

JTG

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Technical Specifications for Construction of Highway Subgrades

公路路基施工技术规范

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1 General provisions

This specification is made in order to raise the technical level of highway subgrade construction and to ensure the quality and the safety of the works.

It applies to the subgrade construction of new, rebuilt and widened highways of every

grade.

The highway subgrade shall meet the strength, the stability and the durability required by the design.

Subgrade construction shall comply with the national laws and regulations on construction works; a sound quality assurance system shall be set up, the responsibility for quality shall be defined and quality management shall be strengthened.

Subgrade construction shall comply with the national laws and regulations on work safety; a sound work safety management system shall be set up, safety responsibilities shall be defined, safety technical measures shall be drawn up, the safe operating procedures shall be strictly observed and the occupational health of the construction personnel shall be safeguarded.

Subgrade construction shall comply with the national laws and regulations on environmental protection: land shall be used sparingly, farmland shall be occupied as little as possible, pollution shall be reduced and the environment shall be protected. On completion, borrow pits and spoil sites shall be reinstated as required.

Reliable new techniques, new processes, new materials and new equipment shall be actively promoted and applied, and subgrade construction shall be standardised so as to raise the level of regularity and refinement.

In addition to this specification, subgrade construction shall also comply with the relevant current national and industry standards.

2 Terms and symbols

subgrade: strip-shaped structure built according to the position of the route and to defined technical requirements, which forms the foundation of the pavement and carries the traffic load transmitted by it.

roadbed: part of the subgrade within 0.8 m or 1.20 m below the pavement structural layers, divided into an upper and a lower roadbed. The upper roadbed is 0.3 m thick; the lower roadbed is 0.5 m thick on highways carrying light, medium and heavy traffic and 0.9 m thick on those carrying very heavy and extremely heavy traffic.

embankment: fill subgrade above the original ground. Structurally it is divided into an upper and a lower embankment: the upper embankment is the fill within 0.7 m below the roadbed, the lower embankment the fill below that.

cutting: subgrade excavated below the original ground.

high embankment: embankment whose maximum side slope height of fill exceeds 20 m.

steep slope embankment: embankment on ground sloping more steeply than 1:2.5.