

Date: 09.09.2020

Venue: Email

Sub: NEW 10000 MT DOUBLE WALL DOUBLE INTEGRITY AMMONIA STORAGE TANK AND ASSOCIATED FACILITIES FOR FACT-CD,
AMBALAMEDU ON LSTK BASIS

Sl. No	Section No. of Bid Doc.	Page No.	Clause No.	Subject	Bidder's Query	Owner / PMC Reply	Discipline
1.	32645-01-PS-001 PH2-Rev-3 -Mech - Static	7 of 9	6.2	Codes & Standards	<p>As per referred ITB Clause, Fire Hydrant equipment and accessories such as Fire hydrants, Monitors, HVLRM, Spray nozzles, branch pipes, fire hoses & couplings, extinguishers etc. shall be Factory Mutual (FM) /Underwriters Laboratory (UL) approved.</p> <p>Kindly be noted, as per General Practices, Bidder would like to suggest Owner ... 1) To accept UL Listed / FM Approved HVLRM, Deluge valve & Spray Nozzles 2) And Hydrant & Accessories and portable Fire Extinguishers as per IS Standard and/or Manufacturer's standard as applicable.</p> <p>Enclosed herewith Annexure-I, includes FF equipments and its approval status for owner review.</p>	Refer TQ 5 reply towards point number 19	Fire Fighting
2.	Project Schedule			Mechanical Completion	<p>Considering effective start date as 1st Feb 2021; the project will encounter two spells of Monsoon effecting Civil foundation work in first spell and Insulation work in second spell. Also, Compressor delivery of 13.5 months (Ex works) results in shortfall of adequate duration needed for the complete erection and pre-commissioning works. Based on this, the project schedule is expected to be 18 Months for Mechanical Completion. Hence bidder request owner to extend the MC by 1 month and reduce the commissioning schedule from 3 months to 2 months so as to keep overall schedule of 20 months.</p>	Tender Condition prevails.	Project schedule
3.	Instrumentation		5	Scope of Work	<p>Integration of existing ammonia tank and associated facilities to the new control system supplied by LSTK is NOT part of Mechanical completion. Kindly confirm.</p>	Integration of existing instrumentation is part of mechanical completion.	Instrumentation
4.	Instrumentation		5	Scope of Work	<p>Bidder proposes to Carry out integration of Existing Tank Instrumentation with new PC-PLC system alongwith new tank work. It is expected that Cabinets will be installed and ready for wiring around 14th Month from EDC. Based on the same Owner shall lay cables upto new control room before 14th Month. Bidder shall carry out termination inside control room based on JB/Cable schedule provided by Owner. Owner shall do termination on Field/MCC side and handover the existing Instruments for further integration activities to Bidder for 6 weeks period starting from 15th Month from EDC. Bidder shall carry out Integration work (Loop Check/Function check) alongwith Owner during this period. Bidder proposes that as existing Compressors are operated from Local PLC and are not part of integration work, the existing tank pressure shall be maintained manually by Owner till completion of Integration work and Bidder can complete Integration work without ATA period. Kindly confirm.</p>	<ol style="list-style-type: none"> Bidder's proposal regarding integration of existing system before new tank completion is allowed as per clause 5.4.8 of 32645-14-PS-001 SPL INST. Existing compressors are operated from local relay panels, which are going to be upgraded to individual PLCs for each compressor by owner. Once this is completed, the repeat signals &/ serial communication from these PLCs shall be integrated to New PLC system supplied and is part of LSTK integration job. During integration, some of the controls will be done manually only. The detailed schedule of integration shall be finalised in kickoff meeting after award of work and Bidder's apprehensions will be positively addressed. 	Instrumentation

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5.	ANNEXURE-3 DOC NO- 32645 – Pre-bid Query No.5 Technical	PAGE 17 OF 29	b)	Interior wall partitions can be of brick masonry, frameless glass partitions or 12mm thick gypsum partitions	Bidder understands, that partition between Rack room and Console to be of Brick with fire rated vision panel and so frameless glass partition or 12mm thick gypsum partition not considered.owner to confirm bidders understanding.	Bidder's Understanding is correct	Civil-Arch
6.	ANNEXURE-3 DOC NO- 32645 – Pre-bid Query No.5 Technical	PAGE 20 OF 29	c) Building Components	Flooring-Plant buildings: Densified Concrete with matte finish. And MCC Room: Densified matt finish concrete or Kota stone finish	Bidder understand 40mm thick concrete flooring 1:1.5:3 with non metallic hardener top for Plant buildings and MCC room to be used. Owner to confirm.	Tender Condition prevails.	Civil-Arch
7.	ANNEXURE-3 DOC NO- 32645 – Pre-bid Query No.5 Technical	PAGE 20 OF 29	c) Building Components	Roofing / Cladding-Non-Asbestos cement sheets / High impact resistant Polypropylene roofing sheets for roofing and cladding	Noted shall be used as per CPWD clause no 12.5 Volume-1. However, Bidder propose 0.55mm TCT Pre colour coated Galvalume Steel Sheet for roofing and cladding to be used .Owner to confirm.	Tender Condition prevails.	Civil-Arch
8.	ANNEXURE-3 DOC NO- 32645 – Pre-bid Query No.5 Technical	PAGE 20 OF 29	c) Building Components	Painting-Masonry / RCC work to be painted with Corrosion resistant epoxy paint.	Bidder understand Plain Cement plaster 15mm thick and Anti-algal weatherproof, acrylic emulsion paint with silicon additives to be used for external walls. Bidder to confirm.	Corrosion resistant Epoxy Coating shall be provided for Ammonia tank Foundation as per CPWD Spec-13.24. Available brands are Armerlock 400 marketed by AsianpaintsPPG or equivalent. Other Structures shall be painted as per the spec below: Exterior:-Weather proof Exterior paint, of approved brand (Asian paints Apex Ultima Protek or equivalent) on new surfaces over a coat of cement primer Interior:- 2 Coats of Premium Acrylic Emulsion of Interior grade on new surfaces over a coat of cement primer	Civil-Arch
9.	ANNEXURE-3 DOC NO- 32645 – Pre-bid Query No.5 Technical	PAGE 22 OF 29	c) Building Components	Sewage Disposal-Soil pipe shall be taken to Septic tank nearby and the waste pipe shall be taken to a sand trap to separate solid wastes. The discharge liquid from septic tank shall be taken to a common STP/ETP through SWR pipes via shortest route. The liquid discharge from sand trap shall be connected to SWR pipes running to common STP / ETP.	Bidder Suggest to go with Septic tank and connected further to Soak pit (Sand trap) philosophy considering the human occupancy and contum of discharge so STP not required. Owner to confirm.	Bidder can proceed without STP. Sewage Disposal-Soil pipe shall be taken to Septic tank and connected further to Soak pit (Sand trap)	Civil-Arch
10.	ANNEXURE-3 DOC NO- 32645 – Pre-bid Query No.5 Technical	PAGE 21 OF 29	c) Building Components	Water Proofing--Water proofing over roofs shall be with fibre reinforced elastomeric water proofing membrane as per CPWD specifications.	Bidder understand ATACTIC POLYPROPYLENE MODIFIED BITUMINIOUS MEMBRANE TO BE USED AS PER Clause no-14.50 CPWD VOLUME-2. Owner to confirm.	Water proofing shall be done as per Clause No 22.15 CPWD Volume 2	Civil-Arch

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11.	ANNEXURE-3 DOC NO- 32645 – Pre-bid Query No.5 Technical	PAGE 17 OF 29	c) Building Components	requirements to be considered while carrying out architectural design of buildings. d)Furniture and soft furnishing are in the scope of contractor	Bidder understand that only furnitures required for specific rooms of plant building to be considered and other soft furnishing are not envisaged. Owner to confirm bidder understanding.	Soft furnishing shall also be considered by the Bidder.	Civil-Arch
12.	'ITB\work_567857\ PROCESS_FILE_1_OF_6\ DESIGN PHILOSOPHY - PROCESS (32645-11-PS-001- PH, R-2)	27 of 80	2.14.1	DG set Load bank	The referred clause specifies Diesel Generator (DG) set along with load bank for DG set testing shall be provided. Bidder understands that load bank is required only for testing and commissioning of DG set by EPC Contractor on rest basis. Load bank is not to be supplied along with the DG to owner.	Bidder's understanding is correct	Package