

## RAIL ELEMENTS AND REQUIREMENTS FOR THEM

*Barotov Ashurali Ixtiyor ugli*  
*Tashkent State Ttransport University*

*Nurillayev Shahobiddin Supkhonovich*  
*University Of New Innovations*

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### Abstract

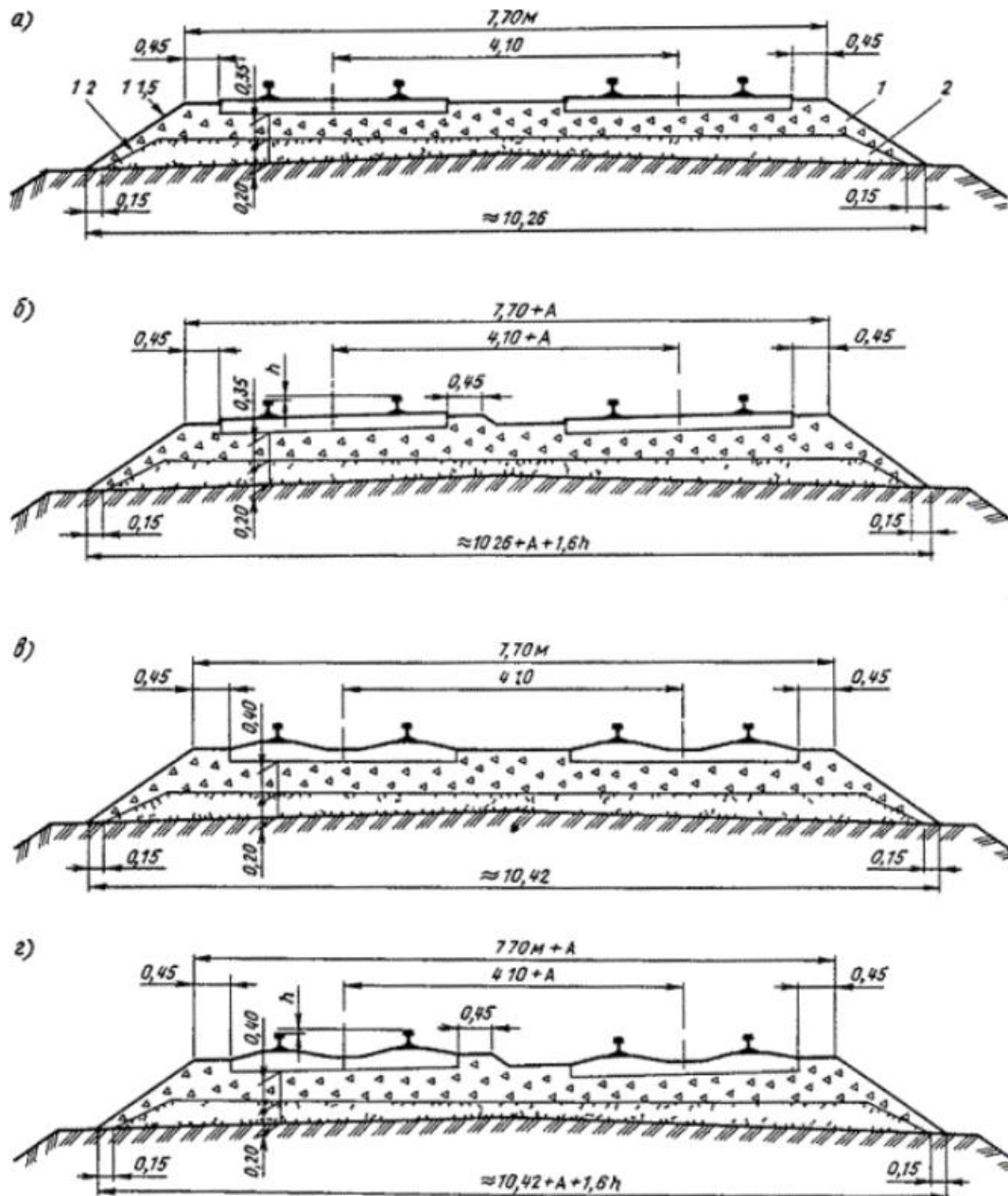
this article provides information about the elements of the railway and the requests for them, as well as the results of the analysis.

**Keywords:** ballast, sleeper, rail, arrow conductor, bridge, Earth lift.

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The railway is a complex engineering facility, the maintenance and safe Organization of train traffic, the effectiveness of the use of technical means of Railways directly depends on its condition. The road economy of rail transport is made up of the railway itself, all its facilities, facilities and production departments and farm enterprises. Production departments and farm enterprises ensure the regular operation of Railways and carry out planning repairs. Road farming is one of the most important sectors of rail transport, with over 50% of the major vehicles on the railways and over 20% of the easement being taxed.

The railway is made up of oysters and superstructures. The undercarriage of the track consists of ground Polo and artificial structures (bridges, tonels, pipes, retaining walls, etc. The top of the track is made up of a layer of ballast, sleepers, rails, couplers, anti-slip devices, threaded conductors, Bridge and conductor bms sleepers. The Ballast layer receives the pressure through the sleepers and transmits it to the main pitch of the ground floor, softens the pressure unevenness and prevents the longitudinal and transverse displacement of the sleeper, ensuring the stability of the railway track. The sleepers accept the pressure through the rails and transfer it to the ballast layer, ensuring the mutual stable position of the rail tracks. The rails direct the wheels of the motion composition and transmit them to the sleepers, receiving their pressure. Rail couplers are used to attach them to interactions and secure them to sleepers. Anti-slip devices are used to keep rails and sleepers from slipping under the influence of the forces of The Walking train. Arrow conductors, on the other hand, serve to transfer the composition of the movement from one path to another. The requirements of the rules for the technical use of Railways for railway elements are as follows (tfq, paragraphs 24-36).



**Figure 1. Cross profiles of a ballast prism made of gravel on a sand cushion for a simple type of road structure on one-track plots:**

a, b-in straight lines and curves on wooden sleepers, respectively; c, d-the same on reinforced concrete sleepers; h-the height of the outer rail; 1-crushed stone; 2-sand

The upper width of the earthen mound should correspond to the upper structure of the road on the right plots. On existing lines, before rebuilding them, the width of the earthen mound should not be less than 5.5 m on single - track lines, on double - track lines - no less than 9.6 m; on Rocky and sizot wetlands, on single-track lines-no less than 5.0 m, on double-track lines-no less than 9.1 m. The minimum width of the bottom lifting edge should be 0.4 m on each side of the road. On curved plots with a radius of less than 2000 m, the earthen mound is expanded by the established norms. The upper width of the earthen mound for newly constructed railways and second roads must comply with the requirements of the building regulations and norms in force in the Republic of Uzbekistan. The bottom lift edge should be 0.5 m higher than the maximum height of the wave lift during strong wind times in water leaks. In straight plots as well as curvature with a radius of 350 m or greater, the nominal size of iron tracks measured at the inner limits of iron track heads would be 15-20 mm in width. In steeper Egri, the width of the Iron tracks should be as follows: in a radius from 349 to 300 m - 1530 mm; in reinforced concrete sleepers - 1520 mm; in a radius of 299 m and less - 1535 mm. On railway line sections and track-beam

tracks with complex unsubstituted tracks on straight track and curved track tracks with a radius greater than 650 m, the nominal size of the rail track width is mxs at to be 1524 mm. At the same time, the width of iron traces on sharp Egri from this is taken as follows: in a radius from 650 to 450 m - 1530 mm. At a radius from 449 to 350 m-1535 mm. At a radius of 349 m and less - 1540 mm. In straight and curved sections, deviations to the edge, which do not require elimination in the dimensions of iron tracks width, should not exceed -4 mm by narrowing, 8 mm by expansion, the speed of movement should not exceed -4 mm by narrowing in 50 km/h and less marked sections, no more than 10 mm by expansion. Deviations from the specified dimensions are eliminated in the order set by AJ. The width of the Iron tracks width less than 1512 mm and greater than 1548 mm is not allowed. The procedure for using a non-capricious Road on reinforced concrete sleepers laid before 1996 is determined by the Department of Road economy AJ. The road should be located at the same level as the upper part of the heads of both rail tracks. It is allowed to install the track of one rail higher than the other by 6 mm, according to the norms established by the relevant instructions of the JSC Road Management Department on the right-of-way plots. The content moving on the curved sections of the road is influenced by different forces . In order to counterbalance the effects of these forces, the outer rails on the curved plots are placed higher than the inner ones. On curved sections of the road, the radius of curvature and the loudness of the outer edge Trace, which depends on the speed of movement in it, is determined by the order of the chairman of the AJ, according to the instructions of the AJ. The outer track of the rails should not be taller than 150 mm. At the required time, the maximum elevation of the outer track of the rails on the curved sections of the main road can exceed 150 mm with the permission of the JSC. Deviations of rail tracks at the level of location in the grid and curved sections are determined by the AJ Road farm administration. The list of extremely large and responsible artificial structures, their control, as well as the procedure for controlling parts of the earthen mound, which are losing their shape in the engineering and geological conditions of the turn, is determined by the chairman of the AJ.

Artificial structures should be provided with firefighting tools according to the norms established by AJ and, if necessary, have the necessary facilities for examination. All bridges are classified by load capacity based on current accounting standards and related guidelines. Track gauges, defectoscope cars, defectoscope carts, defectoscope (defect checker) laboratories, bridge, underpass, track inspection, gabarite inspection, testing, repair-inspection-Gow suspension stations must be used on the tracks to control the condition of the track and structure. The periodicity of inspection of main roads with passenger cars is determined by the relevant instruction of the JSC, in which the route of passenger training running at a speed of more than 60 km/h must be checked at least twice a month. According to the rules for the technical use of Railways (tfq, points 17-19), all elements of the railway (earthen girders, high structures and artificial structures) must ensure safe and smooth movement of trains at the specified speed on this section in terms of strength, stability and condition. The location and equipment of the road distance, road car stations and other enterprises of the road economy, the railway, the structure and the construction of the train must ensure the practically dead-end volume of the movement, the necessary maintenance and repair work to carry out at specified speeds. Requirements for the construction of structures and devices, maintenance and use of the connection, which are not specified in these rules, are determined by their respective units in the AJ system.

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