

BID TOTAL – JP/EW/1B/E2

In accordance with the accompanying and signed form of bid, we (the Bidder) offer to supply, install, test, commission, and remedy at any defects of the whole said works for “Design, Detail Engineering, Manufacture, Supply, Installation, Testing and Commissioning of 25 kv AC traction (Rigid OHE), 33 kv Auxiliary Sub Stations (ASS), Associated Cabling and SCADA Systems for underground corridors of Jaipur Mass Rapid Transport System Project Phase-1B”, in conformity with the said drawings, particular specifications, conditions of contracts and other contract documents of bid for the following sums:

DESCRIPTION	Total Brought from below Bills	
	INR	Foreign Currency
PRICES FOR WORKS ON UNDERGROUND SECTION FROM CHHOTI CHAUPAR TO BADI CHAUPAR		
Part 1 25 kv AC traction (Rigid OHE)		
Part 2 33 kv Auxiliary Sub Stations (ASS), Associated Cabling and SCADA Systems and General Requirement under the contract		
TOTAL SUM		

TOTAL SUM IN WORDS, OF INDIAN RUPEES
TOTAL SUM IN WORDS, OF FOREIGN CURRENCY

DESIGN, DETAIL ENGINEERING, MANUFACTURE, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 25 KV AC TRACTION (RIGID OHE), 33 KV AUXILIARY SUB STATIONS (ASS), ASSOCIATED CABLING AND SCADA SYSTEMS FOR UNDERGROUND CORRIDORS OF JAIPUR MASS RAPID TRANSPORT SYSTEM PROJECT PHASE-1B

CONTRACT PACKAGE – JP/EW/1B/E2

**Part-1
Rigid OHE**

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INSTRUCTIONS FOR COMPLETING THE PRICING DOCUMENT

General Requirements

This Part of the Contract is a fixed Lump Sum Price Contract for “Design, Detail Engineering, Manufacture, Supply, Installation, Testing and Commissioning of 25 kV AC Traction (RIGID OHE), 33 kV Auxiliary Sub Stations (ASS), associated cabling and SCADA Systems for Underground Corridors of Jaipur Mass Rapid Transport System Project Phase-1B”

Bidders’s is requested to refer clause 6 of SCC while quoting the rates.

A. Apportionment of Fixed Lump Sum Price to Sections and to Cost Centres and Milestones under each Section

- 1 The whole of Works including design is divided into Sections, primarily on geographical basis. Each Section is divided into the various Cost Centres named according to their general scope of work.
- 2 The fixed Lump Sum price for the whole of Works shall be apportioned by the bidder amongst the various sections. The apportioned amount for each Section will be further distributed among various Cost Centres included in that Section, separately for foreign currency and for the Rupee portion. The apportioned amount for each Cost Centre will be further distributed amongst various Milestones included in that Cost Centre, separately for the Foreign Currency and the Rupee Portion.
- 3 The sum of amounts shown against Milestones in a Cost Centre is the Cost Centre total that is to be carried forward to the Section Summary. The division of the respective Cost Centre totals between Indian Currency and Foreign currency shall be shown in the said Summary. The Section Summary will be carried forward to the bid Total.
- 4 The scope and extent of the Works are to be ascertained by reference to the Contract Documents as a whole and shall not be limited in any manner whatsoever by the descriptions of the Cost Centres under each Section or of the Milestones under each Cost Centre, as given in the Appendices to the Pricing document.
- 5 Not used.

B. Milestones Achievement Periods

1. The Milestones under each Cost Centre shall identify verifiable steps towards the completion of the work within that Cost Centre under a Section. The Bidders’s shall indicate the periods (in weeks from the Commencement Date of the Works) within which he shall achieve each Milestone.

C. Milestone Payment Schedule (MPS)

1. The MPS completed by the Contractor shall set out the maximum cumulative amount for all Cost Centres for all Sections put together in relation to each month for which payment may be sought in accordance with Clause 7 of the SCC. This information should also be presented in a tabular form. Monthly Cash Flows for the Contract will form part of the Pricing Document.
2. The MPS covers the period which will commence on the first day of the calendar month next after the month containing the Commencement Date of the Works as per the Contract. The first application for interim payment may be made not earlier than during the month following the calendar month next after the month containing the Commencement Date of the Works, such first application relating to the first month (i.e. month 1) of the MPS.

3. **The price shall not be unbalanced therefore, the price quoted in the Cost Center-C (Installation and Site Testing) and Cost Center-D (System Acceptance Tests, Integrated Testing and Commissioning) shall not be less than 15% and 10% of the price quoted in the Cost Center-B (Manufacture and Delivery).**

D. BidTotal

1. The Bid Total submitted by the Bidders's shall be in the format shown in the Pricing Document.
2. The Pricing Document contains Sections, Cost Centres under each Section, and Milestones under each Cost Centre. The Sections, Cost Centres and Milestones have been prepared to indicate the extent of detail required in the Tender. The Bidders's shall prepare and complete documents, in this format, as being his bid and submit as part of the Financial Package.
3. The Pricing Document completed and submitted by the Bidders's, as part of his bid, should use an indexing and page numbering system such that its extent and completeness is clearly evident.

E. Currency

1. Section Totals, Cost Centre Totals and Milestone amounts shall be indicated in Indian Rupees and in a foreign currency as per clause 19.1 of ITB stated in BDS, wherever required.

F. Milestones

1. Cost Centres under each Section are fixed and shall not be changed by the Bidders's. The Bidders's, however, may add additional Milestones in a Cost Centre provided such Milestones genuinely related to that Cost Centre activity. The Cost Centres represent the major items of the Works for which the Employer will pay the Contractor, and the Bidders's shall ensure that he has allowed for all his costs he requires for the Contract to meet the Employer's Requirements.
2. If during the course of execution, it becomes necessary, to meet the Employer's Requirements (as indicated in these Tender Documents), to add more Milestones in a Cost Centre, the Lump Sum Price of the whole of Works, which will remain unaltered, will be reapportioned amongst the Sections, and further redistributed under the Cost Centres in each Sections and the Milestones in each Cost Centre. The liability of the Employer will be limited to the fixed Lump sum Price already accepted and the Contractor will have no right to claim any thing over and above the fixed Lump Sum price for any such addition of Milestones in any Cost Centre. The decision of the Employer will be final and binding in such matters and will not be subject to Conciliation or Arbitration.
3. The Milestones represent the completion of verifiable activities to be undertaken by the Contractor. A date for the achievement of each Milestone expressed as a number of weeks from the Commencement Date of the Works shall be entered in the column provided. Milestones that lead to achievement of a Stage must always precede the Key Date for achievement of that Stage. Milestones shall be converted to Calendar dates when the Notice to Proceed is issued.

G. Terms of Payment (for only Milestone works)

1. In case of 'Lump Sum' contract with cost centre and Milestone payment, the fixed Lump Sum Price shall be apportioned by the Contractor amongst the various Cost Centres. The amount thus apportioned under each Cost Centre will be further apportioned amongst various Milestones with the approval of the Employer. The Contractor shall be entitled to submit to the

Engineer requests for interim payments only upon the achievement of one or more of the Milestones described in the Cost Centre.

2. At the beginning of each month, the Engineer shall issue to the Contractor certificate in respect of each Milestone due to be achieved in the preceding month stating:
 - a.) the date on which the Milestone was achieved; or
 - b.) the non-achievement of the Milestone.

3. The Contractor shall submit a statement in three copies to the Engineer at the beginning of each month, in a form approved by the Engineer, showing the amounts to which the Contractor is entitled, together with supporting documents; including Milestone Certificates. The statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:
 - a.) the amount due in respect of Milestones certified achieved by the Engineer under each Cost Centre;
 - b.) any amounts to be added and deducted for the advance payments and recovery thereof;
 - c) any other additions or deductions is due and approved by the Engineer in accordance with the Contract; and
 - (d) the deduction of the amounts certified in all previous Interim Payment Certificates.The Contractor shall not submit more than one request for interim payment per month.

4. 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. Payments suspended under this Clause shall be resumed by being included in the next application for interim payment made after the Milestone is achieved.

5. In case of 'Lump Sum' or 'Item rate' contracts with payment schedule, the contractor shall be entitled to be paid from time to time, normally once in a calendar month, by way of 'on account' bill as per the payment schedule indicated in Bill of Quantity(BOQ) or as finally approved by the Engineer.

6. No amount will be certified or paid until the Employer has received, and approved, the Performance security and the parent Company Undertakings and Guarantees in accordance with Sub-Clause 4.2. Thereafter, the Engineer shall, within 21 days of receiving a statement and supporting documents, deliver to the Employer, with a copy to the Contractor, an Interim Payment Certificate showing the amount which the Engineer considers to be due; if no payment is considered to be due, the Engineer shall promptly notify the Contractor accordingly.

7. Where only a part of the payment applied for is disputed, payment certificate shall be issued for the undisputed amount. The Engineer shall have the power to omit from any of the contractor's requests for payment the value of any work executed or Materials supplied or services rendered, with which he may for the time being be dissatisfied and for that purpose and for any other reason which to him may seem proper, may delete, correct or modify the sum(s) previously certified by him as being due to the Contractor.

Appendix A 2**Vendor Approval**

It shall be obligatory for the Contractor to obtain Notice of 'No Objection' from the Engineer for the selection of the vendors for all items of work, even if the name of the vendor is specified in the Contractor's Technical Submission and the works to be done including purchase of materials and equipment is in accordance with the Standards specified in the Contract.

In case of vendor selected from the vendor list provided in the contract,

- (a) A list of vendors is provided in this contract, whose material have been used by DMRC/JMRC in U/G stations.
- (b) Contractor in general shall use the material of make as per vendor list unless specified in BOQ or equivalent meeting the Bid specifications as approved by the Employer's representative.
- (c) The contractor shall ensure the correct selection of the make meeting the specifications and its application. Before placing the order for procurement, the sample of approved make shall be verified for its suitability to the specification and application. In case Employer's representative/ engineer, (whose decision will be final and binding on both parties) considers that the make/ model proposed by the contractor does not meet the Bid requirement, the contractor will be required to propose an alternative make acceptable to the Employer's Representative.
- (d) The contractor will submit a list 'A' of vendors for all the items of the BOQ contract
 - (i) The list should include the items for which the contractor is proposing the product of the vendor list.
 - (ii) The contractor will be advised 'No Objection' with following caveat:-
 - The model etc. to be supplied will be the latest or superior one.
 - The contractor will be required to submit the technical proposal for the scrutiny
 - (iii) For the items, contractor desires to propose new vendor, proposal to be submitted in accordance as List 'B'.
 - (iv) The contractor will submit the undertaking that above lists i.e. List 'A' and List 'B' includes all the items required in the contract.

Vendor to be selected who are capable to provide good after sales services available in Jaipur during DLP and thereafter.

Vendor Approval and Selection Procedure

- (1) In the event of contractor wanting to use alternate makes other than those stipulated, for any reason, The contractor can send a proposal after ensuring that what he proposes at least meets the specifications both, the quality and safety standard of the stipulated makes, the alternate proposed product should be a proven one. He shall also stand full guarantee to his alternate proposal and if at any stage it is found that the material is not suitable or meeting the Bid requirement, the contractor shall replace the material and provide the material from the vendor list alternative acceptable make without any additional cost to JMRC. The alternate makes material can be used only after an approval accorded by the Employer, whose decision will be final in the matter.
- (2) The approval of any equipment or product to be used shall be done in two stages:-
- (a) Stage-I**
- Assessment of capability of proposed Vendor to supply a particular equipment or product, with quality and performance requirements, as required by Specifications as well as other contract conditions. The proposed product should be a proven product in service for at least 3 years.
 - Assessment of the financial and functional strength of the Vendor to supply the requisite quantity of equipment and product as per delivery schedule acceptable to contractor and engineer to deliver the project in time.
- (b) Stage-II**
- 16 Stage-II called as Technical Submission Approval Stage, selection of Equipment or product from the equipment / products manufactured / supplied by the vendor will be done. This stage includes thorough technical assessments about the conformance of the offered equipment / product to the Specifications and other requirements.
- (c) To obtain Vendor Approval the Contractor must apply with the four sets of the following documents to the Engineer
- (i) Company Profile and Experience of the Vendor
 - (ii) Clause wise compliance of the relevant Clauses of Specifications.
 - (iii) Details of supplies / orders executed in last ten years for the type of equipment / product offered. Supplies / orders executed for Underground Metro Systems shall be specifically mentioned
 - (iv) Details of the facilities available at the Works / Manufacturing Unit where the proposed equipment / product shall be manufactured.
 - (v) ISO 9000 Certification for the Works / Manufacturing Unit where the proposed equipment / product shall be manufactured (The Works / Manufacturing Unit where the proposed equipment / product shall be manufactured must have ISO 9000 Certification)
 - (vi) Proof regarding compliance to Manufacturer's Qualifications. The offered products must be proven in service.
 - (vii) Audited Financial Statements of the Vendor for the last three years.
 - (viii) Type test certificates/ Performance certificate from accredited laboratories for the proposed type of equipment / products to establish the technical capability of the vendor (In case, specific requirements are mentioned in the relevant sections of Specifications with regard to type testing, same shall also be complied additionally). Type test should not be more than 5 years old.
 - (ix) The vendor shall not have been blacklisted by any Govt. Agency in India.
 - (x) Any other item as required by Employer / Employer's Representative.

- (d) Contractor must certify the check list provided that vendor Proposal is complete and all the above documents are available in the Vendor Proposal. In addition, the Contractor must check / certify compliance to the Specifications before forwarding the same.
 - (e) Incomplete Vendor Proposal will not be treated as a submission and will be returned.
 - (f) Engineer will give Approval to the Vendor Proposal (received complete with all the documents mentioned above) expeditiously.
 - (g) Technical submission shall be accompanied with the calculations / other technical documents to justify the selection of any particular model of equipment / product, detailed technical features / parameters of the selected product, type test certificates from the accredited laboratories for the offered products, any other document required by the Engineer.
 - (h) Engineer will give Approval to the Technical Proposal (received complete with all the documents mentioned above) expeditiously.
- (3) It may be noted that Approval of Vendors as per Point (3) above shall only be done by Employer / Engineer after the award of the work. Vendor submissions shall not be evaluated during the Bid evaluation. Conditional Bid offers received from Bidders with particular Vendors for supply of equipment/ products will not be evaluated during evaluation and will be dealt with after award of the work.
- (4) It may further be noted that Employer / Engineer shall be under no obligation to accept equipment / products manufactured by the successful Bidder, unless it meets the entire criterion mentioned above.

For Design and Build Contracts

In addition to above, in Design and Build Contracts the following shall also be ensured for the Vendor Approval and Selection:-

1. Proven Design

The Contractor shall develop the design based on this specification and on sound proven and reliable engineering practices. The broad design details shall be submitted with technical support data in the technical bid. Detailed calculations shall be submitted to the Engineer during the design process stage for review and approval.

1.1 Systems and Sub-Systems

Manufacturer shall have at least 5 years experience of design and manufacturing of similar system. Proposed systems from the proposed manufacturing unit shall have been in use and have established their satisfactory performance and reliability for 3 years in minimum.

All sub-systems, equipments and major components etc. (hereinafter referred as 'sub-systems') shall be state-of-art and of proven design.

Proposed Systems/ sub-systems shall have been in use and have established their satisfactory performance and reliability on at least Two mass rapid transit systems (including Railway or Airports) in revenue service over a period of three years or more either outside the country of origin at an average in two different countries or in JMRC. Systems/ Sub-systems/ components used in JMRC do not get automatically qualified for use unless specifically approved by the Engineer for this project. If required by the Engineer, Contractor shall provide certificate of satisfactory performance for a period of five years or more from the Metro operators. Where similar System/ Sub-systems of a different rating are already proven in service as per the above criteria then the supply shall be based on such sub-systems.

All 'sub systems' shall be procured from the approved vendors and sourced from only such manufacturing units that have supplied the sub-systems that fulfill the proven design requirements as above.

In case the contractor proposes to use systems or sub-system(s) that do not fulfill the above said criteria then the contractor shall furnish sufficient information to prove the basic soundness and reliability of the offered systems and sub-system(s) for review of the Engineer.

The Engineer's decision on contractor's proposal shall be final and binding.

For sourcing the equipment from indigenous manufacturing facilities, following conditions shall be complied:-

- (i) In case the vendor uses his own facilities for indigenization after part supply of equipment from the approved manufacturing unit, no change in design, component type/make, quality standards, manufacture procedure, etc. shall be made without specific approval of the Engineer.
- (ii) In case OEM wants to use manufacturing facilities in India (other than his own) for items for which the OEM has been approved, it shall enter into an agreement with such selected Indian equipment manufacturer and obtain prior approval from JMRC. No change in composition, rating, type, model no., manufacturing process, quality standards, design, etc. and make of the components used in assemblies/sub-assemblies of such equipment as manufactured by the approved parent vendor shall be made without specific approval of the Engineer.
- (iii) In case OEM wishes to change/make/type specifications, etc. of any sub-components for supplies to be sourced from Indian facility, specific prior approval of the Engineer shall be obtained for changes made, model, specification, etc. Responsibility for obtaining such prior approval shall rest solely with the contractor.

Format for submitting the vendor approval request shall be given to the contractor during initial stages and approved format shall be followed throughout the contract.

Design, Detail Engineering, Manufacture, Supply, Installation, Testing and Commissioning of 25 kV AC Traction (RIGID OHE), 33 kV Auxiliary Sub Stations (ASS), associated cabling and SCADA Systems for Underground Corridors OF Jaipur Mass Rapid Transport System Project Phase-1B

CONTRACT PACKAGE – JP/EW/1B/E2

Statement A

Bid Total

Statement A – Bid Total for ROCS (Part 1)

(THIS DOCUMENT IS TO BE PREPARED AND COMPLETED BY THE BIDDERS)

In accordance with the accompanying and signed form of tender, we (the Bidders) offer to supply, install, test, commission, and remedy at any defects of the whole said works, in conformity with the said drawings, particular specifications, conditions of contracts and other contract documents of JP/EW/1B/E2 for the following sums:

S.No.	DESCRIPTION	Total brought from above Bills	
		Indian Rupees	Foreign Currency
1.	ROCS Works (Part 1)		
Grand Total			
SUM IN WORDS, OF INDIAN RUPEES			
SUM IN WORDS, OF FOREIGN CURRENCY			

DESIGN, DETAIL ENGINEERING, MANUFACTURE, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 25 KV AC TRACTION (RIGID OHE), 33 KV AUXILIARY SUB STATIONS (ASS), ASSOCIATED CABLING AND SCADA SYSTEMS FOR UNDERGROUND CORRIDORS OF JAIPUR MASS RAPID TRANSPORT SYSTEM PROJECT PHASE-1B

CONTRACT PACKAGE – JP/EW/1B/E2

Statement B

Section Summaries

Statement B – SECTION SUMMARIES**Corridor - Chand Pole to Badi Chaupar**

Cost Centres	Description of Cost Centres	Amount in Foreign Currency	Amount in Indian Rupees
A	Detailed Design		
Sections- Chand Pole to Badi Chaupar			
B1	Manufacture and Delivery		
C1	Installation and Site Testing		
D1	System Acceptance Tests, Integrated Testing and Commissioning		
TOTAL CARRIED TO BID TOTAL			

SECTION – MISCELLANEOUS**Corridor- Chand Pole to Badi Chaupar**

Cost Centres	Description of Cost Centres	Amount in Foreign Currency	Amount in Indian Rupees
A	Preliminaries and General Requirements		
B	Training		
C	Spares		
D	Supervision of Maintenance		
E	Manuals		
TOTAL CARRIED TO BID TOTAL			

Statement – F

	Unit Prices for Additional Items	Amount in Foreign Currency	Amount in Indian Rupees
TOTAL CARRIED TO BID TOTAL			

DESIGN, DETAIL ENGINEERING, MANUFACTURE, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 25 KV AC TRACTION (RIGID OHE), 33 KV AUXILIARY SUB STATIONS (ASS), ASSOCIATED CABLING AND SCADA SYSTEMS FOR UNDERGROUND CORRIDORS OF JAIPUR MASS RAPID TRANSPORT SYSTEM PROJECT PHASE-1B

CONTRACT PACKAGE - JP/EW/1B/E2

Statement C

Brief Description of Sections

Statement C - BRIEF DESCRIPTION OF SECTIONS

The work of Chand Pole to Badi Chaupar

Sections	U/G Route Km in Section (Approx)	No of U/G Stations	Expected Date of ROD
Corridor- Chand Pole to Badi Chaupar			
Chand pole to Badi Choupar	2.119 km and Y siding of length 0.225km	2	Feb'2018
Total*	2.119 km and Y siding of length 0.225 km	2	

*Bidders's shall ascertain the length of U/G corridor for providing the ROCS in particular section from the Alignment drawings. Any change up to plus/minus 250 mtr in the Alignment of the overall corridor shall not be considered as a variation.

DESIGN, DETAIL ENGINEERING, MANUFACTURE, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 25 KV AC TRACTION (RIGID OHE), 33 KV AUXILIARY SUB STATIONS (ASS), ASSOCIATED CABLING AND SCADA SYSTEMS FOR UNDERGROUND CORRIDORS OF JAIPUR MASS RAPID TRANSPORT SYSTEM PROJECT PHASE-1B

CONTRACT PACKAGE - JP/EW/1B/E2

Statement D

Corridor - Chand Pole to Badi Chaupar

Corridor - Chand Pole to Badi Chaupar

COST CENTRE A -- DETAILED DESIGN

This cost centre comprises all those obligations and ongoing activities throughout the contract not associated directly with any other cost centre.

This cost centre a comprises all activities relating to the detailed design of 25kv Rigid OCS, , SSP for underground section Chand Pole to Badi Chaupar

This includes but is not limited to:

Submission of the Preliminary Design, Final Design and drawings for various equipment and subsystems including the requirement of space and mounting details.

Specifications for various equipment and subsystems,

Schedule of materials required implementing the design.

Submission of "as-built drawings".

Preliminary simulation study

Final simulation studyValidation (Auditing) of Design & Installation of Rocs.Any other item(s) considered necessary to comply with the scope of work.

Corridor - Chand Pole to Badi Chaupar

COST CENTRE A -- DETAILED DESIGN

MILE STONE NO.	WORK DESCRIPTION	AppORTIONED Amount		Country of Origin	Weeks for completion of Milestone from Commencement Date
	MILESTONE ACTIVITY	Amount in Foreign Currency	Amount in Indian Rupees		
	(Rigid OCS, Cabling Works including return traction cables, longitudinal and transverse bonding cables etc. in stations and tunnels, Earth System and other related works)				
A1	Preliminary design and specifications				
A2	Final design and specifications				
A3	Schedule of materials				
A4	"As-built Drawings"				
A5	Preliminary simulation study				
A6	Final simulation study				
A7	Validation (Auditing) of Design & Installation of ROCS.				
A8	Any other item(s) considered necessary to comply with the Scope of Work				
	COST CENTRE TOTAL CARRIED TO SECTION SUMMARY				

Corridor - Chand Pole to Badi Chaupar

COST CENTRE B1 – MANUFACTURE AND DELIVERY

This Cost Centre comprises all those obligations and ongoing activities throughout the Contract not associated directly with any other Cost Centre.

This includes but is not limited to receipt/ delivery of following equipment for section Chand Pole to Badi Chaupar after, factory acceptance test, provision of indemnity bond and proof of insurance:

Delivery of equipment for the Rigid OCS for corridor chand pole to badi chaupar at contractor's premises in jaipur.

Delivery of equipment for the Sub Sectioning and Paralleling Post (SSP) at Badi Chaupar station at Contractor's premises in Jaipur.

Delivery of equipment for Earthing & Bonding including thermosetting weld & cables, Tunnel Earth Wire (TEW), Return Conductor, Earth Wire, etc. for section Chand Pole to Badi Chaupar at Contractor's premises in Jaipur .

Any other item(s) considered necessary to comply with Scope of Work.

Corridor - Chand Pole to Badi Chaupar

COST CENTRE B1 -- MANUFACTURE AND DELIVERY

MILESTONE NO.	WORK DESCRIPTION	Apportioned Amount		Weeks for completion of Milestone from Commencement Date	Country of Origin
		Amount in Foreign Currency	Amount in Indian Rupees		
	MILESTONE ACTIVITY				
	Obtain the "Notice of No Objection" or "Notice of No Objection subject to..." from the Engineer for each of the following Milestone activities after: <ul style="list-style-type: none"> • Certification of factory acceptance test • Provision of Indemnity Bond • Proof of insurance 				
B1-1	Delivery Of Equipment for Rigid OCS for the Sections Chand Pole to Badi Chaupar at Contractor's premises in Jaipur.				
A	Conductor Rail, Interlocking Joints & Insulators				
B	Contact Wire				
C	Steel Parts				
D	Any Other ROCS Equipments				
B1-2	Delivery of equipment for the Sub Sectioning And Paralleling Post (SSP) at Badi Chaupar at Contractor's premises in Jaipur				
A	25kV Gas Insulated Switchgear				
B	25kV Cables				
C	3.3kV Cables				

D	Any Other Sub-Sectioning and Paralleling Post Equipments				
B1-3	Delivery of equipment for Earthing & Bonding including thermosetting weld & cables, Tunnel Earth Wire (TEW), Return Conductor, Earth Wire, etc. for section Chand Pole to Badi Chaupar section at Contractor's premises in Jaipur				
A	Overhead Protection Conductor (OPC)				
B	Return Conductor (RC)				
C	Tunnel Earth Wire (TEW)				
D	Any Other Earthing & Bonding Equipments				
B1-4	Any other item(s) considered necessary to comply with Scope of Work.				
COST CENTRE TOTAL CARRIED TO SECTION SUMMARY					

Corridor - Chand Pole to Badi Chaupar

COST CENTRE C1 – INSTALLATION AND SITE TESTING

This Cost Centre comprises all those obligations and ongoing activities throughout the Contract not associated directly with any other Cost Centre.

This includes but is not limited to delivery to site from Contractor's premises in Jaipur , submission of installation plan, installation drawings, inspection of equipment and site preparations, pre- installation tests, installation of equipment, post-installation tests, energisation and any other item(s) considered necessary to comply with the scope of work for:

Delivery to site from Contractor's premises in Jaipur, installation and testing (includes pre-installation tests and post installation tests) and energisation of all equipment for the RIGID OCS from Chand Pole To Badi Chaupar section.

Delivery to site from contractor's premises in Jaipur, installation and testing (includes pre-installation tests and post installation tests) and energisation of all equipment for the Sub Sectioning And Paralleling Post (SSP) at Badi Chaupar Station.

Delivery to site from Contractor's premises in Jaipur, installation and testing (includes pre-installation tests and post installation tests) and energisation of all equipment for Earthing & Bonding including Thermosetting weld & cables, Tunnel Earth Wire (TEW), Return Conductor, Earth Wire, etc. for section Chand Pole To Badi Chaupar.

Any other item(s) considered necessary to comply with the scope of work.

Corridor - Chand Pole to Badi Chaupar COST CENTRE C1 –INSTALLATION AND SITE TESTING

MILESTONE NO.	WORK DESCRIPTION	AppORTIONED Amount		Country of Origin	Weeks for completion of Milestone from Commencement Date
	MILESTONE ACTIVITY	Amount in Foreign Currency	Amount in Indian Rupees		
	Obtain the "Notice of No Objection" or "Notice of No Objection subject to..." from the Engineer for each of:				
C1-1	Delivery to Site from Contractor's premises in Jaipur, Installation and Testing (includes pre-installation tests and post installation tests) and energisation of all equipment for the Rigid OCS from Chand Pole to Badi Chaupar section.				
C1-2	Delivery to Site from Contractor's premises in Jaipur Installation and Testing (includes pre-installation tests and post installation tests) and energisation of all equipment for the Sub-Sectioning and Paralleling Post (SSP) at Badi Chaupar Station.				
C1-3	Delivery to Site from Contractor's premises in Jaipur , Installation and Testing (includes pre-installation tests and post installation tests) and energisation of all equipment for Earthing & Bonding including Thermosetting weld & cables, Tunnel Earth Wire (TEW), Return Conductor, Earth Wire, etc. for section Chand Pole to Badi Chaupar				
C1-4	Any other item(s) considered necessary to comply with the Scope of Work				
COST CENTRE TOTAL CARRIED TO SECTION SUMMARY					

Corridor - Chand Pole to Badi Chaupar

COST CENTRE D1 – SYSTEM ACCEPTANCE TESTS, INTEGRATED TESTING AND COMMISSIONING

This cost centre comprises all those obligations and ongoing activities throughout the Contract not associated directly with any other Cost Centre.

This includes but is not limited to:

System acceptance tests in accordance with accepted System Acceptance Plan.

Integrated testing and commissioning in conjunction with designated contractors.

Service Trials. Tests required for verification of design parameters.

Safety certification, in the approved format, for opening the section for revenue operation, including for Traction power.

Any other item(s) considered necessary to comply with the Scope of Work.

Corridor - Chand Pole to Badi Chaupar

COST CENTRE D1 – SYSTEM ACCEPTANCE TESTS, INTEGRATED TESTING AND COMMISSIONING

MILE- STONE NO.	WORK DESCRIPTION	Apportioned Amount		Country of Origin	Weeks for completion of Milestone from Commencement Date
	MILESTONE ACTIVITY	Amount in Foreign Currency	Amount in Indian Rupees		
D1-1	<p>Obtain the “Notice of No Objection” or “Notice of No Objection Subject to ---“ from the Engineer for the System Acceptance Test (SAT) Plan for the Cost Centres as a whole included in Section covering:</p> <p>RIGID OCS for Section Chand Pole To Badi Chaupar</p> <p>Sub Sectioning And Paralleling Post (SSP) at Badi Chaupar Station.</p> <p>Integrated Testing of SCADA system with other system wide contractors for Section Chand Pole to Badi Chaupar Earthing & Bonding Including Thermosetting Weld (if any) & Cables, Tunnel Earth Wire (TEW), Return conductor, Earth Wire, etc. for section Chand Pole To Badi Chaupar</p>				

<p>D1-2</p>	<p>Obtain the “Notice of No Objection” or “Notice of No Objection Subject to ---“ from the Engineer for the Integrated Testing and Commissioning Plan for:</p> <p>Rigid OCS for Section Chand Pole to Badi Chaupar SUB Sectioning and Paralleling Post (SSP) at Badi Chaupar Station.</p> <p>Integrated testing of SCADA system with other system wide Contractors for Section Chand Pole to Badi Chaupar.</p> <p>Earthing & Bonding including Thermosetting weld & cables, Tunnel Earth Wire (TEW), Return Conductor, Earth Wire, etc. for Section Chand Pole to Badi Chaupar.</p>				
<p>D1-3</p>	<p>Obtain the “Notice of No Objection” or “Notice of No Objection Subject to ---“ from the Engineer for the completion of System Acceptance Test (SAT) for the Cost Centres as a whole included in Section covering:</p> <p>RIGID OCS for Section Chand Pole To Badi Chaupar Sub Sectioning And Paralleling Post (SSP) at Badi Chaupar Station.</p> <p>Integrated Testing of SCADA system with other system wide contractors for Section Chand Pole to Badi Chaupar Earthing & Bonding Including Thermosetting Weld & Cables, Tunnel Earth Wire (TEW), Return conductor, Earth Wire, etc. for section Chand Pole To Badi Chaupar</p>				

<p>D1-4</p>	<p>Obtain the “Notice of No Objection” or “Notice of No Objection Subject to ---“ from the Engineer for the completion of Integrated Testing and Commissioning Plan for:</p> <p>Rigid OCS for Section Chand Pole to Badi Chaupar SUB Sectioning and Paralleling Post (SSP) at Badi Chaupar Station.</p> <p>Integrated testing of SCADA system with other system wide Contractors for Section Chand Pole to Badi Chaupar.</p> <p>Earthing & Bonding including Thermosetting weld & cables, Tunnel Earth Wire (TEW), Return Conductor, Earth Wire, etc. for Section Chand Pole to Badi Chaupar .</p>				
<p>D1-5</p>	<p>Obtain the “Notice of No Objection” or “Notice of No Objection Subject to- “from the Engineer for completion of Service Trials.</p>				
<p>D1-6</p>	<p>Obtain the “Notice of No Objection” or “Notice of No Objection Subject to -“ from the Engineer for Detailed Safety Report</p>				
<p>D1-7</p>	<p>Obtain the “Notice of No Objection” or “Notice of No Objection Subject to --“from the Engineer for Safety Certificate.</p>				
<p>D1-8</p>	<p>Any other item(s) considered necessary to comply with the Scope of Work.</p>				
<p>COST CENTRE TOTAL CARRIED TO SECTION SUMMARY</p>					

DESIGN, DETAIL ENGINEERING, MANUFACTURE, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 25 KV AC TRACTION (RIGID OHE), 33 KV AUXILIARY SUB STATIONS (ASS), ASSOCIATED CABLING AND SCADA SYSTEMS FOR UNDERGROUND CORRIDORS OF JAIPUR MASS RAPID TRANSPORT SYSTEM PROJECT PHASE-1B

CONTRACT PACKAGE – JP/EW/1B/E2

STATEMENT - E

SECTION—MISCELLANEOUS

Corridor - Chand Pole to Badi Chaupar

SECTION -- MISCELLANEOUS

Corridor - Chand Pole to Badi Chaupar

COST CENTRE A – PRELIMINARIES AND GENERAL REQUIREMENTS

This Cost Centre comprises all those obligations and on going activities throughout the Contract not associated directly with any other Cost Centre.

This includes but is not limited to:

- Submission of Works Programme to complete JP/EW/1B/E2 Contract.
- Submission of Project Management Plan.
- Submission of interface Management Plan and Detailed interface Documents.
- Submission of Design Submission Programme.
- Submission of Quality Assurance Plan.
- Submission of Safety Assurance Plan and Site Safety Plan.
- Submission of Environmental Plan.
- Submission of Inspection, Testing & Commissioning (including Integrated Testing & Commissioning) Plan.
- Submission of simulated Traction Power System Design.
- Any other item (s) considered necessary to comply with the Scope of Work.

SECTION -- MISCELLANEOUS

Corridor - Chand Pole to Badi Chaupar

COST CENTRE A – PRELIMINARIES AND GENERAL REQUIREMENTS

MILE STONE NO.	WORK DESCRIPTION	Apportioned Amount		Country of Origin	Weeks for completion of Milestone from Commencement Date
	MILESTONE ACTIVITY	Amount in Foreign Currency	Amount in Indian Rupees		
	Obtain the "Notice of No Objection" or "Notice of No Objection subject to..." from the Engineer for:				
A1	Works Programme for complete Contract.				
A2	Project Management Plan				
A3	Interface Management Plan and Detailed Interface Document				
A4	Design Submission Programme				
A5	Quality Assurance Plan				
A6	Safety Assurance Plan & Site Safety Plan.				
A7	Environment Plan				
A8	Inspection, Testing, Commissioning and Integrated Testing Plan				
A9	Simulated System Design for Traction Power System				
A10	Any other item(s) considered necessary by the Contractor to comply with the Scope of Work.				
COST CENTRE TOTAL CARRIED TO SECTION SUMMARY					

SECTION -- MISCELLANEOUS
Corridor - Chand Pole to Badi Chaupar
COST CENTRE B – TRAINING

This Cost Centre comprises all those obligations and ongoing activities throughout the Contract not associated directly with any other Cost Centre.

This shall include but not be limited to:

- Provision of instructors by the Contractor for training of operating and maintenance personnel of the employer in india
- Training of operating and maintenance personnel of the Employer offshore at the Contractor’s facilities and mrts.
- Furnishing of training manuals and associated materials.
- Any other item(s) considered necessary to comply with the Scope of Work.

Notes:

The Bidders’s shall not complete the column “Weeks for completion of Milestone from Commencement Date.

The dates for the operation of these Milestone Activities will be at the discretion of the Employer.

The travel, boarding and lodging expenses for the employer’s trainees sent overseas will be borne by the employer.

The monthly cash flow on the basis of which the PV is to be worked out will exclude the amount of this Cost Centre though this cost centre shall be included in the section MS Summary and the Tender Total.

SECTION -- MISCELLANEOUS**Corridor - Chand Pole to Badi Chaupar****COST CENTRE B – TRAINING**

MILE- STONE NO.	WORK DESCRIPTION	Apportioned Amount		Country of Origin	Weeks for completion of Milestone from Commencement Date
	MILESTONE ACTIVITY	Amount in Foreign Currency	Amount in Indian Rupees		
	Obtain the "Notice of No Objection" or "Notice of No Objection Subject to ---" from the Engineer for:			N/A	
B1	Training of Employer's personnel (6 man-weeks) overseas in Contractor/Sub-Contractor's Works and MRTS.			N/A	
B2	Provision of Contractor's Instructors (8 man-weeks) for training of Employer's operating personnel in India.			N/A	
B3	Provision of Contractor's Instructors (30 man-weeks) for Training of Employer's maintenance personnel in India.			N/A	
B4	Submission of Training Manuals in Original plus five hard copies and in electronic format.			N/A	
B5	Any other item(s) necessary to comply with the Scope of Work.			N/A	
	COST CENTRE TOTAL CARRIED TO SECTION MS SUMMARY				

SECTION -- MISCELLANEOUS

Corridor - Chand Pole to Badi Chaupar

COST CENTRE C – SPARES

This Cost Centre comprises all those obligations and ongoing activities throughout the Contract not associated directly with any other Cost Centre.

This shall include but not be limited to supply of spares for complete JP/EW/1B/E2 Contract:

RIGID OCS from Chand Pole to Badi Chaupar

Sub Sectioning and Paralleling Post (SSP) AT Badi Chaupar Station.

SCADA system for Chand Pole to Badi Chaupar.

Earthing & Bonding Including Thermosetting weld & cables, Tunnel Earth Wire (TEW), Return Conductor, Earth Wire, etc. for Chand Pole to Badi Chaupar

Any other item(s) considered necessary by the contractor to comply with the Scope of Work.

SECTION -- MISCELLANEOUS**Corridor - Chand Pole to Badi Chaupar****COST CENTRE C – SPARES**

MILE- STONE NO.	WORK DESCRIPTION	Apportioned Amount		Country of Origin	Weeks for completion of Milestone from Commencement Date
	MILESTONE ACTIVITY	Amount in Foreign Currency	Amount in Indian Rupees		
	Obtain the "Notice of No Objection" or "Notice of No Objection Subject to ---" from the Engineer for delivery of the following in accordance with the Employer's Requirements:				
C1	Delivery to Site the spares for Section -- Chand Pole to Badi Chaupar as mentioned in chapter 18 of TS OHE Table 18.2-1				
C2	Delivery at site working model for training as per TS OHE clause 20.6				
C3	Any other item(s) considered necessary to comply with the Scope of Work.				
	COST CENTRE TOTAL CARRIED TO SECTION SUMMARY				

SECTION -- MISCELLANEOUS

Corridor Chand Pole to Badi Chaupar

COST CENTRE D – SUPERVISION OF MAINTENANCE*

This Cost Centre comprises all those obligations and ongoing activities throughout the Contract not associated directly with any other Cost Centre.

Rigid OCS from Chand Pole to Badi Chaupar

Sub Sectioning and Paralleling Post (SSP) at badi chaupar station

SCADA system for Chand Pole to Badi Chaupar

Earthing & Bonding including Thermosetting weld & cables, Tunnel Earth Wire (TEW), Return Conductor, Earth Wire, etc. for Chand Pole to Badi Chaupar

Any other item(s) considered necessary by the contractor to comply with the Scope Of Work

The Contractor shall provide experts for supervision of maintenance in accordance with the Employer's Requirements.

Staff and labour will be provided by the Employer.

The Experts will be required during the interval commencing from start of service trials on the Section until six months after Revenue Operation Date (ROD) of the section.

* This excludes Contractor's obligations and responsibilities during the Defects Liability Period.

NOTES:

1. The deployment of the experts under this Cost Centre may not be continuous and they may be required to supervise the maintenance in short periods at a time. The number of man months of experts shall, however, not exceed 40 man-months. Payment for this Cost Centre will be made on man month's basis.
2. The Bidders's shall not complete the column "Weeks for completion of Milestone from Commencement Date".

3. The dates for completion of the Milestone Activities will be at the discretion of the Employer.
4. The monthly cash flow on the basis of which the PV is to be worked out shall exclude the amount of this Cost Centre though this Cost Centre will be included in the Section MS Summary and the Tender Total.

SECTION -- MISCELLANEOUS

Corridor - Chand Pole to Badi Chaupar

COST CENTRE D – SUPERVISION OF MAINTENANCE

MILE- STONE NO.	WORK DESCRIPTION	Apportioned Amount		Country of Origin	Weeks for completion of Milestone from Commencement Date
	MILESTONE ACTIVITY	Amount in Foreign Currency	Amount in Indian Rupees		
	Obtain the "Notice of No Objection" or "Notice of No Objection Subject to ---" from the Engineer for completion of the following in accordance with the Employer's Requirements:				N/A
D1*	Supervision of Maintenance (40 man months)*				N/A
	COST CENTRE TOTAL CARRIED TO SECTION SUMMARY				N/A

* This excludes Contractor's obligations and responsibilities during the Defects Liability Period.

SECTION -- MISCELLANEOUS

Corridor - Chand Pole to Badi Chaupar COST CENTRE E – MANUALS

(The Manuals shall be bilingual in Hindi & English)

This Cost Centre comprises all those obligations and ongoing activities throughout the Contract not associated directly with any other Cost Centre.

This shall include but not be limited to:

Provision of operating manuals (hard copies and electronic format) for:

Traction power Distribution, Rigid OCS, , SSP, Overall Earthing system before commencement of Integrated Testing and Commissioning for Chand Pole to Badi Chaupar

Provision of maintenance manuals in one original and five hard copies and in electronic format) for:

Provision of sub-systems/systems and spare parts catalogue - hard copies and electronic format)

Any other item(s) considered necessary to comply with the Scope of Work.

SECTION -- MISCELLANEOUS

Corridor - Chand Pole to Badi Chaupar

COST CENTRE E – MANUALS

(The Manuals shall be bilingual in Hindi & English)

MILE- STONE NO.	WORK DESCRIPTION	Apportioned Amount		Country of Origin	Weeks for completion of Milestone from Commencement Date
	MILESTONE ACTIVITY	Amount in Foreign Currency	Amount in Indian Rupees		
	Obtain The "Notice Of No Objection" Or "Notice Of No Objection Subject To ---" from the Engineer on delivery of the final manuals for Traction Power, ROCS, SSP, , Overall Earthing System Before Commencement of Integrated Testing And Commissioning for Chand Pole to Badi Chaupar				
E1	Operating Manuals (Original plus five hard copies) and in Electronic Format				
E2	Maintenance Manuals (Original plus five hard copies) and in Electronic Format				
E3	Subsystems/ Systems spare parts catalogue (Original plus five hard copies) and in Electronic Format.				
E4	Any other item(s) considered necessary to comply with the scope of Work.				
COST CENTRE TOTAL CARRIED TO SECTION SUMMARY					

**Design, Detail Engineering, Manufacture, Supply, Installation, Testing and Commissioning of 25 kV AC Traction (RIGID OHE), 33 kV Auxiliary Sub Stations (ASS), associated cabling and SCADA Systems for Underground Corridors OF Jaipur Mass Rapid Transport System Project
Phase-1B**

CONTRACT PACKAGE – JP/EW/1B/E2

Statement F – Unit Prices

STATEMENT – F**Unit Prices****Unit Prices of Items for Additional Quantities**

Sl. No.	Item Description	Unit	Quantity	Rate		Country of Origin
				Amount in Foreign Currency	Amount in Indian Rupees	
1.	25kV Rigid OCS Conductor Rail	Km	1			
2.	Contact wire	Km	1			
3.	Support insulator for 25kV Rigid OCS	Nos	1			
4.	Anchor Assembly for 25kV Rigid OCS	Nos	1			
5.	Expansion Joint for 25kV Rigid OCS	Nos	1			
6.	Air Section for Rigid OCS	Nos	1			
7.	ROCS Protection Cover	Nos	1			
8.	Transition arrangement from ROCS to Flex. OHE	Nos	1			
9.	OPC 70 mm ² Copper	Km	1			
10.	RC 240 mm ² Aluminum	Km	1			
11.	TEW 150 mm ² Copper	Km	1			
12.	Steady Arm	No	1			
13.	Support Bracket	No	1			
14.	25 kV Cable	Km	1			

15.	25kV cable termination kits	Nos	1			
16.	Earthing flats	km	1			
17.	Earthing Electrodes	Nos	1			
18.	LT AC Distribution Board in SP, SS & SSP	Nos	1			
19.	DC Distribution Board in SP, SS & SSP	Nos	1			
20.	Protection Panel for 25kV OCS feeder Circuit Breaker	Nos	1			
21.	25 KV GIS cubicle (With C.B. 2000A)	Nos	1			
22.	25 KV GIS cubicle (With C.B. 1250A)	Nos	1			
TOTAL						

NOTE:

1. The unit price shall be an all inclusive fixed price for delivery, installation, testing and commissioning. The price will include all associated accessories and fixtures of the respective items and all duties, taxes, etc. including tax deducted at source.
2. The unit prices shall be valid until the Taking over Certificate of the last Section.
3. **These unit rates shall be considered for the purpose of comparative evaluation of Tenders.**
4. **THE CONTRACT PRICE WILL BE LOADED BY TOTAL PRICE OF THIS STATEMENT F, FOR FINANCIAL EVALUATION.**

DESIGN, DETAIL ENGINEERING, MANUFACTURE, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 25 KV AC TRACTION (RIGID OHE), 33 KV AUXILIARY SUB STATIONS (ASS), ASSOCIATED CABLING AND SCADA SYSTEMS FOR UNDERGROUND CORRIDORS OF JAIPUR MASS RAPID TRANSPORT SYSTEM PROJECT PHASE-1B

CONTRACT PACKAGE – JP/EW/1B/E2

Statement G – Monthly Cash Flows

STATEMENT G – Monthly Cash Flows for the Contract

This Document is to be prepared by the Bidders's as per clause C. Milestone Payment Schedule

Note: The amount of Cost Centres B and D of Section Miscellaneous will not be included in the Monthly Cash Flows.