

**MEMORANDUM****CONRAIL**

DATE April 3, 1981

TO Distribution

FROM

R. H. Smith *R.H. Smith*

750 Six Penn Center

SUBJECT

Conrail Standard Maintenance of Way Plans

PHONE

5796

Enclosed are copies of revised Conrail Standard Plans and Standard Plan Check List.

Revised Standard Plans:

71500-B Track Bolts, Nuts and Spring Washers  
 71502-B Replacement Bolts for S.G. Frogs  
 73062-C 60' Undercut Stock Rails  
 73155-B 11'-0" Straight Split Switch  
 73157-B 13'-0" Curved Split Switch  
 73167-C 16'-6" Straight Split Switch  
 73178-D 26'-0" Curved Split Switch  
 73179-C 39'-0" Curved Split Switch  
 73180-D Welded 16'-6" Straight Split Switch No. 8  
 73181-D Welded 16'-6" Straight Split Switch No. 10  
 73182-B Welded 26'-0" Curved Split Switch  
 73183-B Welded 39'-0" Curved Split Switch  
 73184-D No. 8 Welded Turnout  
 73185-C No. 10 Welded Turnout  
 73186-C No. 15 Welded Turnout  
 73187-C No. 20 Welded Turnout  
 73192-C No. 8 Bolted Turnout  
 73193-C No. 10 Bolted Turnout  
 73194-C No. 15 Bolted Turnout  
 73195-C No. 20 Bolted Turnout  
 73513-C Switch and Gage Plates 39'-0" Switch  
 73515-D Heel Block, Adjustable Rail Brace, Stop 132RE  
 73517-C Switch and Gage Plates 26'-0" Switch  
 73602-B Heel Block, Adjustable Rail Brace, Stop 119RE  
 73917-B Switch Target  
 73919-B Low Switch Target  
 74160-C No. 8 RBM Frog 132RE  
 74161-C No. 10 RBM Frog 132RE  
 74162-C No. 15 RBM Frog 132RE  
 74163-C No. 20 RBM Frog 132RE  
 78317-B Temporary Stop Sign  
 78400-B Yard Limit Sign  
 78404-C Temporary Speed Signs  
 692024-D Rail Section Dimensions and Drilling - Pages 2, 3, 4 and 7

To: Distribution

-2-

April 3, 1981

Subject: Conrail Standard Maintenance of Way Plans

Standard Plan Check List - 4/3/81:

The plans listed comprise a complete M of W Standard Plan Book. Original plans carry the letter suffix "A". Revisions are indicated alphabetically by the letter suffix. Date of each revision is noted in the upper left hand corner of the plan.

Attached to the check list is a set of Remarks sheets which describe by Note the revisions made to date on each plan.

The check list should be used to assure that you have a complete, and up to date, Standard Plan Book. Obsolete plans should be removed from the book and discarded. Check list and Remarks should be inserted in the Standard Plan Book.

We will issue revisions currently in the future and issue a check list annually.

Remarks

- Note 1 - Reference 2 revised from "on one side only" to read "on one side of such tracks only."
- Note 2 - Rev. B, 4-79  
Install bolts with heads in alternate position. Section of Allegheny Drop Forge Co. added. "Manufactured by Portec" deleted from title block. Huck fastener approved in lieu of A490 bolt in Allegheny Drop Forge Joint.
- Rev. C, 8-79  
Insulated "D" Bar changed to Bonded Joint Bar. "When spiking joint place head in reverse position" taken from beneath both section views and made Note 5.
- Note 3 - Bolt hole spacing of 6" on end of rail drilling corrected to 7".
- Note 4 - 7/8" x 5½" bolt changed to 7/8" x 5" with Account and Reference No. changed to 01-226347. Dimension "L" extended to under side of bolt head.
- Note 5 - Dimension "L" on Elliptical Neck extended to under side of bolt head.
- Note 6 - Notes 1-2-3 added. Dimension for 119 and 132 removed from bottom of Section A-A.
- Note 7 - Rev. B, 4-78  
Title block changed to indicate for 132RE rail.
- Rev. C, 3-79  
Bearing area on tie changed from 114.3 sq. in. to 110.17 sq. in.
- Note 8 - 132RE added to title block and elsewhere.
- Note 9 - Notes were rearranged and closure length dimensions added. 119RE added to title block. Sheet 2, which showed offsets for 119RE housed Switch was deleted, housed switches no longer used. On 73010-B to C revision Point of Switch to P. C. dimension changed from 19'-6-15/16" to 19'-7".
- Note 10 - Radius designation changed from outer rail to center line of track Note 2 revised.
- Note 11 - Rev. B, 3-80  
Inside radius, tangent distance and offsets changed.
- Rev. C, 5-80  
Note 2 revised to indicate fully heat treated rail.

Remarks

- Note 12 - Note 6 added indicating fully heat treated stock and switch rail.
- Note 13 - Note added indicating fully heat treated 132 lb. stock and switch rail. Note added indicating switch to be used only in Lap Turnout.
- Note 14 - Rev. B, 3-79  
Offsets for curved portion of stock rail removed and notes giving offset, rail and tie layout plan numbers put in same location. Tie spacing revised.
- 73167-A and 73189-A were the same, except one was for 140RE and the other for 132RE. They were combined into 73167-B and 73189-A was then designed to a #10 crossover plan, issued 9-10-79.
- Rev. C, 5-80  
Note added indicating stock and switch rails to be fully heat treated. 15' headblock tie eliminated.
- Note 15 - Offsets for curved portion of stock rail removed and notes giving offset, rail and tie layout plan numbers put in same location. Tie spacing revised.
- Note 16 - Rev. B, 3-79  
132RE added to title block. 60' stock rails replaced 39' stock rails. Added drilling for 132RE rail.
- Rev. C, 8-79  
In Bill of Material last item changed to read 4 altered standard tie plates instead of 4 Ft. plates.
- Rev. D, 5-80  
Note 2 changed to indicate stock and switch rails to be fully heat treated. 15' Headblock Tie eliminated.
- 73178-A and 73190-B were the same except one was for 140RE and the other for 132RE. They were combined into 73178-B and 73190-A was assigned to a #15 crossover plan, issued 9-10-79.
- Note 17 - Rev. B, 8-79  
Note added to leave 2 front holes on switch rail open in shipment for use by Conrail C&S Department.
- Rev. C, 5-80  
Note 2 changed to indicate stock and switch rail to be fully heat treated. 15' headblock tie eliminated.

Remarks

Rev. C, 5-80 (Cont.)

Plan 73179-A and 73191-B were the same except one was for 140RE and the other for 132RE. They were combined into Plan 73179-A and 73191-B was changed to 73191-A and assigned to #20 crossover plan issued 9-10-79.

Note 18 - Rev. B, 3-79

On Plan 73180-A for No. 8 T.O. radius behind floating heel block changed from 460.3717' to 443.81'.

On Plan 73181-A for No. 10 T.O. radius behind floating heel block changed from 722.80' to 704.611'.

Rev. C, 1-80

Added 3rd switch rod. Distance of vertical bend from heel of switch rail changed to 2'-3½" from end of rail.

Rev. D, 5-80

Note 8 changed to indicate stock and switch rails to be fully heat treated. Words "straight" and "curved" deleted from 27' RH or LH Switch Rail. Side planing added.

On Plan 73180 the dimension 2'-10-3/8" tangent from floating heel block to the P.C. changed to 2'-10½".

Note 19 - Note 8 changed to indicate stock and switch rails to be fully heat treated. Side planing added.

Note 20 - Rev. B, 8-78

Note 11 added. Notes under legend changed concerning rails to be furnished by manufacturer.

Rev. C, 1-80

Number of FT plates required corrected.

Rev. D, 5-80

Note 1 changed to indicate stock and switch rails to be fully heat treated and all other rails end hardened.

Note 21 - Rev. B, 8-78

Radius corrected on Plan 73185. Note 11 added. Notes under legend changed concerning rails to be furnished by manufacturer.

Rev. C, 5-80

Note 1 changed to indicate stock and switch rails to be fully heat treated and all other rails to be end hardened.

Note 22 - This number 73188-A was for 16'-6" switch for No. 8 or No. 10 T.O., housed for 132RE. Housed switches no longer used. Number reassigned to a No. 8 crossover tie layout. Issued on 9-10-79.

Remarks

- Note 23 - This number 73189-A was for a 16'-6" switch for No. 8 or No. 10 T.O., undercut, for 132RE. Plan 73167-A was same except for 140RE. On 4-6-79 Plan 73167-A was revised to 73167-B to include the 132RE. Number 73189-A was re-assigned to a No. 10 crossover tie layout and issued on 9-10-79.
- Note 24 - This number 73190-A was for a 26'-0" switch for No. 15 T.O., undercut, for 132RE Plan 73178-A was same except for 140RE. On 4-6-79 Plan 73178-A was revised to 73178-B to include the 132RE. Number 73190-A was reassigned to a No. 15 crossover tie layout and issued on 9-10-79.
- Note 25 - This number 73191-A was for a 39'-0" switch for No. 20 T.O., undercut, for 132RE. Plan 73179-A was same except for 140RE. On 4-6-79 Plan 73179-A was revised to 73179-B to include the 132RE. Number 73191-A was reassigned to No. 20 crossover tie layout and issued on 9-10-79.
- Note 26 - Rev. B, 10-79  
Note added that insulated joints must be ordered separately. Conrail Plan number 73189-( ) in first line of "Material included in Panel T.O., Panel Switch or Packaged Switch" changed to 73167-( ) on Plan 73193-A.  
  
Rev. C, 5-80  
Note 5 changed to indicate stock and switch rails to be fully heat treated and all other rails to be end hardened.
- Note 27 - Rev. B, 10-79  
Note added that insulated joints must be ordered separately. Conrail Plan number 73190-( ) in first line of "Material included in Panel or Packaged Switch" changed to 73178-( ).  
  
Rev. C, 5-80  
Note 5 added to indicate stock and switch rails to be fully heat treated; all other rails to be end hardened.
- Note 28 - Rev. B, 10-79  
Conrail Plan number 73191-( ) in first line of "Material Included in Panel or Packaged Switch" changed to 73179-( ).  
  
Rev. C, 5-80  
Note 5 changed to indicate stock and switch rails to be fully heat treated and all other rails to be end hardened. Reference number for O-G Plate changed to same as for 26'-0" Switch 01-504024.
- Note 29 - On Plan 73196-A Radius changed from 443.6801', to 443.808'.  
On Plan 73197-A Radius changed from 704.5501 to 704.611'.

Remarks

- Note 30 - Plates 3H-4H and 5H Eliminated. Replaced with SH Plates (under heel of switch). Note 2 changed to indicate this change.
- Note 31 - Rev. B, 1-78  
Title block changed to include 132RE rail.
- Rev. C, 3-80  
OG-1G and 2G Plate dimensions (gage to gage and center to gage) added and revised. Same OG Plate can be used on either 26' or 39' switch.
- Note 32 - Rev. B, 1-78  
Title block changed to include 132RE rail.
- Rev. C, 3-80  
Note 4 added. Serration length changed from 7" to 8". Mounting hole in clip changed from 1-1/16" dia. to 1-7/16" dia. 3-5/8" dimension on clip changed to 3 1/2".
- Note 33 - Rev. B, 1-78  
132RE added to title block.
- Rev. C, 8-78  
Heel block dimensions added. Length of shoulder bolt changed from 13 1/2" to 13-3/4".
- Rev. D, 5-80  
Shoulder bolt changed from 13-3/4" to 13 1/2".
- Note 34 - 132RE added to title block. "X" dimension for drilling rods for 132RE added to table.
- Note 35 - Cotter pin hole changed 5/16" dia.
- Note 36 - Sheet 1 of 2  
Note added for location of switch stands. Section C-C of target adapter removed. Target adapter changed to target support. Top view of target support on left deleted.
- Sheet 2 of 2  
"Model 50-B" added under Target Adapter. "For Models 50-A and 50-B" added after Throw Lever.
- Note 37 - Note No. 5 added. Smutco No. 1 changed to Oakite 33. Proper manufacturer's description of Scotchlite for Targets added.
- Note 38 - 132RE added to title block and to the notes. 132RE drilling added.

Remarks

- Note 39 - Note 4 revised. Frog plate requirements revised.
- Note 40 - Reference to groove in filler block as an alternate at Section G-G deleted.
- Note 41 - Rev. B, 6-78  
On Plan 74160-A Section J-J revised to indicate depth of groove for bonding.  
  
On Plan 74161-A Section F-F revised to indicate depth of groove for bonding.  
  
Rev. C, 10-80  
Note 6 added indicating casting to be Explosive Depth Hardened Quantity of FT-23 plates changed from 4 to 6 and FT-27 changed from 12 to 10.
- Note 42 - Rev. B, 6-78  
Reference to groove in filler block as an alternate in Section G-G (Plan 74162-A) and Section J-J (Plan 74163-A) deleted.  
  
Rev. C, 10-80  
Note 6 added indicating casting to be Explosive Depth Hardened. Wall thickness changed to 1½" on various sections and vertical rib added to Section F-F (Plan 74162-C) and H-H (Plan 74163-C).
- Note 43 - All references to thickness of sign plate changed from 0.125" to 0.081".
- Note 44 - Rev. B, 1-80  
Approach speed sign changed from Figure A-1 to A. Speed limit sign changed from Figure B-1 to C. Resume speed sign changed from Figure C-1 to D. Approach Speed Sign Figure D changed to Diverting Approach Speed Sign Figure B.  
  
Rev. C, 10-80  
Sign plate thickness changed from 0.125" to 0.081".
- Note 45 - Sign plate thickness changed from 0.125" to 0.081". Note 5 added. Black Disc and Border added. Bottom bolt height changed from 2-11/16" to 1-11/16".
- Note 46 - Rev. B, 3-79  
Prescribed bolt sizes for each rail section and rail drilling added. Pages 1 through 7.  
  
Rev. C, 6-79  
Notes and catalog references for prescribed bolts added to Page 7.



Remarks

Note 46 - Rev. D, 9-80

Bolt size changed from 7/8" x 5½" to 7/8" x 5" for  
following rail sections:

Page 2 - RDG 90# ASCE, NYNH&H 100#, NYC 100# DY

Page 3 - NYC 105# DY, NYNH&H 100#.

Page 4 - NYC 115#DY, NYC 127# DY

Page 7 - Catalog reference changed to 01-226347