

SURFACE AND ALIGN RAILROAD TRACKS

**\*\*From Rockingham STP GMRC(1)**

- xx. DESCRIPTION. This work consists of surfacing and aligning railroad tracks at the locations indicated in the Plans and as deemed appropriate by the operating railroad's Superintendent of Maintenance-of-Way to establish appropriate alignment, and, where necessary, installing new Other Track Materials (OTM) to provide the appropriate level of service.
- xx. MATERIALS. If new materials are required to be installed they shall meet the requirements of the AREMA Manual as follows:
- (a) Rail, joint bars, track bolts, nuts, and washers shall meet the requirements of Chapter 4 - Rail, Part 1 "Design" and Part 2 "Specifications".
  - (b) Tie plates shall meet the requirements of Chapter 5 - Track, Part 1 "Tie Plates".
  - (c) Track spikes shall meet the requirements of Chapter 5 - Track, Part 2 "Track Spikes".
  - (d) Rail anchors shall meet the requirements of Chapter 5 - Track, Part 7 "Rail Anchors".
  - (e) Tie plugs shall meet the requirements of Chapter 30 - Ties, Part 1, Section 5.
- xx. GENERAL REQUIREMENTS. The work shall conform to requirements of AREMA specifications for all track construction.
- xx. SURFACE AND ALIGNMENT. The ballast and track shall be properly prepared and completed in accordance with the specifications before resetting the existing track.

If additional rail length is required to compensate for excessive gaps resulting from the track raise, then the rail and joint bars used for the added rail section shall be new 115# RE. No rail less than 19'-6" is to be installed in the track. Minimum stagger shall be 18 feet. Any short rail sections added to the track shall be removed so as to ensure the minimum number of rail joints.

Surface and align track to achieve horizontal and vertical alignment as required by the operating railroad's Superintendent of Maintenance-of-Way.

Initial surfacing and aligning shall be performed to bring track geometry to within one inch of final profile and to within one inch of final alignment prior to thermal adjustment. Surface and align track by a method which will prevent undue bending of rail and damage to rail fastening assemblies.

Surface and align track only after cribs are filled with ballast.

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The amount of any track lift shall neither exceed three inches nor endanger horizontal and vertical stability of track.

Restore ties pulled loose during surfacing to full bearing against rail and properly secure them.

Final surfacing and aligning of track shall be completed after track has been initially surfaced and aligned, rail has been adjusted for thermal expansion, and track has been fully assembled and clipped.

Final surfacing and aligning shall bring track to final grade and alignment conforming to surface tolerances.

Track tamper shall be a dynamic vibratory type. Tamping of the track during surfacing operations shall be in accordance with AREMA Chapter 5 - Track, Part 5.7. Tamping will be performed after each track lift.

Track liner shall be a fully automatic model capable of determining existing curve data, computing new values for optimum curve value, and lining track to the new values without disturbing track surface. The machine shall be capable of producing a tape or graph showing existing and proposed values and values approved by the Engineer.

- xx. INSPECTION. Final horizontal and vertical alignment shall be within the tolerances specified by the operating railroad's Superintendent of Maintenance-of-Way. Finished track shall be accepted by the operating railroad's Superintendent of Maintenance-of-Way.
- xx. TIE PLATES. All damaged tie plates shall be removed and will become the property of the Contractor. The material shall be removed from the project limits and disposed of properly and to the satisfaction of the Engineer.
- xx. TRACK SPIKES. All damaged spikes shall be removed and will become the property of the Contractor. The material shall be removed from the project limits and disposed of properly and to the satisfaction of the Engineer.
- xx. RAIL ANCHORS. All damaged rail anchors shall be removed and will become the property of the Contractor. The material shall be removed from the project limits and disposed of properly and to the satisfaction of the Engineer.
- xx. TIE PLUGS. Tie plugs shall be installed in existing spike holes on any existing tie prior to the tie being re-spiked.
- xx. METHOD OF MEASUREMENT. The quantity of Special Provision (Surface and Align Railroad Tracks) to be measured for payment will be on a lump sum basis in the complete and accepted work.
- xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (Surface and Align Railroad Tracks) will be paid for at the Contract lump sum price. Payment will be full compensation for fabricating and installing the materials specified, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work. Any required timber cross ties, track spikes, tie plates, rail splices, joint bars, bolts, washers, and nuts will not be paid for separately

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but will be considered incidental to Special Provision (Surface and Align Railroad Tracks).

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.645 Special Provision (Surface and Align Railroad Tracks)	Lump Sum