DELHI JAL BOARD (GOVT. OF NCT OF DELHI) OFFICE OF THE EXECUTIVE ENGINEER(C) DR IX JAGRITI SPS, KARKARI CROSSING, DELHI-110092

No: F(27)/EE(C) DR IX/DJB/2017/ 19 10 82

Corrigendum and Addendum No. 02

Dated: 05-04-2017

Subject: -	"Rehabilitation and Up-gradation of Kondli - Phase I (45 MLD), Phase II (114 MLD)
	Phase III (45 MLD) Waste Water Treatment Plant (WWTP) with effluent standards of
	BOD – 10 mg/l, TSS -10 mg/l or better under YAP – III'' (Package-K3).
Sub-Head :-	Reply to pre-bid queries.
Reference :-	NIT No. 03 (2016-17)
	DJB/F(27)/EE (C) Dr-IX/2016-17/2687-2704 dated 03-02-2017.

The pre-bid meetings were held on 22.02.2017 and 07.03.2017 on the above projec Subsequently, the replies to the queries have been finalized and are being notified for the information all the prospective bidders including corrigendum and addendums.

Further, corrigendum/ addendum, if any, will be uploaded on the website: <u>www.delhijalboard.nic.in</u> under "Expression of Interest" link.

EE (C) Dr-IX

Dated :-05.04.2017

NO DJB/F(27)/EE (C) DR-IX/2017/ 19 2082

Copy to:-

- 1 Mission Director, MNCG, MOOWR, RD&GR, MDSS, 3rd Floor, Rear Wing, 9 CGO Complex, Lodhi Road, New Delhi-110003.
- 2. Chairman, DJB
- 3. Vice Chairman, DJB
- 4. CEO/Member (A)/Member (F)/Member (Dr.)/Member (WS)/Addl. CEO
- 5. Dy. Secy. (Water) Govt. of NCT of Delhi.
- 6. CE (Dr) Pr-I/II, CE (SDW)/ CE (East/West/South/North & central)
- 7. The Chief Representative, JICA, 2nd Floor, Gopal Das Bhawan, 28, Barakhamba Road, New Delhi.
- 8. DOV/Director (F&A)/SDM
- 9. Director (P) Sewerage/ All SE (Dr.) Pr. /SE (SDW)-II
- 10. All EE (C) Dr./ EE (SDW)-IX
- 11. Sr. AO (C) Dr. Pr. N&NW/AAO (C) Dr.-IX/Head Clerk/AE (C) DR-IX/Notice Board
- 12. Contractor Association, 36, Block-BA, Paschimi Shalimar Bagh, New Delhi-110088.
- 13. Firms in the field
- 14. EE (EDP): to display on DJB website under EOK link.
- 15. Foreign Missions/Embassies of different countries in Delhi with the request to give wide publicity in their country.
- 16. M/s NJS Consultancy & Consortium
- 17. Manager, Syndicate Bank, Rani Jhansi Road Branch, New Delhi.

EE (C) PR-IX



DELHI JAL BOARD (DJB)

Replies to Pre Bid Queries & Corrigendum & Addendum

Package K3

Rehabilitation and Up gradation of Kondli - Phase I {45.5 MLD, Phase II {113.7 MLD} & Phase III {45.5 MLD} Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS – 10 mg/l or better under YAP (III)

Reference ID No. BID-YAP-(III) (K3/2017-18)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
Bidder -	1					
1)	Volume 1	53	14.2	Part A, Contract Data, Advance Payment	We assume that advance payment will be interest free.	As per bid document
2)	Volume 1; Section I	4	2.3	Instructions to Bidders, General, Japanese ODA Loan	The loan received from JICA would be applied for portion of works to be carried under this project. We understand that complete scope of work falling under Sec-A "Works Contract" is funded by JICA. Kindly confirm our understanding is correct. Further specify the source of funding for Operation & Maintenance part and confirm the agency involved, would be part of Contract agreement signed with selected bidder post award.	As per bid document
3)	Volume 1; Section II	37	Clause 22.1	BDS, Preparation of Bids, Hard Copy Submission	Submission of Original set + 3 Copies of complete bid + 2 Soft copy in C.D. along with original tender documents in 3 sets is desired. Usual practice is returning original ONE set of tender documents dully signed & stamped on each page, confirm our understanding is correct.	As per bid document
4)	Volume 1	51	4.2	Part A, Contract Data, Performance Security	Bank issues bank guarantee for in favor of company transacting with them in lieu of assurances available and not in name of JV formed. Thus accept the Performance security from Lead partner of JV for performance of contract	As per bid document
5)	Volume 1; Section II	36	21.1	BDS, Bid Security	Bid security shall be Rs 4.34 Cr. In the form of B.G. by any partner in the name of Joint venture. Confirm	As per bid document
6)	Volume 1	50	1.1.78	Part A, Contract Data, Contract duration	EPC-36 Month+6 month trial run=42 Month, total contract duration is 1 yr DLP+9 yr O&M=10 Yr. The project involves major rehabilitation & upgradation that will entail working running plant repairs/works for which 36 months construction period may be insufficient as has happened at plant of DJB request suitable increase the period, confirm	As per bid document
7)				Construction Power & Water	Request provide both construction power and water free of cost since essential component of project execution to support to fasten the execution activity and to continue during trial run as already confirmed.	As per bid document
8)				Excess Power	During Trial run period excess power consumption that exceeds guaranteed power value contractor to pay difference of actual vs guaranteed.	As per bid document
9)				Price Variation	O&M period is 10 yr. (including DLP), price variation clause must be applicable both on chemical & fuel. Confirm & provide formulae.	As per bid document
10)				Tax Variation	Price bid is desired inclusive of all the taxes, Central government is likely to introduce new taxes like GST etc. Further contract duration is about 13.5 years with expectation of change in taxation structure. Kindly confirm statutory variations shall be reimbursed like recovery being made on prevailing rates.	As per bid document
11)				Delayed Payment	Interest provision of 10% on delayed payments is given, please provide number of days beyond which the payment would be considered as delayed. Please confirm.	As per bid document
12)				Type of Payment	Payments during O&M will be independent of the quantity of sewage received at plant inlet. Kindly confirm.	As per bid document

Page **1** of **56**

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Reply to	Pre-bid	Oueries

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
13)	Volume 1	53	14.2	Part A, Contract Data,	Please confirm 10% interest free mobilization advance payment against bank	As per bid document
				Mobilization Advance	guarantee of equivalent value.	
14)				Degree of variation	In case inlet parameters vary significantly leading to non-compliance of	As per bid document
					guaranteed parameters then no penalty or any type of recovery should be	
					done from Contractors during O&M period.	
15)				Retention Money	We understand will be applicable per format provided & governed by	As per bid document
					performance security.	
16)					We understand that to meet pre-qualification criteria any parent company can	As per bid document
					claim technical / financial credentials of its fully owned subsidiary/sister	
17	<u> </u>	-			concern company or vis versa. Kindly confirm.	A 1.1 1 .
17)	Volume 2			Scope of Work	Being a rehabilitation work kindly clarify the extent of repair of the existing	As per bid document
					civil structures that are to be retained as specified in bid document, confirm.	
					Further note that existing structures that are retained, civil specifications shall	
					be as constructed at the time of project implementation whereas new specs	
18)	Volume 2			Disposal points.	will be used for new construction/rehabilitation works of repaired structures. Confirm, disposal land/ area will be provided free of cost by DJB.	As per bid document
16)	volume 2			Disposal politis.		As per bla document
					Provide the point & distance of disposal point for excavated earth as well as dumping of demolished structures material.	
19)	Volume 2			Work Permit	Work permit for Subcontractor to execute work on site would be given by	As per bid document
19)	volume 2			WOIK Feilint	Delhi Jal Board. Kindly confirm.	As per bld document
20)	Volume 2			Labour Placement	Kindly provide the location for labor hutment. Also provide distance of	As per bid document
20)	Volume 2				tapping point of water & electricity from site, please mark al 3 in project	As per bla document
					plan.	
21)	Volume 2			In Plant Road	Kindly specify the scope of in plant road.	As per bid document
22)	Volume 2			Out fall Structure	Provide the drawing for outfall structure with levels to plan hydro power	No hydro power generation is
/					generation.	proposed
23)	Volume 2	241	1.6.1 &	General Requirements & scope of work,	The Temperature indicated in sewage characteristic Min. &Max. 17.8 & 27	Same temperatures are mentioned
- /	Section X	&	2.21	Sewage Temperatures	0C whereas sewage temperature indicated under process requirement Min.	against all the referred clauses
	Part - 1	277			and Max. 17.8 & 29 0C.	
					The sewage temperature given in footnote of bioreactor for design may be	
					considered as 17.8°C & maximum as 29°C.	
					We assume the design sewage temperature shall be Min. & Max. 17.8 & 29	
					0C.	
					Kindly confirm.	
24)	Volume 2	249	6	General Requirements & scope of work,	As per Clause, excess malba / debris / unserviceable material obtained during	As per bid document
	Section X			Demolition of Structures of Existing WWTP	demolition shall be removed from the demolition site to a location as	
	Part 1				required by the local authority.	
					Kindly indicate the approx. distance of disposal site for excess unserviceable	
			<u> </u>		material.	
25)					Bidder should be allowed to use technical & financial qualification of the	As per bid document
					parent company as being accepted in project of BWSS, RUIDP, KUIDFC &	
		_			NMCG. Please confirm.	
26)					Please confirm STP project completed in JV as LEAD PARTNER and share	As per bid document
					less than 50% will qualify for full experience of subject project	

Page **2** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

Reply to	Pre-bid	Queries

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
27)	Volume 2 Section X Part 2	281	2.5	General Design Requirement	As per tender the Bypasses shall be provided around all flow meters and other In-line instrumentation for maintenance purpose.	Confirmed for the flow meters provided in pipe lines
					We assume that bypass shall be provided for flow meter and online instruments with 2 nos. isolation valves and one no. bypass valves. All these valves shall be manual operated and of same size of main valve. Kindly confirm.	
28)	Volume 2 Section X Part 2	281	2.5 & 3.2.4	General Design Requirement & Design conditions for foundations	There is discrepancy between the clauses given in general requirement and design condition for foundation.	Refer Sl. no. 1 of C&A no. 2
					As per general requirement, there shall be no pressure relief valve in the base slab where as in design condition for foundation, the pressure refilled valves require in the base slab for units for minimize the effect of sub-soil water.	
					Kindly clarify the discrepancies.	
29)	Volume 2 Section X Part 2	285	2.6	Plant Layout and Hydraulic Profile	As per the clause, one uninstalled standby unit (in storage) for every set of 3 duty/working units. We assume that uninstalled set of submersible mixer to be provided where	As per bid document
					the units are more than 3 in nos.No standby units shall be provided for mixer of sludge sumps.Kindly confirm.	
30)	Volume 2 Section X Part 2	281 & 282	2.5	General Design Requirement , Lifting arrangement at aeration tank, blower room, digester compressor building.	We understand that for the Overhead Lifting of Aeration Tank Pumps shall be done with Chain Pulley Block with trolley. EOT shall not be provided at aeration tank. EOT shall be provided in blower room, chlorination building and digester control building. Kindly confirm.	As per bid document
31)	Volume 2 Section X Part 2	291	2.8	Inlet Chambers & Head Works	As per tender pipe line from inlet chamber – 1 to be extended to inlet chamber- 2. Please provided the distance between these two chambers.	Bidders to verify from site
32)	Volume 2 Section X Part 2	290 & 294	2.7 & 2.10	Sewage Treatment process Layout & Facilities Description, Grit Chamber	The grit chamber for phase II & III under the clause no. 2.7 indicated 5 whereas under clause no. 2.10 indicated 3 nos. Kindly confirm the nos. of grit chamber.	Refer Sl. no. 2 of C&A no. 2
33)	Volume 2 Section X Part 2	296	2.12	Primary Clarifier	Kindly provided the diameters of sludge withdraw pipe lines of primary clarifier.	Bidders to verify from site
34)					We assume that bidder can proposed Knife gate valves for sludge line in proposed and rehabilitation work of sewage treatment plant. Kindly confirm.	As per bid document
35)	Volume 2 Section X Part 2	301	2.16.1 D	Bioreactor for MLE Technology for Phase I WWTP, Aeration Requirements	The oxygen demand is calculated as Oxidation of BOD entering Aerobic Tank + Nitrification Oxygen Requirement + 50% of oxygen credit due to denitrification We understand that the net oxygen demand shall be derived by subtracting the oxygen credit from denitrification. Kindly confirm	Refer Sl. no. 3 of C&A no. 2

Page **3** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
36)	Volume 2 Section X Part 2	305	2.16.2 C	Bioreactor with IFAS System for Phase II and III, IFAS Tank	As per clause it is stated that The aeration manifold shall be designed to provide uniform distribution of air to each lateral.	As per bid document
					We request, the diffuser grid arrangement should be as per the design of technology provider/ bidder as to create effective media movement within the reactor, air flow profile is designed to suit the respective media.	
					Please confirm	
37)	Volume 2	305	2.16.2	Bioreactor with IFAS System for Phase II	Min. DO in the IFAS tank - DO 3 mg/l	As per bid document
	Section X Part 2			and III	3 mg/l DO in the bioreactor is not required in all conditions. It is usually used	
					only at low temperatures. It should be $DO - 2 \text{ mg/l or as per the design of}$	
					technology provider/ bidder.	
					Please accept	
38)	Volume 2 Section X Part 2	301	2.16.1 D	Phase I is specified for MLE, Aeration Requirements	Will IFAS (integrated fixed-film activated sludge) alternative be considered, as it might be more cost-effective (with min. temperature? 17.80C)	Refer Sl. no. 6 of C&A no. 2
39)	Volume 2	304	2.16.1 C	Bioreactor with IFAS System for Phase II	Specified fill ratio for Phase – II & III – 30%. It may vary for both the plants	As per bid document
	Section X			and III, IFAS Tank	as per the design of technology. Pease allow the filling ratio as per	
40)	Part 2				technology provider's design. May bidder propose the perforated pipe grid diffused aeration system for	As per bid document
-0)					aeration in IFAS tank? The perforated grid aeration system is widely used in	As per old document
					IFAS tank.	
41)	Volume 2 Section X	307	2.16.2 G	Bioreactor with IFAS System for Phase II	As per specification, Dedicated Mixed Liquor Re-circulation Pumps for each	As per bid document
	Part 2			and III, Mixed Liquor Recirculation pump	bioreactor along with one standby pumps shall be provided in the combined channel for internal re-circulation.	
					We assume that one pump shall be provided in each basin and one no.	
					common uninstalled stand by shall be provided.	
42)	Volume 2	327	2.37 &	Centrifuge building & Polyelectrolyte	Kindly confirm. There is discrepancy for MOC of polymer dosing tank. As per clause 2.37	Refer Sl. no. 4 of C&A no. 2
42)	Section X	&	4.2.10.4	Solution Preparation and Dosing System	the tank shall be Material of construction shall be FRVE as Liner + FRP	Kelei 51. 110. 4 01 C&A 110. 2
	Part 2 & 4	434			(with is phthalic resin). Whereas as per clause 4.2.10.4, The material of	
					construction of tank shall be HDPE.	
43)	Volume 2	463	4.2.17.3	Piping Sizing & Material	Kindly clarify the discrepancies. As per table given for MOC of piping work. The common header from	Refer Sl. no. 5 of C&A no. 2
13)	Section X	105	1.2.17.3		blower room to aeration tank shall be SS -316. Kindly confirm the schedule	
	Part 4				of SS 316 Pipe.	
44)	Volume 2 Section X Part 2	308	2.18.1	Secondary Clarifier for Phase I, II & III	Kindly provided the diameters of sludge withdraw pipe lines of Secondary clarifier of Phase III WWTP.	As already clarified during pre bid meeting the bidder to verify from site
45)	Volume 2	308	2.18	Secondary Clarifier, Phosphorus removal	The process of phosphorus removal is not given in the tender document.	As per bid document
	Section X				Please elaborate it.	
46)	Part 2				BOD and TSS less than 10 mg/l is proposed by addition of chemical in	Refer Sl. no. 6 of C&A no. 2
тU)					1 DOD and 100 less than 10 mg/1 is proposed by addition of chemical m	

WTPs) with effluent standards of BOD -10

Page **4** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					secondary clarifier. Giving Guarantee for such values would be extremely difficult by any bidder. Request you to include pumping and filtration unit as envisaged in other DJB project under YAP III.	
47)					The chemical addition in the secondary clarifier may affect the performance of bio reactor as the RAS has to be recycled back in anoxic tank. Please clarify the location of addition of chemical.	As per Bidder's design.
48)					As the anoxic tank in phase II & III are proposed without any media. Request you kindly allow bidder to add media in anoxic tank to reduce the HRT, as low SWD require larger plan area in absence the media addition.	Refer Sl. no. 6 of C&A no. 2
49)					In the Hydraulic drawing provided with tender document has considered the total head loss across the coarse and fine screens as 250 mm. please note that there are two screens in series therefore the considered head loss in not sufficient.	Hydraulic Flow Diagram is the indicative diagram and total headloss across the screens shall be as per Bidder's design.
50)					In Hydraulic drawing the loss between primary clarifier inlet and aeration tank outlet is given as follows. Phase $-204.14 - 203.28 = (+)0.85$ Phase II 203.71 $-203.37 = (+)0.34$ Phase III 203.73 $-203.92 = (-)0.190$ Kindly review the hydraulic drawings with respect of above queries.	Hydraulic Flow Diagram is the indicative diagram. Bidder to verify the levels from site as already made clear in pre- bid meeting.
51)	Volume 2 Section X Part 2	316	2.30	Anaerobic Digester	As per clause Bidder shall provide minimum two no digesters, (each designed for 60 % of the design flow. We assume that the aeratobic digesters shall be constructed for 20% overloading design flow. Kindly confirm.	As per bid document
52)					Please advise whether the hopper portion volume shall be considered as the working volume of digesters.	As per bid document
53)	Volume 2 Section X Part 2	318	2.30	Anaerobic Digester	As per clause, Existing Digesters of Phase-III shall be demolished and 5 nos. of digesters in Phase II shall be used for digestion of combine sludge of Phase II and Phase III. The retention time of anaerobic sludge digester shall be as per available volume of existing digester and sludge flow. No new digester shall be constructed for phase II and Phase III.	As per bid document
54)	Volume 2 Section X Part 2	318	2.30 B	Anaerobic Digester, Digester Biogas Mixing	There is discrepancy in mixing criteria for digester mixing.	As per bid document
55)	Volume 2 Section X Part 2 & 4	318 & 463	2.30 & 4.2.17.3	Anaerobic digester/ Gas Holder & Piping Sizing & Material	There is discrepancy in the material of construction of biogas piping. As per table for MOC, the MOC of biogas piping shall be SS 316 whereas as per process requirement the MOC of biogas piping shall be DI K-9. Please confirm the MOC of biogas pipe lines.	Refer Sl. no. 7 of C&A no. 2
56)					We assume that, bidder can propose the common heating system for digester (not dedicated heat exchanger for each digester)	As per bid document
57)	Volume 2 Section X Part 4	417	4.2.8.6	Motive Water Booster Pumps	The Motive Water supply shall be from the Water Supply System on the campus. Kindly allow to bidder to use the treated sewage from chlorine contact tank for motive water for booster pumps.	Refer Sl. no. 8 of C&A no. 2

Page **5** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

Reply to	Pre-bid	Queries
		-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
58)					Triveni Engineering & Industries Ltd is reputed company for supply the equipments used in sewage treatment plant. Hence we would like you to kindly approve Triveni for Mechanical Coarse bar Screen, Agitators.	As per bid document
59)	Volume 2 Section X - Part 2	293	2.9	Location of Coarse or Medium and fine screens Channels	As per tender document page no. 293/ Clause no. 2.9, 5 Nos.(3w+2Sb) Coarse & Fine screen is common for Phase –II & III. And Layout drawing no. YAP-III/K3/P/GAD/003 (T) indicates 2 Nos. Screen chamber for phase – II and 2 Nos. for phase – III separately. Please clarify whether it is common for Phase – II & III or to be install	Details mentioned under clause 2.9 shall be followed
60)	Volume 2 Section X Part 2	294	2.10	Location of Grit Chamber	 separately for Phase – II and III. As per tender document page no. 294/ Clause no. 2.10, 3Nos.(2w+1Sb) Grit chamber is common for Phase –II & III. And Layout drawing no. YAP-III/K3/P/GAD/003 (T) indicates 2 Nos. grit chamber for phase -II and 2 Nos. for phase – III separately. Please clarify whether it is common for Phase – II & III or to be install separately for Phase – II and III. 	Details mentioned under clause 2.10 shall be followed
61)	Volume 2 Section X Part 4	398	4.2.4	Primary/ Secondary Clarifier	 Primary/secondary Clarifier For width and height of structure Hot dip GI not possible due to unavailability of HD bath tub, please confirmed painting for spray GI. 	Refer Sl. no. 9 of C&A no. 2
62)	Volume 2 Section X Part 4	428	4.2.9.1	Gravity Sludge Thickener	 Thicker mechanism whether auto lift or without lifting type, please confirmed For width and height of structure Hot dip GI not possible due to unavailability of HD bath tub ,please confirmed spray GI 	Refer Sl. no. 10 of C&A no. 2
63)	Volume 2 Section IV	237	Part IV D	b) Guaranteed Power Adjustment for Variance from Normal Flow & Pollutant Load		As per bid document
64)	Volume 2 Section X Part 2	330	2.40	Pilot Plant	As suggested to install the pilot plant and study the result for modification/changes in plant based on study of pilot plant. As indicated, it is very difficult to achieve the result of BOD and TSS <10 mg/l with MLE process as well as IFAS (as suggested technologies) with addition of chemical & without filtration. Therefore it is requested the pilot study of suggested technology should be carried out by client and technology, design guidelines, type and dosages of	As per bid document.

WTPs) with effluent standards of BOD -10

Page **6** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

<u>Reply to</u>	Pre-bid	<u>Queries</u>

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					chemicals should be fixed prior to bid submission.	
					This will help all concerns in hassle free execution, operation and achieving ultimate goal stated in YAP-III and NMCG.	
65)	Volume 1 Part A	52	9.2	Appendix to Technical Proposal FIDIC Gold Book (General Conditions Provision) Time for Completion of Design- Build:	The Time for completion for Design built of Phase I, II & III has given 42 month Including 6 months of trial run and commissioning. The 36 month of construction of 3 nos. of plant would not be sufficient as one plant is in operation and construction to be done in phases with detailed execution plan. Such works take more time than a greenfield project. Please review the duration of completion project and revise it to 48 Months.	As per bid document.
66)	Volume 2 Section X Part 8	702	8.2.1	Output and Operational Guarantees (3) Treated Sludge Disposal	We assume that contractor shall be responsible to make the arrangement to dispose the dewatered digester sludge during operation and maintenance. The site of disposal of sludge shall be made available by employer. Kindly confirm and also indicate the approx. distance to disposal site.	As per bid document.
67)	Volume 2 Section X Part 1	246	2 Point No. XIII	Construction, Rehabilitation and up-gradation of existing WWTP	We assume the site for disposal of sludge from existing digesters of phase III shall be made available by the employer. Kindly confirm.	As per bid document.
68)	Volume 2 Section X Part 1	245	2 Point No. X	Construction, Rehabilitation and up-gradation of existing WWTP Rehabilitation of Phase-I	Rehabilitation of Phase –I treated effluent Outfall disposal pipeline of 1400 mm dia RCC for disposing the treated effluent from the WWTP site to Yamuna River. We assume the DJB shall provide accessibility and encroachment free right of way and all assistance required for execution of work. Kindly confirm.	DJB will provide assistance only
Bidder -	2		1			
69)	Volume 1 Part B Section III A, 3	104	4.2 (a)	Eligibility & Qualification Criteria, Specific Experience : Each Partner under JV must meet at least one WWTP of 60 MLD capacity	Kindly accept combined qualifications in case the bidder is joint Venture or consortium in case the bidder is joint Venture or consortium, Kindly remove "Each Partner Specific Experience Criteria, i.e. clause no. 4.2(a).	As per bid document.
					The basic purpose of Joint Venture is to share the technical expertise and criteria of one partner and share financial strength and criteria of other partner to form a Joint Venture where both financial and technical security will be fulfilled and taken care for entire span of the project.	
Bidder -		500				
70)	Volume 2, Section X, Part 8	702	8.2.1	The sludge generated from the WWTP shall be disposed of by the contractor to a proper landfill site, or other sites as directed by the Employer.	 Please confirm the following:- 1) Has the landfill site already identified by DJB? 2) In that case please provide the distance of Sludge Disposal site from the STP plant. 3) Where is the Sludge disposed which is generated from the 25 MGD operational plant. 	 As per bid document. As per bid document. Bidders to verify from site as already made clear in Pre-bid meeting
71)	General			Raw Sewage inlet data	Please provide the Raw Sewage Inlet characteristics & the raw sewage quantity (per day) coming to the 25 MGD operational plant.	 As per bid document. For quantity Bidders to verify from site

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
72)	Volume 2 Section X Part 2	281	2.4	 Sewage Treatment Process Hydraulic profile for Ph-I In HFD the Outfall pipe invert level for Phase I is mentioned as 199.11m, & the HFL is mentioned as 200.24m. In vol 2 it is mentioned that, treated water disposal for Phase I will be through 1400 mm dia RCC conduit with the IL at the exit of the WWTP as 200.90 m. 	The invert level of pipe in both the clauses are different. Please provide the Invert level of the pipe to be considered for hydraulic design.	HFD provided is indicative. Bidders to verify levels from site.
73)	Volume 2, Section X, Part 1	244	2.4	Replacement of all E&M equipment including all pumps, motors, piping, valves & sluice gate etc. and all connected accessories in all the process and pumping units being rehabilitated.	Kindly provide a comprehensive list of equipment with numbers, capacity & sizes of all E&M equipment's to be replaced & or repaired/ rehabilitated.	Bidders to verify from site
74)	Volume 2, Section X, Part 2	299	2.16	Bio Reactor, IFAS Tank will have minimum DO of 3 mg/L and Aerobic Tank without media will have a minimum DO of 2 mg/l.	We understand that bidders can decide DO level as per their technology requirement to meet the outlet parameter.	As per bid document.
75)	Volume 2, Section X, Part 1	243		Interim Operation of the existing & partly rehabilitated WWTP during construction & rehabilitation period It is envisaged that the rehabilitation of the liquid streams & sludge stream of the Phase-I & Phase-III plants should be completed in a period of about 18 to 20 months and the same could be put into service and be capable of achieving treated effluent standards mentioned above. However, total interim operation of all streams of plant i.e. first Phase-II and then Phase-I & Phase-III will not exceed the contractual construction period of 36 months.	i) for PH-I and PH-III: 24 months.	As per bid document.
76)	Volume 2, Section X, Part 2	292	2.9	Coarse or Medium and Fine Screens Channels Screening shall be done in two stages and Contractor shall have to provide automatic mechanical coarse screens to remove particles larger than 20 mm size and in second stage there shall be fully automatic mechanical fine screens to remove particles larger than 6mm.	We presume that Medium screen (with 20 mm opening) followed by fine screen (with 6 mm opening) will be provided in the headworks. Please confirm.	As per bid document.

Page **8** of **56**

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
77)	Volume 2, Section X, Part 1	243		Interim Operation of the existing & partly rehabilitated WWTP during construction & rehabilitation period If required temporary piping arrangement shall have to be made by the Contractor for diverting sludge to existing SDBs so that the construction of digesters may be carried out without any hindrance.	We presume that after completion of the 10 MGD (Phase I & III) STP, the rehabilitation for 25 MGD STP (Phase II) will commence. Please confirm whether existing sludge drying facility for 25 MGD is sufficient to cater the sludge production from the plant at design capacity. In case of diversion of sludge please identify the SDBs to be used for disposal of sludge as construction work for other two phase would go on simultaneously. We believe that the sludge disposal during interim period is in scope of contractor. Please note that the sludge will not be of truck able consistency during the rainy season & hence kindly delete the sludge disposal from the scope of work.	As per bid document Contractor can dispose the sludge on-site in the drying beds during Interim period. Sludge disposal off-site during O&M period is in the scope of Bidder/Contractor.
78)	Volume 2, Section X, Part 1 Volume 2, Section X, Part 1	280 & 244		Suggestive technology to achieve the target treated effluent is MLE or Integrated Fixed- Film Activated Sludge (IFAS). The process is open and bidders can adopt any proven ASP/modified ASP technology for achieving these guaranteed effluent parameters without any change in the basic structures already available in WWTPs and without any proposal of pumping for the effluent.	Please also confirm the current daily sludge production. Please confirm whether bidder can adopt any proven ASP/modified ASP technology to meet the outlet parameters.	Refer Sl. no. 6 of C&A no. 2
79)	Volume 2, Section X, Part 1 Volume 2, Section X, Part 2	245 & 303	2.16.2	Demolition of Phase-I, existing Aeration Tank including other items which are necessary and construction of new Bio Reactor of required HRT to take care of nitrification and denitrification and to meet the new treated effluent standards. Rehabilitation & Up-gradation of existing aeration tank of Phase-II & Phase-III to meet the new treated effluent standard. (Part 2) Bioreactor with IFAS System for Phase II and III Indicative SWD of aeration tank for Ph II & III is 3.5 m and 3.8m respectively.	aeration tank depth to adjust the HRT. In that case we have to dismantle the	As per bid document.
80)	General			Second Pre-bid meeting	Considering the complexity and volume of the works we request you to arrange another pre-bid meeting after at least seven days of site visit so that bidders can understand the scope and complexity of the works and submit their bid accordingly.	Already held on 07-03-2017
81)	Volume 3, Section XII,	43		Compliance to Treated Wastewater Quality Parameters	Please confirm the following:- 1) Kindly provide the present treated sewage characteristics & the raw	1. Refer clause 1.6.1, Part-1, Volume-2 of bid document

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Part 1			Tender specifies outlet sewage characteristics to be meet as per the table mentioned in the Clause during the interim period.	 sewage characteristics, in order to assess the current treatment efficiency of the plant. 2) Please note that if the treated sewage during the interim period has to meet the discharge standard as mentioned in the table, the plant will have to be rehabilitated. During such condition with both the 10 MGD plant out of operation there will be excessive sewage which will have to be diverted for draining. 	-
82)	General			Drawing of existing structures	Please provide GA drawings of all the existing structures along with the major interconnecting piping in the plant.	No GA drawings of the existing units are available. Bidders to get required details from site
83)	Volume 2 Section X Part 2	281		"It has been observed that the head available at secondary clarification unit is not sufficient to include tertiary filtration system so that effluent flows by gravity to treated effluent channel. Therefore the suggested option is to adopt chemically enhanced clarification at secondary clarification system."	Achieving BOD= 10mg/l and TSS =10mg/l is not possible by adopting chemically enhanced secondary clarification. Disc Filter may be added to meet guaranteed treated sewage parameter.	Refer Sl. no. 6 of C&A no. 2
84)	Volume 2 Section X Part 2	330	2.40	Pilot Plant "The bidder is required to supply, install & commission a pilot treatment plant of 100 m3/day capacity with the same technology as is proposed for he main WWTPs being rehabilitated under this project within 2 months from the date of work order/LOI to study the suitability of treatment process (liquid stream), including of dosing of different chemicals, to achieve guaranteed effluent parametersHowever, it is clarified that no charges whatsoever, shall be paid extra by the Employer for any changes in the design made based on this pilot study."	Please confirm the no of pilot plant study to be done.	For each type of technology one pilot plant has to be supplied.
85)	Volume 2 Section X Part 3 Volume 2 Section X Part 2	344 & 282	3.2.3 & 2.5	Design Conditions for Completely / Partly Underground Liquid Retaining Structures General Design Requirements "Structures shall be designed for uplift in empty conditions with the water table indicated by the Contractor's own investigation or approved by Engineer prior to design, whichever is maximum. No	We understand that new Structures can be designed for uplift. Designing of already existing structures for uplift is not under the scope of bidder. Please confirm.	As per Bid document

Page **10** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				reduction Factor for the uplift forces shall be considered. All structures, whether liquid-holding or not, shall be designed such that they can be fully and completely drained and will not float or move when empty, because of groundwater buoyancy or any other reason. The structures shall be designed to counteract any possible floatation without the use of any type of groundwater pressure relief valves."		
86)	Volume 2 Section X Part 2	283		"All piping routed under any type of structure or equipment shall be fully and completely encased in cement concrete, with the encasement thickness beyond the outer diameter of the pipe being at least 200 mm on all sides. The encasement shall extend along the pipe length for a minimum horizontal distance of 1500 mm in each direction beyond the footprint of the overlying structure or equipment."	It will be difficult to do encasement for the already existing underground pipes. Hence we request you to delete this requirement.	As per Bid document
87)	General				Please provide underground pipe routing, cabling layout so that demolition and rehabilitation work can be done properly.	Not Available. Bidder to verify from site
88)	Volume 2 Section X Part 3	373	3.5	Rehabilitation Work"NDT report(s) are available in the office of the EE(C) DR IX for general information and guidance.The bidder can collect the copy of the same in CD in PDF format from the office of the EE(C) DR IX.The contractor will go through the available NDT report and submit alternative schemes/strategies for rehabilitation along with calculations to show structural sufficiency of strength and durability for various parts of different structures."	Please provide the NDT report.	Refer sl. no. 11 of C&A no. 2
89)	Volume 2 Section X Part 2	309	2.18.2	Existing Secondary Clarifier for Phase-III (10 MGD) WWTP "Electrically operated sluice valves shall be provided at each clarifier sludge out-let line with constant	Knife Gate Valves may be used instead of Sluice valve in all Sludge lines. Please confirm.	As per bid document

Page **11** of **56**

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				bleeding arrangement"		
90)	Volume 2 Section X Part 2	309	2.18.2	Existing Secondary Clarifier for Phase-III (10 MGD) WWTP	Please provide the GA drawings for all units alongwith equipment details for the existing plant.	No GA drawings of the existing units are available. Bidders to get required details from site
				"Replacement / Installation of Manually operated isolation gate at the out-let channel of Secondary Clarifier as per system requirement."		
91)	Volume 2 Section X Part 2	309	2.18.2	Existing Secondary Clarifier for Phase-III (10 MGD) WWTP	Please provide the piping drawings for the existing plant.	No piping drawings are available. Bidders to get required details from site
				"Replacement / Installation of all pipe line, valves & fittings etc. at the out-let channel of Secondary		
Bidder -	4			Clarifier as per system requirement."		
92)	Volume 1 Part B Section III A		Clause no 3, 4 sub clause no 4.2 (a)	experience in the role of prime contractor for Design, Construction, Testing & Commissioning of the conventional activated sludge process In : At least 1 (One) Wastewater Treatment Plant (WWTP) of 120 MLD OR At least 2 (Two) Waste Water Treatment plant (WWTP) of 80 MLD each OR	The Bidder should have successful experience in the role of prime contractor for Design, Construction, Testing & Commissioning of the conventional activated sludge process In : At least 1 (One) Wastewater Treatment Plant (WWTP) of 120 MLD OR At least 2 (Two) Waste Water Treatment plant (WWTP) of 80 MLD each OR At least 3 (Three) Waste Water Treatment plant (WWTP) of 60 MLD each The above projects should have been commissioned in last Ten (10) years as on date of submission of Bids. In the column of "Compliance Requirement" in case of Joint Venture or Association sub titled "Each Partner", we request you to change as "N/A". Please refer to the Expression of interest invited for Rithala & Kondli project together where the PQ called under this clause in case of Joint Venture or Association was :- "ALL PARTNERS COMBINED MUST MEET REQUIREMENT"& the Compliance requirement of Each Partner was "N/A" (viz not required) We wish to make a humble request to restore & keep the PQ same as was invited in EOI "ALL PARTNERS COMBINED MUST MEET REQUIREMENT. We also request you to delete "Each Partner Should have built at least one WWTP of 60 MLD" from the tendered PQ.	As per bid document

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					We have purchased the Tender documents keeping in mind the PQ invited in the EOI.	
93)	Volume 1 Part B Section III A		Clause no 3, 4 sub clause no 4.2 (e)	The Bidder should have experience in role of prime contractor for Design, Construction, Erection and successful Commissioning of at least one Waste Water Treatment plant (WWTP) of 60 MLD capacity based on conventional activated sludge process with High Rate Anaerobic Digesters & Gas Holders" The above projects should have been commissioned in last Ten (10) years as on date of submission of Bid.	To be replaced with: The Bidder should have experience in role of prime contractor for Design, Construction, Erection and successful Commissioning of at least one Waste Water Treatment plant (WWTP) of 60 MLD capacity based on conventional activated sludge process with High Rate Anaerobic Digesters & Gas Holders " The above projects should have been commissioned in last Ten (10) years as on date of submission of Bid. Please refer to the Expression of interest invited for Rithala & Kondli project together where this clause for Power Generation was not the part of PQ. The PQ in EOI called for WWTP experience based on conventional activated sludge process with High Rate Digesters and Gas Holders. We wish to make a humble request to restore & keep the same PQ as was invited in EOI as we have purchased the Tender documents keeping the PQ invited in the EOI.	As per bid document
<u>3idder - 4</u> 94)	Volume 1	104	4.2 (a)	4.2(a) Specific Experience :- The Bidder should have successful experience in role of prime contractor for Design, Construction, Testing & Commissioning of the <i>conventional activated sludge process</i> with sludge digestion and mechanical dewatering in: At least 1 (One) Wastewater Treatment Plant (WWTP) of 120 MLD OR At least 2 (Two) Waste Water Treatment plant (WWTP) of 80 MLD each OR At least 3 (Three) Waste Water Treatment plant (WWTP) of 60 MLD each The above projects should have been commissioned in last 10 years as on date of submission of Bids.	Kindly accept construction experience of <i>SBR type</i> STPs in addition to Conventional ASP; since the treatment processes of both type STP are very much similar. Moreover STP constructed on SBR Technology has delivered treated effluent parameter BOD < 10 mg/l, TSS < 10 mg/l which are better than conventional ASP Process.	As per bid document
95)	Volume 1	105	4.2 (C)	 4.2(c) Specific Experience The Bidder should have experience of in role of prime contractor for Rehabilitation or Up 	It is requested to accept experience of Rehabilitation or up gradation for 2 Nos. of WWTP each of 40 MLD capacity or one WWTP of 50 MLD Capacity. Please confirm	As per bid document

Page **13** of **56**

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				 gradation of clarifiers or aeration unit or digesters or gas holders for at least one Wastewater Treatment Plant (WWTP) of 60 MLD or above capacity. The above projects should have been commissioned in last 10 years as on date of submission of Bid. 		
96)	Volume 1	105	4.2 (e)	 4.2(e) Specific Experience The Bidder should have experience of in role of prime contractor for Design, Construction, Erection and successful Commissioning of at least one Waste Water Treatment plant (WWTP) based on conventional activated sludge process with minimum 0.5 MW/0.65MVA power generation from biogas produced at the plant using only biogas engines. The above projects should have been commissioned in last 10 years as on date of submission of Bid. 	It requested to accept experience of design, constricting, erection, and successful commissioning of at least <i>two</i> WWTP based <i>any technology</i> with minimum <i>125 KVA</i> capacity power generation from biogas produced at the plant using biogas engines. Please accept.	As per bid document
97)	Volume 1	105	4.2 (f)	 4.2(f) Specific Experience The Bidder should have done Operation & Maintenance for at least 1 year in the last 10 years of one Waste Water Treatment plant (WWTP) of minimum 60 MLD capacity based On conventional activated sludge process. The above projects should have been commissioned in last 10 years as on date of submission of Bid. 		As per bid document
98)	Volume 1	107	4.2 (g)	 4.2(g) Specific Experience The Bidder should have experience in the role of prime contractor for Design, Construction, Testing & Commissioning of a minimum 60 MLD capacity Waste Water Treatment Plant (WWTP) based on aerobic growth process having Sludge Digestion and Mechanical Dewatering. The above projects should have been commissioned in last Ten (10) years as on 	Kindly accept <i>SBR type</i> STPs in addition to Conventional ASP; since the treatment processes of both type STP are very much same for experience of sludge watering. Please accept.	As per bid document

Page **14** of **56**

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				date of submission of Bid. The Bidder is required to submit the authenticated end-user certificate for successful completion & commissioning of the project as stipulated in the form 4.2 f.		
99)	Volume 1	61	4.19	Sub-Clause 4.19 Electricity, Water and Gas:- The cost of electricity / power supplies shall also be borne by the Contractor during <i>Trial</i> <i>Run and Commissioning</i> period, and also in case the period of Trial Run exceeds beyond 6-month period.	As contractor have to carry out O & M of Plant during construction period for which power will be supplied free of cost by employer. Construction of Plant is Phase wise without disturbing treatment of inflow Hence trial run will be part of treatment of inflow. Hence We request cost of electricity /power shall be borne by employer.	As per bid document
100)	Volume 2 Section X Part 9	740		Part 9 :- List of Approved Makes :- Mechanical Equipment	There are better makes / vendor / manufacturers are available in the market than specified in the 'Approved Vendor list' for few of the equipments. Kindly confirm bidder can procure the same upon appropriate presentation to client, since bidder has to operate and maintain the facilities for 10 years.	As per bid document
101)	General			Buildings constructed under contract	The buildings i.e. Administrative building, work shop etc. constructed under contract will be allowed for use of contractor during O & M period without any extra cost. Please confirm	Can be used by the Contractor
102)	General			Site office / Contractors office provided during execution of contract	We request site office / contractor's office provided during construction will used during O & M period without demolishing the same	
103)				Date of submission	Kindly extend date of submission by 3-4 weeks after receipt of prebid reply.	No Change
Bidder - 104)	Volume 1 Section III B	101	3.1	Financial Performance Submission of audited balance sheets or if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the last three (3) years to demonstrate the current soundness of the Bidder's financial position and its prospective long term profitability. As the minimum requirement, Bidder's net worth calculated as the difference between total assets and total liabilities should be positive.	As per our understanding of the Clause, the Bidder's Net Worth should be positive for the last financial year preceding the bid due date, as applicable in Bidder's country of origin i.e. from April to March (as in case of India) or January to December (as in case of European Companies). Kindly confirm?	As per bid document
105)	Volume 1 Section III	107	4.2 (g)	 Experience Notes: 1. The experience of the bidder in a project executed in JV, shall be considered only if the firm has completed the work as a Lead partner / Prime contractor with maximum 	It may kindly be noted that, as per tender criteria of various other government departments; the Lead Partner of a Joint Venture is not necessarily required to have maximum share in the JV and the partners in a JV are allowed to select the most suitable party as Lead Member irrespective of whether that Party has maximum share in the project or not. As a matter of fact, this has been a practice in past projects of DJB as well and procurement guidelines allow the same.	As per bid document

Page **15** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				share in the JV in that particular project. However, in case of JV with 50:50 share, both the partners will qualify for full experience.	We therefore, request you to kindly amend this criteria and allow Lead Partner to claim full experience irrespective of whether it had maximum share or not in the project.	
106)	General			Credentials of Parent Company / 100% Owned Subsidiary	We request you to kindly allow a Bidder to claim Technical and Financial Credentials of its Parent Company (where Bidder is a 100% owned subsidiary of a Parent Company) or its 100% owned subsidiary company.	As per bid document
107)	Volume 1 Section II	36	21.1, 21.2 & 21.7	Bid Security	We request you to kindly allow submission of Bid Security in the form of Demand Draft / Pay Order / FDR in addition to the Bank Guarantee	As per bid document
Bidder -	7		1			
108)	Volume 1 Section I	4	Sub clause 2.3	Source of funds "Loan Agreement will cover only part of the project cost. As for the remaining portion, the Borrower will take appropriate measures for finance."	Please indicate the Funding structure of Project by JICA for Design and Build and O&M.	As per bid document
109)	Volume 1 Section II	36	ITB 21.1, 21.2 & 21.7	Bid Data Sheet	We understand that in case of Joint Venture (not being legally incorporated at the time of bidding) the lead partner in its own name can submit the Bid Security in the form of Bank Guarantee on behalf of the Joint Venture.	As per bid document
					Kindly confirm our understanding.	
110)	Volume 1 Section I	6	4	Eligible Bidders Joint Venture (No. of Partners)	Kindly specify the maximum number of Partners in a Joint Venture for this bid.	As per bid document
111)	Volume 1 Section I	6	4	Eligible Bidders Joint Venture	Is there a minimum stipulated percentage stake requirement by JV partners in Joint Venture? OR The bidder is free to choose the percentage stake of partners in JV. Kindly clarify the same.	As per bid document
112)	Volume 1 Part B Section III A	101	3.1	Financial Situation 3.1 Financial Performance Three Financial years	Kindly confirm our understanding that last three Financial years specified in the said clause shall be reckoned from 31 st March 2016.	Yes
113)	Volume 1 Part B Section III A	101	3.2	Financial Situation 3.2 Average Annual Construction Turnover Annual Construction Turnover	As per the general practice adopted in tenders invited by leading municipalities of India the turnover of previous years is given a weightage of 10% per year. We request DJB to kindly incorporate the same for this tender as well. Kindly confirm.	As per bid document
114)	Volume 1 Part B Section III A	104	4.2 (a)	Experience 4.2 (a) Specific Experience	Referring to the bids invited earlier for "Rehabilitation and Up-gradation of 182 MLD Phase-I WWTP at Rithala under YAP (III)" via REFERENCE ID NO. BID-YAP-(III) (R2/2016-17), wherein bidder was required to have successful experience for Design, Construction, Testing & Commissioning of the STPs with capacity as under:	As per bid document

Page **16** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

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S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					 1 (One) Wastewater Treatment Plant (WWTP) of 100 MLD OR 2 (Two) Waste Water Treatment plant (WWTP) of 70 MLD each OR 3 (Three) Waste Water Treatment plant (WWTP) of 50 MLD each Thus, in view of competitive bidding and inviting maximum participation of bidders we request DJB to kindly amend the requirement of the said clause as above. Kindly confirm. 	
115)	Volume 1 Part B Section III A	105	4.2 (e)	Experience 4.2 (e) Specific Experience	The referred clause limits the participation among the firms having only rehabilitation and up gradation experience. Further, please note that the construction of new units involve more complex engineering and execution methods. Thus, in view to invite maximum participation of competitive bidders we request DJB to kindly allow the participation of bidder having "experience in the role of prime contractor for construction of clarifiers or aeration unit and digesters or gas holders for at least one Wastewater Treatment Plant (WWTP) of 50 MLD or above capacity".	As per bid document
116)	Volume 1 Part B Section III A	105	4.2 (c)	Experience 4.2 (c) Specific Experience Experience (Power Generation)	Generating power through bio-gas engine in a waste water treatment plant based on Conventional Activated Sludge process is the most critical and important feature during operation and it would be unjustified to restrict the power generation experience to BIOGAS ENGINES only. Also there are several WWTP's across the globe wherein entire Biogas produced in the plant is being utilized to generate power using cogeneration system & gas engines which can also run on alternative fuels/dual fuels/ blended fuels other than biogas. Thus we request you to kindly amend the referred condition as under: "The Bidder should have experience in the role of prime contractor for Design, Construction, Erection and successful Commissioning of at least one Waste Water Treatment plant (WWTP) based on conventional activated sludge process with minimum 0.5 MW/0.65MVA power generation by utilizing entire biogas through biogas engine / dual fuel engine/ cogeneration system"	As per bid document
117)	Volume 1 Part B Section III A	106	4.2 (g)	Experience 4.2 (g) Specific Experience	Sludge digestion and mechanical dewatering are two different components of a Sewage Treatment Plant and experience of both the components together in one plant will restrict the participation of the qualified bidders. Thus in view of the above we request DJB to kindly allow the Sludge Digestion and Mechanical Dewatering experience to be met by bidder individually with two different Waste Water Treatment Plant (WWTP) based on aerobic growth process plants having minimum capacity of 50 MLD each. Kindly confirm.	As per bid document
118)	Volume 1	107	4.2 (g)	Experience	Kindly clarify whether Work Orders or Experience Certificates issued in	As per bid document.

WTPs) with effluent standards of BOD -10

Page **17** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

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S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Part B Section III A		Note	Note	"Hindi" are required to be submitted along with their "English translation" done by the authorized/approved translator.	
				All experience certificates with English translation should be done by the authorized/approved translator		
119)	Volume 1 Part A Section II	36	16.1 (b)	Bid Data Sheet Defect Liability period	As specified in the clause, Defect liability period of 1 year is included in 10 years O&M period, However as per Financial Proposal "Volume – 3, Section : XII" Page no. 758 the total O&M contract is described for 11 years i.e. 1 years DLP + 10 Years O&M. Kindly clarify the DLP & O&M Period for the project.	This is one year DLP followed by 10 year O&M
120)	Volume 1 Part A Section VIII	53	14.2	Contract Data Appendix to Technical Proposal	Kindly confirm that Mobilization advance @ 10% of Accepted Works Contract Amount is available to bidder in single instalment.	As per bid document
				FIDIC Book 14.2 Ten (10%), Percentage of the Accepted Works Contract Amount payable in the Currencies and proportions in which the Accepted Contract Amount in each category are payable.	Kindly confirm that the mobilization advance available for this project is interest free.	Refer to relevant clause of General Conditions (GC)
121)	Volume 1 Part A Section VIII	53	14.2	Contract Data Appendix to Technical Proposal FIDIC Book 14.2 25% of the Interim payment Certificate amount each during Section A.	is requested to kindly amend the same with the clause adopted by DJB for the bids invited earlier for "Rehabilitation and Up-gradation of 182 MLD Phase-I WWTP at Rithala under YAP (III)" via REFERENCE ID NO. BID-YAP-(III) (R2/2016-17) as under:	
122)	Volume 1 Part A Section VIII	53	14.3	Contract Data Appendix to Technical Proposal FIDIC Book	the end of 5th month from the date of start of work". The timeline for refund of retention money "@ 10% of interim payment certificate of Works Contract Amount" is not provided in the tender document. Kindly provide the same.	Refer relevant clause under "Particular Condition Part B Specific Provisions"
123)	Volume 1 Part A Section VIII	53	14.19	 14.3 Percentage of Retention Contract Data Appendix to Technical Proposal FIDIC Book 14.19 Amount of Maintenance Retention Fund @ 10% of accepted contract amount 	"Maintenance Retention Fund" elaborated in FIDIC Gold Book Clause No. 14.19 states that "Maintenance Retention Fund shall be created by deducting five percent (5%) from the value of each interim payment, determined by the Employer's Representative commencing with the first payment following the issue of the Commissioning Certificate, and continuing until the last Interim Payment Certificate is issued or until the amount in the Maintenance Retention Fund has reached the value (if any) stated in the Contract Data, whichever is the earlier. If the Contractor so chooses, the Maintenance Retention Fund may be replaced by a Maintenance Retention Guarantee in a	As per bid document

Page **18** of **56**

<u>Reply to Pre-bid Queries</u>

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					form and with an entity approved by the Employer. However, the value of the Guarantee shall not exceed the maximum amount of the Maintenance Retention Fund stated in the Contract Data"	
					In view of the above it is requested to kindly amend the Amount of Maintenance Retention Fund to 5 % of the Accepted Contract amount.	
124)	Volume 1 Part A Section VIII	53		Maintenance Retention Fund	We understand that Maintenance Retention Fund can be replaced by a Maintenance Retention Guarantee to be refunded back to contractor at the end of O&M contract. Kindly confirm.	As per bid document
125)	Volume 1 Part A Section VIII Part B	73	Sub Clause 13.9	Taxation	We understand that DJB will provide "Form C" for all items mentioned in Employer's Central Sales Tax Registration.	Refer relevant clause under Part - 1 of Volume-2
126)				Variation in Taxes	Our understanding that there would be provision in contract for any changes in taxation law in future. Kindly Confirm.	As per bid document
127)				Payment of Contractor's Bills	Payment against RA bills shall be realized within 28 days of the submission of bills with all supporting documents. Kindly confirm.	As per bid document
128)	Volume 3 Section XI	782		O&M Cost Price Schedule: A5 : Summary of Operation & Maintenance for 11 years	Kindly reconfirm our understanding that cost of O&M for 1st Year of O&M not be less than 5 % of Cost of Work Contract. However bidder is free to quote rates in 2nd, 3rd till10th Year.	It is obvious that for subsequent years costs have to be more than the cost quoted for 1 st year
129)	Volume 1 Part B Section III A	97		This guaranteed power consumption shall be multiplied by the current rate of electricity charges of Rs. 7.30 per KWh and shall be added to the overall operation and maintenance cost provided by the bidder;		
130)	Volume 2 Section III C	131		The net guaranteed power consumption shall be multiplied by the current rate of electricity charges of Rs. 7.20 per KWh and shall be added to the overall operation and maintenance cost provided by the bidder;	Kindly clarify the Rate of electrical energy to be considered for the O&M period?	Refer sl. no. 12 & 13 of C&A no. 2
131)	Volume 3 Section XI	784		For evaluation purpose the unit rate of electrical energy for the O&M period shall be considered as Rs. 6.3 (Six Rupees and Thirty Paise only) per KWH.		
132)				Cost of Diesel	We understand that during O&M period in case of power failure the cost of Diesel for operating DG set shall be borne by Delhi jal Board only. Kindly confirm.	As per bid document
133)	Volume 2 Part 8	701	8.2.1	Output and Operational Guarantees (3) Treated Sludge Disposal	As per Clause 8.2.1: Output and Operational Guarantees, Point No. 3 Treated Sludge Disposal, Page 701 of tender document it is mentioned that "The sludge generated from the WWTP shall be disposed of by the contractor to a proper landfill site, or other sites as directed by the Employer. The digested Excess Sludge disposal shall be identified by the bidder." We request the department to kindly provide distance of landfill site for sludge disposal.	As per bid document
134)	Volume 2	302		Bioreactor with MLE Technology for Phase I	We suggest to the department to include Aspirator as an alternative proposal	Aspirating type aerators can be

Page **19** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Part 2			WWTP D Process Air Blower	for Aeration system. Aspirators are advanced type aeration system, which will cut the civil cost due to elimination of civil access walkway for Diffusers and blower rooms. Kindly Confirm.	provided in the suspended growth aeration zone, but cannot be allowed in the IFAS zone. Refer Annexure-1.for specifications
135)	Volume 2	386	3.5.19	Demolition	As per Clause 3.5.19: Demolition, Page 386 of tender document it is mentioned that "Safe and proper disposal of demolished and or emptied materials shall be the responsibility of the contractor and it shall be done in an environment friendly manner. In this the norm/practice of the plant may be followed, as directed/approved by the Engineer." We request the department to kindly provide distance of disposal site for disposal of demolished and or emptied materials.	As per bid document
136)	Volume 2	243		Brief Scope of Work Interim Operation of the existing & partly rehabilitated WWTP during construction & rehabilitation period	As per NIT Phase I and Phase III Plants are Not Operational kindly confirm whether there is any incoming sewage in plants, If Yes please confirm the total quantity of sewage to be diverted to phase II during construction & rehabilitation period. Also please suggest disposal of exceeded sewage flow, in case total diverted flow from phase I and phase III excessed the total sewage treatment capacity of phase II.	As per bid document
137)	Volume 4			Drawings	For the ease of work please provide drawings in AutoCAD format.	As per bid document
138)	Volume 2	332		Treated Effluent Tanker Filling Station	In Clause 2.43.3 on page no. 332 Treated Effluent Tanker Filling Station Please provide the capacity of Tanker filling Sump.	As per bidders design subject to approval of the Engineer
139)	Volume 2			Layout ,dimensions and Quantity of civil unit	Kindly confirm bidder has to follow provided layout and dimensions of civil unit or bidder can change/modify dimensions, location and quantity as per the design requirement. Kindly Confirm.	Layout for Indication only
Bidder -	8					
140)	Volume-1, General Construction Experience	104	4.2 (a)	The applicant should have successful experience of Design, Construction, Testing & Commissioning of the conventional activated sludge process in: a. At least 1 (One) Wastewater Treatment Plant (WWTP) of 120 MLD OR b. At least 2 (Two) Waste Water Treatment plant (WWTP) of 80 MLD each OR c. At least 3 (Three) Waste Water Treatment plant (WWTP) of 60 MLD each The above projects should have been commissioned in last 10 years as on date of submission of bids.	We would like to suggest to change the qualification criteria as: All party should combine and meet the criteria moreover, each party should have construction experience of WWTP not necessarily the work is completed.	As per bid document

WTPs) with effluent standards of BOD -10

Page **20** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				Each partner should have experience of WWTP of at least 60MLD.		
141)	Volume 1 Part B Section III A	106	4.2 (f)	The Bidder should have done Operation & Maintenance for at least 1 year in the last Ten (10) years of one Waste Water Treatment plant (WWTP) of minimum 60 MLD capacity based on conventional activated sludge process. The above projects should have been constructed / rehabilitated by the bidder and commissioned in last Ten (10) years as on date of submission of Bid. Consortium as a whole	thus, the Criteria is requested to be amended as:	As per bid document
Bidder -	9					
142)	Volume 1 Part B Section III A	101	3.3	3 Financial Situation Financial Resources	Kindly specify if the self-declaration regarding financial resources will suffice or bidders are expected to produce the credentials from its financial institutions / banks.	Bidders are required to submit the credentials from its financial institutions / banks
143)	Volume 1 Section III A	104 to 107	4	4 Experience Authenticated end user Certificates for successful completion & commissioning of the projects.	Please confirm if Indian notary Attestation would be sufficient for the Enduser certificates issued outside India by Foreign Clients / End users.Kindly note that as per standard DJB bidding eligibility criteria & in some other JICA funded tenders, Indian embassy attestation is required for the certificates issued by foreign clients / end users.	As per bid document.
144)	Volume 1 Part A Section II	35	11.2 (h)	 BDS ITB The Bidder shall submit with its technical bid :- Duly completed schedules in section-IV; bidding forms & required qualification information as requested in Vol 1 of bid document JV agreement Statement of bidder 	These information has already been asked in Envelope 1 –"Initial Filter (PQ)". Is it again required to be submitted in Envelope-2 – "Technical proposal" Please clarify, if it is to be enclosed in both the envelops.	Technical schedules are to be submitted in Envelope-2 and remaining schedules are to be submitted in Envelope-1
145)	Volume 1 Part A Section I	13	15.1	Instructions to Bidders Documents establishing the eligibility and qualification of bidder	Please advise in which Envelope will the information of Section-III, Evaluation & Qualification criteria & Information of Section –IV, Bidding forms to be submitted. It is not clear in the clause.	Technical schedules are to be submitted in Envelope-2 and remaining schedules are to be submitted in Envelope-1
146)	Volume 1 Part A Section I	15 & 104- 107	17.5, 4.1 & 4.2	Technical Proposal, Subcontractors	It seems that both clauses are at variance. The first clause, permit the bidder to meet the qualification through its specialist sub-contractors, while the 2nd clause doesn't mention anything about qualification through sub-contractors.	Refer to clause 17.4 of ITB, page 15, Volume-1 and clause ITB 17.2, page 36, Volume-1.
	Volume 1			Eligibility and qualification criteria	Please clarify.	

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

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S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Part B Section III A			Experience		
147)	Volume 1 Part A Section II	36	20.3 (a)	BDS ITB Bid prices adjustment	Bid prices will be adjusted, if there is a substantial delay beyond the control of employer. Please clarify the duration / number of days which will be termed as substantial delay.	As per bid document
148)	Volume 1 Part B Section III A	106	4.2 (f)	Experience 1 year O&M including DLP experience is required	The proposed projects calls for a long term $O\&M$ of $3+1+10 = 14$ years. We propose that, $O\&M$ experience of bidders should at-least be equal to DJB standard bidding eligibility criteria of at-least 3 years.	As per bid document
149)	Volume 2 Section X Part 1	243	1.7	Brief Scope of Work	Considering the phasing required by the tender documents certain activities cannot be done in parallel hence to execute the complete work, minimum 48 months should be the required for section-A of contract. Please confirm.	As per bid document
150)	Volume 2 Section X Part 1		1.7 sub clause iv	Construction, Rehabilitation and up-gradation of existing WWTP shall interalia include	As observed during site visit condition of primary clarifiers of stream I was too bad to repair hence and it will be better to construct new structures instead of doing any rehabilitation work for these.	As per bid document
151)	Volume 2 Section X Part 1	243	1.7 sub clause 6	Brief Scope of Work , Demolition of Structures of Existing WWTP	As per this clause "If the area/space of such existing structure is proposed to be utilized for construction of new structure, then demolition of the same shall be carried out up to the foundation level" To know the correct level and quantity of demolition please provide as built drawings of structures or allow the bidder to quote on item rate basis instead of LS as indicated in price schedule 3. Further Schedule 3 should ask for cost of demolition upto foundation level and not 1 m from Ground level as in most of case new structures are to be made on same location.	As built drawings of structures are not available. For these structures Bidder has to quote on LS basis only
152)	Volume 2		<mark>6</mark>	Topographic Drawing	Please provide AutoCAD Drawings for Plant site for proper working of bidders.	Cannot be made available
153)	Volume 2 Section X Part 2 & Part 3	334 & 348	2.43.5 & 3.3	Toilet Particular civil requirements	In section X part 3: Civil Specification XXXVI : "All control rooms and pump houses shall be provided with toilet of minimum size of 2m X 3m. " Whereas in Part 2: Plant & Process Requirement, full table is provided for requirement of toilets in each buildings. As per process requirement we are following clause 2.43.5 and table. Kindly Confirm.	Confirmed
Bidder -	10		L			
154)	Volume 1 Part A Sec. VIII Part A	53	14.7 (b)	Minimum Amount of Interim Payment Certificate	We request you to kindly remove this clause of minimum amount for Interim Payment Certificate (3% of Accepted Contract Price) in order to have better cash flow	As per bid document
155)	Volume 1 Part A Sec. VIII Part A	53	14.2	Advance Payment	We understand that Mobilization advance @ 10% of accepted Works Contract shall be interest free. Recovery rate of 25% from each RA Bills seem to be on higher side, which	Refer clause 14.2 of GCC
					will affect the cash flow of Contractor. We request you to commence the	As per bid document

Replies to Pre Bid Queries

Page **22** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					recovery after 20% works completion and complete the recovery before 80% of works completion on Pro-rata basis	
156)	Volume 1 Part A Section VIII Part A	53	14.19	Amount of Maintenance Retention Fund	It is mentioned as 10% of Accepted Contract Amount. Please clarify it will be deducted 10% of Running bills. Also confirm the limitation of Retention is 5%	As per bid document
157)	Volume 1 Part A Sec. VIII Part B	70	13.8	Adjustment in Changes in Cost	We understand that the bidder needs to submit the weightages of various components of materials for both Civil and E&M works separately including for imported items, if any.	As per bid document
158)	Volume 1 Part A Sec. VIII Part B	70	13.8	Price Adjustment formula for O&M	 We understand that the Price Adjustment formula and weightages provided for Labour & Material is only for Design & Build period. However, weightages for O&M will be different from Design & Build period. Hence, we request you to provide the formula and weightage for O&M separately. Alternatively, Bidder shall be allowed to propose the formula and weightage. Please confirm. 	As per bid document
159)	Volume 1 Part A Sec. VIII Part B	73	13.9	Taxation	Since this project is JICA funded, please confirm any exemption is available under Custom and Excise Duty for this project Please confirm that Form-C will be issued for imported Equipment that is to be incorporated in permanent works & hence Output VAT will not be applicable for such imported items	As per bid document Refer Clause 1.36, Page 275, Part-1, Volume-2 of bid document
160)	Volume 1 Part A Sec. VIII Part B	74	13.9	Taxation	It is mentioned that Service Tax (if applicable) shall be reimbursed and shall not be included in the Tender cost. We understand that the above clause will be applicable for both Works Contract (Design & Build duration) and Operation & Maintenance duration also	As per bid document
161)	Volume 2 Section X Part 1	275 & 276	1.36	"C" Form	We presume that, client will provide "C" form the gas generation related items also like Heat Exchangers, Boilers and Scrubbers etc. Kindly Confirm.	Refer Clause 1.36, Page 275, Part-1, Volume-2 of bid document
162)	Volume 1 Part A Sec. VIII Part B	61	4.19	Electricity during Interim O&M	We understand that during Interim O&M of 36 months for both phase-1 & Phase-2, electricity will be in Employer's scope. Please confirm	As per bid document
163)	General			General – Treatment process	During second pre bid meeting, we understood that, the proposed process scheme in the tender document for Phase I, II & III is indicative only, bidder can choose any scheme aerobic technology / process which will fit into the existing area. Aerobic process will be as per Metcalf & Eddy or CPHEEO Manual. Kindly confirm.	Refer Cl. No. 6 of C&A no. 2
164)	General			General – sludge Disposal during interim operation	As per the second pre bid meeting discussions, we understood that, sludge during interim operation shall be disposed to the existing sludge drying beds by using the existing facilities. Kindly confirm	Confirmed
165)	General			General – sludge Disposal during DLP &	As per the second pre bid meeting discussions, we understood that during	As per bid document

Page **23** of **56**

Reply to	Pre-bid	<u>Queries</u>
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S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				Operation & Maintenance	Operation and Maintenance period, land / location for sludge disposal to be identified by Contractor and Environmental compliances required for sludge disposal also is in contractor scope. But we request that to make all bidders at par and for evaluation purpose, we request you to please provide minimum sludge disposal distance during Operation & Maintenance.	
166)	Volume 2 Section X Part 1	268	1.25.4	Refuse Dispose	We request you to please provide the land for refuse (after demolition of civil structure & Electro Mechanical instrumentation equipment) and also the disposal distance from STP site.	As per bid document
167)	Volume 2 Section X Part 1	245	1.7 & 2 Point no vii	Demolition of Secondary clarifiers of Phase I, II & III	AS per this clause, we understood that, Secondary clarifiers of Phase I, II & III are to be demolished. But as per site visit, we observed that, instead of destructing the structure, with strengthening we can retain the structures. Kindly confirm.	-
168)	Volume 2 Section X Part 2	330	2.40	Pilot Plant	As per this clause, Contractor has to supply, install & commission Pilot Treatment Plant of 100 KLD cap. with same technology as proposed in Main Plant within 2 months from the date of Work order and study the suitability of Treatment process for at least one year but based on the results observed during first 3 months to decide any changes if required to be done in Main Plant	As per bid document
					However, duration of 2 months for Design, Procurement, installation & Commissioning of pilot plant is too short and will take at least 6 months. After that we need to study & observe the plant for treatment process for 3 months. But, by this time, most of the rehabilitation works for phase-1 would be completed and hence it would be difficult to make any changes / modification in the Rehabilitated Plant after that.	
					However, as you are very well aware that achieving of Guaranteed outlet parameters are at the risk of the Bidder and Bidder will choose the suitable Treatment process to ensure to meet the guaranteed outlet parameters. Hence, we request you to relax this clause.	
169)	Volume 3 Section XIII			Condition-D	As per this clause, there seem to be double penalty/damages for both excess power consumption than guaranteed as well as less power generation than guaranteed. However, we presume that the damages will be applicable on Net excess Power Consumption only i.e., Actual Power Consumed less (Total Power consumption Guaranteed - Total Power generated). Please confirm	As per bid document
170)	Volume 1 Part B & Volume 3	97	1.2 & Price schedule B1	Price Schedule	In Clause 1.2 electrical energy for O&M period considered as Rs. 7.3 per kWH and in clause Price Schedule B1 it is mentioned as Rs. 6.3 per kWH. Which is contradicting	
171)	Volume 2 Section X Part 1	244	1.7 & 2.ii)	Rehabilitation and Modification/ reconstruction	Please clarify which one is correct.We assume that existing inlet chamber no.2 has to be rehabilitated & modified to distribute the flow to all 4 phases.Please provide the dimension of existing inlet chamber 2 and the TWL.	Bidders to get required details from site as already made clear in pre-bid meeting

Page **24** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
172)	Volume 2 Section X Part 1	244	1.7 & 2.ii)	Inlet chamber	As per NIT, Inlet chamber no.2 shall be designed for all 4 phases. So we understand that the rising main of phase I inlet chamber no.1 also has to be diverted to inlet chamber no. 2. Please confirm.	Confirmed
					If so please provide the diameter of rising main in order to increase the width of inlet chamber for accommodating the rising main.	Bidders to get required details from site
173)	Volume 2 Section X Part 1	245	1.7 & 2.xi	Outfall channel	As per mentioned clause the disposal channel which is common for phase II & III is sufficient to carry the flow of all 3 phases (100 MGD – Peak flow). Please confirm whether the same channel can be used for phase I, II and III.	As per bid document
174)	Volume 2 Section X Part 1	240	1.4 b	Existing Status	As per mentioned clause, digesters and gas holders in Phase II are in working condition but required regular maintenance. Please clarify whether electromechanical replacement is required for these working units.	As per bid document.
175)	Volume 2 Section X Part 1			Rehabilitation scope		As per bid document.
176)	Volume 2 Section X Part 2	323	2.32	Biogas Holder	We assume that, the Phase II biogas holder has to be rehabilitated and to be combined for phase II and III capacity. Please provide the type of biogas holder in phase II.	Self Weight Moving drum type but Bidders to verify from site
177)	Volume 2 Section X Part 2	303	2.16.2 & 2.18.1	SVI	As per clause 2.16.2: Bioreactor with IFAS technology and in Cl. 2.18.1: secondary clarifier, it is mentioned that minimum SVI as 140. But lower the SVI value, settling efficiency is better. We understand this shall be read as maximum SVI is 140.	As per bid document.
178)	Volume 2 Section X Part 1	307	2.18	Secondary Clarifier	As per the clause, Clariflocculator is recommended for mixing and floc formation. In all other clauses, secondary clarifier is envisaged. In clariflocculators, at higher solid loading rate with MLSS concentration of 4000 mg/l will affect the performance. For higher loadings conventional clarifier is only better. We assume that bidder is free to choose the type of clarifier to achieve the desired effluent quality. Please confirm. As per CPHEEO manual (Part A, Pg- 5-218), can we consider HYDROPLUME instead of Clariflocculator. Please confirm.	Refer sl. No. 6 of C&A no. 2
179)	Volume 2 Section X Part 2	307	2.18	Secondary Clarifier	As per mentioned clause alum and polymer dosing shall be done at upstream of secondary clarifier for TSS and Phosphorus removal. Please clarify whether bidder can consider only alum for both TSS and phosphorus removal?	Bidder to provide his proposal with his choice of chemical addition / scheme for complying with the performance guarantee. The process given in the bid document is Suggestive.
180)	Volume 2 Section X Part 1	244	1.7	Interim Operation	We assume during interim operation, the sludge generated from primary and secondary clarifier shall be disposed without dewatering to the existing SDBs through temporary piping arrangement. Please confirm.	Confirmed
181)	Volume 2 Section X Part 1	279 & 298	2.3 & 2.16	Bioreactor for Phase I STP	As per Cl. 2.16., Existing Bioreactor for Phase I has to be demolished and new Bioreactor shall be constructed. But in Cl.2.3, list of structures to be demolished, Bioreactor is not mentioned. Please clarify the same.	Refer sl. No. 14 of C&A no. 2

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries
182)	Volume 2 Section X Part 2	293	2.9	Layout: YAP-III/K3/P/GAD/003(T) Screen channel for Phase II & III	In the mentioned clause, No. of screen channels common for phase mentioned is $5(3W+2S)$. But in the layout, quantity is mentioned as 3 We understand that 5 nos. of coarse and 5 nos. fine screens shall be pro Please confirm.
183)	Volume 2 Section X Part 1	301	2.16.1	Fouling factor	In specifications for aeration requirements, fouling factor of 0.7 mem which is lower and it will increase the capacity of blowers. We require change the same to 0.8 which is normally followed.
184)	Volume 2 Section X Part 1	301	2.16.1	Safety factor	In Aeration requirements for bioreactor, safety factor of 20% is ment which leads to more power consumption than requirement. Please clarif
185)	Volume 2 Section X Part 2 & Volume 2 Section IV	277 & 237	2.2.1 & Part IV D	Inlet BOD	As per inlet characteristics of sewage, design value of BOD mention 250. But in Part IV D, functional guarantees of plant, power consum guarantee based on nominal design loads, BOD is mentioned as 22: understand this shall be 250 instead of 225. Please confirm.
186)	Volume 2 Section X Part 2	281	2.4	New Headwork's (Inlet chamber, screen, grit chamber)	As per Cl. 2.4, separate preliminary treatments (inlet, screen and chamber) to be provided for phase I and combined for phase II and III. For easy operation and maintenance of all three phases, shall we provided for phase I, II and Please clarify.
187)	Volume 2			General	 Please provide the GA drawings of the following units which has used/modified. Primary Clarifier – Phase I, II and III Raw Sludge and Pump House - Phase I, II and III Aeration Tank – Phase II and III Secondary Clarifier – Phase III Return Sludge Sump and Pump House – Phase II & III Anaerobic Digester - Phase II Gas Holder – Phase II
188)	Volume 2 Section X Part 1	243	1.7 Point no 1	Anaerobic digester	 As per the clause, Phase II plant presently working and treating about MLD of wastewater with functional digesters. Please provide the quantity of sludge being anaerobically digested and be generated presently. Also please provide the quantity of sludge being disposed after deway
189)	Volume 2 Section X Part 2 & Volume 4	279	2.3	Demolition of Existing Facilities	from Phase II. As per mentioned clause, in Phase I, 2 Nos of digester and 2 Nos of holders to be demolished. As per drawing YAP-III/K3/C/SURVEY/002 Nos of digesters and 1 No of gas holder shown in the existing layout. As per layout (Phase I), we assume that 3 Nos of digester and 1 No of holder to be demolished. Please confirm.

	Reply
I & II 3 nos. ovided.	Yes, Confirmed
ntioned uest to	As per bid document
ntioned fy	As per bid document
ned as mption 25. We	Refer sl. No. 15 of C&A no. 2
nd grit	As per bid document
orovide nd III.	
to be	No GA drawings of the referred units are available. Bidders to get required details from site
out 70	Refer sl. No. 16 of C&A no. 2
biogas	Bidder to verify from site
atering	
of gas 02(T) 3	Refer sl. No. 17 of C&A no. 2
of gas	

Page **26** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

<u>Reply to Pre-bid Queries</u>

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
190)	Volume 2 Section X Part 2	279	2.32	Biogas Holder	As per mentioned clause, 1 No of existing gas holder to be demolished and 2 Nos of new gas holder to be constructed for Phase I. Please confirm whether membrane type gas holder shall be considered for the proposed 2 Nos of new gas holder.	As per bid document
191)	Volume 3 Section XI	760		(Financial Proposal) Price Schedule A2 Breakup of cost of different units/ItemsAs per Price Schedule A2, For Phase I, Bypass channel at Distribution chamber of Primary Clarifier and Distribution chamber of bioreactor has to be rehabilitated. As per drawing No YAP-III/K3/P/GAD/003(T). 600 mm dia pipe shown as bypass.We assume that existing bypass system is done through 600 mm dia pipe which has to be rehabilitated. Please confirm.		Refer sl. No. 18 of C&A no. 2 Referred drawing may be treated amended accordingly
192)	Volume 2 Section X Part 2	304	2.16.2	IFAS Tank-media fill	We request you to leave the media fill in IFAS tank must be based on the calculation requirement and surface area of media.	As per Bid Document
193)	Volume 2 Section X Part 2	304	2.16.2	IFAS Tank-media specification	The range for the effective surface area of media shall be increase on higher side in order to better and effective design.	As per Bid Document
194)	Volume 2 Section X Part 2	300	2.16.1	General-free board(bioreactor)	As per standard practice min. freed board should be 0.5 m.	As per Bid Document
195)	Volume 2 Section X Part 2	330	2.4.0	Pilot Plant	We request you to consider the past experience of the bidder or technology provider to be consider for project execution instead of supply, install & commissioning of 100 KLD pilot plant for one year.	As per bid document
196)	Volume 2 Section X Part 2	330	2.4.0	Pilot Plant	We understand that MOC /mobility of pilot plant as per contractor only. Also supply of electricity & sewage to pilot plant is in client scope.	As per bid document
197)	Volume 2 Section X Part 2	312	2.22	Chlorination Contact Tank	Minimum HRT given 30 minimum. We request to change as given below: HRT (min)—20 minutes (peak) HRT (min)—30 minutes (average)	As per Bid Document
198)	Volume 2 Section X Part 2	312	2.22	Chlorination system	We understand that bidder can propose UV system in place of Chlorination system.	As per bid document
199)	Volume 2 Section X Part 2	327	2.37	Centrifuge –solid concentration in cake	We request you to change the range of solid cake concentration as 22-25% as most of the centrifuge manufacturer provide equipment with this specification.	As per Bid document
200)	Volume 2 Section X Part 2	306	2.16.2	Type of Blower	Please clarify can bidder propose twin lobe/tri lobe blowers also. Also please provide the information for Noise level limits at Duty Point in dB(A) at 1.86 m.	As per bid document
201)	Volume 4		2 to 6	Furnishing Auto-CAD drawings	We request you to furnish the AutoCAD copies of all the drgs. furnished along with the NIT. This helps us to understand the clear distances available between units & plan for placement of nearby units.	AuotCAD drawings cannot be made available.
202)	General - pile			Information on existing structures with pile	Please confirm us if there are any existing structures within the existing	As Built drawings are not

Page **27** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

Reply to	Pre-bid	<u>Queries</u>
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S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	foundation			foundations	WWTPs (phase 1, 2 & 3) with pile foundation. If yes, please furnish the dia. & depth of pile below ground level. This will be helpful for structures which have to be dismantled completely.	available
203)	Volume 2	342	3.2.1	NDT Reports	First line of paragraph 4 in the listed clause states "The contractor may refer to the available soil investigations, topographical survey and NDT reports"	Refer sl. No. 19 of C&A no. 2
					In line with this, we request to furnish the available NDT reports of WWTP structures (in phase 1, 2 & 3) in order to evaluate the structural stability of tanks/buildings to be retained. Also please clarify, what has to be done in case a structure is found unsound	
					as per the reports but is suggested in NIT to be used for rehabilitation.	
204)	Volume 2	343	3.2.2 (i), (viii)	Weight of sand (filter media)	In the aforesaid clause, weight of sand is specified to be 26kN/cum. which seems unlikely. Request you to reconfirm on the same or provide the revised load to be considered.	Refer sl. No. 20 of C&A no. 2
205)	Volume 2	344	3.2.3 (vi)	Design Water table level	In the listed clause, it states "Structures shall be designed for uplift in empty conditions with the water table indicated by the Contractor's own investigation or approved by Engineer prior to design, whichever is maximum."	As per bid document
					But we observe that water table is not met even at a depth of 15m from NGL in all the boreholes (BH-1 to BH-10) furnished in soil report, Volume 4, clause 4.2(e).	
					With these points in perspective, request you to furnish the 'design ground water table level' to be considered for structural design of partially or completely underground liquid retaining structures.	
206)	General			Furnishing as built drawings	Request you to furnish as built drawings (of existing WWTP structures at site) in order to carry out a detailed estimate for demolition works.	As built drawings of structures are not available. Bidders are to get required details from site
207)	General – Boundary wall			Scope for boundary wall	Since it is a rehabilitation job within an existing STP plot, we presume that existing boundary wall is sufficient for the plant. Kindly clarify.	As per bid document
					If it is required additionally, kindly specify the scope, extent, height above FGL & Material of construction details for the same.	
208)	Volume 2 Section X Part 5	502	cl 5.3.1.1	Technical specification of Power Transformers	Technical parameters of the transformer indicates, percentage impedance voltage shall be as per IEC/BIS.	As per bid Document
					Kindly note that as per IEC60076-5, page.13, Cl. 3.2.2.4, Table 2, for example 2500kVA transformer rating the percentage impedance voltage is 6% but whereas as per BIS 1180 latest amendment, the percentage impedance voltage is 6.25%.	
					So, kindly confirm the standard to be complied by bidder.	
209)	Volume 2	502	cl 5.3.1.1	Technical specification of Power	As per subjected clause, transformer shall be oil type and of indoor	As per bid Document

Replies to Pre Bid Queries

WTPs) with effluent standards of BOD -10

Page **28** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Section X Part 5			Transformers	installation.	
					Since the transformer is ONAN type, we propose outdoor installation of transformer with suitable fence and gate arrangement. Kindly confirm.	
210)	Volume 2 Section X Part 5	463 & 658	cl 5.3.14	Silent Type DG Set with AMF Panel	As per subjected clause, "The contractor shall provide the required nos. of DG sets of suitable capacity to cater auxiliary loads of gas engines and Bio gas power plant auxiliary loads for starting of bio gas engines"	As per bid Document
					We presume that DG set needs to be designed only for auxiliary loads of Gas engine and Bio gas power plant only. STP loads need not be taken into consideration for arriving at DG set rating.	
					Kindly confirm.	
211)	Volume 2 Section X	395 &	cl 5.2.10	Dismantling of Cable Trays	As per the subjected clause, "Dismantle all the rusted, outdoor cable trays at all the various units of Phase I, II & III in the plant."	Outdoor as well as Indoor Cable Trays need to be dismantled.
	Part 5	658			The above clause details only about outdoor cable trays. Kindly confirm whether indoor cable trays in substation/switchgear room & other process buildings need to be dismantled.	
212)	Volume 2 Section X Part 5	469 & 658	cl 5.3.18 Pt 11	Specific specification – Substation building	As per subjected clause' "Vendors have to check the adequacy of the existing substation buildings at Substation-I,II & III and to carry out the necessary modification/renovation"	Substation layouts for Phase I, II & III are not available. Bidders are to get required details from site.
					Kindly provide the substation layouts for Phase I, II & III and the associated room dimensions for arriving at the adequacy of existing substation buildings.	
213)	Volume 2 Section X Part 5	577	cl 5.3.25.1	Cable Laying	As per subjected clause, "RCC cable trenches of adequate size shall be used for cable laying between Electric substation and various LT panels located at different location of the plant. Cable shall be laid on trays inside the cable trenches"	Refer sl. No. 21 of C&A no. 2
					We presume that, for indoor installations, cables shall be laid in trenches on cable trays and for outdoor installations, cables shall be laid directly buried in cable trenches. Kindly confirm.	
214)	General			General	Irrespective of motor kW rating, the nominal operating voltage of the motors shall be 415V AC 50Hz. Kindly confirm	As per bid Document
215)	Volume 2	332	2.43.2	Firefighting	Please mention, which code/standard shall be followed for Fire fighting system	All related codes
216)	Volume 2 Section X Part 2	245	1.7/2 (x)	Treated effluent Outfall Disposal	 Provide the L-Section of following Treated effluent Outfall Disposal Line inclusive of Ground Level, Pipe Slope, Invert Level, Manhole Interval etc., 1. 1400 mm Diameter RCC line 2. RCC Channel of width 2.75 m X Height 2.3 m 	L-Sections are not available. Bidders are to get required details from site.
217)	Volume 2 Section X Part 1	245	1.7/2 (xi)	Treated effluent Outfall Disposal	Provide the High Flood Level (HFL) of Shahdara Outfall Drain	Refer HFD drawing provided in Volume-4 of bid document but Bidders to verify from site.
218)	Volume 2	245	1.7/2 (x &	Treated effluent Outfall Disposal	We understood that the treated effluent outfall location is same for 1400 dia	Yes, but Bidders to verify from

Replies to Pre Bid Queries

Page **29** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Section X Part 1		xi)		RCC Pipe and RCC Channel (i.e Yamuna River & Shahdara Outfall Drain).	site.
					We understood that distance of above mentioned outfall locations from WWTP site are same (i.e Approx. length is 3150 m). Please confirm	
219)	Volume 2 Section X Part 1	239	1.2	Project Background	 Provide the following details of terminal Pumping Station (6 Nos of TPS) which discharge waste water to inlet chamber 1. Pump Details of TPS (number of pump, discharge of each pump & Pump Head) 2. Pumping Main L-Section Details (Diameter, Material, Invert Level, length of Pumping Main etc.,) 	Bidders to get required details from site
220)	Volume 2			General ICA scope	We presume that complete ICA equipment for all three phases shall be newly procured and installed.	Yes
221)	Volume 2			General BOQ item	We presume that there is no BOQ item involved in this Tender. It's completely new systems, equipment's, instruments and automation systems to be considered for all the three phases. Kindly confirm.	As per bid Document
222)	Volume 2	586	6.5.1	4-20 mA	Kindly accept that all field instruments or transmitters equipment's output shall be of 4-20 mA instead of wireless type as indicated in the Tender.	As per bid Document
223)	Volume 2	633	6.12.7.6	UPS	Kindly confirm that UPS battery backup shall be considered for 60 minutes, Tender calls for 120 minutes, which is very high and cost inclusive.	As per bid Document
224)	Volume 2	604	6.7.3.5	Gas Flow meter	Kindly confirm that Gas flow meter is Inline ultrasonic type flow meter (Factory fitted sensors).	As per bid Document
225)	Volume 2			General	Kindly confirm that multichannel analysers can be considered in the scope.	As per bid Document
226)	Volume 2	613	6.8	Analyzers SPD	Surge protection Device's shall be provided to protect only analogue signals. Kindly confirm.	As per bid Document
227)	Volume 2	643	6.13.5.1	CPU	We understand that only CPU is redundant, not the IO modules – Please confirm	As per bid Document
228)	Volume 2	644	6.13.7	System architecture	We understand that single redundant PLC system shall be provided at central control room. RIO's shall be deployed at site (Phase-1, Phase-II and Phase-III) and further connected via FO cable (12C) to central control room. Kindly confirm	Confirmed.
229)	Volume 2			Hazardous area	All the instruments, transmitters shall be located intrinsically safe area only but the instruments coming under hazardous area only shall be certified that operations for hazardous. Kindly confirm.	Confirmed.
230)	Volume 2	586	6.5.1	Field Instruments	We understood that the field instruments and analytical instruments indicated in the table only to be considered. Kindly confirm.	Instruments indicated are minimum, however any additional instrument if required as per process requirement, shall have to be provided.
231)	Volume 2	752	Part 9	Vendor list	Vendor list for instrumentation cables and other ancillary items like CCTV, EPABX have not provided. Kindly provide for consideration.	Refer Sl. no.22 of C&A no. 2
232)	Volume 4	12	Drawing	System architecture	Kindly inform that where is this central control room located? System architecture indicates that it is located in 25 MGD.	It is in Laboratory cum SCADA Room.

Page **30** of **56**

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
233)	Volume 2	644	6.13.8	SCADA system	It is understood that main SCADA system and SCADA server are redundant. Kindly confirm.	As per bid Document
234)	Volume 2	644	6.14.1	Data acquisition	It is indicated as "PLC is to be located at each location of Plant" but we understood that RIO's shall be deployed at site and PLC (Redundant) will be there at centre control room as common PLC for all three phases (phase I, II and III).Kindly confirm.	As per bid Document
idder - 🛛	11					
235)				 Notes: 1. The experience of the bidder in a project executed in JV, shall be considered only if the firm has completed the work as Lead partner / Prime contractor with maximum share in the JV in that particular project. However, in case of JV with 50:50 share, both the partners will qualify for full experience. 	It may kindly be noted that, as per tender criteria of various other government departments; the Lead Partner of a Joint Venture is not necessarily required to have maximum share in the JV and the partners in a JV are allowed to select the most suitable party as Lead Member irrespective of whether that party has maximum share in the project or not. As a matter of fact, this has been a practice in past projects of DJB as well and procurement guidelines allow the same. We therefore, request you to kindly amend this criteria and allow Lead Partner to claim full experience irrespective of whether it had maximum	As per bid document
236)				Bid Security	share or not in the project. We request you to kindly allow submission of Bid Security in the form of	As per bid document
230)				Blu Security	Demand Draft / Pay Order / FDR in addition to the Bank Guarantee	As per bla document
Bidder 12	2					
237)	Volume 2 Section IV	236	D : Functional Guarantee of the plant	Total Power Consumption Note below the table states- The power required towards lighting of plants, campus and building etc. shall be indicated separately and this shall not be accounted for evaluation.	i) We understand that power consumed by ventilation as well as air conditioning shall also be indicated separately and shall not be accounted for evaluation. Please clarify.ii) Also, we understand that Net power calculation will be done excluding Lighting as well as ventilation power loads. Please clarify.	As per bid document
238)	Volume 2 Section IV	237	D : Functional Guarantee of the plant	Net Power Consumption Tender Clause states- The bidder shall guarantee the net electric power consumed based on the following nominal design Loads- BOD3 - 225 mg/l	We understand that this is a typo error. BOD3 shall be 250 mg/l as stated for plant design.	Refer Sl. No. 15 of C&A no. 2
239)	Volume 2 Section X Part 1	246	2.0, xix Construc- tion, Rehabilita- tion and up- gradation of existing WWTP	Intermediate Pumping Tender Clause states- Though suggested process details to achieve guaranteed effluent parameters are mentioned in Part -2, the process is open and bidders can adopt any proven ASP/modified ASP technology for achieving these guaranteed effluent parameters without any change in the basic structures already available in WWTPs	are very stringent. Achieving Such effluent parameter through Coagulation and polymer may be possible. BUT as biological system is very sensitive and depends primarily on bacterial contact with incoming Food (i.e. pollutants). Adding Polymer to clarifier, will ultimately return to Biological system via Return activated sludge and will hinder bacterial free movement. During Peak flow, The system will always be prone to be unstable due to low flash mixing and flocculation time. Also, Daily chemical consumption will be quite high.	Refer Sl. No. 6 of C&A no. 2

<u>Reply to Pre-bid Queries</u>

Replies to Pre Bid Queries

Page **31** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				and without any proposal of pumping for the effluent.	So, We request Client to allow tertiary filtration and intermediate pumping	•
240)	Volume 2 Section X Part 2	280 & 281	2.4, Sewage Treatment process	Tertiary Filtration systemTender Clause states-It has been observed that the head available at secondary clarification unit is not sufficient to include tertiary filtration system so that effluent flows by gravity to treated effluent channel. Therefore the suggested option is to adopt chemically enhanced clarification at secondary clarification system.However bidders are advised to verify the same and no claim on account of any variation of above shall be entertained.	 Please note that Effluent quality guarantee (TSS<10 mg/l & BOD<10 mg/l) are very stringent. Achieving Such effluent parameter through Coagulation and polymer may be possible. BUT as biological system is very sensitive and depends primarily on bacterial contact with incoming Food (i.e. pollutants). Adding Polymer to clarifier, will ultimately return to Biological system via Return activated sludge and will hinder bacterial free movement. During Peak flow, The system will always be prone to be unstable due to low flash mixing and flocculation time. Also, Daily chemical consumption will be quite high. So, We request Client to allow tertiary filtration and intermediate pumping 	Refer Sl. No. 6 of C&A no. 2
241)	Volume 2 Section X Part 2	279	2.3	List of Existing Units/Structure to be demolished	We understand that Demolition of Aeration tank (Phase-I) has been missed in the list. Please confirm.	Refer sl. No. 14 of C&A no. 2
242)	Volume 2 Section X Part 2	287	2.7, I. Phase-1 (10 MGD), E. Chlorine contact tank	Sewage treatment process layout and facilities description Chlorine Contact Tank - New Construction - 1 No.	We understand, Chlorine Contact Tank requirement is 1 No. and this requirement will supersede 2 Nos. requirements given under detailed description at clause No. 2.22 (Page 312). Please confirm.	Refer sl. No. 23 of C&A no. 2
243)	Volume 2 Section X Part 2	288	2.7, II. Phase-II (25 MGD), C. Secondary Clarifier	Sewage treatment facilities descriptionprocess layout and facilities descriptionSecondary clarifierNew Construction - 3 Nos.	We understand, Phase-II secondary clarifier requirement is 3 Nos. and this requirement will supersede 2 Nos. requirements given under detailed description at clause No. 2.18.1 (Page 308). Please confirm	Refer sl. No. 24 of C&A no. 2
244)	Volume 2 Section X Part 2	290	2.7, IV. Common units for phase-II & Phase-III, A. Head- works	Sewage treatment process layout and facilities description Grit Chamber - New Construction - 5 Nos.	We understand, Grit chamber requirement given is typo error. Actual requirement shall be 3 Nos. as given under detailed description at clause No. 2.10 (Page 293). Please confirm.	Refer sl. No. 25 of C&A no. 2
245)	Volume 2 Section X Part 2	290 & 291	2.7, IV. Common units for phase-II & Phase-III, A. Head works	Sewage treatment process layout and facilities description Common Flow measuring channel - New Construction - 1 No.	We understand, Flow measuring channel requirement given is typo error. Actual requirement shall be 1 No. For each phase i.e. Phase-II and Phase-III as given under detailed description at clause No. 2.11 (Page 295). Please confirm	Refer sl. No. 26 of C&A no. 2
246)	Volume 2 Section X	291	2.7, IV. Common	Sewage treatment process layout and facilities description Chlorine Contact Tank -	We understand, Chlorine Contact Tank requirement is 1 No. and this requirement will supersede 4 Nos. requirements given under detailed	Refer sl. No. 27 of C&A no. 2

Page **32** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Part 2		units for phase-II & Phase-III, B. Chlorine contact tank	New Construction - 1 No.	description at clause No. 2.22 (Page 312). Please confirm	
247)	Volume 2 Section X Part 2	304	2.16.2, C. IFAS TANK (Tank with Media)	% of Media fill in IFAS tank	We understand that Media fill details 30% min is quite high. Fill ratio should be based on the technology supplier design guidelines and proven media fill %. We request you to relook into this minimum capping of 30%.	As per bid document
248)	Volume 2 Section X Part 2	304	2.16.2, C. IFAS TANK	Media Specification Specific Surface Area - 600-800 m2/m3 Media MOC - HDPE Density of Media - less than 1.0 but no less than 0.94	The media specification provided limits the competition and favors only few IFAS media suppliers. Specific surface area - This should be increased to 1500 m2/m3. Higher surface area per m3 is good for design and attached biological growth. Media MOC - MOC should be HDPE/PP/PE/PET Further normally a HDPE media will be expected to destroy silicon membrane diffusers over time (3-5 years) Density of Media - It should be less than 1.0 as per vendor design.	As per bid document
249)	Volume 2 Section X Part 2	318	2.30	Anaerobic Digester Tender Clause states- The Existing Phase-II digesters shall be used for the combined sludge from Phase-II and Phase-III.	We understand that design specification provided of Anaerobic Digester are applicable for New Constructed digester of Phase-I (Volume-2, Section: X, Part-2, Clause no. 2.30, page 318). Phase-II digesters are to be operated AS IT IS basis. Existing Mixing arrangement shall be utilized and no heating arrangement to be provided as it will need Modification in existing digester structure and make it prone to leakages.	As per bid document
250)	Volume 2 Section X Part 2	330	2.40	Pilot PlantTender Clause states-The bidder is required to supply, install & commission a pilot treatment plant of 100 m3/day capacity with the same technology as is proposed for the main WWTPs being rehabilitated under this project within 2 months from the date of work order/LOI to study the suitability of treatment process (liquid stream), including of dosing of different chemicals, to achieve guaranteed effluent parameters. The study shall be carried out by the bidder for at least one year but based on the results observed during first 3 months study of pilot plant, the changes required, if any, shall be made in the	 Please Confirm. This being a rehabilitation project of Phase-1, II & III and as described in Tender specification, Different process schemes may be opted by bidder for all the three phases depending on optimization. We have following queries-i) In that scenario, Do the bidder need to supply 3 pilot plant based on each phase process scheme? ii) Which process units are to be included in the pilot plant? iii) What will be the MOC of the Pilot Plant? 	 i) For each type of technology pilot plant has to be supplied. ii) As being proposed by bidders for main plant. iii) Tankage shall be SS316 and other equipment as per specifications of bid document.

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				design of main WWTPs being rehabilitated under this project so that the guaranteed effluent parameters may be achieved		
251)	Volume 2 Section X Part 2	318	2.30, Anaerobic Digesters	Digester supernatant Tender Clause states- On Para 6, Page 318, Tender states that "anaerobic digesters shall have facility for gas mixing and hydraulic pumped mixing and contents inside the digesters shall be continuously kept under homogeneous mixed conditions through these mixing systems."	 Please clarify the following: 1. Phase-I Plant anaerobic digesters will be newly constructed. Do bidders have to consider hydraulic pumped mixing in addition to gas mixing? 2. Since we have to use existing 5 nos. of digesters for Phase-II & III Plants, do we have to make gas mixing system for these digesters? 3. Do bidders required to install digester heating system for Phase-II & III Plant digesters? 	As per bid document.
252)	Volume 2 Section X Part 2	320	2.30, Anaerobic Digesters	Digester supernatant Tender Clause states- On Para 3, Page 320, Tender states that "The digester shall work as constant level tanks whenever fresh sludge is added equal quantity of supernatant shall over flow."	Please note that being a mesophilic complete mix anaerobic digester, all the sludge inside digester shall be under homogenous mixed condition via gas mixing and hydraulic pumped mixing. So, In practical, No supernatant shall be generated. Please clarify your requirement.	As per bid document. Bidder can consider 'supernatant' to be equivalent to overflow of the digester contents so as to operate the digester at constant level.
253)	Volume 2 Section X Part 2	307	2.18, Secondary Clarifiers	Secondary clarifier inlet distribution weir gatesTender Clause states-"The flow to all clarifiers shall be regulated through electrically operated weir gates."	Please note that due to hydraulic level fixed at inlet (i.e. water level of Primary clarifiers) and at outlet (i.e. Water level at plant discharge), Flow distribution to Aeration tanks as well as secondary clarifiers via weir gates will not be feasible as it will attract more head loss compared to Sluice gates. Kindly advice if bidders can use gates instead of weir gates.	Bidder can use any suitable method that will achieve equa flow distribution among the operational / in-service units.
254)	Volume 2 Section X Part 2	284	2.6, third bullet point	Tender Clause States- All weirs in the plant including variable height weirs on weir gates, shall remain un- flooded / un-submerged, with a minimum 75 mm free fall from the weir invert to the downstream water surface level under the following conditions occurring simultaneously:	Please note that we are already constrained by the fixed Inlet and Outlet Water levels, asking bidders to maintain the 75 mm free fall and unsubmerged gates will be impossible when current plants are designed with no weirs for flow distribution.	Note that the hydraulic profile given in the bid is only for reference, and bidder should make his own assessment of the levels. Bidder can propose a method that will ensure equal flow distribution among all working / in-service units.
				a. Max./High Flood level in the receiving water body/structureb. Operating flow equal to design average flowc. One unit of each unit process out of service		
255)	Volume 2 Section X Part 4	408	4.2.7, para (f)	MOC of diffuser and air piping Tender Clause states- "Diffuser Membrane - Silicone with laser drilled holes."	Please note that as IFAS process is also an optional process suggested by client to opt, Normally a HDPE media will be expected to destroy a silicon membrane over time (3-5 years) so we request you to allow us to use EPDM/ PTFE membrane diffuser as per suitability of selected process.	As per bid document
256)	Volume 2 Section X	409	4.2.7.1, para (xxi)	Tender Clause states- "The aeration system shall be removable	We understand this is typo error as Client has specified to use Non-Retrievable type diffusers under clause 2.16.1, para. ©, page 301. Please	Refer Sl. No. 28 of C&A no. 2

Page **34** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

Reply to	Pre-bid	<u>Queries</u>

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Part 4			without needing to drain or partially drain the tanks. Contractors shall provide details of suitable lifting method to remove the banks of diffusers for maintenance."	confirm.	
257)	Volume 4 Drawing		YAP- III/K3/P/P H- II/HFD/00 4 (Sheet 2 of 3)&YAP- III/K3/P/P H- III/HFD/0 02 (T)	Hydraulic level of Primary Clarifiers	For Phase-II hydraulics, Hydraulic level of primary clarifier provided (i.e. 204.32m) is higher than the upstream units (i.e. PST distribution chamber 203.71m). For Phase-III hydraulics, Kindly Note that Hydraulic level of primary clarifier provided (i.e. 203.77m) is higher than the upstream units (i.e. PST distribution chamber 203.73m). Please review the same and confirm us an appropriate hydraulic design reference as Primary clarifier and aeration tanks are to be rehabilitated with current hydraulic levels. Also, Hydraulic levels for Phase-II and Phase-III primary clarifiers shall not vary this much.	The hydraulic flow diagram in the tender is for reference only. The bidder shall make his own assessment / measurements for preparing his bid.
258)	Volume 2 Section X Part 2	324	2.35, Second last Paragraph	Power Generation – In the second last paragraph of this clause, bidders are asked to construct provision of pipe line to transfer the biogas of phase-I, II, & III WWTP to power generation building of Phase-IV Plant and Vice versa i.e. Transfer of biogas from gas holder of phase-IV plant to power generation building of phase-I, II & III Plant.	 As per contractual guarantees of Phase-IV plant O&M Operator, will he allow us to transfer the biogas generated in phase-IV for power generation in Phase-I, II & III Plants. Do we have to install new biogas blowers at Phase-IV Plant for transferring the biogas to phase-I, II & III Plant power generation building? Please note that since geographically Phase-IV WWTP is located very far from the proposed location of Phase-I, II & III Plant Power generation building, maintaining pressure balance in either of power generation plant will be very difficult. 	As per bid document
259)	Volume 2 Section X Part 1	239	1.1	The requirements specified in the Section-XI -Part-1 General & Particular Employers requirement here under, shall be in read in conjunction of addition requirements specified in	We assume that, there is a typographical error in Section and it shall be Section-X -Part-1 General & Particular Employers requirement Please confirm.	Refer Sl. No. 29 of C&A no. 2
260)	Volume 2 Section X Part 1	239	1.2 Project Backgroun d	1 I	Kindly confirm the individual pumping line size as well as the material of construction of the same pipe	Bidders to get the details from site as already made clear in Pre-bid meeting
261)	Volume 2 Section X Part 1	245	2. (vi)	i. From distribution chamber u/s of Primary Clarifier to individual clarifier.	Kindly confirm the individual line size and material construction of the pipe	Bidders to get the details from site as already made clear in Pre-bid meeting
262)	Volume 2 Section X Part 1	245	2. (vi)	ii. From Primary Clarifiers to the sump of Raw Sludge pump house.	Kindly confirm the individual line size and material construction of the pipe	Bidders to get the details from site as already made clear in Pre-bid meeting
263)	Volume 2 Section X Part 1	245	2. (vi)	iii. From distribution chamber u/s of Final Clarifier to individual clarifier.	Kindly confirm the individual line size and material construction of the pipe	Bidders to get the details from site as already made clear in Pre-bid meeting
264)	Volume 2 Section X Part 1	245	2. (vi)	iv. From Final Clarifiers to the sump of Return Activated Sludge pump house.	Kindly confirm the individual line size and material construction of the pipe	Bidders to get the details from site as already made clear in Pre-bid meeting

<u>Reply to Pre-bid Queries</u>

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
265)	Volume 2 Section X Part 1	281	2.5	Bypasses shall be provided around all flow meters and other in-line instrumentation such that the instrument can be isolated and removed for calibration and maintenance without interrupting the flow, regardless of whether or not such bypasses are shown in any drawings included in the Tender Document	We assume that all Magnetic flow meters will be provided with 2 Nos. Isolation Valve and 1 No. Bypass Valve. Please confirm.	Confirmed
266)	Volume 2 Section X Part 2	283	2.5	Appropriate restrained flexible connections and/or joints shall be provided for all pipes where they connect to any and all of the following:o Equipment such as pumps, blowers, or inline deviceso Valves	We assume that, the type of flexible connections / joints shall be as per Bidder's design. Please confirm.	As per bid document
267)	Volume 2 Section X Part 2	286	2.7, I, A, 1	Connecting channel from Inlet Chamber no 2 (common for Phase-I,II,III & IV) to Inlet chamber Phase-I	We Presume that Proper shut down period (time shall be discussed with DJB at the time of Contract) will be provided by client during the Connecting channel from Inlet Chamber no2 (common for Phase-I,II,III & IV) to Inlet chamber Phase-I	Total shut down shall not be permitted. Bidders have to make proper arrangement before hand
268)	Volume 2 Section X Part 2	318	2.30	The Dome structure shall be of Mild Steel with Cathodic protection arrangement	Kindly confirm. We assume that, we have to provide Cathodic Protection for New / Rehabilitate scope only and not for the existing Units. Please confirm.	As per bid document
269)	Volume 2 Section X Part 2	322	2.32	M.S. dome top and open bottom with Cathodic protection arrangement		As per bid document
270)	Volume 2 Section X Part 2	319	2.3	DI K9 gas line of min. 200 mm dia. with a pressure gauge on the top of digester shall be provided with gas tight/gas leak proof valves of standard make. It shall be connected		Refer Sl. No. 7 of C&A no. 2
271)	Volume 2 Section X Part 4	322	2.32	The gas holder shall also have, separate gas inlet and outlet piping, control valves, vacuum and pressure relief valves with flame arrestors. There shall be a DI pipeline header coming through digesters to feed gas holder tank.	As the clauses are contradicting with each other, we assume that, Bio-gas piping from Digester to Bio-gas holder shall be SS 316, 10S Pipe. Please confirm.	Refer Sl. No. 7 of C&A no. 2
272)	Volume 2 Section X Part 4	463	4.2.17.3	Bio Gas piping - SS 316		As per bid document
273)	Volume 2 Section X Part 4	465	4.2.17.7	Stainless Steel Pipes All gas pipes, fittings and other related components inside the digester shall be of stainless steel SS- 316.		As per bid document
274)	Volume 2 Section X Part 2	322	2.32	An equal number of MS channels shall also be required on the inner surface of the RCC walls over which the steel bell shall roll up	Normally, Gas Bell is designed with 200 mm WC. Kindly confirm.	As per bid document

Page **36** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				and down in the water filled RCC tank under gas pressure of 250 mm of water gauge.		
275)	Volume 2 Section X Part 2	324	2.35.1 Power Generation Building	The provision of pipe line should also be made to transfer the biogas of Phase-I,II & III WWTP to power generation building of Phase-IV plant and vice versa i.e., transfer of biogas from gas holder of Phase-IV plant to power generation building of Phase-I,II &III plant.	Kindly confirm the Bio-gas line size from Phase IV to Phase I,II.&III	The bidder shall propose his sizing for new / required facilities.
276)	Volume 2 Section X Part 2	327	2.37 B) XV	All piping of the Dosing System - Polypropylene.		As per bid document
277)	Volume 2 Section X Part 4	434	4.2.10.5	The polymer pipework shall be stainless steel and valves shall be PP ball valves.	All the clauses are contradicting with each other. We assume that, the Dosing pipeline shall be selected as per Table provided in Page No. 463 Please confirm.	Refer Sl. No. 30 of C&A no. 2
278)	Volume 2 Section X Part 4	463	4.2.17.3	Chemical Feed lines - PVC / PP / HDPE / SS		Refer Sl. No. 31 of C&A no. 2
279)	Volume 2 Section X Part 2	332	2.43.2	The contractor shall design and construct suitable fire-fighting system along with pump sets, fire hydrant shall be provided in the firefighting pump house	The location of Fire Hydrants are as per System Design. Please confirm.	Confirmed
280)	Volume 2 Section X Part 2	336	2.46.6 Potable Water Supply	Presently water is being supplied to existing office building complex through a Water tankers of DJB and the water pipe lines is passing near the road .A connection has to be taken by the contractor for drawing water supply to existing administrative block and other buildings shall include connection from Delhi Jal Board pipeline, supplying water to existing buildings.	Please confirm the coordinates for DJB water pipe line near the road	Bidder to get from site
281)	Volume 2 Section X Part 4	399	4.2.4 12.	Bridge : MS with Hot dip Galvanized (galvanizing minimum thickness shall be 80 micron)	Please note that, the Clarifier bridge is a fabricated steel structure and it is difficult to do HOT DIP Galvanizing due to size restriction of the bathing vessel.	Refer Sl. No. 9 of C&A no. 2
					We assume that, the Clarifier Bridge shall be Carbon steel With Epoxy Painting of 300 Microns. Please confirm.	
282)	Volume 2 Section X Part 2	404	4.2.6.3.1	Suitable Air Cooling System shall be provided to reduce the temperature of compressed Air from discharge of air blower before entering into the Aeration Tank.	We assume that, the type and location of Air cooler is as per Bidder's Design. Please confirm.	Confirmed
283)	Volume 2 Section X Part 4	408	4.2.7.1	Stainless steel (SS 316) Drop Legs. Stainless steel (SS 316) Air Distribution Header.	We assume that, Air header from Air Blower to Aeration tank shall be SS 316, Welded pipe, 10S (as per B36.19M) or as per Design Thickness. Please confirm.	Refer Sl. No. 5 of C&A no. 2
284)	Volume 2	464	4.2.17.3	Air (Pressurized Lines) Common Header		

Replies to Pre Bid Queries

Page **37** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Section X Part 4			pipeline from Air Blower to Aeration Tank - SS 316		
285)	Volume 2 Section X Part 4	464	4.2.17.3	Air (Pressurized Lines) Common Header pipeline from Air Blower to Aeration Tank - SS 316		
286)	Volume 2 Section X Part 4	411	4.2.7 1. C)	An on-line cleaning system shall be provided as an option to allow for cleaning of diffusers without taking aeration system off-line.	The arrangement of on-line cleaning system shall be as per Bidder's Design. Please confirm.	As per bid document
287)	Volume 2 Section X Part 4	418	4.2.8.7	Chlorine Gas (Vacuum Regulator to Ejectors): 80CPVC 700mbar Vacuum Gauges Chlorine Solution (Ejectors to Dosing Points):80CPVC 15kg/cm ² Pressure Gauges	We assume that, the pipe line shall be CPVC, Sch. 80. Please confirm.	Confirmed
288)	Volume 2 Section X Part 4	429	4.2.9.1	Bridge: MS with Hot dip Galvanized (galvanizing minimum thickness shall be 80 micron)	Please note that, the Clarifier bridge is a fabricated steel structure and it is difficult to do HOT DIP Galvanizing due to size restriction of the bathing vessel. We assume that, the Clarifier Bridge shall be Carbon steel With Epoxy Painting of 300 Microns. Please confirm.	Refer Sl. No. 10 of C&A no. 2
289)	Volume 2 Section X Part 4	469	4.2.18.4	Butterfly Valve:- Unless otherwise specified, valve body and disc shall be of close-grained grey cast iron. Valves shall be mounted with shafts horizontal.	Please note that, the type of Shaft either Horizontal or Vertical, is based on Manufacturer's Design. Please confirm.	As per bid document
290)	Volume 2 Section X Part 4	469	4.2.18.4	Butterfly Valve:- Valves of diameter 600 mm and above shall be provided with electric actuator.	We assume that, all the Butterfly Valves above 600 mm shall be provided with Electrical Actuator. Please confirm.	Refer Sl. No. 32 of C&A no. 2
291)	Volume 2 Section X Part 9	743	1.Mechna- nical Equip- ment.	List of Approved Makes:- 32.Sluice Gates : KBL / IVC/ Jash	As per our knowledge' KBL 'do not manufacture sluice gates so, we assume that we can use equivalent additional vendors and the same shall be highlighted in our offer. Please confirm.	As per bid document
292)	Volume 2 Section X Part 5	494	5.1.3	System Description and Scope: Single Line Diagram related to 11 kV distribution systems of all the three phases of the plant and concept Single Line Diagram for 415 V Switchgear are enclosed with this specification.	The mentioned SLD is not enclosed in the Contract. Please provide the same.	Refer to Volume-4 of bid document for SLD
293)	Volume 2 Section X Part 5	495	5.2.1	Scope of Work for Phase I, II & III (11 kV Switchgears) Supply, Installation, Testing and Commissioning of New 11 KV VCB Switchboard as per SLD dwg no-YAP- III/K3/E/SLD/001(T) to meet the requirements of Phase I, II & III in the existing substation building of Phase II as per	The mentioned SLD is not enclosed in the Contract. Please provide the same.	Refer to Volume-4 of bid document for SLD

Page **38** of **56**

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				specifications.		
294)	Volume 2 Section X Part 5	495	5.2.2	Scope of Work for Phase I, II & III (11 kV Please provide the routing of the HT Cables to be excavated and All XLPE Cables)- VIII Approximate length of the cable to be excavated and recovered-2000m be be excavated and recovered-2000m		Bidder to assess from site
295)	Volume 2 Section X Part 5	490	5.1.1	Power Supply Information	Please confirm the Incoming HT Supply details and requirement of DP structure/ metering panel, etc.	As per Bid Document
296)	Volume 2 Section X Part 5	490	5.1.1	Power Supply Information	We understand that the Incoming Power supply from the metering Room (which is in DJB's scope) to the Substation at Phase-II is Bidder's scope. Please confirm and provide the distance between the Metering Room and the Substation.	Bidder to assess from site Metering Room is a part of Substation at Phase-II
297)	Volume 2 Section X Part 5	490	5.1.1	Power Supply Information	We understand that the Metering panels (2 Nos) as per the drawing no- YAP-III/K3/E/SLD/005 (T) is not BSES' scope. Please confirm and provide the details and location of the Panels.	As per Bid Document
298)	Volume 2 Section X Part 5	501	5.2.17	Construction Power Supply: Contractor has to make his own arrangements for construction power supply from BSES authorities. However, upon request of the Bidder, if DJB or their representative agrees to provide the construction power supply then it is the responsibility of the Bidder to connect his equipment at the point of supply and pay the requisite charges / fees to the DJB or their representative as per the prevalent rates of BSES.	Please provide the length of the Incoming HT line from BSES to Plant Substation.	Bidder to assess from site
299)	Volume 2 Section X Part 5	510	5.3.1.11	Tests: Type test certificates shall be provided for verification. Whenever two nos. or more identical transformers are being offered, type tests on one of them shall be carried out, including heat run test.	We understand that there are no MV Motors used in the Plant and as such there will be no requirement of MV capacitors. Please confirm.	As per Bid Document
300)	Volume 2 Section X Part 5	531	5.3.4	Capacitors and APFC Panel MV capacitors shall be provided for connection across MV motor terminals while LV capacitors with APFC relay and a panel shall be provided for connection to LV switchboard bus, where specified.		Confirmed
301)	Volume 2 Section X Part 9	745	2	List of Approved vendors	Please confirm if the bidder can consider Vendors in addition to the specified Vendor's List.	As per Bid Document

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
302)				Voltage Levels (HV and LV Voltage Classification)	Please provide the HV and LV voltage ranges. Also clarify upto what kW rating can we consider a motor to be LT and HT respectively.	No HT Motors are required.
303)	Volume 2 Section X Part 5	494	5.1.3	System Description and Scope: Single Line Diagram related to 11 kV distribution systems of all the three phases of the plant and concept Single Line Diagram for 415 V Switchgear are enclosed with this specification.	The mentioned SLD is not enclosed in the Contract. Please provide the same.	Repetition of earlier query
304)	Volume 2 Section X Part 5	495	5.2.1	Scope of Work for Phase I, II & III (11 kV Switchgears) Supply, Installation, Testing and Commissioning of New 11 KV VCB Switchboard as per SLD dwg no-YAP- III/K3/E/SLD/001(T) to meet the requirements of Phase I, II & III in the existing substation building of Phase II as per specifications.	The mentioned SLD is not enclosed in the Contract. Please provide the same.	Repetition of earlier query
305)	Volume 2 Section X Part 5	495	5.2.2	Scope of Work for Phase I, II & III (11 kV All XLPE Cables)- VIII Approximate length of the cable to be excavated and recovered-2000m	Please provide the routing of the HT Cables to be excavated and recovered.	Repetition of earlier query
306)	Volume 2 Section X Part 5	490	5.1.1	Power Supply Information	Please confirm the Incoming HT Supply details and requirement of DP structure/ metering panel, etc.	Repetition of earlier query
307)	Volume 2 Section X Part 5	490	5.1.1	Power Supply Information	We understand that the Incoming Power supply from the metering Room (which is in DJB's scope) to the Substation at Phase-II is Bidder's scope. Please confirm and provide the distance between the Metering Room and the Substation.	Repetition of earlier query
308)	Volume 2 Section X Part 5	490	5.1.1	Power Supply Information	We understand that the Metering panels (2 Nos) as per the drawing no- YAP-III/K3/E/SLD/005 (T) is not BSES' scope. Please confirm and provide the details and location of the Panels.	Repetition of earlier query t.
309)	Volume 2 Section X Part 5	501	5.2.17	Construction Power Supply: Contractor has to make his own arrangements for construction power supply from BSES authorities. However, upon request of the Bidder, if DJB or their representative agrees to provide the construction power supply then it is the responsibility of the Bidder to connect his equipment at the point of supply and pay the requisite charges / fees to the DJB or their representative as per the prevalent rates of BSES.	Please provide the length of the Incoming HT line from BSES to Plant Substation.	Repetition of earlier query
310)	Volume 2	510	5.3.1.11	Tests:	We understand that there are no MV Motors used in the Plant and as such	Repetition of earlier query

Page **40** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Section X Part 5			Type test certificates shall be provided for verification. Whenever two nos. or more identical transformers are being offered, type tests on one of them shall be carried out, including heat run test.	there will be no requirement of MV capacitors. Please confirm.	
311)	Volume 2 Section X Part 5	531	5.3.4	Capacitors and APFC PanelMV capacitors shall be provided for connection across MV motor terminals while LV capacitors with APFC relay and a panel shall be provided for connection to LV switchboard bus, where specified.	Transformers and other Electrical equipment shall be type-tested. Type-test certificates for any identical equipment shall be furnished and these reports shall not be more than 5 years old. Please confirm.	Repetition of earlier query
312)	Volume 2 Section X Part 9	745	2	List of Approved vendors	Please confirm if the bidder can consider Vendors in addition to the specified Vendor's List.	Repetition of earlier query
313)				Voltage Levels (HV and LV Voltage Classification)	Please provide the HV and LV voltage ranges. Also clarify upto what kW rating can we consider a motor to be LT and HT respectively.	Repetition of earlier query
314)				Site Visit- Gas Engines	Please provide the location of the gas engines to be installed for the Phase-I, II & III of the Plant.	To be proposed by bidder at the time of designing
315)				Site Visit- Substation for Phase-I	Please clarify the purpose of the existing building near the room number 148 and 149 (YAP-III/K3/P/GAD/003(T)) which is shown as Store and workshop as per the Layout.	As per Bid Document
316)				Site Visit- Substation for Phase-I	We understand that the existing Substation housing the 11kV HT Panels, 11/.433 kV Transformers, 415V Lt Panels and the Capacitors bank will be used as workshop and a new Substation has to be built for the above mentioned equipment.	As per Bid Document
317)				Site Visit- Substation for Phase-I	We understand that the existing Substation housing the 11kV HT Panels, 11/.433 kV Transformers, 415V Lt Panels and the Capacitors bank will be used as workshop and a new Substation has to be built for the above mentioned equipment.	Repetition of earlier query
318)	Volume 2 Section X Part 2	295	2.11. Flow Measuring Channel (Area Velocity Flow Meter Type)	The wastewater from Grit Chambers shall flow to a common channel having facility for measuring flow with the Area Velocity Flow Measuring type Ultrasonic Flow Meter.		
319)	Volume 2 Section X Part 5	512	5.3.2.1 Circuit Breaker	Separate limit switches, each having a minimum of 2 'NO' + 2 'NC' contacts, shall be provided for both 'Service' and 'Test' positions of the circuit breakers for future SCADA.	Kindly clarify "Future SCADA" mentioned in the clause. We understand that 'future SCADA" is excluded from the scope of supply in this project.	Refer Sl. No. 33 of C&A no. 2
320)	Volume 2 Section X	544	5.3.8 VARIABL	All frequency dives shall be suitable for data connectivity with PLC/SCADA	Kindly clarify the protocol to be adopted for the communication interface between variable frequency drives and the PLC/SCADA system.	It is compatible to PLC.

Replies to Pre Bid Queries

Page **41** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries
	Part 5		E FREQUE NCY DRIVES (VFD) 5.3.8.1 General	system and shall have suitable for data connectivity with PLC/SCADA system and shall have communication port and protocol compatible to PLC.	
321)	Volume 2 Section X Part 2	290	2.7. Sewage Treatment Process Layout and Facilities Descriptio n	 V. Common Units for Phase-I, Phase – II & Phase-III 3. SCADA cum Laboratory (Common for all phases) No. of Units Existing / Proposed - 1 New Construction 	There seems to be a discrepancy in location of the Master Control Ro We understand that the Master Control Room will be located in the SCA cum Laboratory building . The OS-1 and OS-2+ENGG. And printers sh in the system architectural diagram will be located in the SCADA Laboratory building. Kindly confirm our understanding
322)	Volume 4		System Architectu ral Diagram	MASTER CONTROL ROOM IN SUBSTATION OF 25 MGD	
323)	Volume 2 Section X Part 6	579	Instrument ation Specificati ons 6.1 General	The plant data collected through online monitoring of water quality and flow shall be displayed locally where the instrument is installed and also transferred to the PLC / SCADA control room. The data shall also be made available via the internet to various various statutory bodies / locations.	Query 01: We understand that the data collected through online monitor water quality and flow - refers to the quality and flow parameters at H inlet and Plant outlet only. Kindly clarify Query 02: Kindly clarify the number and details of the various statu bodies/locations where the Data has to be made available via the internet
324)	Volume 2 Section X Part 6	586	6.5 Design Requireme nts for Control And Instrument ation Systems (C&I)	The installation arrangements for meters measuring conductivity, pH, and dissolved oxygen, chlorine residual and ionic	
325)	Volume 2 Section X Part 6	586	6.5.1 Instrument Design Criteria	As far as possible and depending upon the location and availability of wireless services (GPRS / GSM, etc.), all transmitting instruments and data loggers shall be of wireless type. In case of non-feasibility, the output of the transmitting instruments shall be 4-20 mA / 0-10V DC linear having two wire	 a) All instruments such as Pressure Transmitter , Level transmitter , I transmitters etc shall communicate to the Control center (i.e. control rot through hardwired 4 -20mA signal only . b) All pH Analyzer, Conductivity, DO Analyzer etc shall communicate to the communicate to the communicate to the communicate to the control center (i.e. control rot through hardwired 4 -20mA signal only .

WTPs) with effluent standards of BOD -10

	Reply
Room. CADA Shown Cum	Confirmed.
	Master control room is in SCADA cum Laboratory Building.
toring Plant	1. As per Bid Document
tutory et.	2. DJB Head Office.
ments eters , ns of ionic all be	Bidder understanding is correct however such arrangement is applicable for Lab equipment only.
Flow room)	a) Confirmed
ate to signal	b) Confirmed

Page **42** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

Reply to	Pre-bid	<u>Queries</u>

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
				system.	only.	l
					c) All special analyzer (BOD, COD, and TSS etc) shall communicate to the control center (i.e. control room) though hardwired 4 -20 mA signal only.	c) Confirmed
					d) The control system if required shall have GPRS facility to communicate with third party system	d) Confirmed
326)	Volume 2 Section X Part 6	587	6.5.1 Instrument Design Criteria	All instruments to be used or installed within a corrosive sewerage environment shall be Explosion Proof or Intrinsically Safe.	We understand that Explosion proof and intrinsically safe transmitters/instruments are required only for instruments/sensor/limit switches/solenoid valves located in the hazardous areas and not for instruments/sensor/limit switches/solenoid valves located in Safe Areas. Kindly confirm	Confirmed
327)	Volume 2 Section X Part 6	589	6.5.1 Instrument Design Criteria	5. Gas Flow meter (Ultrasonic Flow Measurement System) 0 – 1500 Normal m3/hr	Query 01 - We understand that bidder is free to choose the type of measurement for Gas Flow. Based on wide experience we suggest use of Thermal Mass Flow meters for Gas Flow measurement. Kindly confirm.	As per Bid Document
			Table 1 Online Instrument Range		Query - 02 - There are many types of ultrasonic flow measurement system . Please indicate if the Ultrasonic flow system is Inline system or Clamp -on system.	As per Bid Document
328)	Volume 2 Section X Part 6		6.7.5.2 6.7.5.3 6.7.5.4 6.7.5.5 6.7.5.6	TSS Analyzer pH Analyzer Residual Chlorine Analyzer Ammonia Analyzer BOD Analyzer	Query 01: We understand that Explosion proof and intrinsically safe transmitters/instruments are required only for instruments/sensor/limit switches/solenoid valves located in the hazardous areas and not for instruments/sensor/limit switches/solenoid valves located in Safe Areas. Kindly confirm.	Confirmed
			6.7.5.7 6.7.5.8 6.7.5.9	COD Analyzer Total Phosphorus Analyzer Oil In Water Analyzer	Query 02 : We understand that instruments and analyzers will communicate with the PLC on 4 -2 0 mA signal output only. Kindly confirm	Confirmed
329)	Volume 2 Section X Part 6	641	5. Input / Output Devices	All the I/O modules shall have max 8 channels for the Analog and 16 channels for the Digital modules. Special modules like Counter inputs shall monitor dry contact	With wide experience in Water and Wastewater treatment we suggest use of 32 channel digital modules, 16 analog input modules and 8 channel analog output modules. This will ensure efficient control room space utilization and shall provide cost benefit. This will be sufficient for the safe and reliable operation of the plant. Kindly confirm your acceptance.	Confirmed
330)	Volume 2 Section X Part 6	644	6.13.7 System Architectu re	The system should be capable of Remote I/O modules architecture at various remote locations near to the major equipment sensors to reduce the commissioning. There will be remote I/O module stations at various	 Query - 01 : Please clarify if process areas can be supplied with Remote I/O Module panels which will communicate to a Central PLC. Query - 02 : The system architecture diagram shows only Remote I/O module panels at various locations in Phase I , Phase II and Phase III. The PLC is located in Phase I only. Hence the PLC (controller module) will be located in Phase I and all remote I/O module panels shall communicate to the controller located at Phase I . Kindly confirm 	
					Query - 03 : We understand that the quantities of Remote I/O module panels shown in system architecture is indicative and bidder is free to design the	Confirmed

Page **43** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					requirement of Remote I/O module panels. Kindly confirm	
331)			6.14.1 Data Acquisitio n	The SCADA system shall perform data acquisition from PLC and field Equipments. PLC is to be located at each location of the plant. PLC communications with Control Centre shall utilize the Open protocol like Modbus, Profibus.		-
332)	Volume 2 Section X Part 6	587	6.5.1 Instrument Design Criteria	Unless otherwise specified, all continuous online monitoring instruments shall be plug and play type.	Kindly clarify the term "Plug and play type". Is it a vendor specific characteristic?	For "Plug-and-play sensors" refer to the IEEE 1451.4 specification of sensors that contain calibration or configuration information in memory on the sensor. In particular, the sensors are embedded with a Transducer Electronic Data Sheet (TEDS), typically in an EEPROM that specifies what type of sensor is present, describes its interface, and gives technical information that would be needed to take measurements using it.
333)	Volume 2 Section X Part 6	589	6.5.1 Instrument Design Criteria	13 Bio Gas line feeding to GasEngine4. CH4 & H2S Gas Concentration	We understand that these instruments are not mandatory requirement as per process and these instruments are highly sophisticated and complex . Kindly remove this requirement.	As per Bid Document
334)	Volume 2 Section X Part 6	590	6.6 Laboratory – Laboratory	The quality of the sewage entering, passing and leaving the treatment plant shall be monitored via online monitoring equipment as well as manual sampling systems and tested daily, at least from the following parameters: Table 2 Parameters	We understand that the parameters mentioned in Table 2 shall be measured at the laboratory with the help of laboratory instruments only. Kindly confirm	As per Bid Document
335)	Volume 2 Section X Part 9	750	3. Instrument ation LIST OF EQUIPME NT	Instrumentation / Continuous Online Water Quality Monitoring Instruments	Kindly include M/s.Tethys for supply for continuous online water quality monitoring instruments.	As per Bid Document
336)	Volume 2 Section X Part 9	751	3. Instrument ation	4 PRESSURE GAUGES	Kindly include reputed manufacture M/s. GIC for supply of pressure gauges	As per Bid Document
			LIST OF			

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
			EQUIPME NT			
337)	Volume 2 Section X Part 9	751	3. Instrument ation	5 PRESSURE TRANSMITTERS	Kindly include M/S. Endress & Hausser for supply of pressure and differential pressure transmitters	Refer Sl. No. 34 of C&A no. 2
			LIST OF EQUIPME NT			
338)	Volume 2 Section X Part 9	751	3. Instrument ation	5 ULTRASONIC LEVEL TRANSMITTER	Kindly include M/S. Endress & Hausser and M/S. Emerson for supply of level indicating transmitters (ultrasonic and other types)	Refer Sl. No. 34 of C&A no. 2
			LIST OF EQUIPME NT			
339)	Volume 2 Section X Part 9	751	3. Instrument ation LIST OF	General	We understand that the bidder is free to propose reputed instrument makes and suppliers apart from those mentioned in the list. Also for items not mentioned in the list, bidder is free to consider reputed makes and suppliers. Kindly confirm	As per Bid Document
			EQUIPME NT			
340)	Volume 2 Section X Part 1	241	1.5	It should be specifically noted that the contract is on Lump Sum Plan (except rehabilitation works of civil units) Only Rehabilitation works of existing civil units shall be carried out on Item Rate basis as mentioned in the Schedule of Volume-3 of bid document.	We presume that, the rehabilitation works will be measured as per actual and payment will be paid accordingly. Please confirm.	As per Bid Document
341)				Road	Presume that, road reinstatement has already been covered in Price Schedule A - 3 under rehabilitation works. Please confirm.	As per Bid Document
342)				Strom water drain	Presume that, rehabilitation of storm water drain are also covered in Price Schedule A - 3. Please confirm.	As per Bid Document
343)				Existing treated channel	No rehabilitation works envisaged for existing treated effluent channel at Price Schedule A 3 and we presume that the same is not in bidder scope. Please confirm.	As per bid document
344)				Fencing	Please indicate minimum length of chain link fencing which is to be considered between phase 4 and phase 3 for bidding purpose.	As per bid document Bidder to assess from site
345)				Sludge	We presume that, sludge which are to be collected from existing digester, sludge drying bed and from any other existing units shall be disposed with in the Kondli plant.	As per bid document

Page **45** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					Please confirm.	
346)	Volume 2 Section X Part 3	344	3.2.3	Design Conditions for Completely / Partly Underground Liquid Retaining Structures	We presume that, the proposed water retaining structure shall be designed as per IS $3370 - 2009$ Clause 4.4 by limit state method with allowable crack width of 0.2mm. Please confirm	As per bid document
347)	Volume 4 Geo Technical Investigation report	11	6.1	6.1 Ground Water: The ground water table was not encountered upto the depth of exploration in the bore holes below existing ground level during boring activities at site.	We presume that, ground water table shall be considered as per Geo technical report for uplift calculation for water retaining structures. Please confirm.	As per bid document
348)	General			Rehabilitation of existing structures	We presume that, the bidder shall not provide any guarantee on structural parts of the Rehabilitated units as they are existing structures and rehabilitation works will be carried out as per details prescribed in Price schedule A3. Please confirm.	As per bid document
349)	Volume 2 Section X Part 3	372	3.5	The proposed scope of rehabilitation works indicatively (xii.) Gas Holders for Phase-III and (xiii.) Existing Sub Station Building (PMCC-I).	We presume that, Gas holder for phase III should be demolished as indicated in Vol 2/ Sec X / part 2 Clause 2.3 Please confirm.	As per Bid Document
350)	Volume 2 Section X Part 2	338	2.46.10	Land Development, Horticulture, Arboriculture and Landscaping	We presume that, Landscaping will be provided as indicated in Dwg no : YAP-III/ K3 / P/ GAD / 003 (T) Please confirm.	No details of landscaping have been shown in the referred drawing. The same shall be as per approval of Engineer at time detailed engineering.
351)	Volume 3 Section XI Price Schedule A3	770	Item 9	Finishing with Epoxy paint (two or more coat) at all location surface prepared and applied as per manufacturer's pacified including appropriate priming coat, preparation of surface (including surface cleaning and sand lasting), etc. complete. Gas Holder Steel Bell for phase-II	Please provide the quantity for epoxy paint to be applied for Gas holder steel bell for phase II	Refer Sl. No. 35 of C&A no. 2
352)	Volume 3 Section XI Price Schedule A3	780	Item 59	Add or Deduct per Meter depth for rehabilitation of manholes/ chambers including removal of old plaster, sealing of leaks, preparing surface after thorough cleaning, washing, I) application of 12 mm thick plaster 	We presume that, the units will be in each instead of metre. Please confirm.	As per bid document
353)	Volume 1 Part A Section VIII part A	52	9.2	Section B2 - Interim O&M contract - 42 months	We understand that interim O&M contract shall be applicable for 36 Months work contract period + 6 months trial run period. Please confirm.	As per bid document
354)	Volume 1 Part A Section VIII	52 & 781	9.2 & Note ii Volume 1	Section B2-Interim O&M contract - 42months.&The duration of total Interim operation shall	We find a conflict of statement regarding duration of interim O&M period as 36 months and 42 Months. Kindly clarify the scope of interim O&M for 6 months trial period is lies with Contractor	Refer Sl. No. 36 of C&A no. 2

Page **46** of **56**

<u>Reply to Pre-bid Queries</u>

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	part A & Volume 3 Section XI Price schedule - A4		Conditions of Contract	not exceed 36 calendar months		
355)	Volume 1 Part A Section VIII part A & Volume 3 Section XI Price schedule - A4	53 & 781	9.2 & Note ii	Section B2 - Interim O&M contract - 42 months. & The duration of total Interim operation shall not exceed 36 calendar months	If the scope of interim O&M during 6 months period lies with contractor, Kindly provide the revised price schedule for 42 months (including 36 months' work contract + 6 months trial run period)	As per bid document
356)	Volume 1 Part A Section VIII & Volume 3 Section XII	53 & 783	14.19 & A . 5	Amount of Maintenance retention fund- 10% of the accepted Contract amount	We understand that the term "maintenance retention fund" and "reserve fund" are similar which is payable for major maintenance and repair. Please confirm.	Both terms are different
357)	Volume 1 Part A Section VIII	53	14.19	Amount of Maintenance retention fund- 10% of the accepted Contract amount	We understand that maintenance retention fund shall be deducted only from O&M contract amount. Please confirm.	As per bid document
358)	Volume 1 Part A Section VIII	53	14.19	Amount of Maintenance retention fund- 10% of the accepted Contract amount	As per FIDIC gold book provisions, We understand that retention fund are limited to only 5% of O&M contract amount. Hence retention fund shall be considered 5% instead of 10% of the O&M contract amount. Please confirm.	As per bid document
359)	Volume 1 Part A Section VIII	53	14.19	Amount of Maintenance retention fund- 10% of the accepted Contract amount	As per FIDIC gold book provisions, We request the Employer to accept retention bank guarantee (submitted by contractor) which is renewable every year for entire O&M contract period, instead of deduction of retention fund in interim payments. Please confirm.	As per bid document
360)	Volume 1 Part A Section VIII	62		Any additional charges on account of the actual power consumption exceeding the net power consumption guaranteed shall borne by the contractor.	We understand that if the net power consumption increases beyond the guaranteed limit due to low flow of sewage, then the increased net power charges shall be borne by the Client. Please confirm.	As per bid document
361)	Volume 1 Part A Section VIII	62		The net power consumption shall be adjusted for the quantity and quality of the raw sewage treated at the WWTP, as per schedule, Part - 9, Section - X, volume - 2 of the bid documents	We understand that there is a typo error in technical schedule references as Technical schedule Part - 9, Section X, volume -2 of bid documents. We presume that the technical schedule shall be Volume - 3, Section - XII, page -611 of bid documents. Please confirm our understanding.	Refer Sl. No. 37 of C&A no. 2
362)	Volume 1 Part A Section VIII	62		Any additional charges on account of the actual power consumption exceeding the net power consumption guaranteed shall borne by the contractor.	We understand that if the net power consumption increases beyond the guaranteed limit by the default of contractor, then the contractor shall pay charges for increase in net power. Hence Penalties for excess power consumption shall not be applicable. Please confirm.	As per bid document
363)	Volume 1	69	10.10 i	Employer shall be liable to pay to the		Refer Sl. No. 38 of C&A no. 2

Replies to Pre Bid Queries

Page **47** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Part A Section VIII Part B			contractor the fixed operation and maintenance charges as specified by the bidder at the time of bidding in schedule A-9, Section XIV, volume - 3 of bid documents	provide correct references of schedule.	
364)	Volume 1 Part A Section VIII	70		The Liquated Damages as specified in 'Annexure – Service Level Agreement, Volume 3 of Bid Document' then shall be applicable on the agreed Alternative Output Standards."	We understand that the aggregate limitations of liability of the contractor for liquidated damages, penalties shall be 10% of the O&M contract value. Please confirm.	As per bid document
365)	Volume 1 Part A Section VIII	70	13.8	Price Variation shall be applicable for Works Contract and Operation and Maintenance Contract.	We understand that the Formula given in the tender document is applicable only for price variation during Construction period. Hence please provide the price adjustment formula for chemicals, fuels, consumables, and materials during the O & M period.	As per bid document
366)	Volume 1 Part A Section VIII	73	13.9	Accordingly, Employer shall issue "Form-C" for all major materials and supplies/ equipment made for Civil, E&M and O&M works in the project as specified in "Annexure – List of Items for issue of Form 'C', Volume 4 of the Bid Document".	We request the Client to provide the correct references again. The reference seems to have typo error.	Refer Sl. No. 39 of C&A no. 2
367)	Volume 2 Section X Part 8	700	8.2.C	All cost for operation and maintenance of the WWTP such as manpower, chemicals, fuels, spares, tools,	We request the Client to reimburse the cost for usage of Diesel for DG set by maintaining log book at the site. Please confirm.	As per bid document
368)	Volume 2 Section X Part 8	700	8.2.C	All cost for operation and maintenance of the WWTP such as manpower, chemicals, fuels, spares, tools,	Please provide the average power cut timing in a day to be considered for Kondli plant area for calculation of diesel consumption.	Bidder to collect required details from site
369)	Volume 3 Section XII & Volume 1 Part B Section III A	784 & 97	Note - ii and 1.2 .b.iii.a	the unit rate of electrical energy for O&M period shall be considered as Rs. 6.3 per KWH & Consumption shall be multiplies by the current rate of electricity charges of Rs. 7.3 per KWH	We understand there is conflict of statement in defining the unit charges for power. Kindly clarify the unit charges for power.	Refer Sl. No. 12 & 13 of C&A no. 2
370)	Volume 3 Section XII	795	Condition- E	Disposal to the sanitary land fill (the tipping charges shall be borne by the contractor)	Kindly provide the distance between sanitary landfill approved by DJB for disposal of screenings and grit.	As per bid document
371)	Volume 3 Section XII	795	Condition- E	Ultimate disposal of dewatered sludge shall be responsibility of the contractor	We request the Client to provide approved land for ultimate disposal of dewatered sludge.	As per bid document
372)	Volume 2 Section X Part 8	716	8.3.7	Handling and disposal of waste water treatment by – products	We request the Client to get all statutory approvals for disposal of Waste water treatment by-products including grit, screenings, and dewatered sludge disposal. Please confirm.	As per bid document
373)	Volume 3	795	Condition-	Disposal to the sanitary land fill (the tipping	We request that the Client to indicate existing tipping charges for disposal of	Bidder to get information from its
374)	Section XII Volume 1 BDS	33	E ITB 1.1	charges shall be borne by the contractor) Reference ID No. of the tender	by products, grit, screenings and dewatered sludge in sanitary land fill area. The reference ID nos. mentioned at places in the tender are contradictory. Kindly confirm the which of the following Reference ID no. is correct to be captured in the bid: - BID–YAP (III) (K3/2016-17) OR - BID–YAP (III) (K3/2017-18)	Sources Query does not appears to be correct
375)	Volume 1 ITB	4	2.3	Sources of Funds	Please indicate the Funding structure of Project by JICA for Design and Build and O&M	As per bid document

Page **48** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

Reply to	Pre-bid	Queries
		-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
376)	Volume 1 ITB	6	4.2	Eligible Bidders	In the event contract being awarded to JV, whether the representative of JV can execute the Contract under his legal business name and style? For more clarity, the project will be executed through the Leader/member of JV who wish to submit the invoice and receive payment from the Employer.	As per bid document
377)	Volume 1 BDS	36	21.1, 21.2 and 21.7	Bid Security	Please confirm, in case contract being awarded to JV company, please specify the laws under which act the JV company will be registered in India for the execution of contract	Bidder has to get the information from the concerned authority of Government
378)	Volume 1 Part A Section II BDS	36	ITB 14.1	To establish the eligibility of the Plant, Material, and Services in accordance with ITB 5, Bidders shall complete the Country of origin declarations in Volume 3, Section XI : Schedule of Payment and Prices.	The mentioned document is not available in Vol. III. Employer is requested to provide the said document/ declaration format	As per bid document
379)	Volume 1 PC Part B	73	13.9	Taxation	Please confirm the Employer shall issue Form C to the Contractor for materials/supplies/equipment supplied through the sub-supplier/contractor for the execution and O&M in the course of interstate trade against Form C based on the invoices issued by the Contractor.	As per prevailing CST rules
380)	Volume 1 PC Part B	73	13.9	Taxation The Contractor shall be accordingly required to submit its request for issuance of "Form C" along with the following documents to Employer: a. Contractor's Sale invoice specifying the goods, its quantity, delivery challan, rate, value and tax (tax must be charged at the concessional rate applicable against Form-C). Invoice should clearly mention that the sale is against Form-C. TIN No. of the parties involved shall also be indicated. b. Copy of transportation receipt/ bills/ GR/ lorry receipt (along with Vehicle No.).	Request the employer to modify the required documents for issuance of "Form C" :-(a) Contractor's Sale invoice specifying the goods, its quantity, delivery challan, rate, value, tax if applicable under CST Act(b) Copy of Transportation receipt/ bills/ GR/Lorry Receipt	As per bid document
381)	Volume 1 PC Part B	74	13.9	Taxation, Service Tax	By virtue of notification No.25/2012 ST dated 20-06-2012 amended time to time. Services rendered to Municipalities and Government being exempted from Service Tax. In the above case, please confirm if the applicable benefit can be considered in the Bid.	As per bid document
382)	Volume 1 PC Part B; General Conditions of Contract (GCC)	75 50 of FIDI C Gold Book	14.1(iv) (c); Cl. 13.6	The Contract Price; Adjustments for Changes in Legislation	Please confirm adjustment of the Contract Price due to imposition of new taxes and duties and variation in existing Taxes & Duties during the Contractual Delivery of Works Contract and O&M Contract.	
383)	Volume 1 PC Part B	74	14.8	Local Bank Account	The bidder may intend to operate banking transaction in the state in which bidder is registered. Hence request Employer not to limit an account locally present in a bank in Delhi	As per bid document

Page **49** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
384)	Volume 1 PC Part B & Volume 2 Section X Part	74 & 275	13.9 1.36	Taxation List of Items for issue of Form C	Please specify types of Construction materials as per Employer's Central Sales Tax Registration – List of Items for Issue of Form C :- Sl. No.(20) : All Type of Construction Material	As per bid document
	1				Pl confirm under this Sl. No. of 20, Form 'C shall be issued by employer for Cement & Bricks against submission of invoices & LR.	
385)				General	Employer deducts BOW Cess from the payment to the Contractor under Construction and O&M payment. Kindly confirm the percentage (%) deductions to be made.	
386)	Volume 2 Section X Part 1	269	1.29	Statutory Approval : The contractor shall obtain all statutory approval for/and on behalf of DJB under the following (1) Factories ActAny other approval as may be required	We request the employer to confirm whether the existing plants (Ph-I, II & III) are being covered under various acts mentioned in the clauses in the State of Delhi. If so, please furnish the registration number issued under the said Act.	Bidder to obtain from site office
387)	Volume 2 Section II BDS	37	ITB 22.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: Original Power of Attorney (legally valid) for authorized signatory of the Bid.	Legally valid "Power of Attorney' by nature is one original document issued in the name of the authorized signatory. We request Employer to accept a duly notarized copy of the Power of Attorney instead of Original.	As per bid document
388)	Volume 2 Section II BDS	35	ITB 11.2 (h)	Statement from the Bidder (and each member of a Joint Venture) in accordance with Clause 4 Section I: Instructions to Bidders;	In the absence of any specific format bidders are allowed to submit statement with requisite declaration in their own format. Kindly confirm or provide the specific format/ form of declaration to filled and submitted along with the bid.	Confirmed
389)	Volume 1 Section II BDS & Volume 3 Section XI, XII, Price Schedules	36 and Pg. nos. 758 to 767	ITB 19.1 (i) and Price schedule formats	For those inputs to the Works that the Bidder expects to supply from outside the Employer's country (referred to as "the foreign currency requirements"), in Japanese Yen, Euro and/or USD.	We understand from the clause that supplies from outside the Employer's country can be quoted in more than one (1) foreign currency. However only one column has been provided as a provision to fill foreign currency in Price Schedules "Quoted Price - Works Contract" and "A2", Vol. III Financial Proposal, Section XI & XII. Employer is requested to amend the price schedule formats by giving 2 more columns as provision to fill any of the 3 foreign currencies as applicable. Else kindly confirm if bidder is free to modify the format to fill prices in foreign currencies as applicable.	Bidder has to quote a particular item only in one currency and currency is to be mentioned under the column
390)	Volume 3 Section XI	782	Price Schedule A5	Note as mentioned below the price schedule: "O&M cost for the 1st year should not be less than 5% of cost of Work Contract"	Employer is requested to this note and allow the bidder to quote the prices during 1st year as estimated	As per bid document
391)	General			Bid Data Sheet (BDS)	The clause descriptions/ conditions mentioned in the Bid Data Sheet (BDS) for the package shall amend and/or supplement the provisions in the Instructions to Bidders (ITB). Wherever there is a conflict, the provisions of BDS shall prevail over those in the ITB. Kindly confirm.	As per bid document
392)	Volume 1	60	Sub. Cl.	Electricity, Water & Gas:	There is a contradiction in the scope of Electricity. We understand that DJB	Refer Sl. No. 40 of C&A no. 2
	Section VIII		4.19	Electricity during Construction, Trial Run & Commissioning is in Contractor's scope	will directly pay the electricity charges to electricity supply company/ authority during Integration, Trial run & Commissioning period of contract.	
393)	Volume 2 Section X Part 1	247	1.7, Sr. no.3	Brief Scope of Work: Electricity shall be directly paid by DJB during Integration of rehabilitated WWTP & Trial run.	Kindly confirm if our understanding is correct.	
394)	Volume 1	52	9.2	Trial run and commissioning period is given	The consolidated period of Trial run and commissioning is given as 6	Successful bidder has to submit

Replies to Pre Bid Queries

Page **50** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

<u>Reply to Pre-bid Querie</u>	S

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
	Section VIII PC Part A			as 6 month	months. Employer is requested to mention specific period of Trial Run, commissioning and PGTR after which the start of O&M (during DLP period) starts.	complete time schedule for the approval of the Engineer confirming to the bid requirements.
395)	Volume 1 Section VIII PC Part A	50 & 52	1.1.78, 8.2 & 9.2	Time for Interim O&M Contract: Pg. 50: Section B2 - Interim O&M Contract Period is defined as 36 Months Pg. 52: Section B2 - Interim O&M Contract Period is defined as 42 Months	There is a contradiction in the period of Interim O&M. We understand that the Interim O&M period is 36 months which is the construction period for Rehabilitation & Up-gradation of Ph - I, II & III. Kindly Confirm.	Refer Sl. No. 36 of C&A no. 2
396)	Volume 1 Section VIII PC Part A	58	Sub- Clause 1.16	The Contractor shall permit Employer/GOI/any other Authorized Agency to inspect the Contractor's accounts and records related to the performance of the Contract and to have the same audited if so required. The Contractor shall have to remove all defects/deficiencies pointed out by Employer and recoveries if any proposed will be enforceable from the Contractor's payment."	From the word recoveries we mean that any applicable Liquidated Damages. If not, we request you to remove this clause of recoveries as the contractor is already liable to remove all defects/ deficiencies.	As per bid document
397)	General			Mode of Payment	The tender silent on the mode of payment. We request to accept that all payments shall be covered through a confirmed, unconditional, irrevocable Letter of Credit (LC) payable at sight issued in a form acceptable to all nationalized & scheduled banks.LC of 100% to be opened within 3 months of the signing of the contract. The Letter of Credit shall be valid up to 3 months from the date of project completion. All the cost of LC shall be to Employer's account. The LC shall allow for partial shipments and transshipments.	As per bid document
398)	Volume 3 Section XIII	794	Condition D: Liquidated Damages for not meeting the Electric Consumpti on Guarantee	Damages payable by Contractor to Employer on excess consumption of net electric energy and on Reduction in Power Generation from WWTP	We understand from the condition that damages will be payable by contractor only in the event of shortfall in the guaranteed figures of net	As per bid document
399)	Volume 2 Section IV	238	C, III (b)	Pollutant load factors for adjustment of guaranteed power given in the table against TSS, VSS, BOD & TKN	We understand that the pollutant load factors are provided to arrive at the adjustment in Power Consumed. We believe there should be separate pollutant load factors for Power Generation to arrive at the Net Power Consumed during actual Operation. We request DJB to provide separate pollutant load factors to be considered for Power Generation.	As per bid document

Page **51** of **56**

Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5MLD) Wastewater Treatment Plants (WWTPs) with effluent standards of BOD -10 mg/l, TSS –10 mg/l or better under YAP (III) (Package K3) Name of work :-

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
400)	Volume 2 Section III C	131	2 (b), (III)	During Bid Evaluation for Guaranteed Power Consumed, the net guaranteed power consumption shall be multiplied by the current rate of electricity charges of Rs. 7.20 per KWh and shall be added to the overall operation and maintenance cost provided by the bidder	There is contradiction in the unit rate of electricity charges to be considered for calculating charges for guaranteed power during bid evaluation. Kindly confirm if it is Rs. 7.20 per KWh or Rs. 6.3 per KWh	Refer Sl. No. 12 & 13 of C&A no. 2
401)	Volume 3 Section XII	784	Notes in Price Schedule B1	For evaluation purpose the unit rate of electrical energy for the O&M period shall be considered as Rs. 6.3 (Six Rupees and Thirty Paise only) per KWH.	There is contradiction in the unit rate of electricity charges to be considered for calculating charges for guaranteed power during bid evaluation. Kindly confirm if it is Rs. 7.20 per KWh or Rs. 6.3 per KWh	Refer Sl. No. 12 & 13 of C&A no. 2
402)	Volume 1 Part A, Section VII, GC, FIDIC Gold Book	784	43 of FIDIC Gold Book	Test on Completion of Design – Build If the Works, or a Section, fail to pass (b). issue a notice under sub - clause 15.1 (Notice to Correct)	In the event of failure during Test on Completion, Employer is requested to specify the upper limit of no. of re-testing to be done and/or the duration to correct/remedy the plant.	As per bid document
403)	Volume 1 Part A Section VIII PC Part A	54	Total Liability of the contractor	100% of that portion of the Accepted Contract Amount attributable to the Design-Build of the Works for the period extending until 5 years after the date of issue of the Commissioning Certificate, at which point the Total Liability of the Contractor shall reduce to 50% of the Accepted Contract Amount attributable to the Design-Build of the Works until Contract Completion.	We understand that the total liability of the contractor shall be at 100% of the Design Build portion of the Contract Price and will be valid till 5 years from the date of issue of commissioning certificate. Also that the total liability value will be reduced to 50% of the Design Build portion of the Contract Price from the 6th year onwards till 10th year. Employer is requested to limit the validity of total liability (100% of Design Build portion) till start of O&M during DLP.	As per bid document
Bidder -	13			· · · · · · · · · · · · · · · · · · ·		
404)					Tender documents specify MLE process as a recommended technology for phase I WWTP & Integared Fixed Film Activated Sludge Technology for Phase II & Phase III WWTPs.	
					Both of these processes do not have any proven track record in Indian Climatic conditions for the STP capacities under this project achieving effluent standards of BOD $< 10 \text{ mg/l}$, TSS $< 10 \text{ mg/l}$.	
					Also these systems require internal nitrate recycle upto 500% of influent flow requiring huge power cost for the same.	
					As confirmed in the latest CPHEEO manual November 2013 (Page 185) as " In its functional process scheme, a Sequencing Batch reactor (SBR) is the same as the activated sludge process.	
					We would therefore like to request to allow SBR process along with the other specified processes.	
					In India itself there are more than 400 WWTPs based on SBR process in	

Page **52** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WWT
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					various stages of completion; out of which about 150 plants are already in operation since year 2005 providing consistent effluent results for BOD < 10 mg/l, TSS < 10 mg/l. The largest of the SBR based STP plant in operation is of 245 MLD capacity.	
					SBR process based plants are also provided for JICA funded project as these are PLC based, easy to operate, achieving desired parameters $BOD < 10$ mg/l, TSS < 10/l and N & P removal in single stage without need of tertiary treatment.	
					SBR process requires only about 25% of recycle flow and it would save on huge pumping energy as otherwise required for other two processes like MLE & IFAS upto the tune of about 400% of influent flow.	
					For SBR based plants Secondary clarifiers are not required and the existing secondary clarifiers can be used as treated water storage tank for recycle/reuse.	
					Considering all the above it would be advisable to also allow as an option Sequential Batch Reactor process for the subject WWTPs with or without pumping of the effluent based on the overall energy requirement of the plants based on various processes which we are confident will workout economical and consistently achieve effluent parameters $BOD < 10 \text{ mg/l}$, TSS < 10 mg/l etc. which are now mandatory.	
405)	Volume – 1 Part B Section III A	104	Clause 4.2(a)		We draw your kind attention to Section IIIA Clause 4.2(a) mentioned in the tender as qualification criteria for participating in the above mentioned tender which states that Bidder should have experience as Prime Contractor for Design, Construction, Testing & Commissioning of the conventional activated sludge process. The criteria given is as follows:	As per bid document
					At least 1 (one) Wastewater Treatment Plant of 120 MLD (or) At least 2 (two) Wastewater Treatment Plant of 80 MLD (or) At least 3 (three) Wastewater Treatment Plant of 60 MLD each"	
					In connection with the above, we would like to mention that the Qualification criteria sought for similar Tenders called by DJB in the recent past is at least one (1) STP of Maximum capacity from 55% to 60%, two (2) STP's of 38% to 40% and three (3) STP's of 27% to 30% Capacities. However, DJB Guidelines states as follow.	
					 At least One Pant of 60% capacity of proposed Plant (or) At least Two Plants each of 40% capacity of Proposed Plant (or) At least Three Plants each of 30% capacity of Proposed Plant 	
					It is evident that though Tender for Kondli Project, though the number of STPs are clubbed in single Tender, the PQ requirement is set based on the maximum capacity of the Plant proposed to be constructed (Total 204 MLD).	

WTPs) with effluent standards of BOD -10

Page **53** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WWT
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document			Bidd	ler's Q	ueries		
					MLD) are proposed to I Plant of 120 ML	be rehabil	itated.	2 Nos of 45 MLI However, the PC 60% of cumulativ) has as	sked fo
						ement sought is			t capacity of 18 which is roughly		
									der participation re-framed as follow		ender,
								2	designed, constr ntional activated s	,	
					At lea	· · ·	Water Tre	atment	Plant of 70 MLD Plant of 46 MLD nt Plant of 35 MLI		
Bidder - 1	14										
406)	Volume – 1 Part B Section III A	104	Clause 4.2 (a)		qualif				d tender and the Clause 4.2 (a) Sp		
					contra		Construc	tion, 7	xperience in the Testing & Comm		
					At lea (OR)	ast 2 (Two) Wast	tewater Tro	eatmen	Plant (WWTP) of 2 it plant (WWTP) plant (WWTP) of	of 80 N	MLD e
					qualif		or precedir	ng tend	draw your kind lers published by of STPs.		
					S. No	Name of tender	Maxim um capacit y of single plant (in MLD)	No. of STP s in the tend er	PQ Conditions mentioned	PQ% of Maxi mum capac ity	PQ% of Tota Cap ty
					Old '	Tenders		I	I	I	_ _
					1.	Rithala 182 MLD	182	1	1 STP of 100	55%	55%

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Pre- ience-	As per bid document
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Page **54** of **56**

Name of work :-	Rehabilitation and Up-gradation of Kondli: Phase I (45.5 MLD), Phase II (113.7 MLD) & Phase III (45.5 MLD) Wastewater Treatment Plants (WW
	mg/l , TSS –10 mg/l or better under YAP (III) (Package K3)

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document		Bidder's Queries																											
						STP			MLD																								
									2 STPs of 70 MLD	38%	38%																						
									3 STPs of 50 MLD	27%	27%																						
					2.	Coronation Pillar 318 MLD STP	318	1	1 STP of 190 MLD	60%	60%																						
										510 WILD 511			2 STPs of 125 MLD	39%	39%																		
									3 STPs of 95 MLD	30%	30%																						
					3.	EIL Cluster of STPs Package 2	36	9	1 STP of 22 MLD	61%	23%																						
						(Total 97 MLD STPs)			2 STPs of 15 MLD	42%	15%																						
									3 STPs of 11 MLD	31%	11%																						
					4. EIL Cluster of STPs Package 3						STPs Package 3	STPs Package 3											STPs Package 3	STPs Package 3					25.5	5	1 STP of 16 MLD	63%	20%
						(Total 80 MLD STPs)	MLD		2 STPs of 11 MLD	43%	14%																						
									3 STPs of 8 MLD	31%	10%																						
					Pre	Present tender																											
					1.	Kondli 204 MLD 11 STPs	114	3	1 STP of 120 MLD	105%	59%																						
										2 STPs of 80 MLD		39%																					
									3 STPs of 60 MLD	53%	29%																						
					set of Tend work in pr It ca gene 1 ST 2 ST 3 ST How	eviewing the above out based on the M lers mentioned in S () have also been u ojects mentioned in n also be observed rally been set as fol P of 60% Capacity Ps of 40% Capacity Ps of 30% Capacity rever, for Kondli S ulative capacity of 3	Iaximum SI. No. 3 tilized fo SI. No. from the low: of Maxim of Maxim of Maxim of Maxim	Capac & 4 o r proje 1 & 2. e abov num Ca mum C mum C	eity of Plant in cas f above table. This cts containing 1 No re table that the PO apacity Plant, (OR) Capacity Plant, (OR Capacity Plant. have been consider	e of C criteria c. STP C condi	luster a (PQ consid itions he bas																						

WTPs) with effluent standards of BOD -10

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Page **55** of **56**

S. No.	Volume	Page	Clause	Subject / Particulars as per Bid Document	Bidder's Queries	Reply
					Therefore, in concurrence to the above observations and conditions, we intend to propose the PQ clause of Kondli to be restructured as follow:	
					"The bidder should have successful experience of Design, Construction, Testing & Commissioning of the conventional activated sludge process in-	
				At least 1 (One) Wastewater Treatment Plant (WWTP) of 68 MLD (OR) At least 2 (Two) Wastewater Treatment Plant (WWTP) of 46 MLD each (OR) At least 3 (Three) Wastewater Treatment Plant (WWTP) of 34 MLD each"		

Corrigendum & Addendum No. 2

S. No.	Clause reference	Corriger	dum &	Addendum		
1.	Volume 2 Section X, Part-2, Part 2	Last sentence under third dot para of Clause 2.5 General Design Requirements, Page 281, "The structures shall be designed to counteract any possible floatation without the use of any type of groundwater pressure relief valves" stands deleted.				
2.	Volume 2, Section X, Part 2, Page 290	Figure mentioned in the table IV, A stands deleted. The revised figure is as under	C	Sr. No. 4, column 3, Clause 2.7,		
		Sr. No. Unit / Structur Description	re	No. of Units Existing / Proposed		
		4. Grit Chamber		3		
3.	Volume 2, Section X, Part 2, Page 301	Matter mentioned in the table against Sr. No. D, iv, column 3, Clause2.16.1 Bioreactor with MLE Technology for Phase I WWTP, standsdeleted.The revised figure is as under :Sr.DescriptionRequirement for Ph I				
		No.DAeration Requirements				
		iv. Oxygen Requirement	Oxidatie Tank Require	on of BOD entering Aerobic + Nitrification Oxygen ement - 50% of oxygen credit lenitrification		
4.	Clause 4.2.10.4, Volume 2 Section X Part 4, Page 434	 Preparation and Dosing System, "The material of construction of tank shall be HDPE. Agitator and wetted parts of Pump shall be SS-316". Stands deleted. The revised paragraph is as under: "The material of construction of tank shall be FRVE as Liner + FRP (with 				
5.	Clause 4.2.17.3, Volume 2 Section X Part 4, Page 464	In the third column of all relev deleted. The revised MOC is as under:	"The material of construction of tank shall be FRVE as Liner + FRP (with is phthalic resin). Agitator and wetted parts of Pump shall be SS-316" In the third column of all relevant rows showing "SS316" stand			

S. No.	Clause reference	Corrigendum & Addendum
6.	Clause 1.7(2)(xix), Volume 2 Section X, Part-1, Page 244	The Clause 1.7(2)(xix), "Though suggested process details and without any proposal of pumping for the effluent" Stands deleted. The revised clause is as under: "Though suggested process details to achieve guaranteed effluent parameters are mentioned in Part -2, however process technology is open and bidders can adopt any proven ASP/modified ASP technology for achieving the effluent parameters to be guaranteed without any basic changes in the structures available for rehabilitation in present WWTPs on economical life cycle cost basis. Bidders to furnish the sufficient proof of at least 60 MLD WWTP on such proposed technology, running successfully for minimum for last 5 year".
7.	Clause 2.30, Volume 2 Section X Part 2, Page 318	 The first sentence of 12th para under Clause 2.30 Anaerobic Digesters, "DI K9 gas line of min. 200 mm dia. with a pressure gauge on the top of digester shall be provided with gas tight/gas leak proof valves of standard make" Stands deleted. The revised first sentence of 12th para is as under: "SS 316 gas line of min. 200 mm dia. with a pressure gauge on the top of digester shall be provided with gas tight/gas leak proof valves of standard make"
8.	Clause 4.2.8.6, Volume 2 Section X Part 4, Page 417	The third sentence of 1 st para under Clause 4.2.8.6 Motive Water Booster Pumps, "The Motive Water supply shall be from the Water Supply System on the campus" Stands deleted. The revised sentence is as under: "The Motive Water supply shall be from the treated effluent from chlorine contact tank".

S. No.	Clause reference	Corrigendum & Addendum			
9.	Clause 4.2.4, Volume 2 Section X Part 4, Page 398	The table under 12, Materia and Secondary Clarifiers, S The revised table is as unde			
		Feed Well	SS 304, minimum 3 mm thick		
		- Bridge	MS with Epoxy painting (welded/nut bolted/riveted truss in a consolidated single component and no site welding shall be allowed)		
		- Rake Arm	MS with Epoxy painting		
		- Center Cage	MS with Epoxy painting		
		- Rake Blades	Stainless Steel Grade 316L; minimum 5 mm thick		
		- V-notch weir	SS 304, minimum 6 mm thick and 300 mm wide		
		- Squeegees	Neoprene rubber, 10 mm thick, adjustable type		
		- Walkway	MS with Epoxy painting		
		- Handrail (both ways in two layers minimum 1 m high)	32 NB SS Pipe, 32 mm dia vertical and top rail with 25 mm dia middle level .The hand railing on clarifier shall have a 6 mm toegusard made of hot dipgalvanised and be 100 mm wide x 5 mm thick.		
		- Scum skimmer assembly	SS 304, minimum 5 mm thick and 300 mm wide		
		- Scum Box	SS 304, minimum 3 mm thick		
		- Scum Baffle	SS 304, minimum 3 mm thick and 400 mm wide		
		- Fasteners – Under Water	SS-316		
		- Fasteners – Above Water	Galvanised		

S. No.	Clause reference	Corrigendum & Addendum				
10.	Clause 4.2.9.1, Volume 2 Section X Part 4, Page 428-429	•				
11.	Clause 3.5.1, Volume 2 Section X Part 3, Page 372	 The first para on page 373 under Clause 3.5.1 Requirements, "NDT report(s) are availableand durability for various parts of different structures." Stands deleted. The revised para is as under: "The bidder shall conduct NDT tests at its own cost" 				
12.	Clause 1.2, Volume 1B, Section III A, Page 96	The second sentence under Clause 1.2 (b) (iii) (page 96-97) Evaluation of Price Bids, "This guaranteed power consumption and maintenance cost provided by the bidder;" Stands deleted.The revised second sentence is as under: "This guaranteed power consumption shall be multiplied by the current rate of electricity charges of Rs. 7.20 per KWh and shall be added to the				
13.	Price Schedule-B1, Volume 3 Section XII , Page 783	overall operation and maintenance cost provided by the bidder;" The Note (iii) (page 784), "For evaluation purposas Rs. 6.3 (Six Rupees and Thirty Paise only) per KWH." Stands deleted. The Note (iii) is as under: "For evaluation purpose the unit rate of electrical energy for the O&M period shall be considered as Rs. 7.20 (Seven Rupees and Twenty Paise only) per KWH."				
14.	Clause 2.3, Volume 2 Section X Part 2, Page 279	Add as Sr. No. 12 at the end of A-Phase-I of the table under Clause no. 2.3 Demolition of Interfaces and Tie-Ins with Existing Facilities, the following: Sr. Unit / Structure Quantity Indicative No. Description Dimension				
		10.Description12Bioreactor1				

S. No.	Clause reference	Corrigendum & Addendum							
15.	Volume 2, Part IV D: Functional Guarantees of the Plant, Section IV, Page 237	The description mentioned against Sl. Nos. 4 in the 2 nd table at pageno. 237 under iii) Net Power Consumption, stands deleted.The revised description & requirement against Sl. Nos. vi. is as under :							
	1 460 20 /	S		Nomen		Nor	Nominal Numbers		
		No	Parameter	clature	Units	Phase 1	Phase II	Phase III	
		4	BOD3	(BOD)d	mg/l	250	250	250	
16.	Volume 2, Section X, Part-1, Page 243	The second row of Clause 1.7, 1), Interim Operation of the existing & partly rehabilitated WWTP during construction & rehabilitation period at Page 243, stands deleted.The revised row is as under :Phase II114 MLDOperational and presently working and							
				trea was	ting abou tewater wi ctional me	t 114 m th function echanical	ld (25 n nal digeste	mgd) of ers and a	
17.	Clause 2.3, Volume 2 Section X Part 2, Page 279	table u Existin	es mentioned under Clause ng Facilities, s evised Figures	no. 2.3 D stands dele	Demolition eted.				
		Sr. No.	Unit / St	ructure De	escription	Quantit	y		
		8.	Digester			3			
		9	Gas Holde	er		1			
18.	Volume 3, Price Schedule: A2, Page 760	The matter in Column 2 (Unit Description) against S. No. 8 on page 760, "By Pass channelof Primary Clarifier." Stands deleted. The revised matter is as under : "By Pass pipe at Distribution Chamber of Primary Clarifier."							
19.	Volume 2, Section X Part 3, Clause 3.2.1, Page 342	The first sentence of 4th para on page 342 under Clause 3.2.1 Design Submission , " <i>The contractor may</i> survey and NDT reports." Stands deleted. The revised first sentence of 4th para is as under : " <i>The contractor may refer to the available soil investigations and</i> <i>topographical survey reports.</i> "							

S. No.	Clause reference	Corrigendum & Addendum				
20.	Volume 2, Section X Part 3, Clause 3.2.1, Page 343	Item (viii) under Clause 3.2.2, on page 343 Design Loading, Stands deleted.				
21.	Volume 2, Section X Part 5, Clause 5.3.25, Page 577	The matter under Clause 5.3.25.1 Cable Laying, "RCC cable trenches of inside the cable trenches." Stands deleted. The revised first sentence of 4th para is as under : "All outdoor cable trenches of adequate size shall be used for cable laying between Electric substation and various LT panels located at different location of the plant shall be buried cable trench. Cable shall be laid on sand bed, covered with sand and then finally covered with stone slab."				
22.	Volume 2, Part 9, Page-752	Add the follo	owing vendors in the	last as under:		
	1 40 7, 1 490 702	S. No.	Equipment	Approved Makes		
				Eternity GE		
				Syntel		
				Telemagic		
		1	EPBAX	Hertj Technogies		
				Hindustan Telecommunications		
				Mascot		
				Panasonic		
				Samsung		
				Bosch		
				IP Infotech		
		2	CCTV	Telecab		
				Sapphire Computech		
				Axies Technology		
				Survellance System		
				Vintron		
		3	Instrument Cable	As per Approved List of Power & Control cable manufacturers		

S. No.	Clause reference	Corrigendum & Addendum					
23.	Volume 2, Section X, Part 2, Page 287	2.7, I. Pha	Figure mentioned in the table against Sr. No E-24, column 3, Clause 2.7, I. Phase-1 (10 MGD), stands deleted. The revised figure is as under :				
		Sr. No.	Unit / Structure Desc	cription	No. of Units / Propo	U	
		24.	Chlorine Contact Tank	(CCT)	2		
24.	Volume 2, Section X, Part 2, Page 308	2.18.1. Ph	Figure mentioned in the table against Sr. No. Iii, column 4, of Clause 2.18.1. Phase-II stands deleted. The revised figure is as under :				
		Sr.	Description		Requiremen	ts	
		No.		Phase -]	I Phase – II	Phase - III	
		iii	Nos. of New Secondary Clarifiers	2 nos.	3 nos.	1 no.	
25.	Volume 2, Section X, Part 2, Page 290	Figure mentioned in the table against Sr. No 4, column 3, Clause 2.7, IV-A, stands deleted. The revised figure is as under :					
		Sr. No.	Unit / Structure Description		No. of Units I Propos	U	
		4.	Grit Chamber		3		
26.	Volume 2, Section X, Part 2, Page 291	Figure mentioned in the table against Sr. No. 6, column 3, Clause 2.7, IV, A. stands deleted. The revised figure is as under :					
		Sr. No.	Unit / Structure Desc	eription	No. of Units / Propos	U	
		6	Common Flow measur Channel (Area velocity meter)	-	3		

S. No.	Clause reference	Corrigendum & Addendum				
27.	Volume 2, Section X, Part 2, Page 291	Figure mentioned in the table against Sr. No. 7, column 3, Clause 2.7, IV, B stands deleted. The revised figure is as under :				
		Sr. No.Unit / Structure DescriptionNo. of Units Existing / Proposed				
		7.Chlorine Contact Tank4(CCT)				
28.	Volume 2, Section X, Part 4, Page 409	The para (xxi) under Clause 4.2.7.1, Fine Bubble Diffusers Assembly, "The aeration system shall be removableof diffusers for maintenance." stands deleted.				
29.	Volume 2, Section X, Part 1, Page 239	The first sentence of second para on page 239 under Clause 1.1 Project Description and Location and Access to the Site , <i>"The requirements</i> <i>specified in the Section-XI -Part-1 General & Particular Employers</i> <i>requirement here under, shall be in read in conjunction of addition</i> <i>requirements specified in</i> " stands deleted.				
		The revised para is as under: <i>"The requirements specified in the Section-XI -Part-1 General Requirements & Scope of Works, shall be read in conjunction of addition requirements specified in"</i>				
30.	Volume 2, Section X, Part 4, Page 434	The third para on page 434 under Clause 4.2.17.3 Interconnecting Pipe Work , <i>"The sludge, centrate centrifuge to prevent</i> <i>transmission of vibration"</i> stands deleted.				
		The revised para is as under: "The sludge, centrate and water pipe work shall consist of pipes of DI-K7 and CI Gate Valves / GM Globe Valves. The pipe works shall be of Polypropylene and valves shall be PP ball valves. Suitable flexible connections shall be provided in the pipe work connecting centrifuge to prevent transmission of vibration"				
31.	Volume 2, Section X, Part 4, Page 463	The third column of ninth row (Chemical Feed Lines) under Clause 4.2.17.3 Piping Sizing & Material, "PVC / PP / HDPE / SS" Stands deleted. The revised third column of row is as under: "Polypropylene"				
32.	Clause 1.7(2)(vi), Volume 2 Section X, Part-1, Page 244	The second sentence of Clause 1.7(2)(vi), "All Gates and sluice valves, process details specified otherwise" Stands deleted. The revised clause is as under: "All Gates and valves except valves in suction of pumps shall be electrically operated unless specified otherwise."				

S. No.	Clause reference		Corrigendum & A	Addendu	m		
33.	Volume 2, Section X, Part 5, Page 512	The second sentence of second para on page 512 under Clause 5.3.2.1 Circuit Breaker "Separate limit switches,					
		"Separate	ed sentence is as under: e limit switches, each having shall be provided for both 'Se pakers"				
34.	Volume 2, Section X, Part 9, Page 751		. Instrumentation, "List MENTATION), add the follow		UIPMEN	Г (ONLI	NE
		S. No.	Equipment's	Ар	proved Ma	akes	
		5	PRESSURE TRANSMITTERS	Endress	& Hausser		
		6	ULTRASONIC LEVEL	Endress	& Hausser		
			TRANSMITTER	Emersor	ı		
35.	Volume 3,Section XI, Price Schedule A3,						
	Page 770	Item	Description		Units	Quantity	ÿ
		9	9 Finishing with Epoxy paint (two or more coat) at all location surface prepared and applied as per manufacturer's specified including appropriate priming coat, preparation of surface (including surface cleaning and sand blasting),etc.complete.				
			Gas Holder Steel Bell for phase	e-II	sqm	5200	
36.	Volume 1A, Section VIII, Appendix to Technical Proposal-, Page 52	Existing matter against FIDIC Gold Book (General Conditions) Provision 9.2, Section B2 "The Duration of total Interim operation shall the plant as described in Volume 2 Section 1" stands deleted.					
		"Section 1 of Section effluent st	ed matter is as under: 32 – Interim O&M Contract – . A), operation and maintenan andards and using existing DJ ontract for various phases"	nce of pl	ant phases	with curr	rent
37.	Volume 1A, Section VIII, PC, Page 62	Maintena 62, "the	nder "During Defect Liab nce (b) of Sub-Clause 4.19 El power charges calculated Part-9, Section X, Volume 2	lectricity,	, Water an	d Gas", Pa per Techni	age ical

S. No.	Clause reference	Corrigendum & Addendum
		deleted.
		The revised sentence is as under: "the power charges calculated on the basis of net power consumption guaranteed by the Contractor. The net power consumption shall be adjusted for the quantity and quality of the raw sewage treated at the WWTP, as per b)- <u>Guaranteed Power Adjustment for Variance from</u> <u>Normal Flow & Pollutant Load</u> , Section IV, Volume 2, Page 237 of the Bid documents."
38.	Volume 1,Part A, Section VIII, Part B, PC, Page 69	Matter under (i) of third para of Sub-Clause 10.10 Non-Availability of Raw Sewage, Page 69, "the power charges calculated as per Technical Schedule, Part-9, Section X, Volume 2 of the Bid
		documents." stands deleted.
		 The revised sentence is as under: (i) "the Employer shall be liable to pay to the Contractor the Fixed Operation & Maintenance Charges as specified by the bidder at the time of bidding in 'S. No. 2., Price Schedule-B1: Operation and Maintenance, Section XII, Volume 3 of Bid documents'"
39.	Volume 1,Part A, Section VIII, Part B, PC, Page 73	Second sentence under third para of Sub-Clause 13.9 Taxation, Page 69, "Accordingly, Employer shall issue of Form 'C', Volume 4 of the Bid Document." stands deleted.
		The revised sentence is as under: "Accordingly, Employer shall issue "Form-C" for all major materials and supplies/ equipment made for Civil, E&M and O&M works in the project as specified in "Clause 1.36, List of Items for issue of Form 'C', Volume 2 of the Bid Document."
40.	Volume 1A, Section VIII, Page 61	All the three para under "During Trail Run and Commissioning", of Sub-Clause 4.19, "For trial run andin case the period of Trial Run exceeds beyond 6-month period." stands deleted.
		The revised matter is as under: <i>"For trial run and commissioning period (total of 6 months) no extra payment shall be made.</i>
		No payment on account of manpower, consumable & preventive maintenance / replacement is admissible to the contractor during Trial run & commissioning period of the WWTP.
		The cost of electricity / Power supplies shall be paid directly by DJB to electricity supply company as per the similar provision of O&M period i.e. minimum of the power consumption guaranteed by the contractor or actual consumed at site. However any excess power consumed than the guaranteed power during six months trial run period then the power charges shall be borne by the Contractor.
		Further during extended period of Trial run of the Plant the Electricity

S. No.	Clause reference	Corrigendum & Addendum				
		charges will have to be borne by the contractor."				
41.	Volume 2, Section X, Part 9, Page 742	Under 1 Mechanical Equipments, add the followings:				
	1 art 9, 1 age 7 +2	S. No. Equipment'				
		23 HOT and EOT	West Works Sales Corporation			
42.	Volume 2, Section X, Part 2, Page 303	Matter mentioned in the table against column 3, Sr. No. C, Clause 2.16.2 Bioreactor with IFAS System for Phase II and III, stands deleted. The revised figure is as under :				
		Sr.DescriptionNo.	Requirement			
		C IFAS Tank (Tank with	media)			
		iii. Media Specifications	 The effective specific surface area of media shall be between 600-800 m2/m3. The technology provider shall be of international repute and have sufficient experience of the technology in similar applications. It is preferable that the material be virgin high-density polyethylene (virgin HDPE). Density of the media shall be less than 1.0 but no less than 0.94. 			
43.	Volume 2, Section X, Part 5, Page 493-494	Matter in the second para, page 494, under Clause 5.13 System Description and Scope, "It is the intent of this specification being implemented by some contractor",				
		stands deleted. The revised matter is as under: <i>"It is the intent of this specification to make the electrical systems for all of</i> <i>the three phases of the plants suitable for receiving and utilizing in-house</i>				
		bio-gas generated power in the	plant."			

Annexure-1

ASPIRATING TYPE AERATORS

Technical Specifications / Functional Requirements

The aspirator type aerator shall consist of an electric motor and regenerative blower located above the water surface. Aerators with submersible motors are not acceptable. Gear Box mechanism should not be required. The hollow shaft should drive a mixing propeller and ring-type diffuser beneath the water surface to disperse the air as fine bubbles into the water.

Standard Oxygen Transfer efficiency of the aerator must be minimum 1.8kg/kWhr, and Oxygen transfer efficiency certificate must be attached as per ASCE / equivalent standards.

COMPONENTS

A. AERATOR DRIVE MOTOR

- 1) The motor shall be with no gear box mechanism and shall be rated for 415 volts, 50HZ/cycle, 3phase service, IEC Motor.
- 2) Motor enclosure configuration shall be totally enclosed, fan cooled TEFC and meet IP55/56 specifications.
- 3) Motor frame shall be made of cast iron end brackets and cast iron body. Fan material shall be carbon steel, aluminum, or propylene with metal hub. Fan cover shall be cast iron or carbon steel with epoxy polyester paint - 50 micrometers thick minimum.
- 4) The noise level of the motor shall be as per applicable noise standards.

B. BLOWER

- 1) The equipment shall include a high efficiency regenerative blower sized to provide sufficient airflow to yield the rated oxygen transfer capacity. Each blower shall include following features:
 - a) Maintenance free and CE compliant Declaration of Conformity on file
 - b) Aluminum alloy construction
 - c) Inlet and outlet sound attenuating silencers to minimize noise.
 - d) The blowers shall be tropicalized for corrosion resistance and motor should be rated for 415volts, 50Hz cycle, 3phase service. Blower motors shall be wired separately.

C. MOUNTING FLANGE

The mounting flange shall be stainless steel and shall permit removal of the aerator mechanism leaving the motor in place. The mounting flange shall allow the aerator to be rotated out of the water for inspection, maintenance or storage.

D. SHAFT/UNIVERSAL JOINT COUPLING

1) The shaft shall be stainless steel full-welded to a forged carbon steel universal joint coupling. The shaft must be preferably hollow to promote maximum air flow and oxygen transfer. The shaft shall be dynamically balanced.

- 2) The universal joint coupling shall include standard grease fitting for maintenance lubrication. Units which utilize flexible couplings to attach to the shaft of the motor are not desirable.
- 3) The shaft shall be stabilized by a replaceable water lubricated bearing. The area of the shaft supported by the bearing shall be fitted with a replaceable hardened non-metallic sleeve.

E. HOUSING

The housing shall be stainless steel and flanged for mounting to the aerator. The housing shall form a guard around the hollow shaft and support a field replaceable, water-lubricated bearing press-fitted into the housing lower end. Water lubrication holes shall penetrate the housing in the area surrounding the bearing.

F. BEARING

The aerator shall be supplied with a field replaceable water lubricated lower support bearing. The bearing shall be preferably press-fitted into the housing to allow ease of replacement. A cantilever design without a lower support bearing or re-greaseable tapered roller bearings are not preferred.

G. SLEEVE

The replaceable hardened non-metallic sleeve shall be the only moving part in contact with the electrometric bearing and shall spin with the shaft as one unit. The sleeve shall be solid and homogeneous.

H. PROPELLERS

- 1) The stainless steel mixing propeller shall be specifically designed to maximize oxygen transfer and mixing characteristics. Propellers shall be self-tightening such that the propeller threads tighten on the shaft threads during normal operation. The entire flow of air shall pass through the propeller via the hollow drive shaft along the axis of the propeller hub.
- 2) The propeller design shall be tested in clean water and shown to draw a minimum of 85% of the recommended full motor amperage load at nameplate voltage and power factor. The propeller shall be designed to allow easy removal and replacement in the field.

I. RING / DIFFUSER

The Aerator shall be equipped with a stainless steel secondary Ring diffuser, smaller than the mixing propeller, consisting of two concentric rings of differing diameters fixed to the diffuser body. The rings shall be specially designed to maximize oxygen transfer and to prevent self aspiration when the regenerative blower is turned off to accomplish mixing. The entire flow of forced air shall exit through the propeller /atomizer opening.

J. VORTEX SHIELD

A vortex shield shall be furnished with each mounting assembly to eliminate the formation of vortices, maximize shaft airflow and prevent cavitation damage to the propeller during operation. Units without vortex shields are not acceptable.