बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

CORRIGENDUM NO. -3

Dated: 07/07/2026

PROJECT NAME: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA)near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

TENDER No.: 6300040573 **DATE OF TENDER ISSUED:** 25/05/2026

1. This Corrigendum shall form an integral part of the tender to be read in conjunction therewith.
2. All other terms and conditions remain unchanged.

Bidders are advised to acknowledge receipt of this Corrigendum on the Tender Form when submitting a bid.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
1	Chapter – 4	Masonry Wall, Flooring, Painting, Doors & Windows and Other Civil Works	32-44	Technical Specification

The following item is supplementary to the clause referred above and both is to be read in conjunction.

STRUCTURAL GLAZING

Providing and supplying aluminium extruded tubular and other aluminium sections in accordance with approved shop drawings and architectural drawings, aluminium quality in accordance with grade 6063 T5 or T6 according to BS 1474, and tolerances in accordance with DIN/EN standards from an approved extruder, including super durability (AkzoNobel) or super durable (Jotun) powder coating of 60–80 microns in accordance with AAMA 2604 in the necessary colour and shade as authorized by the Engineer-in-Charge. (The item comprises the cost of materials needed to fabricate extruded aluminium frames, such as sleeves, cleats, and SS screws. There will be no additional payments made to this account.

The Contractor shall undertake the complete design, engineering, fabrication, supply, installation, testing and commissioning of a Semi-Unitized (Grid Type) Structural Glazing System with open joints for both linear and curvilinear facade portions at all heights and levels of the building. The system shall be designed in accordance with relevant Indian Standards, including IS 875 (Part III) and shall successfully withstand proof testing at 1.5 times the design wind pressure without failure. The scope shall include preparation and submission of structural analysis, design calculations, shop drawings and all necessary engineering documents for approval by the Engineer-in-Charge. The work shall comprise supply and installation of aluminium framing members, cleats, sleeves, splice plates, pressure plates, cover caps and all associated accessories required for proper functioning of the glazing system. Supporting brackets shall be fabricated from Aluminium Alloy 6005-T5, while all anchor fasteners, bolts, nuts, washers and fixing accessories exposed to weather shall be of SS-316 grade with suitable nylon separators to prevent bimetallic corrosion. The scope shall further include provision of approved two-part structural silicone sealant, one-part weather silicone sealant, microwave-cured EPDM gaskets, spacer tapes, setting blocks, backer rods and all other necessary sealing components to ensure structural integrity, air-tightness and water-tightness. The glazing system shall be designed to accommodate surface temperatures ranging from 45°C to 55°C and a temperature differential of 25°C without inducing excessive stresses in any

component. The contractor shall provide fire-stop barriers, smoke seals, and solid-coloured aluminium flashings of minimum 1.0 mm thickness at all interfaces between the glazing and building structure to ensure complete weather protection. Adequate drainage and pressure equalization arrangements, including drainage holes, channels and gutter profiles wherever required, shall be incorporated to prevent water ingress and ensure long-term performance of the façade. The scope shall also include all scaffolding, cradles, cranes, lifting equipment, temporary works, safety arrangements, mock-ups, laboratory testing of materials and components, field performance testing, cleaning, protection and all incidental works necessary for successful execution and completion of the glazing system.

The following performance test are to be conducted on structural glazing system from the certified laboratories accredited by NABL (National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Performance Testing of Structural glazing system Tests to be conducted in the NABL Certified laboratories. Complete system shall be warrantee for minimum 10 yrs against design & workmanship defects, as specified and as directed by engineer in charge. The following performance tests shall be conducted:

1. **Air Leakage Test** as per ASTM E283, for both positive and negative pressures ranging from ±50 Pa to ±300 Pa, to verify the air infiltration performance of the glazing system.
2. **Static Water Penetration Test** as per ASTM E331, for pressures ranging from 50 Pa to 1500 Pa, to assess the watertightness performance of the glazing system.
3. **Dynamic Water Penetration Test** as per AAMA 501.1, for pressures ranging from 50 Pa to 1500 Pa, to evaluate the system's resistance to water penetration under dynamic conditions.
4. **Structural Performance Test** as per ASTM E330, to verify deflection and structural integrity under static air pressure, including proof testing at 1.5 times the design wind pressure without any failure, excessive deformation or permanent damage.
5. **Seismic Movement Test** as per AAMA 501.4, for movement up to 30 mm, to demonstrate the system's ability to accommodate seismic and inter-storey movements. This test shall be conducted at site.
6. **On-site Water Leakage Test** for pressures ranging from 50 kPa to 240 kPa (35 psi), to verify the watertightness of the installed glazing system under field conditions.

VISION GLASS PANELS

Vision glass panels (IGUs) comprising of hermetically-sealed 6-12-6 mm (24mm IGU THK.)insulated glass (double glazed unit) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface, an inner Heat strengthened clear float glass 6mm thick of approved colour and shade, spacer tube 12mm wide, desiccants, including primary seal and secondary seal (structural silicone sealant) etc. All complete for the required performances and the Architectural drawings, as per the approved drawings.

Glass of approved make having properties (Aqua Green/ Aqua Marine colour) are:

(I) visible Light transmittance (VLT) of More than 40%

(II) SF/Solar Heat Gain Coefficient Less than or equal to 0.27

(III) U value of Less than or equal to 1.6 W/m^2 degree K

SPANDREL GLASS PANEL

The Spandrel Glass Panels comprising of 6mm thick heat strengthened monolithic float glass of approved colour and shade with reflective soft coating on surface, so as to match the colour and shade of the IGUs in the vision panels etc., all complete for the required performances as specified, as per the approved architectural drawings.

Coloured tinted float glass 6mm thick substrate with reflective soft coating on face, having properties as visible Light transmittance (VLT) of 56%, shading coefficient less than equal to 0.5 and U value of less than equal to 5.6 W/m2 K etc.

OPENABLE PANELS IN VISION PANEL

Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardware's for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4-point Cremona locking sets with stainless steel plates, handles, buffers to ensure air tight sealing etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. The system shall comprise of 2 barrier gasket design & shall have provision for drainage uncontrol water entering the system, all complete as per the Architectural drawings, as per the approved drawings and details.

DOORS IN GLAZING

Extra for Fabrication, Supply, Installation, Protection, Cleaning & Handover Single & Double shutter aluminium framed glazed door with (6+12mm air gap+6 mm thick) 24mm IGU (Insulated glass unit) opening outward custom designed to with stand the design

wind pressure. The system shall have two barrier gasket system for weather sealing & provision for aluminium thrash hold at bottom. The profile system shall be as per detail drawings in total for outer and shutter frame assembly with minimum of 2 mm thickness. Door shutter shall be air tight and have crimped corner at top and SS tie rod at bottom for rigid connection. Including other accessories like Door closer / Door stopper / Door Lock all complete as per detail drawings and specification.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
2	1.12	Roads and Drains	11 of 261	Technical Specifications

The following item is a supplementary to the above referred clause and Both is to be read in conjunction.

All the proposed roads for the BRAHMA Rail plant should have proper road markings as per relevant IS Codes. Also, the geometric design (Horizontal and Vertical Curves) of the major roads (7m wide roads) inside the plant are to be complied with truck & trailer arrangement vehicle envisaged for transporting the rail coaches by road to ensure smooth movement of the truck and trailer arrangement vehicle.

The specifications for the truck & trailer vehicle arrangement are given below;

DETAILS OF TURNING FOR THE TARILER COMBINATION USED FOR TRANSPORTATION OF RAIL COACHES					
Outer radius (m)	Inner Radius (m)	Road Width at Turning (m)	Overall Length including Puller (m)	Overall, Height from GL (m)	Gradient
23.79	13	10.79	39.5	5.55	1 in 40

The specifications for the road marking are given below;

- **Thermoplastic Road Marking**

The thermoplastic material shall be homogenously composed of aggregate, pigment, resins and glass reflectorizing beads. The colour of the compound shall be white (IS colour No. 356). The pigment, beads and aggregate be uniformly dispersed in the resin. The material shall be free from all skins, dirt and foreign objects and shall comply with requirements indicated Table 800-9 of MORTH (Fifth Revision).

The material shall consist of a minimum 18% binder, minimum 30% intermixed glass beads, minimum 10% titanium dioxide, and maximum 42% calcium carbonate and inert fillers. Road Marking shall be of ordinary road marking paint, hot applied thermoplastic

compound or reflectorised paint as specified in the item and the material shall meet the requirements Table 800-9 of MORTH (Fifth Revision).

The properties thermoplastic material, when tested in accordance with ASTM D36/BS-3262- (Part I), shall be as below:-

1. Daylight luminance at 45° -65 percent min. as per AASHTO M 249.
2. Drying Time: When applied at a temperature specified by the Manufacturer and to the required thickness, the material shall set to bear traffic is not more than 15 minutes.
3. Skid Resistance: Not less than 45 as per BS:6044.
4. Cracking Resistance at Low Temperature: The material shall show no cracks on application.
5. Softening Point: 102.5° ±9.5° C as per ASTM D 36.
6. Yellowness Index: Not more than 0.12 as per AASHTO M 249.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
3	O.	EXCAVATION AND EARTHWORK:	125 of 189	NIT

The above referred clause stands deleted:

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
4	9.1.1	Scope	143 of 269	Technical Specifications

The above clause is amended as below

FOR	READ AS
f) Supply of power supply arrangement (clause #2.14), necessary spares, consumables, tools and tackles (clause #3), inspection and test certificates (clause#4), installation and commissioning (clause #5), documentation (clause #6), training (clause #7) and warranty (clause #8) as per General Terms and Conditions applicable for Bill #13for each crane.	**f)** Supply of power supply arrangement, necessary spares, consumables, tools and tackles, inspection and test certificates, installation and commissioning, documentation, training and warranty as per General Terms and Conditions applicable for Bill for each crane.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
5	1.6.4.12	Common Driveways/ Landscaping around the Facilities	143 of 269	Technical Specifications

The above clause is amended as below

FOR	READ AS
Development of Green Belt and Landscaping (37 Acres) Minimum 40% of total plant area shall be maintained as green cover were feasible. Green belt / landscaping shall be developed using a 3-tier vegetation structure:	**Development of Green Belt and Landscaping (37 Acres)** Green belt / landscaping shall be developed using a 3-tier vegetation structure:

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
6	9.1.2	Other Cranes	148 of 261	Technical Specifications

The above clause is amended as below

FOR

Other Cranes

The following Single girder under slung cranes are envisaged for maintenance of compressors / water system pumps.

S. N	Location	Capacity	Height of lift	Span
1	Compressor room	5T SG Under slung Crane	7.0m	10m
2	Water Pump house	2T SG Under slung Crane	4.5m	9m

READ AS

Other Cranes

The following Single girder under slung cranes are envisaged for maintenance of compressors / water system pumps.

S. N	Location	Capacity	Height of lift	Span
1	Water Pump house	2T SG Under slung Crane	4.5m	9m

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
7	1.5.3	SIGNAGES	46 of 189	NIT

The below mentioned specifications are supplementary to the above referred clause. Both to be read in conjunction for clarity

OVERHEAD INFORMATORY SIGNAGE

Manufacturing, supplying and fixing retro reflective overhead signage boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity and encapsulated lens type heat activated retro reflective sheeting conforming to type - III of ASTM-D-4956-01 of combination including subject matter, message (bi-lingual), symbols, letters, borders etc. as per IRC : 67-2001 in silver white with blue colour back ground and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminium alloys, rivets or bolts & nuts @ 300 mm centre to centre all along the periphery as well as in two vertical rows along with theft resistant measures, including the cost of painting with two or more coats of epoxy paint in grey colour on the back side of aluminium sheet including appropriate priming coat. Rounding off the corners, lowering down the structural frame work from the gantry, fixing and erecting the same in position all complete as per drawings, specification and direction of the engineer-in-charge. (Rectangular area of the sheet only shall be measured for payment).

Signages shall be provided at following facilities/location:

1. Name of the plant at main entrance gate with BEML logo.
2. Name of the gate with Gate Number at all gates with BEML logo.
3. Name of the facilities and capacity (wherever applicable) at the entrance of the facility. (Example: STP-250 KLD, Manufacturing block No-01, Inspection & Testing Bay No-01.etc.)
4. Direction boards at prominent places like road junctions / entrance gate etc.
5. Signage for Emergency Assembly Point.

NOTE: Signages shall be part of the facilities being designed and constructed. No separate line item is envisaged for payment purpose.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
8	1.6.3	Inter Bay Traversers	66 of 189	NIT

The following item is a supplementary to the above clause referred

Goliath Crane

Surface type traversers are now replaced by Goliath Crane. After completing the inspection and test protocols on fully furnished coach in inspection and testing bay, the coach shall be taken out of the testing bay from the Southern end and will be placed on the hardstand using Rail Road Vehicle (RRV). Goliath Crane provided across hardstand on southern end having overall width of 32m shall be lifting the coach, move it towards the west and place the same on the rail track on western side. The c/c span of the Goliath crane shall be 28.5m to accommodate coach length of approximately 26.33m. Also, the railway track envisaged in manufacturing bays shall be extending towards south in the full width of hardstand i.e. 32 m. likewise testing track envisaged in inspection & testing bay shall be extending outside the bay in the full width of hardstand on southern & northern end.
Though the supply of goliath crane is not included in the scope of EPC contractor; providing and fixing of rail to the hardstand for the movement of goliath crane along the length of hardstand is included in the scope of EPC contractor.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
9	Clause C -(a)	LIQUIDATED DAMAGES FOR DELAY IN COMPLETION OF WORKS:	109 OF 189	NIT

The above clause is amended as below;

For	Read
a. In case the Contractor fails to complete the works and clear the site on or before the stipulated time mentioned in the Work order he shall without prejudice to any other right or remedy of the Company in this behalf pay, as agreed Liquidated Damages and not as penalty, pay sum equal to 0.5% of the Contract sum (excluding nontendered/extra items, if any) for every week's delay subject to **maximum of 10% of the total final bill value of the Contract.**	a. In case the Contractor fails to complete the works and clear the site on or before the stipulated time mentioned in the Work order he shall without prejudice to any other right or remedy of the Company in this behalf pay, as agreed Liquidated Damages and not as penalty, pay sum equal to 0.5% of the Contract sum (excluding nontendered/extra items, if any) for every week's delay subject to **maximum of 10% of the total executed value of the Contract.**

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
10	Chapter – 4	Masonry Wall, Flooring, Painting, Doors & Windows and Other Civil Works	32 of 261	Tender Specifications

The following item is a supplementary to the above clause referred

Wall cladding

Galvanized (Galvalume coating AZ150-150 g/m^2 Al-Zn alloy coating), Colour Coated (PPGI) profiled sheeting of tensile strength 550 MPA conforming to IS 277 / IS 15961. Minimum 0.6mm TCT (Total Coated Thickness). Trapezoidal / ribbed profile suitable for industrial cladding, minimum crest height: 28 mm, with zinc aluminium alloy of AZ-150(as per AS-1397: 1993). Sheet shall have a hot dip metallic zinc aluminium alloy Coating of zinc (43%), silicon (1.5%) and aluminium (55%) with total mass coating of 150 gms/sqm considering both sides together. Installation using self- drilling, self-tapping fasteners conforming to IS 1367. Fasteners shall be zinc coated with EPDM washers for watertightness. Side laps: Minimum one corrugation overlap. End laps: Minimum 150 mm with sealant bead. Butyl / PU sealant to be provided at all laps to prevent water ingress. Proper alignment to be ensured to maintain uniformity and aesthetic appearance. Ridge flashing, corner flashing, base trim, eave trim and openings flashing shall be of same material and finish.

Note:

1. The sheet shall have silicon modified polymer (SMP) coating of 20-micron thickness on exposed face and back coat pre-coating of 5–7-micron thickness on unexposed face.
2. The colour of galvalume steel sheet shall be approved colour and shade (BEML's Approval is required before sourcing).

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
11	10.2	FIRE TENDERS	160 of 261	Technical Specifications

1). Fire Tender (DCP) – 1 No.

S. N	SCOPE OF WORK / SUPPLY
1	**GENERAL**: DCP tender contains 4000kg of dry power in 2 vessels (2000kg each). The DCP tender fabricated on tata LPT 2518 / 48 or Ashoka chassis 2516 or Volvo or Mahinda AMW or EICHER. The DCP unit itself will have independent expellant gas assembly to discharge powder through two hose reels fitted with triggered type pistol grip nozzle from each vessel
2	CHASSIS: Modal: TATA LPT 2518 / 48 or Ashoka chassis 2516 or Volvo or Mahinda AMW or Eicher. Along with 1-sparer wheel / stepney
3	**DCP Tank: 2-Nos**
3.1	**Material**: 2- cylindrical tanks fabricated as per ASME code VIII Div-1 with 10 percent radiography of seams and 100percent radiography of T-joints. Tank hydraulically tested to 35kg/sqcm test certificate also shall be furnished at the time of inspection
3.2	**Anti-corrosive treatment:** sand blasting / tin coating from inside/ outside synthetic enamel PO-red in colour
3.3	**Capacity:** 2000kgX2Nos
3.4	**Sheet:** SA 515 Grade 60/70 or SA 516 GR 60/70
3.5	**Shape:** cylindrical
3.6	**Design pressure:** 20 kg/ sqcms
4	**Safety disc:**1-no with each vessel
5	**Safety valve:** burst disc on tank calibrated to 21kg/sqcm
6	**Free fluidity of DCP:** Perfect fluidisation achieved through a set of diffuser nozzle
7	**Working pressure of system:** 14kg/sqcm
8.1	**Nitrogen cylinders:** Each tank mounted on the unit-8 Nos
8.2	Total 16 Nos end to cylinders
8.3	Capacity 56/60 litre (only one capacity to be in tender)
9	**Expansion shock device:** Independently provide each vessel to ensure that fluidity of dry powder is constantly maintained
10	**Hose reel:**
10.1	Quantity 2nos for each tank
10.2	Hose size 25mm X 30m long
10.3	**Nozzle:** trigger type piston grip nozzle
10.4	**Discharge rate:** 5kg/sec at a pressure of 14kg/sqcm

11	**Monitor:** 1-having 14kg/sec, 25kg/sec and 15kg/sec discharge rates at 3-position, the throw being approximately 45meter, 30 meter and 20meter respectively. Monitor traversing through 360 degrees in horizontal and +70 degree and -15deg in vertical plain
12	**Driver cab**
12.1	**Type: -**Close type with single compartment
12.2	**Material:** MS square tube 30X30X2mm structure, externally panelled with al sheet 16 SWG, internal panelling al sheet 16SWG
12.3	**Seat:** 2no plus one full six crew seat
12.4	**Flooring:** Al chequered plate 16SWG
12.5	**Doors and lockers:** 2-nos (1 on each side)
13	**Controlled panel**
14	**Aluminium extension ladders 10.5m (IS:4571)—1 NO**
15	**Shovel (as per IS:274)- 1 NO**
16	**Pick axe small as per IS:550-1 NO**
17	**Fire man Access:(IS 926) -2 NO**
18	**Pick axe large as per IS:550-1NO**
19	**Accessories**
19.1	Electric siren-1NO
19.2	Fog lamps-2NO
19.3	Reversing light-1NO
19.3	Traficators-1 set
19.5	Trafficators blinker type-1-set
19.6	Wind screen wipers 1-no
19.7	Tools for normal routine maintenance
19.8	Search light with 30meters cable
19.9	Adjustable spotlight
19.10	Inspection lamp
19.11	PA-system suitable for outdoor duty and capacity 1-No
19.12	Tool box for general maintenance kit-1-set
19.13	First aid box-1 no
19.14	Mud guard-1-set
19.15	Hydraulic jack 25-ton capacity-1-no
19.16	**Spark and surge arrester:** CCE approved spark and surge arrester along with original certificate to be handed over to BEML with supply 1-No
20	**Finish** 2-coats of primer NC based fire red (PO-red) in middle, inside cabin cream colour
21	**Painting:** name of department: BEML ltd in Hindi, and English must be painted on both the side
22	**Acceptance tests:** The acceptance test mentioned below to be given to complete satisfaction of inspecting officer
22.1	**Stability:** No overturning of fully Ladden and equipped vehicle at a horizontal

	angle of 27 degree from horizontal plane
22.2	**Gradient:** To be tested at an angle of 1:4 as per BIS
22.3	**Articulation:** to be tested for articulation and should not show any sign of stress during the test the clearance of the wheel wells to be checked for tolerance
22.4	**Shower test:** after completion of fabrication, the vehicle to be subjected to shower test as per the norms lead down under BIS the plan should not show any sign of leakages during test
22.5	**Road Test:** Road test to be carried out as per the parameters for breaking acceleration top speed etc...
23	**Performance guarantee:** manufacturer guarantee for design material workmanship and the performance of the complete unit for the period of 12-months from the date of commissioning of completed vehicle. Any mechanical defect, faulty workmanship or operational defects found during this period to be rectified by the vendor at BEML premises within reasonable time without any extra cost of BEML. The tank to be warranted against leakage for a period of 5-years after supply in writing.
24	**Training:** After supply of vehicle, vendor will provide training on operation and maintenance including chassis at BEML's site &charge for the same to be included in the price. Additional free training to be given at BEML's site within warranty period & when desired by BEML.
25	**Approvals:**
25.1	All equipment being quoted by vendor shall confirm to the latest version of relevant Indian standard**.**
25.2	Vendor shall mention the relevant standard reference, against each item governed by the Indian / overseas
25.3	vendor shall agree to provide certificates in original of all necessary or mandatory approvals in respect of the fire tender before dispatch to BEML Bhopal.
25.4	On placement of order, Fire tender is to delivered at BEML Bhopal. Transit insurance shall be included in vendor's scope.
25.5	After supply, vendor shall provide training in operation of their systems free of cost to BEML/CISF personnel.
25.6	On final supply, operation and maintenance manual, any electrical system manual etc., shall be handed over to BEML. All guarantee certificated for any/All accessories installed on the fire tender, shall be handed over to BEML.
25.7	Along with Techno-commercial offer, vendor shall submit a separate sheet listing all items (Installed on DCP Tender)
26	**INSPECTION: -**
26.1	All the inspection shall be carried out against relevant IS & Tender technical specification of BEML Jointly
26.2	Vendor shall agree to offer stage inspection of the fire tender in three stages. a) 1st inspection for Tank & Allied Accessories.

	b) 2nd inspection for body work on chassis. c) 3rd inspection shall be final pre-dispatch inspection 3rd inspection will be done by CISF & BEML jointly.
27.	**ERECTION & COMMISSIONING:** Since the item is ready to use type and shall be delivered in ready to use condition in BEML, Bhopal. However, supplier's representative shall come & will make all the system fully ready to use again & demonstrate use of all items. And shall import training to our working personnel (Training period 7-days). Defect free & uninterrupted demonstration shall be contributed as successful commissioning. Further, Guarantee period will start after successful commissioning. Fuel required during the demonstration at BEML works shall be arranged by the vendor.
28	**Registration at Bhopal:** BEML shall arrange registration at Bhopal and annual insurance for vehicle.
29	**Transit insurance** as applicable for automobiles as per Govt. rules from the point of delivery to BEML CRX shall have to be arranged by vendor.
30	For Delivery: Vendor has to deliver the vehicle at the works of BEML, Bhopal & shall have to arrange driver / fuel / insurance, any other applicable documents etc., and other leviable Govt. Duties from various states where vehicle is passing. All bills' challans, receipts etc in respect of vehicle shall be handed over to BEML by vendor at the time of Delivery.

2). Fire Tender (water) – 1 No.

1	Chassis: - (included in vendors Scope) capacity = 25T, 280 BHP, type= MAN CLA or TATA or VOLVO or Mahindra or Eicher or Benz or Ashok Leyland along with one spare wheel / stepney. Drag Hook or eye of adequate strength and design to be provided at the rear & front of chassis by vendor
	PUMPING SYSTEM: -
	Type – centrifugal
	Make – Firefly or go-Vida or Rosenbauer
2	**Discharge capacity** – minimum 6000LPM at 8 kg/sqcm
	Material of construction: The pump body, casing, impeller and delivery outlet to be made of gun metal / bronze / stainless stell only. The pump should not have any aluminium parts. The impeller shaft to be of stainless steel and to be carried in anti-friction bearing as per the manufacturers standard design. Bearing housing to be of CI drain valve to be made of stainless steel.
	Pump suction inlet: The suction inlet of the pump should capable of being connected either directly to hydrant discharge outlets through header or to the water tanks of the vehicle size of inlet should not less than 140mm or 2X 100mm the connection from the water tank to the pump to be suitably sized (min 150mm)
3	Pump discharge outlets: there to be 6 outlets of 63mm each of standard size 63 mm with screw down type gun metal (LTB GR.2 of IS 318). Delivery valves having

	female couplings.
	Pump mounting: the pump to be rear mounted pump will have at least 4-mounting points, the mounting to be done on heavy "C" channels / plates only.
	Shaft sealing: self-adjusting type.
	Pump control panel: the entire system of control panel to be of open architecture type which will ensure that both the scheduled operation as well as preventive maintenance is affected easily. The control panel will have the following: - Pump to delivery outlets - Pump to monitor pump to colling line - Tank to pump suction - Outside source to pump suction - Water level indicator The above-mentioned connections are the min. requirements other connections / controls as maybe required can be provided by the manufacturer. The "pump engaged" indicator LED type will also be provided in the driving compartment along with the one mentioned on the control panel above to indicate that the pump shift has been successfully completed to the driver as well as the operator
	Pump priming system Type: twin piston reciprocating or water – ring or exhaust ejector type Make: firefly of GO-Vida or Rosenbauer or equivalent make Capacity: priming system must be capable of lifting water from 7-meters depth within 24 seconds.
	HP- pump The HP pump to be fully imported, CE certified / UL listed, separate unit driven by the side PTO of the Chassis. The capacity to be 150 LPM @ 100kg/sqcm pressure. The pump will have six plungers & positive displacements, working to its optimum capacity at not more than 1000RPM. Indigenous three piston / diaphragm pumps will not be accepted. The pump to be guarantee for a min life of 5000HRs of operation.
5	HOSE REEL Two hose reels (High- pressure type) to be provided for the auxiliary pump. The hose used would be minimum R1 type & rated for 130 bar working pressure two high pressure fog guns capable of discharging 75 LPM @ 100kg.sqcm pressure in jet or fog patterns to be provided at the end of the reel the jet range to be minimum 25mtrs.
6	POWER TAKE OFF (P.T.O): The P.T.O of heavy-duty type of a suitable ratio for the rated output of the pump & torque of the vehicle to be provided. The lever / switch for engaging the P.T.O to be provided in driver cabin. Necessary supports for PTO units, propeller shaft coupling, universal joints etc for power inputs to and outout from PTO units will have to be provided by vendor. MAKE: WEBSTER 4128 or SYALL or VAS.
7	COOLING SYSTEM: in addition to the radiator cooling. An indirect cooling system of the open circuit type to be provided to keep the engine from overheating during

	extended use in tropical climates & when ambient temperature is over 50degree Celsius. A flexible pipe, at least 5-meters long to be provided as spare, so that waste cooling water can be discharged away from vehicle. The pipe will have threaded end connectors.
8	Water Tank: the water tank to be of minimum 10000lts. Capacity & to be suitable mounted on the chassis in such way that the weight distribution is optimised. In addition, a 2% expansion space to be made in the tank over & above the water capacity. The tank to be fabricated out of MS plates min 5mm thick (externally epoxy painted & internally FRP Lined) all around except the top and baffle plates which to be of 4mm. the tank to be welded construction & to be die – pressed on all side to prevent distortion & to ensure torsional rigidity. Due care to be taken to ensure that butt-welded joints are minimized. Wherever butt-joints are unavailable, the soundness of weld-joints complete welding to be done using Mig welding process only. The tank to be hydraulically tested at 0.5kg/sqcm pressure to find out if there are any leakages. All the joints to be flanged type and will have O-ring sealing. Rubber gaskets will not be used anywhere in the plumbing. All the outlets and inlets from the tank to be taken by installing nozzles of suitable length and reinforcements pads.
8a	BAFFLES: thickness of baffle plate to be minimum 4mm and should be bolted type, the baffle to be designed that they do not distort / buckle under any circumstance during braking & cornering.
8b	MOUNTING: the tank to be mounted on rigid mountings which will prevent distortion due to chassis flexion. Suitable hooks / lifting eyes. To be provided on top of the tank to enable it to be lifted off the vehicle for maintenance / repairs.
8c	CONNECTION FOR FILLING: the tank to be filling orifice of 250mm & an inspection & maintenance manhole of 450mm at the top. The cover for this port to be hinged or threaded type apart from the above two more filling connection to be provided on the sides of the tank terminating in filling connection of 63mm male instantaneous couplings made of GM or SS material incorporated with a strainer. Valve to be of NRV / Ball / Butterfly type.
8d	DRAINING, CLEANING & REPAIRS: A 50 mm Dia drain line with a ball / butterfly valve to be provided to drain the tank for maintenance/ cleaning / repairs etc. A cleaning hoe of 250mm to be provided at the bottom of the tank & to be taken down to a point below the chassis without reducing the effective ground clearance.
8e	OVERFLOW: one overflow pipe of suitable diameter to be fitted to the tank. The diameter of the overflow pipe to be determined as per the filling connections provided. However, it should not be less than 100mm diameter in any case to ensure the tank does not get pressurized. The overflow pipe to be taken up to 2-inches higher that the top of the vehicle.
8f	LEVEL INDICATOR: A water level indicator to be provided near the control panel. The level indicator to be of graduated glass tube, clear acrylic or electronic type as per the manufacturer's standards.
9	FOAM PROPORTIONER: The foam proportioner should provide with the selector valve will have four settings. Each upward setting will result into an equal increase in the foam compound flow rate. The linkages of this purpose to be as

	simple as possible to avoid distortion due to chassis flexion.
10	MONITOR: the water monitors to be provided at a suitable location on the top of the vehicle the monitor to be of 4500LPM@10Kg/sqcm pressure. It should have provision for jet as well as spray patterns.
10a	MONITOR PERFORMANCE: the monitor to be capable of traversing through 360 degrees in horizontal plane, +75 deg & 15deg in vertical plane with discharge range of at least 65-meters in still air with water. The fog curtain to be 160 deg & the friction loss will be less than 10 psi through the monitor. The monitor to be designed for a continuous working pressure of 8-10kg/sqcm.
10b	MONITOR MATERIAL CONSTRUCTION: the material for the monitor & waterways to be chosen with a view that there will be prolonged use with brackish water & hence corroding materials will not be permitted.
10c	MONITOR COATING / PAINTINGS: Painting of monitor to be done using a good quality paint system. The paint used to be poly urethane only for enhancing fade resistance. The paint will be guaranteed for minimum 5-years against peeling, chipping, cracking and fading
11	PIPING & VALVES: complete pipeline circuit on the vehicle including water lines & fittings will be of SS 316 material only, including all water lines. All valves up to 2" size to be lever operated SS 316 ball valves & all valves above 2" size will be normal ball / butterfly valves but made of SS316. The valves to be of 3-piece design to ensure easy maintenance & repairs. Seats of the valves to be easily replaceable, readily available & at least 2-sets of spare seals to be provided for each size of valves. All sockets welded lines to be dry penetration tested and all the butt-welded joints to be radiographically tested. A flow chart and schematic diagram to be made and submitted with the technical bid
12	BODYWORK: enclosed accommodation for driver, officer in charge & four crew members to be provided in a double compartments drivers cabin as per the below given specs:
12a	INTERIORS OF THE CABIN: the cabin to be internally lined with a good quality PVC Coated aluminium sheets. Alternatively other systems of interiors will be accepted provided the same is on PAR with the latest tender in the latest trends in the international markets & as per new norms the entire floor of the crew cabin to be provided with a good quality anti-skid type vinyl matting. A first aid box to be provided in the cabin.
12b	STRUCTURE: The entire structure to be of welded construction made from MS pressed section & square tubes of Min 2mm thickness duly treated for corrosion resistance by zinc plating & two other pack epoxy treatment. Angles & channels used for the structure will be min. 3mm thick runners and cross members (wherever used) will be of minimum 6mm thickness.
12c	PANELLING: the outer panelling to be done from 3mm aluminium sheets and the internal panelling to be done from 2mm aluminium sheets treated for anti-slippage or with chequered sheets. The doors will be fitted with winding / sliding safety glasses. Sheets of outer panelling will be glued to the framework. Riveting / bolting / screws of any kind will not be permitted.
12d	SEATING: All the seats would have foam cushions & to be covered with good quality Rexene. The crew seat will have individual seating for the crew fitted with

	brackets for placements of breathing apparatus in an upright position. The seats to be of the wear and walk away type so that when the crew disembarks from the vehicle the BA sets should easily come off the seats with them. The seat bottom will be theatre type, which will automatically flip-up when the fireman gets up, thereby freeing up the space for easy embarking and disembarking.
12e	LOCKERS: Sufficient lockers to be provided to accommodate all the equipment / accessories accessible manner.
12f	ROLLER SHUTTERS: for easy operation of fire tender MCD (FRANCE) or Fierce (ITALY) make roller-shutters to be installed on both sides of the appliances. These shutters will be rooted inward underneath the roof giving unobstructed access to the equipment's lockers & the equipment accessories fitted in the vehicle. Roller shutters to be made of hollow rectangular shaped aluminium links which should be inter connected with the help of plastic / rubber profiles, sealings the roller shutter water tight when closed. They should be powdering terrain and slopes. a spring mechanism to be fitted so that the shutters are held-up at any point of opening. It would be easy to operate & will ensure that the shutters cab ne easily pulled down. The sections of the shutter to be powder coated / anodized to a smooth finish and aesthetic look. Guide rails should support the shutters over the entire length on both sides & make them torsion free the shutter should have a sturdy locking mechanism which will prevent accidental opening during movement of the vehicle. A master switch for isolating locker lighting circuit should also be fitted in the driver's cabin
12g	STORAGE OF EQUIPMENTS: for all watering fittings like branch pipes etc quick release type couplings on snaps clamps of spring steel (as per the manufacturers standards) to be provided which will be enable the operator to locate the desired equipment instantly & save valuable time.
12h	OTHER WORKS: The door of the cabin to be fitted with safety glasses. The driver to be provided with rear view mirror, the cabin to be ergonomically designed for long and comfortable run.
13	Electrical system: all the wiring to be properly fixed and to be protected against heat, oil and physical injury. To the extent possible all wiring will pass through conduits. All wires to be stranded copper or copper alloy conductors of a gauge rated to carry at least 125 percent of the maximum current for which the circuit is protected wiring to be uniquely identified at least every 2ft by colour coding or permanent marking
14	LADDER & LADDER GALLOWS: Ladder gallows with ladder to be provided for carrying 10.5 metres aluminium trussed type double extension ladder. The design to be such that the ladder can be released without difficulty from a reasonably position & will embody rollers to permit easily withdrawal by one man.
15	**FITTINGS AND ACCESSORIES**: the following accessories to be provided on the appliance 1. Spot light in front – 2Nos 2. Fog lamps -2Nos 3. Blinker type traffic indicator -4Nos 4. Search light with 30mtrs cable and tripod stand- 1Nos

	5. LED light bar (minimum 75-100 watts) makes grand or equivalent. - 1Nos
16	**WORKMANSHIP & FINISH:** The GVW of appliance should not exceed the rated GVW of the chassis manufacturer with all equipment's & crew the weight distribution diagram should not be submitted along with the offer.
17	**PAINTING AND MARKING:** priming the finished material with a zinc rich primer & then finally coated with a two-pack epoxy-based paint.
18	**SURFACE PREPARATION:** once the panelling is completed, all the outside surfaces should be surface treated & painted with a good quality paint system, like Du-Pont, PPG, sandbox etc, the paint to be polyurethane (PU) finished paint each coat of 50 microns DFT. Water lines to be painted red in colour & foam lines will be painted yellow in colour.
19	**VEHICLE EXTERIOR PAINT:** The vehicle and monitor should be painted with at least 2-coats of zinc phosphate epoxy primer each of 50-microns DFT and two coats of polyurethane finish paint each coat 50-microns DFT.
20	**WATER AND FOAM LINE PAINT:** water & foam lines should be painted with zinc phosphate epoxy primer each of microns DFT and two coats of polyurethane finished paint each coat of 50-microns DFT. Waterlines to be painted red in colour & foam lines will be painted yellow in colour.
21	**DETAILS REQUIRED:** the bidder should give the details of entire painting and process & also the details f in house painting facilities like paint booth etc., the colour for outside tube as per the latest international and Indian norms for the fire brigade vehicles. The user's name to be written on both sides with yellow colour
22	Reflective strips: Reflective stripes to be affixed to the perimeter of the apparatus
23	**MARKING / NAME PLATES:** shall be provided with stainless steel
24	**OWNERS EMBLEM:** Owner's emblem in original colour together with name (in HINDI and ENGLISH) to be written in golden yellow/ reflective white stickers / paint on both sides of the vehicle. "BEML ltd, Bhopal"
25	**Acceptance tests:** The acceptance test mentioned below to be given to complete satisfaction of inspecting officer. Vendor will ensure that design of tender should not affect chassis parameters such as speed, turning circle, acceleration, endurance test, priming test, hydraulic testing etc all inspections & tests to be carried out by the vendor to the complete satisfaction of BEML representative. All testing parameters should be carried out at manufacturers premises & details of infrastructure to be provided at time of techno-commercial bid.
25.1	**Stability:** No overturning of fully Ladden and equipped vehicle at a horizontal angle of 27 degree from horizontal plane
25.2	**Gradient:** To be tested at an angle of 1:4 as per BIS
25.3	**Articulation:** Vehicle to be tested for articulation and should not show any sign of stress during the test the clearance of the wheel wells to be checked for tolerance
25.4	**Shower test:** after completion of fabrication, the vehicle to be subjected to shower test as per the norms lead down under BIS the plan should not show any

	sign of leakages during test
26.5	**Road Test:** Road test to be carried out as per the parameters for breaking acceleration top speed etc...
26.6	**Performance guarantee:** manufacturer guarantee for design material workmanship and the performance of the complete unit for the period of 12-months from the date of commissioning of completed vehicle. Any mechanical defect, faulty workmanship or operational defects found during this period to be rectified by the vendor at BEML premises within reasonable time without any extra cost of BEML. The tank to be warranted against leakage for a period of 5-years after supply in writing.
26.7	**Training:** After supply of vehicle, vendor will provide training on operation and maintenance including chassis at BEML's site &charge for the same to be included in the price. Additional free training to be given at BEML's site within warranty period & when desired by BEML.
27	**Approvals:**
	All equipment being quoted by vendor shall confirm to the latest version of relevant Indian standard**.**
	Vendor shall mention the relevant standard reference, against each item governed by the Indian / overseas
	vendor shall agree to provide certificates in original of all necessary or mandatory approvals in respect of the fire tender before dispatch to BEML Bhopal.
	On placement of order, Fire tender is to delivered at BEML Bhopal. Transit insurance shall be included in vendor's scope.
	After supply, vendor shall provide training in operation of their systems free of cost to BEML/CISF personnel.
	On final supply, operation and maintenance manual, any electrical system manual etc., shall be handed over to BEML.All guarantee certificated for any/All accessories installed on the fire tender, shall be handed over to BEML.
	Along with Techno-commercial offer, vendor shall submit a separate sheet listing all items (Installed on water bowser Tender)
28	**INSPECTION: -**
	All the inspection shall be carried out against relevant IS & Tender technical specification of BEML Jointly
	Vendor shall agree to offer stage inspection of the fire tender in three stages. d) 1st inspection for Tank & Allied Accessories. e) 2nd inspection for body work on chassis. 3rd inspection shall be final pre-dispatch inspection 3rd inspection will be done by CISF & BEML jointly.
29	**ERECTION & COMMISSIONING:** Since the item is ready to use type and shall be delivered in ready to use condition in BEML, Bhopal. However, supplier's representative shall come & will make all the system fully ready to use again & demonstrate use of all items. And shall import training to our working personnel (Training period 7-days). Defect free & uninterrupted demonstration shall be contributed as successful commissioning. Further, Guarantee period will start

	after successful commissioning. Fuel required during the demonstration at BEML works shall be arranged by the vendor.
30	**Registration at Bhopal:** BEML shall arrange registration at Bhopal and annual insurance for vehicle.
31	**Transit insurance** as applicable for automobiles as per Govt. rules from the point of delivery to BEML CRX shall have to be arranged by vendor.
32	**For Delivery:** Vendor has to deliver the vehicle at the works of BEML, Bhopal & shall have to arrange driver / fuel / insurance, any other applicable documents etc., and other leviable Govt. Duties from various states where vehicle is passing. All bills' challans, receipts etc in respect of vehicle shall be handed over to BEML by vendor at the time of Delivery.
33	**Accessories**
	Aluminium extension ladder-10.5-metre-long trussed type-1no's
	Heavy duty PVC suction hose with round thread couplings- 2.5 metre long-4no's
	Synthetic jacketed delivery hose as per BIS type 'B" 63mm, 22.5 metre with coulings-10no's
	Suction strainer of gun-metal LTB Gr 2 of IS 318-2no's
	Basket strains for above GM suction strainer-2no's
	Suction wrenches for above GM suction strainer-1pair
	Dividing breaching Gun metal LTB Gr of IS 318-20no's
	Collecting breaching Gun metal LTB GR 2 of IS 318- 2no's
	Hand controlled branch pipe gun metal LTB Gr 2 of IS 318-1no's
	Long line terylene 50 mm circumference 30m long-2no's
	Short line terylene 50 mm circumference 15m long-2no's
	Hose bandages rubberized-12no's
	Hose clamps-6no's
	Branch pipe gun metal LTC Gr 2 of IS 318-4no's
	Nozzle for branch pipe of various sizes gun metal LTB Gr 2 of IS 318-10 no's
	Adaptor double female instantaneous pattern gun metal LTB Gr 2 of IS 318-2no's
	Adaptor double male instantaneous pattern gun metal LTB Gr 2 of IS 318-2no's
	Nozzle spanner gun metal LTB Gr 2 of IS 318-2 no's
	Rubber gloves- 6 pairs
	Light bar installed outside on front top of cabin (Halogen strobe – LED) of red-white -blue colour-1nos
	Electrically operated wailing siren of high pitch to be provided-1no's
34	**Spark and surge arrester:** CCE approved spark and surge arrester along with original certificate to be handed over to BEML with supply 1-No 1. Taparia / Jhalani make tool kit- 1 no's 2. Hydraulic jack of 25T capacity- 1no's **3.** First Aid Box- 1no's

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
12	1.6.4.6	Water Supply and Fire Water Pump House	68 of 189	NIT

The above clause is amended as below;

For	Read
Water Supply and Fire Water Pump House The Water Supply and Fire Water Pump House are designed to accommodate raw water and fire-fighting water systems within a compact yet accessible layout. The building adopts a single-storey industrial form with adequate internal clear heights for pump installation, maintenance, and overhead piping. This combined pump house is a RCC structure with a height of 6m & pump house of height 8m. Water reservoir is RCC type above ground structure, Pump house is RCC column with brick wall type structure. The building is RCC structure building with total Built up area is 850 Sq. m.	**Water Supply and Fire Water Pump House** The Water Supply and Fire Water Pump House are designed to accommodate raw water and fire-fighting water systems within a compact yet accessible layout. The building adopts a single-storey industrial form with adequate internal clear heights for pump installation, maintenance, and overhead piping. This combined pump house is a RCC structure with a height of 6m (Sump) & pump house (Industrial Shed) of height 8m. Water reservoir is RCC type above ground structure, Pump house is RCC column with brick wall type structure. The building is an Industrial shed building with total Built up area of approx. 859 Sq. m

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
13	1.6.4.7	MRSS	70 of 189	NIT

The following item is a supplementary to the above clause referred

In the switch gear room of MRSS an area measuring 3m x 3m to be identified which shall have wall enclosures and perforated metal false ceiling for installation of VFD & other temperature sensitive electronic panels.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
14	1.6.4.6	STP	69 of 189	NIT

The following item is also included in the civil scope of STP as described in the above referred clause

A toilet of standard size consisting of 1-No. floor mounted EWC with flushing cisterns & 1-No. Hand wash Basin of Standard size to be constructed in the premises. The toilet shall have all required toilet accessories, fittings & fixtures.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
15	F. Scoring criteria	Experience in similar nature of works, 2, B	19	Corrigendum - 1

The above clause is amended as below;

For	Read
The Bidder should have successfully completed an Industrial/infra structure/ commercial project during last 07 Executed on design and build basis **with total construction area (Built up area) of Industrial Shed and RCC Buildings** combined together should not be less than 43,500.00 Sqm (Design and Build)-	The Bidder should have successfully completed an Industrial/infrastructure/ Commercial project during last 07 Executed on design and build basis **with total construction area (Built up area) of Industrial Shed and/or RCC Buildings** combined together should not be less than 43,500.00 Sqm (Design and Build)-

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
16	Annexure - 5	Power of Attorney		

ANNEXURE-5 POWER OF ATTORNEY is Revised as follows

To be typed on non- judicial Stamp Papers of appropriate value as applicable and notarized

Know all men by these presents, that I/We---------- (name of the firm/consortium members and address of registered office) do hereby make, nominate, constitute and appoint Mr [•], whose signature given below herewith to be true and lawful Attorney of M/s [•] hereinafter called 'Company', for submitting bid/entering into Contract and inter alia, sign, execute all papers and to do necessary lawful acts on behalf of Company with M/s BEML Limited, BEML Rail, Plant, Bhopal, ZONE-1 M.P. Nagar, Bhopal- 462011, M.P. in connection with [•] vide Tender Ref No. 6300040573 Dated 25.05.2026

And the Company do hereby agree to ratify and confirm all acts, deeds, things or proceedings as maybe lawfully done by the said attorney and by or on behalf of the company and in the name of the company, by virtue of the powers conferred herein and the same shall be binding on the company and shall have full force and effect.

This power of attorney is issued regular and valid pursuant to the Resolution passed by the Board of Directors of the Company in their meeting held on ..... (**date of board meeting**)

IN WITNESS WHEREOF, the company has executed the power of attorney through its authorized director/ CEO on this (**Day**) of (**month**), (**year**).

FOR (**Name of the limited company)**

(**Signature of authorised director/ CEO** with seal)
Name: (Name of the director)
Designation: .....
Place & date

Specimen Signature of the Attorney:

Attested by: Authorized Director / CEO

NOTE- This POA should accompany a resolution passed by the Board of Directors authorizing the issuance of the POA and the signing authority of the executant.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
17	1.6.1	Annexe Building	58	NIT

The revised floor wise sitting arrangement for the Annexe Building units have been provided in **Annexure – 1**.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
18	1.6.4.4	Main Gate Complex with Security Office	68 of 189	NIT

The above referred clause has been amended as follows;

1.6.4.4 Main Gate Complex with Security Office

The Main gate complex building is integrated with Security office. This is RCC structure building. This is Ground +1 building structure. Total Built up area is 863 Sq. m. This building has a provision for entry / exit for all employees with access control system. This Main Gate will provide access to main security building from employee entry. The main gate complex is an RCC structure of G+1 floor with gate pass, scanning and security monitoring area.

The building shall have the following facilities:

- Reception and waiting area
- Scanning area
- Staff room
- Monitoring room
- Chief security room
- Sliding Gate at Plant Entry (Facility 7A as per Revised Master Plan)

Being the main entrance to the factory, the facia and facade of the gate complex have to be aesthetically beautiful, facade is to be aesthetically appealing and combination of different treatment such as dry-stone cladding, ACP (aluminium composite panel), Rustic textured paint, Exterior grade acrylic emulsion paint. Etc., should be planned in consultation with BEML before execution. The area of parking at entrance gate should be provided with heavy duty paver blocks of approved colour combination and shade.

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
19	1.6.4.5	Gate Complex at Railway Siding Main Gate Complex with Security Office	68	NIT

The above clause name i.e. “Gate Complex at Railway Siding Main Gate Complex with Security Office” shall read as “Gate Complex at Railway Siding”

Sl. No	Reference Clause No	Clause Name	Page No.	Document Name
20	1.6.4	Associated Building/ Facilities Description	66 of 189	NIT

The following item is a supplementary to the above referred clause:

1.6.4.13 Hardstand for parking (covered):

A covered hardstand for parking of approximate area of 4650m2 is envisaged for parking of approximately 100 Cars and 400 Two wheelers using interlocking concrete paver blocks as per relevant IRC and IS codes (IRC: SP:63 and IS 15658). Suitable base preparation is to be resorted to for laying of paver blocks. The grade of the paver blocks shall be of minimum M40 and 60 mm thick. The roofing shall be of galvalume sheets. **The cost of this facility is to be quoted along with the Raw Material Storage Yard Facility (i.e. Item No. B (3) under Civil & Structural Works. The successful bidder shall submit the cost breakup of this facility separately before the award of contract.**

21. General (Pre-Bid Queries)

Having the bid submission date extended by 21-Days beyond the initial 45-days bid submission time, the queries from the bidders (if any) shall be entertained only if they are received on or before **15/07/2026**. The BEML will reply to only those queries which are received before the scheduled date as mentioned above.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
1	Existing Structures	Topography Survey Drawing	Some houses and structures are being noticed within the boundary limit. Please elaborate who will dismantle the houses.	The site will be handed over to EPC contractor without any encroachments. Dismantling/ demolition and disposal of debris pertaining to any structure falling under the plant boundary shall deemed to be included in the scope of EPC contractor.
2	Finished Floor Level	General	Please indicate the FFL of the facilities in RL values.	Refer Clause 1.6 Page No. 49 of 189 in NIT.
3	NIT document - Scope of Work Cl. 1.4	"Execution of work with construction of buildings and services. This shall include supply of all required materials, construction, installation, testing and commissioning for operationalization of the building and services. This shall also include clearance of jungle, cutting of all existing trees as required, services and utilities ....."	Please indicate whether Tree cutting approval will be taken by BEML/MECON with documentary evidence of successful bidder.	No tree cutting is envisaged as of now.
4		General	The STP capacity is considered 100 KLD. Please confirm.	STP shall be of minimum 200 KLD capacity, however, based on water requirement as mentioned in NIT, bidder to assess and quote accordingly if it is exceeding.
5	NIT document - Scope of Work Cl. 1.6	Buildings and Facilities	Bidder undertands that only EOT and Underslung cranes are within EPC scope of supply. Remaining all equipments (Moving machine/ equipment like crane, traverser, turntable, forklift, trolleyn etc.) are to be supplied by BEML. Bidder requests to share the load data, equipment sizes etc. for structural estimation.	Yes, Only EoT's and Underslung Crane are under the scope of EPC Contractor. AGV's is expected to be used for movement of coaches (2 Nos. of AGV per coach) in Tandem arrangement inside the Manufacturing Block. AGV self weight may be considered as 5.6T each and fully furnished coach weight may be considered as 55T. Live load details are provided in Technical Specifications

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
6	NIT document - Scope of Work Cl. 1.6	List of facilities	Bidder understands that 100 ft weighbridge means the platform length is 100 ft. Bidder considers the width of the platform is 3m. Further Bidder considers weigh bridge shall be of pitless type. Please confirm.	The weigh bridge is proposed to be installed on EPC mode. Hence, the bidder is required to assess themselves as per the requirement of the proposed facilties and quote accordingly. It is advised that the bidder should consult product supplier to get the required technical details. In general, weigh bridge shall be of static and pit type.
7	NIT document - Scope of Work Cl. 1.6	List of facilities	In absence of detail specification bidder consideres the DG EOT/ SGUS Cranes shall be as per IS-3177 of M-5 class. MOC of the crane shall be as per OEM standard. Please confirm.	Class of the Crane required for DG EOT i.e. M-8 has been mentioned in Technical Specification. Follow tender specifications. Class of Underslung crane shall be of M-5 type.
8		General	Is the boundary wall of the plant is in Bidder's scope ? If yes, please elaborate the material of construction. Also, please demarkate the boundary line.	Internal compound/ security wall required to secure the facility as per the drawings and for the main gate entry apart from the boundary wall already constructed is under the scope of EPC contractor. The material of construction shall be RCC and brick masonry as per the scope of work.
9	NIT document - Scope of Work Cl. 1.4	"....storm water drains connected to rain water harvesting pond...."	Please show the size and location of RainWater harvesting pond. Any specific lining requirement is required to be considered ?	Rain water harvesting pond is not envisaged instead recharge wells of suitable size and number are to be provided by EPC contractor for tapping rain water runoff from roofs of facilities and hardstand.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
10	Technical Specification (1.12)		Provide the FGL for all buildings for earthwork.	Refer Clause 1.6 Page No. 49 of 189 in NIT.
11	Technical Specification (1.12)		Please provide the type of vehicles which will be plying and the frequency to decide the crust composition.	The road is proposed to be constructed on EPC mode. Hence, the bidder is required to assess themselves the type of vehicle as per the requirement of the proposed facilties, codal provisions and quote accordingly.
12	Technical Specification (1.12)		Provide annual rainfall data for drainage design.	Bidders have to collect local meteorological data themselves for designing purpose
13	Deatailed Engineering Scope Scope of work, cl no 1.5.1 ,a, page no 45	a. Surveys and investigations Topographical survey (Topographical survey report carried out at the time of DPR preparation available with BEML has been annexed with this tender (Report). However, verification/ validation of the same with respect to the MSL of Obaidullaganj Railway Station shall be the sole responsibility of EPC contractor as it is very critical for railway siding work and Land & Site Development Work as dispatch railway track is to be connected to the broadgauge line passing by the side of project site with slope as permitted by the Indian railways. Soil investigation and geotechnical report available with BEML is also enclosed with this tender (Report) which is a preliminary investigation carried out for DPR preparation. It is mandated that fresh soil investigation be carried out for the assessment of soil bearing capacity and decision regarding type of foundation	1. Topographical survey report Soft Copy(Excel/Cad) required. 2. Deatiled Scope of Take off Point from Main Line of Obaidullaganj to Coach factory. 3.Deatiled Scope of 25KV OHE from Main to Coach factory and Coach factory Siding. 4.ROW Scope for Track laying from Main Line of Obaidullaganj to Coach factory. S & T (Signalling and Telecomunication) -- 1. If the plant siding is connected to the Indian Railways network, entry and exit movements between the main line and the plant siding generally require signalling systems and operating procedures. Kindly confirm whether the scope of signalling works, including any associated interlocking, signalling interfaces, and operational requirements, is included in the tender scope or shall be considered excluded. 2. As the proposed track is to be connected to an Indian Railways station and may necessitate alterations/modifications to the existing	1. Topo survey report (CAD) has already been shared in NIT. 2. Take off point from main line of Obaidullagunj to Coach Factory is not under the scope of EPC contractor. 3. Scope of 25KV OHE from Main to Coach factory and Coach factory Siding is in ECP contract. 4. ROW Scope for Track laying from Main Line of Obaidullaganj to Coach factory is not in the scope of EPC contractor. 5. S & T (Signalling and Telecomunication) - Not under the scope of EPC contractor.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
14	Stinger Box	1.6.2 Coach/Car Inspection & Testing facility	STINGER BOX A 750 V DC power supply Stinger box has been envisaged inside the Car body inspection bay for a distance of 400 m for the testing facility for Metro car. This area has been isolated by means of access control system which will allow only authorised personnel to access this area. This area has been designated along the column axis No. A	Access control system shall be in place for total inspection and testing bay.
15	25KV TESTING TRACK 1.6.2 Coach/Car Inspection & Testing facility	A 25 kV AC power supply has been envisaged inside the Car body inspection bay for a distance of 400m for the testing facility for Commuter rails. This area has been isolated by means of access control system which will allow only authorised personnel to access this area. This area has been designated along the column axis No. B	For a Car Inspection & Testing Facility (Coach/Car maintenance facility), whether 25 kV supply is taken directly from the existing Railway OHE network or Seprate feed required Like TSS/SSP with CB. If Seprate 25KV feed(TSS) required incoming HT Volatge also required.	Seprate 25KV feed (TSS) is required
16	Appendix-C Compliance to Bill of Quantity (BOQ)	Preparation of Architectural, Structural Designs, proof check of design & drawings by IITs, Cutting, levelling/filling of land, field survey and soil investigation and Construction of Manufacturing Block with Annexe building, Inspection Block, various technological buildings, non-technological buildings, Canteen Building, Fire Station, Occupational Health Centre, rail tracks with and without OHE, traverser foundation, construction of MRSS, EPSS, compressed air station, gas bank, raw material storage	Confirmation required whether new laid All track 25KV OHE arrangement is Required or Not.	Yes, required.
17	Roads & Drains	Technical Specification (1.12)	Provide the FGL for all buildings for earthwork.	Refer Clause 1.6 Page No. 49 of 189 in NIT.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
18	Roads & Drains	Technical Specification (1.12)	Please provide the type of vehicles which will be plying and the frequency to decide the crust composition.	The road is proposed to be constructed on EPC mode. Hence, the bidder is required to assess themselves the type of vehicle as per the requirement of the proposed facilties, codal provisions and quote accordingly.
19	Roads & Drains	Technical Specification (1.12)	Provide annual rainfall data for drainage design.	Bidders have to collect local meteorological data themselves for designing purpose
20	Roads & Drains	Technical Specification (1.12)	Possible location of drainage discharege point.	The one connection point for the storm water shall be to the existing nalla which is located adjacent to the entry point of the proposed plant. Another connection point shall be at eastern side of the plot near the temple for discharge of storm water into existing pond. No discharge of Sewerage to Municipal Sewer is envisaged as all generated sewer shall be treated through plant STP as it is a zero discharge plant.
21	Incoming Power & utility interface	NIT-6300040573: 1.6.4.7. Main Receiving Substation (MRSS): MRSS is a RCC structure building with total Built up area is 300 Sq. m. A Separate 33/11kV transformer area of size 12m X 6 m has been considered. A Satellite office building is also integrated with this MRSS building. A dedicated 33 kV HT cable will reach to Project site by MP State Electricity Board under deposit basis work. The 33 kV HT line will be terminated at the metering cubicle inside the project area. 33 kV Cable from metering cubicle to the MRSS shall be laid through suitable cable routing by the EPC.	The SEB is responsible for bringing the cable to the metering cubicle inside the plant, and the EPC Contractor responsibility start from Metering cubicle. Further, the required deposit for laying of 33kV cable from SEB to metering panel will be bear by Client/BEML Please confirm.	Yes, confirmed.
22	Cables	Technical Specification: K. HT/LT Cables: 11kV cables shall be heavy duty, FRLS, XLPE insulated, PVC sheathed multi core, aluminium/copper conductor steel wire double armoured, FRLS type.	Please confirm the requirement of Al or Cu condutor for HT & LT Cable.	Aluminium conductor with armoured cable

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
23	DG set capacity Discrepancy	NIT-6300040573: 1.6.4.8. Emergency Power Supply System (EPSS): Emergency power supply for all other units & Pump Houses are planned from Centralized DG system near to MRSS building. 2Nos. 1000 kVA. DG sets has been considered and the same is located near to MRSS. Containerbed type DG set has been considered with a provision for Day tank to feed the DG set. A Hard stand structure of around 70 Sq. m has been considered for the facility. Technical specification: 14.1 Technical Particulars of DG sets 14.1 TECHNICAL PARTICULARS OF DG SETS Sl. No. | Description | Unit | Value 1. | Rated power at the alternator terminals | KVA | 2000 2. | Power rating classification | KVA | Prime power with varying load required during power outage.	In RFP, NIT 6300040573 it is mentioned that 2 No's of 1000kVA DG set to be consider while in technical specification it is mentioned as 2000kVA DG set. Further in the layout drawing 3 nos of foundation is shown. Please clarify which one to consider.	DG Sets are proposed for 2 Nos. of 1000 kVA capacity each only.
24	Fuel Storage	Technical Specification: 7. Fuel Oil System Each DG set shall be provided with 990 Liters Day tank. Day tank shall be provided with flanged fuel inlet, outlet, high- and low-level switches, float valve etc. The day tank shall be provided with level gauge calibrated in liters for easy filling in of fuel. Fuel outlet of day tank to be connected to the fuel supply / feed line of DG set. Fuel return line from the DG set shall be connected back to the day tank. Drain cock shall be provided. The oil tanks shall be mounted on a self-supported steel structure frame.	We are considering that each DG sets will be provided with 990 ltr Day oil tank only and there is no additional requirement of HSD tank. Please confirm.	There is no additional requirement of HSD tank
25	Future Load Growth	Future provision/ Space/ Spare for Electrical System	Please confirm the requirement of future provision, space/ spare capacity, redundancy for Electrical Equipments (DG, Transformer, UPS), LT Panel feeders, etc.	Follow tender condition
26	Specialized Testing Facilities	NIT-6300040573: 1.6.2. 25KV TESTING TRACK: A 25 kV AC power supply has been envisaged inside the Car body inspection bay for a distance of 400m for the testing facility for Commuter rails. This area has been isolated by means of access control system which will allow only authorised personnel to access this area. This area has been designated along the columns axis No. B. A 750 V DC power supply Stinger box has been envisaged inside the Car body inspection bay for a distance of 400 m for the testing facility for Metro car. This area has been isolated by means of access control system which will allow only authorised personnel to access this area. This area has been designated along the column axis No. A.	As per present technical specificaiton and scope details MRSS building have only 33/11 kV system. Please clarify the tap off point for 25kV & 750V DC system. For clarity provide the block scheme/SLD.	Please follow New SLD diagram provided in Annexure 1 of Corrigendum-1. It is to be noted that the new SLD diagram is conceptual in nature and is shared only as reference and quoting purpose only. EPC bidder shall need to design and prepapre detailed SLD diagram during design stage and get it approved from BEML.
27	UPS	Technical Specification: Q. UN-INTERRUPTED POWER SUPPLY (UPS) Each UPS set shall consist of common battery bank for 30 minutes back up (for lighting) and 1hour backup (for workstation) in case of power failure.	We are envisigning that the 30 min backup is for complete plant & external area Lighting. However, emergency lighting will be considered with 90 min of inbuilt battery bakcup as per requirement of NBC/ NFPA norms. Please confirm.	Follow tender condition

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
28	Solar street lighting, Lighting automation, Façade lighting, Landscape lighting, EV charging, DC system for plant		Please confirm the rquirement of Solar street lighting, Lighting automation, Façade lighting, Landscape lighting, EV charging, DC system for plant, etc	Follow tender condition.
29	Equipment Layout drawing & client supplied equipment load list		Please provide the Equipment layout drawing which is being supplied & installed by client along with load list, power factor, starting methodology, scope demarkation for all those equipments.	SLD diagram has already been shared in Corrigendum-1. Bidder to assess the requirement on those basis.
30	INSTRUMENTATION & PROCESS CONTROL , IBMS NIT-6300040573(Page 55 of 189)	Under frame fabrication facility: Welding controller with software & Robot gantry system	Kindly confirm the scope of the Welding Controller, associated software, and Robot Gantry System. Also, please confirm whether any monitoring, control, or integration with the IBMS is required.	Not Required.
31	INSTRUMENTATION & PROCESS CONTROL , IBMS NIT-6300040573(Page 55 of 189)	Car body assembly welding facility: EOT cranes will be utilised for the lifting and lowering of the car body shell. Piped gas line and compressed air facility has been planned at columns and can be drawn to the consumer points.	Kindly confirm the scope of EOT Cranes mentioned under the Car Body Assembly Welding Facility. Also, please confirm whether any monitoring, control, or integration with the IBMS is required.	The scope of EoT cranes has already been provided in NIT and techniical specifications. IBMS integration shall be as per general industrial standards which is to be provided by EPC contractor for approval
32	INSTRUMENTATION & PROCESS CONTROL , IBMS NIT-6300040573(Page 62 of 189)	1.6.2 . Coach/Car Inspection & Testing facility	Kindly confirm whether the Coach/Car Inspection & Testing Facility is required to be integrated with the IBMS. If yes, please provide the detailed scope and integration requirements.	IBMS integration shall be as per general industrial standards which is to be provided by EPC contractor for approval
33	TRAIN CONTROL AND MONITORING SYSTEM NIT-6300040573(Page 64 of 189)	TRAIN CONTROL AND MONITORING SYSTEM (PCMS TEST)	Kindly confirm the scope of the Train Control and Monitoring System (TCMS Test). Also, please confirm whether any monitoring, control, or integration with the IBMS is required.	Follow tender condition

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
34	INSTRUMENTATION & PROCESS CONTROL , IBMS NIT-6300040573(Page 72 of 189)	Development of Green Belt and Landscaping (37 Acres)	Kindly confirm whether any security systems such as CCTV, Perimeter Intrusion Detection System (PIDS), Access Control System (ACS), or other ELV systems are required for the Green Belt and Landscaping area (37 Acres).	Follow tender condition
35	INSTRUMENTATION & PROCESS CONTROL , IBMS Chapter-7 & 8	MRSS & EPSS	Please clarify whether these systems are required to be monitored through IBMS only or controlled through dedicated PLC/SCADA systems with integration to IBMS.	Follow tender condition
36	INSTRUMENTATION & PROCESS CONTROL , IBMS Chapter-7 & 8 (Page 48 &113 of 262)	Control Rooms & IBMS room	Kindly provide the locations and layout details of the Control Room(s) and IBMS Room(s)	Refer corrigendum-3.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
37	INSTRUMENTATION & PROCESS CONTROL , IBMS Chapter-7 & 8 (Page 118 of 262)	VESDA detectors shall be provided in critical or high-value areas where early detection is essential, such as: a. Server Rooms	Kindly provide the locations of Server Rooms where VESDA detection systems are required to be installed.	Refer corrigendum-3.
38	INSTRUMENTATION & PROCESS CONTROL , IBMS Chapter-7 & 8 (Page 119 of 262)	7.3 VIDEO CONFERENCE SYSTEM Discussion rooms, Board rooms, and large conference halls	Kindly provide the locations, quantities, and seating capacities of the Discussion Rooms, Board Rooms, and Large Conference Halls where Video Conference Systems are required.	VC for conference rooms are envisaged in Annexe buildings
39	INSTRUMENTATION & PROCESS CONTROL , IBMS Chapter-7 & 8 Page 129 of 262)	Compliance: Adherence to structured cabling standards (TIA/EIA-568), data centre guidelines (TIA-942), and local telecom regulations	Kindly confirm whether TIA-942 Data Center Guidelines are applicable to this project. If applicable, please specify the areas/buildings where compliance is required.	BEML cyber security guidelines to be followed
40	INSTRUMENTATION & PROCESS CONTROL , IBMS Chapter-7 & 8 (Page 143 of 262)	MATERIAL HANDLING FACILITIES	Kindly confirm the detailed scope of Material Handling Facilities and clarify whether any monitoring, control, communication, or integration with the IBMS is required.	Follow tender condition
41	Weight bridge NIT-6300040573(Page 52 of 189)	100 ft road Weight bridge & office	Please confirm whether any monitoring, control, or integration with the IBMS is required.	Follow tender condition
42	VEHICLE CONTROL CIRCUIT TEST NIT-6300040573 > TENDER DOCUMENT ,Tender Notice No. 6300040573 Dated: 25.05.2026 >, Page no. 62	1. The vehicle Control and Safety interlocks of train are as per the design via various Simulations.	Kindly confirm the scope of the vehicle control circuit and clarify whether integration with the PLC / IBMS is required, or if the complete system is under BEML's scope.	Follow tender condition

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
43	General		please share Design concept report or material specifications for Plumbing Services and equipments if any.	The material specifications related to plumbing services are already provided in Technical specifications
44	Tender document,WATER TIGHTNESS TEST,Page no 63	The water used to perform this test will be used again by means of closed loop recycle mode	Please confirm the range of accepted TDS parameters for RO Water to be used for Testing.	Feed Water TDS - <500 ppm. Product water TDS - <100 ppm.
45	Tender document,Requirement of Water,Page no 69 VCS Technical Specification,Requirement of Water,Page no 167	Requirement of water	There is difference in Water Reuirement Calculation Identified in both documents , please confirm which one shall be followed.	Please refer Scope of Work Clause 1.6.4.6 for correct water demand requirement.
46	Tender document,Requirement of Water,Page no 69	Water requirement washroom and drinking @ 45 l/pax No. of People around 1600 (1455+10%)	Please confirm the Staff count , additionally confirm as calculation indicated fresh water 45l/pax no. whether the water supply for Urinal and EWC to be used from Fresh Water Storage or it should be considered from Treated flushing water from STP.	Please refer Scope of Work Clause 1.6.4.6 for correct water demand requirement. The treated water from STP is not to be used for flushing purpose.
47	Tender document,Requirement of Water,Page no 69 VCS Tender document 1.6.4.12 RO Plant (Container Based):Page no 72	Total Water Requirement per day - Say 210 Cum	Please confirm the Packaged RO Plant capacity as from calculations it apears to be 0.21 MLD however RO Plant requirement is of 1 MLD.	Follow tender specification
48	Drawing No. MEC-I0047-01-48-D1-XX-12-DR-A-01100	DOMESTIC AND FIRE WATER PUMP HOUSE AND SUMP BUILDING	The Storage Tank for Treated RO Permeat is not highlighted in Drawings , please confirm the Capacity to be maintained and Storage Tank Material i.e. RCC / GFS .	Please refer NIT Clause No. 1.6.4.12 Page No. 72. However, it is clarified that the RO storage tank will have 2 compartments each having 50% of total capacity. Refer the revised master plan for location of RO storage Tank as well as RO system.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
49	Tender document,Irrigation System,Page no 74	Total green belt/ landscaping area: 37 acres (approx. 149734 Sq.m)	Based on Landscape Area and NBC 2016 Irrigation Water Requirement for Landscape Area, There shall be Irrigation Storage Tank Requirment. In Water Considerations we did not found required quantity . Please confirm to metigate the additional Irigation water requirenet any additional water source to be considered other than trated STP Water.	Irrigation water requirement is proposed to be met with treated STP effluent, Ro reject water and Municipal Corporation supply. The total capacity of fresh water tank proposed along side water supply pump house shall be as per the drawing enclosed in NIT. This storage shall also cater for ilrrigation along with other water requirement of the plant.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
50	Tender document,NIT-Page no 69 Clause 1.6.4.6	Water shall be made available to the site at 1 point inside the plot area by municipal corporation	Please share the location of water supply point	Near municipal solid waste disposal plant.
51	General	Exess Drainage Overflow connection	During STP maintainance, any by pass connection upto external sewage drain please share the location	There is no municipal sewer line nearby. Therefore, the bidder has to envisage alternative measures/ facility to divert/ bypass sewage on temporary basis for carrying out STP maintenance. This has to be taken care during STP design.
52	General	Water Dispenser / Water Cooler / Drinking Water Fountain	Please confirm if any specific Area there is reuirement of Water Cooler / DWF.	Water Dispenser / Water Cooler / Drinking Water Fountain are not envisaged in this tender. However, drinking water points are to be provided for connecting it into Water Dispenser / Water Cooler / Drinking Water Fountain
53	General		please share Design concept report or material specifications for Fire Protection Services and equipments if any.	The material specifications related to fire protection ssytems are already provided in Technical specifications
54	Tender document,1.6.4.3 Fire Station,Page no 67	1.6.4.3 Fire Station	Please confirm the Refilling considerations and Storgae for Fire Tender to be consider separately for Fire Station or Shall be filled from Fire Storage Tank and Pump Room.	Fire water storage capacity requirements and tank hev already been provided in technical aspecification and facility drawing
55	NIIT-6300040573	Kitchen Equipment's is a specialized subject, hence the cost of the same is not considered in this document.	Please clarify, whether HVAC for kitchen will be in our scope and also provide the battery limits.	3 Nos. of 40 TR VRF system are proposed for the canteen facility which are covered under the scope of EPC contractor. However, Cooking Area Exhaust System / Kitchen Exhaust System are not included in the scope, however, general exhaust fans of adequate capacity and numbers are to be provided in kitchen for proper ventilation.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
56	NIIT-6300040573	Mechanical ventilation systems (Heavy duty industrial and exhaust fans) supplement natural airflow to maintain indoor air quality and temperature control in zones with heat generating equipment. The EPC contractor to design and assess the number of such exhaust fans with their capacity and location of installation.	Heat dissipation data is required to design the ventilation system of all relevant buildings where ventialation is required .	EPC contractor to assess and propose as per general industry standard practice for approval from BEML
57	General		Kindly confirm the redundancy requirement for HVAC items.	Redundancy requirement is not there for HVAC system
58	Technical Specifications	The capacity of Air conditioning system shall be arrived based on room sizes, Temperature, RH, Occupancy, solar loads, internal equipment heat loads, lighting loads etc. as per ISHRAE / ASHRAE standards. 20% factor of safety (for de-rating of equipment / air leakages in ducts etc.) shall be considered on the capacity of the equipment.	Heat dissipation is required to design air conditioning system.	EPC contractor to assess and propose as per general industry standard practice for approval from BEML
59	Soil Investigation	Soil Investigation and Topography Survey Report enclosed with the Bid	The Bidder wants to execute Pre-Tender Soil Investigations in form of Confirmatory Bore-Holes and Topography survey at the earliest and seek confirmation from the Employer	Bidders can carryout pre-tender survey and investigation studies at site. Bidders can reach the contact details provided in NIT for furtherance.
60	Date of Submission	Date of Submission = 09-07-2026	Considering the volume and complexity of the Bid , the Bidder requests the Employer to extend the Due Date of Submission of the Bid till 30-07-2026 , to enable the Bidder to submit most competitive and comprehensive Bid.	Refer Corrigendum - 2
61	EMD BG NIT	Bank Guarantee from any of the commercial banks	The folloing details required : Beneficiary Name & Address, Bank Name, Contact Person email Id	The format given for BG against EMD at Annexure - VII may please be followed.
62	Architectural & Interior Finishes Technical specification		Kindly provide Architectural & Interior finishing schedule of all blocks as per the relevent standard.	Please refer Corrigendum - 3.
63	Building plinth Level Drawings PDF_c		Kindly confirm all building plinth level, as per the data received there is no plinth level.	Refer Clause 1.6 Page No. 49 of 189 in NIT.

बी ई एम एल
BEML
Beyond Possibilities

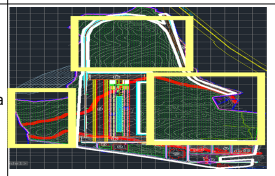
(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
64	Façade Drawings PDF_c	DRAWING No.: 03G- ANNEX SPACE GROUND FLOOR PLAN, TYPICAL FLOOR PLAN AND SECTIONS	Kindly confirm concept facade details of Car body Fabrication Block and Car body Inspection & testing bay block relavent standard.	Please refer Corrigendum - 3.
65	Landscape Drawings PDF_c	DRAWING No.: MEC-I0047-01-48-D1-XX-06-DR-A-01100	Kindly confirm concept of landscape.	Please refer NIT Scope of work Clause No. 1.6.4.12 Page No. 72
66	Civil Drawings PDF_c		Kindly provide Civil layout drawing of Car Body Inspection & Testing Bay	Please refer Corrigendum - 2.
67	Civil Drawings PDF_c		Kindly share location drawing of Open Yard surrounding manufacturing Block & Inspection/Testing Block . Also pavment floor specification requirement	Heavy duty interlocking paver blocks 80mm thick M65 of approved colour combination and shade shall be used in the area other than plinth protection and Road.
68	Civil Technical specification		Disposal yard location of excavated soil /rock	The disposal of surplus excavated soil/ rock shall be the responsibility of EPC contractor including identification of suitable disposal site outside the plant boundary without any cost implication to BEML
69	DG Backup General		Please confirm the loading on the DG set. Do we need to consider 100% loading on the DG set or only essential load required to properly shut down the plant along with life safety and security related electrical loads. Please confirm	Consider 100% loading on DG set.
70	Hazardous Area Classification General		Kindly share the list of hazardous area if any to be consider.	As per the processes involved in manufacturing only paint booth can be classified as hazardous area which will be housed at 1st floor fabrication bays of the Manufacturing block.
71	Periphery & Green belt area lighting General		Lighting along the plot boundary wall & Green areas as marked in the attached drawing is not envisaged. Please confirm.	Illumination of all roads inlcuding peripheral road is envisaged. The bidder to consider this aspect.
72	Voltage Drop Technical	Technical Specification: DESIGN PARAMETERS:	We are considering voltage drop as per NBC 2016. Please confirm.	NBC 2016 norms can be followed subject to meeting functional requirements (viz. Test bay, robotics, testing equipments, EoT cranes, etc.) of the facility with respect to Voltage.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
73	Transformer Phase angle Technical d) Vector groups HV-LV: DNyn	Technical Specification: 6.6 EQUIPMENT SPECIFICATION: A. POWER TRANSFORMER:	We are considering the vendor group DNyn is typo error and vector group to be considered is Dyn11 for power and distribution transformer, please confirm.	Confirmed.
74	Transformer losses		Transformer losses has not mentioned in the specification for Power & Distribution Transformers. We are considering as per ECSBC 2024, Star rating 1. Kindly confirm.	Star Rating for the Transformer is not required, however, the efficiency of the transformer should be 95% and above.
75	33kV switchgear Specification		Kindly share detailed specification of 33kV Switchgear.	SLD diagram has already been shared in Corrigendum-1. Bidder to assess the requirement on those basis. EPC contractor is responsible for its complete design, procurement, supply, testing and commissioning as per the reputed approved make (Hycone, ABB, Siemens, CG power, Schneider electric, L&T and GE Power).
76	CSS	Technical Specification: G:COMPACT SECONDARY SUBSTATIONS (CSS):	Kindly share detailed specification of 11/.433KV Compact Sub-station.	SLD diagram has already been shared in Corrigendum-1. Bidder to assess the requirement on those basis. EPC contractor is responsible for its complete design, procurement, supply, testing and commissioning as per the reputed approved make (Hycone, ABB, Siemens, CG power, Schneider electric, L&T and GE Power).
77	UPS Lighting		We are considering 10% of total light fittings under UPS for emergency lighting with 90 minutes battery backup. Kindly confirm	Confirmed.
78	RO System	Tender Document RO Plant Scope will start from Feed Pump at Pump House located approx. 50-75 mtr.	Please provide: i. Pipe size and material ii. Available pressure at tapping point iii. Minimum and maximum flow availability	EPC contractor is responsible for its complete design, procurement, supply, testing and commissioning as per the reputed approved make. Hence, bidder is to assess and quote accordingly.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
79	RO System	RCC Storage Tank of 250 KL to be constructed for RO water storage	Please provide: i. i. Distance to delivery point - ii. Pipeline size and material iii. Required residual pressure at delivery point iv. Storage tank/sump capacity v. Tank operating levels (LLL, LWL, HWL) vi. Elevation difference between RO plant and point of delivery	Please refer the revised master plan for location of RO plant and RCC storage tank. EPC contractor is responsible for its complete design, procurement, supply, testing and commissioning as per the reputed approved make. Hence, bidder is to assess and quote accordingly.
80	RO System	Feed Water and Product Water Quality	i. Complete feed water quality and desired product water quality are required for membrane selection and process design. ii. Please also specify the guaranteed product water quality requirements.	Feed Water TDS - <500 ppm. Product water TDS - <100 ppm.
81	RO System	Requirement of post treatment of produvt water	i. Since the RO water is intended for car body testing and associated industrial applications, re-carbonisation and re-mineralisation may not be required. ii. Please confirm whether the permeate water from the RO system can be utilized directly or whether any post-treatment is envisaged.	No post treatment is envisaged. However, RO should necessarily have pre-filtration unit of adequate capacity
82	RO System	Disposal of RO reject Water	Please clarify the mode of disposal of RO reject water: i. Discharge to drain ii. Discharge to ETP/STP iii. Recycling/recovery system iv. Evaporation pond v. Other disposal arrangement Please provide any applicable environmental or discharge limits.	RO reject water is proposed to be used for irrigation purpose.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
83	RO System	Preferred Technology / Approved Vendor	Please confirm whether: i. Any specific RO membrane manufacturer is preferred. ii. Any approved vendor list exists for membranes, pressure vessels, pumps, instrumentation, PLC/SCADA, etc. iii. Any specific RO technology (single-pass, double-pass, high-recovery RO, etc.)	i. Any specific RO membrane manufacturer is preferred - **DOW, DuPont, Hydronautics, alfa laval.** ii. Any approved vendor list exists for membranes - Pressure vessels, Pumps, instrumentation, PLC/SCADA, etc. - **For Membrane and PLC/SCADA preferred makes have already been provided. For rest, Bidder to consider reputed makes for initial assessment of cost , however, the successfull bidder will have to get prior approval of proposed vendor from BEML before the supply** iii. Any specific RO technology (single-pass, double-pass, high-recovery RO, etc.) - **Single-Pass, Minimum net recovery percentage of 70%**
84	RO System	Plant Capacity and Operating Philosophy	Please provide: i. Required RO plant capacity (m^3/hr) ii. Average and peak water demand iii. Daily operating hours iv. Continuous or batch operation v. Future expansion requirements, if any	RO Plant Capacity and water demand has already specified in NIT. It is envisaged that Rain water leakage test shall be carried out for a period of1 hour at car body shell level and fully assembled coach level.
85	RO System	Recovery and Redundancy Requirements	Please confirm: i. Minimum RO recovery percentage required. Page 167 of the Technical Specification mentions “RO reject water @ 30% of Feed Water”. ii. Availability requirements of the plant iii. Standby philosophy (N+1, 100% standby, etc.) iv. Requirement of duty/standby pumps and critical equipment	i. Minimum RO recovery percentage required. Page 167 of the Technical Specification mentions “RO reject water @ 30% of Feed Water - **Minimum net recovery percentage is 70%** ii. Availability requirements of the plant - **20 hours a day** iii. Standby philosophy (N+1, 100% standby, etc.) **- No standy is required.** iv. Requirement of duty/standby pumps and critical equipment - **Nil**

बी ई एम एल
BEML
Beyond Possibilities

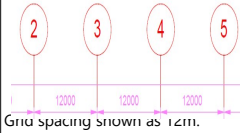
(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
86	RO System	Electrical and Automation Requirements	i. Preferred PLC/SCADA platform ii. Communication protocol requirements iii. Remote monitoring requirements	Siemens, Schneider Electric & ABB - PLC/SCADA platform is required
87	RO System	Performance Guarantees	Please confirm if we need to provide guarantees for: • Permeate flow rate • Product water quality • Salt rejection • Recovery percentage • Membrane life • Specific energy consumption • Overall plant availability	• Permeate flow rate - **50 m3/hr.** • Product water quality **TDS < 50 ppm, TSS : negligible, SDI < 3, Turbidity : Nil** • Salt rejection - **97%-99%** • Recovery percentage - **Minimum net recovery percentage is 70%** • Membrane life - **Minimum 5 Years** • Specific energy consumption - **Energy efficient plant to be provided** • Overall plant availability - **20 hours a day**
88	RO System	Site Conditions	Please provide: i. Ambient temperature range ii. Water temperature range iii. Available installation area iv. Indoor or outdoor installation requirement v. Seismic, wind load, and corrosion classification requirements	Refer tender specification for Sl. No. iii and iv. Water temperature range - 20-25 degree Celcius. Bidder to assess all other parameters on their own and quote accordingly.
89	Drawing for CAR BODY FABRICATION AND ASSEMBLY FACILITY WITH ANNEX BUILDING (Page 10 of Drawings pdf)	 Grid spacing shown as 12m.	Whether different column grid spacing such as 8m or 10m can be adopted. Please confirm.	24m span cannot be changed, however the spacing of columns in longitudinal direction may be reduced maximum upto 8m with no compromise in functional requirement.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
90	General	Minimum depth of foundation not mentioned in NIT/TS.	IS code guideline shall be followed. Please confirm.	Confimed
91	ANNEX SPACE GROUND FLOOR PLAN, TYPICAL FLOOR PLAN AND SECTIONS (DRAFT)-(Page 11 of Prawings pdf) & 60 0f 189 of the NIT (Cl 1.6.1)	be used. However, the frame of the annexe building is to be made up of structural steel. Deck sheet form work can be used for floor casting in the quest As per first para page 60 0f 189 of the NIT (Cl 1.6.1) "the frame of the annex building to be made up of structural steel" . In draft drawing RCC frame shown.	TS shall be followed. Please confirm.	Confimed
92	DOMESTIC AND FIRE WATER PUMP HOUSE AND SUMP BUILDING-(Page 23 of Prawings pdf) & Cl 1.6.4.6 page 68 0f 189 of the NIT	The building is RCC structure building with total Built up area is 850 Sq. m. As per Cl 1.6.4.6 page 68 0f 189 of the NIT "The building is RCC structure building" In draft drawing steel roof shown.	TS shall be followed considering all RCC including roof. Please confirm.	Refer Corrigendum - 3 for revised TS.
93	Cl 1.6.4.9 page 71 0f 189	As per Cl 1.6.4.9 page 71 0f 189 of the NIT "During detail design stage positioning of these compressors within manufacturing block / Inspection Bay, pipeline routing along with technical requirements & BOM will be finalised."	Separate building or shed for compressors shall not be considered. Please confirm.	Separate building is envisaged and is under the scope of EPC contractor.
94	Cl 1.4 (III C) page no Page 42 of 189	Traversers Foundation considered in scope of work.	As per discussion at BEML office on 30-07-2026 instead of Traverses Foundation Goliath crane/ Gantry may be used. Only foundation up to supply of rail for the crane shall be under bidders scope in that case. Please confirm.	Confirmed.
95	MRSS BUILDING-(Page 20 of Prawings pdf)	3 nos DG set space shown.	As per discussion at BEML office on 30-07-2026 2 nos DG set envisaged & 2 nos foundation instead of 3 nos shall be considered. Please confirm.	Confirmed.
96	General	Clause 5.0 of the TS page 46 of 261	Percentage area of polycarbonate sheets not mentioned. 5-10% shall be considered.	5% is to be considered.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
97	Technical	Location of TSS Room	Please provide the location of traction substation which feed the 25 kV AC and 750 V DC supply to system	Refer Corrigendum - 3 for location of MRSS and Corrigendum - 1 for SLD.
98	Technical	Equipment specification	Please provide the Specification / make / rating of 750 V DC & 33 kV SWGR and DC & AC Cables .	Please refer SLD for required details.
99	Technical	Equipment specification	kindly confirm the maximun train load capacity	Query is not relevant to the tender
100	Technical	Equipment specification	Please cofirm the requirement of S&T	S & T (Signalling and Telecomunication) - Not under the scope of EPC contractor.
101	Tender document 1.6.4.12 RO Plant (Container Based):Page no 72	RO Plant requirement is of 1 MLD.	According to WATER TIGHTNESS TEST - 240 water spraying nozzles to spray water at 2 bar pressure at discharge rate of 7.4 ltr/min/nozzle as per IEC 61133 standard -- According to these considerations the process require 1,06,560 Ltrs /hour/ Testing . Please confirm any other requirement to fit 1 MLD..	Follow tender condition
102	NIIT-6300040573	Fire case smoke extraction requirement for Fabrication-assembly and inspection-testing.	Please confirm for Fire Emergencies Smoke Extraction for Fabrication, Assembly, Testing Plant Building.	Not required. However, general ventillation and exhaust system is to be carried by EPC contractor.
103	NIIT-6300040573	pressurisation system for annexe buildings.	Please confirm for Fire Emergencies Pressurisation Requirements.	Not required.
104	Technical Specifications	Track	The proposed alignment for Siding No. 1 includes a 12° degree of curve. However, this does not comply with the permissible limits specified under the relevant Indian Railways guidelines (as applicable for the project).	The proposed alignment of railway track has been provided as per the space availability for accommodating the required number of tracks for stabling, running test and dispatch. For achieving this, certain engineering adjustments would be needed including speed restrictions. The bidder to quote as per the curve provided. However, during detail engineering, if there is a possibility to accommodate bigger radius, the same shall be welcome by BEML.
105	Technical Specifications	Track	Kindly clarify whether the indicated level 452 refers to the Rail Level (RL) or the Formation Level (FL). This information is essential for verifying the track geometry, formation design, earthwork quantities, and the overall design coordination.	The indicated level i.e. 452m MSL is Rail Level.
106	Technical Specifications	Track	Clarification was sought regarding whether the proposed track shall be designed using Long Welded Rail (LWR) or Fish plated track	The proposed track shall be designed using Long Welded Rail (LWR)

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
107		Logistic	Connectivity for vehicler movement from NH46 to Project Site. As the existing bituminus road from nearest NH46 connecting point at Bhimvatika to project site are narrow, few narrow culvert seen, few location the over head electric supply line corresed the road. These condition hindered the heavy/long length tailer movement.	Road widening works from NH 46 to project site (Bhimbetka Road) have already been initiated by PWD.
108		Site Temporary Structure	Temporary site infrastructure to be establish within factory premises	The space accommodating the requested temporary facilities shall be provided by BEML within the plant site based on availability on written request by the EPC contractor.
109		Worker Accomodation	Worker accomodation to be established within factory premises with proper hygine	The space for worker accomodation shall be provided by BEML within the plant site based on availability on written request by the EPC contractor.
110		Construction Water	KPIL will provide construction & worker facility water consumption requirement to BEML for municipality water connetion	Though BEML will make all efforts to have water connection at site before start of work which will be on chargeable basis, In the event of being of unsuccessful in its endeavour, the EPC contractor will have to arrange these on their own without wasting any time at their own cost. The prevailing tariff of Municapal water coonection applicable during the period of execution shall be chargeable. In case of multiple users, fixed charges applicable shall be proportionately distributed as per consumption.
111		Construction Power	KPIL will provide construction power consumption requirement to BEML for Electricity Board connetion	Though BEML will make all efforts to have electricity at site before start of work which will be on chargeable basis, In the event of being of unsuccessful in its endeavour, the EPC contractor will have to arrange these on their own without wasting any time at their own cost. The prevailing tariff of Madhya Pradesh Vidyut Vitaran Company applicable during the period of execution shall be chargeable. In case of multiple users, fixed charges applicable shall be proportionately distributed as per consumption.
112		11KV Electric line	11KV over head Electricty supply line crossing along southern side of boundary wall inside factory premises, need to be shifted from factory premisses	Action for shifting of electricity supply line located inside the factory premises has already been initiated.
113	Building Levels / plinth level		Kindly confirm the plinth level of all the block if any for reference. Kindly confirm reshuffle of the blocks as suitable location as per the site condition.	Refer Clause 1.6 Page No. 49 of 189 in NIT.
114	Architectural & Interior Finishes		Kindly provide Architectural & Interior finishing schedule of all blocks as per the relevent standard.	Please refer Corrigendum - 3.

बी ई एम एल
BEML
Beyond Possibilities

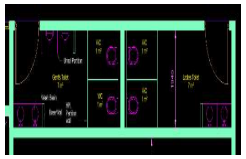
(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
115	Architectural & Interior DBR		Kindly provide the Architectural DBR if any.	Any specific information required from the report for bidding purpose shall be provided based on the availability.
116	Car body Fabrication Block & Car body Inspection & testing Bay		Kindly provide combine layout of of the block.	Combined Layout of both the blocks are provided in the Master Plan and individual layouts of the blocks are provided in the NIT drawings inlcuding its AutoCAD versions.
117	Car body Fabrication Block & Car body Inspection & testing Bay	Annex Detailed Floor 	Kindly confirm any provision of ventilation requirement in toilet area or not.	Yes, provision of adequate ventillation is to be provided in the Toilet Area.
118	Envelop of building (Façade)	DRAWING No.: 03G- ANNEX SPACE GROUND FLOOR PLAN, TYPICAL FLOOR PLAN AND SECTIONS	Kindly confirm concept of facade design of Car body Fabrication Block and Car body Inspection & testing bay block as per the relavent standard.	Please refer corrigendum-3 façade details.
119	Drainage (Waste water & Strom water)		Kindly confirm any proposed layout for drainage. Confirm the demercated line for landscape area if any.	The STP has been relocated. Please refer the revised master layout. Please refer the Technical specifications for Landscaping details.
120	Landscape	DRAWING No.: MEC-I0047-01-48-D1-XX-06-DR-A-01100	Kindly confirm concept of landscape.	Please refer the Technical specifications for Landscaping details.
121	Scope of work, cl no 1.4 ,j, page no 43	Obtaining Green Building Rating compliance (Minimum of GRIHA 3- star rating)	Kindly clarify whether certification cost & compliance cost is reimbursable.	The applicable statutory fee for the same shall be reimbursed by BEML upon submission of fee receipt.
122	Technical specification - Door & windows		Kindly confirm same Tech. spec. to be follow for all block.	Please refer corrigendum-3 for building finishes.
123	Furniture details		Kindly confirm about BEML Policy for furniture quantity calculation.	Please refer furniture details provided in NIT
124	NIT-6300040573 Compressed air	Car body Fabrication Block & Car body Inspection & testing Bay	Compressed air block drawing is missing. kindly confirm the location of comressed air location. In NIT Doc. it has been written (air facility at regular interval between the column so that tapping can be made at any point to meet the compressed air requirement).	Please refer corrigendum-3 for compresser air room drawing.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
125	NIT-6300040573 - Gas line facility	Car body Fabrication Block & Car body Inspection & testing Bay	kindly confirm the location of gas line provision. In NIT Doc. it has been written (gas line facility at regular interval between the column so that tapping can be made at any point to meet the gas requirement.)	The gases shall be utilised in bay 1 and bay 3 of 1st floor of manufacturing block where the fabrication activities are envisaged. The piping layout to be accordingly assessed and quoted by the bidder.
126	Drawings PDF_c	Gas bank	Kindly provide detail layout of the block.	Layout of the Gas Bank Facility has already been provided in NIT drawings please refer.
127	APPENDIX - C Bill of Quantities Sl.No: C2 - S.No: 8	IT Equipment & ITES - 1-lot	Scope of work, Technical Specifications and Drawings are not provided with Tender document. Request to provide the above details for consideration	It is to be noted that the details available in this tender are from the prelminary/ conceptual level of studies only. The EPC contractor shall be responsible for carrying out detail assessment of IT equipments & ITES to meet the functional requirements of the proposed facilites and propose for approval from BEML during the detail design stage.
128	Technical Specification, Chapter-7 Instrumentation & Process Control Page No: 124 of 261	7.6 NETWORK FOR IP-BASED SYSTEMS The communication backbone supports multiple converged IP systems, each operating within logically segmented networks:	Request to provide the Overal Architectural Layout Drawings of Network for IP based Systems. ERP network for Client ERP system, Technical Specifications and Drawings are not provided. Kindly provide	It is to be noted that the details available in this tender are from the prelminary/ conceptual level of studies only. The EPC contractor shall be responsible for carrying out detail assessment of Networking systems, ERP system, etc. as per general industry standard practice to meet the functional requirements of the proposed facilites and propose for approval from BEML during the detail design stage.
129		ACS SYSTEM	Kindly confirm the anticipated number of users/credentials to be supported by the Access Control System	Bidder to assess as per manpower details provided in Pre-bid Clarifications Set -1.
130		ACS SYSTEM	Kindly confirm the number of door licenses and user licenses to be included in the ACS software.	Bidder to assess as per manpower details provided in Pre-bid Clarifications Set -1.
131	Technical Specification 15.3 proposed facilities Pg no 208/262	BMS	Please be specific about the requirement	IBMS integration shall be as per general industrial standards which is to be provided by EPC contractor for approval

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
132	NIT Cl No:-1.6.2 Coach/Car Inspection & Testing facility Page No: 61 of 189	25KV TESTING TRACK A 25 kV AC power supply has been envisaged inside the Car body inspection bay for a distance of 400m for the testing facility for Commuter rails.	Scope of work, Technical Specifications and Drawings are not provided with Tender document. Request to clarify and confirm the scope of work and provide the details for consideration	Drawings for the Car Body Inspection and Testing Facility is enclosed with Corrigendum-3. For testing of manufactured coaches, a 25KV 50 Hz AC single phase OHE line is to be provided throughout the length of testing bay for transmitting power to the rail coaches. The standards and specification shall be primarily governed by RDSO standards. The work is to be carried out on EPC mode. Please refer SLD.
133	Cl. 3 (F), Sr. No. 2 (F), Pg. 21 of 189 The Bidder should have successfully executed Minimum 02 projects pertaining to railway / workshops / industrial / commercial / Institutional Project on EPC mode each valuing not less than Rs. 216 Crore during last 07 years with In-House Capability in at least Civil & Structure and MEP		We request authority to give 100% marks in case bidder has completed twice the required Value of works in a single contract. For eg.: In case, bidder submits a single project having completed ₹ 432 Cr. value of works, he should be awarded 100% mark	This clause stands modified refer Corrigendum -1 to be issued shortly
134	NIT Clause: 1.6.3 Inter Bay Traversers Pg No 66 of 189	2-Nos. of Surface type Traversers has been envisaged under this project. 1-No. 75-Ton capacity Traverser area of 240mX32 m. 1-No. 75-Ton capacity Traverser area of 200m X 32m	Since the traverser supply and installation are not within the contractor's scope, kindly provide the wheel load data and dimensions for assessment of civil quantities.	Surface type traversers are now replaced by Goliath Crane. Fully furnished coach weight may be considered as 55T. Bidder to assess the wheel load accordingly.
135	Apendix-C Bill of Quantities and Master Plan Layout	As per A- Land & Site Development Green Belt Area	9- Green Belt Development-37 Acres, Kindly confirm the location of green belt area to be considered, and share revised Master Plan for better clarity.	Green belt area has been shown in the draiwngs and the same is provided in Corrigendum-3.
136	Master Plan Layout	Location of STP	STP in master plan is located on higher contour level which is not preferable, Kindly confirm.	The relocated STP is shown in revised layout provided in Corrigendum -3.

बी ई एम एल
BEML
Beyond Possibilities

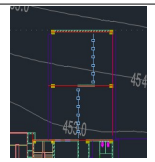
(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
137	Drawings PDF_c-Annexe building_page no..11	Additional STP	As per the given Annexe building drainage can not be taken upto the indicated STP on the master plan, kindly confirm additional STP to the west of the site plan.	The relocated STP is shown in revised layout provided in Corrigendum -3.
138	Drawings PDF_c-Annex space ground floor plan, typical floor plan sections. NIT document pg. no. 58	Annex space ground floor plan, typical floor plan sections	The section of Annex building indicates storage area however in typical level plan only open office area is given . kindly provide floor plans for all the levels in the Annex building.	Refer Corrigendum - 3.
139	Drawings PDF_c-Main gate complex with security office_page no.16	Main gate complex with security office access control system	 Kindly provide the details of access control system as shown in master plan.	Please refer revised drawing is provided in Corrigendum-3. Please refer the technical specificatiom to get details of requried access control system.
140	Drawings PDF_c-Annex space ground floor plan, typical floor plan sections_page no.11	Glass Specification for Structural Glazing (Annex Building)	Kindly confirm the glass specification proposed for the structural glazing for the Annex Building. Also, kindly confirm whether any acoustic performance requirements are applicable and if acoustic glass needs to be considered for this location.	Acoustics performance is required. The specificaton for the structural glazing for the Annexe building is provided in Corrigendum - 3.
141	Drawings		Request you to kindly specify the location of the Main receiving substation & emergency power supply system on master plan.	The location of MRSS and EPSS have been marked in Revised master layout provided in Corrigendum-3.
142	O. EXCAVATION AND EARTH WORK: ,NIT,Pg 126	If on the actual excavation, hard rock or ordinary rock is met with the contractor shall intimate the Engineer-in- charge in writing for making necessary price adjustment. Excavation done in ordinary/hard rock will be priced as an authorized extra item	Kindly clarify the clause.	The referred clause has been revised and provided in the Corrigendum - 3.

बी ई एम एल
BEML
Beyond Possibilities

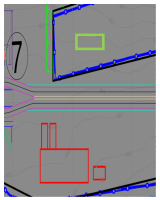
(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
143	Master Plan Layout Drawing, Drg No. MEC-I0047-01-14-D1-ZZ-ZZZ-DR-J-10100, R06		Kindly provide details about the structure as highlighted green rectangle.	The location of red colour layouts i.e. MRSS shown in this screenshot is not matching with the Master layout provided in the tender. Please refer the revised master layout provided in Corrigendum - 3 for clarifications.
144	General		For testing block arch. Drawings were not received kindly share the drawings for better understanding.	Refer Corrigendum - 3.
145	Section E - Technical Eligibility (Sl.No 23)/Pg.18 & (Pg.24 & 25)	Key Personnel and their min. qualification	There is mismatch in the min. qualification criteria for the following key personnel. The list of which is as below: 1. Project Manager 2. Construction Manager 3. Planning Manager 4. Design Manager 5. Lead Architect 6. Lead Mechincal Engineer 7. Lead Electrical Engineer *(Kindly refer to the tables mentioned on pg 18 and pg 24 & 25 for observing this mismatch)* **Further, we would request that the min. qualification for all key personnels to be set at "Bachelor's Degree"**.	Please refer Corrigendum - 1.
146	General	Finishing Matrix	Provide Finishing Matrix for All the structures	Please refer Corrigendum - 3.
147	General	Site Grading	Kindly clarify the areas to be considered for site grading	Please refer Corrigendum - 3.
148	General	Architectural Finishing Matrix	Please Furnish the Finishing Matrix, building wise.	Please refer Corrigendum -3.
149	General	Manufacture Shed & Inspection and Testing Shed	Kindly provide section and elevation details.	Detail drawings of Manufacturing shed has already been provided in NIT Drawings. Please refer Corrigendum -3 for Inspection and Testing Bay drawings.

बी ई एम एल
BEML
Beyond Possibilities

(A Govt. of India Mini Ratna Company under Ministry of Defence)

Pre-bid Meeting – BEML Response to Pre-bid Queries from Bidders - Set 2

Dated: 05/07/2026

Name of the Work: Engineering, Procurement & Construction pertaining to establishment of Rail coach factory including Civil Construction of manufacturing blocks, testing bay, other utility buildings (Non factory buildings), Railway Track sidings, water supply and distribution System, Roads, Drainage and sewerage systems, General Electric works including regular and emergency power supply and distribution system, related installations & services (Fire, Gas, Compressed air, IT, BMS, etc.), MFA (Miscellaneous fixed assets) and other Land & Site development works including grading, levelling works in connection with setting up of a Rail Coach Factory hereinafter referred as BEML RAIL HUB FOR ADVANCE MANUFACTURING (BRAHMA) near Umaria village, Obaidullaganj, District- Raisen, Madhya Pradesh (India) on EPC Mode.

Tender Notice No. :6300040573 **Tender Date:** 25.05.2026

Sl. No.	RFP Clause Ref. and Page No.	Content of RFP requiring Clarification	Bidder Queries	Response/ Clarification by Customer
150	General	Air Compressor Shed	Kindly provide plan, section and elevation	Please refer Corrigendum -3.
151	General	Raw material Storage yard	Kindly provide plan, section and elevation	Please refer Corrigendum -3. EPC contractor to propose detail drawings and get approved by BEML during the detail design stage on the basis of built up area and layout provided in the master layout.
152	Finishes		Kindly provide the architectural finishes matrix	Please refer Corrigendum - 3.
153	Ref. Annexure-7 , page - 14	Bid Guarantee Format	In Bid Guarantee Format, the bidder Director details need to delete as the company is Public Listed Company & BIDING process would be executed by Power of Attorney holder. Instead , mention company name with register address.	Agreed. The details of power of attorney holder can also be mentioned in BG format.
154	Ref. Annexure-7 , page - 15	Bid Guarantee Format	Bid Guarantee format , the BG validity mention as Bid Valid +60 days, whereas as per NIT page no. 31 the BG valid period is Bid validity +45 days. Please clarify , which should follow.	Please follow as per NIT Page No. 31 i.e. BG shall be having a Validity period of bid validity + 45 days from the date of opening of Tender.

Facilties-wise Material Schedules

Technological And Utility Buildings

1	**Facility Name:** Manufacturing Facility	
	Schedule of finishes	**Items**
	Roofing	Rock Wool Sandwich Panel
	False Ceilings	Not Applicable
	Wall	Up to 3m from FFL, AAC Block Masonary wall, Remaining height shall be of galvalume sheets
	Flooring & Floor Finishes	Epoxy flooring above the Structural VDF flooring
	Doors	Mild Steel, Fire exit doors
	Gates/Shutters	Rolling Shutters with suitable size canopy overhead
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor and structural cladding at the 1st Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty and primer of approved Make, colour and shade.
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

2	**Facility Name:** Annexe Building**s**	
	Schedule of finishes	**Items**
	Roofing	RCC roof
	Ceiling	Perforated metal false ceilings
	Wall	Structural Glazing
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2
	Doors	WPC Doors (30mm thick) with paint finish, Aluminium Doors, Fire exit doors
	Gates/Shutters	—
	Windows/Louvers	Suitable numbers of Vision glass panels
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty of approved make, colour & shade
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

3	**Facility Name:** Testing & Inspection facility	
	Schedule of finishes	**Items**
	Roofing	Rock Wool Sandwich Panel
	Ceiling	—
	Wall	Up to 3m from FFL, AAC Block Masonary wall, Remaining height shall be of galvalume sheets
	Flooring & Floor Finishes	Epoxy flooring above the Structural VDF flooring
	Doors	Access control system, Fire exit doors as per referred specification
	Gates/Shutters	Rolling Shutters with suitable size canopy overhead

Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty of approved make, colour & shade
Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

4	**Facility Name:** Water Supply & Fire Water Pump House
Schedule of finishes	**Items**
Roofing	PUF insulated sandwich panels & RCC Roof slab for tanks
Ceiling	—
Wall	Up to 3m from FFL, AAC Block Masonary wall, Remaining height shall be of galvalume sheets & RCC Wall for tanks
Flooring & Floor Finishes	Concrete Flooring M-25 with hardonite top, Tiling for tank internal wall and floor finish
Doors	WPC Doors (30mm thick) with paint finish
Gates/Shutters	Rolling Shutters with suitable size canopy overhead
Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding . Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty of approved make, colour & shade
Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

5	**Facility Name:** Gas Bank
Schedule of finishes	**Items**
Roofing	PUF insulated sandwich panels
Wall	Knee wall of height 1.2m of AAC block masonry of 200 mm thickness from platform top all around the platform.
Boundary wall	Chain Link fencing
Flooring & Floor Finishes	Concrete Flooring M-25 with hardonite top
Doors	-
Gates/Shutters	Two leaf Sliding Gate
Windows/Louvers	—
Interior Paints	—
Exterior Paints	—
Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

6	**Facility Name:** Main Receiving Sub-station **(MRSS)**	
	Schedule of finishes	**Items**
	Roofing	RCC Roof Slab
	Ceiling	Perforated metal false ceilings (Office & Electronic Panel rooms)
	Wall	AAC Block Masonry Wall
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2
	Doors	WPC Doors (30mm thick) with paint finish
	Gates/Shutters	Rolling Shutters with suitable size canopy overhead
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty of approved make, colour & shade
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

7	**Facility Name:** Compressed Air Station	
	Schedule of finishes	**Items**
	Roofing	PUF insulated sandwich panels
	Ceiling	—
	Wall	Up to 3m from FFL, AAC Block Masonary wall, Remaining height shall be of galvalume sheets & RCC Wall for tanks
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2
	Doors	WPC Doors (30mm thick) with paint finish
	Gates/Shutters	Rolling Shutters with suitable size canopy overhead
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty of approved make, colour & shade
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

8	**Facility Name:** STP Plant	
	Schedule of finishes	**Items**
	Roofing	PUF insulated panels
	Ceiling	Perforated metal false ceilings (PLC Room)
	Wall	Up to 3m from FFL, AAC Block Masonary wall, Remaining height shall be of galvalume sheets & RCC Wall for tanks
	Boundary Wall	-
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2 & Concrete Flooring M-25
	Doors	WPC Doors (30mm thick) with paint finish
	Gates/Shutters	Rolling Shutters with suitable size canopy overhead
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty of approved make, colour & shade
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

8	**Facility Name:** Raw Material Storage Yard (PEB Structure)	
	Schedule of finishes	**Items**
	Roofing	Roofing shall be of colour coated Galvalume sheets (Shed), RCC (Office & Toilet)
	Ceiling	-
	Wall	Up to 3m from FFL, AAC Block Masonary wall, Remaining height shall be of galvalume sheets & RCC Wall for tanks
	Boundary Wall	-
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2 (Office & Toilet) & Concrete Hardonite Flooring M-25
	Doors	WPC Doors (30mm thick) with paint finish
	Gates/Shutters	Rolling Shutters with suitable size canopy overhead
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty of approved make, colour & shade
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

Non-Technological Buildings:

9	**Facility Name:** Canteen Building	
	Schedule of finishes	**Items**
	Roofing	PUF insulated sandwich panels (Dining Area), RCC for rest of the area
	Ceiling	Gypsum Board and perforated metal false ceilings in combination of both
	Wall	Combination of Glazing & AAC Block Masonary wall.
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2
	Doors	WPC Doors (30mm thick) with paint finish & Aluminium Glass Doors
	Gates/Shutters	—
	Windows/Louvers	Aluminium Windows/louvers & Suitable numbers of Vision glass panels wherever structural glazing is envisaged.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty and primer of approved Make, colour and shade.
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

11	**Facility Name:** Fire Station	
	Schedule of finishes	**Items**
	Roofing	RCC Roof Slab
	Ceiling	Perforated metal false ceilings
	Wall	Up to 3m from FFL, AAC Block Masonary wall, Remaining height shall be of galvalume sheets
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2
	Doors	WPC Doors (30mm thick) with paint finish
	Gates/Shutters	—
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor and structural cladding at the 1st Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty and primer of approved Make, colour and shade.
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

12	**Facility Name:** Occupational Health Center	
	Schedule of finishes	**Items**
	Roofing	RCC Roof Slab
	Ceiling	Perforated metal false ceilings
	Wall	Combination of Glazing & AAC Block Masonary wall.
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2
	Doors	WPC Doors (30mm thick) with paint finish & Aluminium Glass Doors
	Gates/Shutters	—
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor and structural cladding at the 1st Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty and primer of approved Make, colour and shade.
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

13	**Facility Name:** Main Gate Complex with security Office	
	Schedule of finishes	**Items**
	Roofing	RCC Roof Slab
	Ceiling	Perforated metal false ceilings at applicable areas
	Wall	Combination of Glazing & AAC Block Masonary wall.
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2
	Doors	WPC Doors (30mm thick) with paint finish & Aluminium Glass Doors
	Gates/Shutters	—
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor and structural cladding at the 1st Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty and primer of approved Make, colour and shade.
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

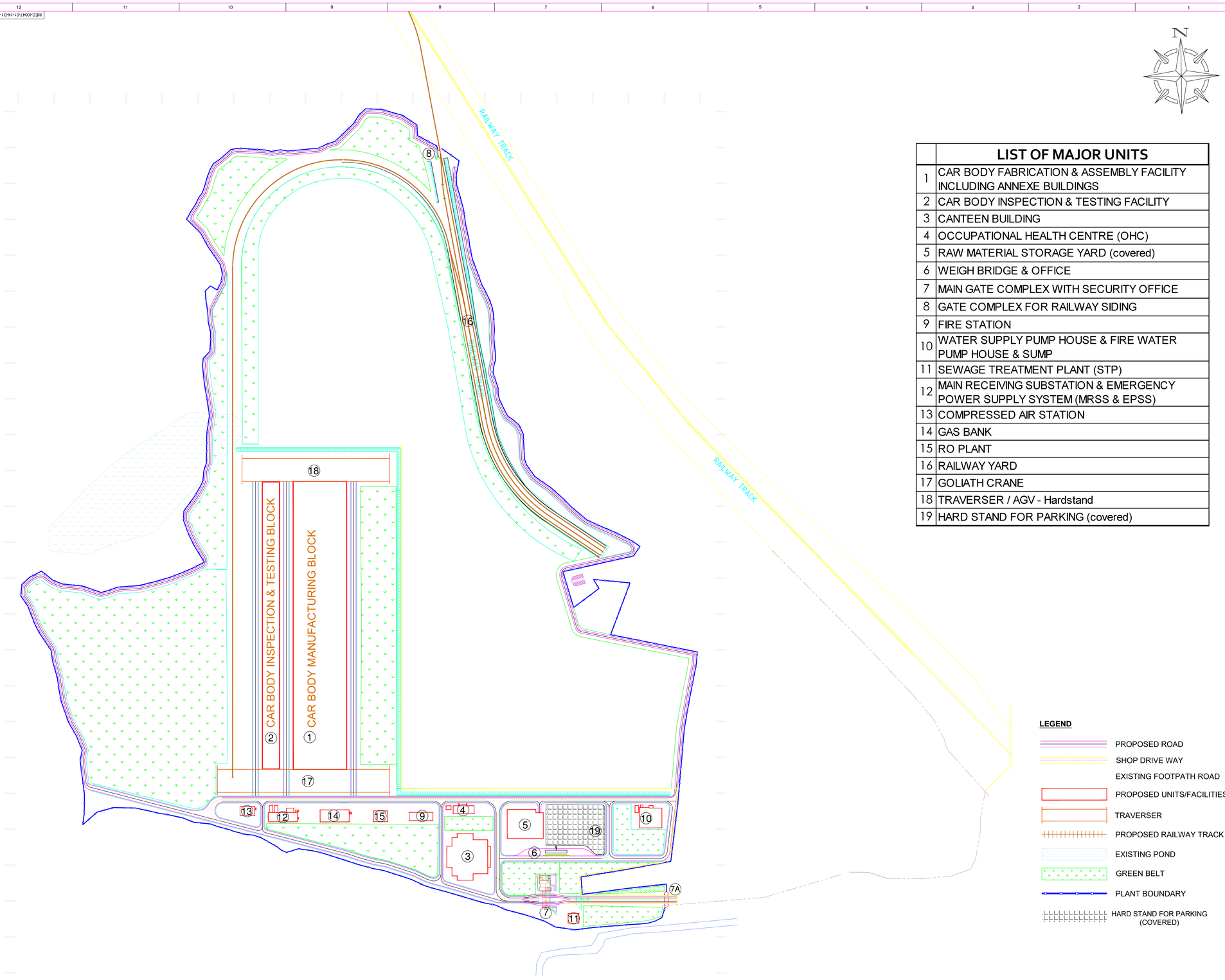
14	**Facility Name:** Gate complex for Railway Siding	
	Schedule of finishes	**Items**
	Roofing	RCC Roof Slab
	Ceiling	-
	Wall	AAC Block Masonary wall.
	Flooring & Floor Finishes	Tile Floor Finishing as per Clause 4.2
	Doors	WPC Doors (30mm thick) with paint finish
	Gates/Shutters	—
	Windows/Louvers	Adequate number of suitable size Aluminium sliding windows with MS Grill to be provided in the Masonry cladding at the Ground Floor and structural cladding at the 1st Floor. Aluminium sliding windows with MS Grill should have provision of 3 track channel to accommodate 1 panel of SS mesh (fly screen). Suitable size sunshed to be provided over windows. Joints are to be properly sealed to avoid water ingress.
	Interior Paints	Premium Acrylic Emulsion paint over white cement-based putty and primer of approved Make, colour and shade.
	Exterior Paints	Weather coat Acrylic External Emulsion paint of approved make, colour & shade
	Structural Paint	2 component (2K) High - Build Epoxy paint of 100-120 micron of total finish thickness of approved make, colour & shade over priming coat of Zinc rich epoxy primer with 50-75 micron dry film thickness before application of primer shot/ sand blasting to be resorted to for surface preparation.

Annexe Buildings Floorwise Tentative Sitting Plan

	Ground Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	Total (Pax)
UNIT 1	Leisure sitout area for workmen	ED cabin & Secretrial Staff	Pantry and Conference Hall	CMD & Secretrial Staff	GM (HR) & Executives	Leisure sitout area for workmen	
	25	3	2	4	3	25	62
UNIT 2	DGM (Production) & Executives	GM (Production)	Pantry and Conference Hall	DGM (Safety) & Executives	DGM (Production) & Executives	DGM (Production) & Executives	
	6	3	2	6	6	6	29
UNIT 3	Leisure sitout area for women	GM (Maint.)	Pantry and Conference Hall	DGM (Maint.) & Executives	DGM (Maint.) & Executives	Leisure sitout area for workmen	
	25	3	2	6	6	25	67
UNIT 4	Leisure sitout area for workmen	DGM (Quality) & Executives	Pantry and Conference Hall	DGM (Quality) & Executives	GM (Production)	Leisure sitout area for workmen	
	25	6	2	6	3	25	67
UNIT 5	DGM (Production) & Executives	GM (Purch.)	Pantry and Conference Hall	DGM (Purch.) & Executives	DGM (Methd. Plng.) & Executives	DGM (Production) & Executives	
	6	3	2	6	6	6	29
UNIT 6	Leisure sitout area for women	GM (Methd. Plng.)	Pantry and Conference Hall	DGM (IT), Server room	Control Room, IBMS Room	Leisure sitout area for workmen	
	25	3	2	4	2	25	61
						Total	**315**

Note: *All floors shall have washrooms of suitable capacity with appropriate sanitary and plumbing installations. The Conference room/ hall shall be equipped with meeting table and chair for 10-15 Pax. And shall have facilities of video conferencing with LED screens and Camera.*

MEC-I0047-01-14-D1-ZZ-ZZZ-DR-J-10100



	LIST OF MAJOR UNITS
1	CAR BODY FABRICATION & ASSEMBLY FACILITY INCLUDING ANNEXE BUILDINGS
2	CAR BODY INSPECTION & TESTING FACILITY
3	CANTEEN BUILDING
4	OCCUPATIONAL HEALTH CENTRE (OHC)
5	RAW MATERIAL STORAGE YARD (covered)
6	WEIGH BRIDGE & OFFICE
7	MAIN GATE COMPLEX WITH SECURITY OFFICE
8	GATE COMPLEX FOR RAILWAY SIDING
9	FIRE STATION
10	WATER SUPPLY PUMP HOUSE & FIRE WATER PUMP HOUSE & SUMP
11	SEWAGE TREATMENT PLANT (STP)
12	MAIN RECEIVING SUBSTATION & EMERGENCY POWER SUPPLY SYSTEM (MRSS & EPSS)
13	COMPRESSED AIR STATION
14	GAS BANK
15	RO PLANT
16	RAILWAY YARD
17	GOLIATH CRANE
18	TRAVERSER / AGV - Hardstand
19	HARD STAND FOR PARKING (covered)

LEGEND

- PROPOSED ROAD
- SHOP DRIVE WAY
- EXISTING FOOTPATH ROAD
- PROPOSED UNITS/FACILITIES
- TRAVERSER
- PROPOSED RAILWAY TRACK
- EXISTING POND
- GREEN BELT
- PLANT BOUNDARY
- HARD STAND FOR PARKING (COVERED)

0 40m 80m 160m 240m

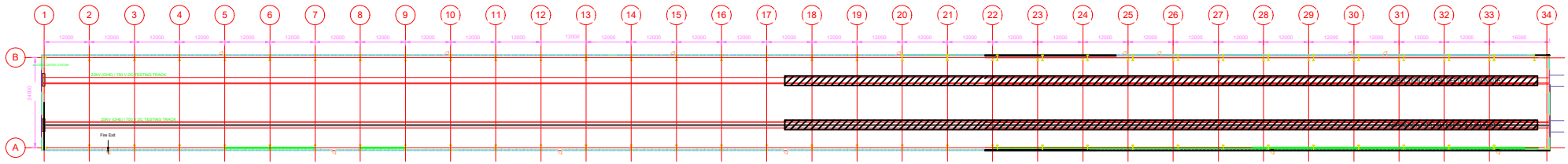
SCALE IN METRES

M/S BEML LIMITED BANGALORE

ROLLING STOCK MANUFACTURING FACILITY AT BHOPAL, MADHYA PRADESH

MASTER PLAN LAYOUT

APPROVED	SCALE- AS SHOWN	SHEET No.	1 OF 1	REV.
DATE 08.07.2026	DRG.No. MEC-I0047-01-14-D1-ZZ-ZZZ-DR-J-10100			R01



CONCEPT DRAWING

CLIENT

BEML
BANGALORE

BRAHMA RAIL PLANT

FACILITY

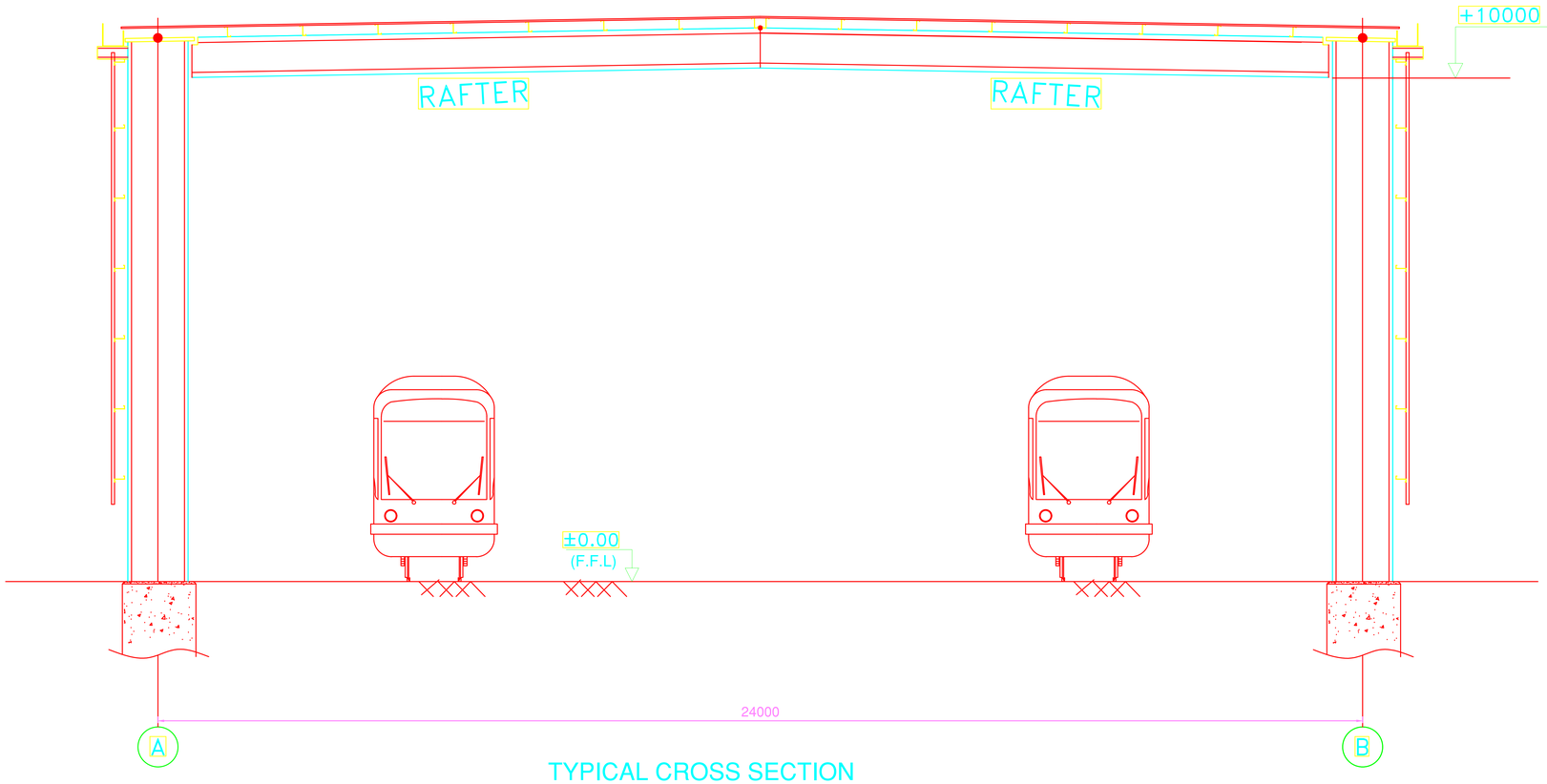
CAR BODY FABRICATION AND ASSEMBLY FACILITY

TITLE

CROSS SECTION

DRAWN:	CHECKED:	REVIEWED:	APPROVED:
DATE:		SCALE:	SIZE: A0
REF No.:			
DRAWING No.:			REVISION:

DRAWING No.: MEC-I/0047-01-31-D1-XX-02-DR-T-13300



TYPICAL CROSS SECTION

FUNCTIONAL LAYOUT DRAWINGS

REV	DATE	DESCRIPTION	BY	CHK	RVW	APP

REVISIONS

CLIENT

BEML LIMITED
BANGALORE

COMPREHENSIVE DETAILED PROJECT REPORT (DPR) FOR ESTABLISHING A STATE-OF-THE-ART GREENFIELD ROLLING STOCK MANUFACTURING PLANT AT BHOPAL, MADHYA PRADESH

TITLE

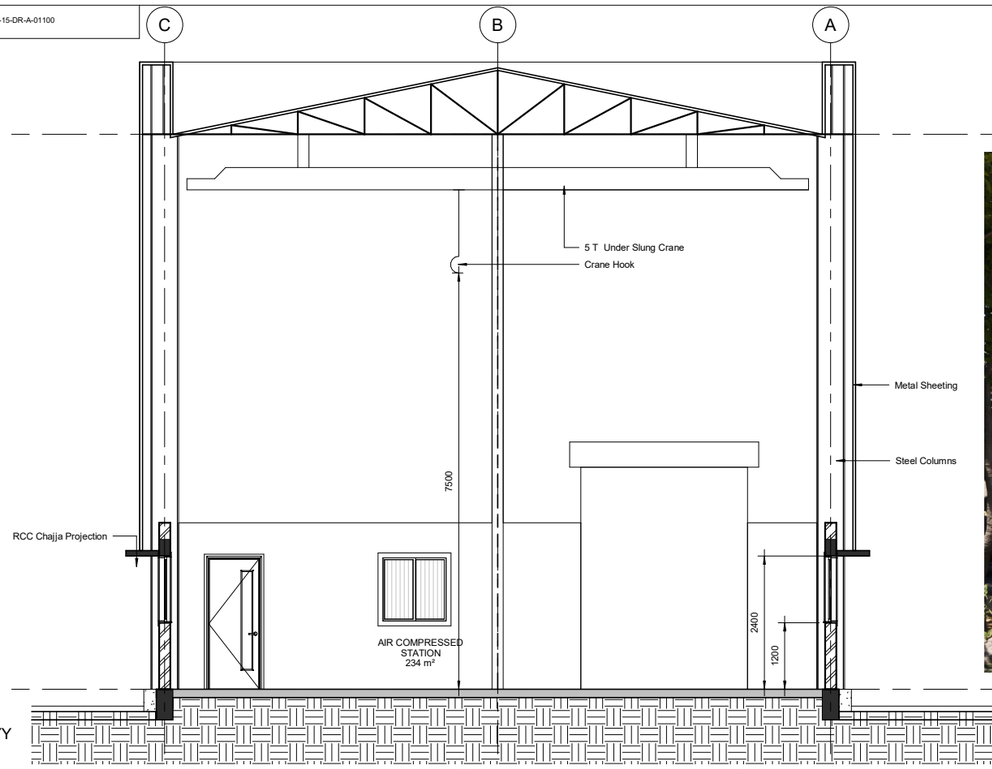
CAR BODY INSPECTION & TESTING LINE

SECTION

DRAWN:	REVIEWED:	APPROVED:
DATE:	SCALE :	SIZE: A2

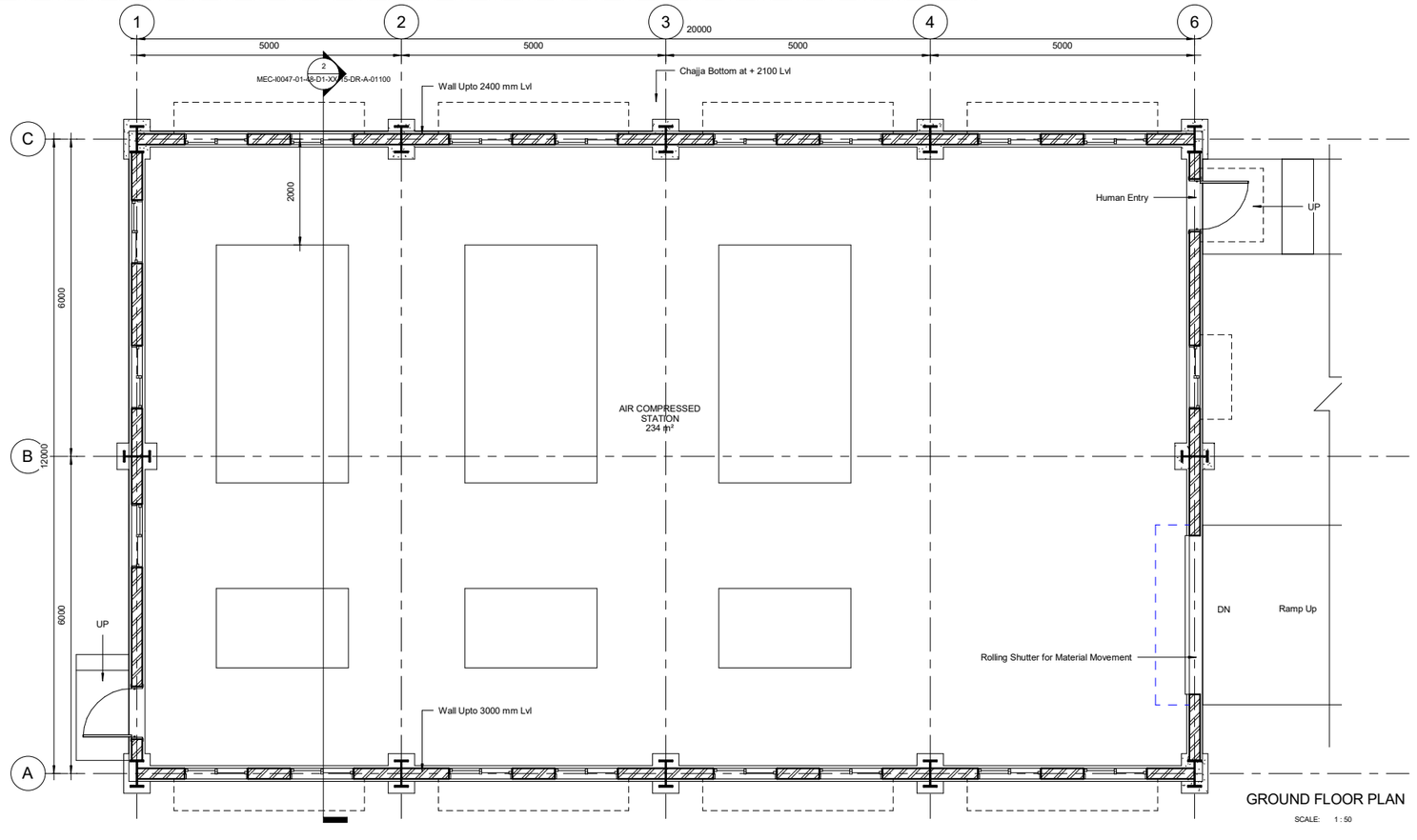
DRAWING No.: MEC-I/0047-01-31-D1-XX-02-DR-T-13300 REVISION:

DRAWING No.: MEC-I0047-01-48-D1-XX-15-DR-A-01100



SECTION - YY

SCALE: 1 : 50



GROUND FLOOR PLAN

SCALE: 1 : 50

Area Schedule (Gross Building)	
Name	Area
FLOOR AREA	250 m²
TOTAL BUILT UP AREA	250 m²

CONCEPT DRAWING

REV	DATE	DESCRIPTION	BY	CHK	RVW	APP
R02.0	28-11-25	FOR DPR SUBMISSION	MSB	MSB	MM	BGS
R01.0	15-11-25	SUBMITTED FOR APPROVAL	MSB	MSB	MM	BGS

REVISIONS

CLIENT

BEML BANGALORE

Comprehensive Detailed Project Report (DPR) for Establishing a *State-of-the-Art Greenfield Rolling Stock Manufacturing Plant* at Bhopal, Madhya Pradesh

CENTRALISED COMPRESSED AIR STATION

MECON LIMITED BANGALORE

TITLE

GROUND FLOOR PLAN , SECTION & VIEW

DRAWN:	CHECKED:	REVIEWED:	APPROVED:
MS BRUNO	MS BRUNO	MALAYA	BG SAJIT
DATE: 15-11-025		SCALE : 1 : 50	SIZE: A1
REF No.: 5900062340/-0 dated 30 July 2025		PROJECT No.: I/0047	
DRAWING No.: MEC-I0047-01-48-D1-XX-15-DR-A-01100			REVISION: R02.0