

## PRE-BID QUERIES

PART DESIGN BASED ON ACCEPTED DEFINITIVE DESIGN, DETAILED ENGINEERING, MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, INSTALLATION, TESTING AND COMMISSIONING (INCLUDING INTEGRATED TESTING & COMMISSIONING), DEMONSTRATION OF PERFORMANCE OF THE SYSTEM AND ANNUAL MAINTENANCE CONTRACT OF TUNNEL VENTILATION SYSTEM (TVS) FOR UNDERGROUND SECTION OF KOLKATA METRO EAST WEST LINE PROJECT

REPLIES TO QUERIES Dated 7 March 2017

Sr no	Asked For	Vol	Appendix/ Section	Clause No.	Page	Description	Pre-bid queries	Reply	Addendum Required
1						General Obligation	If there will be any changes in the CRD after GFC and design preparation, additional design cost shall be applicable. Pl. confirm	No Change in tender condition is envisaged.	No
2						General Obligation	Contractor shall be reimbursed for any kind of damages of all the material that are once installed at site. The value of the reimbursement shall be calculated with respect to the BOQ rate or prevailing the market rate, which ever is higher.	No Change in tender condition is envisaged.	No
3						General Obligation	In case of ECS/TVS & E&M Contract all BOQ rates shall be divided into the following :- BOQ Rates shall be separate for 1. Supply of material at stores/site, 2. Installation at site 3. Testing & Commissioning.	Instant tender is only for TVS. The work is divided into Schedule X & Schedule Y, with details clearly given in the tender document. No Change in tender condition is envisaged.	No
4						General Obligation	Payment terms shall be as follows 1.100% against supply of material. 2.100% against installation at site. 3.100% against testing & commissioning.	No change in tender condition is envisaged.	No
5						General Obligation	Staff shall be deployed as per requirement & Site Access. Pl. confirm. If the manpower will be ideal due to non availability of Site Access, employer shall pay cost for manpower. Pl. confirm.	No change in tender condition is envisaged.	No
6						General Obligation	In case of contract work is delayed due to other contractors, price escalation shall be paid to contractor, Pl. confirm.	No change in tender condition is envisaged.	No
7						General Obligation	As we know that the specified Contract is a Design Built Contract, for which requirement for Auto-Cad Drawings is must for considerations and evaluations of various equipments quantity of Tunnel Ventilation System. Pls do provide the same	The CAD drawings can be provided to the successful bidders subject to the submission of Confidential Agreement.	No
8						General Obligation	Support of TVF to be provided by others. Pls Confirm	No change in tender condition is envisaged.	No
9						General Obligation	Kindly Confirm Earthing to be used will be of copper or G.I?	Tinned Copper tape similar to those mentioned in clause no. 2.9.9 of volume 3 part 2.	No
10						General Obligation	Outgoing cable for UPS fan will be fire survival, please confirm.	No. Not required.	No
11						General Obligation	Mounting bracket in tunnel for LHD and booster fan power cable in tunnel to be provided by E&M contractor. Please confirm	Mounting brackets for LHD and booster fans Power cable to be provided by TVS Contractor. The contractor may coordinate with E&M and civil contractor for any space Planning in this regard.	No
12						General Obligation	Fire paint & fire insulation on TVS system to be provided or not. Please confirm	TVS Contractor to provide as per Vol 3 part 1 ( Employer's Requirement)	No
13						General Obligation	Scope of CSD to be clarified. Pls confirm	CSD is not under the scope of TVS contractor. Though the necessary information / inputs / interface in the form Autocadd to be provided to the other contractor responsible for CSD as stipulated clearly in point number 8 of Vol3.	No
14						General Obligation	For the smooth work flow kindly provide us the soft copies of BOQ ,Annexures and Appendix.	Soft copy of BOQ will be provided to the successful tenderer if required. Other Annexures and Appendices which have copy rights, only PDF copies will be provided. However if tenderer requires for bid submission the same can be provided upon request.	No
15						General Obligation	List of Makes Within respect to the Tender documents List of Makes is not provided .Do provide the List of Make .Pls Confirm If List of Make is not provided pls Confirm that makes proposed by the contractor shall be consider finally .Pls Confirm	We do not have Approved Makes List. Please follow the procedure of selection of vendors as called for in the Tender Specifications (GCC clause 1.1.6.16) which are subject to the approval by the Engineer	No
16	General	Vol-1		O		SCOPE OF WORK	ALL minor civil works like equipments related plinths, pockets ,inserts, support are part of the TVS contractor's scope, however all major foundation are carried out by the civil contractor. It means the input of foundation, opening & related to civil are in TVS contractor scope & making of them , structural support, RCC foundation & other related to civil work in civil contractor scope. Please confirm	Yes. Please follow the "work included in the Services" of Vol 3 Part 1.	No

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17		Vol-2	ELIGIBILITY CRITERIA	1.11.1 & BASIS OF EVALUTION T1	ECR/5 & ECR/39	Financial Standing & Basis of Evaluation	Please confirm if the firm or Joint Venture is able to qualify the criteria & requirement of financial resource through Working Capital then Credit Line substantiated by a letter from the bank & other financial resources is not required. Pls Confirm.	No change to the specification clauses is envisaged	No
18		Vol-2	ELIGIBILITY CRITERIA	1.11.1	ECR/6	Experience Record T10	For a Contract, if a phase / part is been completed having an proper authentication with the completion letter should be consider in the work experience .Pls Confirm.	No change to the specification clauses is envisaged. For the modified T10 clause, please refer to addendum.	No
19		Vol-2	ELIGIBILITY CRITERIA	1.11.1	ECR/39	Basis of evaluation	Providing information on current contract commitments for contract under extension may not be feasible as the completion date of contract cannot be envisaged. In view of this, such contract shall not be considered for referred clause for T1. Please confirm.	T1 refers to liquidity requirement. Please follow the tender condition.	No
20		Vol-2	ELIGIBILITY CRITERIA	1.11.1	ECR/6	Experience Record T8	In Understanding to the works with similar scope and nature as other experience are for 5 years whether the same we should consider for 5 years .Pls Confirm	The query is not clear.Please follow the tender condition.	No
21		Vol-2	GCC	2.2	GCC/18	Access to and possession of the Site	If reasonable EOT is provided the employer shall provide the escalation of prices.Pls Confirm	Please refer to the PVC formula in the tender document.	No
22		Vol-2	GCC	2.2	GCC/18	Permit ,License or Approvals	To obtain permit ,License and approvals from Local Authorities for the subject project involves considerable expenditure which costs to the employer. Therefore obtaining the permits,License and approvals shall provide reasonable assistance to employer in getting the same required during the execution of the contract.Please Confirm	It is Contractor's responsibility to obtain the permit/licences, etc. by submitting directly to proper authority. However, the Employer/Engineer will provide all technical assistance possible. Hence there is no change to the specification clauses is envisaged	No
23		Vol-2	GCC	4.1	GCC/20	General Obligations	Electricity ,water etc for testing and commissioning shall be provided by the employer.Please Confirm	The Contractor shall be responsible for arranging the Electricity, Water required for temporary as well as for testing & commissioning at his own risk & cost. Hence no change to the tender condition is envisaged.	No
24		Vol-2	GCC	4.1	GCC/21	General Obligations	The employer shall provide overall security of the site and personal, record of the personal moving at the site, security of the equipments kept at site for execution should be provided by the employer. Please Confirm	The contractor shall be responsible for any security issues as mentioned in GCC clause 4.27. Hence no change to the tender condition is envisaged.	No
25		Vol-2	GCC	4.1(f)	GCC/21	General Obligations	Diversion of any service and facilities required for the purpose of work shall not be in the scope of contractor .Please Confirm.	The contractor shall be responsible as mentioned in GCC clause 4.1. Hence no change in the tender condition is envisaged.	No
26		Vol-2	GCC	4.2.2	GCC/21	Release	In case of Partial take over performance bank gaurantee value shall be reduced proportionally and insurance policy accordingly.	No Change. The release of Performance Guarantee shall be as per GCC clause 4.2.2. Pls. follow tender requirement for insurance.	No
27		Vol-2	GCC	4.4.b	GCC/23	Facilities for and co-ordination with others	The employer shall provide overall security of the site and personal, record of the personal moving at the site,security of the equipments kept at site for execution should be provided by the employer.Please Confirm	TVS Contractor to provide for security to his own works. Hence no change in the tender condition is envisaged. Please follow GCC clause 4.27	No
28		Vol-2	GCC	4.16	GCC/29	Safety of works	The contractor's shall provide safety of their own works i.e light,guard etc but overall safety shall be provided by the employer free of cost	No change to the tender condition is envisaged.	No
29		Vol-2	GCC	4.21	GCC/32	Stores,Shed,Yards	We request to provide covered and secured place for site office approximately 1000 sq.mtrs,material stores approx 10000 sq.mtrs and labour camp approximately 2000sq mtrs at all the stations .The electrical,water and sanitary connection points for office ,stores and site shall also be provided by the client free of cost.Please Confirm	No change to the tender condition is envisaged. TVS Contractor to provide his own as per GCC clause 4.21.	No

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30		Vol-2	GCC	4.26	GCC/32	Contractors to keep site clear	The contractor shall clear,remove wreckage ,rubbish or temporary works which is under his scope of work and same shall be stored at one location within the site.These rubbish etc shall be cleared etc from site by the system wide contractors .Please Confirm	No change to the tender condition is envisaged. TVS contractor to clear his debris, rubbish and all Constructional Plant, surplus material and Temporary Works regularly as stated in GCC clause 4.26. The contractor shall also follow the requirement of SHE manual and SHE conditions of contract of the tender document.	No
31		Vol-2	GCC	6.7	GCC/42	Health & Safety	Necessary hygiene required for the site work shall be provided by the employer free of cost.	No change to the tender condition is envisaged.	No
32		Vol-2	GCC	8.5	GCC/50	Liquidated Damages for Delay	LD to be imposed in case last key date delayed subject to EOT and not for intermediate key date	No change to the tender condition is envisaged.	No
33		Vol-2	GCC	10.1	GCC/53	Completion of outstanding works and remedying defect	DLP of the complete system shall be recommended from the date of first take over certificate/ROD in case of part take over .Please Confirm	No change to the tender condition is envisaged.	No
34		Vol-2	GCC	10.9	GCC/55	Performance Certificate	Performance certificate shall be issued to the contractor upon completion of defect liability period .If not issued by the employer the reason must be provided by the employer 90 days in Advance so as to take necessary action.Please Confirm	No change to the tender condition is envisaged.	No
35		Vol-2	GCC	10.9	GCC/55	Performance Certificate	Part performance certificate to be issued in case of part DLP Completion and proportionate PBG to released in part.Please Confirm	No change to the tender condition is envisaged.	No
36		Vol-2	GCC	11.3	GCC/59	Application for interim payment certificate	Milestone achievement mention in the cost centre must be record for supply,installation,testing commissioning on running basis within limits of 7 days from the date of verbal or written intimation or else statement by contractor shall be accepted or certified .Pls confirm	No change to the tender condition is envisaged.	No
37		Vol-2	GCC	11.3	GCC/59	Application for interim payment certificate	The contractor shall submit more than one IPC and payment in a month .Pls confirm	No change to the tender condition is envisaged.	No
38		VOLUME -2	GCC	12.1	GCC/65	Variation	If any items addition or deletion after the award of contract these work as a variation or extra item please clarify	No change to the tender condition is envisaged.	No
39		Vol-2	GCC	15.1	GCC/74	Insurance for Design	We undersand that this is a Boq based tender and the contractor scope of work is limited and therefore submission of any professional indemnity insurance shall not be applicable to the contractor. Damage to material ,machinery and works due to fire,theft etc.Validity required till the material is delivered at site.Kindly confirm the above mention validity criteria is acceptable to the employer.	No change to the tender condition is envisaged.	No
40		Vol-2	SCC	7	SCC/5	Mobilisation Payment	Advance Bank Gaurantee shall be reduced proportionally in case of part taking over certificate/ROD/Commercial usgae .Pls Confirm	No change to the tender condition is envisaged.	No

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41		Vol-2	SCC	8	SCC/6	Defect Liability	Space to establish maintenance office and store to be provided to contractor free of cost .Kindly Confirm	No change to the tender condition is envisaged.	No
42		Vol-2	SCC	24	SCC/11	Performance Security	Performance Security shall be reduced proportionally in case of part taking over certificate/ROD/Commercial usage.Pls Confirm	No change to the tender condition is envisaged.	No
43		Vol-2	SCC	53	SCC/21	Contract Price	In case item quoted in Foreign Currency at tendering stage are procured from within India during execution, then also payment shall be made in quoted currencies without any clarification or financial impact. Please confirm.	This is not acceptable. No change to the tender condition is envisaged.	No
44		Vol-2	SCC	53	SCC/21	Contract Price	a) All contract shall be quoted without Custom / Excise Duty / VAT / CST in case same is paid or applicable in part or full, the same shall be reimbursed at actual and the same shall prevail for any statutory variation in case of EOT of contract completion period. Please confirm. b) It is also to confirm that Taxes and Duties shall be reimbursed in case of the quantity of the material not measured due to Wastage, pilferage, loss etc. as the subject quantity has been procured only for the project. Therefore, duties payable on respective quantities shall also be reimbursed. !!	No change to the tender condition is envisaged.	No
45		Vol-2	SCC	53	SCC/21	Contract Price	Concessional duty shall be payable and the same shall be reimbursed as evaluation is without custom duty. Please confirm.	No change to the tender condition is envisaged.	No
46		Vol-2	SCC	53	SCC/21	Contract Price	Service Tax shall be reimbursed in case it is applicable. Please confirm. VAT / CST shall be reimbursed in case it is applicable. Please confirm.	No change to the tender condition is envisaged.	No

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47		Vol-2	SCC	53	SCC/21	Contract Price	Only concessional / full custom duty shall be reimbursed as paid at actual.	No change to the tender condition is envisaged.	No
48		Vol-2	SCC	53	SCC/21	Contract Price	Any deemed export benefit shall not be availed by the contractor. Therefore, any type of custom duty / excise duty / VAT / CST paid in full / part / concessional to be reimbursed to the contractor at actual. In case full custom duty or excise duty is paid same shall be reimbursed. Any increase in cost due to new taxes or change is existing during extended contract period, same shall be reimbursed to the contractor. Reimbursement of Taxes and Duties shall be payable within 21 days from the date of submission of documents. Please confirm. It is also to confirm that Taxes and Duties shall be reimbursed in case of the quantity of the material not measured due to Wastage, pilferage, loss etc. as the subject quantity has been procured only for the project. Therefore, duties payable on respective quantities shall also be reimbursed.	No change in the tender condition is envisaged.	No
49		Vol-2	SCC	53	SCC/21	Contract Price	For Custom Duty Reimbursement Bill of entry & challan is required & Excise Duty Reimbursement Excise Invoice & challan is required. Any other documents is not required. Please Confirm.	No change in the tender condition is envisaged.	No
50		Vol-3	PART-1	12	11	Physical Sizes of Plant & Equipments	It is understood that proper access has to be provided for the maintenance purpose but how so ever if any further modification related to plant size required will solely be responsibility of the employer. Pls Confirm	Not Acceptable. You are required to comply to the requirements stipulated in the tender.	No
51		Vol-3	PART-1	27.2	29	TVS- Quality Controls	For non-American Fan/equipment manufacturers equivalent, international standards shall be complied i.e (ISO – mostly equal to BS), European (EN) and German (DIN, VDI, VDMA) standards etc.	Other relevant Standards are acceptable as long as they are proved equivalent to the standards specified in the Tender Specification. The Contractor shall highlight to the Employer the advantages of the proposed standard with the specified standard, giving documentary evidence for acceptance. Otherwise please comply to the details mentioned in this specification.	No
52		Vol-3	PART-1	28.18	42	TVS- Fan Start Up Time	Possible only with DOL starters, whereas in case of the start delta starters start up time may vary from 15 to 60 seconds approx. It is recommended to follow NFPA reversing intervals. Kindly Confirm.	We have not envisaged Start - Delta starters. The selected starters should be able to meet the requirements about starting stipulated in TVS report attached in the Tender Document. Please comply.	No
53		Vol-3	PART-1	28.6	36	TVS- Fan Motor Voltage Dip	Starting Voltage dip of 25% is not possible in case of Star Delta Starter and Motor shall not be insensitive to line voltage variation but may function and deliver the torque required by the motor at +/- 10% variation for continuous operation.	We have not envisaged Start - Delta starters. Select the starters to meet the design requirements. In case of not meeting the design requirements next higher rating motors will be selected.	No
54		Vol-3	PART-1	28.6	36	TVS- Motor Power Factor	It shall be including allowed tolerances. Please confirm.	Tender specification shall prevail and complied with.	No
55		Vol-3	PART-1	28.18	42	TVS- Reversal Test	Manufacturers offer reversal test where fan and motor being run up to full speeds in forward mode and allowed to run at that speed until the data is collected to create the fan curve. Similarly for reverse mode. Please confirm as per manufacturer standards.	Tender specification shall prevail.	No
56		Vol-3	PART-1	28.4.2	35	TVS- Fan Fabrication	Weld located in the air stream should be ground smooth- Welds only close to the impeller will be ground smooth kindly confirm	Tender specification shall prevail and complied with	No

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57		Vol-3	PART-1	29.3.1.5	46	TVS Dampers- Bearing Mounting	Bearing mounting shall be pressed into frame or as per manufacturing standard of some manufacturers. Please confirm.	Tender specification shall prevail and complied with	No
58		Vol-3	PART-1	32	64	TVS- Booster Fan Quality Controls	For non-American Fan/equipment manufacturers equivalent, international standards shall be complied i.e (ISO – mostly equal to BS), European (EN) and German (DIN, VDI, VDMA) standards etc.	See reply to item 51 above.	No
59		Vol-3	Part-1	4	6	Work included in the service	The scope of glanding & termination of incoming cable for TVS panel to be clarify.Pls confirm	Termination of incoming power & glanding shall be provided by TVS contractor.	No
60		Vol-3	Part-1	4	6	Work included in the services	We understand that the SES report was finalized by a design consultant based on old alignment. The alignment has under gone a change and a tentative drawing showing the original alignment and the detour portion is also enclosed in the tender document volume-4,a revised SES report for the revised alignment shall be given to the after award of contract-it means the final SES will be provided to the TVS contractor with study of CFD, please confirm.	Yes. Our assessment is that there will not be any changes to the Fan, Ventilation shaft, damper and room sizes. However final report with SES study of revised alignment and CFD will be provided to the successful tenderer.	Yes. Sl. no 12 of Addendum 1
61		Vol-3	Part-1	4	6	Work included in the services	The report was finalized by a desian consultant based on old alignment. The alignment has under gone a change and a tentative drawing showing the original alignment and the detour portion is also enclosed in the tender document volume-4,a revised SES report for the revised alignment shall be given to the after award of contract - it means if any equipment or any items related to TVS has been revised,then it consideard as a variation/extra item,please confirm.	Our assessment is that there will not be any changes to the Fan, Ventilation shaft, damper and room sizes. In case of any major change the same will be dealt as per the tender condition.	Yes. Sl. no 12 of Addendum 1
62		Vol-3	Part-1	4	6	Work included in the services	All minor civil works like equipment related plinths,pockets,support are part of TVS contractor's scope however all major foundation are carried out by civil contractor.It means the inputs related to civil work for TVS system in TVS contractor scope and making of all civil work related to civil like RCC plinths, structural support, opening and their finishes meets the TVS requirements are in civil scope, please conform.	Please refer to the reply provided under point no. 16 above	No
63		Vol-3	Part-1	21.5	20	Congestion Operation	At congested operation the tunnel air temperatruue shall not exoced 45deg. C, the tunnel air temperatruue means It is the around the A/C out door units. Please confirm.	The temperature of 45 Deg C is the temperature at back of the train or downstream of the airflow including around the A/C out door units.	No
64		Vol-3	Part-1	Data sheet for tunnel ventilation fan	76	paint	We understand from the specification that Fan structure are required hot dip galvanised.In some cases the fan structure is in large size & It is very difficult to hot dip galvanised,In that case the fan structure can be zinc painted. Please confirm.	No change to the specification is envisaged. Tender conditions shall prevail.	No
65		Vol-3	Part-1	Data sheet for over track exhaust fan	77	fire rated enclosure	Fire rated demountable enclosure is required only on fan and not on attenuator & transition piece.In data sheet already mention the high temp operation is 2hour @250c, after the fire rating of fan 2 hour @250c the fire rated demountable enclosure required over the fan. Please confirm.	Fire rated enclosure is not required.	Yes. Sl. no 10 of Addendum 1
66		Vol-3	Part-1	Data sheet for under platform supply fan	78	fire rated enclosure	Fire rated demountable enclosure is required only on fan and not on attenuator & transition piece. In data sheet already mention that Fan is required for rating of 2 hours @ 250 degree Celcius.Pls confirm wheather still demountable enclosures are required for the same .	Please refer to the reply provided under point no. 65 above	Yes. Sl. no 11 of Addendum 1
67		Vol-3	Part-1	Data sheet for sound attenuator	81	Sound Attenuators	As given the size of attenuator are different from FID damper given in volume 4 dwg no.UG-2-D-TVS-0050 & UG-2-D-TVS-0051, As per our suggestion the sound attenuator size shall be match with the size of FID or vise-versa otherwise unnecessary the taper piece creates the pressure drop & space limitation. Pls clarify	Please select the attenuator size to avoid any further pressure drop keeping the sound level required in the specification.	No

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68		Vol-3	Part-1	Data sheet for fire rated duct	84	Sheet	We understand from the specification that the gauge of sheet minimum 6mm thickness is required. Wherever as per other metro jobs like DMRC, BMRCL, the gauge of sheet used 4mm thickness is been used. Please confirm whether the same 4mm sheet can be used in Kmrcl Project.	Tender conditions shall prevail.	No
69		Vol-3	Part-1	Data sheet for fire rated duct		duct accessories	For joints hexagonal nuts/bolts/washer SS-304 rivets SS-304. The duct itself will be manufacture from M.S sheet, Can we use the G.I. bolt ,rivets instead of SS-304. Please confirm.	Specification shall be complied with.	No
70		Vol-3	Part-1	Data sheet for fire rated duct		Duct support	The support of duct from wall/ceiling the anchor fastner will be G.I. Please confirm.	Specification shall be complied with.	No
71		Vol-3	Part-1	28.4.9	35		Bolts shall be not less than 12mm diameter. Bolts, nuts, washer and lock washer used on the fan and component shall be type 316 stainless steel, silicon bronze or other corrosion resistant material as approved. It means these accessories are related to fan assamble only. For the fan grounting with the foundation or steel structure the G.I anchor fastner can be used. Please confirm	Specification shall be complied with.	No
72		Vol-3	Part-1				For The testing and commissioning period the power will be provided by client. Please confirm.	No change to the tender condition is envisaged.	No
73		Vol-3	Part-1				The under platform supply fan will be fire rated or Non fire rated. Please confirm	The underplatform supply fan to be considered as non-fire rated.	Yes. Sl. no 11 of Addendum 1

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74		Vol-3	Part-1	29.3.2.10	48	Damper support	Bolts shall be not less than 12mm diameter, Nut & Bolt shall conform to the requirement of ASTM A193, Grade B8MA, equivalent to AISI type 316, with suitable lock washer for the bolts we understand these nuts & bolts for the interconnecting of module of damper & for fixing the damper with wall, floor & duct, the anchor & nut bolt are G.I. Please confirm.	Specification shall be complied with.	No
75		Vol-3	Part-1	31.3.1			The minimum G.I. sheet thickness for ductwork/transition pieces like cones should be as per data sheet which 6mm thick where are other metro's like DMRC/BMRCL, JAIPUR Metro sheet thickness was 4mm thick. In KMRCL same sheet can be used (4mm. thk.) Please confirm.	Specification shall be complied with.	No
76		Vol-3	Part-1	31.3.8			Each bolts shall be fabricated from stainless steel, not less than 12mm diameter and be complete with a nut, 2 plain washer and a lock washer spool of bolts on flanges shall not exceed 200mm. As per our understanding these bolt only for interconnected the duct piece. For grouting the duct in RCC floor or wall the G.I. anchor & nut, bolt can be used. Please confirm.	Specification shall be complied with.	No
77		Vol-3	Part-1			General Obligation	The under platform grille are in the scope of ECS contract. Please conform.	Under Platform grilles are in the scope of TVS Contractor.	No
78		Vol-3	Part-1			General Obligation	Do we need a single manufacturer for all kinds of fan or we can have different manufacturer for different types of Fan. Pls Confirm	It is preferred to have a single manufacturer for one type of fan.	No
79		Vol-3	Part-1	32.3.9.4.3	71	Performance Test	Performance test in accordance with ASHRAE51/ACMA 210 But in DMRC phase-III it is ACMA 210 only. Pls Confirm	No change to the specification clauses is envisaged.	No
80		Vol-3	Part-1	29.3.2.6	47	Damper Fabrication	Damper flange not less than 80mm on mounting side but as per DMRC phase-III specification we are using 50mm of thickness. Pls Confirm & Clarify	No change to the specification clauses is envisaged.	No
81		Vol-3	Part-1	29.3.2.11	48	Damper Fabrication	We understand from the given clause that Damper operator mounting brackets should not be less than 9mm thick but in DMRC phase-III 3mm is the minimum thickness. Pls Confirm & Clarify	No change to the specification clauses is envisaged.	No
82		Vol-3	Part-1	29.3.2.14	49	Damper Fabrication	We understand from the given clause that the Quantity of technical support bearing 5% of each type should be used on damper. But in DMRC phase-III we have used 1% of each type. Pls Confirm	No change to the specification clauses is envisaged.	No
83		Vol-3	Part-1	29.3.7.3	50	Screens	Damper test accordance: AMCA 500. But in DMRC phase-III AMCA 500-D-58 & AMCA510-04.	No change to the specification clauses is envisaged.	No
84		Vol-3	Part-1	32.3.3.2.6	66	Vibration	We understand that Booster fan assembly vibrations is 1.6 mil for nominal speed of 3200rpm or less but in DMRC phase-III the same is been applicable for 1800rpm or less.	No change to the specification clauses is envisaged.	No
85		Vol-3	Part-1	28.2	33	Operating Environment	Stress of relating equipment depends upon the manufactures standard only. Pls amend this clause.	No change to the specification clauses is envisaged.	No
86		Vol-3	Part-1	28.4.7	35	Gasket between companion flanges	Is Gasket not required between companion flange. Please confirm.	No change to the specification clauses is envisaged.	No
87		Vol-3	Part-1	22.O	22		Terminal velocity can only be maintained if civil will provide shaft outlets sufficiently required. Please confirm.	Sufficient requirement of shaft outlet sizes have been incorporated.	No
88						General Obligation	The OTE damper in the scope of ECS contract or TVS contract. Please conform.	OTE damper is in the scope of TVS Contractor.	No
89		Vol-3	PART-1	32.3.3.3.10	67	TVS- Booster Fan Housing	In addition to referred clause, Some reputed manufacturers offers surface treatment of booster fans with hot dip galvanization as per ISO 1461. Please Confirm.	No change to the specification clauses is envisaged.	No
90		Vol-4	Part-3	4.2	8	Congestion Operation	It is confirmed with GCKMRC that only 1 train is allowed to stop inside a ventilation section. It means the second train will not stop in same ventilation section & will go upto other ventilation section or will be at the station only. Pls Confirm	These details are clearly mentioned in the Volume 4 - TVS Report.	No
91		Vol-4	Part-3	4.2	8	Congestion Operation	Considering a higher ambient temp will oversize the tunnel ventilation system and most certainly requires cooling of the tunnel which is only required to operate. If congestion happens during this 2% of the time in a year then how temperature will achieve in tunnel if congestion will happen in that 2% of the time in a year when temperature will go up from 35.2C.	Please follow the "Outdoor Temperature (Critical Scenario) Sensitivity Study Report" provided to you in Volume 4 TVS Report.	No



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92		Vol-4	Part-3	4.3	9	Fire Emergency Operation	It is conformed with GC/KMRC that only 1 train is allowed to stop inside a ventilation section and only 1 fire scenario/ incident is considered. It means that second train will not stop in same ventilation section,second train will go upto other ventilation section or go upto station.Pls Confirm	Please follow the Volume 4 TVS Report provided along with Tender documents.	No
93		Vol-4	Part-3	5.2.2	17	Congested Operation	From Fig no.10. operation of TVS during a double congestion scenario. We have understand that congestion in both side tunnel as a single train is allowed to stop inside a ventilation section. Pls confirm	It is only One train Congestion. This scenario is clearly explained in the TVS Report. No change to the specification clauses is envisaged.	No
94		Vol-4	Part-3	6.2	29	Ambient Temperature	We know that Ambient temp of Calcutta as per ISHRAE-37.7 deg DB,wherever as per desgin it is taken 35.2deg. C,Please clarify	We have considered 35.2 °C DB at 2% of the time according to the Indian National Building Code. Also please refer to the Sensitivity Study Report attached to your Tender document considering higher ambient DB temperature of 40.2 deg C.	No
95		Vol-4	Part-3	6.4.1	36	Parameters for fire emergency	Cross passage doors at the upstream of smoke (back of train fire) is opened for evacuation passengers escaping into the non-incident track, how many door will be opened? Pls confirm	After evacuating from the train, the passengers in the tunnel will walk towards the nearest tunnel cross-passage, as the pressure acting at the doors are expected to be less than 150Pa and cross into the non-incident track before escaping towards the nearest station. Cross Passage doors are designed to meet the NFPA 130 requirement.	No
96		Vol-4		Appendix-I		Draught Relief Damper Area	From Appendix- I, As per drg.no. UG-2-D-TVS-0050,Draught relief damper area is considered 15sqmt.,wherever as per DMRC-PHASE-III,the same in 20.25sq.mt.	No change to the specification clauses is envisaged.	No
97		Vol-4		Appendix-I		Damper	From Appendix- I, As per drg.no UG-2-D-TVS-0050,the TVD, FID & BY PASS Damper area considered 9.0sq.mt. for air volume 85 cms, for this air volume the face velocity on damper is 9.5m/s. which seems to little high, Please confirm.	No change to the specification clauses is envisaged.	No
98		Vol-4		Appendix-I			From Appendix- I, As per drg.no UG-2-D-BT-TVS-0057, The intermediate slab is provided in the tunnel for booster fan installation. It means the slab to be provided in the niche area for booster fan installation.wherever other metro like DMRC, BMRCL the booster fan are hanging from the tunnel roof. Please confirm.	No change to the specification clauses is envisaged.	No
99		Vol-4		Appendix-I			From Appendix- I, As per drg.no UG-2-D-TVS-0051,The area of TEF damper is 2.56m (1600X1600) for 30cms & the face velocity on damper is 11.72m/s. which is seems to high face velocity at the damper ,Please confirm.	No change to the specification clauses is envisaged.	No
100		Vol-4		Appendix-I			The over track exhaust duct considered RCC to be provided by others. It should not be in TVS contract.Please confirm	Your understanding is correct except the scope as mentioned under TVS Contract. It will be provided by the civil contractor.	No
101		Vol-4		Appendix-I			Appendix- I, The OTE damper will be sliding plate type damper. Please confirm.	No change to the specification clauses is envisaged. Please follow report.	No
102		Vol-4					At HOWRAH Maidan station dead end the overrun damper not provided because these station are with PSD when train will come at the station for release the piston effect may be overrun damper will be required.Please confirm	Howrah Maidan Station is provided with Relief damper & relief shaft. No change to the specification clauses is envisaged.	No
103		Vol-4		C-7.3.21			From Scenrio-E-15 ,We understand that tunnel section between phool bagan station's tunnel portal the 3nos TVF & 2nos of OTE's are required to operate at phool bagan station due to the large cross sectional area. It means any one end of the phool bagan station both the Tunnel Ventilation Fans will be working ,Please confirm.	The same is indicated in the TVS Report provided to you. No change to the specification clauses is envisaged.	

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104		Vol-4			10	Temporary tunnel ventilation system	We understand from the contract that temporary tunnel ventilation at the time of E&M construction are in the TVS contractor Scope. Please clarify the scope of accessories such as TBF power cable, Elect. Panel for supply the power of TBF & incoming supply for panel & containments for temporary tunnel ventilation system. Pls confirm	Please refer to the Scope of Works in Vol 4 TVS Report provided too you along with Tender documents: 10. TEMPORARY TUNNEL VENTILATION SYSTEM 10.1 The objective of the temporary tunnel ventilation (TTVS) is to provide a suitable environment in the tunnel for installation work to be carried out by the interfacing contractors and E&M contractors during Track Related Installation Program (TRIP). 10.2 The TTVS shall ensure that the toxic substances concentrations do not exceed the permissible exposure levels (PEL). 10.3 Jet fans will be provided within the running tunnels to generate the necessary thrust to induce the minimum airflow rate (normally 25m <sup>3</sup> /s to create a minimum air velocity of 1m/s) required to keep the emission levels below the permissible exposure levels (PEL). Fresh air is drawn in via the entrances and tunnel ventilation shafts openings at the station at one end of the tunnel. The vitiated air is discharged through the entrances and tunnel ventilation shaft openings at the station at the other end of the tunnel. Alternate stations will be designated as supply and exhaust stations. Refer to Appendix V for the TTVF scheme. 10.4 The detail design of the TTVS shall be carried out by the TVS Contractor. Since the scope of work of the Contract UG-TV S Contractor includes the design, supply, manufacture of temporary works including power cable, Elect. Panel for supply the power of TBF & incoming supply for panel & containments; decommissioning, removal and disposal of temporary works shall also be in scope of TVS Contractor.	No
105		Vol-4			10	Tempemporary tunnel ventilation system	For Detail Design of the TTVS, requirement of DDC is must for the work to be carried out. Pls confirm	Contractor is free to engage specialized consultant on their behalf for design of TTVS.	No
106		Vol-4		Appendix-O		Item-15	We understand from the Design Report that the Train heat release rate during fire is 30MW, Where as per SES Reports it is taken to be of 10MW. Please confirm.	There is no mention of 30 MW Fire in our TVS Report. For SES, the train HRR is considered as 10MW only.	No
107		Vol-4		Appendix-W			The out door temp. considered is 40.2 deg. c & earlier exercise it is 35.2 deg. c, What will be the final ambient temperature to be considered as change is reflecting in the Headway's for both the cases. Please confirm.	Please refer to our reply against item no. 94 above.	No
108		Vol-4					As per critical scenerio sensitivity study the ambient DB 40.2deg. c, train headway 4min & car capacity (person) 1626(AW3). It means that 2% time of the year when the ambient temp DB will be 40.2deg. c, the train headway and car capacity will be as per critical scenerio sensitivity study. Please confirm	Please refer to our reply against item no. 94 above.	No
109		VOLUME-4	Part-3	7.3	55	Fire Emergency Analysis & Result	The emergency between phool bagan portal not done. It means in emergency case the train will not stop between phool bagan station & portal. It will be go upto via duct. Please confirm.	No change to the specification clauses is envisaged. Refer to the TVS Report for this scenario.	No
110		Vol-5 UG/E&M	Tender Drawings			Pool Bagan + Tunnel From Portal to Phool Bgan U/G Station	Tunnel Drawings of all services are required. Kindly Provide the same	Tunnel CSD drawings will be provided to the successful tenderer.	No
111		Vol-5 UG/E&M	Tender Drawings			All UG Stations	Following drawings are required-1. Tunnel Drawings of all services are required. 2. Station Electrical drawings Fire service drawings are required. 3. Cable Calculation, Lightning Calculation, Cable Try & Load Calculation Schedule are required. Kindly Provide the same	Some of the requested documents will be provided to the successful tenderer.	No
112		Vol-6	General			Cabling of Tunnel Light Fixtures	It is requested to quantify this item on measurement basis. The length of the cable of Primary point of a tunnel light varies in different section of tunnel. Pls Confirm	Your query is irrelevant since the cabling of Tunnel lighting is not in your scope.	No
113		Vol-6	Price Schedule	BOQ	BOQ	General	For the smooth flow of work. Kindly Provide the BOQ in excel Format	Not applicable. No change to the specification clauses is envisaged. Tender conditions shall prevail.	No
114		1	Instruction To Tenderers	A 1.6	ITT/2	The Contractor shall be responsible for carrying out developing key design information keeping in view the projected traffic volume (for East-West Corridor).	Contractors scope is limited to part design based on accepted definitive design. We presume that developing key design information keeping in view the projected traffic volume is already addressed in definitive design. In view of the above, we request the clause to be deleted.	Agreed. This will be deleted.	Yes. Sl. no 13 of Addendum 1

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115		1	Instruction To Tenderers	A 1.8	ITT/2	The Scope of Work for various interfacing works for other Contracts, e.g. Signalling and Telecommunication, Traction Power & Power Distribution, station BMS, Track Work, Automatic Fare Collection, Lifts & Escalators, Rolling Stock, Platform Screen Gates, etc. shall be but not limited to as described below: ☐ Cable ducts/cables/hangers/trays for routing all type of cables and connections. ☐ Earthing and lightning protection wherever required. ☐ Provision of ducts where not provided by Civil Contractors and bellows for inter connections.	This being TVS work tender, providing services for other Contracts as mentioned in A 1.8 shall be in the scope of other tenders. Our scope shall be limited to all the equipments in TVS Works only. Please confirm.	No Change. The Contractor shall be responsible for the interfacing between other contractors as mentioned in the clause to ensure proper & adequate accommodation of their respective services after award of Contract before and during construction.	No
116		1	Instruction To Tenderers	C 10.1	ITT/14	The Contractor shall be responsible for maintaining the Works for 2 years during DLP followed by 3 years of AMC period from the Date of Completion of the Works of Phase 1 and Phase 2.	Completion time of Phase 1 and Phase 2 as per key dates is 64 & 180 weeks respectively. Hence, taking over and completion certificates will be issued phase wise. Kindly confirm.  As per tender DLP is 24 months followed by AMC of 3 years. DLP does not include maintenance & operation. Contractors liability shall be limited to attending defects during such period. We request to rephrase the clause omitting "maintenance".	Please follow GCC clause 9 and SCC 29 for Taking over certificates.  Please follow GCC clause 10 & SCC clause 8 for Defect Liability.	No
117		1	Instruction To Tenderers	C 18.1	ITT/18	The Bank Guarantee shall be in the name of the "JV or Consortium". In the case where the Tenderer is a JV or consortium, the Bank Guarantee for Tender Security shall be from JV or Consortium and not from individual members except that a local member of the JV or Consortium is permitted to furnish the tender Security with an assurance from the other JV or Consortium members to back such a Security.	At bidding stage, JV or Consortium member may only sign MOU and formal agreement / registration can be done after being successful bidder. In view of the above, you are requested to accept Bank Guarantee in the name of any one of the JV or Consortium partner / member.	Any member of the JV or Consortium is permitted to furnish the tender Security with an assurance from the other JV or Consortium members to back such a Security.	Yes. Sl. no 14 of Addendum 1
118		1 & 2	Instruction To Tenderers & Special Conditions of Contract	C 19.2 & Parent company undertaking & Guarantee	ITT/19, S3/2 & S4/2	If the Tenderer comprises a consortium or joint venture, a parent company of each member or participant will be required to execute the Undertakings and Guarantees.  Parent company undertaking - Not Used  Parent company guarantee - Not Used	Each partner / member being an entity on its own Undertakings and Guarantees can be furnished by respective members only. In such a case Undertakings and Guarantees by parent company should not be required. Kindly confirm.  As per SCC page No. S3 / 2 - Parent company undertaking is not required. Kindly confirm.  As per SCC page No. S4 / 2 - Parent company guarantee is not required. Kindly confirm.	Yes. We confirm.	Yes. Sl. no 5 of Addendum 1
119		1	Instruction To Tenderers	F 4	ITT/28	The Tenderer should note that in the event of acceptance of the Tender, the Tenderer will be required to execute the two separate Contract Agreements in the form specified in Schedule to Special Conditions of Contract with such modifications as may be considered necessary at the time of finalization of the contract within a period of 45 days from the date of issue of the Letter of Acceptance.	By two separate Contract Agreements we understand that one contract shall be for Supply i.e Schedule X and other for Installation, Testing, Commissioning & Handover with AMC i.e Schedule Y. Please confirm.  Kindly confirm whether AMC contract shall be separate in addition to above two contracts.  Kindly confirm for " Supply " under schedule X wherever applicable whether you will be able to issue C form / E1 or E2 form and road permits will be provided by you. In the event of you are not being able to provide C form / E1 & E2 form / road permits the objective splitting the scope of work and awarding as different contract may not serve the purpose of optimising the tax liability. Hence, a single contract for SITC work covering the entire scope may be awarded.	Please refer to the addendum  Please refer to the addendum  No change to the tender condition is envisaged.	Yes. Sl. no 33 of Addendum 1  Yes. Sl. no 33 of Addendum 1  No
120		1	Instruction To Tenderers	13	FOT Appendix 1 / 2	Penalty for Not Maintaining Equipment during AMC (SCC Clauses 41 and 46) - 0.01 % of the Contract Price	Penalty is 0.01 % of the Contract Price. Kindly confirm that contract price in here is limited to the value of AMC portion / as quoted by bidder. Please confirm.	No change to the specification clauses is envisaged.	No

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121		2	Eligibility Criteria Requirements	1.4	ECR/4	The Lead member shall be the Technical member in case of JV/ Consortium.	Bidders intend to structure their JV/ Consortium based on their strengths of various factors such as technical, operations, design, service, presence, etc. with the endeavour to meet employers' requirement and provide superior project delivery and service. In view of the above, we request that the JV/ Consortium shall be at liberty to decide Lead member amongst themselves, as all the members of JV / Consortium are expected to be Engineering Companies. Kindly approve.	The technical member are engineering companies having know how of the system.	No
122		2	Eligibility Criteria Requirements	1.14	ECR/6	Calculating rupee equivalent as on 31.03.2015 & 31.03.2016	Exchange rate for USD, JPY & EUR are given. If financial data / Completed work value are in any other currency, then kindly elaborate on modality.  Exchange rate for 31.03.2015 & 31.03.2016 is provided. For calculating (in INR equivalent) Financial data of previous years exchange rate is not provided.	The source of currency exchange should be same i.e. the source from which specified, the currency conversion rate in the tender, the same must continue.	No
123		2	Eligibility Criteria Requirements	1.11.1 - I – Financial Standing - T 2 & T 2A	ECR/6	Earning before Tax, Positive in 3 years out of last 5 years ending 31.03.2015  Net Worth (last Two Years ending 2014-15), Positive.	As audited balance sheet for FY 15-16 by now are available hence; Earning before Tax, Positive in 3 years out of last 5 years ending 31.03.2016 can be considered and similarly in case of Clause T2A. Kindly confirm.	No change to the tender condition is envisaged.	Yes. Sl. no 24 of Addendum 1
124		2	Eligibility Criteria Requirements	1.11.1 -III – Experience Record T 8	ECR/6	Three years in Business as on 31.03.2016, with works similar in scope and nature	As not many underground Metros are developed every year and that too in India, we request you to modify 3 years' requirement to 'Fifteen years in Business as on 31.03.2016, with experience in TVS / ECS / Electrical Systems for MRTS/ Railway/ Airports/ Large infrastructure projects.	Your understanding is wrong. No change. Please follow clause T5 in page ECR/41.	No
125		2	Eligibility Criteria Requirements	1.11.1 -III – Experience Record T 9	ECR/6	INR 400 Million, Average Annual Turn-over during last 5 years ending 31.03.2015	As audited balance sheet for FY 15-16 by now are available hence; Average Annual Turn-over during last 5 years ending 31.03.2016 can be considered. Kindly confirm.	No change to the tender condition is envisaged.	Yes. Sl. no 26 of Addendum 1
126		2	Eligibility Criteria Requirements	1.11.1 -III – Experience Record T 10	ECR/6	At least One TVS Project work for at least for 2 U/G stations for Rail Transit systems of .....	The work under contract being TVS; more importance should be on the length of tunnel in which the bidder has executed TVS. In view of above, we propose that clause T 10 be modified to 'Detail Engineering, Manufacture, Supply, Installation, Testing and commissioning of Tunnel Ventilation System of large infrastructure projects/ U/G works completed in last 10 years - One work of 4.0 km tunnel for MRT/ Railways/ Highways or above.'	Clause has been amended.	Yes. Sl. no 6 of Addendum 1
127		2	Eligibility Criteria Requirements	1.11.1 -III – Experience Record T 10	ECR/6	..... during last 10 years ending 31.03.2016	In Delhi Metro Phase I, many under ground stations were constructed and completed in 2003. Now, in Delhi Metro Phase III, many underground stations are under construction and not yet completed. Due to cap of last 10 years in the clause, some proven bidders are unable to participate, who completed TVS Works in 2003. In view of this, we propose that clause T 10 be modified to 'At least One TVS Project work for at least 2 U/G stations for Rail Transit systems of not less than INR 320 Million during last 15 years ending 31.03.2016	Clause has been amended.	Yes. Sl. no 6 of Addendum 1
128		2	Eligibility Criteria Requirements	1.11.1 -III – Experience Record T 11	ECR/6	Atleast one design work of SES / CFD Analysis completed and .....	As most of the contracting companies do not have inhouse capability to do SES Analysis and the same is done by detailed design consultant, we request you to accept that SES / CFD analysis can be subcontracted to the design consultant having experience of "Atleast one design work of SES / CFD Analysis completed and ....." as per the tender.	Please refer ECR/41, where the detailed clause is explained as "At least One work (with at least 2 U/G Stations) of Design including SES/CFD Analysis & Detail Engineering completed in last 10 years for Underground Rail transit Facility (refer Q. 17d) (Please note that the job carried out by the Contractor should have been based on the design done on the basis of SES/CFD Simulations (either carried out by themselves or by Others)".	No
129		2	Eligibility Criteria Requirements	1.11.1 -III – Experience Record T 12	ECR/6	Atleast one work completed of Supply and Installation Work of Fire Rated equipment with 250 deg C for hr with atleast 2 U/G Stations during last 10 years ending 31.03.2016	As explained in Sr. No. 13, along with U/G Stations, also allow Large Infrastructure Projects, Rail / Road Tunnels to be considered for the same. As explained in Sr. No. 14, kindly allow experience of last 15 years ending 31.03.2016 Also, kindly advise whether experience in Fire Rated Ducts as per BS 476 and Cables as per BS 7846 can qualify for the same.	This clause is amended.	Yes. Sl. no 6 & 7 of Addendum 1

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130		2	Eligibility Criteria Requirements	Joint Venture/ Consortium Summary	ECR/14	This information should be duly certified and signed by the qualified Chartered Accountant.	Annual turnover data (INR equivalent) of each member can be submitted attested by qualified Chartered Accountant separately. However in case of Foreign partner the annual data can be notarized in country of origin. Kindly confirm.	No change to the tender condition is envisaged.	No
131		2	Eligibility Criteria Requirements	Joint Venture/ Consortium Agreement	ECR/15	1. that they will legalize a Consortium / joint ventures Agreement in case that a Contract for the _____ (name of the Project) is awarded to their group;	We understand that 'will legalize a Consortium / joint ventures Agreement' means that the Consortium / joint ventures Agreement is to be registered and not forming a Special Purpose Vehicle (SPV). Kindly confirm.	Your understanding is correct.	No
132		2	Eligibility Criteria Requirements	ANNEXURE - 3 - NOTES	ECR/34	For financial year 2015-16 the information should be duly certified by Board of directors or Company Secretary or equivalent.	If audited financial result are being provided then information need not be duly certified by Board of directors or Company Secretary or equivalent. Kindly confirm.	Agreed.	Yes. Sl. no 15 of Addendum 1
133		2	General Conditions of Contract	2.3 - Permits, Licences or Approvals	GCC / 18	It shall be Contractor's exclusive responsibility to get approvals, permits or license required for the Contracts. However, the Employer may (where he is in a position to do so) provide reasonable assistance to Contractor at the request and cost of the Contractor in getting Permits, License or Approvals required during the Contract.	Requesting to provide the list of Permits, License or Approvals that may be required to obtain.	No change. Please follow GCC clause 1.10.	No
134		2	General Conditions of Contract	11.3 - Application for Interim Payment Certificates	GCC / 59	If any Milestone is not achieved by the end of the month in which it is scheduled to be achieved, the Engineer shall suspend the payment relating to the Cost Centre in which the Milestone is included.	Already milestone related LD clause is applicable in case the milestone is not achieved. If milestone / cost centre payments are put on hold it shall adversely effect cash flow. Further, retention too is applicable. In view of above we request that milestone completion payments should not be kept on hold in any circumstances.	No change. Tender conditions shall prevail.	No
135		2	General Conditions of Contract	11.6 - Retention Money	GCC / 61	Five percent (5%) amount towards retention money shall be paid after taking over of the whole works. There shall be no deduction from any running bills towards retention money.	We request that the bidder be allowed to submit a BG against retention Five percent (5%) amount on the onset of the project and this 5% be paid against supply of materials at site.	No change to the tender condition is envisaged.	No
136		2	General Conditions of Contract	11.7 - Statement at Completion	GCC / 61	Not later than 60 days after the issue of the Taking Over Certificate for the whole of Works	Requesting to provide completion certificate phase wise. Please confirm.	It is already indicated in the Tender document. Please follow GCC clause 9 and 10.	No
137		1 & 2	Instruction To Tenderers & Special Conditions of Contract	C 10.1 & 8	ITT/14 & SCC/6	The Contractor shall be responsible for maintaining the Works for 2 years during DLP followed by 3 years of AMC period from the Date of Completion of the Works of Phase 1 and Phase 2. During the Defect Liability Period the Contractor shall provide, free of cost, competent and skilled personnel and maintain adequate stock of spares so as to promptly fulfil his obligations during the Defects Liability Period as laid down in GCC and Employer's Requirements.	Clause C 10.1 of ITT relates to 'maintaining the Works for 2 years during DLP' and Clause 8 of SCC relates to 'maintain adequate stock of spares'. We understand that for DLP clause 8 of SCC more relevant; hence clause 8 of SCC prevails over Clause 10.1 of ITT. Kindly confirm.	All the clauses mentioned are relevant and shall prevail.	No
138		2	Special Conditions of Contract	9	SCC/6	Retention Money Not used	Kindly confirm as per clause 9 of SCC retention is not applicable.	Please refer GCC clause 11.6 which is self explanatory. SCC clause 9 is not applicable.	No
139		2	Special Conditions of Contract	41	SCC/15	Additional Clause: Supervision and Maintenance	Kindly confirm that clause 41 of SCC is in context of AMC	The context is during AMC and DLP.	No
140		2	Special Conditions of Contract	9	SCC/9	Insurance	Kindly advise about what are the other insurances.	Please refer the explanation written under the same clause.	No

PART DESIGN BASED ON ACCEPTED DEFINITIVE DESIGN, DETAILED ENGINEERING, MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, INSTALLATION, TESTING AND COMMISSIONING (INCLUDING INTEGRATED TESTING & COMMISSIONING), DEMONSTRATION OF PERFORMANCE OF THE SYSTEM AND ANNUAL MAINTENANCE CONTRACT OF TUNNEL VENTILATION SYSTEM (TVS) FOR UNDERGROUND SECTION OF KOLKATA METRO EAST WEST LINE PROJECT

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Sr no	Asked For	Vol	Appendix/ Section	Clause No.	Page	Description	Pre-bid queries	Reply	Addendum Required
141		2	Special Conditions of Contract			Labour Cess / BOCW	Nothing is mentioned in tender about Labour Cess / BOCW. Kindly clarify whether you will deducting the same & at what percentage.	Bidders need to judge the applicability of BOCW for the work. Any liabilities on account of BOCW at any stage shall be on part of bidder and the quoted price shall be inclusive of BOCW charges. If same is not applicable, the bidder needs to submit required undertaking/certificates. The KMRC shall make the deduction accordingly and deposit the amount to the concerned authorities	Yes. Sl. No 16 of Addendum 1
142		3	Part 1 - Employers Requirements Specification	48.2.2.b	142	The cable shall be of LSZH type (Low smoke zero halogen) to withstand a minimum temperature of 950 deg C for 3 hours fire rating complying to BS:6387 and with a life expectancy in excess of 100 years.	In other Metro installations (DMRC / JMRC) max. life expectancy is 20 - 30 years. We request to modify the clause for life expectancy accordingly.	Accepted. Clause has been amended.	Yes. Sl. No 8 of Addendum 1
143		3	Part 1 - Employers Requirements Specification	48.2.2.d	142	It should be LPCV certified.	LPCV certification is not called for in other Metro installations (DMRC / JMRC). In view of above, we request the clause be deleted.	No change to the specification clauses is envisaged.	No
144		3	TVS Vol. 3 Part 1, section 4.0			The updated SES report will be issued to the successful tenderer only upon award of the contract.	Kindly advise whether the updated SES report can be issued to us at bidding stage, in order that the uncertainty with regards to tunnel ventilation capacities can be reduced, and so that a more competitive price for this lumpsum contract can be established.	The revised SES report can not be provided at the bidding stage.	No
145		3	TVS Vol. 3 Part 1, section 4.0			SES modelling files	Kindly advise whether the SES modelling files prepared by you can be made available to the successful bidder.	No. Modelling files are Proprietary document of KMRC.	No
146		3	TVS Vol. 3 Part 1			Dampers - structural opening sizes	Kindly advise whether the measurement of the structural opening sizes within the scope of this contract.	The contractor has to ensure that the structural opening sizes are conforming to the sizes required by them.	No
147		3	TVS Vol. 3 Part 1			Permissibility of alternatives and innovation after award of contract.	Kindly advise whether the equipment specifications contained in the tender is mandatory or can we propose "equal and approved" alternatives or innovative solutions, after the award of contract.	No change to the tender condition is envisaged.	No
148		4	TVS Vol. 4-1, Appendix U			Ventilation mode tables.	Kindly advise whether the ventilation mode tables can be supplied as Excel files to the successful bidder.	Already provided the same in PDF version. Contractor may convert the Mode Tables to any suitable format as per their requirement.	No
149		4	TVS Vol. 4-1, Appendix V			No results for the temporary tunnel ventilation system (TTVS) have been provided.	Please provide the calculated results of the air volumetric flowrates for the TTVS in Appendix V of TVS Vol. 4-1.	Contractor is free to engage specialized consultant on their behalf for design of TTVS.	No
150		4	TVS Vol. 4-1, Appendix V			Construction sequence for the design of the TTVS.	Please provide the construction sequence for the design of the TTVS.	This aspect will need to be co-ordinated and agreed upon with Civil and other Specialist Contractors	No
151		5	TVS Vol. 5			Drawings	Kindly advise whether the drawings can be supplied as CAD files at the bidding stage for correctly estimating the quantities for this lumpsum contract.	The CAD drawings can be provided to the successful bidders subject to the submission of Confidential Agreement.	No
152		5	TVS Vol. 5			SES modelling files	Kindly advise whether modelling can be done on 1D-Simulation Program, viz. IDA Tunnel, instead of SES.	No change. Please follow the relevant clauses of the Tender Specification.	No
153		1	Notice of Invitation to Tender	5	NIT/3	Last Date of Seeking Clarification : 22nd October 2016 and Tender Submission Date : 28th November 2016	This being part design and lumpsum contract, we request that last day of seeking clarification be changed to 22nd Dec' 2016 and tender submission date to 28th Jan' 2017.	Please refer to the addendum.	Yes. Sl. No 17 of Addendum 1
154		VOL1 ITT		C7	Page 24 of 82	C7.3 The Tenderer shall submit with his Tender either the proposed terms and conditions upon which the Designer would be appointed in the event of acceptance of the Tender (excluding the financial and commercial terms thereof) or at least a statement of the heads (salient features) of such an agreement	Kindly confirm technical requirement or criteria for selection of such designer	Please follow GCC clause 5 & Schedule 8 of SCC. Then Contractor is to fulfill the contract obligations. Therefore Contractor to propose the designer based on the responsibility for the performance requirement.	No
155		VOL 2 GCC SCC		8	Page 14 of 184	Joint Venture/ Consortium Summary	Kindly confirm the maximum number of parties allowed in JV/ Consortium	No limit. Please follow the ECR clause 1.4.	No

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Sr no	Asked For	Vol	Appendix/ Section	Clause No.	Page	Description	Pre-bid queries	Reply	Addendum Required
156		VOL 2 GCC SCC		III – Experience Record	Page 6 of 184	At least one design work of SES/CFD Analysis completed and implemented with at least 2 U/G stations during last 10 years ending 31.03.2016. If particular Certificate regarding SES /CFD Analysis is not available from the client a copy of the SES Report thus carried out together with covering letter of submission to the client should be attached	SES/CFD in majority of the metro worldwide are being done by separate (specialised subcontractor) entities and not by the EPC contractor. Hence, most EPC contractors in the TVS industry may not have the references to fulfill the SES/CFD qualification requirement (T11). These specialised agencies are very small companies in terms of financial turnover and other criteria. Although we agree that we shall get the SES/CFD executed under our responsibility (in the event the project is awarded to us), however, we request you to kindly remove the qualification criteria from the bidder level and kindly allow this criteria to be fulfilled by the bidder's specialised subcontractor. The bidder should be allowed to specify the name of specialised subcontractor and submit the credentials (and SES/CFD references) of the subcontractor alongwith the bid that shall be submitted to KMRC.	Please refer ECR/41, where the detailed clause is explained as "At least One work (with at least 2 U/G Stations) of Design including SES/CFD Analysis & Detail Engineering completed in last 10 years for Underground Rail transit Facility (refer Q. 17d) (Please note that the job carried out by the Contractor should have been based on the design done on the basis of SES/CFD Simulations (either carried out by themselves or by Others)".	No
157		VOL 2 GCC SCC		III – Experience Record / T10	Page 6 of 184	At least One TVS Project work for at least for 2 U/G stations for Rail Transit systems of not less than INR 320 Million during last 10 years ending 31.03.2016	One of our proposed JV partners has done the TVS of entire city metro system. However, these were done under 2 separate work orders, i.e. 2 separate contracts. However, both these contracts were part of different stations on the same line of u/g metro of one particular city. First work order had scope of executing TVS of u/g station A and TVS of u/g tunnel between station A and station B. Second work order has scope of executing TVS of u/g station B and TVS of u/g tunnel between station B and station C. Please confirm whether this is acceptable instead of "One TVS Project work for at least for 2 u/g stations for Rail Transit systems "	Clause has been amended.	Yes. Sl. no 6 of Addendum 1
158		VOL 2 GCC SCC		III – Experience Record / T10	Page 6 of 184	At least One TVS Project work for at least for 2 U/G stations for Rail Transit systems of not less than INR 320 Million during last 10 years ending 31.03.2016	Since most major u/g metros in Europe have been done more than 10 years ago, we request you to kindly allow experience of last 15 years ending 31.03.2016 (instead of 10 years ending 31.03.2016)	Clause has been amended.	Yes. Sl. no 6 of Addendum 2
159		VOL 2 GCC SCC		III – Experience Record	Page 6 of 184	At least one design work of SES/CFD Analysis completed and implemented with at least 2 U/G stations during last 10 years ending 31.03.2016. If particular Certificate regarding SES /CFD Analysis is not available from the client a copy of the SES Report thus carried out together with covering letter of submission to the client should be attached	Please provide draft of Certificate regarding SES /CFD Analysis or format of the SES Report	No Change. No change to the specification clauses is envisaged.	No
160		VOL 2 GCC SCC		8	Page 14 of 184	Joint Venture/ Consortium Summary	Kindly confirm that after the award of the project to any given Joint Venture / Consortium, whether that Joint Venture / Consortium has to be registered as a separate company as per Indian Companies Act (with registrar of companies in India) or whether that JV/Consortium can perform the scope of work in the awarded project as an Unincorporated entity.	Please follow the tender condition.	No
161		VOL IV				SEC / CFD	Kindly provide CFD /SES analysis as per the current alignment of the tracks.	To be provided to successful bidder	No
162		VOL IV				BOQ / Drawings	Request you to provide Auto Cad drawings and Excel sheet of BOQ for ease of estimation and calculation .	The CAD drawings can be provided to the successful bidders subject to the submission of Confidential Agreement.	No
163		VOL1 ITT		5	1	Date & Time of Submission of Tender	Request you to extend the last date of Tender submission by at least 8-10 weeks beyond the present submission date.	Please refer to the addendum	Yes. Sl. no 17 of Addendum 1
164		Volume-1		5	NIT/3	Submission and opening of bid	As lot of documentation to be prepared ,we request you to grant us an extension for submission of tender upto 28 December 2016	Please refer to the addendum	Yes. Sl. no 17 of Addendum 1
165		Volume-1		C11	ITT/15	Sub-Contractor	Kindly inform about the maximum no. of subcontractor can be deployed for a single service.	Please follow GCC Clause 4.5, SCC 2 & FOT Appendix 15.	No
166		Volume-1		Annexure2	ITT ANNEXTURE 2/1	Scope of Work(c,d,e,f,g)	Kindly confirm whether ph-1 and ph-2 material can be supplied together.	Please comply to the dates indicated in FORM OF TENDER , APPENDIX 1A of Vol 1.	No
167		Volume-2		4.21	GCC/32	Sheds, Store, Yard	Space at free of cost to be provided by Employer at each site for making shed,store,yard,office.	No change. TVS Contractor to provide his own as per GCC clause 4.21.	No

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168		Volume-3	1	12	11	Physical size of plant and equipment	If any equipment do not accommodate in existing area/foundation the civil work involve outside this package	The design has been carried out and room sizes have been identified in the layouts based on Equipment dimensions and Code requirements. For Foundation requirement, Please follow ITT Annexure 2 for REQUIREMENTS FOR TENDERER'S TECHNICAL PROPOSALS	No
169		Volume-3	1	13	12	Drawings submission to authorities	We require Auto Cad version of all existing drawing.	The CAD drawings can be provided to the successful bidders subject to the submission of Confidential Agreement.	No
170		Volume-3	1	21.2	19	Heat Load Estimation	Is there any provision to be kept for no of car to be increased from 6-car train	No. Specification shall be complied with.	No
171		Volume-3	1	28.4	34	Fan Fabrication	Is there any alternative material of construction is allowed.	No. Specification shall be complied with.	No
172		Volume-3	1	28.11	38	Motor Test	Only Rutine Test shall be carried out	Specification shall be complied with.	No
173		Volume-3	1	28.11	40	Radiographic Inspection	x-ray/gama ray will be performed	Specification shall be complied with.	No
174		Volume-3	1	31	57	Duct Work	Provide detail ducting drawing	Detailed Ducting Shop drawing shall be provided by the TVS Contractor.	No
175		Volume-3	1	46.2	105	General	Wheather any hot redundancy required	Specification shall be complied with.	No
176		Volume-3	1	48.2.3	142	Motor control centre	Draw out or non Draw out type	Specification shall be complied with.	No
177		Volume-3	2	16.1.1	112	Quality Assurance	Quality Assurance document (vol-IV) not provided.	Not provided	No
178							Kindly provide us approved make list.	We do not have Approved Makes List. Please follow the procedure of selection of vendors as called for in the Tender Specifications (GCC clause 1.1.6.16) which are subject to the approval by the Engineer	No
179						Please refer to TVS Volume 2 GCC SCC – III – Experience subsection T10 At least One TVS Project work for at least for 2 U/G stations for Rail Transit systems of not less than INR 320 Million during last 10 years ending 31.03.2016.	In this regard we would to request you to consider the following as experience in this clause At least One TVS Project work for at least for 2 U/G stations for Rail Transit systems or 2.5km tunnel el for MRT/ Railways/ Highways of not less than INR 1. 320 Million during last 10 years ending 31.03.2016 Also please refer to the Mumbai Metro. The similarity shall be defined as "A single contract with Air conditioning system of minimum capacity 2000 TR for project MRT/ Railways/ Airports/ Ports/ Big Hospitals etc and/or Tunnel ventilation system of 2.5 km tunnel for MRT/ Railways/Highways".  Hence requesting to add or Tunnel ventilation system of 2.5km tunnel for MRT/ Railways/ Highways and changes accordingly in section 17d also	Clause has been amended.	Yes. Sl. no 6 of Addendum 1
180						T11 At least one design work of SES/CFD Analysis completed and implemented with at least 2 U/G stations during last 10 years ending 31.03.2016. If particular Certificate regarding SES /CFD Analysis is not available from the client a copy of the SES Report thus carried out together with covering letter of submission to the client should be attached.	T11 At least one design work of TUNNEL VENITLLATION SYSTEM completed and implemented with at least 2 U/G stations OR Tunnel ventilation system of 2.5 km tunnel for MRT/ Railways/ Highways during last 10 years ending 31.03.2016.  Requesting for changes accordingly in section 17d also.	Please refer Tender Volume 2 , page no. ECR/41, where the detailed clause is explains as "At least One work (with at least 2 U/G Stations) of Design including SES/CFD Analysis & Detail Engineering completed in last 10 years for Underground Rail transit Facility (refer Q. 17d) (Please note that the job carried out by the Contractor should have been based on the design done on the basis of SES/CFD Simulations (either carried out by themselves or by Others)".	No
181						T 12 At least one work completed of Supply and Installation work of fire rated equipment with 250 °C for two hr. with at least 2 U/G stations during last 10 years ending 31.03.2016.	At least one completed similar work of one U/G metro station or Tunnel ventilation system of 2.5km tunnel for MRT/ Railways/ Highways within last 7 years.  Requesting for changes accordingly in section 17d also.	Clause has been amended.	Yes. Sl. no 7 of Addendum 1



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182						<b>C19. Performance Guarantee, Undertaking and Warranties</b> C19.1 The Tenderer shall submit full details of the identity of the proposed parties who shall provide or issue the Performance Guarantee since the Consortium or JV shall be registered in India before issue of LOA, the PG shall be submitted by registered Consortium or JV in accordance with Sub-Clause 4.2 of the GCC; and relevant SCC; C19.2 If the Tenderer comprises a consortium or joint venture, a parent company of each member or participant will be required to execute the Undertakings and Guarantees.	May please be amended as C19.1 The Tenderer shall submit full details of the identity of the proposed parties who shall provide or issue the Performance Guarantee, the PG shall be submitted by registered Consortium or and JV member in accordance with Sub-Clause 4.2 of the GCC; and relevant SCC;  C 19.2 may please be deleted	No change to the specification clauses is envisaged.  C.19.2 - The clause has been amended.	Sl. No. 5 of Addendum 1
183		Vol 2		1.11.1		T10 - At least One TVS Project work for at least for 2 U/G stations for Rail Transit systems of not less than INR 320 Million during last 10 years ending 31.03.2016	1.For the purpose of pre qualification, please accept one work of TVS done for Road Tunnel of 4 KM as is accepted while pre qualifying in DMRC,CMRL and MMRCL. 2.Also please accept the experience of ongoing projects UG Metro rail in India and overseas 3.WE have done many Infrastructure projects of airports that involves airconditioning and ventilation systems.Please accept the experience of these projects to qualify for the TVS project.We will engage specialist for design/design verification/installation testing and commissioning of the TVS equipment.	Clause has been amended.	Yes. Sl. no 6 of Addendum 1
184		Vol 3		1.11.2		T11 - At least one design work of SES/CFD Analysis completed and implemented with at least 2 U/G stations during last 10 years ending 31.03.2016. If particular Certificate regarding SES /CFD Analysis is not available from the client a copy of the SES Report thus carried out together with covering letter of submission to the client should be attached.	Normally, SES and CFD analysis is done by the DDC engaged by Employer. Hence either delete this from the Bidder's scope or allow the experience of specialised vendor/Consultants from bidder will engage post award of contract.	Please refer Tender Volume 2 , page no. ECR/41, where the detailed clause is explained as "At least One work (with at least 2 U/G Stations) of Design including SES/CFD Analysis & Detail Engineering completed in last 10 years for Underground Rail transit Facility (refer Q. 17d) (Please note that the job carried out by the Contractor should have been based on the design done on the basis of SES/CFD Simulations <b>(either carried out by themselves or by Others)</b> ".	No
185		VOL 3 part -1		11		Contractor shall ensure that necessary equipment for monitoring the Ground sub-soil temperature using PT 32 or RTD probes. All facilities necessary for monitored every six months of the sub-soil temperature shall be provided by the Contractor	Please confirm that civil will be providing the Soil temperature sensors	No change to the specification clauses is envisaged.	No
186		VOL 3 part -1		28.1.3		The required stable operation range for both the forward and reverse flow directions for TVFs shall be plus 480 Pa to minus 360 Pa pressure variations from the static pressure as specified.	Please confirm that pressure variation range is for Total pressure.	The fan characteristics curve shows the relationship between static pressure and the air flow rate of the fan. No change to the specification clauses is envisaged.	No
187		VOL 3 part -1		28.3.7		Pressure variations of plus or minus 300 Pa induced by external causes shall not result in movement of the fan operating point along the fan operating curve into the region of unstable operation. This requirement does not affect the kilowatt requirement for the design operating Point	Please confirm that this pressure variation is not applicable for Trackway fans and shall be limited to 200 PA for track way fans.	No change. In the case of station run-through, the trackway fans shall also be subjected to this pressure in the same way as TVFs.	No
188		VOL 3 part -1		28.5.1		Surface Finish is specified as sand blasting process, however Galvanised surface finish is also universally accepted	Please confirm that GI surface finish will be acceptable as per OEM	No change to the specification clauses is envisaged.	No
189		VOL 3 part -1		28.15.1		Run IN test for 24 Hours during the testing at factory.	As per the environmental guidelines 24 Hours run in test is not possible. Please accept the 8 Hrs test during the testing .	No change to the specification clauses is envisaged.	No
190		VOL 3 part -1		31.3.1		DUCT work with 6 mm thick GI sheets.	6mm thick MS cones and duct work is not possible to galvanize at it gets distorted during galvanising process.We recommend to use 4 mm thick MS sheet duly painted with Heat resistant paint to avoid corrosion instead. Please confirm the same.	No change to the specification clauses is envisaged. Suggested to use proper bracing to prevent distortion	No

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191		Vol 3, Part 1		36.3		At the OCC, a workstation is to be provided giving effective means of controlling the operation of TVS equipment for individual stations and groups of stations by the Auxiliary Systems Controller (Aux C).	Kindly confirm the number of workstation to be provided at OCC/BCC	As specified, one workstation with dual monitors and provision to display on Mimic Panel.	No
192		Vol 3, Part 1		38.3.4		The redundancy shall be provided, but not limited to, Central Processing Units (CPUs), system memories, buses and I/Os.	The I/O's mentioned herein refers to RTU/ R/I/O as mentioned elsewhere, which are actually a redundant PLC as mentioned in clause 46.9.1, kindly confirm the understanding.	Understanding is correct.	No
193		Vol 3, Part 1		39.1.1		RTUs shall be powered by a supply, which includes a back up to the main incoming power supply as part of the Power Supply System.	Power supply & its back-up to TVS SCADA control equipment shall be provided by others, kindly confirm	Understanding is correct.	
194		Vol 3, Part 1		46.4.2		The service life of the TVS SCADA shall not be less than 15 years. Service life shall be counted from the commencement date of Defects Liability Period. The service life of the TVS SCADA shall be for 5 years beyond AMC period.	The two statements are contradictory, kindly confirm. Also for IT hardware, the maximum service life offered by OEM's is 5-7 years, kindly confirm the same is acceptable	15 years as service life. Addendum to be issued.	Yes. Sl. no 9 of Addendum 1
195		Vol 3, Part 1		46.9.1		The R/I/O shall be a device which shall support redundant configurations as hot standby backup. The R/I/O shall be connected to TVS controller as a peer unit through the system bus. Dry contact, digital and analogue I/Os shall be supported by the R/I/Os. The level of R/I/O dual redundant shall include: - dual connections to the ring network - dual CPUs - dual memory modules - dual power supply modules Due to electromagnetic interference and considering the safety of functioning of TVS SCADA system, all the I/O modules at the stations which are mentioned as RTUs are to be replaced with programmable logic controllers (PLCs). Please refer to the specification for PLCs for station TVS system attached in Appendix 1 for tenderers to comply.	As per the description, RTU/ R/I/O is an intelligent device/PLC including dual CPU, dual network, dual memory module & dual power supply module and as per the specifications provided under Appendix-1. Kindly confirm the understanding.	Understanding is correct.	No
196		Vol 3, Part 1		46.9.1.3		The RTUs shall be suitable for either wall or floor mounting and shall be suitably robust for operation in plant room areas, to IEC529 IP65 enclosure standard. Wall mounting is preferred. RTUs shall be, as far as possible, of the same make and type at all sites and individual components shall be interchangeable between RTUs at different sites.	Since all the panels are to be mounted indoors, IP 54 rated panels can be provided. Kindly confirm	IP55 in line with vol-3 clause 46.8.7	No
197		Vol 3, Part 1	Appendix-3, Typical Network Diagram			Appendix-3, Typical Network Diagram	As per the system architecture, TVS SCADA at OCC is in ISMS scope, whereas the specifications documents says TVS SCADA at OCC is part of TVS contract. Kindly confirm	TVS SCADA at OCC is part of TVS contract. Please comply.	No
198		Volume-5				In Auto CAD	Kindly Provide Drawings in Auto CAD format to enable us to evaluate and take off exact quantities to bid competitively	The CAD drawings can be provided to the successful bidders subject to the submission of Confidential Agreement.	No
199		GCC : Vol - 2	GCC 14 Cl. 14.3		73	The Employer's risk of loss or damage to physical property in India.....	Request you to kindly amend this clause by inclusion of the provision "Change in Law" in this clause. Adjustments in the Contract Price to take into account any increase or decrease in cost resulting from change in laws of the country (including intro of new laws and the repeal or modification of existing laws) or in the judicial or official governmental interpretation of such laws, made after the Base date, which affect the Contractor in the performance of obligations under the Contract.	No change to tender condition is envisaged. Please refer to SCC clause 1 for provisions pertaining to change in laws and regulation	No
200		Volume-2	Volume-2 4.18 Electricity, Water & Gas		31		Noted that the Contractor shall make its own arrangement for Electricity, Water & Gas for the Construction Works and to run its facilities. However, please confirm that for Testing & Commissioning of E&M, ECS and TVS equipment/ plant, the Employer shall make available permanent power.	No change to tender clause is envisaged. E&M & ECS is not a part of this contract. The Contractor shall be responsible for the temporary as well as testing & commissioning Electricity, Water at his cost.	No

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Sr no	Asked For	Vol	Appendix/ Section	Clause No.	Page	Description	Pre-bid queries	Reply	Addendum Required
201		Volume-2	4.17 Protection of Environment		30-31		Protection of the environment shall be limited to within Sitepremises only as the Contractor could not be held responsible for Environmental impacts in outside the site locations. Please modify the clause accordingly.	No change in tender condition is envisaged.	No
202		Volume-2	8.2 Time for Completion		48		The first sentence states "Time is the essence of Contract and will remain so at all times during the pendency of the Contract including the extended period of Contract". The condition Time is the essence of Contract is generally applicable to those contracts/projects that would have no purpose if not completed within the Contract Period. But this sentence is contradictory as if Time is the essence of the contract, how can there be an extended period. Please consider deleting this sentence.	No change in tender condition is envisaged.	No
203		Volume-2					The Contract Price shall not be adjusted to take into account any increase or decrease in cost resulting from any change in taxes, duties, levies from the last date of submission of the Tender to the completion date including the date of the extended period of Contract	Please refer to SCC clause 1 for provisions pertaining to change in laws and regulation	No
204		Volume-2	8.3 Delay		48		As per second paragraph of this sub-clause, the Contractor is not entitled for reimbursement of damages when there is any default in the part of the Employer except in case of not providing NTP within 180 days of issue of LOA. Any change or delays from the Employer in handing over of site/ issue of drawings/ instructions can have an effect on the construction methodology & sequencing and could lead to change in the resource deployment plan of the Contractor which will definitely have an impact in the cost. Hence, it is unfair of the Employer not considering the monetary impact the Contractor would suffer for a breach by the Employer. As the end-user and the final beneficiary of the Project would be the Employer, it is unfair to transfer the risks to the Contractor arising out of Employer's breach. No experienced Contractor would be able to judge the delays that maybe caused by the Employer and hence the assumptions by each Tenderer could be different and the sole purpose of competition gets dissolved. Please consider revising the clause such that for any delays caused by the Employer, the Contractor would be given reasonable Extension of Time along with the necessary compensation in cost incurred.	Please refer to the SCC clause 48 regarding PVC formula in the tender document. Please also refer to SCC 56 regarding extension of time.	No
205		As per Fan Data Sheet Volume-3, Part-1					As per Fan Data Sheet given in Volume -3 Part-1, 85 db Noise Criteria is Maintain please Clarify this noise level is after Silencer or before silencer	After the Silencer at 1m distance.	No
206		As per Fan Data Sheet Volume-3, Part-1					Please Clarify the Fan Static Pressure mentioned in FAN Data Sheet Volume 3 Part 1, is External Static Pressure or Total Static Pressure for TVS & TEF	It is clearly mentioned as "Total Pressure".	No
207		As per TVS Report Volume-4					As per TVS report Given in (volume -4) Drawing No-UG2-DBT-TVS0031-38, Quantity & Sizes of Damper & Attenuators Are Same for the all Station ,if its Same on the all Stations ,Please Clarify.	The query is not clear. Please follow the tender condition.	No

PART DESIGN BASED ON ACCEPTED DEFINITIVE DESIGN, DETAILED ENGINEERING, MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, INSTALLATION, TESTING AND COMMISSIONING (INCLUDING INTEGRATED TESTING & COMMISSIONING), DEMONSTRATION OF PERFORMANCE OF THE SYSTEM AND ANNUAL MAINTENANCE CONTRACT OF TUNNEL VENTILATION SYSTEM (TVS) FOR UNDERGROUND SECTION OF KOLKATA METRO EAST WEST LINE PROJECT

REPLIES TO QUERIES Dated 7 March 2017

Sr no	Asked For	Vol	Appendix/ Section	Clause No.	Page	Description	Pre-bid queries	Reply	Addendum Required
208		As per TVS Report Volume-4					The Sizes of the Tunnel Ventilation Sound Attenuators maintain in the Clause No 33.8 of Volume-3 is different from the sizes shown in the Tunnel Ventilation fan Layout Drawing no UG-2-D-TVS-0050, Appendix I of TVS Volume-4 -1, Please Clarify.	In drawing UG-2-D-TVS-0050, attenuator shown diagrammatically for the purpose of description of the requirement.	No
209		As per TVS Report Volume-4 & TVS Drawing Volume-5					Reference to the Tunnel Ventilation Air flow Schematic of Mahakaran Station Drawing No-UG-2-D-BT-TVS-0034 & Drawing No-UG-2-D-BT-TVS-0032 of Howrah Station in Appendix J of TVS volume 4-1 is Different from mentioned in TV Schematic of Mahakaran Station Drawing No UG 1-WSA-MKN-DWG-NME-1301 Rev A & Howrah Station Drawing No UG 1-WSA-HWH-DWG-NME-1304 Rev B, Please Clarify.	The two different drawings representation may be different but the scheme is same for both Mahakaran & Howrah Moidan Station station drawings & air flow schematic drawings provided in vol-4.	No