Revisions And Prints

7 33	Prints for Est
8 33	Prints for B.P.R.

+6.00%

800' V.C.

Sta. 4+19.62 El. 1107.05

Span. No.1 No.2 No.3 No.4 No.5 No.6 No.7 No.8 No.9 No.10

El. 1077.0

Datum El. 1070.0'

El. 1076.0±

El. 1076.75

El. 1076.75

ELEVATION

All piles to be treasated D.F. Length assumed to be 25' for estimating purposes only.

West Curb R=4000' Δ=5°20'38" T=186.67'

PCC West Curb Sta. 4+33.30

West Curb R=10020' Δ=3°07'08" T=272.79'

Exist Temp. Supp

℄ Mount Vernon Avenue

℄ R=10000'

El. 1095.88 El. 1096.49 El. 1098.06 El. 1099.62 El. 1102.16 El. 1104.69 El. 1107.00 El. 1108.44 El. 1110.79 El. 1113.00

Sta. 3+28.97 El. 1097.29

Sta. 3+09.42 El. 1096.12

Sta. 3+19.42 El. 1096.72

Sta. 3+45.42 El. 1098.26

Sta. 3+71.42 El. 1099.84

Sta. 4+13.67 El. 1102.37

Sta. 4+55.92 El. 1104.91

Sta. 4+84.92 El. 1106.63

Sta. 5+09.92 El. 1108.12

Sta. 5+61.67 El. 1110.88

Sta. 6+11.67 El. 1113.17

El. 1095.90 El. 1096.51 El. 1098.09 El. 1099.65 El. 1102.18 El. 1104.73 El. 1105.89 El. 1107.39 El. 1110.64 El. 1112.94

East Curb R=812.10'

East Curb R=9980'

PLAN

Bent

Footings of existing viaduct to be removed to at least 2'-0" below ground surface.

Span 6

New location of Track No.46, at approx. El. 1082.9 to secure std. 22' clearance.

New 8" Vit. Pipe sewer and manholes to be constructed. Const. by Santa Fe

59'-11⅝" to ℄ Bent No.10

Const. by Santa Fe

New 8" Sewer

Existing 8" Water Main

℄ Mount Vernon Avenue N.0°02'W

Existing 6" Water Main

3" Gas main to be abandoned

Test pile

Existing 12" Vit. Clay sewer, approx. 8' below ground line to be abandoned, from 2nd Street manhole to Bent No.9. Manhole at Bent No.9 to be removed, and three new manholes and sewer to be constructed as shown on this sheet and Sheet No.3 to connect to existing manhole at 2nd Street.

Associated Telephone Co. to relocate manhole and portions of telephone cable that interfere with footings.

Existing sewer manhole to be abandoned

Note: See Sheet No.8 for plan and details of South Abutment, Retaining Wall

See Sheet No.3 for details concerning relocation of 8" Water Main.

℄ South Abutment

℄ Bent No.1

℄ 3rd Street East

℄ Bent No.2

℄ Bent No.3

℄ 3rd Street West

PCC East Curb Sta. 3+66.49

℄ Bent No.4

℄ Bent No.5

℄ Bent No.6

℄ Track No.44

℄ Bent No.8

℄ Track No.42

℄ Track No.40

℄ Track No.38

℄ Bent No.9

℄ Track No.36

FOOTING PLAN

RHODE DEPARTMENT

GL&S 10-32 TYP. 8-33 GL&S 12-32 F-G-S 8-33-33 TYP. 9-33 Revised 9-34 drawn by GL&S F-34 H.D.S.

MOUNT VERNON AVENUE VIADUCT

GENERAL PLAN

SPANS NO. 1 TO NO. 9 INCL.

1"=5'-0"

54-26 C 15-91

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Exist Temp Support

Girder 2

Girder 4

LEGEND

12" → Indicates length and location of Cracks

BRIDGE DEPARTMENT

HDS

SPAN #1 · SPAN #2 · SPAN #3 · SPAN #4 · SPAN #5 · SPAN #6 · SPAN #7 · SPAN #8 · SPAN #9 · SPAN #10 · SPAN #11 · SPAN #12

Mt Vernon Ave

See Sheet #15 for details of rigid frame structure in spans #1, #2, #3.

Sta. 3+09.42 ℄ Viaduct

Working Line of Sta 3+11.42 intersecting top flange of girders 1'-8" below crown grade

℄ of Bearing ℄s & End Stiffener ℄s

End working points of all lateral bracing to be 1'3" from intersection of bent with ℄ of curb girder in all spans.

Note: Make cross frames parallel to bents in spans 4-5-6-12-13-14-17-20-21 and 22.

Note: All sidewalk beams to be 12 I's @ 5'8" as shimmed from R.R. stringers of existing viaduct unless otherwise noted. Sid beams girder new are 32 I's @ 5'8" in place of old 32 I's @ 5'8".

All longitudinal girders and beams in any span are parallel to the skirt chord of that span and spaced as shown. All longitudinal dimensions shown refer to distances measured along ℄s of flanges of girders or beams placed at grade and intersecting ℄ of bents at below crown elevations unless otherwise noted: All certain beams in span #7 are 10 or 11 below crown grade and are so noted: (-10) (-11)

HOUNT VERNON AVENUE VIADUCT

STEEL FRAMING PLAN SOUTH HALF

SCALE 1"=10'-0" FILE NO

BRIDGE NO. DRAWING NO

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Bent 7

Old girder Mark G5B

Old girder Mark G4B

Old girder Mark G5A

Old girder Mark G14A7

Old girder Mark G12B

12"

Girder 2

Girder 4

5"

Exist Temp Support

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Roads for Widening

℄ Roadway

Varies

11⅛" Slab

10½" Slab.

Note: See Sheet No. 21 for note on depth of slab.

8" 2'-4" long @ 12" ctrs.

½" ø Spacers

¾" ø "b" Bars @ 19⅛" ctrs, hooked.

¾" ø "b1" Bars @ 19⅛" ctrs, bent, hooked.

¾" ø "c" Bars @ 19⅛" ctrs.

¾" ø "d" Bars @ 19⅛" ctrs, hooked.

½" ø Spacers

3" x 2½" x ⅝" Clip Ls on approx. 7'-6" ctrs.

Special 2d backing

¾" Exp. jt. with exp. jt. filler.

3" x 2½" x ⅝" Clip Ls on approx. 7'-6" ctrs.

Slope 1½" per ft.

12" I 31.8 lb. to be remodeled from str. of existing structure

⅞" ø Bars 1'-10" y. @ 12" ctrs

All plates ⅜"

1:1 slope

1'-2" At ends of girder

1'-2" at ends of girder

3" x 3" x ⅜" L

Cut Girders

Reinforcing

R = 3'-10"

2-3" x 3" x ⅜" Lg

Varies See Sheet No. 21

Varies See Sheet No. 21

Curb girder for Spans Nos 4,5,6,20 & 21.

SPAN NO 22
OLD STEEL

Note: See sheet no 25 for bracket and cross frame connection details

42' AND 60' SPANS NOS 4,5,6,12,13,14,15,20 & 21

Showing Old Girders 4'-3¼ Deep Reinforced With Plates and New Girders 4'-8" Deep.
See sheets nos 17 and 18 for location of old and new girders, also see sh # 25 for details of bracket and cross frame connections

— September 1, 1933

BRIDGE DEPARTMENT

HDS

1'-0" 3'-6" 20'-0"

Note: Reinforcing steel similar to that shown above.

℄ Roadway

Cross-Frame Details at ℄ of 90' Span

Cross Frame Details at 3rd & 6th Panels in 90' Span

12⅛" Slab

3" x 2½" x ⅝" Clip Ls on approx. 7'-6" ctrs.

1'-2" At ends of girders below crown of roadway

Diaphram @ ℄ of 90' Span only

3" x 2½" x ⅝" Clip Ls on approx. 7'-6" ctrs.

All plates ⅜"

1L 3" x 3" x ⅜"

2L 3" x 3" x ⅜"

⅜" Pl.

Bent Pl.

ELEVATION Ⓐ-Ⓐ

Connection shown is to support steel bracket furnished by Santa Fe by for their main 6" steam line between bents 19 to 16 incl. along west side of viaduct.

ELEVATION

Note: Bent plate details shown are typical for bracing as shown in Elevation

60' SPANS - NOS. 10, 16 & 17.
NEW STEEL

90' SPAN - NO. 11
NEW STEEL

MOUNTED ON A

TYPICAL SECTION

C-2-109

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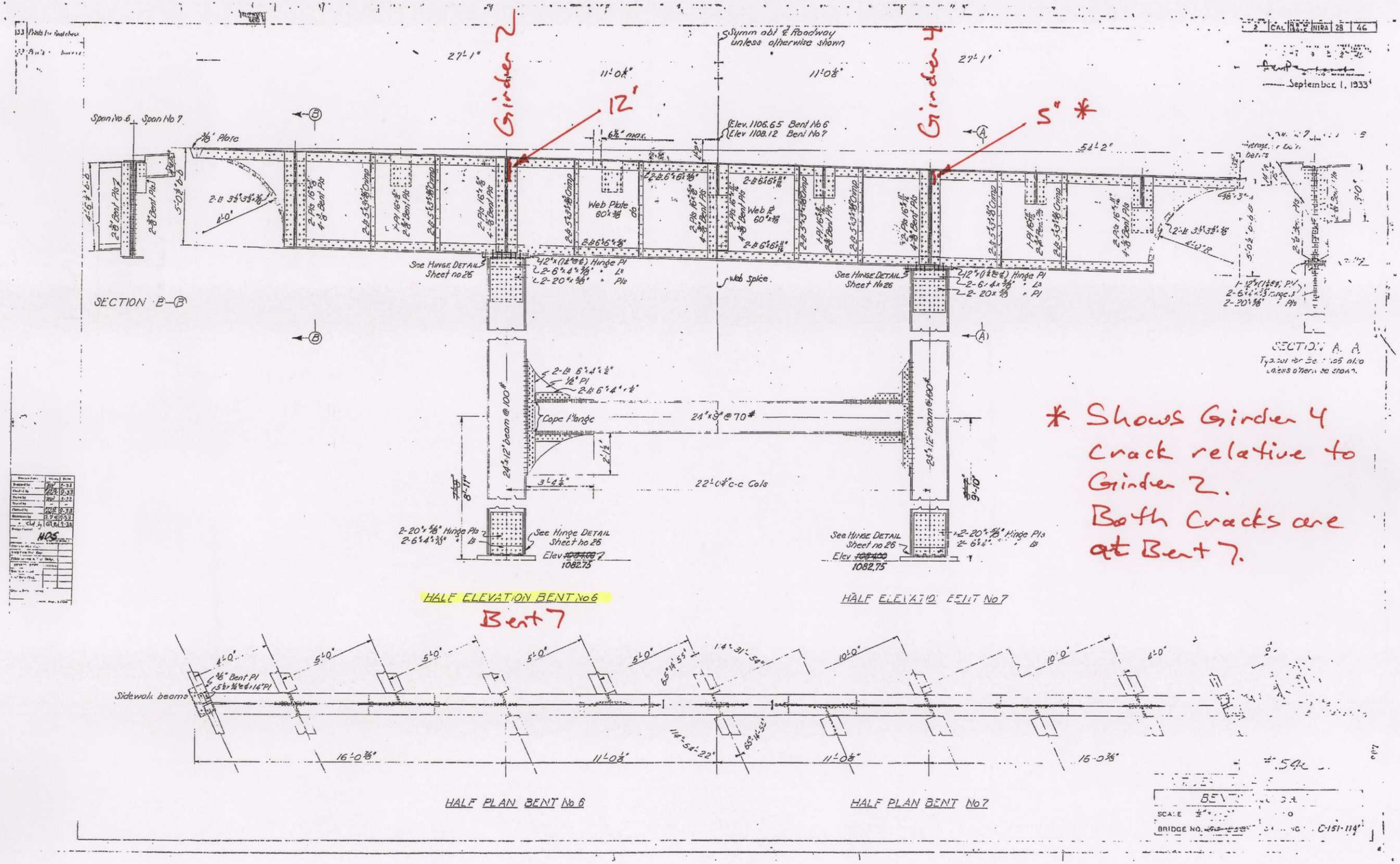

* Shows Girder 4 Crack relative to Girder 2. Both Cracks are at Bent 7.

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Slope Distance 42'-3⅜"

41'-9⅞" ℄ of bearing to ℄ Cross Girder

41'-0⅜"

14'-2⅜"

12'-7⅛"

Reinforce with 2 Cov Pls 8"x½"x26'-0" on all girders except G 15B and G 1B Spans #15 and G 1A and G 30A Spans #21

Weld ⅜"x2" Fw @ 6" ctrs

⅜"x8" Fw

⅜"x8" Fw

See sheet nos 17a 3

September 1, 1933

Dwg 9345 9 T C 25-15

6'-4" ℄ roadway

6½"

4'-1'-0"

¾" Exp Jt Fill with exp material

15℄ @ 33.9"

New Pl. 8"x½"x 2'-3½" (2 Pls 23'-3")

New sole pl. Existing sole plate to be removed (all girders)

See sheet no 35 for new bearing details

9½"

℄ Bent No 1

New Stiffener 2 Pls 3"x½" & 1 Pl 3"x⅜" Fw @ 6" ctrs

Cross Frame 2 Pls 3"x½" & 1 Pl 3"x⅜" Fw @ 6" ctrs

New Stiffener 2 Pls 3"x½" & 1 Pl 3"x⅜" Fw held 3" long at 6" ctrs

Present Stiffener L 3½"x3½"x½" & Rivets

New Stiffener Pls

Cross Frame

Leave open

New Stiffener Pls

Present L Reinforcement

New Stiffener Pls

Cross Frame

New Stiffener Pls

Present L Reinforcement

New Stiffener Pls

2 L 6"x6"x⅝"

Web Pl ⅝"x54"

2 L 6"x6"x⅝"

Leave open

Note: For size of connection pls or ℄ see BENT DETAILS

℄ Bent No 5

See note at left

Knock out present rivets shown ●. Weld 4"x⅜"x 41'-5⅜" pl on F.B. for Cross FRAME connection. Replace rivets except where otherwise shown. Note: This revision for Cross FRAME connection is typical for all old girders except G-10 in Span #22 for which see revision note below.

Note: Cut ends of girders as required for clearance

New notes thus → Old holes thus ●

Note: Cut ends of girders as required for clearance, Old girder working PLES to be cut as determined by Cross FRAME location

Note: Cut ends of girders as required for length and clearance

Note: End connections may be machined to suit conver ges of fabricators

ELEVATION SPAN No 4

Typical for all 42' girder spans except as noted on sheets nos 17 & 18.

All girders with 6-6½" ℄ F.A. Reinforce with 2 Cov Pls 11"x⅜"x42'-0"

⅜"x28" Fw

Weld ⅜"x2" Fw @ 6" ctrs.

All girders with 6-6½" ℄ F.A. Reinforce with 2 Cov Pls 8"x½"x40'-0"

⅜"x8" Fw

Weld ⅜"x2" Fw @ 6" ctrs

15℄ @ 0"

℄ Girder

*Sym. about ℄ except end connection

See sheets nos 17 and 18

2 New Stiffener Pls 3"x½" & ⅜"x2" Fw @ 6" ctrs

Leave open

New Stiffener Pls

Cross Frame

Leave open

New Stiffener Pls

New Stiffener Pls

Cross Frame

Chip between Sp pl. and angle before welding

⅜"x8" Fw both sides

Note: No web splice welding required for old girders Mark G, and G2

See note above

See note above

℄ Bent

Note: Cut ends of girder as required for clearance except girders G-1 and G-2 in span #15 which are to be cut at bolt ends so that cover plate is symmetrical about ℄ span.

HALF ELEVATION 60 FOOT GIRDERS

Typical for all 60' girders except as noted on sheet no 18 and shown on shop plans of old girders

Layout line ℄

1:8"

⅜"

Sta 13+23.42

Elev. 1165.02

15℄ @ 33.9"

Cross Frame

1'-6⅛" (See sheet #10. 6'-5" ℄ Abut

¾"

For details not shown see ELEVATION SPAN No 4 at bent #5.

SECTION AT NORTH ABUTMENT

These notes for Cross FRAME con

⅞" holes for Cross FRAME connection

New 4"x⅜" Pl ⅜"x3" Fw @ 6" ctrs staggered

Leave open

⅞"ø holes for Cross Frame connection

⅜"x3" Fw

Existing 32"x⅜" ⅜" ø

REVISION FOR CROSS FRAME CONNECTION

¾"x15" Fw

New 6"x⅛" Pl ⅜"x3" Fw @ 6" ctrs staggered

⅞"ø holes for BRACKET con

Existing 33"x⅜"x⅜" ø

WEST SIDE GIRDERS EAST SIDE GIRDERS

NEW SIDE PLATES AND ANGLES FOR BRACKET CONNECTION

WERE REQUIRED ONLY FOR

[illegible]

EFA-CC

MT. VERNON AVE VIADUCT

TYPICAL ELEVATIONS OLD STEEL

SCALE ½"=1'-0" | FED NO

BRIDGE NO. 54-355 | DRAWING NO C-151-11½

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