

SCHEDULE-D

(See Clause 2.1)

Specifications and Standards

1. Construction

The Contractor shall comply with the Specifications and Standards set forth in Annex- I of this Schedule-D for construction of the Project Highway.

2. Design Standards

The Project Highway including Project Facilities shall conform to design requirements set out in the following documents:

Manual of Specifications and Standards for Four Laning of Highways (IRC: SP: 84-2019).

Annex - I
(Schedule-D)
Specifications and Standards for Construction

1. Specifications and Standards

All Materials, works and construction operations shall conform to the Manual of Specifications and Standards for Four-Laning of Highways (IRC: SP:84:2019), referred to as the Manual, and MORTH Specifications for Road and Bridge Works. Where the specification for a work is not given, Good Industry Practice shall be adopted to the satisfaction of the Authority's Engineer.

2. Deviations from the Specifications and Standards

(i) The terms "Concessionaire", "Independent Engineer" and "Concession Agreement" used in the Manual shall be deemed to be substituted by the terms "Contractor", "Authority's Engineer" and "Agreement" respectively.

(ii) Notwithstanding anything to the contrary contained in Paragraph 1 above, the following Specifications and Standards shall apply to the Project Highway, and for purposes of this Agreement, the aforesaid Specifications and Standards shall be deemed to be amended to the extent set forth below:

(iii) Note 1: Deviations from the aforesaid Specifications and Standards shall be listed out here. Such deviations shall be specified only if they are considered essential in view of project-specific requirements.

| Sl. No. | Clause No. Referred in the Manual | Provision as per manual | Deviation to Clause |
|---------|-----------------------------------|---|---|
| 1 | Section -2 Clause-2.1 | Geometric Design and general features: i) This section lays down the standards for geometric design and general features for four- lane divided carriageway. | The Geometric Design shall be as per the existing alignment except for new proposals mentioned in Schedule B. The new proposals mentioned in the Schedule B shall be as per Specifications and Standards mentioned in the Manual. |
| 2 | Section-2 Clause-2.12.2 | Width of Service Road: - Width of Service Road as per Fig.2.5/2.6 is 7.0/7.5 m.in rural & urban area respectively. | The width of Service/Slip Road shall be as specified in Schedule-B. |
| 3 | Section-2, Clause-2.13.1 | Entry/Exit arrangement The entry/ exit arrangement at grade separated structures with slip roads/service road shall be as shown in Fig 2.1A to 2.1 F | The entry/exit arrangement at grade separated structures, ramps and service road/slip roads shall be provided as mentioned in Schedule-B. |

| Sl. No. | Clause No. Referred in the Manual | Provision as per manual | Deviation to Clause |
|---------|-----------------------------------|--|--|
| 4 | Section-2, Clause-2.17 | Typical Cross-sections Typical cross-section of project highway are given in Fig. 2.2 to Fig 2.10 for various locations. | The existing carriageway, paved shoulder & earthen shoulder widths are to be retained. For new proposals the widths shall be as per Schedule-B & Drawings. |
| 5 | Section-3 Clause-3.4.6 | Lighting The Top & Underside of the grade separated structures and interchange area at the ground level up to 50m beyond the point from where flaring of the main carriageway takes place shall be provided with lighting. | The street lights shall be provided in the lengths and locations if given in Schedule-B. High Mast lights shall also be provided if mentioned in Schedule B. |
| 6 | Section – 5 Clause-5.9.7(iv) | Design of Pavement Overlay – Thickness of bituminous overlay for pavement strengthening shall not be less than 50 mm bituminous concrete. | (i). Overlay Thickness specified as per Schedule B |
| 7 | Section-7, Clause 7.3 & 7.9 | Width of Bridges and Grade Separated Structures | The width of the proposed Bridges and Grade Separated structures shall be as per Schedule-B and the GADs in Drawing Volume. |
| 8 | Section -9 Clause -9.1 | Traffic Control Devices/Road Safety Devices/Road Side Furniture: - Traffic Control Devices, Road Safety Devices and Road Side Furniture shall comprise of road signs, road markings, object markers, hazard markers, studs, delineators, attenuators, safety barriers, pedestrian guard rails, boundary stones, km stones, etc. Guidelines given in IRC:8, IRC:25, IRC:26, IRC:35, IRC:67, IRC:79, IRC:103 and Section 800 of MORTH Specifications shall be used for providing these items unless otherwise specified in this Section. | All the existing Traffic Control Devices/Road Safety Devices / Road Side Furniture are to be retained in place or shifted to location as per the standards if the same are in good condition in consultation with Authority/ Independent Engineer. All the damaged /missing Traffic Control Devices /Road Safety Devices / Road Side Furniture etc. during Construction and Operation and Maintenance period due to reasons like accidents, thefts, fire etc. are to be replaced as per the specifications and standards mentioned in the Manual. Requirement of provision of any new Traffic Control Devices / Road Safety Devices / Road Side Furniture during Construction and maintenance period shall |

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| | | | be as per the specifications and standards mentioned in the Manual. |
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