Track Standards Bulletin #6

Various Sections

4 November 2021 Bulletin No. 006

REVISED

Refer to Section 2 and add definition 62 and renumber accordingly:

62. Rail Profile Irregularity - Physical imperfections, such as scuffs, nicks, gouges, scrapes, cuts, scars, impact marks, or other imperfections across the entire rail profile that may negatively affect the lifecycle and overall asset performance.

Refer to Section 4.2 and add

12. New rail and special track components shall be free from rail profile irregularities.

Refer to Section 4.5.13 and revise to read:

13. Where rail end mismatch exceeds 1/8" (3 mm) on the top or the gauge side of a rail joint, it shall be repaired promptly by grinding, welding or replacement of the rail. Until such time as these repairs are made, movements over the mismatch shall not exceed the speed for the appropriate class of track, as prescribed by Table C - Appendix G

Refer to Section 4.5.13 and delete Table 7.

Refer to Section 4.14.10 and revise to read:

10. Extra care must be taken on Direct Fixation Track on structures when a broken rail is found. The gap measurement must be provided to the Manager of Track Infrastructure - Operations. Destressing must occur per Track Standards Section 4.9.

Refer to Section 9.1.14 and revise to read:

14. On main track where the quantities of defective ties approach the limits prescribed by this section, or meet the cumulative quantities below, consideration will be given for installation by mechanised production gang.
    a. Cumulative defective track tie quantities of 15,000 per track in a subdivision

b. Cumulative defective track tie quantities of 30,000 in a multiple track subdivision
c. Cumulative defective track tie quantities of 50,000 in multiple subdivisions

Refer to Section 9.2.2 and revise to read:

8. Transition ties must extend far enough to ensure that any rail joint, including bonded insulated joints, are placed on the same composition of tie and the rail joint is separated from another tie composition by at least four track ties.
    a. In all combinations cited in Section 9.2, the timber transition tie of the greatest length shall be placed adjacent to the infrastructure with the greater unfrozen track modulus (TM). Typical approximate track modulus values are:
        i. Wood and steel tie track, after tamping TM = 1,000 psi
        ii. Wood and steel tie track, compacted by traffic TM = 3,000 psi
        iii. Plastic composite-tie track, compacted by traffic TM = 3,000 psi
        iv. Concrete-tie track, compacted by traffic TM = 6,000 psi
        v. Direct fixation track, TM = 9,000+ psi

Refer to Section 9.2.8 and revise to read:

9. Where steel ties adjoin concrete ties a set of approved transition ties must be installed. This set consists of four 9 foot (2.8m) ties, four 10 foot (3.1 m) ties, and four 11 foot (3.4m) ties spaced twenty inches (508 mm) apart.

Refer to Section 9.2 and delete 9.2.9. Renumber remaining Section 9.2 accordingly.

Refer to Section 10.4.8 and add subsection "a" as follows:

a. Cedar or Treated hardwood timber tie plugs may be used in temporary applications or as directed and approved by the CM Senior Manager of Track & Structures.

Refer to Section 16.2.2 and move 2.a, and 2.b to 1.e.ii and 1.e.iii. Renumber remaining Section 16.2 accordingly. Revise Section 16.2.1.e to read:

1. Gauge
    e. Where gauge is found to be less than 56¼ in. (1422 mm):
        i. A class 5 speed restriction must be placed;
        ii. If change in gauge over a distance of 31 ft. (9.5 m) or less on either side of the narrow gauge defect exceeds ½ in. (13 mm) a class 3 speed restriction must be placed

iii. If change in gauge is found over a distance of 20 ft. (6.1 m) or less on either side of the narrow gauge defect exceeds 1½ in. (38 mm) a class 1 speed restriction must be placed

Refer to Section 18.2 and delete 18.2.2 and 18.2.3.

Refer to Section 18.5.6 and delete a, b and c. replace with:

a. Field validation of all loaded gauge values identified must be done using an approved hydraulic pressure tester capable of applying at least 4000 psi, and in no case greater than 5000 psi, of horizontal load.

Refer to Section 19.4.10 and revise subsection "e" to read:

e. A maximum of 4 in. (102 mm) below the balance elevation for GO Trains, VIA trains and UP DMU's (GO Transit and VIA are exempt from the Transport Canada rule in item d.);

Refer to Section 19.4.27 and revise to read:

27. The minimum spiral length between parts of a compound curve will be the greater of the two lengths calculated in Passenger Comfort (3) and Freight Torsion (4) equations identified in 19.4.23, where:
    a. In Passenger Comfort Equation (Equation 3), Eu will be modified to be the difference between the imbalance values of the two circular curves, and;
    b. In Freight Torsion Equation (Equation 4), Ea will be modified to be the difference between the superelevations on the two circular curves.

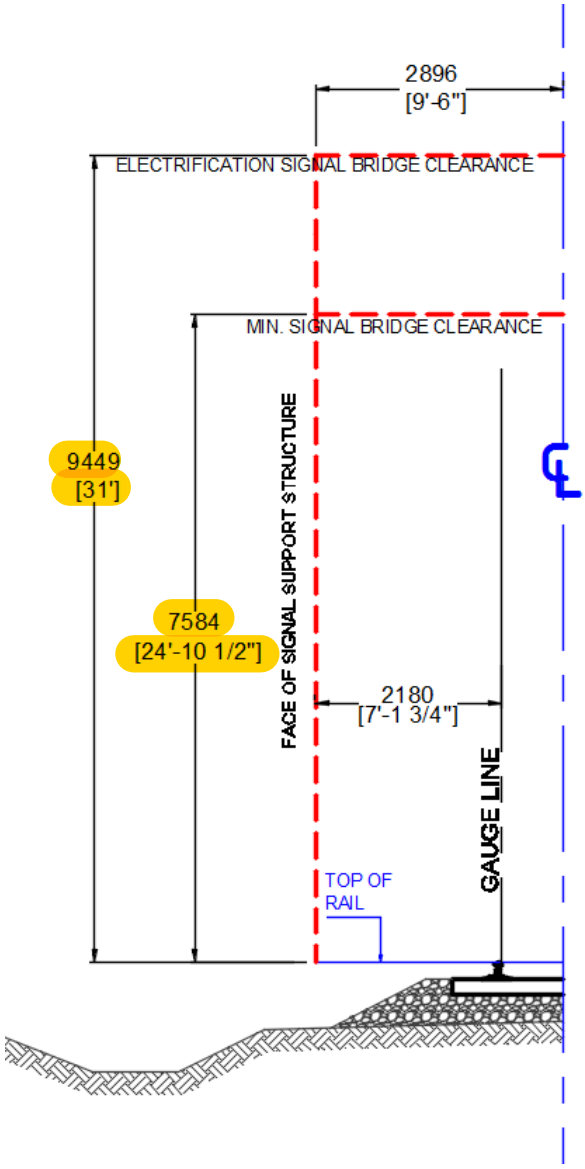
Refer to Appendix G – Rail Wear and rename to Rail Wear and Mismatch.

Refer to Appendix G – Rail Wear and Mismatch and relocate Table 7 from Section 4.5 to after Table B and re-label as Table C.

Refer to Appendix X Figure 42 and replace with:

Figure 42. Clearance Diagram for Signal and Electrification Structures

Note: For use with tangent track only. For curve correction, consult with the CM Sr. Manager of Track and Structures. Refer to Metrolinx General Guidelines for Design of Bridges and Structures for full details on design requirements. Horizontal clearances to signal bungalows shall be per the current approved SCP.



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These changes are effective immediately.

END

Signed:
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