



MUMBAI METRO RAIL CORPORATION LIMITED

(A JV company of Govt. of India and Govt. of Maharashtra)

5th Floor, A -Wing, Old MMRDA Building, Bandra-Kurla Complex, Bandra (E), Mumbai - 400 051.

MMRC e-Tendering portal: www.tenderwizard.com/MMRC

Website: www.mmrc.com

Invitation of Bid For, “Design, Manufacture, Supply, Installation, Testing and Commissioning of E&M works comprising of Electrical Sub Stations with HT and LT works, Ventilation and Air Conditioning Systems (VAC), Fire Detection Systems, Fire Suppression (Fire Fighting) Systems, Building Management System (BMS), EOT cranes, Air-Compressors including compressed air piping works and Plumbing Pumps for the Depot Buildings including OCC and at grade Aarey Station for “Mumbai Metro Line -3”

Date: [25th January 2018]

Contract No: [MM3-CBS-DEM]

Addendum No: 7

Sr. No	Reference Clause no. and Description	Existing content to be deleted		To be replaced as	
1	Volumel, Section 1,NIT Clause 1.1.2 KEY DETAILS, Page 1 & 2 of 10 Sr. No 1 of Addendum -6, Serial No.-1.	Tender documents on sale	From 24-07-2017 to 29-01-2018 (up to 18:00Hrs) on e-tendering website www.tenderwizard.com/MMRC Tender Documents can be downloaded for reference purpose from the e-Tendering Portal www.tenderwizard.com/MMRC .	Tender documents on sale	From 24-07-2017 to 11-02-2018 (up to 18:00Hrs) on e-tendering website www.tenderwizard.com/MMRC Tender Documents can be downloaded for reference purpose from the e-Tendering Portal www.tenderwizard.com/MMRC .

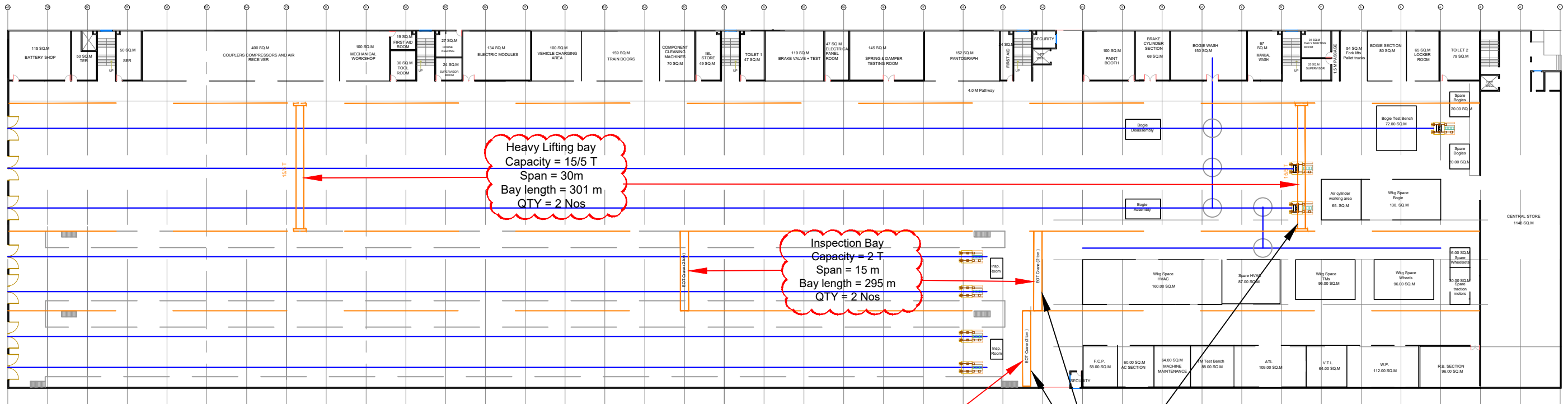
Sr. No	Reference Clause no. and Description	Existing content to be deleted		To be replaced as	
			<p>Interested Bidders have to make online payment of Tender Fee using online payment gateway during bid preparation through Debit Card/Credit Card/Net-Banking. Tender Fee receipt can be system generated during</p> <p>For further information on this regard bidders are advised to contact on +91-7666563870, +91-7980042472, +9180-49352000 & on E-mail ID – twhelpdesk358@gmail.com</p>		<p>Interested Bidders have to make online payment of Tender Fee using online payment gateway during bid preparation through Debit Card/Credit Card/Net-Banking. Tender Fee receipt can be system generated during</p> <p>For further information on this regard bidders are advised to contact on +91-7666563870, +91-7980042472, +9180-49352000 & on E-mail ID – twhelpdesk358@gmail.com</p>
		Date & time of Submission of Tender	30-01-2018 up to 1800 Hrs	Date & time of Submission of Tender	12-02-2018 up to 1800 Hrs
		Date & time of opening of Tender (Tender Security + Technical)	31-01-2018 from 1100 Hrs	Date & time of opening of Tender (Tender Security + Technical)	14-02-2018 from 1100 Hrs
2	<p>Volumel,Section 1,NIT Clause 1.1.8</p> <p>B) e-Envelope ‘B’ (Financial Bid) Page 9 of 10</p>	<p>B) e-Envelope ‘B’ (Financial Bid) Bidder shall quote his offer as percentage below / above / at par the estimated cost electronically based on his filled Financial Proposal (vol-6) at the prescribed space in the dialog box in Envelope- B1 Percentage Rate Tender Form. Under “MMRC- Financial Bid Percentage Rate” Under “Price Bid- Covering Letter” Upload the digitally signed copy of Tender document and Quotation in company’s Letter</p>		<p>B) e-Envelope ‘B’ (Financial Bid) Bidder shall quote his offer as percentage below / above / at par the estimated cost electronically based on his filled Financial Proposal (Vol-6) at the prescribed space in the dialog box in Envelope- B1 Percentage Rate Tender Form</p>	

Sr. No	Reference Clause no. and Description	Existing content to be deleted	To be replaced as
3	Volume1,Section 1,NIT Clause 1.1.8 ii) Tender Security amount (c) Page 10 of 10	c.) E-transfer through RTGS/NEFT/Net Banking/Credit card/Debit Card.	c.) E-transfer through RTGS/NEFT/Net Banking/Credit card/Debit Card.in Bank Account Bank Name:- HDFC Bank Limited A/C Number:-50200004613380 Type:- Current Account Address:- Worli Seaface Branch,Mumbai IFSC Code:- HDFC000080 BSR Code:- 0510093 Swift Code:- HDFCINBBXXX MICR Code:- 400240022
4	Volume1,Section II,ITT Clause C2 Documents Comprising the Tender C2.1 Page 12 of 70	C2.1 Financial Package shall contain the documents referred to in paragraphs C2.2 (a); (b); (c).	C2.1 Financial Package shall contain the documents referred to in paragraphs C2.2 (c).
5	Volume1,Section II,ITT Clause C2 Documents Comprising the Tender C2.2 (c) Page 12 of 70	C2.2 (c) Appendix 2 to the Form of Tender: completed bill of quantities / Pricing Document (see paragraph C10, C15 and C23); including Appendix C in Annexure 4 of ITT. Statement of pricing for unqualified withdrawal of conditions/qualifications and deviations etc.	C2.2 (c) Bidder shall quote his offer as percentage below / above / at par the estimated cost electronically based on his filled Financial Proposal (vol-6) at the prescribed space in the dialog box in Envelope- B1 Percentage Rate Tender Form. and Appendix C in Annexure 4 of ITT. Statement of pricing for unqualified withdrawal of conditions/ qualifications and deviations etc. at the prescribed space in the dialog
6	Volume1,Section II,ITT Clause C18 Tender Security C18.1 (c) Page 22 of 70	C18.1 (c) E-transfer through RTGS/NEFT/Net Banking/Credit card/Debit Card.	C18.1 (c) E-transfer through RTGS/NEFT/Net Banking/Credit card/Debit Card.in Bank Account Bank Name:- HDFC Bank Limited A/C Number:-50200004613380 Type:- Current Account

Sr. No	Reference Clause no. and Description	Existing content to be deleted	To be replaced as
			Address:- Worli Seaface Branch,Mumbai IFSC Code:- HDFC000080 BSR Code:- 0510093 Swift Code:- HDFCINBBXXX MICR Code:- 400240022
7	Volume-5-Tender Drawings Attachment-12 to Addendum-5	Drawing No-MM3-GC-DIM-GD-08-D07-0106 (R1)	Refer attachment:-1 Drawing No-MM3-GC-DIM-GD-08-D07-0106 (Rev2)
8	Volume-6 B4-2 Sub Section - 2- EOT CRANE 2.1-b	Inspection Bay: 2 Ton The rate include Design, manufacture, supply, installation, testing and commissioning of 2T EOT Crane for span 9m, bay length 295 m with Main hoist motor along with accessories, and long/cross travel motors along with accessories. Crane will be provided on inspection bay with special girder system in the bay. Cranes will also be controlled from pendent switch and radio remote control. All the wire ropes along with hook, rope drum and necessary safety devices etc. Necessary arrangement of 3-phase power supply for working the crane throughout the long travel length along with current collection system. The EOT crane shall be complete in all respects and as per technical specifications. (In single bay with individual operation control / pendent)	Inspection Bay: 2 Ton The rate include Design, manufacture, supply, installation, testing and commissioning of 2T EOT Crane for span 15m , bay length 295 m with Main hoist motor along with accessories, and long/cross travel motors along with accessories. Crane will be provided on inspection bay with special girder system in the bay. Cranes will also be controlled from pendent switch and radio remote control. All the wire ropes along with hook, rope drum and necessary safety devices etc. Necessary arrangement of 3-phase power supply for working the crane throughout the long travel length along with current collection system. The EOT crane shall be complete in all respects and as per technical specifications. (In single bay with individual operation control / pendent)

Attachment No. 1 To Addendum No.7

TYPICAL EOT SCOPE OF WORK DEM & CIVIL (MAINTENANCE & INSPECTION WORKSHOP AND CENTRAL STORE)

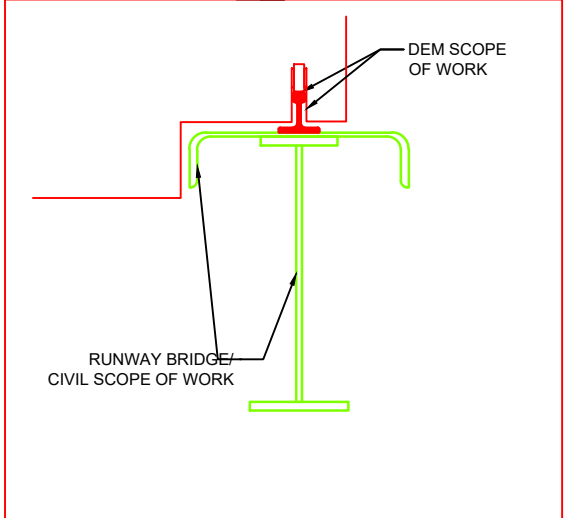


GROUND FLOOR PLAN

NOTES:

- 1) ALL EOT Crane INSTALLATION TESTING & COMMISSIONING IS E&M SCOPE OF WORK.
- 2) ALL THE CIVIL STRUCTURE AND RELATED WORK IS CIVIL SCOPE OF WORK
- 3) FOR MORE DETAIL ABOUT SPAN LENGTH, WIDTHS, AND HEIGHT REFER CIVIL TENDER DRAWINGS OR COORDINATE WITH CIVIL

Bogie workshop Area
Capacity = 2 T
Span = 14.50 m
Bay length = 96 m
QTY = 1No



REV.	DATE	PREP.	APPROVED	DESCRIPTION
R2	25/01/18			MODIFIED AS PER TECHNICAL REQUIREMENT
R1	11/12/17			MODIFIED AS PER ARCHITECTURAL CHANGE



**GENERAL CONSULTANCY SERVICES
FOR MUMBAI METRO RAIL PROJECT, LINE No. 3
COLABA- BANDRA-SEEPZ**



**E&M
FOR TENDER ONLY**

PROJECT	MUMBAI METRO LINE 3 COLABA-BANDRA-SEEPZ		DATE	JAN 2018
TITLE	EOT CRANE GENERAL ARRANGEMENT DRAWING	DRAWING TITLE	TYPICAL EOT SCOPE OF WORK DEM & CIVIL	
DRAWING NO	MM3-GC-DIM-GD-08-D07-0106	SCALE	NTS	
DRAWN BY		NAME		
DESIGN BY		SIGN		
CHECKED BY				
APPROVED BY				



maple
MUMBAI METRO LINE-3
GENERAL CONSULTANT

MUMBAI METRO RAIL CORPORATION LIMITED Mumbai Metro Line-3 Project							MMRC'S RESPONSE / CLARIFICATION dated 25 th January 2018. LOT-4
Response to Bidder's Queries on Volumes 1 to Volume-6 for Contract No. MM3-CBS-DEM							
Design, Manufacture, Supply, Installation, Testing and Commissioning of E&M works comprising of Electrical Sub Stations with HT and LT works, Ventilation and Air Conditioning Systems (VAC), Fire Detection Systems, Fire Suppression (Fire Fighting) Systems, Building Management System (BMS), EOT cranes, Air-Compressors including compressed air piping works and Plumbing Pumps for the Depot Buildings including OCC and at grade Aarey Station for "Mumbai Metro Line -3"							
Sr. No.	Volume	Section	CLAUSE No. / Sub Head / BOQ Sr.No. / Addendum's	PAGE No.	Relevant Abstract from Tender & Addendum's	Bidder's Queries	MMRC'S RESPONSE
1	Volume-1	Bidding Procedure Section 1 - NIT	Clause1.1.8,	page 8-10		As per our discussion few min ago, please forward Bank details for MMR-3 (Colaba_Bandra_Seepez) project for EMD purpose.	Please refer Addendum-7, Serial No.3 &6.
2	Volume-1	Bidding Procedure Section 1 - NIT	Clause1.1.8,	page 8-10		We are in process of preparing the BG for E&M works for Depot project [MM3-CBS-DEM]. Requesting you to send the below mentioned Bank details- 1] Bank Name- 2] Branch Name/Address 3] A/c. number- 4] Type of Account- 5] IFSC Code- 6] MICR Code- 7] BSR Code 8] SWIFT Code	Please refer Addendum-7, Serial No.3 &6.
3	4	Technical Specifications	2.6.2	Page 32 of 154	IEC 61439-4 : Bus trunking systems	As per IEC 61439 Part 1 and 6 standards, the design and 3rd Party certification / calculation of Busduct system is as per Short Circuit and Temperature rise requirements. Bus bar design is based on temperature rise calculation. As per clause 2.6.5 : Busbars - Current density shall not be more than 1 amp per sq.mm. Above given clauses for busbar sizing are contradictory and any one of the above can prevail. Kindly confirm.	Please refer Addendum-1 Sr.No. - 31
4	4	Technical Specifications	2.6.3	Page 32 of 154	Enclosure thickness.	As per specification enclosure thickness is 1.6 mm and as BOQ it is 2.0 mm. Kindly accept Busduct enclosure thickness 1.6 mm or above.	Please refer Addendum-1 Sr.No. - 31
5	4	Technical Specifications	2.6.4	Page 33 of 154	Current Rating : 3200 Amps 3P +100% N+ 50% integral	Vendors have clarified that the Busduct enclosure shall act as an 50% integral body earth. Kindly confirm acceptance.	Please refer Addendum-1 Sr.No. - 31
6	4	Technical Specifications	2.6.4	Page 33 of 154	Temperature rise : 50°C above 45° C ambient. Design data in support of temperature rise being within permissible limits shall be furnished along with the tender.	Temperature rise shall be as per IEC 61439 Part 1 & 6. Design data in support of the same shall be submitted. Kindly confirm.	Please refer Addendum-1 Sr.No. - 31
7	4	Technical Specifications	2.6.5	Page 34 of 154	Current density shall not be more than 1 amp per sq.mm Each busbar shall be individually insulated by means of 4 layers of glass mica and polyester insulation to give minimum class F (bus temperature 155 Deg C) insulation.	Layers and material of insulation varies for vendor design / product. However requirement of class F insulation shall be complied. Kindly confirm.	Please refer Addendum-1 Sr.No. - 31
8	6	BOQ	12.1		630 KVA D.G. SET	Requesting to accept 600 / 625 KVA DG set as 630 KVA engine rating is not in product range of majority of approved vendors.	BID CONDITIONS PREVAIL
9	4	Technical Specifications	2.16.2.4	Page 125 of 154	e. Engine Exhaust	Kindly provide the height to be considered for DG exhaust piping. Kindly provided DG location / building height / drawings for DG exhaust piping and support structure calculation.	BID CONDITIONS PREVAIL

MUMBAI METRO RAIL CORPORATION LIMITED Mumbai Metro Line-3 Project							MMRC'S RESPONSE / CLARIFICATION dated 25 th January 2018. LOT-4
Response to Bidder's Queries on Volumes 1 to Volume-6 for Contract No. MM3-CBS-DEM							
Design, Manufacture, Supply, Installation, Testing and Commissioning of E&M works comprising of Electrical Sub Stations with HT and LT works, Ventilation and Air Conditioning Systems (VAC), Fire Detection Systems, Fire Suppression (Fire Fighting) Systems, Building Management System (BMS), EOT cranes, Air-Compressors including compressed air piping works and Plumbing Pumps for the Depot Buildings including OCC and at grade Aarey Station for "Mumbai Metro Line -3"							
Sr. No.	Volume	Section	CLAUSE No. / Sub Head / BOQ Sr.No. / Addendum's	PAGE No.	Relevant Abstract from Tender & Addendum's	Bidder's Queries	MMRC'S RESPONSE
10	4	Technical Specifications	7.1.2.11	30	Transformer Cubicle : The door shall be provided with a mechanical system interlock, to ensure that it is possible to open the door only when the protection circuit breakers on the HV side as well as LV side of the transformer are in 'Open' position. Transformer door shall be reverse interlocked, that is, if the Transformer door is opened, Circuit breaker (HT & LT) on either side of Transformer shall trip automatically.	Approved OEM / vendors are unable to provide mechanical interlock. However electrical reverse interlock provision is possible. Kindly confirm.	BID CONDITIONS PREVAIL
11	6	BOQ	3		Lighting Bus Trunking : Fault Level Withstand Capacity of 2.5 kA min for 0.1 Sec (Icw) and 9.6 kA (Ipk).	Approved OEM / vendors can provide short circuit current withstand capacity of 2 kA min for 0.1 sec (Icw) instead of 2.5 kA min for 0.1 sec (Icw) and 3kA pk instead of 9.6kA pk. Kindly confirm.	BID CONDITIONS PREVAIL
12	Volume-4 & 6	Section-VI-F	BMS System		BMS System	This being BOQ based tender, we request you to provide the list of equipments to be monitored and controlled via BMS and equipment wise IO point list as a minimum since the configuration and costing of BMS is based on these inputs.	Please Refer Addendum-5, Response to prebid queries, Serial N0.17
13	Addendum 6	Addendum 6	Sr. No. 1		Date & time of Submission of Tender is on 30.01.2018 upto 1800Hrs	Based on addendum-5, as there has been revision in equipment capacities and quantities, we shall need time to get revised quotes for equipments / items complying to tender specifications. Hence, we kindly request you to grant us extension to bid submission upto February 21, 2018	Please refer Addendum-7, Serial No.1
14	Volume-2	Section-V-SCC		page 10 of 19		Since GST Council has reduced GST rate on construction of metro projects from 18% to 12%, we kindly request you to confirm that the same is applicable to Mumbai Metro Depot Contract No. : MM3-CBS-DEM.	Please refer to SCC-24) Sub-Clause 11.1.1 C) Bid Condition Prevail.
15						We request you to kindly consider extending the bid submission date by two weeks. i.e. February 14, 2018.	Please refer Addendum-7, Serial No.1
16	Volume-4 & 6	Section-VI-F	BMS System			We request you to kindly share the IO summary for BMS pricing	Please Refer Addendum-5, Response to prebid queries, Serial N0.17
17	Volume-1	Section-1	NIT Clause 1.1.2 KEY DETAILS, Sr. No 1 of Addendum -6, Serial No.-1.	Page 1 & 2 of 10		Further we request to provide extension of 10days on account of upcoming holidays for Republic Day.	Please refer Addendum-7, Serial No.1
18	Volume-1	Section-1	NIT Clause 1.1.2 KEY DETAILS, Sr. No 1 of Addendum -6, Serial No.-1.	Page 1 & 2 of 10		Thanks you very much for inviting us to participate in the prestigious tender mentioned above. As mentioned in the NIT and subsequent addendums issued the bidders must submit the bid on 30/01/2018 at 1100 hrs. However, we received the last addendum on 17th Jan 2018 and therefore, to prepare for bid we need adequate time for submission. Therefore, it is requested to kindly extend the submission period for another one month i.e. upto 28/02/2018 to enable us to submit our competitive offer.	Please refer Addendum-7, Serial No.1

MUMBAI METRO RAIL CORPORATION LIMITED Mumbai Metro Line-3 Project							MMRC'S RESPONSE / CLARIFICATION dated 25 th January 2018. LOT-4
Response to Bidder's Queries on Volumes 1 to Volume-6 for Contract No. MM3-CBS-DEM							
Design, Manufacture, Supply, Installation, Testing and Commissioning of E&M works comprising of Electrical Sub Stations with HT and LT works, Ventilation and Air Conditioning Systems (VAC), Fire Detection Systems, Fire Suppression (Fire Fighting) Systems, Building Management System (BMS), EOT cranes, Air-Compressors including compressed air piping works and Plumbing Pumps for the Depot Buildings including OCC and at grade Aarey Station for "Mumbai Metro Line -3"							
Sr. No.	Volume	Section	CLAUSE No. / Sub Head / BOQ Sr.No. / Addendum's	PAGE No.	Relevant Abstract from Tender & Addendum's	Bidder's Queries	MMRC'S RESPONSE
19	Volume-1	Section-1	NIT Clause 1.1.2 KEY DETAILS, Sr. No 1 of Addendum -6, Serial No.-1.	Page 1 & 2 of 10		<p>We have been working on the Subject Tender and after going through revised BOQ, drawings & Technical Specs we have noticed the changes, and are awaiting for prices of major items/products required for the project. It will take much time to prepare a proper estimation of the work inline to the revised Specs & Drawings. It is not possible for us to submit our best competitive offer along with all the required documents within the specified due date.</p> <p>Thus, we kindly request M/S. MMRCL to extend the deadline for submission of aforesaid Mumbai Metro Line-3 Tender by 2 weeks from the present submission due date i.e. 30th January 2018.</p>	Please refer Addendum-7, Serial No.1
20						<p>We are keen on participating in the above mentioned project. We have our Sub-contractor as required in the tender but due to revised BOQ and Technical Specifications, vendors require time to give their best rates. Due to which we won't be able to submit our offer in due course of time. Hence in order to promote better & wider participation, we request you to extend the tender submission date by at least 2 week from current submission date i.e. 12/02/2018. This will enable us to quote our best possible offer.</p>	Please refer Addendum-7, Serial No.1
21	Volume-1	Section-1	NIT Clause 1.1.2 KEY DETAILS, Sr. No 1 of Addendum -6, Serial No.-1.	Page 1 & 2 of 10		<p>This has reference to the Tender Notice No : MM 3-CBS-DEM for Design, Manufacture, Supply, Installation, Testing and Commissioning of E&M works comprising of Electrical Sub Stations with HT and LT works, Ventilation and Air Conditioning Systems (VAC), Fire Detection Systems, Fire Suppression (Fire Fighting) Systems, Building Management System (BMS), EOT cranes, Air-Compressors including compressed air piping works and Plumbing Pumps for the Depot Buildings including OCC and at grade Aarey Station for "Mumbai Metro Line -3".</p> <p>Please be informed that we really interested to participate in above tender. As here in Kolkata Bank & our office both were closed on 22-1-18 ,23-1-18 & 26-1-18 ,27-1-18 for Sarswati puja and Netaji Subhas Chandra Bose Birthday & Republic Day & 4th Saturday however considering the job involvement there, to collect the quotation of Bought Out Item we require another 20 working days time to submit our best price offer.</p> <p>Under the above circumstances we would request to you to please extend the tender submission date up to 20.02.2018 to enable us to submit our best proposal.</p>	Please refer Addendum-7, Serial No.1