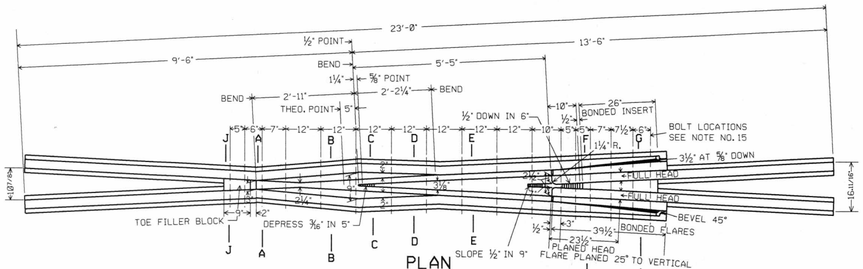
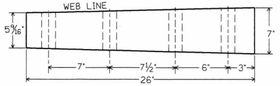
REVISIONS

B-June, 1978
C-Oct., 1980
D-May, 1986
E-May, 1987
F-Aug., 1991
G-Sept., 1994 (Redrawn)
H-Sept., 1995

FROG ANGLE = 5°-43'-29"

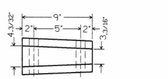




BONDED INSERT

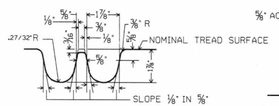
NOTES

1-This Plan is for use with Conrail Specification MW 180 for 136RE rail.
2-The 136RE rail shall be per the current Conrail Plan 71016.
3-All rails shall be fully Heat Treated or Head Hardened.
4-Rail ends shall not be beveled, except where shown.
5-Workmanship and materials shall be per current AREA Specifications.
6-Heavy wall casting shall be per current AREA Specifications.
7-Frog center casting shall be Explosion Hardened and done prior to assembly.
8-Casting shall be Radiographed for internal soundness.
9-Casting shall be Hi-Quality and to the internal soundness levels on the current Conrail Plan 74165.
10-All bolt holes in rails shall be chamfered 1/16".
11-When frog is to be used in bolted track, the first bolt hole is to be drilled in the field by Conrail.
12-The bolt holes in the heel end of the casting for heel rails, wing rails and fillers shall be cored 1 9/16" diameter. All other holes cored in the casting can be round or elongated.
13-Drilling of bolt holes in the toe end of the wing rails and both ends of the heel rails shall not be permitted through the stamping on a rail.
14-Frog bolts shall be square head, Hi-Tensile, heat treated steel, Grade 5, 1⅜" diameter with ASAH square nuts, headlocks, washers and AREA spring washers.
15-For bolt lengths see the current Conrail Plan 71501.
16-Frog bolts must be of proper length for each location throughout the frog. After torqueing of the bolt, between ½"-1¼" of the bolt should extent beyond the face of the nut. Burning or cutting the bolt to size will not be permitted.
17-Frog bolt nuts shall be tightened to 1650 Ft. Lbs. +/- 50 Ft. Lbs.
18-For the location of Swivel Shoulder Frog Plates see the current Conrail Plan 73185.
19-The weight of the frog is 4920 Lbs.
20-The Item Numbers are 01-332848 for standard length and 01-332830 for maintenance length.
21-Heel rail section of frog shall be glued using Allegheny Temprange Epoxy.

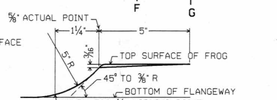


SPREADS SHOWN ARE ⅝" DOWN ON RAIL HEAD

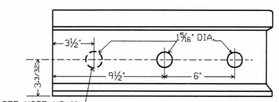
TOE FILLER BLOCK



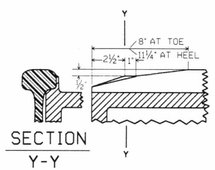
SECTION AT POINT



ELEVATION OF POINT

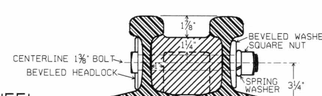


RAIL DRILLING

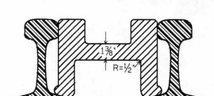


SECTION Y-Y

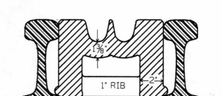
SECTION AT TOE AND HEEL END OF MANGANESE



SECTION A-A



SECTION B-B



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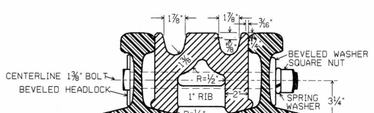

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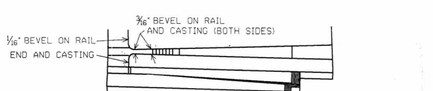
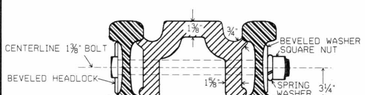
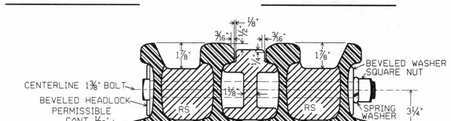


BEVEL DETAIL AT HEEL END OF CASTING



SECTION E-E



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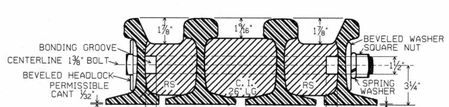
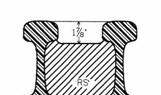
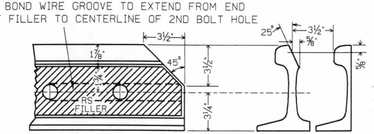


SECTION G-G



SECTION J-J

BOND WIRE GROOVE TO EXTEND FROM END OF FILLER TO CENTERLINE OF 2ND BOLT HOLE



BEVELED END OF WING RAIL

PLANING AT END OF WING RAIL

CONRAIL

74161-H

STANDARD

NO. 10 RAILBOUND MANGANESE STEEL FROG

136-RE

DECEMBER, 1977

DIR.- STANDARDS & TRACK ANALYSIS

CHIEF ENGINEER

FROGS 177684:3.1060, 245850:1.88600