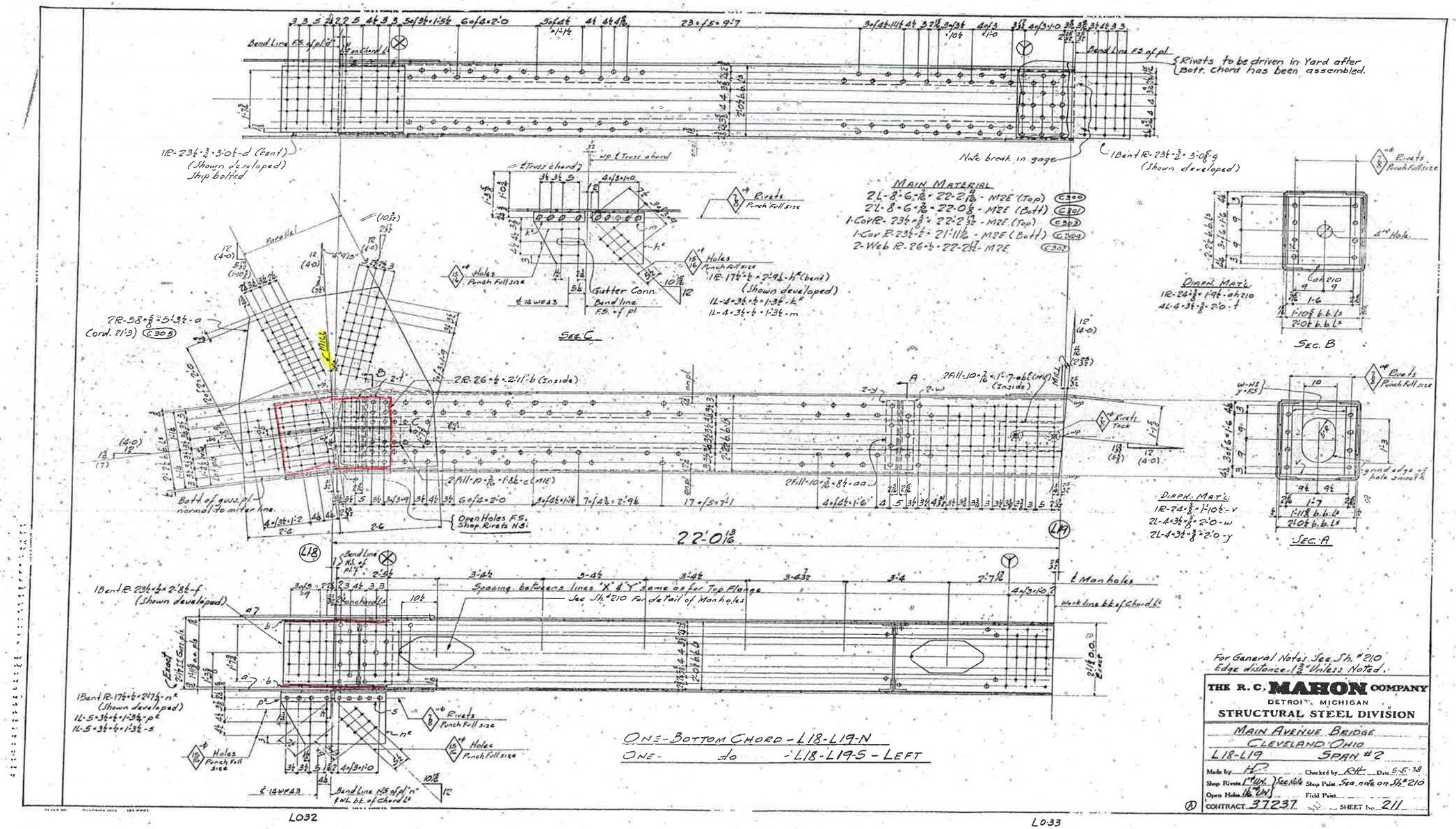
Made by HP Checked by RH Date 8-5-38
Shop Rivets ¾" UN } See Notes Shop Pins See notes on Sh. # 210
Open Holes 15/16" UN } Notes Field Pins
CONTRACT 37237 SHEET No. 213

One-Bottom Chord Section - L16-L17-N
One- do - L16-L17-S - Left



ONE-BOTTOM CHORD SECTION - L17-L18-N
ONE- do -L17-L18-S-LEFT

L17 N&S



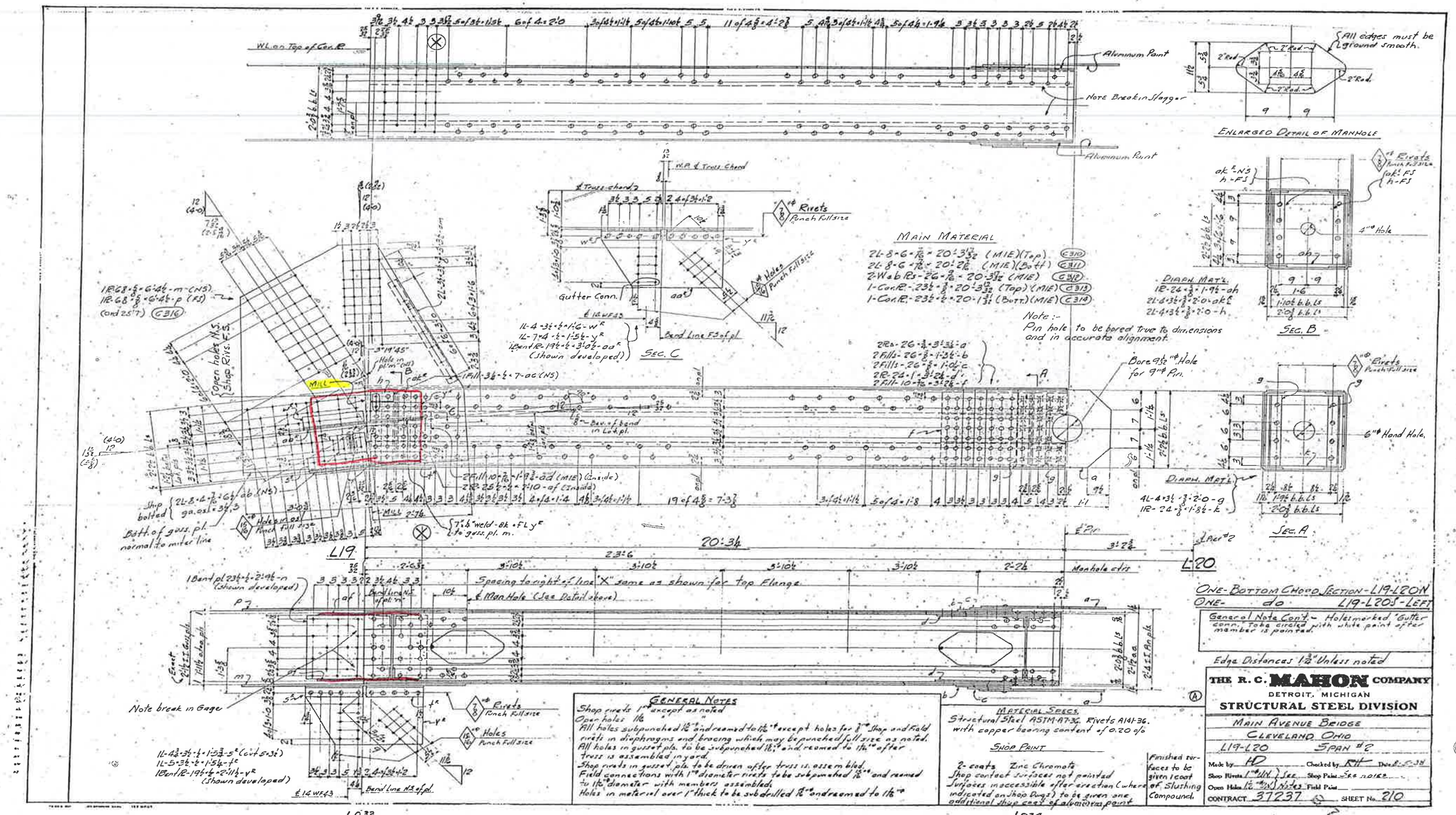
For General Notes See Sh. #210
Edge distance 1¾" Unless Noted.

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
L18-L19 SPAN #2

Made by HP Checked by RH Date 5-5-38
Shop Rivets 1" Dia. } See Note Shop Paint See note on Sh. #210
Open Holes 1 1/16" Dia. Field Paint
CONTRACT 37237 SHEET No. 211

L18 N&S



GENERAL NOTES

Shop rivets 1" except as noted
Oper holes 11/16 " "
All holes subpunched 13/16" and reamed to 1 1/16" except holes for 7/8" Shop and Field rivets in diaphragms and bracing which may be punched full size as noted.
All holes in gusset pls. to be subpunched 13/16" and reamed to 1 1/16" after truss is assembled in yard.
Shop rivets in gusset pls. to be driven after truss is assembled.
Field connections with 1" diameter rivets to be subpunched 13/16" and reamed to 1 1/16" diameter with members assembled.
Holes in material over 1" thick to be subdrilled 13/16" and reamed to 1 1/16".

MATERIAL SPECS.

Structural Steel ASTM-A7-36. Rivets A141-36. with copper bearing content of 0.20 %

SHOP PAINT

2-coats Zinc Chromate
Shop contact surfaces not painted
Surfaces inaccessible after erection (where indicated on shop Dwgs) to be given one additional shop coat of aluminum paint

Finished surfaces to be given 1 coat of Slushing Compound.

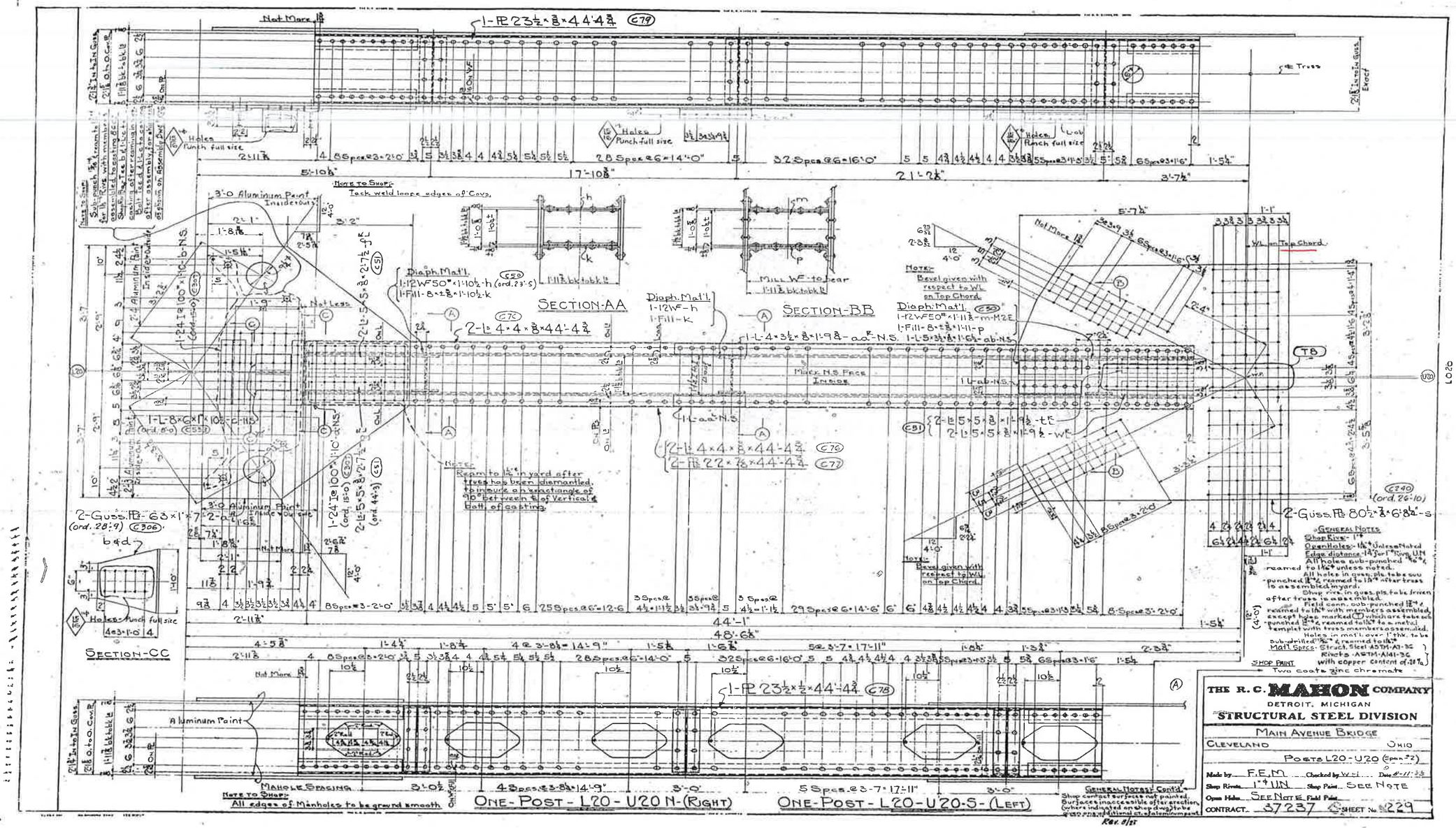
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
L19-L20 SPAN #2

Made by HD Checked by RH Date 8-5-38
Shop Rivets 1" Dia. } See Shop Paint See notes
Oper. Holes 11/16" Dia. } Notes Field Paint
CONTRACT 37237 SHEET No. 210

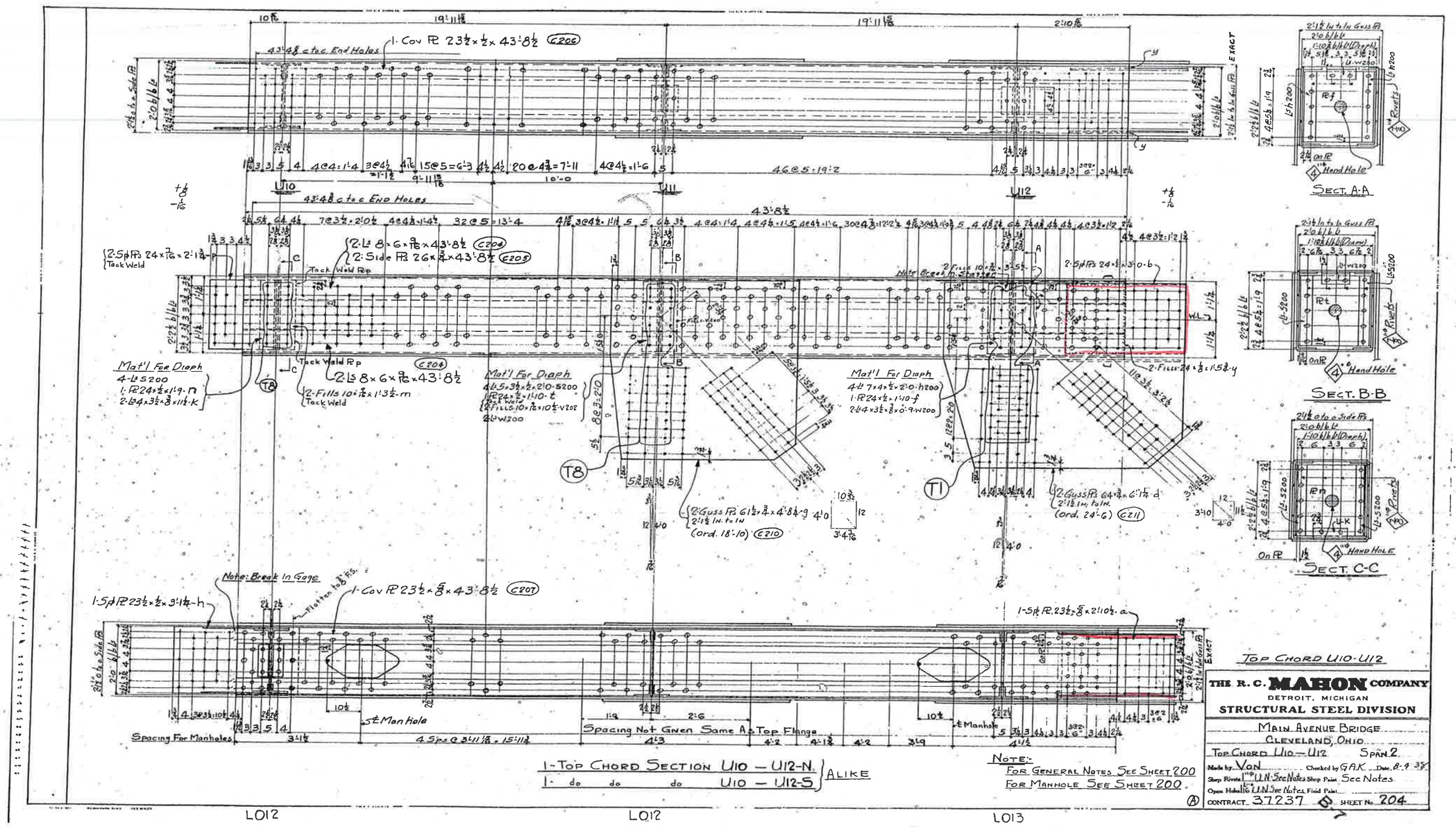
L19 N&S

3
554



L20 N&S
U20 N&S

3
579

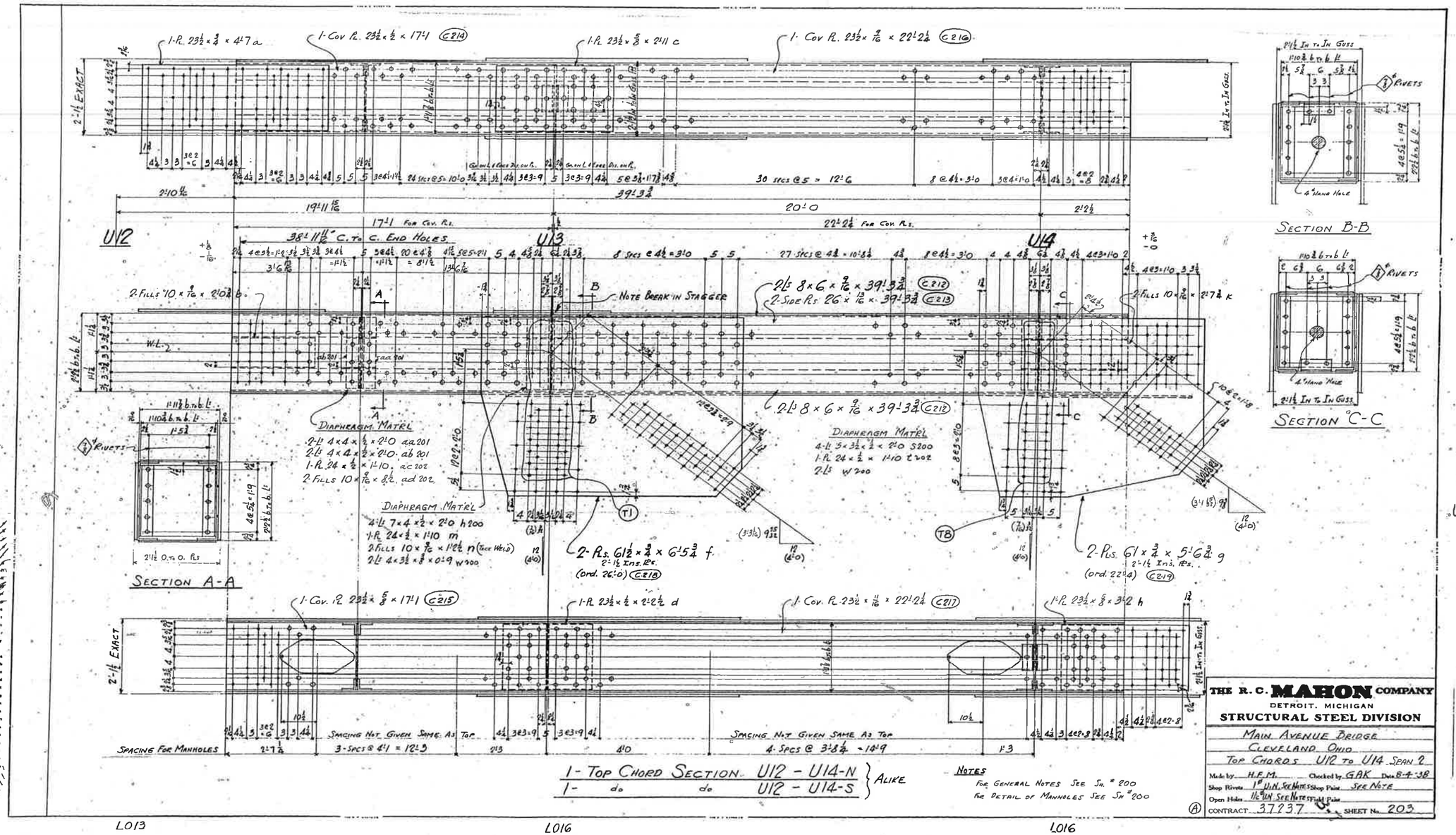


U11 N&S
U12 N&S

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland, Ohio
Top Chord U10 — U12 Span 2
Made by Von Checked by G.A.K. Date 8-9-38
Shop Rivets 7/8" U.N. See Notes Shop Paint See Notes
Open Holes 13/16" U.N. See Notes Field Paint
CONTRACT 37237 SHEET No. 204

3
580



1 - Top Chord Section U12 - U14-N } Alike
1 - do do U12 - U14-S

NOTES
For General Notes See Sh. # 200
For Detail of Manholes See Sh # 200

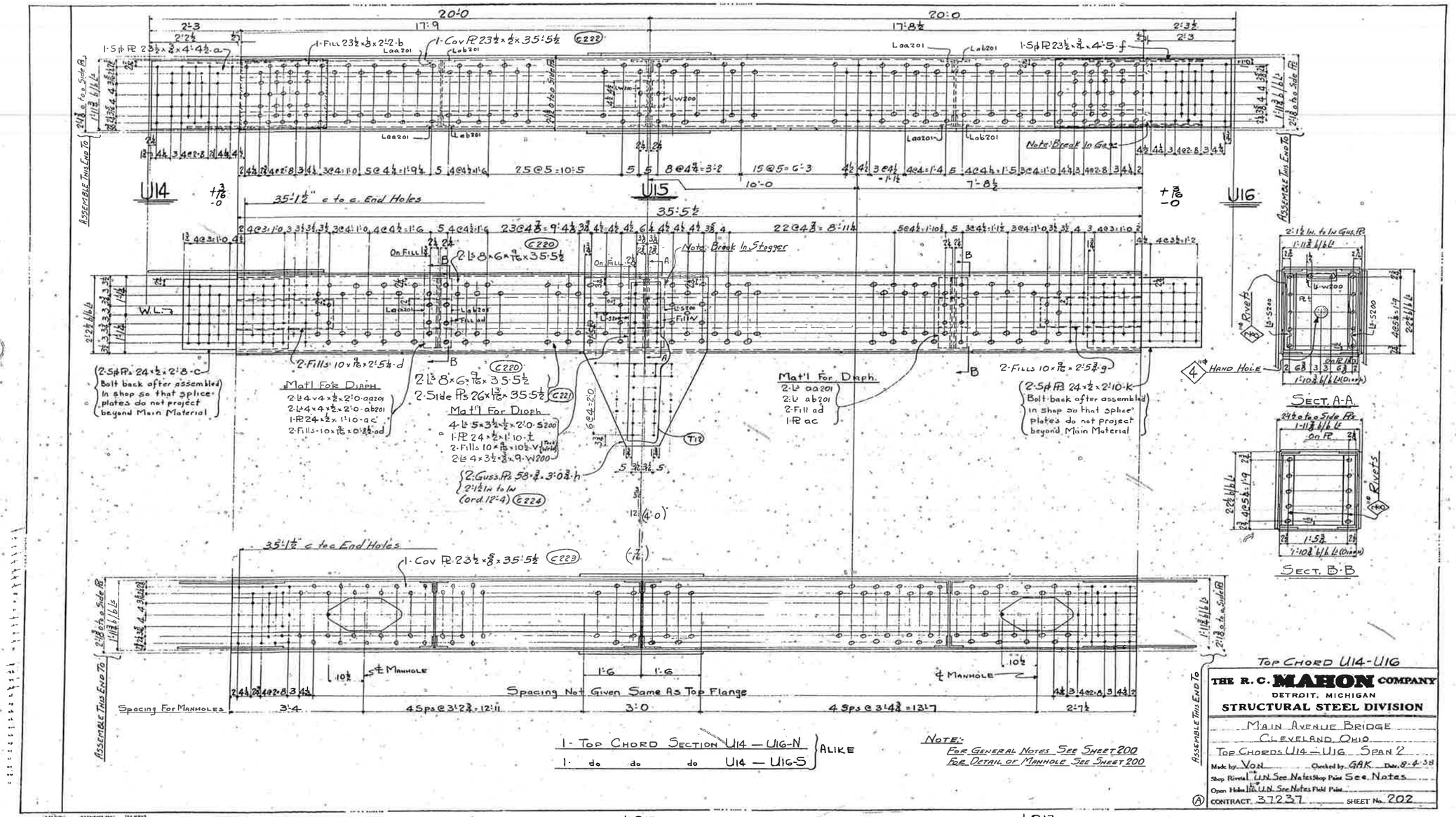
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland Ohio
Top Chords U12 to U14 Span 2

Made by H.F.M. Checked by GAK Date 8-4-38
Shop Rivets 1" U.N. See Notes Shop Paint See Note
Open Holes 11/16" U.N. See Notes Field Paint
CONTRACT 37237 SHEET No. 203

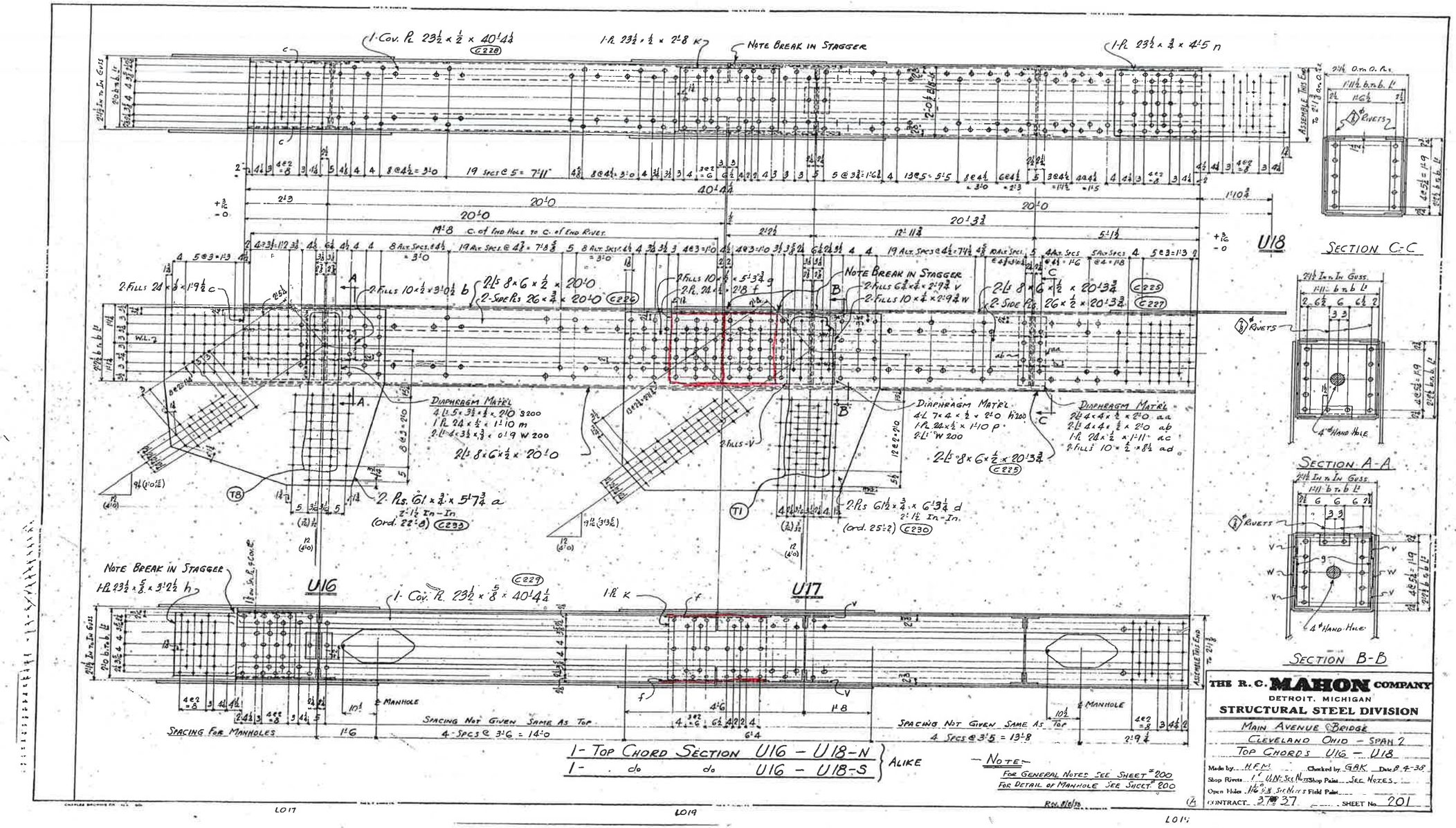
U13 N & S
U14 N & S

3
581


U14
U15
U16
35'-1½" c to c End Holes
35'-5½
Note: Break In Gage
Note: Break In Stagger
Mat'l For Diaph.
2-Fills 10 × 9/16 × 2'-5¾-d
2-Fills 10 × 9/16 × 2'-5¾-g
2-5ϕ Pls 24 × ½ × 2'-8-c
Bolt back after assembled In shop so that splice plates do not project beyond Main Material
2-5ϕ Pls 24 × ½ × 2'-10-k
Bolt back after assembled In shop so that splice plates do not project beyond Main Material
2-Guss. Pls 58 × ¾ × 3'-0¾-h
2-1½ In to lw (ord. 12'-4)
Spacing For Manholes
Spacing Not Given Same As Top Flange
Hand Hole
Sect. A-A
Sect. B-B
Top Chord U14-U16
Assemble This End To
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
Main Avenue Bridge
Cleveland, Ohio
Top Chords U14 – U16 Span 2
Made by VON Checked by GAK Date 8-4-38
Shop Rivets U.N. See Notes Shop Paint See Notes
Open Holes U.N. See Notes Field Paint
CONTRACT 37237 SHEET No. 202
1-Top Chord Section U14 — U16-N
1- do do do U14 — U16-S
ALIKE
NOTE:
For General Notes See Sheet 200
For Detail of Manhole See Sheet 200
L016
L017
L017

U15 N&S

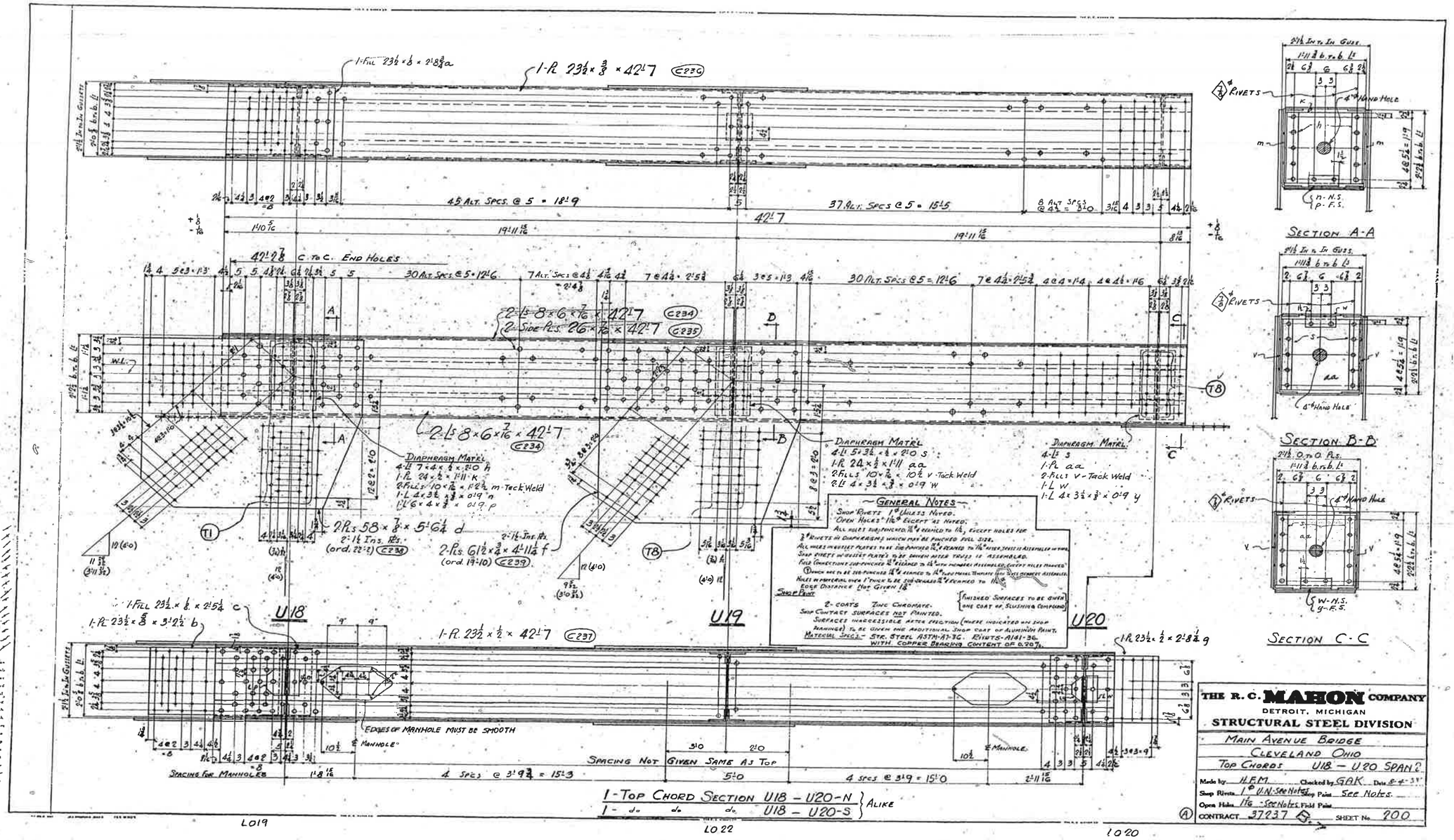
3
582



U16 N&S.
U17 N&S.

3
583

U18 N&S
U19 N&S

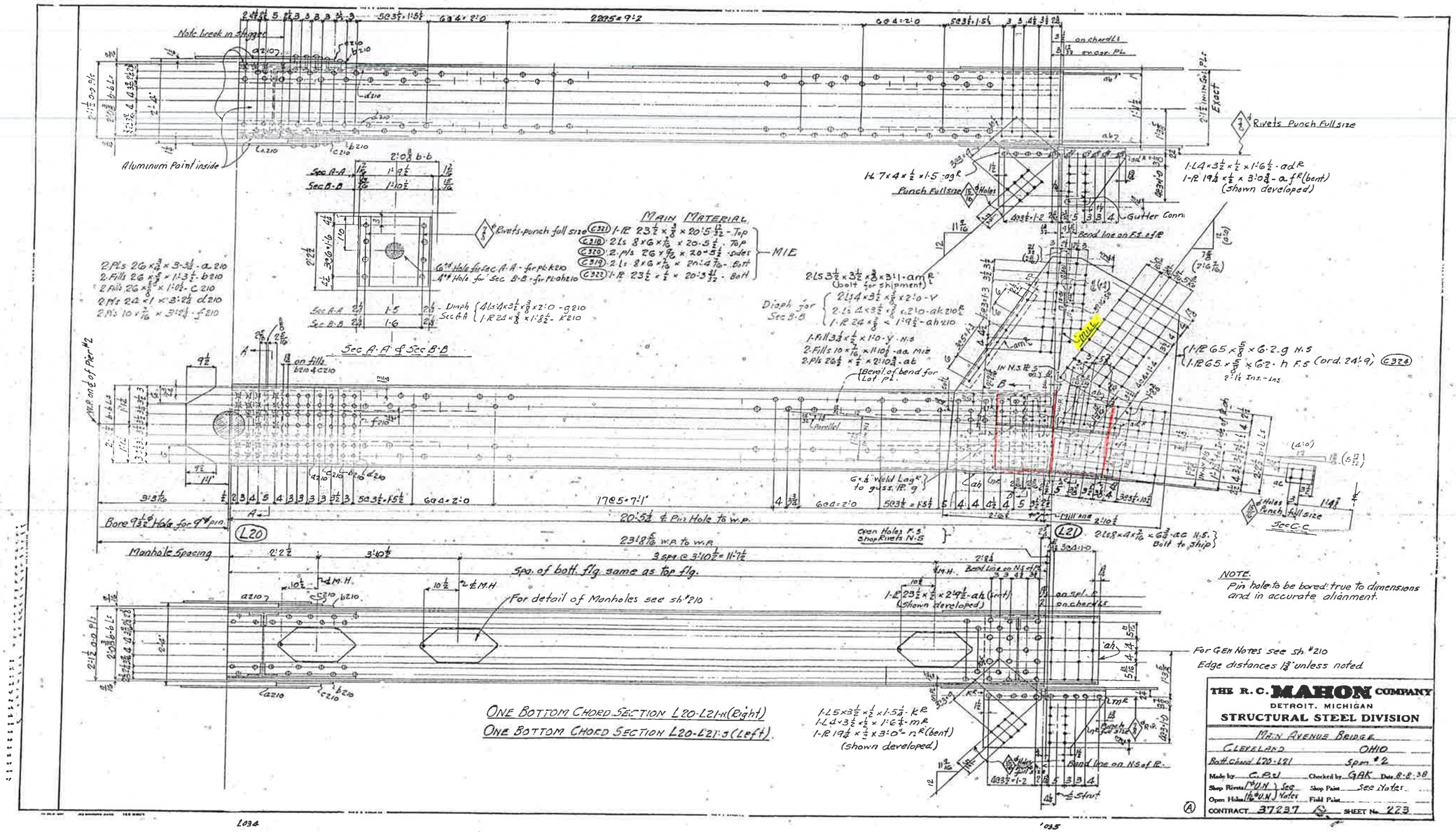


THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland Ohio
Top Chords U18 - U20 Span 2

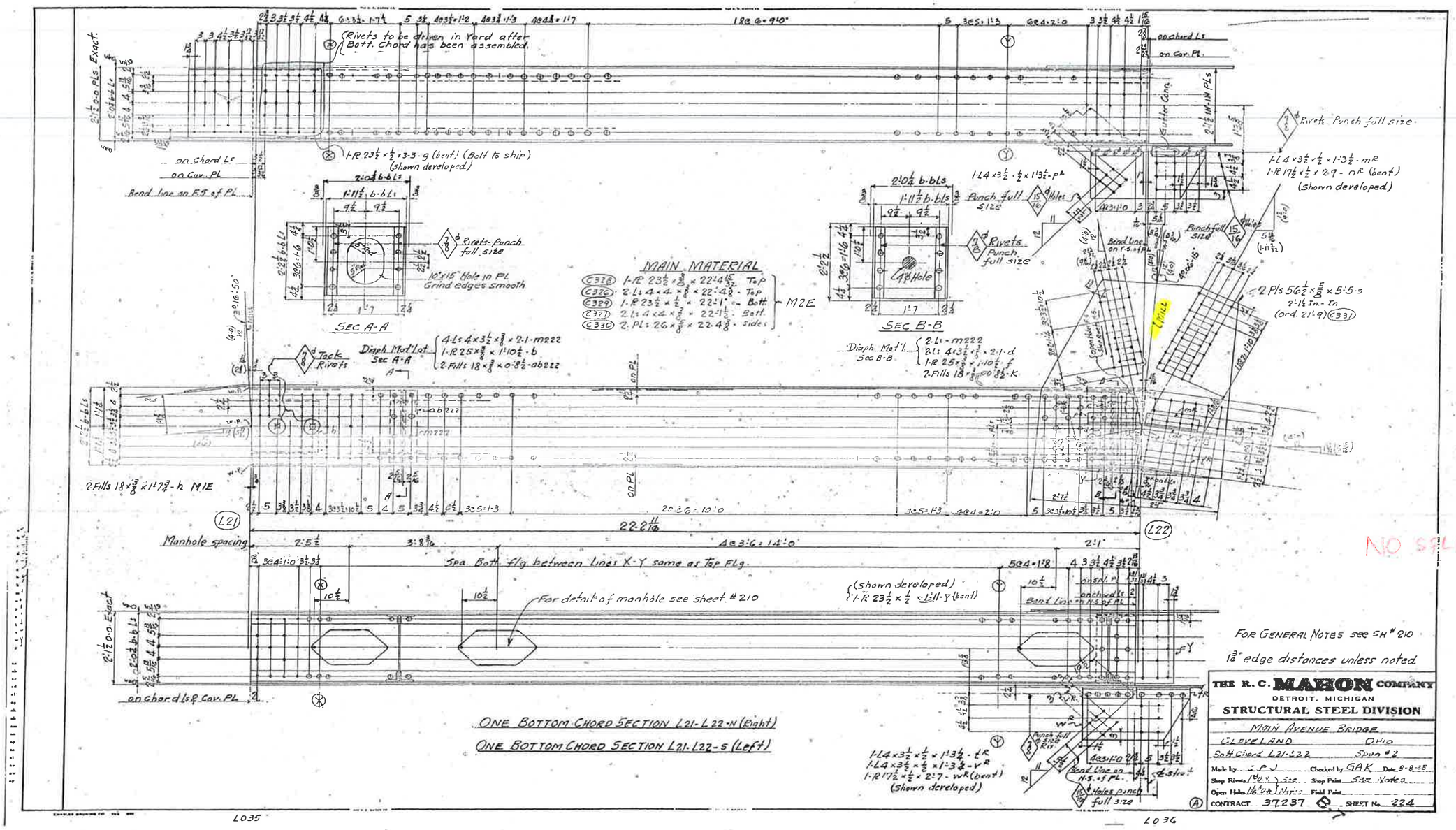
Made by H.F.M. Checked by G.A.K. Date 6-4-37
Shop Rivets 7/8" U.N. See Notes Shop Paint See Notes.
Open Holes 11/16 - See Notes Field Paint
CONTRACT 37237 SHEET No. 200

3
560


Note break in stagger
Aluminum Paint inside
Main Material
Rivets Punch Full size
Sec A-A & Sec B-B
Bore 9 1/8" Hole for 9" pin
Manhole Spacing
For detail of Manholes see sh. #210
Spa. of bott. flg. same as top flg.
Open Holes F.S. Shop Rivets N.S.
Gutter Conn.
Bend line on F.S. of R.
Bend line on N.S. of R.
Diaph for Sec B-B
Edge distances 1 3/8" unless noted
For Gen Notes see sh. #210
NOTE.
Pin hole to be bored true to dimensions and in accurate alignment.
ONE BOTTOM CHORD SECTION L20-L21-H (Right)
ONE BOTTOM CHORD SECTION L20-L21-J (Left)
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
Bott. chord L20-L21 Span #2
Made by C.P.V. Checked by GAK Date 8-8-38
Shop Rivets 7/8" U.N. See Notes
Open Holes 13/16" U.N. See Notes
Shop Paint See Notes
Field Paint
CONTRACT 37237 SHEET No. 223

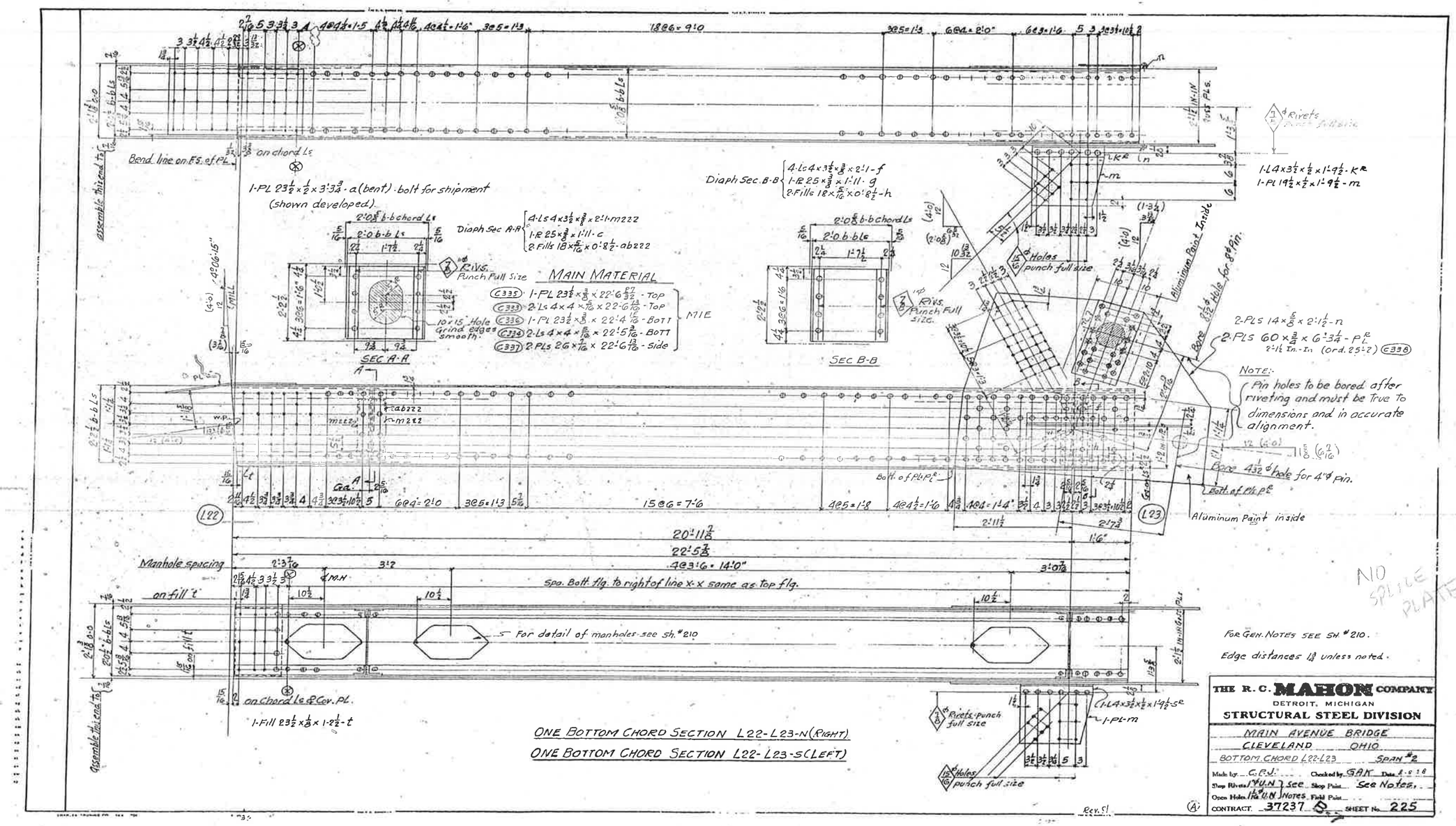
L21 N&S

3
559



ONE BOTTOM CHORD SECTION L21-L22-N (Right)

ONE BOTTOM CHORD SECTION L21-L22-S (Left)



ONE BOTTOM CHORD SECTION L22-L23-N (RIGHT)

ONE BOTTOM CHORD SECTION L22-L23-S (LEFT)

L23 N&S

NO SPLICE PLATE

FOR GEN. NOTES SEE SH. #210.

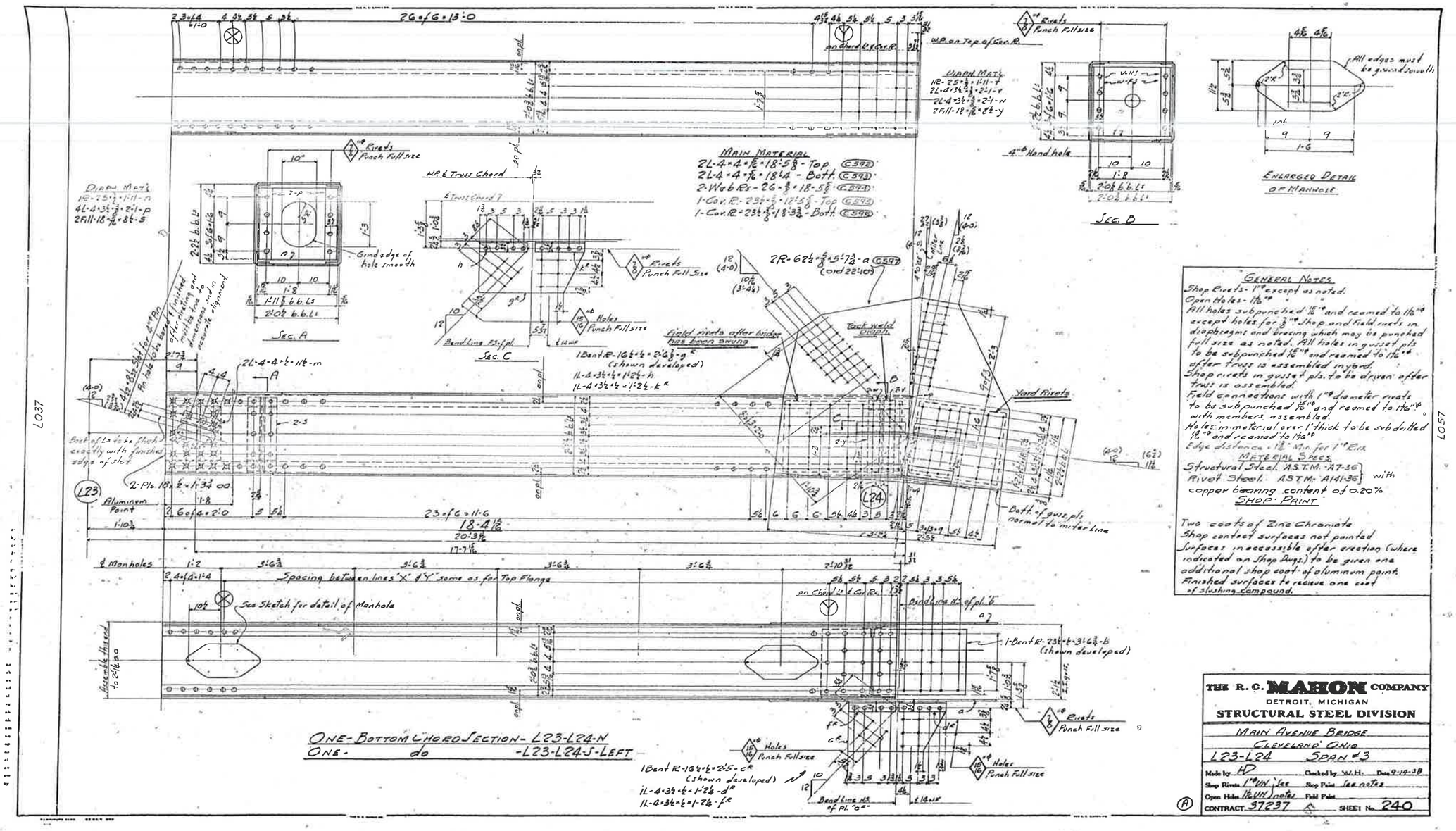
Edge distances 1¾ unless noted.

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTTOM CHORD L22-L23 SPAN #2

Made by C.P.J. Checked by GAK Date 8-9-16
Shop Rivets 7/8" U.N. Shop Paint See Notes.
Open Holes 1 1/16" U.N. Field Paint
CONTRACT 37237 SHEET No. 225

3
543



General Notes

Shop Rivets - 1" except as noted.
Open Holes - 17/16".
All holes subpunched 15/16" and reamed to 17/16" except holes for 7/8" Shop and field rivets in diaphragms and bracing which may be punched full size as noted. All holes in gusset pls to be subpunched 15/16" and reamed to 17/16" after truss is assembled in yard.
Shop rivets in gusset pls. to be driven after truss is assembled.
Field connections with 1" diameter rivets to be subpunched 15/16" and reamed to 17/16" with members assembled.
Holes in material over 1" thick to be subdrilled 15/16" and reamed to 17/16".
Edge distance - 1 1/4" Min. for 1" Rivet.

Material Specs.

Structural Steel. A.S.T.M. - A7-36
Rivet Steel. A.S.T.M. - A141-36 } with copper bearing content of 0.20%

Shop Paint

Two coats of Zinc Chromate
Shop contact surfaces not painted
Surfaces inaccessible after erection (where indicated on Shop Dwgs.) to be given one additional shop coat of aluminum paint.
Finished surfaces to receive one coat of slushing compound.

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland, Ohio
L23-L24 Span #3

Made by HP Checked by W.H. Date 9-14-38
Shop Rivets 1" & 7/8" } see Shop Paint See notes
Open Holes 17/16" & 15/16" } notes Field Paint
CONTRACT 57237 SHEET No. 240

L24 N&S

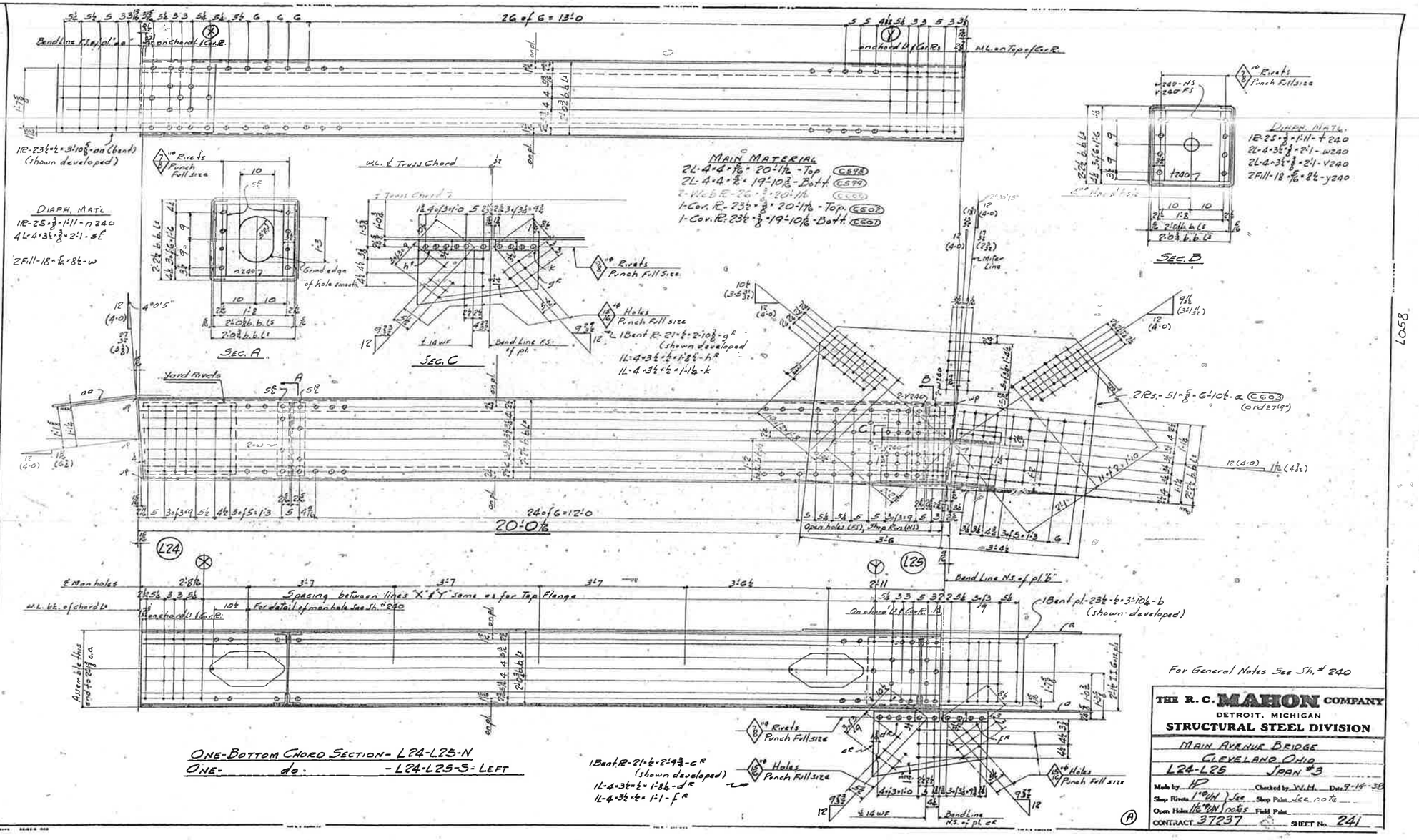
NO SPLICE PLATE

3
542

L57

L58

L25 N&S



One-Bottom Chord Section - L24-L25-N
One- do. - L24-L25-S-Left

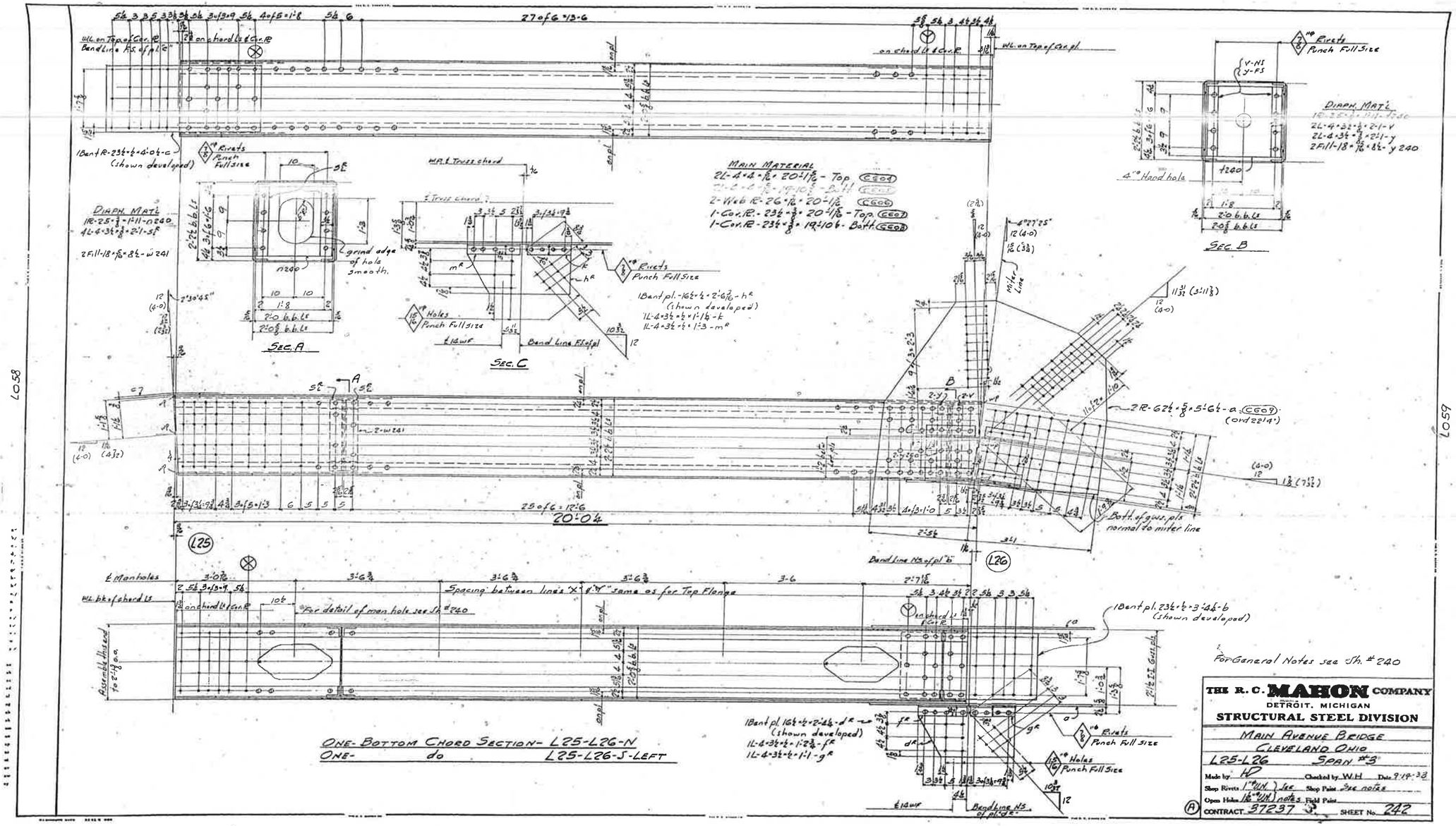
For General Notes See Sh. # 240

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland Ohio
L24-L25 Span #3

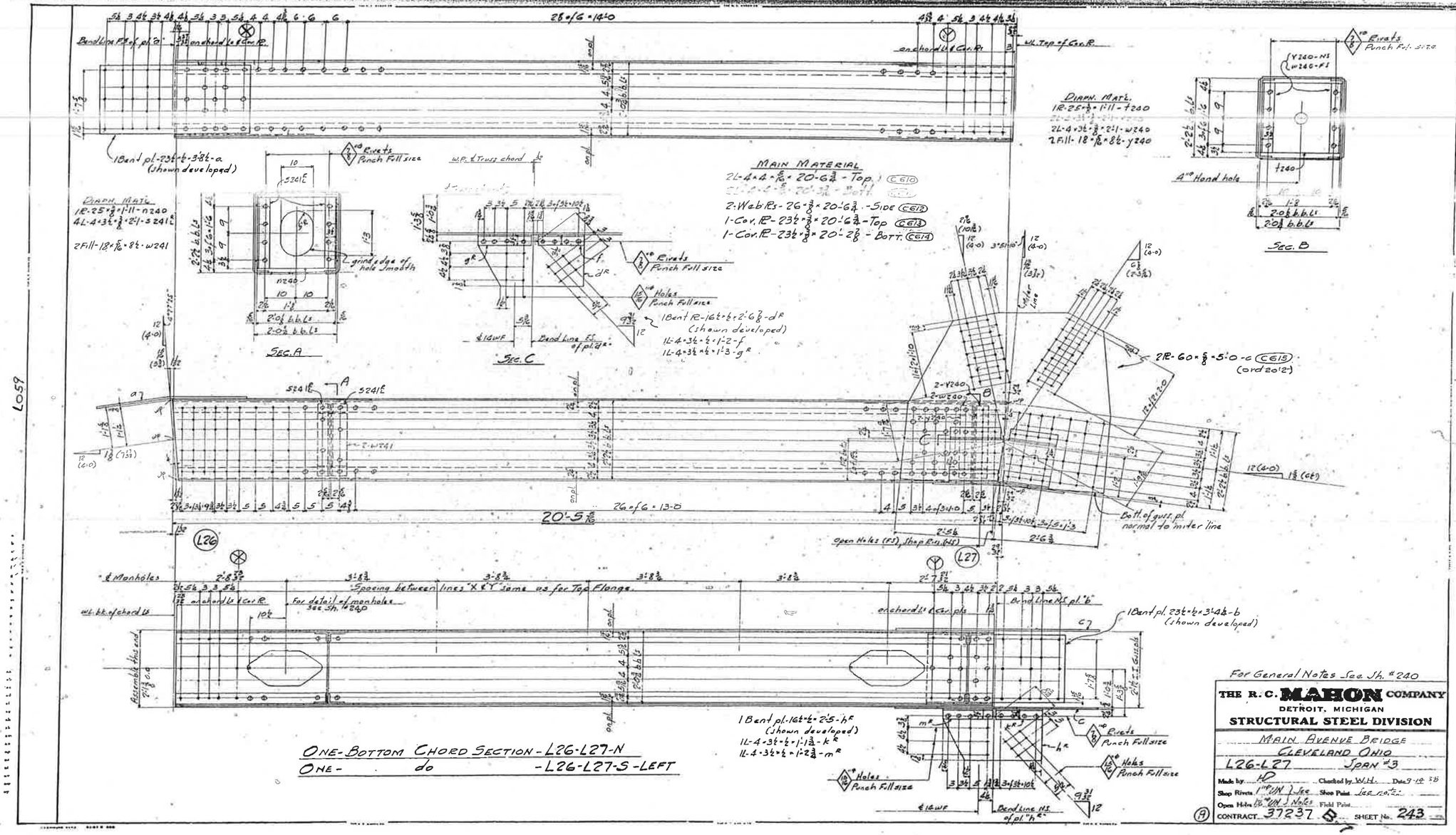
Made by H. Checked by W.H. Date 9-14-38
Shop Rivets 1" Pn/H Jee Shop Paint Jee. note
Open Holes 1 1/16" Pn/H notes Field Paint
CONTRACT 37237 SHEET No. 241

3
541


MAIN MATERIAL
2L-4"x4"x7/16"x20'-1 5/16" - Top (C604)
2L-4"x4"x7/16"x19'-10 5/8" - Bott (C605)
2-Web R-26"x7/16"x20'-1 1/16" (C606)
1-Cov.R-23 1/2"x3/8"x20'-1 1/16" - Top (C607)
1-Cov.R-23 1/2"x3/8"x19'-10 1/2" - Bott (C608)
DIAPH. MAT'L
1R-25"x3/8"x1'-11"-0240
4L-4"x3 1/2"x3/8"x2'-1"-5f
2Fill-18"x7/16"x8 1/2"-w 241
SEC. A
SEC. B
SEC. C
Rivets Punch Full Size
Holes Punch Full Size
grind edge of hole smooth.
4" Hand hole
Mitter Line
Bend Line F.S. of pl
Bend Line N.S. of pl
Spacing between lines "X" & "Y" same as for Top Flange
For detail of man hole see Sh. #240
For General Notes see Sh. #240
ONE-BOTTOM CHORD SECTION- L25-L26-N
ONE- do L25-L26-S-LEFT
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
L25-L26 SPAN #3
Made by HP Checked by W.H Date 7-19-38
CONTRACT 37237 SHEET No. 242

L26 N&S

3
540



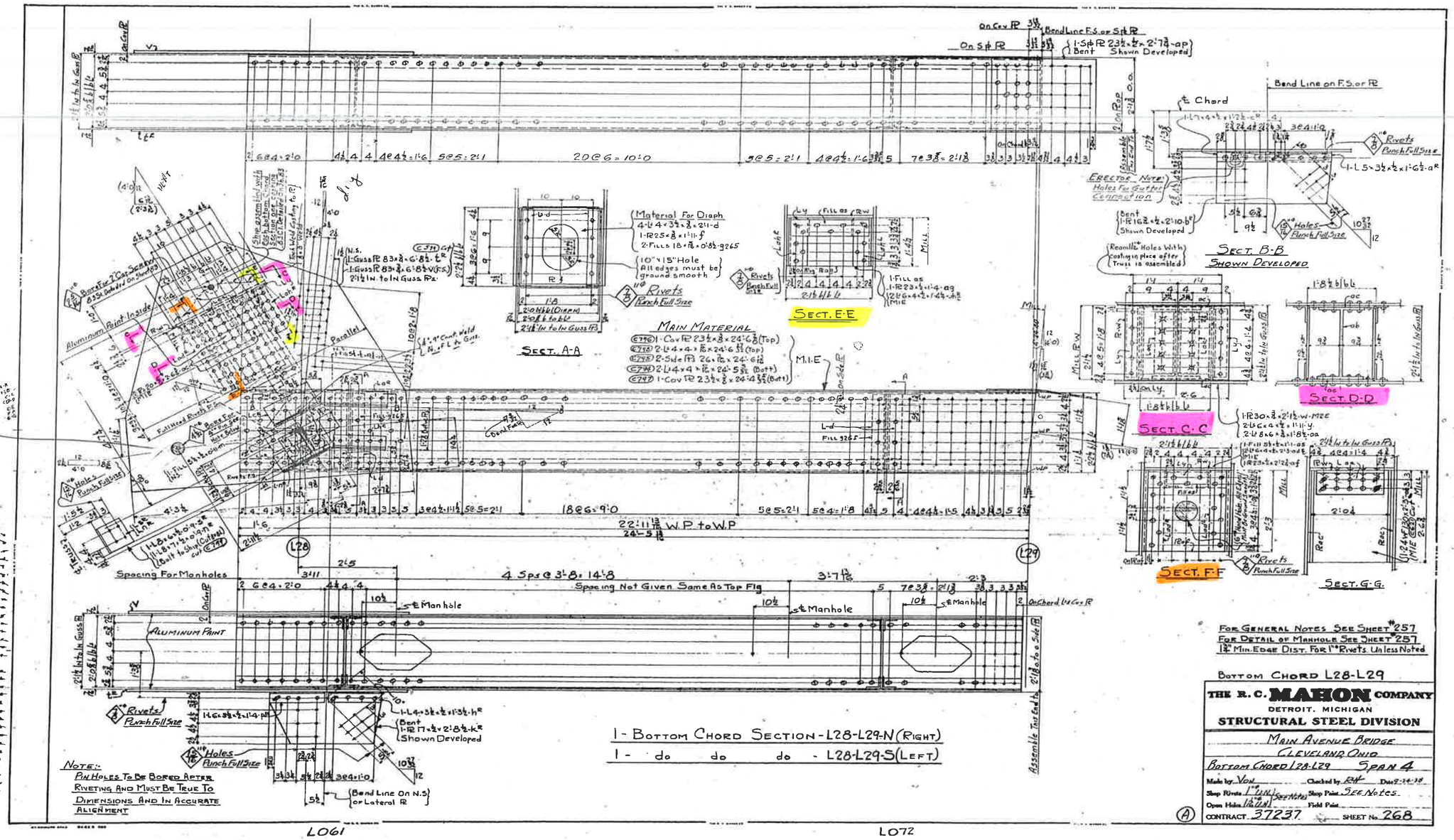
For General Notes See Sh. #240

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
L26-L27 SPAN #3

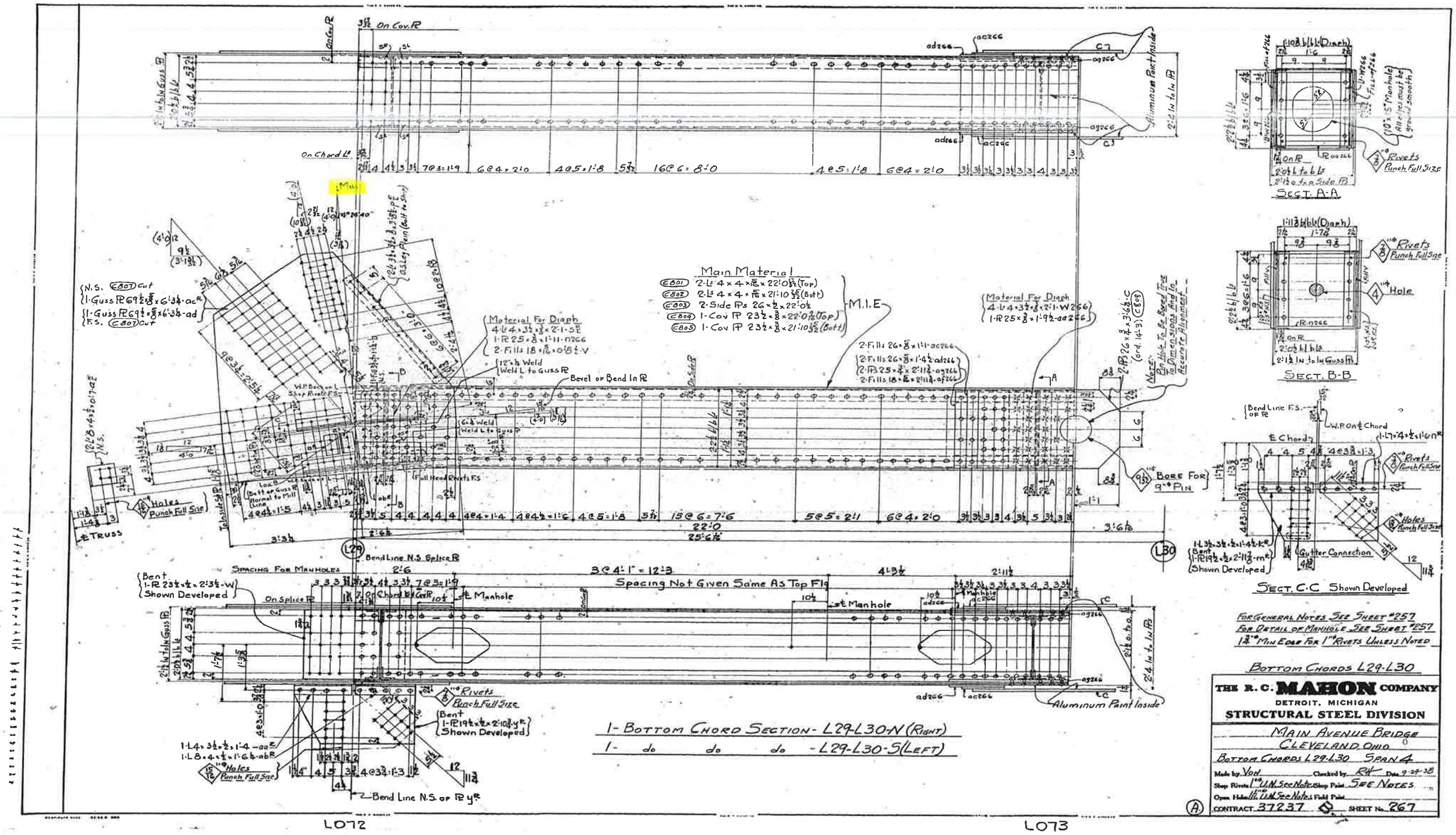
Made by HP Checked by W.H. Date 9-14-58
Shop Rivets 1" Ø WM & Less Shop Paint See note
Open Holes 13/16" Ø WM & Holes Field Paint
CONTRACT 37237 SHEET No. 243

3
515



VERT
TENS
LC.

3
516



L29 N&S

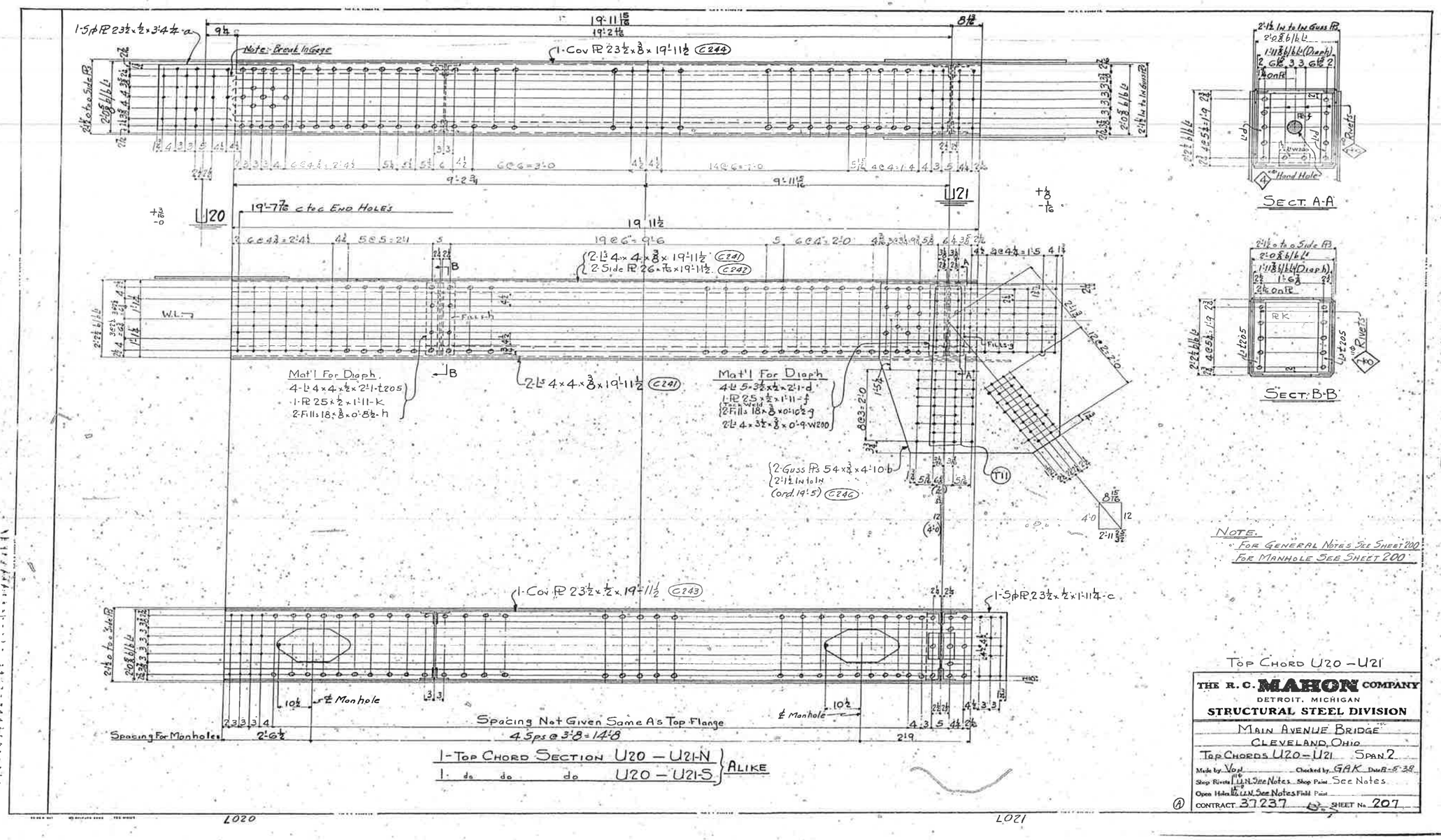
For General Notes See Sheet #257
For Detail of Manhole See Sheet #257
1½" Min Edge For 1" Rivets Unless Noted

Bottom Chords L29-L30

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland, Ohio
Bottom Chords L29-L30 Span 4

Made by Vod Checked by RH Date 9-29-38
Shop Rivets 1" U.N. See Notes Shop Paint See Notes
Open Holes 1" U.N. See Notes Field Paint
CONTRACT 37237 SHEET No. 267



U21 N&S

NOTE.
For General Notes See Sheet 200
For Manhole See Sheet 200

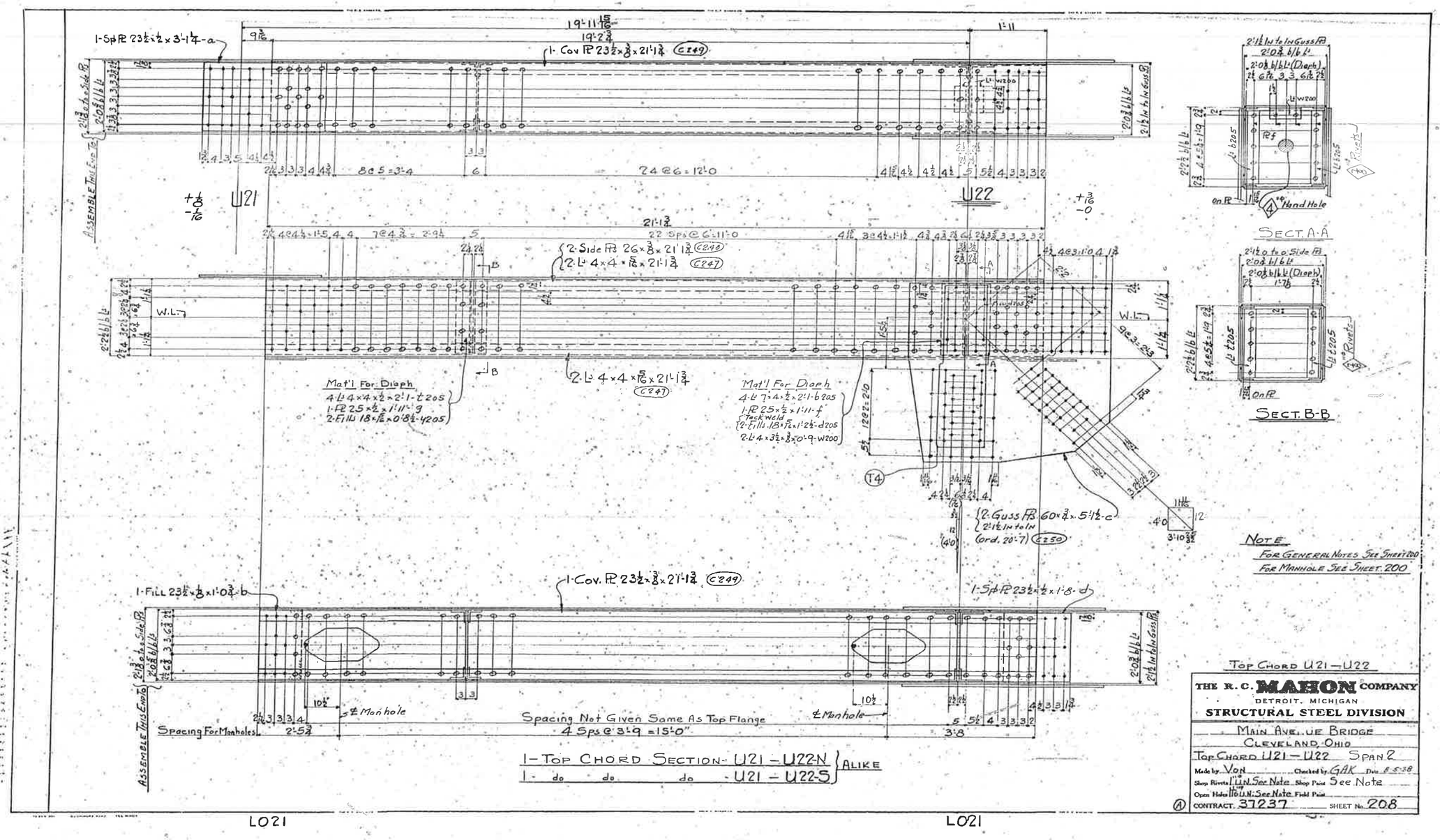
1-Top Chord Section U20 – U21-N
1- do do do U20 – U21-S
} Alike

Top Chord U20 – U21

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

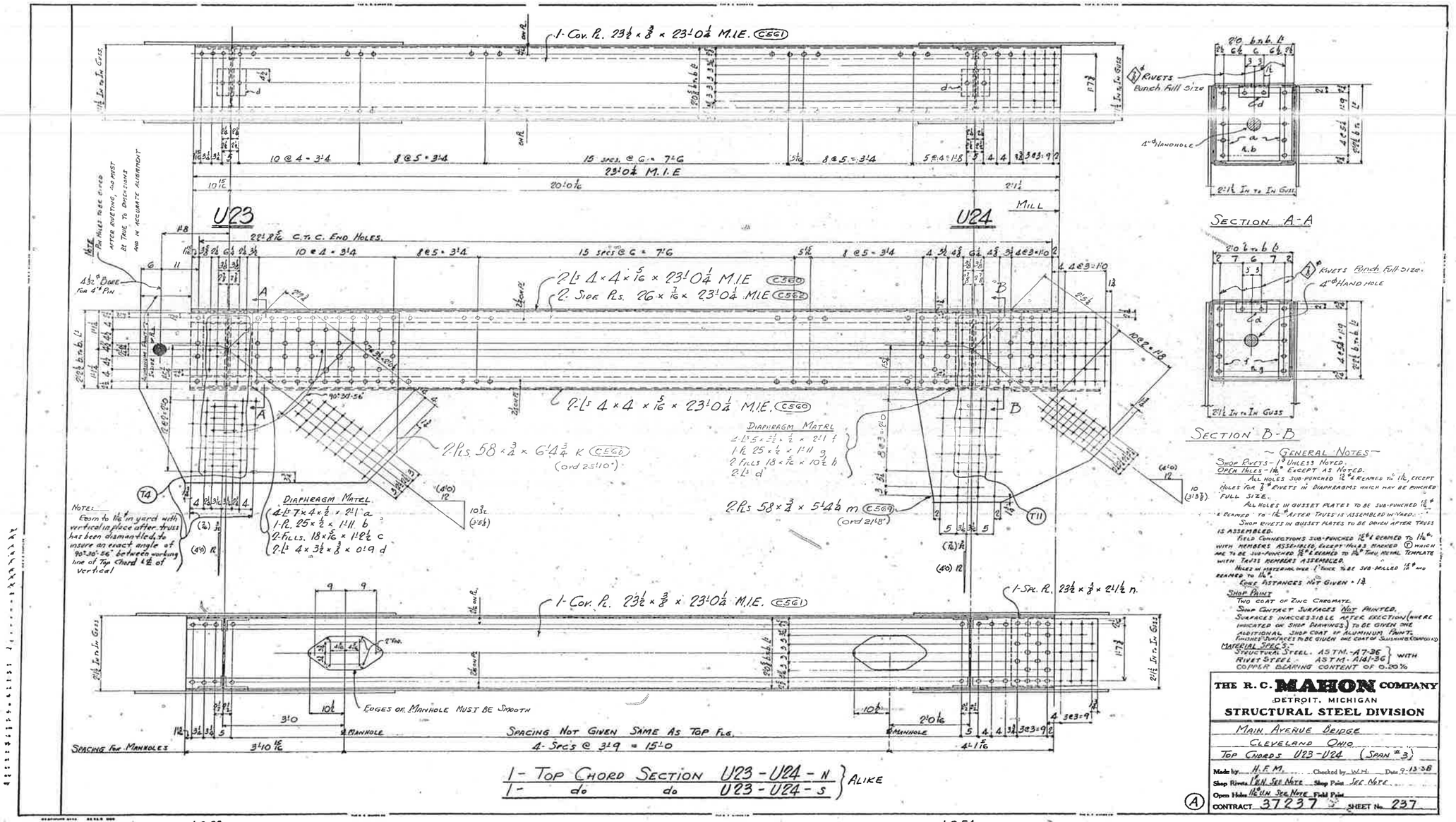
Main Avenue Bridge
Cleveland, Ohio
Top Chords U20 – U21 Span 2
Made by Vogel Checked by GAK Date 8-5-38
Shop Rivets 11/16 U.N. See Notes Shop Paint See Notes
Open Holes 11/16 U.N. See Notes Field Paint
(A) Contract 37237 B Sheet No. 207

3
575



1-Top Chord Section- U21 – U22-N } Alike
1- do do do - U21 – U22-S

3
546



U23 N&S
U24 N&S

~ General Notes ~

Shop Rivets - 13/16" Unless Noted.
Open Holes - 1 1/16" Except As Noted.
All holes sub-punched 15/16" & reamed to 1 1/16" except holes for ⅞" rivets in diaphragms which may be punched full size.
All holes in gusset plates to be sub-punched 15/16" & reamed to 1 1/16" after truss is assembled in yard.
Shop rivets in gusset plates to be driven after truss is assembled.
Field connections sub-punched 15/16" & reamed to 1 1/16" with members assembled, except holes marked (D) which are to be sub-punched 15/16" & reamed to 1 1/16" thru metal template with truss members assembled.
Holes in material over 1" thick to be sub-drilled 15/16" and reamed to 1 1/16".
Edge distances not given - 1¾

Shop Paint
Two coat of zinc chromate.
Shop contact surfaces not painted.
Surfaces inaccessible after erection (where indicated on shop drawings) to be given one additional shop coat of aluminum paint.
Finished surfaces to be given one coat of shipping compound.

Material Specs.
Structural Steel - ASTM-A7-36 } with
Rivet Steel - ASTM-A141-36 }
Copper bearing content of 0.20%

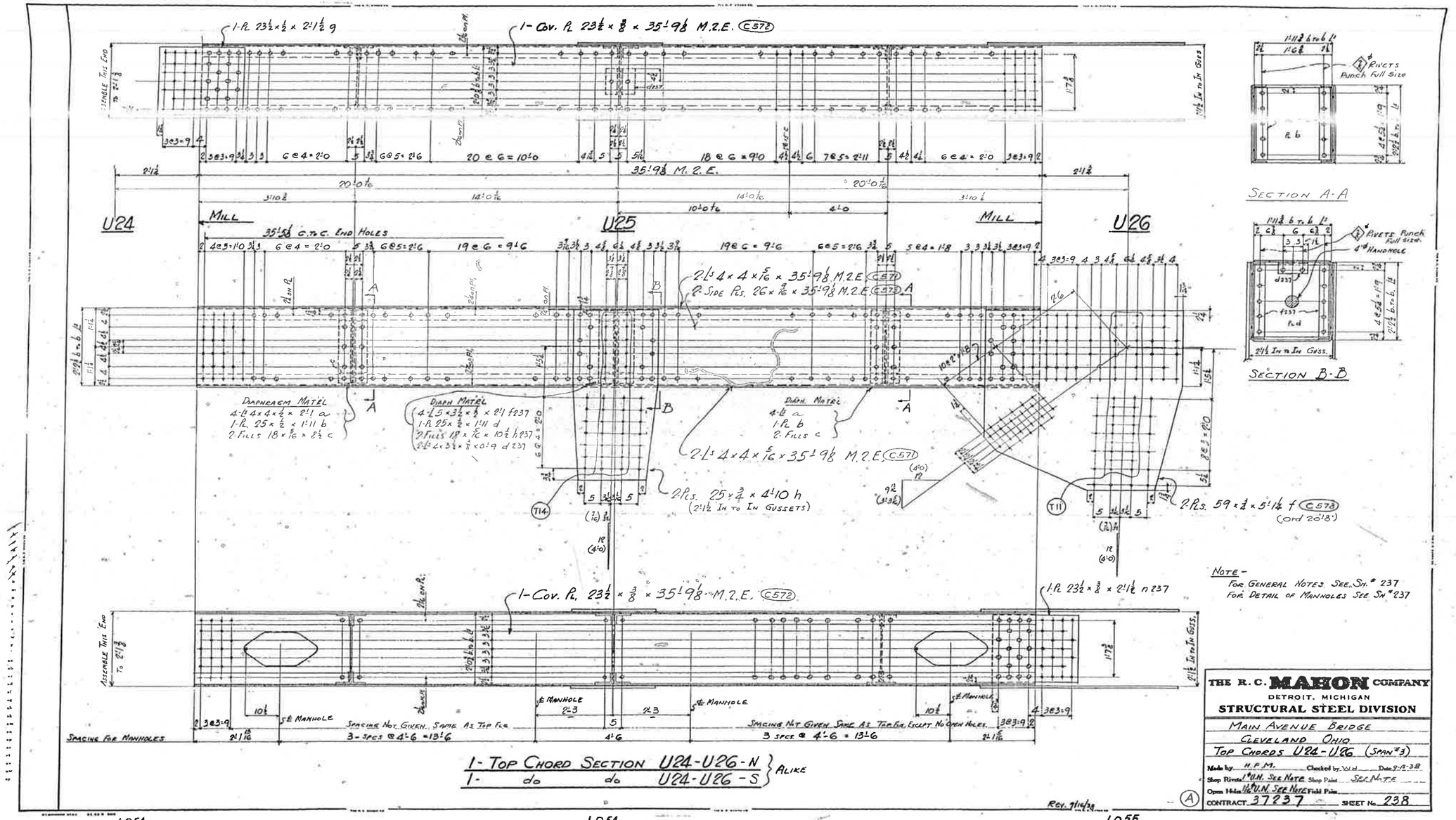
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland Ohio
Top Chords U23-U24 (Span #3)

Made by H.F.M. Checked by W.H. Date 9-13-38
Shop Rivets 13/16" See Note Shop Paint See Note
Open Holes 1 1/16" See Note Field Paint
CONTRACT 37237 SHEET No. 237

(A)

3
545



NOTE –
FOR GENERAL NOTES SEE SH. # 237
FOR DETAIL OF MANHOLES SEE SH # 237

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

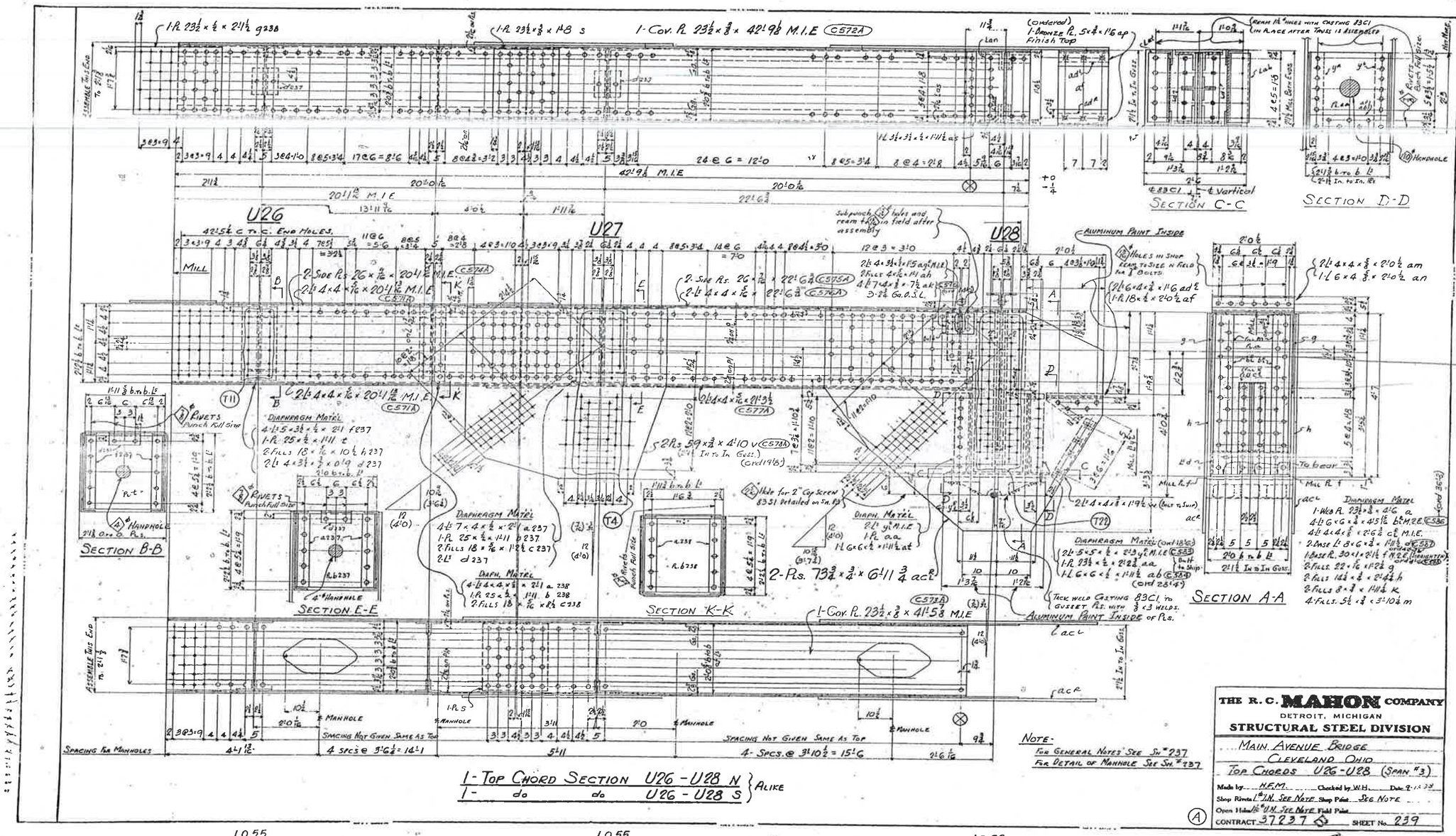
MAIN AVENUE BRIDGE
CLEVELAND OHIO
TOP CHORDS U24-U26 (SPAN #3)

Made by H.F.M. Checked by W.H. Date 9-12-38
Shop Rivets 7/8" U.N. SEE NOTE Shop Paint SEE NOTE
Open Holes 11/16" U.N. SEE NOTE Field Paint
CONTRACT 37237 SHEET No. 238
(A)

Rev. 9/16/38

U25 N & S
U26 N & S

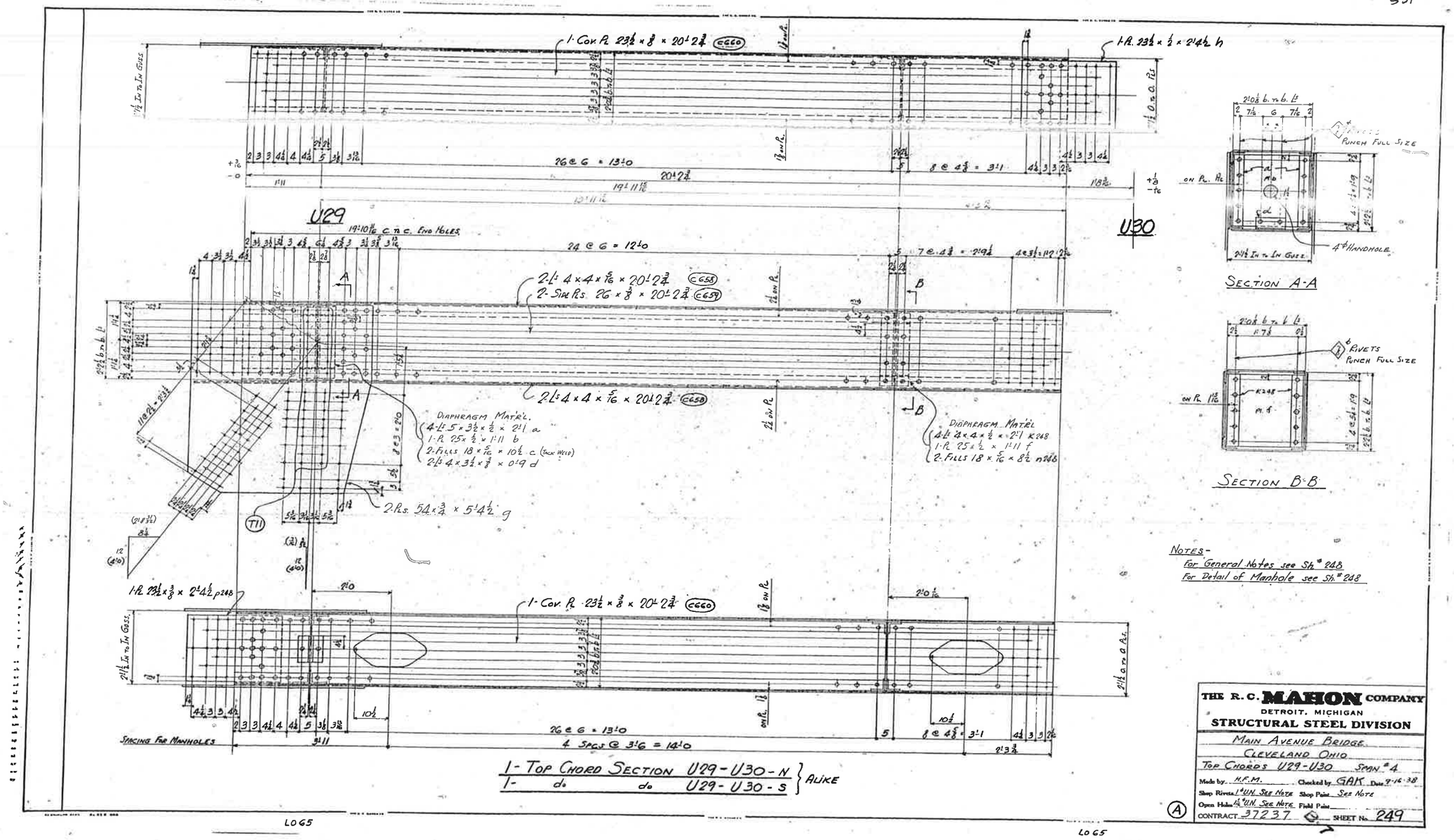
3
544



DUMMY

U27 N & S
U28 N & S

L055 L055 L056



U29 N&S.

Notes-
For General Notes see Sh. # 248
For Detail of Manhole see Sh. # 248

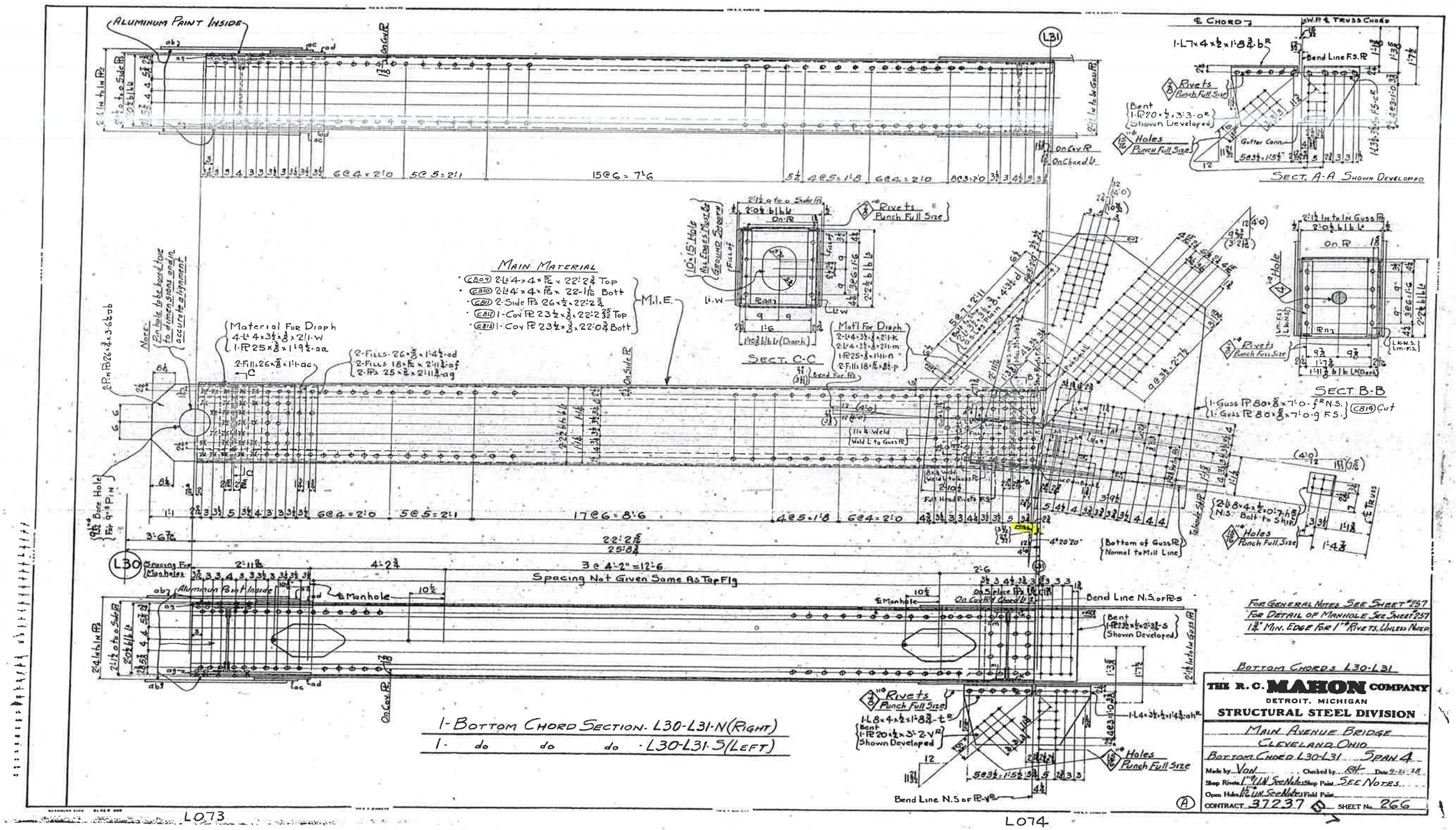
1- Top Chord Section U29-U30-N
1- do do U29-U30-S } Alike

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland Ohio
Top Chords U29-U30 Span # 4

Made by H.F.M. Checked by GAK Date 9-16-38
Shop Rivets 1" U.N. See Note Shop Paint See Note
Open Holes 1½" U.N. See Note Field Paint
Contract 37237 Sheet No. 249

3
517



Bottom Chords L30-L31

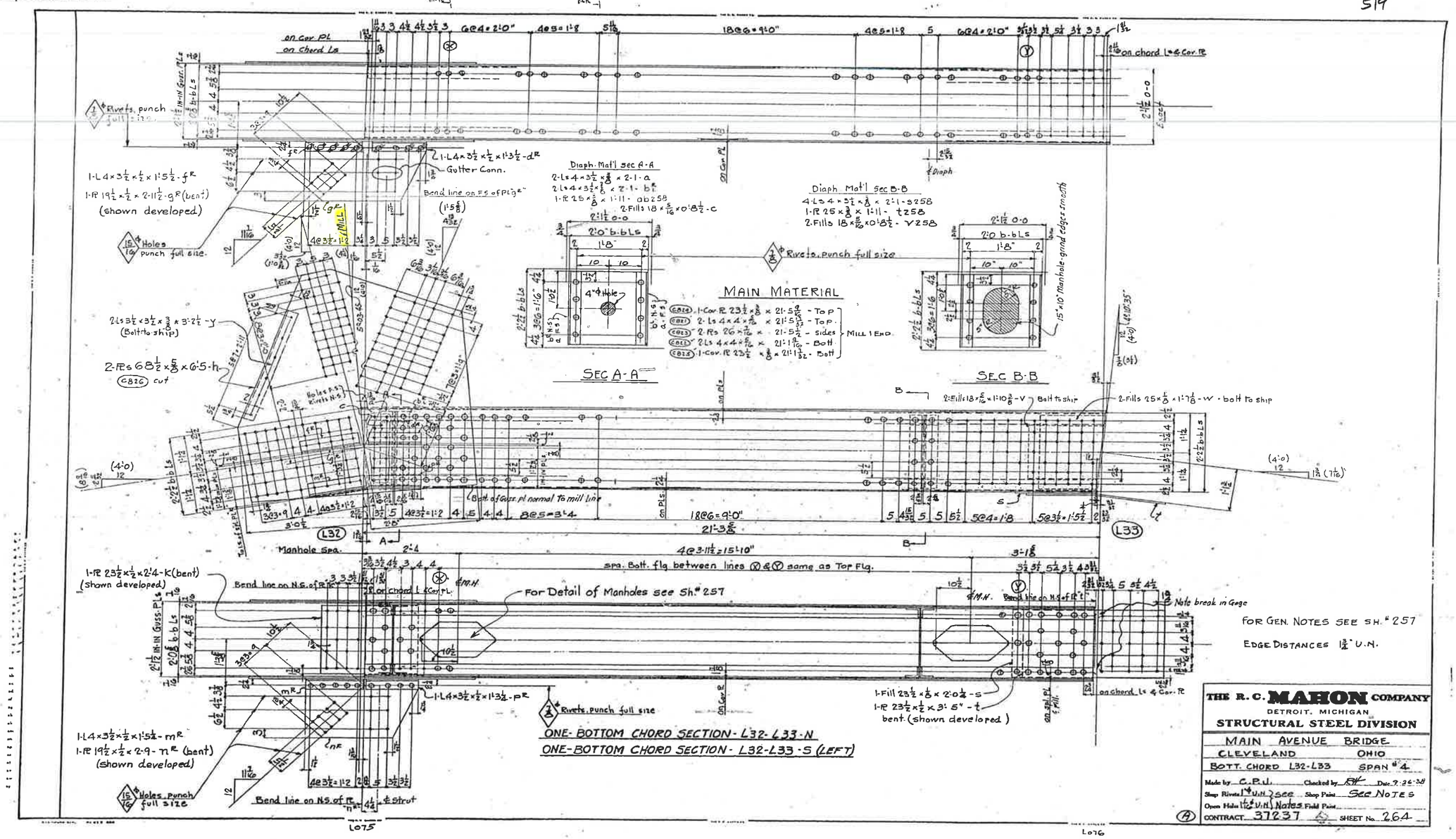
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland, Ohio
Bottom Chord L30-L31 Span 4

Made by Von Checked by RH Date 9-23-38
Shop Rivets 1"ø U.N. See Notes Shop Paint See Notes
Open Holes 15/16" U.N. See Notes Field Paint
CONTRACT 37237 SHEET No. 266

L31 N&S

3
519



L32 N&S

FOR GEN. NOTES SEE SH. # 257

EDGE DISTANCES 1¾" U.N.

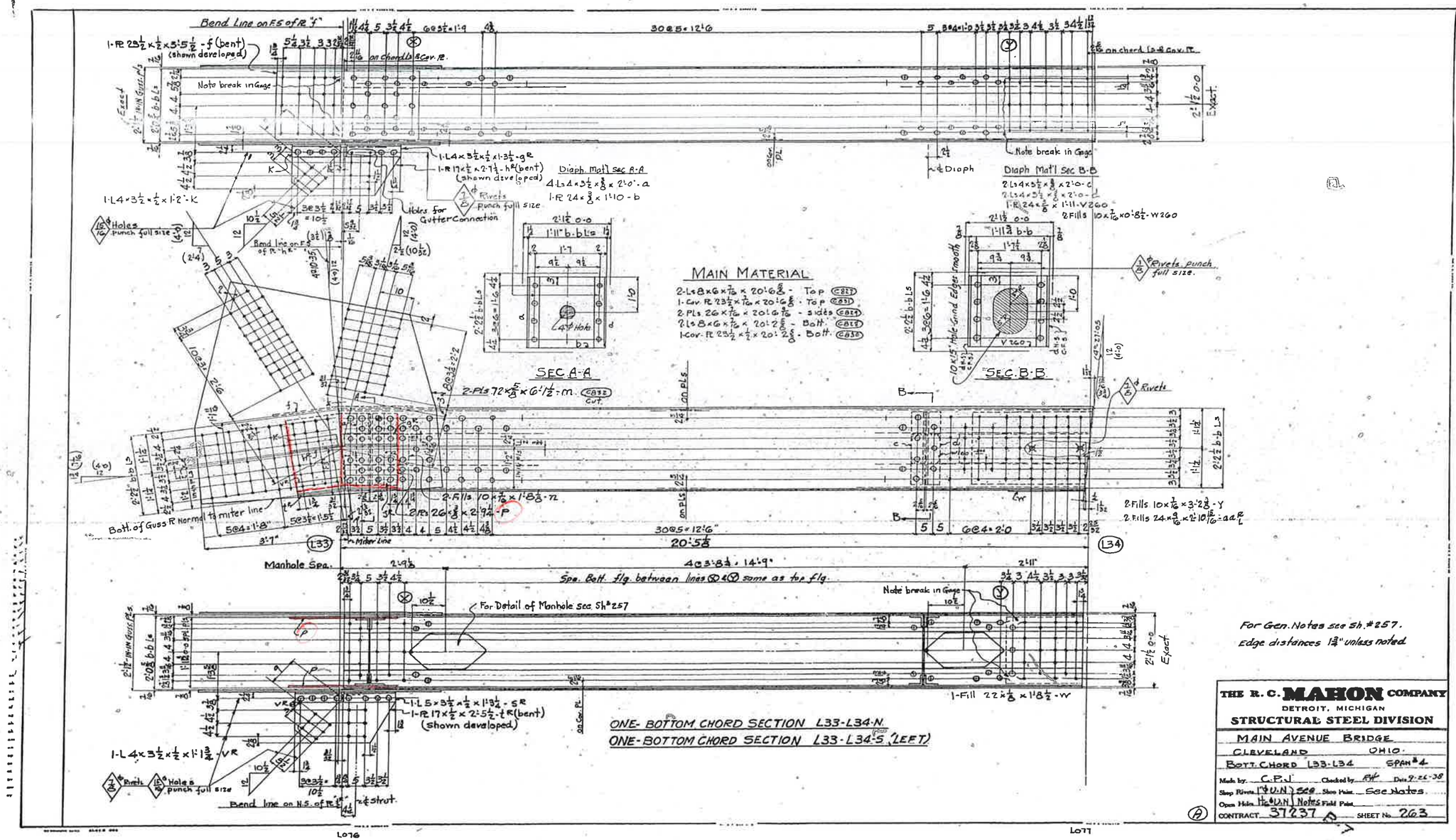
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTT. CHORD L32-L33 SPAN # 4

Made by C.P.U. Checked by RW Date 9-26-38
Shop Rivets 1¼" U.N. } see Shop Paint See NOTES
Open Holes 1 7/16" U.N. } Notes Field Paint
CONTRACT 37237 SHEET No. 264

3
520

L33 N&S

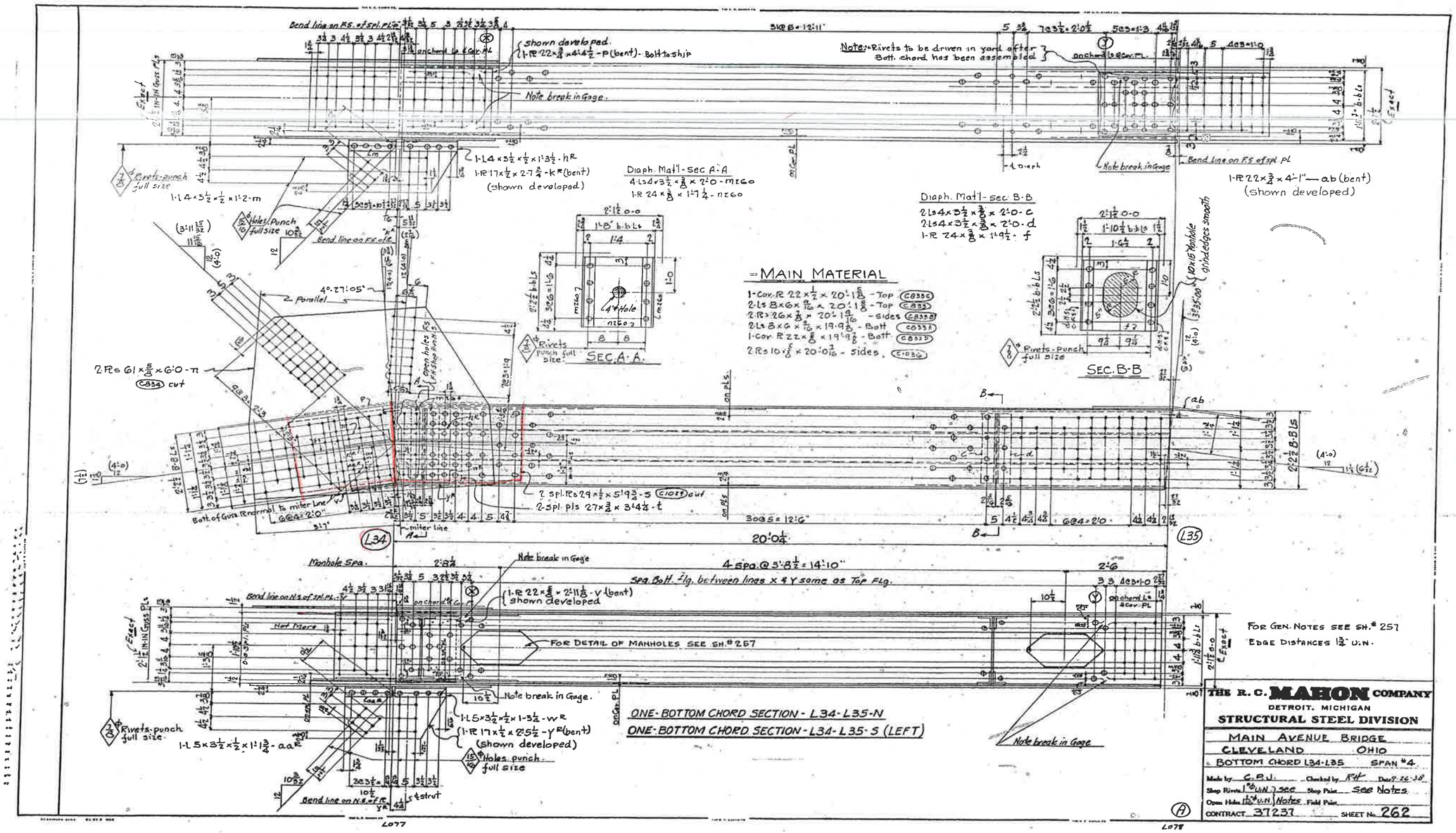


For Gen. Notes see Sh. #257.
Edge distances 1¾" unless noted.

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO.
BOTT. CHORD L33-L34 SPAN #4
Made by: C.P.J. Checked by: RH Date: 9-26-38
Shop Rivets: 1" ⊕ U.N.) 508 Shop Holes: See Notes
Open Holes: 1" ⊕ L.N.) Notes Field Point:
CONTRACT 37237 A SHEET No. 263

3
521



L34 N&S

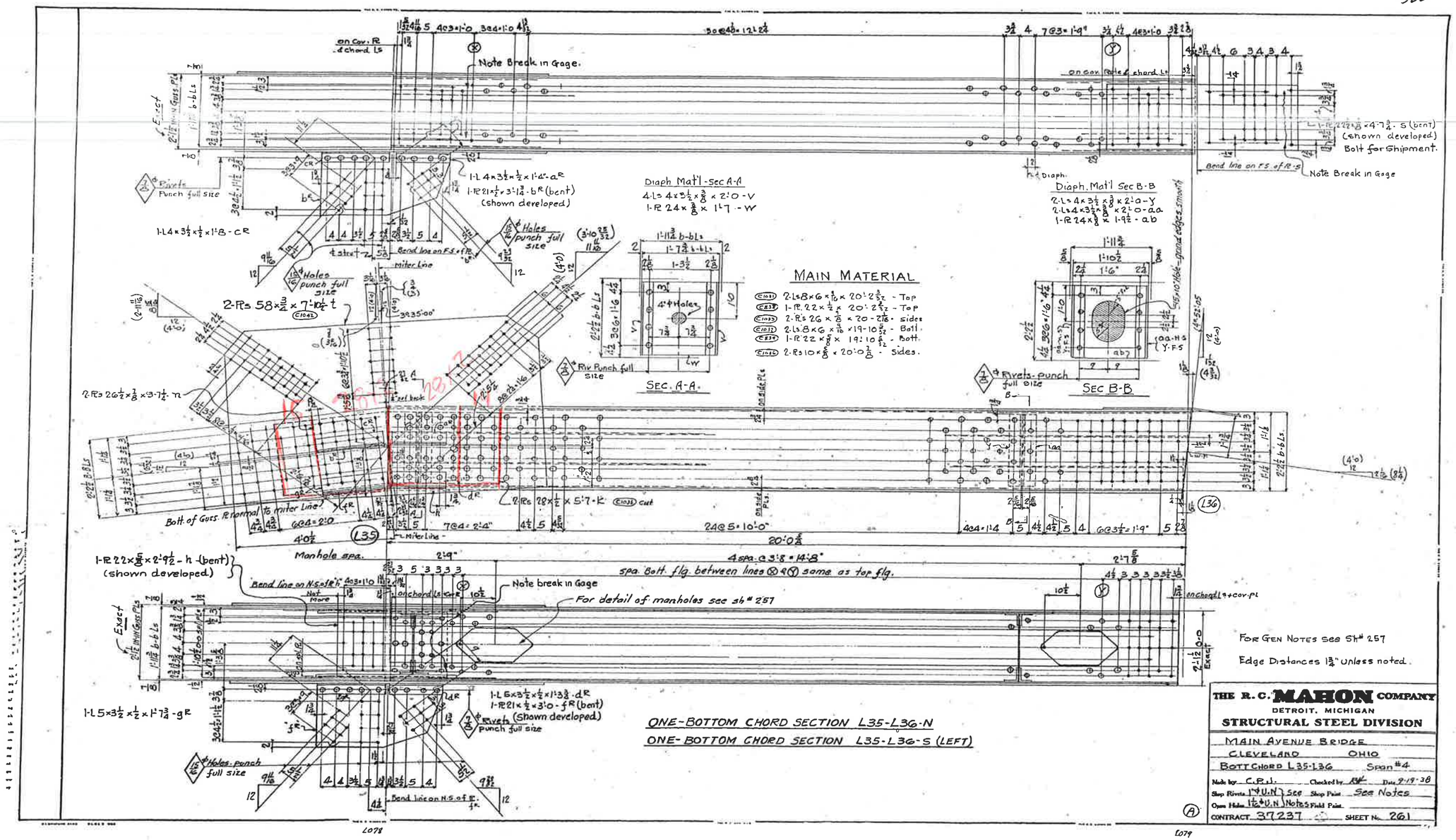
FOR GEN. NOTES SEE SH. # 257
EDGE DISTANCES 1¾" U.N.

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

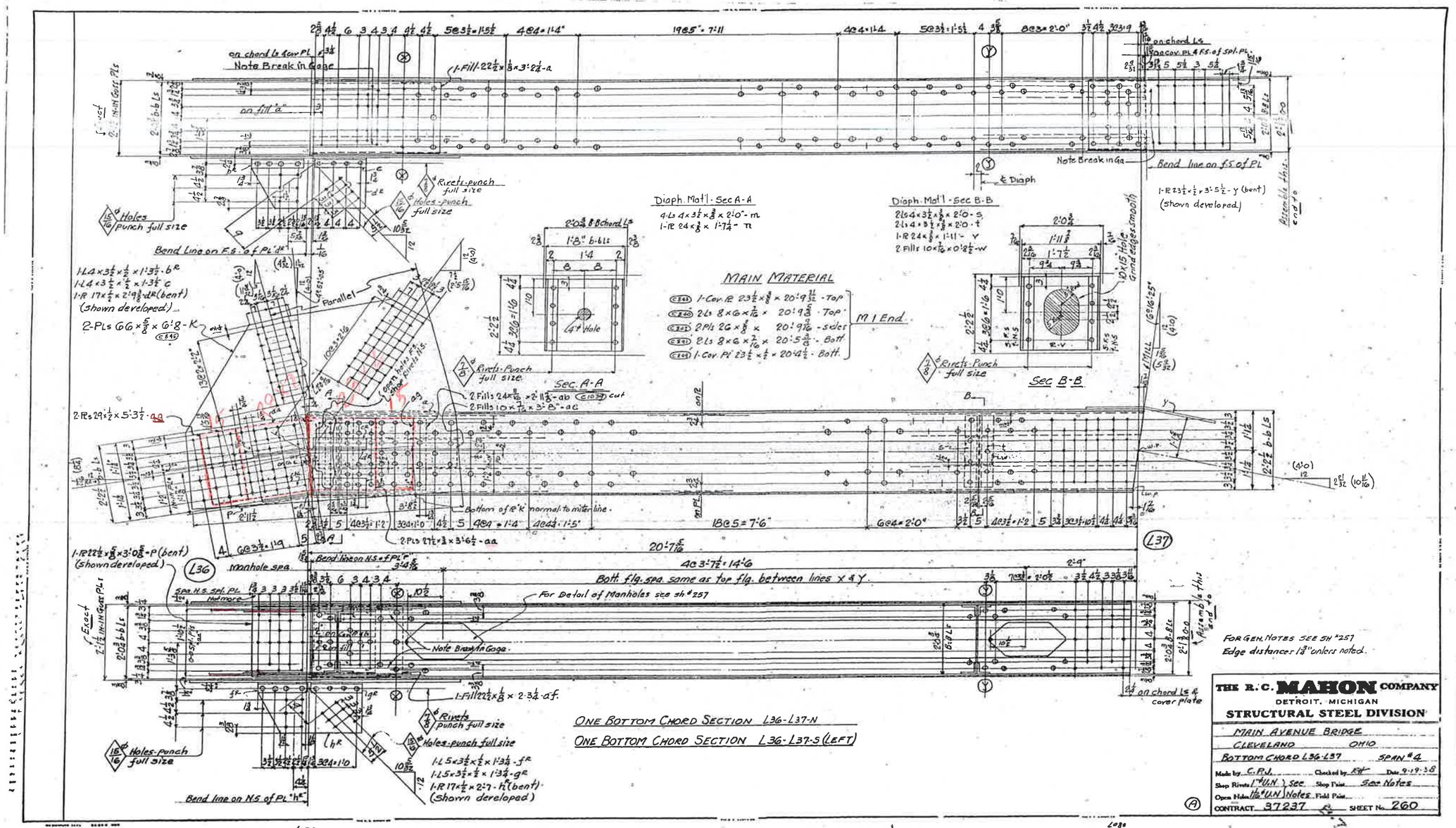
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTTOM CHORD L34-L35 SPAN #4

Made by C.B.J. Checked by R.H. Date 9-26-38
Shop Rivets ⅞" U.N. - See Shop Pins See Notes
Open Holes 1⅛" U.N. Notes Field Pins
CONTRACT 37237 SHEET No. 262

3
522


Note Break in Gage.
on Cov. PL & chord Ls
Diaph Mat'l - Sec A-A
4-Ls 4x3½x⅜x2'-0 - V
1-PL 24x⅜x1'-7 - W
Diaph. Mat'l Sec B-B
2-Ls 4x3½x⅜x2'-0 - Y
2-Ls 4x3½x⅜x2'-0 - aa
1-PL 24x⅜x1'-9½ - ab
MAIN MATERIAL
2-Ls 8x6x7/16x20'-2 3/32 - Top
1-PL 22x½x20'-2 5/32 - Top
2-PLs 26x7/16x20'-2 7/16 - Sides
2-Ls 8x6x9/16x19'-10 9/32 - Bott.
1-PL 22x⅝x19'-10 9/32 - Bott.
2-PLs 10x⅝x20'-0 3/8 - Sides.
SEC. A-A.
SEC B-B
Rivets - punch full size
Rivets Punch full size
Holes punch full size
Bend line on F.S. of PL
Miter Line
Bolt of Guss. PL normal to miter line
Manhole spa.
Note break in Gage
For detail of manholes see sh # 257
spa. Bott. flg. between lines ⊗ & ⊗ same as top flg.
Bolt for Shipment.
(shown developed)
ONE-BOTTOM CHORD SECTION L35-L36-N
ONE-BOTTOM CHORD SECTION L35-L36-S (LEFT)
For Gen Notes see Sh # 257
Edge Distances 1¾" unless noted.
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTT CHORD L35-L36 Span #4
Made by C.P.L. Checked by RW Date 9-19-38
Shop Rivets 1¾ U.N. See Shop Paint See Notes
Open Holes 1½ U.N. Notes Field Paint
CONTRACT 37237 SHEET No. 261
L35 N&S

3
523



ONE BOTTOM CHORD SECTION L36-L37-N

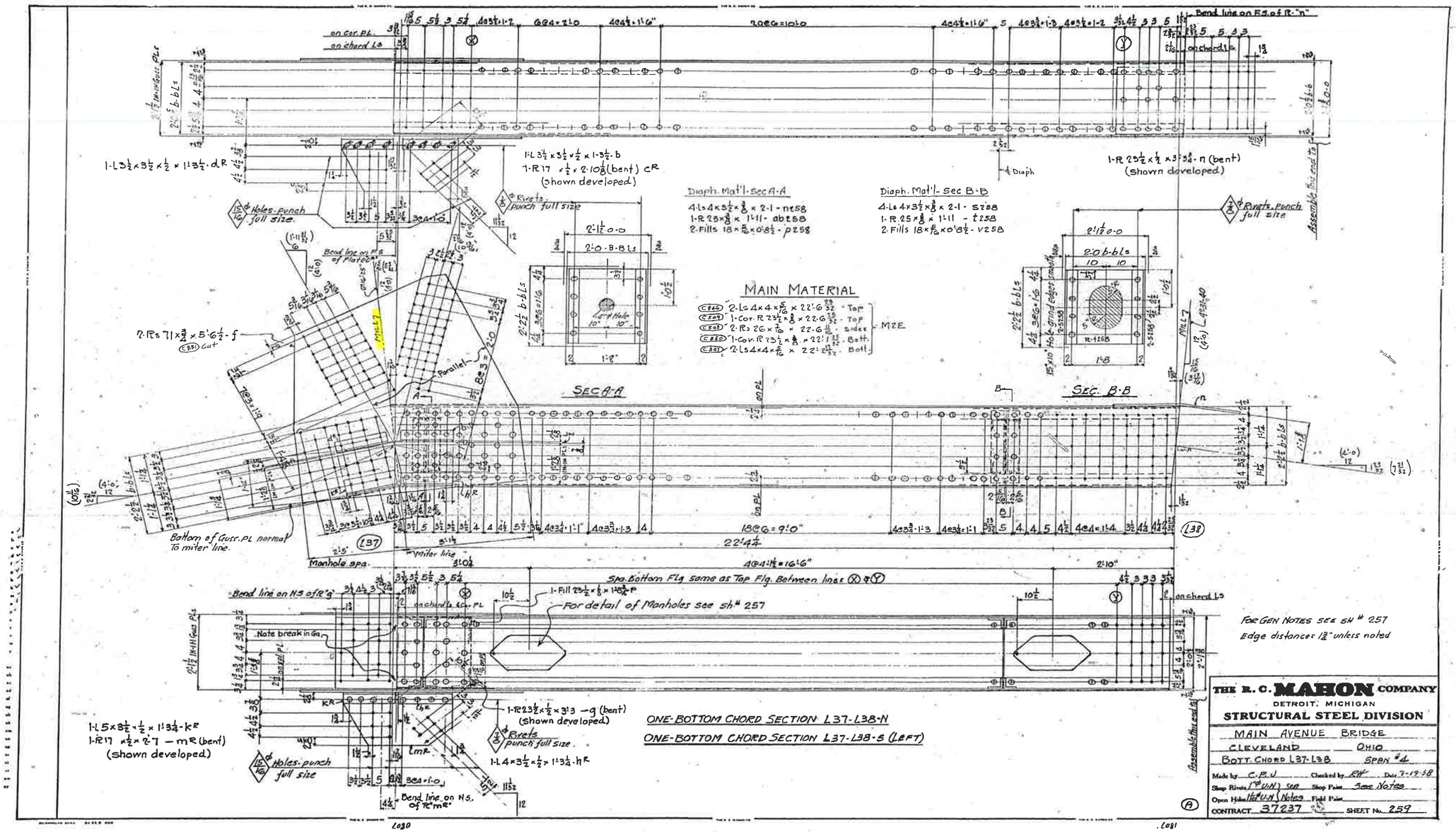
ONE BOTTOM CHORD SECTION L36-L37-S (LEFT)

FOR GEN. NOTES SEE SH #257
Edge distances 1 3/8" unless noted.

THE R.C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

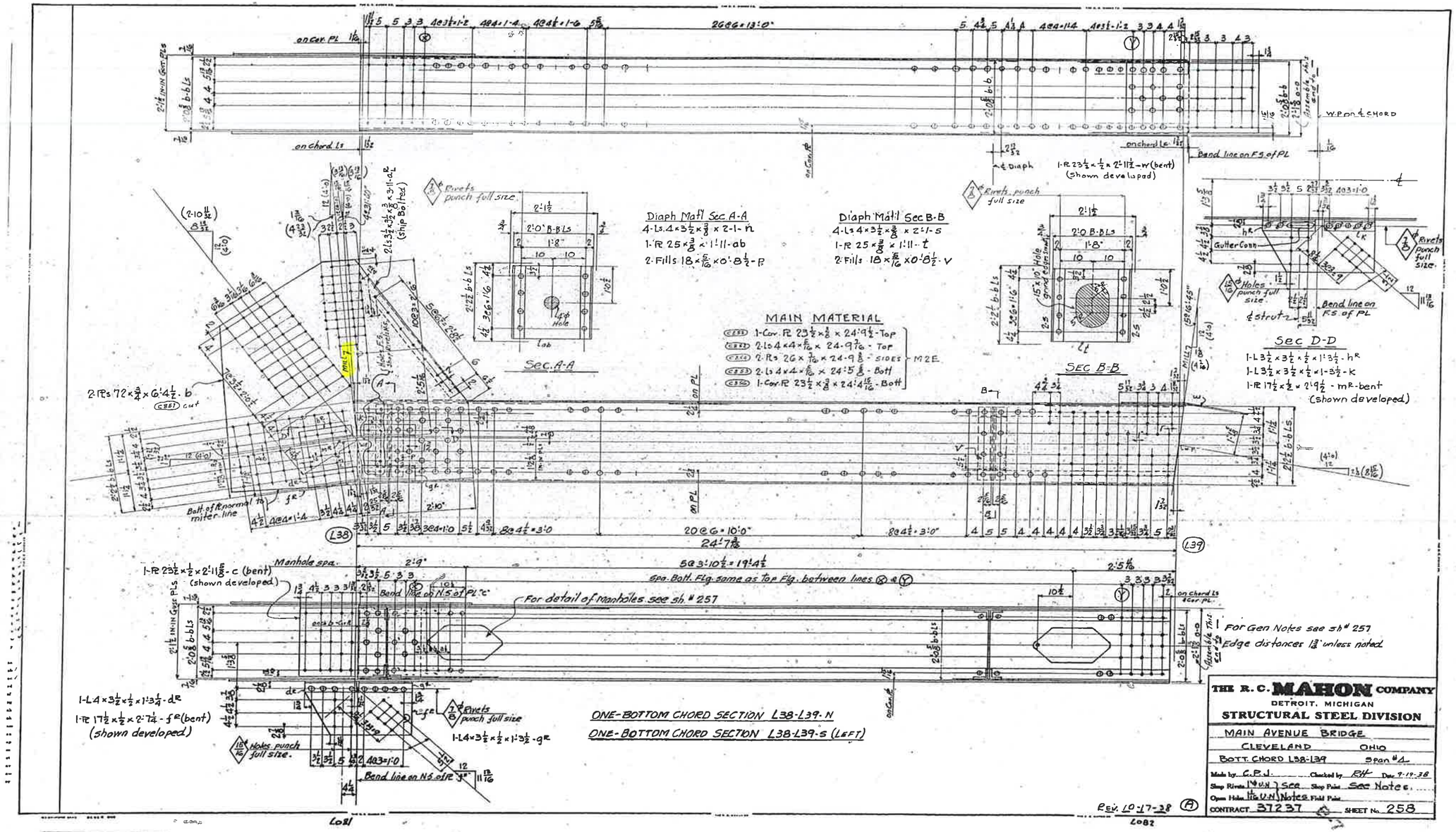
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTTOM CHORD L36-L37 SPAN #4
Made by C.P.J. Checked by RJF Date 9-19-38
Shop Rivets 1" U.N. See Shop Paint See Notes
Open Holes 13/16" U.N. Notes Field Paint
CONTRACT 37237 SHEET No. 260

3
524


1-L 3½x3½x½x1'3½-dR
1-L 3½x3½x½x1'-3½-b
1-R 17 x½x2'10⅛(bent) cR
(shown developed)
1-R 23½x½x3'5¾-n (bent)
(shown developed)
Diaph. Mat'l-Sec A-A
4-Ls 4x3½x⅜x2'-1-nt58
1-R 25x⅜x1'-11-abt58
2-Fills 18x5/16x0'-8½-pz58
Diaph. Mat'l-Sec B-B
4-Ls 4x3½x⅜x2'-1-st58
1-R 25x⅜x1'-11-tz58
2-Fills 18x5/16x0'-8½-vz58
MAIN MATERIAL
2-Ls 4x4x5/16x22'-6 3/32 - Top
1-Cov. R 23½x⅜x22'-6 3/32 - Top
2-Rs 26x5/16x22'-6 3/32 - Sides
1-Cov. R 23½x⅜x22'-6 3/32 - Bott.
2-Ls 4x4x5/16x22'-2 13/32 - Bott.
M2E
SEC A-A
SEC. B-B
2-Rs 71x⅜x5'-6½-f
Cut
Holes-punch full size
Rivets-punch full size
Large Hole 10"x10"
Hole grind edges smooth
Bottom of Gusset PL normal to miter line.
Manhole spa.
Miter line
Spa. Bottom Flg same as Top Flg. Between lines ⊗ & Ⓨ
1-Fill 23½x½x1'-8½-P
For detail of Manholes see sh.# 257
Bend line on N.S. of R"g"
Note break in Ga.
1-L 5x3½x½x1'-3¼-kR
1-R 17 x½x2'-7 -mR (bent)
(shown developed)
1-R 23½x½x3'-3 -g (bent)
(shown developed)
1-L 4x3½x½x1'-3¼-hR
Bend line on N.S. of R"mR"
ONE-BOTTOM CHORD SECTION L37-L38-N
ONE-BOTTOM CHORD SECTION L37-L38-S (LEFT)
FOR GEN NOTES SEE SH # 257
Edge distance 1¾" unless noted
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTT. CHORD L37-L38 SPAN #4
Made by C.B.J. Checked by EH Date 7-19-58
Shop Rivets 7/8" U.H. Shop Paint See Notes
Open Holes 1 1/16" U.H. Notes Field Paint
CONTRACT 37237 SHEET No. 259

L37 N&S.

3
525



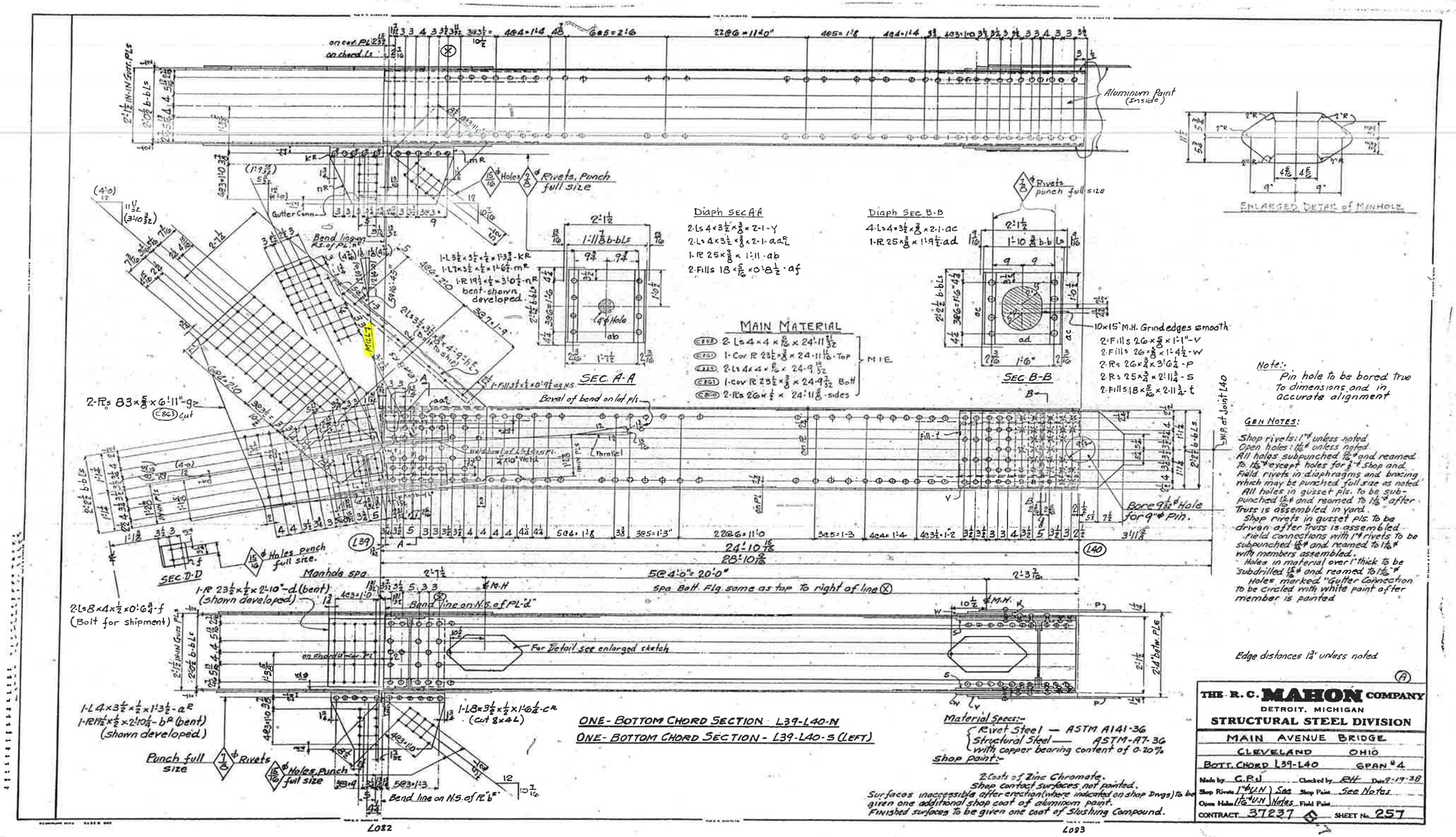
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTT. CHORD L38-L39 Span # 1

Made by C.P.J. Checked by RH Date 9-19-38
Shop Rivets 1/4" U.N. } See Shop Paint See Notes
Open Holes 11/16" U.N. } Notes Field Paint
CONTRACT 37237 SHEET No. 258

REV. 10-17-38 (A)

3
526


Aluminum Paint (inside)
Rivets, Punch full size
Holes
Gutter Conn.
Bend line on PL of Rs.
Diaph SEC A-A
2-Ls 4×3½×⅜×2-1-Y
2-Ls 4×3½×⅜×2-1-aa
1-R 25×⅜×1'-11-ab
2-Fills 18×5/16×0'-8½-af
Diaph Sec B-B
4-Ls 4×3½×⅜×2-1-ac
1-R 25×⅜×1'-9½-ad
Rivets punch full size
ENLARGED DETAIL of MANHOLE
MAIN MATERIAL
2-Ls 4×4×5/16×24'-11 31/32
1-Cov R 23½×⅜×24'-11 15/16-Top
2-Ls 4×4×5/16×24'-9 19/32
1-Cov R 23½×⅜×24'-9 19/32 Bott
2-Pls 26×½×24'-11⅝-sides
M.I.E.
10×15" M.H. Grind edges smooth
2-Fills 26×⅜×1'-1"-V
2-Fills 26×⅜×1'-4½-W
2-Rs 26×¾×3'-6¼-P
2-Rs 25×¾×2'-11¾-S
2-Fills 18×5/16×2'-11½-t
SEC. A-A
SEC. B-B
SEC. D-D
2-Pls 83×⅝×6'-11"-gz
Bore 9 1/32" Hole for 9" Pin.
Manhole spa.
5@4'-0"=20'-0"
Spa Bott. Flg same as top to right of line
For Detail see enlarged sketch
Bend line on N.S. of PL-d
Bend line on N.S. of PL-b
1-R 23½×½×2'-10"-d (bent) (shown developed)
2-Ls 8×4×½×0'-6¾-f (Bolt for shipment)
1-L 4×3½×½×1'-3½-a
1-R 11½×½×2'-10¼-b (bent) (shown developed)
1-L 8×3½×½×1'-6½-c (cut 8×4L)
Punch full size
Holes, Punch full size
Holes punch full size.
Note:- Pin hole to be bored true to dimensions and in accurate alignment
GEN NOTES:
Shop rivets: 1" unless noted
Open holes: 15/16" unless noted
All holes subpunched 13/16" and reamed to 15/16" except holes for ¾" shop and field rivets in diaphragms and bracing which may be punched full size as noted
All holes in gusset pls. to be subpunched 15/16" and reamed to 1 1/16" after Truss is assembled in yard.
Shop rivets in gusset pls. to be driven after Truss is assembled
Field connections with 1" rivets to be subpunched 15/16" and reamed to 1 1/16" with members assembled.
Holes in material over 1" thick to be subdrilled 15/16" and reamed to 1 1/16"
Holes marked "Gutter Connection" to be circled with white paint after member is painted
Edge distances 1¾" unless noted
ONE-BOTTOM CHORD SECTION L39-L40-N
ONE-BOTTOM CHORD SECTION - L39-L40-S (LEFT)
Material Specs:-
Rivet Steel — ASTM A141-36
Structural Steel — ASTM-A7-36 with copper bearing content of 0.20%
Shop paint:-
2 Coats of Zinc Chromate.
Shop contact surfaces not painted.
Surfaces inaccessible after erection (where indicated on shop Dwgs) to be given one additional shop coat of aluminum paint.
Finished surfaces to be given one coat of Slushing Compound.
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION
MAIN AVENUE BRIDGE
CLEVELAND OHIO
BOTT. CHORD L39-L40 SPAN #4
Made by C.P.J. Checked by RH Date 9-19-38
Shop Rivets 1" U.N. Std Shop Paint See Notes
Open Holes 15/16" U.N. Holes Field Paint
CONTRACT 37237 SHEET No. 257
L082
L083

L39 N&S

3
509

L088 L088 L088

1-PL 22×½×65'-0½" (C764)

General Notes

Shop Rivets - 1¾"
Open Holes - 1⅛" Unless Noted.
Edge distances - 1¼" for 1⅛" Rivs. UN.
All holes, sub-punched 15/16" and reamed to 1 1/16" unless noted.
All holes in gusset pls. to be sub-punched 15/16" & reamed to 1⅛" after truss is assembled in yard.
Shop rivs. in gusset pls. to be driven after truss is assembled.
Field conn. sub-punched 15/16" & reamed to 1⅛" with members assembled, except holes marked (●) which are to be sub-punched 15/16" & reamed to 1⅛" by metal templet with truss members assembled.
Holes in matl. over 1 1/16" to be sub-drilled 15/16" and reamed to 1⅛".
Matl. & Rivs. - 0.27% Copper Bearing Steel.
Specs. - Struct. Steel ASTM-A7-52.
Riv. Steel ASTM-A141-36.
Shop Paint -
Two coats zinc chromate.
Shop contact surfaces not painted.
Surfaces inaccessible after erection, (where indicated on shop dwg.) to be given one additional ct. of aluminum paint.

Shop to paint mark 1" near top of member as indicated on Dwg.

Note to Shop: Sub-punch 9/16" & ream to 1 1/16" for 1⅛" Rivs. with members assembled like existing BBCK. Shop Rivs. punched like existing BBCK. Bolt holes like existing BBCK.

Note to Shop: Bolt holes like existing BBCK. Bolt holes remain in place after removing in place after assembly for shipment as shown on Assembly Dwg. 27

Holes Punch Full Size

Section-AA

Diaph. Matl. (C100) cut
1-16WF45×1'-9½-h
1-Fill-7×½×1'-9½-k

Section-BB

2-Ls 4×4×⅜×65'-0½" (C759)

Diaph. Matl. (C763) cut
1-16WF45×1'-10⅜-m
1-Fill-7×½×1'-10-p

Diaph. Matl.
1-16WF-h
1-Fill-K

2-Ls 4×4×⅜×65'-0½" (C759)
2-PL 26×15/16×65'-0¼" (C760)
2-PL 26×½×65'-0¼" (C1041)

Note to Shop: Tack weld loose edges of Cover.

Note: Ream to 1⅛" in yard after truss has been disassembled to insure an exact angle of 90° between ℄ of Vertical & bott. of casting.

Note: Bevel given with respect to W.L. on Top Chord.

W.L. on Top Chord.

Section-CC

Aluminum Paint

Manhole Spacing

Note to Shop: All edges of Manholes to be ground smooth

One-Post-L40-U40-N (Right) One-Post-L40-U40-S (Left)

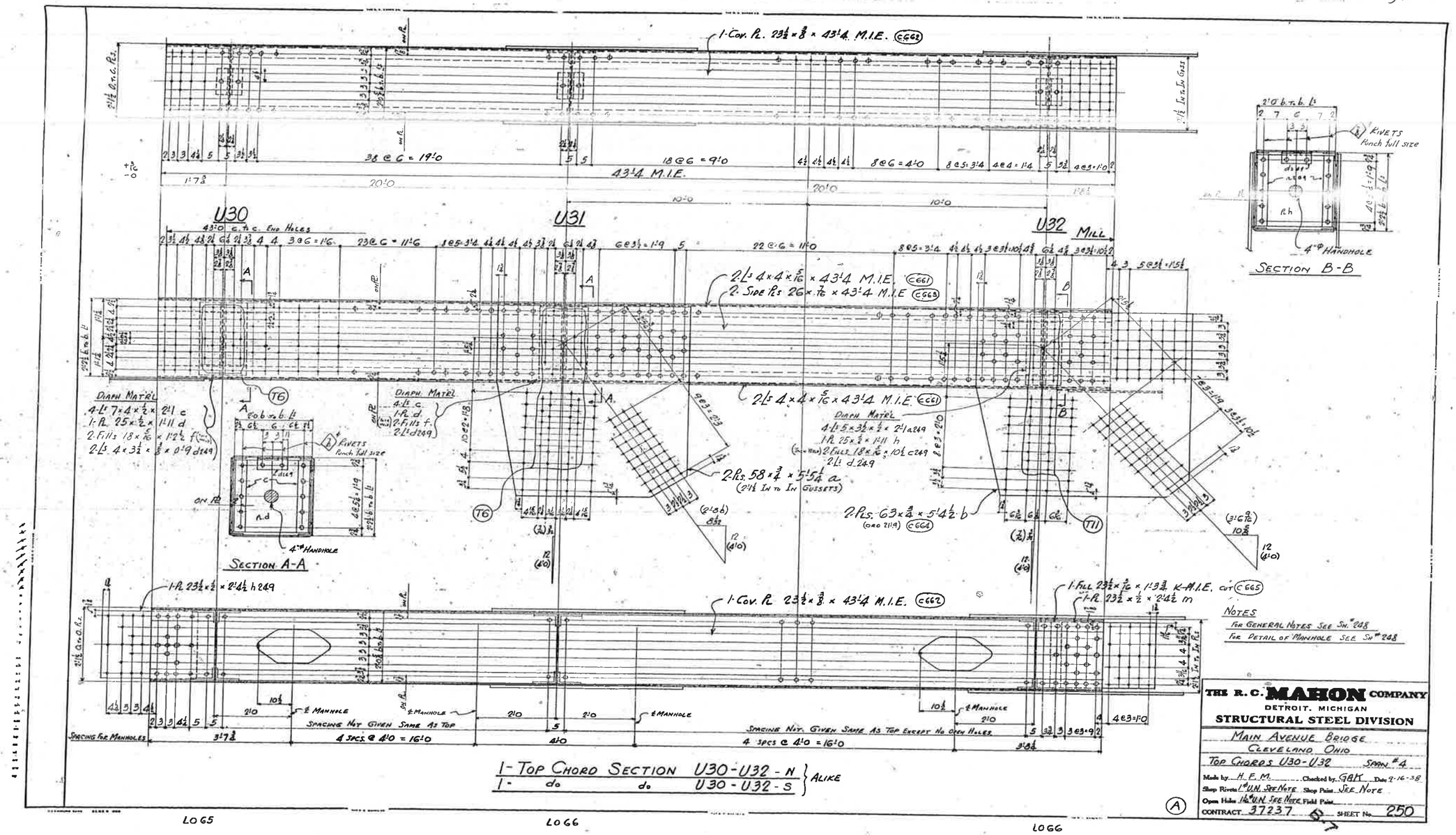
L083 L070

L40 N&S
U40 N&S

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

MAIN AVENUE BRIDGE
CLEVELAND OHIO
POST L40-U40 - SPAN No. 4

Made by F.E.M. Checked by W.H. Date 9-20-30
Shop Rivets 1¾" U.N. Open Holes 1⅛" Unless Noted Shop Paint See Notes
Open Holes See Notes Field Paint
CONTRACT 37237 SHEET No. 274



1- Top Chord Section U30-U32-N } Alike
1- do do U30-U32-S

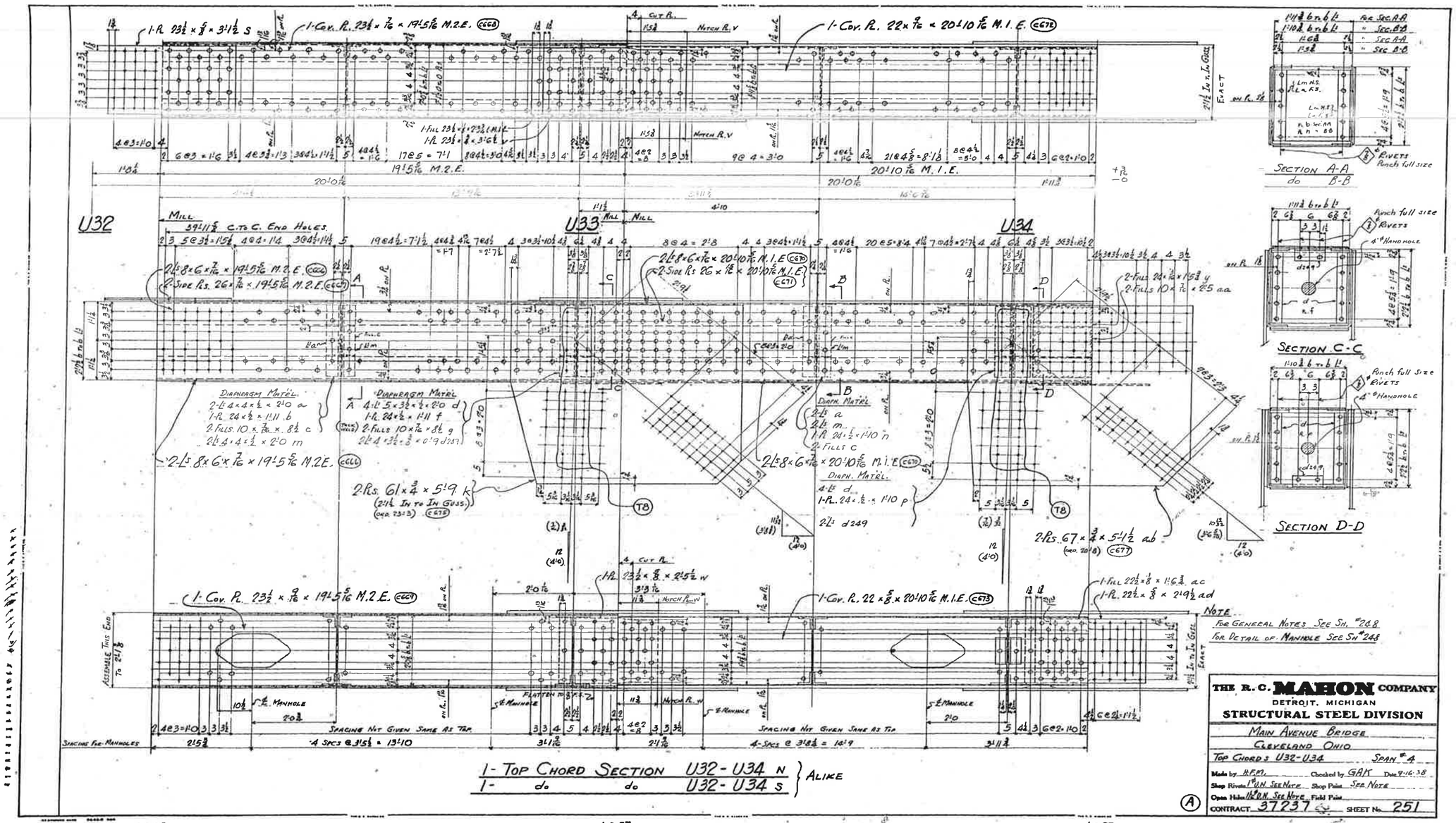
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland, Ohio

Top Chords U30-U32 Span #4

Made by H. E. M. Checked by GAK Date 9-16-38
Shop Rivets 1" U.N. See Note Shop Paint See Note
Open Holes 1⅛" U.N. See Note Field Paint
CONTRACT 37237 SHEET No. 250

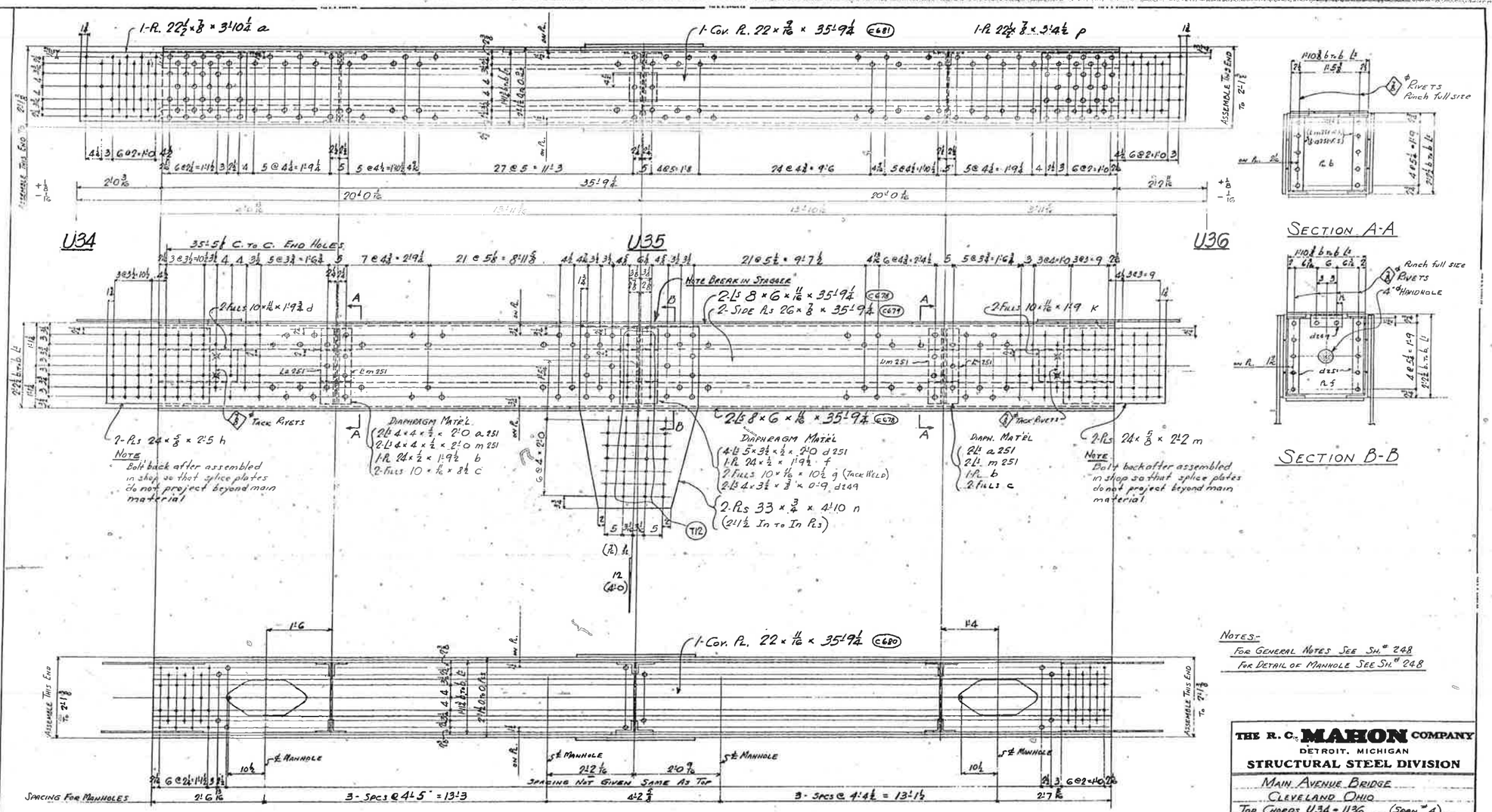
U31 N & S
U32 N & S



U33 N&S
U34 N&S

No SPLICE

U35 N & S



1 - Top Chord Section U34 - U36 N
1 - do do U34 - U36 S } Alike

Notes-
For General Notes See Sh. # 248
For Detail of Manhole See Sh. # 248

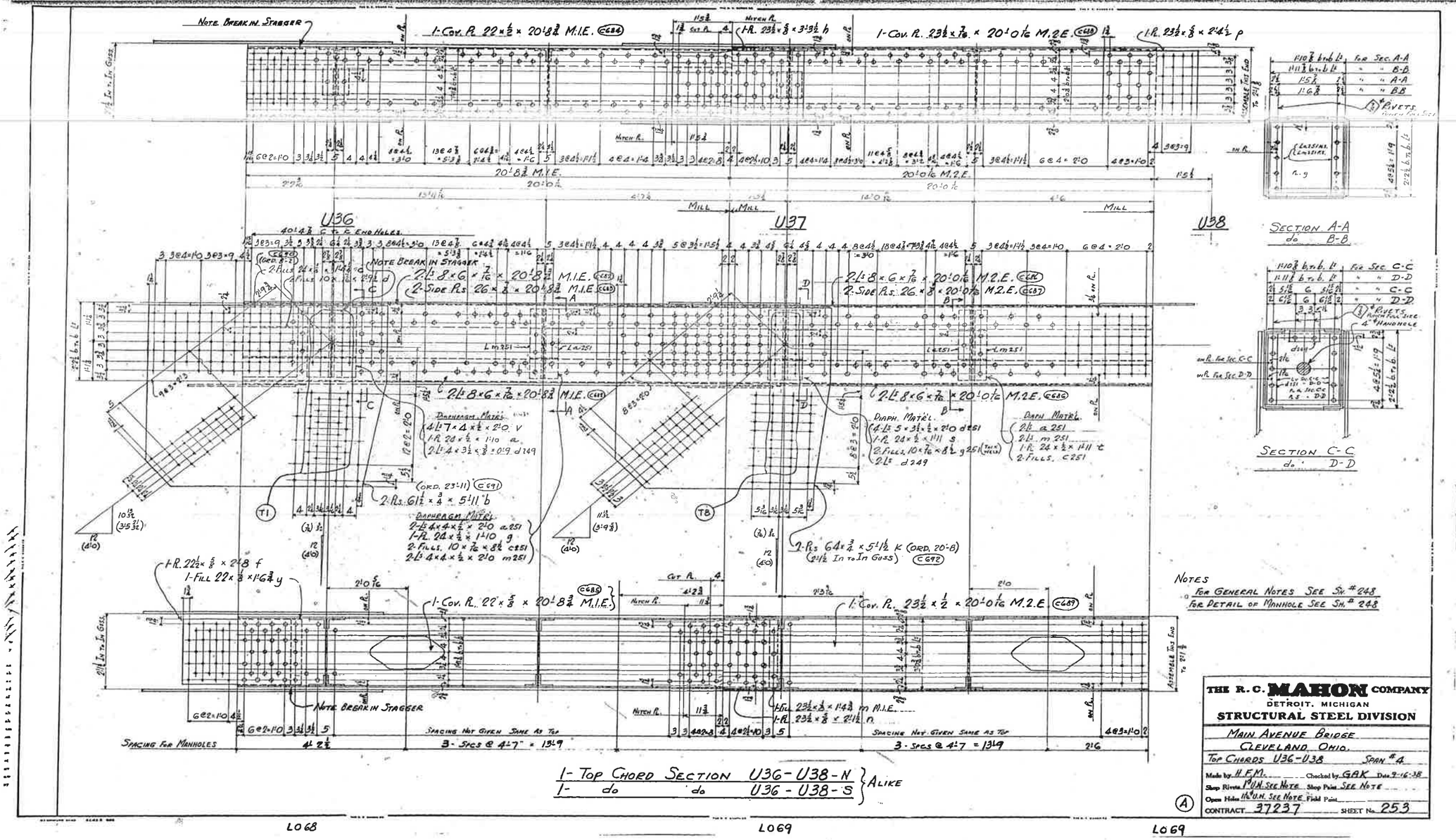
THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland Ohio
Top Chords U34 - U36 (Span. # 4)

Made by H.F.M. Checked by G.A.K. Date 9-16-38
Shop Rivets 7/8" U.N. See Note Shop Point Spr. Note
Open Holes 11/16" U.N. See Note Field Point
CONTRACT 37297 SHEET No. 252

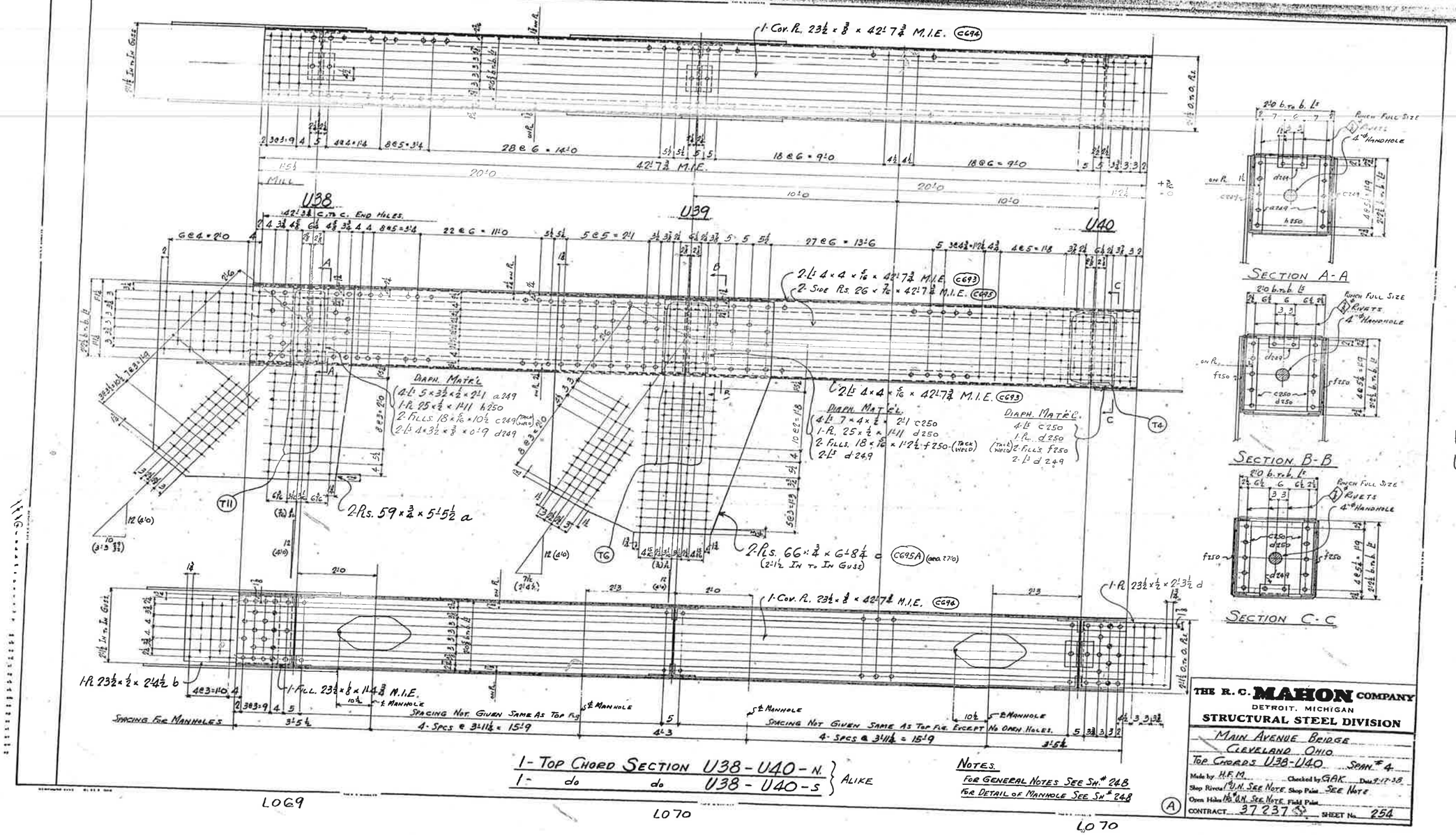
LOG 7 LOG 8 LOG 8

3
530



U36 N & S
U37 N & S

3
529



U38 N&S
U39 N&S

1-Top Chord Section U38-U40-N.
1- do do U38-U40-S } Alike

Notes.
For General Notes See Sh. # 248
For Detail of Manhole See Sh # 248

THE R. C. MAHON COMPANY
DETROIT, MICHIGAN
STRUCTURAL STEEL DIVISION

Main Avenue Bridge
Cleveland Ohio
Top Chords U38-U40 Span # 4

Made by H.F.M. Checked by G.A.K. Date 9-17-38
Shop Rivets 3/4" U.N. See Note Shop Paint See Note
Open Holes 13/16" U.N. See Note Field Paint
CONTRACT 37237 SHEET No. 254

L069 L070 L070