

Schedule - C

(See Clause 2.1)

Project Facilities

1. Project Facilities

The Contractor shall construct the Project Facilities in accordance with the provisions of this Agreement. Such Project Facilities shall include:

- (a) Toll plaza[s];
- (b) Roadside furniture;
- (c) Pedestrian facilities;
- (d) Tree plantation;
- (e) Truck lay-byes;
- (f) Bus-bays and bus shelters;
- (g) Rest areas; and
- (h) Others to be specified
 - i. Highway Lighting at Fly over and Major Junction,
 - ii. Highway Patrol,
 - iii. Medical Aid Post,
 - iv. Cranes,
 - v. Traffic Aid Post,
 - vi. ECBs (Emergency Call Boxes)

2. Description of Project Facilities

Each of the Project Facilities is described below:

(a) **Road side Furniture:** This will include

- (i) Traffic Signs and Pavement Markings
- (ii) Concrete Crash Barrier, Metal beam crash barrier, Separators (MS railings) wherever required as per manual.
- (iii) Traffic Safety Devices wherever required
- (iv) Boundary Stones, Hectometre / Kilometre stones
- (v) Traffic Blinker Signal (L.E.D) shall be provided at all At-grade junctions, median opening, schools, hospitals, police station, places of worship and institutional buildings etc.
- (vi) Overhead signs: 1 no. shall be provided.
- (vii) Delineators and Studs: Studs (100mm x 100mm) with reflective panels of dual

prismatic cube capable of providing total reflection of light entering the lens face for lane marking and delineators for night time visibility shall be provided for the entire project Highway.

(viii) Pavement marker and tree reflector

(ix) RCC Guard Posts

(b) Pedestrian Facilities

The additional pedestrian facilities in the form of guard rails, footpath, etc. shall be provided.

(c) Landscaping and Tree Plantation

This shall include Road side plantation, median plantation and landscaping below Viaduct & Junctions etc. This shall be carried out in accordance with IRC SP 21 and section 11 of the manual.

(d) Bus-bays and Bus Shelter,

Bus-bays and Bus Shelters shall be provided at 5 locations on both sides. Locations shall be finalized by Authority Engineer in consultation with MORTH.

(e) Others:

1. **Highway Lighting** shall be provided as per schedule D (Manual of Specifications and Standard for 4-Laning of Highways) IRC: SP: 84-2009). However, the lighting in built up areas shall be provided in consultation with IE/Employer.

2. Highway Patrol

The Concessionaire shall provide Highway Patrol vehicles in adequate number as per manual and this agreement.

3. **Medical Aid Post:** As per Article 21.

4. Cranes

The Concessionaire shall provide one mobile Cranes having the capacity to lift a truck with a gross vehicle weight of 30,000 (thirty thousand) kilogram and such posts shall be located at the toll plaza location in consultation with the IC/Authority.

5. Traffic Aid Post

6. ECBs (Emergency Call Boxes)

ECBs (Emergency Call Boxes)_with loud speaker, micro phone, activation

button with LED indicating conversation, shall be housed in a vandal proof casing and operate in full to play mode in noise level of upto 95 decibels within built diagnostic features for automatic detection in case of damage by any object. Mobile communication system shall comprise the mobile radio base stations and control centre equipments. It shall have provision for mounted mobile set on ambulances, trains & patrolling vehicles. The system shall have the facility to connect mobile to mobile, mobile to controller, and controller to mobile along with the systems for waiting, holding and transfer of calls. The system shall use pair frequencies to be allotted to the concessionaire with the approval of wireless planning & coordination (WPC), Department of Telecommunications and shall operate for full duplex mode.

Note: Provide adequate details of each Project Facility to ensure their design and completion in accordance with the project-specific requirements and the provisions of the Manual

