



DESIGN DIRECTIVE

To: Distribution

From: Erik Stoothoff, P.E. *EJS*
Chief Engineer

Date: August 26, 2021

RE: Final Track Geometry Tolerance Inspections

This design directive is intended to consolidate, reiterate, supplement, and clarify the MBTA's final track geometry tolerance inspection requirements. In the event that conditions warrant deviation from this directive, a design waiver signed by the Chief Engineer is required.

OBJECTIVE

All new, reconstructed, and/or rehabilitated track shall undergo a final inspection in conformance with this Directive prior to acceptance in order to assure that track has been installed within the specified tolerances.

FINAL INSPECTION REQUIREMENTS

1. Final horizontal and vertical alignment, gauge, superelevation and cross level shall be within the tolerances specified in the contract documents. In order to determine the acceptability of finished track, the Contractor together with the Authority shall conduct a final inspection to establish that track construction is within specified tolerances.
2. Track deviations disclosed by inspection, which exceed tolerances as specified by the contract documents, shall be corrected by the Contractor at no additional cost to the Authority. Re-inspections shall be made by the Contractor and Authority to ensure that corrections have been made.
3. Final inspection shall include testing by an approved Contractor-furnished track geometry test car capable of testing gauge, cross level, left and right rail profiles, track alignment, twist, warp and superelevation. Test car shall be capable of measuring the parameters specified above with sufficient accuracy, at 1-foot increments, to establish that the track construction is within the specified tolerances.
4. Notify the Engineer one month in advance regarding the request for the scheduling of final track inspections.

5. The Contractor shall correct track deviations, as disclosed by final inspection, at no additional cost to the Authority.
6. The Contractor shall participate in any retesting, required as a result of corrections to work, at no additional cost to the Authority.