

MUMBAI METRO RAIL CORPORATION LIMITED						
Mumbai Metro Line-3 Project						
IFB No: MM3-CBS-DEQ-9-06D						
Design, Manufacture, Supply, Installation, Testing & Commissioning of Lot I: Blow Down Plant along with Comprehensive Maintenance Service, and Lot II: Well Wagon						
Response to Bidders' Queries (SET-1)						
Sr. No.	Part No. & Section No.	Clause No.	Page No.	Bid Document Clause Description	Bidder's Query /Clarification	MMRC Response
1	Part 1 Section III - Evaluation and Qualification Criteria	2.4.2 Specific Experience	12 of 15	A) A minimum of two Nos. of Equipment as specified below of similar(i) Works (Design, Manufacture, Supply, Installation, Testing & Commissioning of: Lot I: Blow Down Plant, Lot II: Wagon that has been satisfactorily and substantially(ii) completed for Metro/ Railway/ MRT systems since 1st January 2015 by the Eligible Bidders(ii).	We have Experience and Supplied Design, Manufacturing, Supply, Installation, Testing & Commissioning of "Fully Automatic Coach Underframe Washing & Cleaning System" for Indian Railway Which is Similar Nature of Blow Down Cleaning System for Metro Train Under Frame i) References Document - Tender No.: GMRC/GD&AD/MP-12/2022, Clause Volume -1, 1.5.4 Experience. Since Considering Both are Similar Nature of Work You are Requested to Consider our request.	Bidding documents conditions prevail.
2	Part 1 Section III - Evaluation and Qualification Criteria	2.4.2 Specific Experience	13 of 15	C) A minimum number of one (01) Equipment shall be in operation in Metro/ Railway/ MRT systems with satisfactory performance over a minimum period of two (02) years after commissioning and supported by a performance certificate from the end-client. This certificate shall be issued during the last 7 years from the date of Invitation of Bid.	A minimum number of one (01) Equipment shall be in operation in Metro/ Railway/ MRT systems with satisfactory performance over a minimum period of within one (01) years after commissioning and supported by a performance certificate from the end-client. i) References Document Tender No.: GMRC/GD&AD/MP-12/2022, Clause Volume -1,1.5.4 Experience You are Requested to Consider our request.	Bidding documents conditions prevail.
3	Part 2 - Employer's Requirements Section VI-B- Technical Specifications	2.3.1 (a)	12 of 25	The Blow down Plant shall comprise of a channel in which underframe of Metro cars shall be cleaned with air jets. Blow Down plant shall have the provision of automatic operation, PLC controlled & HMI interfaced to control the blowing from remote/ local panel. It shall be possible to re-program the logic based on experience gained and the Contractor shall be bound to carry out the modifications free of cost during the Contract period. To cover the underframe of the car (in the direction of width) 10 nozzles shall be provided in a row and with three rows in parallel making a total of 30 nozzles, placed on a system that allows an oscillating motion of about 30 degrees with a frequency of 120-140 oscillations per minute for a total coverage of the underslung equipment and underframe of the car. The Bidder may describe his alternative procedure for automatic operation (without the need of operator for manual cleaning) with effective cleaning of the underframe equipment which shall be equally or more effective than the procedure described above. The Bidder shall detail the preparatory works prior to start of blowing down operation.	Please add the following in the RFP: "Fully Automatic air flushing system - all under frame & equipment, bogie both side faces under cabin floor level. Bottom and Side Cleaning thru Nozzles." Please add the following in the RFP: "The cleaning process is automatically finished during the train passing through the facility with 2-5km/h speed, the train will run and stop by self running or a shunter or by winch." Please add the following in the RFP: "within 3-4 minutes for 6 car" Please add the following in the RFP: "Swing Type Nozzle"	Please refer Addendum No. 1, Sr No. 1 Please refer Addendum No. 1, Sr No. 1 Please refer Addendum No. 1, Sr No. 1 It is a design build contract. The contractor shall take design approval as per Clause 1.2 (a), Section VI-B, Technical Specifications, Part 2. Employers Requirements. Bidding documents conditions prevail.
4	Part 2 - Employer's Requirements Section VI-B- Technical Specifications	2.3.3	13 of 25	Cleaning of the cartridge filters is carried out by an in built automatic pre-programmed intervals reverse pulse cleaning mechanism which operates via compressed air whilst the unit is operational. This is controlled by the unit's control panel, incorporating a solid-state sequential timer board complete with differential pressure gauge. Compressed air is pulsed directly into the centre of each cartridge thus purging the collection of dust off the outer surface. A specially designed conical air distribution tip controls the blast of compressed air to ensure an even pulse is distributed throughout the entire length of the cartridge. The purged dust is the swept downwards into the discharge hopper by the prevailing air flow and gravity.	Please add the following in the RFP: "For dust Flushing 100 Trains – One time per month."	Please refer Addendum No. 1, Sr No. 2



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5	Part 2 - Employer's Requirements Section VI-B- Technical Specifications	2.4.1 (b)	13 of 25	The Contractor shall submit the design of concrete channel, side platforms in respect of various dimensions. The Contractor shall finalize the details during interface with Depot Civil Contractor.	Please add the following in the RFP: "Design, manufacture, supply, Installation, testing and commissioning for nominated depot, keeping the interface with the existing civil structure for the perfect match of lead dimensions and facilities available at site. The layouts drawings of building shall be submitted by Tenderer to propose their design layout."	Please refer Addendum No. 1, Sr No. 3
6	Part 2 - Employer's Requirements Section VI-B- Technical Specifications	2.4.2	13 of 25	The dirt accumulated on the underframe equipment surface is dislodged using high pressure air. A centrifugal fan unit located in the nearby plant room draws air into and along the underframe channel, carrying with it airborne dust dislodged from the vehicle. The air so drawn shall pass through the dust collection unit having the filter media, where the dirt is separated and clean air exhausted to atmosphere outside the plant room. The air exhausted into the atmosphere shall not damage any critical equipment located nearby, like Underfloor Wheel Lathe.	Please add the following in the RFP: "Flushing Booth with Air Curtain."	Please refer Addendum No. 1, Sr No. 4
7	Part 2 - Employer's Requirements Section VI-B- Technical Specifications	2.4.5 & 2.4.9	14 of 25	Suction Blower a) Two nos. Suction Blower of capacity approx. 50,000 cm ³ /h each shall be provided to each dust collector. b) The access to the fan duct shall be protected by the provision of a wire mesh grille capable of collecting larger items of detritus such as plastic bags, newspapers, etc. The controllable face area shall facilitate the uniform air suction at each such location. c) The Centrifugal fan fitted with TEFC IP55 motor will be fitted in an acoustic enclosure for noise reduction. The motors shall be controlled from the control panel and remote panel independently. d) Each blower shall consist of single inlet centrifugal fan steel fabricated construction having bladed impeller statically and dynamically balanced for smooth operation. All driving and installation accessories such as V-belt driving set, belt protection guard, vibration rubber pads and foundation bolts shall be provided. Blower assembly shall also consist of fan inlet and outlet connection, fan outlet manually operated damper, motor and base frame. e) Duct outlet of the blowers shall be provided with louvers and wire-mesh on the outlet to avoid any ingress of water and birds making nests into ducts. Compressor: a) 2 nos. of screw type air compressor of capacity approx. 200 cfm each at minimum 7.5 bar pressure shall be provided to fulfil the requirement of air for under frame blowing and filter cleaning. The compressor shall have provision of giving the air at desired pressure constantly by changing the speed of motor available throughout the blowing operation. b) The compressor unit shall consist of necessary accessories like air dryer dedicated for dust pulsing unit, air receiver, safety valves, gauges and distribution pipes. c) Electronic water drain with integrated manual drain shall include the supply to remove 100% condensate in air receiver, dryer. d) Compressor shall have electronic control modules graphic display and equipped with following: (i) The compressor is supplied with integrated VSD and internal permanent magnet oil cooled motor having a protection class of IP-66 with direct transmission through a single shaft. The display has the facility to show compressor status indication - voltage on, auto operation, compressor loaded, compressor unloaded, maximum allowed unloading pressure, (ii) Temperature, numerical readouts - delivery air, ambient air temperature, (iii) Pressure, numerical readouts - delivery air.	Please add the following in the RFP: "Every Bidder has to provide."	The Tender conditions and Employers Requirements are applicable to all bidders Bidding documents conditions prevail.
8	Part 2 - Employer's Requirements Section VI-B- Technical Specifications	2.4.6 (b)	15 of 25	Air pressure at air nozzle during blowing shall be 5.0 kg/cm ² to 6.0 kg/cm ²	Please add the following in the RFP: "Air pressure 10-6 bar"	Please refer Addendum No. 1, Sr No.5
9	Part 2 - Employer's Requirements Section VI-B- Technical Specifications	2.4.9 (a)	15 of 25	2 nos. of screw type air compressor of capacity approx. 200 cfm each at minimum 7.5 bar pressure shall be provided to fulfil the requirement of air for under frame blowing and filter cleaning. The compressor shall have provision of giving the air at desired pressure constantly by changing the speed of motor available throughout the blowing operation	Please add the following in the RFP: "Minimum 55 KW, Tank-160 m ³ in 2 min + Compressor 8.0 m ³ /min =88.0 m ³ /min. Continuous Compressor used for Manual Type Cleaning used by DMRC."	It is a design build contract. The contractor shall take design approval as per Clause 1.2 (a), Section VI-B, Technical Specifications, Part 2. Employers Requirements. Bidding documents conditions prevail.
10	Part 2 - Employer's Requirements Section VI-B- Technical Specifications	3.2	22 of 25	The Well Wagon shall be 8 wheel, 4-axle type flat well wagon with Bo-BO bogie and suitable to operate on Standard Gauge (1435 mm), in Mumbai Metro line-3, inside tunnel and at grade. It should also satisfy kinematic profile.	we recommend an alternate wagon design as:- (i) Wagon without Crane: 2 Axle. (ii) Wagon with Crane: 2 Axle.	2-axle wagon is not acceptable. Bidding documents conditions prevail.
11	Part 1 - Bidding Procedure Section II - Bid Data Sheet	ITB 24.1	6 of 7	The deadline for Bid submission is: Date: 18/04/2023 Time: 15:00 hrs.	We need time to prepare well compliant bidding documents, so we request you to grant bid submission extension till 31.05.2023.	Please refer Addendum No. 1, Sr No. 6 & 7

