OFFICE OF THE EXECUTIVE ENGINEER (PROJECT) W-II DELHI JAL BOARD; GOVT OF NCT DELHI 501, VARUNALAYA PHASE-I, KAROL BAGH NEW DELHI – 110005

(Ph. No. 23554573, eepw2.djb@nic.in)

No:- DJB/EE (Project) W-II - 204

Dated:-19.05.2017

CORRIGENDUM No. - 8
NIT No. 01(2016-17)/EE (Project) W-II

(EXTENSION OF BID SUBMISSION DATES & REPLY TO CLARIFICATIONS)

Name of Work: Design, Construction, Installation, Testing, Commissioning and Automation with 2 years DNP and 14 years O&M of 477 MLD Chandrawal Water Treatment Plant including Up gradation and Implementation of Part Existing Units and Central Water Management Centre

Under

JICA Assisted Delhi Water Supply Improvement Project in Chandrawal WTP Command Area (Loan No. ID-P225)

This is in continuation to the earlier corrigendum no. 7, corrigendum no. 6, corrigendum no. 5, corrigendum no.4, corrigendum no.3, corrigendum no.2, corrigendum no.1and corrigendum as notice regarding extension of dates. The dates of the said NIT are further extended as follow:-

Last date & time for purchasing Tender Documents : 15:00 on 12.06..2017
 Last date & time for submission of Proposals : 15:00 on 14.06.2017

• Date & time for opening of Prequalification Bid : 15:15 on 14.06.2017

The reply of clarifications which were received in reference to reply to pre bid queries till 03.05.2017 has also been attached here with. Further, kind attention is drawn towards ITB Clause 7.1 on the time period for raising the queries, it is hereby notified that the reply to pre-bid queries issued now is final and no further queries from bidders shall be entertained hereafter. The extension of time granted for submission of bid is also final.

All other conditions remain the same.

لهاء (B. S. Rawat)

EE (Project) Water-II

Copy to: -

- P.A to CEO / Member (A) / Member (F) / Member (WS) / Member (DR) / Addl. CEO, DJB
- 2. CE(Water)Project/CE(WW)
- 3. SE(Project)W-III/SE(WW)
- 4. DOV
- 5. EE(E&M)-I
- 6. EE(EDP) To upload on DJB website.(www.delhijalboard.nic.in)
- 7. JICA India Office
- 8. Under Secretary JAPAN-III, DEA
- 9. M/S TEC Ltd. (Project Manager)
- 10.AE-I / AAO
- 11. M/F & O/C

EE(Project) Water-II

JICA Assisted Delhi Water Supply Improvement Project in Chandrawal Water Treatment Command Area (ID-P225) NIT NO. 1(2016-17)/EE (PROJECT) W-II

<u>Package 1</u>: Design, Construction, Installation, Testing, Commissioning and Automation with 2 years DNP and 14 years O&M of 477 MLD Chandrawal Water Treatment Plant Including Upgradation and Implementation of Part Existing Units and Central Water Management Centre

CLARIFICATION TO PRE-BID QUERIES – II (Dated 26.04.2017) R1

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query		eply on Pre- Queries	-bid	Clarification required on DJB Pre-bid Replies	2 nd Clarification
1.	39	P- 8 of	Pre-settling	In the referred clause 1.4 states	Tender	condition	shall	The Pre-bid replies at Sl.	The bidder is free to
	&	225	Tank Sizes.	that "4nos of Pre-settling tank	prevail.			No. 39 and 146 are at	design either of same
	Annexure-			of same size having a				variance.	sizes for all or of
	19A(P- 225-121-H-			combined capacity of					different sizes for 182
	WTP-			477MLD".				Kindly confirm the size	and 295 MLD streams
	003A,B,C			Whereas in the NIT and in the				of the Pre-settling unit	based on his overall
	&D)			Layout of Proposed				to be considered by	process and unit
				Chandrawal Plant P-225-131-				Bidder for the design of	design and layouts.
				L-WTP-109(III) is mentioned				WTP i.e. 4 Nos. of same	
				as pre-settling tank for				sizes as per NIT or as	
				182MLD WTP with 28 m dia.				per Hydraulic Flow	
				and pre settling tank for				Diagram given in	
				295MLD with 34 m dia.				Annexure-19A of	
				We understand bidder has to				Corrigendum &	
				design 2 no's pre settling tank				Addendum (2 Nos. X	
				for 182 MLD and 2 no's for				27m Dia. each for 182	
				295 mld with different sizes.				MLD and 2 Nos. X	

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				Please Confirm.		34m Dia. each for 295 MLD).	
	146	P-31 of 225		The tender states that "Raw Water from Cascade aerator shall flow to 4 no. of Presettlers of same size having a combined capacity of 477 MLD plus losses" However as per tender drawings P-225-121-HWTP- 003 A & B it is shown that pre settlers are to be designed separately for 182 MLD (2 nos of 27 m dia) and 295 MLD (2 nos of 34 m dia). Please confirm the Design capacity of the Pre -settlers for each of these streams	It is left to the bidder. Minimum requirement for sizing is given in the Bidding Document.		

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
2.	63	P-13 of 225	Chloride	The treatment scheme proposed in NIT is for removal of turbidity, odour, color, TSS, iron, micro-organism & pathogens present in the raw water. The removal of other parameters TDS, Total hardness, Chloride and Fluoride etc. are not envisaged in treatment scheme and hence will appear in treated water. However the "notes" given in raw water report states that chloride value in raw water well above the desirable limits. We request you to please clarify.	The treated water quality shall meet the standards and values for specified parameters given in the bid document.	The Pre-bid replies at Sl. No. 63, 779 and 793 are at variance. We presume that Bidder has to consider reply at Sl. No. 793 and replies given at Sl. No. 63 & 779 are to be ignored. Please confirm.	Ok, reply of S.N. 793 can be considered. However any plant shutdown shall be under approval of DJB.
	779	203 of 225	Treated Water Quality - Chlorides	It is noted that the Chloride content in the raw water has gone upto 550 mg/l against IS:10500 specified Acceptable Limit of 250 mg/l. Since there is no treatment specified for Chloride, please confirm that Chloride content upto 1,000 mg/l (Permissible Limit in the absence of alternate source as per IS:10500) shall be allowed.	The WQ parameters and their limits for guarantee purpose are revised. Please refer to Corrigendum and Addendum – 6.		

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	793	212 of	Raw Water	A Raw Water Quality Table,	Treated water quality for		
		225	& Output	with only 10 parameters	guarantee purpose shall		
			Water	normally analyzed in the	comply with the specified		
			Quality	existing plant, is annexed to	parameters in the Bid		
				the Tender as Annexure-VII	documents, refer to page G-		
				(Drawings). For the Output	10 and SLA Page 116 along		
				Water Quality, a list of specific	with the Corrigendum and		
				Parameters with required value	Addendum - 6, issued now.		
				is provided at pg G-10 of 88,	However, for public water		
				whereas as per pg. O&M -6 of	supply purpose, IS 10500		
				23, it is required that the	must meet statutorily.		
				treated water quality shall be in	Therefore, in case there are		
				complete compliance with the	substances in the raw water		
				local drinking water standards	which can't be treated by		
				(IS:10500-2012), which has	the process employed		
				more than 40 parameters. It	herein, and the consequent		
				may be noted that the plant is	treated water quality is not		
				not designed to treat several	in compliance with the IS		
				parameters forming part of	10500, the plant may be		
				IS:10500-2012, like Heavy	allowed to shut down		
				Metals, Chlorides, Nitrates,	temporarily.		
				etc. Hence, for a better			
				contractual and design clarity			
				of all the stake holders, we			
				kindly request the Employer to			
				issue a Table specifying			
				clearly the Raw Water Quality			
				Parameters and values for			
				which the Plant is to be			

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				designed, and the corresponding Output Water Quality Parameters (IS:10500-2012), to be guaranteed.			
3.	49 597	P-10 of 225	Poly Electrolyte & Storage	In the referred clause 1.10.2 states "that Poly electrolyte solution is pumped at the point of application". Whereas in clause 1.14. it is mentioned "Alum or PAC chemicals". Kindly confirm whether Polyelectrolyte is envisaged for design of WTP. If yes kindly provide the dosing rate and specifications. Kindly confirm the number of	Polyelectrolyte shall be replaced with PAC. Contractor shall have to	The Pre-bid replies at SI. No. 49 & 597 are at variance. Kindly confirm whether Polyelectrolyte is envisaged for design of WTP. If yes kindly provide the dosing rate and specifications.	Polyelectrolyte is dropped and replaced by Poly Aluminium Chloride (PAC).
	391	225		days for the storage of polyelectrolyte, and the design daily consumption (kg/day).	design the storage area for minimum 15 days.		

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
4.	78	P-16 of 225	Ozone	In the referred clause, it is mentioned "liquefied ozone is used to generate ozone". The scope of supply of O2 cylinder is not mentioned; Kindly confirm the capacity of cylinder and quantity of cylinder to be considered for storage of Liquid O2.	Liquefied Oxygen shall be preferable to generate Ozone. But the Bidder may opt for other options given in the bid documents and as per the bidder's offered technology and design.	Kindly provide the number of days to be considered for the storage of Liquefied oxygen for the design of WTP.	It is upto the Bidder to propose as per his design of dosing rates and standard practice in the industry.
5.	General		Chemical Used in Existing 36MLD Recycling plant			Kindly provide the list of chemicals, their concentration, dosage rates, quantity etc. used in the existing 36 MLD Recycle plant.	. Bidders to design of their own to meet the specified effluent standards.
6.	71	15 of 225	No. of Filter beds working and Standby for the WTP.	We presume that the Quantity, Capacity and size of unit shown in the NIT Drawings such as Layout, HFD are indicative only and the bidder can furnish his own design as per CPHEEO Manual. Please Confirm.	Bidder can make its own design but wherever the quantity, capacity and sizes are prescribed as requirement, the design should be made accordingly. CPHEEO manual is a guideline only.	The Pre-bid replies at SI. No. 71, 331, 788 & 834 are at variance regarding filter size, the number of working and standby filters to be considered by bidder for the design of WTP.	Bidder should comply on the filtration rate and on stand-by units as per NIT. Other design parameters (e.g. area, size, numbers) can be as per his own design.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	331	80 of		Kindly confirm whether the	Bidder shall design the	•	
		225		bidder can choose to provide	units with his own	can select filter size, the	
				the number of filters as per	technology considering	number of working and	
				optimized design. Also	stand-by filter as per NIT.	standby filters as per his	
				confirm if the number of		own design however	
				standby		filtration technology	
				Filters shall be chosen by the		shall be as specified in	
				bidder as per the operating		tender.	
				philosophy for best operating		DI C'	
	5 00	200 6	T211	conditions.	Y/ C C' 1	Please confirm.	
	788	209 of 225	Filtration	Can we understood that;	Yes. Confirmed. Number of		
		223	System	- The filtration rate	stand-by Filters shall be as		
				(7.5m3/hr/m2 . 10	per tender document.		
				m3/hr/m2) is mandatory specification, while the	Also refer to Reply at S.N. 331		
				specification, while the number of filters given in	331		
				General Specification is only			
				for reference.			
				- The bidder/contractor is fully			
				responsible to determine the			
				Number of filters satisfying the			
				given filtration rate and			
				guaranteeing the performance			
				for the whole water treatment			
				system.			
				Please confirm.			

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	834	224 of 225	The filter shall be designed as Rapid Gravity Dual Media Filters. The filtration rate could be taken in the range of 7.5 m3/hr/m2 – 10 m3/hr/m2.	We presume that the no of Filters provided in General Specifications is only indicative and the bidder shall design the actual no of filters based on the specification provided (Filtration rate range of 7.5 m3/hr/m2 – 10 m3/hr/m2.) in the Particular Specifications. Kindly confirm	Yes.		
7.	54	11 of 225	Existing 182 MLD Plant Details.	As per the clause, it is mentioned to reconstruct /renovate the existing 182 mld WTP .We request you to furnish the existing WTP system details as mentioned below 1. P&ID 2. GA drawing of Mechanical Equipment's. 3. GA drawings of Civil Units. 4. Civil tank sizes. 5. Dosing ppm Details 6. Hydraulic flow diagram.	The bidders can contact the DJB office and get the available drawings and information.	As per Pre-bid reply, we contacted DJB for obtaining the said details but was informed that all information is provided in Pre-bid Replies/Corrigendum 6. As these details are not available in Pre-bid Replies/Corrigendum 6, we request you to please provide the following details/documents:	Previous reply on this query stands

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				7. Electro mechanical units (capacities, head, model, make etc.) 8. Piping Layout. 9. Pipe & Valves 10. Motor Kw Details. 11.SLD 12.Process Design Details		 Process Design calculations Hydraulic design calculations & Flow Diagram GA drawing of all Mechanical Equipments Civil units civil drawings and tank sizes Dosing ppm Details Electro mechanical units (capacities, head etc.) Make and Model of all Mechanical Equipments Equipment MOC Equipment MOC Equipment Motor installed power SLD 	
8.	55	12 of 225	Existing 36 MLD Recycling Plant Details.	As per the clause, it is mentioned to reconstruct /renovate the existing 36 mld Recycling Plant. We request you to furnish the existing system details as mentioned	For detail/ drawing, bidders to contact DJB office.	As per Pre-bid reply, we contacted DJB for obtaining the said details but was informed that all information is provided in Pre-bid	Previous reply on this query stands

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				below		Replies/Corrigendum 6.	
				1. P&ID		As these details are not	
				2. GA drawing of Mechanical		available in Pre-bid	
				Equipment's.		Replies/Corrigendum 6,	
				3. GA drawings of Civil Units.		we request you to please	
				4. Civil tank sizes.		provide the following	
				5. Dosing ppm Details		details/documents:	
				6. Hydraulic flow diagram.		1. Process Design	
				7. Electro mechanical units		calculations	
				(capacities, head, model, make		2. Hydraulic design	
				etc.)		calculations & Flow	
				8. Piping Layout.		Diagram	
				9. Pipe & Valves (Type, sizes,		3. GA drawing of all	
				MOC, Pressure rating etc.)		Mechanical	
				10. Make and model of		Equipments	
				Mechanical Equipment's.		4. Civil units civil	
				11. Control philosophy of the		drawings and tank	
				plant		sizes	
				12. Motor Kw Details.		5. Dosing ppm Details	
				13. SLD		6. Electro mechanical	
				14. Process Design Details		units (capacities,	
	56	12 of	Spares	We need to work out the	The bidder may contact the	head etc.)	Previous reply on this
		225		Spares for 14 years O&M, we	DJB office and get the	7. SLD	query stands
				request to furnish the Existing	required details as	8. Make and Model of	
				plant details such as	available.	all Mechanical	
				manufacturers of all		Equipments	
				Equipment's with capacity,		9. Control Philosophy	
				MOC, Kw, etc.,		of the plant	

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	123	26 of 225	Existing Recycling Plant	Kindly provide the details of Centrifuge & Screw Pumps in the existing 36 MLD Recycling Plant i.e. Capacity, Model, Make, quantity (W+SB), MOC, working	Bidders may contact DJB offices and acquire the required information.	10. Equipment MOC 11. Centrifuge & Screw Pumps Capacity, Model, Make, quantity (W+SB), MOC, working	Previous reply on this query stands
9.	58	13 of 225 13 of 225	Water Report	The water report is furnished in the tender document is for 2011-2013. In 2014 data, only ammonia, iron, chloride value is mentioned. We request you to furnish latest water report for a period from 2014 to till date, with furnishing all parameters like turbidity, TSS, Color, Alkalinity, THM etc. for design the water treatment plant. The total Suspended Solids is not available in raw water Quality report, Hence we request you to furnish the TSS value from 2013 –till date.	The bidder may collect all available data from DJB. For unavailable data, the bidder shall make its own investigation. The bidder may collect all available data from DJB. For unavailable data, the bidder shall make its own investigation.	As per Pre-bid reply, we contacted DJB for obtaining the said details but was informed that all information is provided in Pre-bid Replies/Corrigendum 6. As these details are not available in Pre-bid Replies/Corrigendum 6, we request you to please provide the latest water reports furnishing all parameters like TSS, Color, PH etc. from 2013 to till date for design the water treatment plant.	provided in Annexure 17 of Pre-bid replies

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	64	14 of 225	pH & Color	The pH, Color value cobalt scale is not available is raw water report. We request to furnish the value.	The bidder may collect all available data from DJB. For unavailable data, the bidder shall make its own investigation.		
10.	121	25 of 225	Water Quality at outlet of Clarifloccu lator of existing 182 MLD WTP	As per referred clause, newly constructed 4 Nos. Flash Mixers &Clariflocculators of 182 MLD Chandrawal 1 Plant has to be integrated and utilized for 477 MLD WTP. Also Bidder has to operate & maintain FM &Clariflocculators for 14 years during O&M of 477 MLD WTP. In view of above, we request you to kindly provide water quality reports indicating TSS, Turbidity, Al, pH etc. at outlet of Clariflocculators of existing 182MLD WTP since its commissioning.	The raw water quality data is enclosed in the Bid document. The bidder may avail additional data from the DJB office.	As per Pre-bid reply, we contacted DJB for obtaining the said details but was informed that all information is provided in Pre-bid Replies/Corrigendum 6. As these details are not available in Pre-bid Replies/Corrigendum 6, we request you to please provide the water quality reports indicating TSS, Turbidity, Al, pH, Alkalinity etc. at outlet of Clariflocculators and plant performance data	These data are not available.
	563	141 of 225	Output Water Quality	Kindly confirm that the existing Clariflocculators are designed and consistently meeting the criteria of Clarified Water Turbidity < 10 NTU. Kindly	Bidder to collect required data from DJB and assess by site visits.	of existing 182 MLD WTP.	Previous reply on this query stands.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				also provide to the Bidders			
				the plant performance data for			
				atleast last 1 year.			
11.	124	26 of	Existing 36	As per referred clause,	Bidders to contact DJB	1 .	Previous reply on this
		225	MLD	Operation and	office for details.	contacted DJB for	query stands However
			Recycling	Maintenance of existing 36		obtaining the said details	please also refer to
			Plant	MLD Water Recycling Plant is		but was informed that	reply under sr. no 5.
				in scope of Bidder. We,		all information is	
				therefore, request you to please		provided in Pre-bid	
				furnish details of Treatment		Replies/Corrigendum 6.	
				Scheme and Design Basis (i.e.		As these details are not available in Pre-bid	
				TSS, load in Kg/d, sludge consistency, flow, operating		Replies/Corrigendum 6,	
				hours etc.) adopted for		we request you to please	
				recycling plant.		provide following	
				recycling plant.		information of existing	
						36 MLD Recycling	
						Plant:	
						Treatment Scheme	
						2. Design Basis (i.e.	
						TSS, load in Kg/d,	
						sludge consistency,	
						flow, operating	
						hours etc.) adopted	
						for recycling plant.	
12.	411	99 of	Renovation	Kindly provide the sludge	Please contact DJB office	As per Pre-bid reply, we	Previous reply on this
		225	,	consistency for disposal and	and visit the site to collect	contacted DJB for	query stands.
			automation	lab data for one year along	more information.	obtaining the said details	
			and	with equipment list & load list		but was informed that	

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
			integration of 36 MLD Recycle pump house existing in the Premises of Chandrawa 1 WTP-I.	of existing 32 MLD plants.		all information is provided in Pre-bid Replies/Corrigendum 6. As these details are not available in Pre-bid Replies/Corrigendum 6, we request you to please provide following information of existing 36 MLD plant: 1. Sludge quantity and consistency presently being achieved in Recycling Plant.	
13.	221	49 of 225	Difusers for Ozonation System	In our current system, diffuser is enough to achieve the performance as ozone dosing system. Could we adopt only diffuser? Kindly confirm.	No. Tender Specification shall prevail.	The Pre-bid replies at Sl. No. 221 and 720 are at variance. Please clarify.	The bidder may adopt any method that is compatible with the overall Ozonation system designed and
	720	183 of 225	Difusers for Ozonation System	1) Please clarify which type the Bidder shall propose, Injector Type, or Diffuser Type, or can the bidder propose one of them under thebidder's design and responsibility? 2) Please confirm that; 4.8.3 and 4.8.4 to be filled and	 Bidder to propose as per his design Yes. 		proposed by the Bidder provided that the same should meet all the performance requirements of the specification and the works.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				4.8.10 can shall be blank or			
				"N.A." if the Bidder is proposing Injector type, and			
				vice versa if the Bidder is			
				proposing Diffuser type.			
14.	52	11 of	Filter	In the referred clause 4.1 states	Tender Condition shall	As per Pre-bid reply at	Use of Filtered water
		225	Backwash	that "Filter wash water shall be	prevail.	Sl. No. 52, disinfected	is acceptable.
				disinfected filtered water".		filtered water shall be	
				Since Dual media filter is		used for backwashing of	
				adopted with GAC, we prefer		filters whereas reply at	
				to do the filter backwash from		Sl. No. 489 states that	
				filtered water channel without		source of filter wash for	
				disinfected water, which will		filtration shall be filtered	
				affect the media performance		water. Both the replies	
				because of residual chlorine.		are at variance. We wish	
	100	100 0		Kindly confirm.		to state that disinfected	
	489	122 of 225	Filter	We understand that source of	Confirmed.	filtered water contains	
		223	Backwash	filter wash for filtration shall		residual Chlorine of 1.5	
				be filtered water. Kindly		ppm (As per Pre-bid	
				confirm		reply Sl. No. 35) which will lead to unnecessary	
						consumption of GAC.	
						Hence, we request you	
						to please allow Bidder	
						to do filter backwash	
						with filtered water & not	
						with disinfected filtered	
						water. Please confirm.	

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
15.	101	22 of 225	Surge Equipment	From the referred clauses we presume that analysis, supply and installation for the surge equipment for pumping system, if required at the pumping station, is included in the scope of this contract. Please provide the survey of the pipeline downstream with all the tapping details, levels of pipeline profile along with the length & material of the pipeline downstream of the treated water pumping station for performing surge analysis.	A tentative detail of pipe length and dia is given as schematic in Annexure-12 of Corrigendum and Addendum - 6	We have noted details provided in Corrigendum - 6 (Annexure-8) regarding Surge Equipment. However, following details are also required for assessing surge protection devices: 1. Demand Statement for each reservoir to be filled with pump installed under this project. 2. Pipeline alignment (elevation data) from pump station to reservoirs. 3. Maximum water level of each reservoir to be filled with pumps. We request you to please provide the same.	The data for transmission mains given in Annexure 8 (CA – 6) is being supplemented with data of 'flow' and 'pipe elevation' as per Annexure 8 (G) to 8 (L). These data should be used for surge design purposes only.
16.	30	6 of 225	Sludge disposal	Kindly provide Sludge Disposal location and distance from WTP.	To be identified by the Bidder as per Bid conditions.	The Pre-bid reply at Sl. No. 30 states that Sludge disposal location shall	No. The bidder is also expected to do site searching works and

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	76	16 of 225	Sludge disposal	In the referred clause it is mentioned "Disposal of WTP sludge to the site suitably identified by the firm and approved by DJB. The bidder shall consider disposal distance of 5 km". We presume DJB will identify the sludge disposal site along with approval required for the same. The bidder scope shall be restricted to transportation of sludge upto the identified site.	The firm and the DJB both shall endeavour to find the sludge disposal site within 5 km distance.	be identified by Bidder as per Bid conditions whereas reply at Sl. No. 76 states that firm & DJB both shall endeavor to find the sludge disposal site within 5 Km distance. The Prebid reply at Sl. No. 261 states that Bidder has to identify & propose possible land sites and DJB can also work at its own on the matter.	procedural follow ups, as required, in realizing the same.
	261	63 of 225	Sludge disposal	Please confirm QUERY (i) We understand that the DJB shall provide the approved land for the sludge disposal through the O&M period. (2 years DNP & 14 years O&M.). Contractor is responsible for disposal of sludge (minimum of 18-20% sludge consistency) at the approved site by DJB. Please confirm. (ii) Please clarify where to provide the Sludge Disposal Cost in the Price Schedule.	The bidder has to identify and propose the possible land sites to DJB. The DJB can also work at its own on the matter. All the excess sludge have to be disposed of. The disposal cost may be put under 'others' head in Schedule 8.4, Preventive/ Periodic maintenance cost.	All the replies are at variance. We presume that DJB shall identify sludge disposal site and Bidder's scope of work shall be transportation of sludge from WTP upto landfill. Please confirm.	

Sl. No	Sl. No. in Corrigend	Page	Subject	Pre-bid Query	DJB Reply on Pre-bid	Clarification required on DJB Pre-bid	2 nd Clarification
	um	No			Queries	Replies	
17.	92	22 of 225	Solar Power & Accessorie s	As per the referred clause the capacity of Solar power to be generated is 500 KW. However as per the Vol IV, Drawings, No:- P-225-134-ESLD-002 it is mentioned as two incomers to be considered for Solar panel 1 & Solar panel 2. Form the above we understand that 2Nos of 250 KW power to be generated by Solar power system. Hence kindly clarify & confirm the same.	Refer to Annexures-6 and Annexure-9 of Corrigendum and Addendum - 6	We request you to please clarify following points provided in Annexure-6: (a) Details provided in Annexure 6 regarding Proposed Solar Power Generation at Chandrawal WTP of Package-1 seems erroneous. We are providing calculation sheet of Solar Power Generation which is attached here as "Appendix – A" for your clarification and confirmation. (b) The clause 9.1(e) mentions that Solar power generated is exceeded the power of the load of the plant then solar	(a) Total guaranteed Solar power generation shall be 950000 KVAh / Year (minimum) considering 0.98 PF for 16 years. Contractor shall select Solar System for generation of the above capacity. (b) Solar system will be installed in compliance of DERC / NDPL guideline. It shall be provided with Interlocking panel, isolation transformer, surge arrestor device, net metering and other safety equipment as per norms. However separate step up 0.433 / 11 KV transformer, HT cable is not required as same 11 / 0.433 KV transformer
						power shall be	will be used.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						supplied reverse to	(C): SLD P-225-134-
						the Grid of the	ESLD-002 to 008 (7
						Electricity company	
						as per the DERC.	available in tender
						Kindly clarify &	document.
						confirm the scope of	
						Switchyard	
						equipments to	
						accomplish the	
						complete Electrical	
						system i.e.	
						Synchronization	
						panel, Step-up	
						transformer 0.433/11kV, HT	
						· ·	
						Cable, metering, protection &	
						communication	
						devices. Please note	
						that it would be	
						challenging to	
						provide suitable area	
						Plant Layout for	
						locating all above	
						mentioned electrical	
						units.	
						(c) SLD for 11KV &	
						11/3.3KV	

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						(P-225-134-E-SLD-001) is available and the remaining Drawings, No:- P-225-134-ESLD-002 to 008(7 sheets of SLD) are not found. Please provide the same.	
18.	462	117/226	12 Pieces Pump Set PLCs and Pump Set RTUs	We understand that each of the CW pump shall have a separate PLC with RTU Unit. These PLCs shall be non-redundant in configuration and shall communicate to a CWPS Master PLC which is redundant in configuration. Kindly confirm if understanding is correct.	For transmission pumps, only a set of common redundant PLC shall be necessary.	The Pre-bid replies at Sl. No. 462 and 697 are at variance. Kindly clarify and confirm that the 12 pieces Pump Set PLCs and Pump Set RTUs to be considered (or) only a set of common redundant PLC system to be considered for CWPS.	 (a) In CWPS there shall be 4 Sets of Transmission Pumps, for 4 Distribution Transmission Mains. Each Set will comprise of 3 Pumps (2duty+1 Stand-by Pumps). (b) Each Set of Pumps shall have a common redundant hot Stand-
	697	173/226	2.3.16 CW pumping Station Fig: CW pumping station SCADA	Such figures show that PLCs and RTUs Separately. Should we understand that the Contractor shall design PLCs (to control the utilities) and RTUs (to transmit the data) separately for the system's stable and	Yes. Tender condition shall prevail		by PLC and RTU (c) As per Section 2.3.6, pg. no. SP-16 of 31 Vol III, PLC and RTUs shall be separate units and redundant PLCs of all the 4 Set

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
			and Automatio n Configurati on	secured performance?			of Pumps, shall be connected to hot Stand-by redundant Pumping Station Master PLC and Master RTU.
19.	Corrigendu m-6	44/104	Minimum IO counts for SCADA		Table for Minimum IO counts for SCADA	In Addendum, the IO count given in referred table seems very high. Kindly allow us considered as mentioned below: 1. For transmitter- 01 AI signal 2. For Switch- 01/02 DI signal 3. Gauges- Nil 4. Each Analyzer- 01 AI signal 5. For each Switchgear- 06 DI & 02 DO signals. 6. For each actuator- 06 DI, 03 DO, 01 AI signals 7. For each pump set- 06 DI, 02 DO, 01 AI signals. Kindly confirm.	The IO counts indicated by you, seems to be OK. Please add 30% of each type of IOs. Quantity (required for Safe, efficient and reliable operation) of IO cards shall be finalized during Detailed Engineering

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
20.	35	7 of 225	Disinfectio	Kindly confirm whether	The free residual chlorine	The Pre-bid replies at	OK, Confirmed.
			n at	disinfection system is in	at the outlet of transmission	Sl. No. 35, 109, 296	
			pipeline	bidder's scope.	pumping facilities should	and 566 are at	
			distribution		be provided at 1.5 ppm for	variance.	
					requirements at pumps up		
					to the limit of the contract.	We presume that	
	109	23 of	Residual	We understand that the bidder	The free residual chlorine	Bidder has to maintain	
		225	Chlorine	has to achieve residual	shall be maintained at 1.5	1.5 ppm residual	
				chlorine as specified in	ppm as per requirement in	chlorine at header	
				referred clause at the plant	the downstream.	outlet of Clear Water	
	20.5	70 C		outlet. Please confirm.	TTI C	Pumps.	
	296	73 of 225		We understand that the scope	The Contractor's scope	Please confirm.	
		223		of the bidder terminates at the	shall be upto 5m from the	Please commin.	
				common discharge headers of 4 set of treated water pumps	wall of treated water pump house excluding		
				with the blind flange at the end	house excluding interconnection with the		
				providing a maximum length	transmission system		
				of 25 m for common header	transmission system		
				with necessary fittings and			
				instruments before the blind			
				flange. Also we understand			
				that the interconnection with			
				the transmission system is			
				taken care by other contractor.			
				Kindly confirm.			
				Due to the presence of	The bidder shall consider		
				ammonia in the water, a very	maintenance of the free		
1				high dose of chlorine will be	residual chlorine at the		
				required to exceed the break-	outlet of CCT/CWR at 1.5		

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	566	142 of 225	Output Water Quality – Free Residual Chlorine	even point, and meet the guarantee for "Free Residual Chlorine > 0.2 mg/l". In addition, the formation of chloramines will adversely impact the taste and odor of the output water. In view of this, we request the requirement to be changed to "Total Residual Chlorine > 0.2 mg/l". Kindly review and confirm.	S.N. 35		
21.	520	129 of 225	Specialist Subcontrac tor	We understand that the "Specialist Subcontractor" nominated by the Applicant to meet the requirements specified under 4.2(ii), 4.2(iii), 4.2 (iv-a), 4.2 (iv-b), 4.2 (vi) has executed the reference projects as a Single Entity or as a JV Member, not as a Subcontractor. Please confirm	Yes, Confirmed.	The Pre-bid replies at SI. No. 520 and at 9 are at variance. We presume that Bidder has to consider Pre-bid reply at SI. No. 9 (page 2 of 10) and ignore Pre-bid reply at SI. No. 520 (page 129 of 225). Thus,	Yes, Confirmed.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	Corrigendu m 6, Sl. No. 9	2 of 10	Specialist Subcontrac tor	Specialist subcontractor	Clarified as: Specialist subcontractor's experience in similar capacity elsewhere will be considered and the same can complement to the experience of the main bidder.	reference projects executed in the role of a Subcontractor are also allowed and acceptable for meeting criteria 4.2(ii), 4.2(iii), 4.2(iv-a), 4.2(iv-b) and 4.2(vi). Please confirm our understanding is correct.	
22.	512	126 of 225	Specialist Subcontrac tors	The Experience sought from the bidder as "Design, Supply, Construction and Commissioning of 143 MLD WTP with advance treatment with Granular Activated Carbon (GAC) Media" is a specific stringent criterion which is not prevalent in the projects of water treatment executed in India. Further, limited availability of such experience will restrict participation to few firms only. Thus, in view of the above we request DJB to kindly allow the Supplier's experience of providing the system of	Tender condition shall prevail. It may be noted that if the supplier comes as specialist sub-contractor, the same will be accepted.	The Pre-bid replies at SI. No. 512 states that if the supplier comes as specialist subcontractor, the same will be accepted. As per the above reply, it is our understanding that experience of a supplier or manufacturer of supplying GAC for a WTP of 143 MLD or more capacity shall be eligible to qualify against Pre-qualification criteria 4.2 (iii) if such supplier or manufacturer comes as specialist sub-	No. That only meant that the supplier/manufacturer can also become specialist subcontractor for this contract. However, the Supplier and the Main Bidder can complement the experience to each other functionally. For example, the Supplier can have design and supply experience and the main bidder can have construction and commissioning

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				advance treatment with Granular Activated Carbon (GAC) Media to be accepted against the referred clause.		contractor. Please confirm our understanding is correct.	experience .
23.	524	130 of 225	Notes for applicant	Applicant share by value in previous executed project, shall be considered to meet the requirement. We presume that, in case of project executed in JV, the leader having maximum share can claim the full experience of the project. This is also in line with other DJB projects. Kindly confirm.	Yes, Confirmed	With reference to the Pre-bid reply at Sl. No. 524, it is our understanding that for a reference project executed in JV, the JV partner is eligible to claim full plant capacity experience irrespective of his share in JV. Please confirm our understanding is correct.	Yes confirmed.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
24.	125	26 of 225	Specific Constructio n Experience 4.2 (iii)	We request you to kindly consider the experience of design, supply, installation, testing & commissioning of one WTP with minimum capacity 15% or more i.e. 75 MLD with advance treatment with Granular Activated Carbon (GAC) media for qualification purposes. Please confirm.	Tender conditions shall prevail	The referred clause stipulates Specific Construction Experience Criterion for GAC. It is our understanding that "WTP" referred in clause 4.2 (iii) means either a New WTP or an upgraded / refurbished WTP with GAC filters of minimum capacity of 30% or more i.e. 143 MLD.	It is clarified that a "WTP" as mentioned in the bid documents includes an upgraded / refurbished WTP.
						understanding is correct.	
25.	761	199 of 225		We understand that WTP means potable drinking water treatment plant. Please confirm.	Yes. Confirmed.	Referring to Pre-bid replies at Sl. No. 761 and 3, it is our understanding that "water sector projects" mentioned for Qualification Criteria 4.2 (ii) refers to potable	Previous reply on this query stands.
	Corrigendu m 6, Sl. No 3	1 of 10		Similar means that design, supply, installation, testing & commissioning of at least one WTP with minimum	Modified as: Similar means that design, supply, installation, testing & commissioning of	drinking water treatment plant projects only. Please confirm our	

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				capacity 30% or more i.e. 143	Ozonation system for;	understanding is correct.	
				MLD with advance treatment	• aggregated capacity of		
				by Ozonation	143 MLD (multiple		
					contracts) for water		
					sector projects		
					OR		
					• one Plant of 71.5 MLD		
					capacity (50% of 143		
					MLD) for Water Sector		
					Project.		

Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
26. Corrigendu m 6, Sl. No 3	1 of 10		Similar means that design, supply, installation, testing & commissioning of at least one WTP with minimum capacity 30% or more i.e. 143 MLD with advance treatment by Ozonation	Modified as: Similar means that design, supply, installation, testing & commissioning of Ozonation system for; • aggregated capacity of 143 MLD (multiple contracts) for water sector projects OR • one Plant of 71.5 MLD capacity (50% of 143 MLD) for Water Sector Project.	Construction Experience Criterion for Ozonation System. It is our understanding that "Plant" referred in this modified clause 4.2 (ii) means either a New WTP or an upgraded / refurbished WTP with	Yes Confirmed

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
27.	16 & 17	3 of 10	Letter of Price Bid	Alternative No.: [insert identification No. if this is a Bid for an alternative] (C) [In case of multiple lots, insert the total price of each lot] [in case of multiple lots, insert the total price of all lots (sum of all lots)]:	Deleted. Refer to Annexure -20 as enclosed herewith. Replaced by: Section 1: [insert the total price of all Section 1 works in words and figures, indicating the various amounts and the respective currencies] Section 2: [insert the total price of all Section 2 works in words and figures, indicating the various amounts and the respective currencies] Refer to Annexure -20 as enclosed herewith	However, Annexure – 20 is not available in Corridengum 6. We request you to please provide the same.	20 as Annexure 12. Also at Sr. no. 22, 23 & 24 please read Annexure 18 as Annexure 11.
28.	105	22 of 225	Extension of Bid submission	We are sure you will appreciate in the view of extensive and critical scope of work involved, we require sufficient time to assess the site conditions in order to arrive at the suitable methodology to be adopted. In order to prepare competitive technical and commercial bid, we request you to extend the bid submission date by at least	Please refer to the DJB's website for such related notifications.	We are sure that you will consider grant of sufficient time required for through review of the pre-bid clarifications and subsequent incorporation of the revisions / changes in our technical and commercial bid. Therefore, We request you to extend the bid	Bid submission date is extended and is due on 24.05.2017

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				4 weeks. Kindly consider and confirm		submission date by at least 4 weeks. Kindly consider and confirm	
29.	No. 221 and No. 720 of the reply to Pre-bid queries	49 of 225, and 183 of 225	Ozonation	<no. 221="" query=""> In our current system, diffuser is enough to achieve the performance as ozone dosing system. Could we adopt only diffuser? Kindly confirm. <no.720 query=""> 1) Please clarify which type the Bidder shall propose, Injector Type, or Diffuser Type, or can the bidder propose one of them under the bidder's design and responsibility? 2) Please confirm that; 4.8.3 and 4.8.4 to be filled and 4.8.10 can shall be blank or "N.A." if the Bidder is proposing Injector Type, and vice versa if the Bidder is proposing Diffuser Type.</no.720></no.>	<no. 221="" answer=""> No. Tender Specification shall prevail <no.720 answer=""> 1) Bidder to propose as per his design 2) Yes</no.720></no.>	As in reply no. 221 DJB has denied the use of only diffusers for ozone dosing while in reply no. 720 DJB has given the right to bidder to go as per their design. Kindly clarify.	Please refer to S.N. 13 above.
30.	No. 218 of the reply to Pre-bid	48 of 225	O&M Cost	We understand that contractor shall be responsible for the breakdown, repair,	Tender condition shall prevail	The contractual condition of O&M is not cleared by the answer.	(1) No. The cost shall be limited to the amount quoted in

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	queries			replacement and spare parts preparation during O&M period under the Comprehensive operation, and, on the other hand, contractor can enjoy the benefit of optimization. Namely, contractor cannot claim any money if actual operational cost excesses the proposed price, and can receive proposed price without doing repairing or replacement if equipment or facility is expected to work well beyond assumed period. Please kindly confirm whether our understanding is correct.		(1) If unexpected fault happened and repair was required in addition to submitted plan in Schedule no. 8.5, could contractor get additional cost? (2) Even If repair was not required considering actual working condition, would contractor be obliged to do the repair work stated in no. 8.5? Please kindly clarify.	Schedule no. 8.5. (2) Yes.The recommended frequency for overhauling, repair and replacement of specified/ quoted items must be followed by the contractor.
31.	No. 321 of the reply to Pre-bid queries		Filtration Rate	Bidder had raised the following query "It is specified that filtration rate could be in the range of 7.5 – 10.0 m³/hr/m². Kindly confirm to provide maximum filtration rate up to 12 m³/hr/m² as it is Rapid Gravity Dual Media Filters "	Tender conditions shall prevail	With minimum EBCT provided for GAC in dual media filters and complying with the process requirements as per tender, the filtration rate can be increased up to 12 m ³ /m ² /hr for dual media filters as per the "Manual on Water	Previous reply on this query stands.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
32.	Annexure 17 Raw					Supply and Treatment – CPHEEO Clause 7.6.4.3". Hence, Bidder requests DJB to increase the maximum filtration rate to 12 m³/m²/hr. Kindly confirm. The raw water data provided in both tender	This is a design-build-operate type of
	Water parameters					and Annexure 17 are monthly maximum and minimum values and the turbidity parameter has a wider range of values which cannot be taken as design value. Also the raw water quality for the total contract period of 231 months is unpredictable. This makes it difficult to design the WTP system to meet the treated water quality criteria in the entire O&M period.	contract. So, the contractor is expected to analyze the raw water data and trend and design the plant with engineering prudence (on design
						Hence it is mandatory to have design raw water quality especially TSS, turbidity and TOC and	

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						so requesting DJB to provide a single design value for the above said parameters which shall be used to design the treatment units of the WTP, Sludge treatment and also for guarantee purposes.	
33	Corrigendu m No.6 - Annexure 4 DCS/PLC/ SCADA – General Specificati ons		Volume 3 Part 2Work Requireme nts Section VI Particular Requireme nts SCADA and Automatio n 2.2 WTP SCADA and Automatio n software 2.2.1 Automatio n	The automation hardware, the PLCs, and the automation software shall be of the same manufacturer than the SCADA software and the RTUs. For all RTUs and PLCs in the SCADA center the same brand and type shall be provided, if applicable	DCS manufacturer should quote directly, support engineers should be of minimum 7 years' experience.	We understand that the PLC, RTU, Automation hardware and Software for the WTP SCADA shall be from the same manufacturer or is the bidder free to choose different makes for the PLC and RTUs. Kindly clarify Please clarify the term "than the" in clause 2.2.1. and please clarify the term "if applicable" in clause 5.3	Yes. The PLC, RTU, Automation hardware and Software for the WTP SCADA shall be from the same manufacturer. "If applicable" is meant for the situation that "If PLC and RTU can be of the same brand and type, they should be accordingly."

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
			Part 2 Work Requireme nts Section VI General Specificati on SCADA and Automatio n 5.3 RTU and PLC Hardware				
34	Corrigendu m No.6 - Annexure 4 DCS/PLC/ SCADA - General Specificati ons		Volume 3 Part 2 Work Requireme nts Section VI Particular Requireme nts SCADA and Automatio n Sub- Section 3. SCADA at the CWMC	The SCADA software for the CWMC shall be the same brand name than that for the WTP.	DCS manufacturer should quote directly, support engineers should be of minimum 7 years' experience.	We understand that the WTP SCADA and the CWMC SCADA shall be of the same make/manufacturer. Please confirm. Please clarify the term "than that for the WTP" in the clause 3.2.	Yes. The WTP SCADA and CWMC SCADA shall be of the same make/manufacturer

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
			3.2 CWMC SCADA and Automatio n Software				
35	Corrigendu m & Addendum -6 Annexure – 3		(with Annexures) And Replies to Prebid Queries, Instruments		Minimum IO Counts for SCADA at Chandrawal Water Treatment Plant The list above is formulated for one instrument.	The IO Counts indicated in the table are very high in number for each unit. For example, 19 – Pump set has 21 – DI, 2 – AI, 25 – DO, and 1 – AO. Such high IO Counts are not essential for a pump. This would cause a huge increase in the IO Count and thereby increase the cost of the project. Kindly review the IO Counts.	This IO Counts for each Instrument is only indicative. As this is a DBO Tender, the contractor may consider the IO Counts as deem adequate for a 477 MLD WTP. Actual IO count will be finalized during detail Engineering period
36	Corrigendu m & Addendum -6 Annexure –		(with Annexures) And Replies to Prebid Queries, Instruments		Minimum IO Counts for SCADA at Chandrawal Water Treatment Plant The list above is formulated for one instrument.	The IO Counts indicated in the table for Transmitters (level, pressure), Flow meter, Turbidity meters, ph Meter, Ammonia Analyzer, Residual Chlorine Analyzer, BOD/COD Analyzer, other water quality monitoring are not usually followed.	Refer to the Reply at S.N. 35

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						Generally for the above instruments only 1 AI is considered for the 4-20 mA signals. The table also indicates DI, DO and AO signals for such instruments. Kindly review. Such consideration will cause a huge increase in the IO Count and thereby increase the cost of the project. Kindly review the IO Counts.	
37	Corrigendu m & Addendum -6 Annexure –		(with Annexures) And Replies to Prebid Queries, Instruments		Minimum IO Counts for SCADA at Chandrawal Water Treatment Plant The list above is formulated for one instrument.	Please clarify what does the column "Fixed" indicate in the IO Table. Kindly clarify the type of IO this column represents	Refer to the Reply at S.N. 35
38	Corrigendu m & Addendum -6 Annexure –		(with Annexures) And Replies to Prebid Queries, Instruments		Minimum IO Counts for Water Treatment Plant The list above is formulated for one instrument.SCADA at Chandrawal	The IO Count mentioned for Actuator and valve chamber in the Table is high. Such high IO counts are not generally considered. Also clarify the difference between actuator and valve chamber IOs as they both refer to the feedback/command of	Refer to the Reply at S.N. 35

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
39	Corrigendu		Reply to		Besides Tender	valves. Such consideration will cause a huge increase in the IO Count and thereby increase the cost of the project. Kindly review the IO Counts. The Annexure 4 does	
	m No.6		Pre-bid Queries Query No.460		Specification, please refer to Annexure 4 enclosed with corrigendum and addendum – 6	not clarify the addressed query no. 460. Please clarify if ICA refers to the PLCs and RTU refers to the networking components of the system i.e Ethernet switches, FO Patch panels which facilitates communication of PLC with the SCADA system. The communication modules will be housed in the PLC panel and the network components will constitute the RTU.	Local Control Panel and RTU refers to networking components interfacing with SCADA System

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
40	Corrigendu m No.6 - Annexure 4 DCS/PLC/ SCADA		General Specificati ons		System Architecture: The DCS/PLC system shall consist of a modular controller, including control, I/O, and communication functions, Operator and Engineering software. It should be scalable architecture	We understand that PLC based control system is acceptable for this contract. DCS is not required for this contract. Kindly confirm	Whether to provide DCS or PLC will be decided during detailed Engineering, based on the process / system requirement.
41	Corrigendu m No.6 - Annexure 4 DCS/PLC/ SCADA		General Specificati ons		DCS manufacturer should quote directly, support engineers should be of minimum 7 years' experience. No distributor or system integrator will be permissible	clause is applicable only if the bidder proposes a DCS based control	Only the DCS manufactures should quote to the main Bidder.for the SCADA systems. No Distributer or System Integrator will be permissible
42	Corrigendu m No.6		Reply to Pre-bid Queries Query No.625		Please refer Corrigendum and Addendum - 6	Kindly indicate to which section of the Corrigendum and Addendum – 6 we should refer for the reply to this particular query.	Annexure 9 enclosed with CA-6 gives modified specification for solar power system. The Specified documents shall be required to be submitted after award of contract.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
43	Corrigendu m & Addendum 6		Annexure 6 - solar Power Generation Total solar Power generation			We understand that the total solar power generation is calculated based on the formula "Days in a year x sun insolation x power plant capacity" (365 days x 5.06 x 500kWp); whereas the average annual sunny days will be less than 365 days. Also, the sun insolation is considered for calculating power generation, whereas the power generation from solar modules will be lesser than this sun insolation. We request you to change the formula as "Average sunny days in a year x sun insolation x efficiency x power plant capacity".	Refer to the Reply of S.N. 17 (a).
44	Corrigendu m & Addendum 6 - Annexure 6		Annexure 6 - solar Power Generation Total solar Power generation			We understand that the guarantee for total solar power generation mentioned in the addendum can be taken for 1st year only. There will be system losses in the consequent year up	Refer to the Reply of 17 (a).

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						to 16 years. So the given guarantee is asked for the first year only. In case of providing guarantee for the 16 years, there will be losses from guaranteed value of first year. Please confirm.	
45	Corrigendu m & Addendum 6 - Annexure 9		Solar Power System Subsidy- Note: i) The subsidy for installation of Solar system shall be pass on to DJB.			We understand from the ministry notification, No.03/88/2015-16/GCRT that the subsidy mentioned is not applicable for Government Sectors. Please clarify.	Subsidy/ incentive for installation of Solar Power Generation system shall be passed on to DJB, if Any.
46	Corrigendu m & addendum 6		Clarificatio n to pre-bid replies S.No 303		Recycle Plant is capable to treat the sludge.	Bidder understands that the existing 36 MLD recycle plant is capable of treating all the sludge from the WTP both during monsoon and non-monsoon season. Please confirm.	Bidder may visit site and access the suitability of plant as per the requirement and account for suitable measures if felt necessary. However it is clarified that the water losses shall be considered on annual average basis.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
47	Corrigendu m & addendum 6.		Clarificatio n to pre-bid replies S. No 565		Bidder can design and propose for appropriate coagulants/ chemicals for meeting the output water quality and other requirements	Bidder understands that either Alum or PAC shall be chosen as coagulant based on the treated water quality and other requirements. Provision for dosing both Alum and PAC are not required. Please confirm.	For constructing the Chemical House, provision for both the PAC and Alum tanks should be made. However, during plant operation, bidder can propose on coagulants to use as appropriate.
48	Corrigendu m & addendum 6 –		Clarificatio n to pre-bid replies S.No 52			Using disinfected (chlorinated) water for backwashing of filters will lead to faster utilization of active sites of GAC and this will reduce the adsorption capacity of GAC and hence lead to more frequent regenerations. Hence we are reiterating to use filtered water without disinfection to be used for backwashing of filters. Please confirm.	Yes, confirmed. (Refer to S.N. 14.)
49	Corrigendu m & addendum 6 Annexure 17		Raw Water parameters			The raw water data provided in both tender and Annexure 17 are monthly maximum and minimum values and the turbidity parameter has a wider range of values	Refer to the reply at S.N. 32

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						which cannot be taken as design value. Also the raw water quality for the whole contract period of (3 Construction + 16 DNP +O&M) is unpredictable. This makes it difficult to design the WTP system to meet the treated water quality criteria in the entire O &M period. Hence it is mandatory to have design raw water quality especially TSS, turbidity and TOC and so requesting DJB to provide a single design value for the above said parameters which shall be used to design the treatment units of the WTP,Sludge treatment and also for guarantee purposes.	
50	Corrigendu m & addendum 6		Clarificatio n to pre-bid replies S.No 571		The Empty Bed Contact Time (EBCT) for GAC volume shall be taken as minimum 10 minutes.	Empty Bed Contact Time (EBCT) of 10 minutes will lead to higher media depth and there will be increased media loss during backwash of filters because of bed	Previous reply stands

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						fluidization. As per the standard references it is sufficient to provide 5 minutes of EBCT for GAC for removal of organics. Hence, bidder requests DJB to specify the minimum EBCT for GAC to be 5 minutes.	
51	Corrigendu m & addendum 6		Clarificatio n to pre-bid replies S.No 493	Bidder had raised the following query "Provide the design turbidity and suspended solids separately for monsoon and non-monsoon season, to bring all the bidders on par. "for which the reply provided was "Refer to Annexure-17 of Corrigendum and Addendum – 6".		The above referred Annexure provides additional monthly data (max/min) on various Raw water parameters and not the design values. Requesting DJB to provide design turbidity and suspended solids to allow all the bidders to design the water treatment system on the same basis.	Refer to the reply at S.N. 32
52	Corrigendu m & addendum 6		Clarificatio n to pre-bid replies S.No 494	Bidder had raised the following query "Provide the inlet raw water turbidity and suspended solids for monsoon and non-monsoon season for designing the sludge/waste water treatment system, for all the bidders to design the system on the same basis. "for which the reply provided was "Refer to Annexure-17 of		The above referred Annexure provides additional monthly data (max/min) on various Raw water parameters and not the design values. Requesting DJB to provide design turbidity and suspended solids to allow all the bidders to design the	Refer to the reply at S.N. 32

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				Corrigendum and Addendum – 6".		sludge treatment system on the same basis.	
53	Corrigendu m & addendum 6		Clarificatio n to pre-bid replies S.No 496	Bidder had raised the following query "Functional Guarantees: Specify the raw water quality at which the clear water quality guarantees are to be provided. "for which the reply was "The guarantee to be given on clear water quality is independent of the raw water quality. However, guarantee will be enforced on only the parameters stated in the Bid document."		To bring all the bidders on par, requesting DJB to provide the design values for the raw water parameters for which the functional guarantee to be provided.	Refer to the reply at S.N. 32
54	Corrigendu m & addendum 6		Clarificatio n to pre-bid replies S.No 321	Bidder had raised the following query "It is specified that filtration rate could be in the range of 7.5 – 10.0 m³/hr/m². Kindly confirm to provide maximum filtration rate up to 12 m³/hr/m² as it is Rapid Gravity Dual Media Filters "	Tender conditions shall prevail	With minimum EBCT provided for GAC in dual media filters the filtration rate can be increased up to 12 m³/m²/hr as per the "Manual on Water Supply and Treatment – CPHEEO Clause 7.6.4.3" and thereby reduce the overall area required for the filters still meeting the process requirements. Kindly confirm.	Refer to the reply at S.N. 31.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
55	Vol-III, Section- VI, Clause no. 2.4.9	G- 17 of 88	Sludge Disposal	In the referred clause it is mentioned "Disposal of WTP sludge to the site suitably identified by the firm and approved by DJB. The bidder shall consider disposal distance of 5 km". We presume DJB will identify the sludge disposal site along with approval required for the same. The bidder scope shall be restricted to transportation of sludge up to the identified site. Please confirm	The firm and the DJB both shall endeavor to find the sludge disposal site within 5 km distance.	We understand that Approved Landfill Site for disposal of sludge and residues will be identified by customer. Necessary licence, approval with local bodies and permits and its renewal and the cost associated with these shall be borne by employer. Contractor shall only transfer the sludge from the plant to the identified site which is located in 5 km radium from the plant. Kindly confirm our understanding.	Refer to the reply at S.N. 16. Contractor's general license and permit costs shall be borne by the contractor itself as clarified in relevant query previously. However, with respect to specific dumping or disposal charge, the same shall be first paid by the contractor under approval from the DJB and then claimed as reimbursement under Provisional sum in the contract. The cost of sludge disposal within 5 km distance shall be borne by contractor and beyond 5km, if applicable, shall be paid extra as per SOR.
56			Vol-III, Section VI, Clause 2.4.9 G-17 of	It is specified in the bid document that disposal of WTP sludge to the site suitably identified by the firm and approved by DJB. The bidder	Bidder to identify and propose. In case of unavailability, cost of haulage to extra distance shall be considered.	We understand that Employer being the owner of the plant shall be responsible for any royalties, dump fee and	Refer to the reply at S.N. 55.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
			O&M of the entire works under the Contract	shall consider disposal distance of 5 km. Since the Chandrawal WTP Plant is located in the Centre of city, Sludge & refuses disposal site identification within 5 km radius is difficult for the firm. Hence We request DJB to provide site for the sludge& refuses disposal & approval within the plant premises/5 km radius from the plant.		any other fee collected by land owner or landfill operator.	
57			Vol-III, Works Requireme nts O&M - 3 of 24 O&M of 14 Years after DNP, Recycling plant,	The Recycling plant is an existing plant and the Contractor will be responsible for the O&M of this plant during the Defect Notification Period and the O&M Contract period of 14 years thereafter. The Contractor shall include in his price for this O&M works of this plant. As per Intial Query S.no 272: Contractor shall take over this plant as demonstrated conditions with all the functional guarantees fulfilled as per employer requirements under good working conditions. We presume that the civil life of the structure shall withstand a minimum of 16 years from the start of DNP.	Yes, it is expected to be so. However, the bidder may visit the site, assess the condition and consider for doing any minor repair and maintenance works, if required, to ensure its performance over the desired period.	We request employer to certify the residual structural life of existing civil structures by engaging a reputed university/third party firm. Kindly confirm.	Previous reply on this query stands.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
				Kindly confirm.			
58			Vol-III, Works Requireme nts O & M - 5 of 23 O&M of 14 Years after DNP, 1.2 General,	Obtain licenses/clearances, renewal of licenses, permits and certificates that are necessary to operate the plant for the fulfillment of the obligations of the Contractor under the Conditions of Contract As per Initial Query S.No. 280: We request Employer to bear the cost to Obtain and Renew all licenses/clearances, permits, sludge management permits, and certificates that are necessary to operate the plant. The contractor shall support to getting this work done in coordination with concern departments.	This cost shall be included in bidder's bid price.	As Employer being the Owner of the plant, we request Employer to arrange for licenses/clearances, renewal of licenses, permits and certificates that are necessary to operate the plant. The contractor shall extend support in coordination with concern departments	Previous reply on this query stands.
59			Vol 1, Section IV, Page 48 of 50 Clarificatio n to Prebid replies S.N 392 Form of Bid	This guarantee will expire and shall be returned: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security issued to the Beneficiary in relation to such contract agreement; or (b) if the Applicant is not the	As per GC 19.2, The Bid Security shall be valid for twenty-eight (28) days beyond the original validity period of the Bid. The Bid Security period shall be valid not less than 178 days from Bid submission date.	We would like to bring to your attention that according to the RBI direction, we cannot issue guarantee without capping the same by incorporating the definite expiry date in the Form of Bid Security. In the Form of Bid Security provided in	The concerned Bidders may submit the Bid Security Guarantee with minimum 178 days validity period from Bid submission date as per previous reply.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
	um		Security	successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period		the tender, the expiry date of the guarantee is not specified irrespective of whether the Bidder is successful or not. Hence we kindly request you to provide an expiry date/end date for the guarantee in the Form of Bid Security as below. "This guarantee will expire and shall be returned: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security issued to the Beneficiary in relation to such contract agreement; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the	
						Beneficiary's notification to the Applicant of the results of the bidding process;	

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						or (ii) twenty-eight days after the end of the Bid Validity Period or (c) xx-xx-xxxx (Expiry Date: 178 days from Bid submission date), whichever is earlier.	
60	Corrigendu m & Addendum 6, S.N 16				Column: Modified or Clarified as Deleted. Refer to Annexure -20 as enclosed herewith.	Annexure-20 is not enclosed. Kindly provide the same.	Refer to the reply at S.N. 27
61	Corrigendu m & Addendum 6, Annexure 1,		Schedules of Stage Payments		Column: Correspond to the Schedule No. 4.1 and 4.2	Schedule No. 4.2 correspond to Installation and Other Services. Hence, Bidder feels that the payment corresponding to this Schedule should come under S.N 3 of the Major Work Category – Plant and Equipment for Incorporation in the Permanent Works	No. Installation involves only labour works as supply component is paid under schedule 1 and 2. Hence S.N. 2 is the right category.
62	Corrigendu m & Addendum 6, Annexure 1,		Schedule No. 8.6 Summary of Cost for DNP and O&M Period		Column: Total Amount (for Bid Evaluation) Equivalent in INR** (o) INR Equivalent + (n)	We believe that there is an error in the above formula for arriving at the Total Amount (for Bid Evaluation). It should be modified to (o) INR Equivalent + (p) Since (p) is the total INR component.	Yes. Please correct (n) as (p) in the last column of schedule no. 8.6.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
63			Clarificatio n to Prebid replies S.N 137		The document can be found at this URL: http://www.jica.go.jp/englis h/our_work/types_of_assist ance/oda_loans/oda_op_inf o/guide/tender/c8h0vm0000 011e2j-att/civil_02.pdf	The link shows that the file you have requested is not found. Kindly provide the General Conditions of Contract	The corrected URL is as under https://www.jica.go.jp/english/ourwork/types_of_assistance/oda_loans/oda_op_info/guide/tender/c8h0vm0000aoesst-att/civil_02.pdf
64			Clarificatio n to Prebid replies S.N 785		Delay damage will be applicable for the construction period wherein delay occurs completion of work by the fault of the contractor. Delay damage for O&M period will be applicable as per SP-O&M clause 7.4 and calculation of amount as per GC 8.7. Also, refer to reply at S.N.7 Please understand accordingly.	Since the Contractor is responsible for O&M during the DNP period, We request the client that it is reasonable that the delay damages for DNP period be applicable as per SP-O&M clause 7.4 and calculation of amount as per GC 8.7.	DNP falls under Section 1 of the contract period. Secondly, final acceptance of the capital works would be at the end of DNP only. Hence, in DNP period contract conditions for construction phase would apply.
65			General		<i>Q y</i> :	We presume that consequential damages are excluded under this contract. Please confirm.	This can't be replied in general. Interpretation of contract conditions are subject to the judgement of competent authorities on case by case basis.

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
66	Volume II, III, Corrigendu m -6, Sr. No. 16,17	Corrige ndum - 3 of 10	Letter of technical & Price bid.			Corrigendum indicates, Annexure-20 as technical & price bid. The same is not included in the annexure list, however a detailed price bid is enclosed. Please advise, if we have to consider the letter of technical bid as mentioned in the original tender doc (page — 24 of 204, Section-IV) & letter of price bid as mentioned in the original tender doc (page — 24 of 204, Section-IV).	Refer to the reply at S.N. 27
67	I,III, Qualificati on criteria Notes for the applicant, iii)	Corrige ndum - 2 of 10 & Pre bid replies – Sr 205, page-44 of 225	For contracts under which applicant participated as a JV member, only the applicant share, by value, shall be considered			The Modified or clarified clause under Corrigendum -6 & Prebid replies are at variance / inconsistent. The qualification being a critical area, we request for a suitable clarification.	There is no variance. For better clarity, it is further clarified as follows. In case of a work done by a JV, the following will apply: (i) On financial side, each JV member can claim for their share of contract value only (ii) On work experience side, each

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			to meet this requiremen t.				JV member can claim for the whole work done by the JV.
68	Volume III, 2.4.3	G - 11 of 88	Demolition and Re- constructio n/renovatio n works			Please provide the as built drawing of structures to be renovated or demolished.	Bidder to contact DJB to get the available drawings
69			Site Visit			As per our site visit there is an existing drain at site. Please confirm the inflow to this drain will be stopped and bidder will be able to close and work on this area	The site will be handed over to the successful bidder in as is condition. The bidder has to make its own investigation and assessment.
70	Volume - III Part-2. Works Requireme nts.2.4.4 Point Number-15	G - 13 of 88	Construction/Erection of 477 MLD (Output) Water Treatment Plant			Please confirm the mode of payment for works of Re-routing of existing drainage system falling within the proposed boundary and connection with existing culvert across the Ring Road. In case it is deposit work, please confirm the agency which will be the executing authority.	Any such costs should be included in the bid price by the bidder. No additional payment shall be made on this account.
71	Vol-III, Section- VI,Clause 1.2.3, page	Pre Bid Reply Page No 174, Sr	capacity of			What is the type and number of equipment's /Instruments (e.g. Valves, Gates, Pumps,	Your understanding is correct. CWMC capacity should be enough to

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	G-7 of 88	No 700	1.2.3 Project Objective			Pressure & flow transmitters, analyzers, Level transmitter & switch etc.) Connected to each 21 UGR's, 147 DMA's and 30 Nos outlet header of UGR's.	accommodate data from Packages 2, 3 and 4 as well and further from future expansion to other WTP command areas.
						We understand that, 21 UGR's,90 Nos Pumps, 147DMA's are the part of 3 distribution system SCADA (Package,2,3,4)	
						Kindly confirm and specify the details.	
72	Corrigendu m and Addendum -6, Sub Section -9 Page A9/1		Annexure - 9 Solar Power Generation			Ni-Cd batteries have been specified in the replies, We would like to specify that Ni Cd batteries contains cadmium which is highly toxic heavy Metal. These are not recommended in the solar system now a days due to its hazardous impact on the environment and also are less efficient as compared to Nical Metal Hydride 'NiMH' batteries.	Ni-Cd batteries or better maintenance free batteries may be used, as Contractor has to maintain system for 16 years. Battery shall be considered 50 KW (minimum) load.

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						Hence, We request you to kindly allow NiMH' batteries or any other type of battery as an option.	
73	Corrigendu m and Addendum -6,Page A6 /1		Annexure - 6 Solar Power Generation			Total Minimum Guaranteed for Solar Power generation specified is 950,000 KVA / Year, However the total solar KWp mentioned is 500 with sun insulation (Avg. Annual) @5.06. The factor of 5.06 has been derived considering 300 days working in a year while the guarantee of 950,000 has been calculated considering 365 days working. The efficiency degradation on yearly basis shall also play major role in the overall guarantee. The Solar System Suppliers have suggested that the Minimum Solar Power Capacity Generation system installed shall be around 750 KWp to achieve Guarantee of	Refer to the reply at S.N. 17 (a)

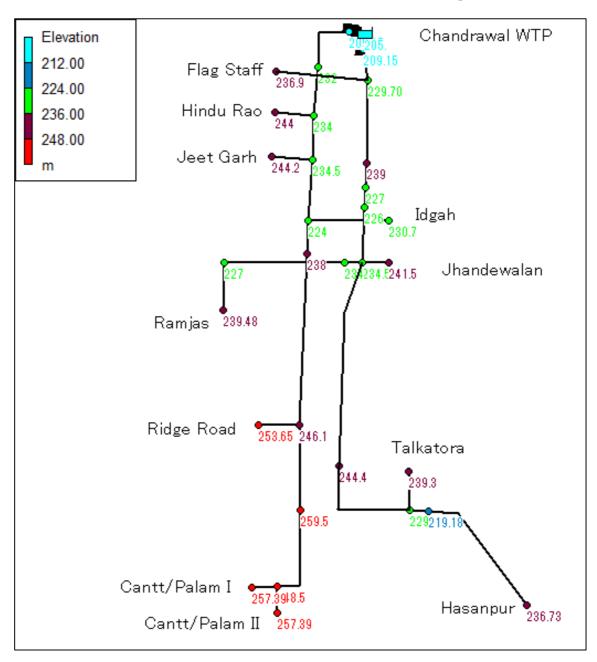
Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						950,000 KVA/Year.	
74	Corrigendu m and Addendum -6, Page 11 of 225	Replies No 469 & 470	Surge protection System			It has been specified in the said Replies that Surge Protection System is part of this contract. Hence, We request you to kindly provide us the L -section of Full Network and Flow at different Nodes in the Network to do the Surge Analysis and offer system accordingly.	Refer to the reply at S.N. 15
75			Vol I Sectio Qualificatio Table 4.2 (i	n criteria		Is it permissible for a parent company to use experience of its 100% owned subsidiary company? Can the parent company be then the contracting entity as a Specialist Subcontractor to a main contractor?	Yes it is permissible.
76			Vol I Section III Qualificati on criteria Table 4.2 (ii) and (iii) and response to			The PQ criteria requires experience in "design, supply, installation, testing and commissioning" of the plants mentioned therein. Reply to bid query #755 doesn't	Refer to reply at Sr. No. 22

Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
			bid queries #755			seem to allocate minimum role that a Specialist subcontractor is required to undertake. Is it therefore acceptable that the Specialist subcontractor with relevant experience provides a supervisory role only to ensure that the packages are delivered successfully and perform as desired and does not provide any guarantees of package plants while the main contractor takes full responsibility and provides necessary guarantees from suppliers through support from Specialist	
77						Request for further extension for bid submission by one month to 24th May 2017 since many requirements have	Refer to Reply at sr. no. 28

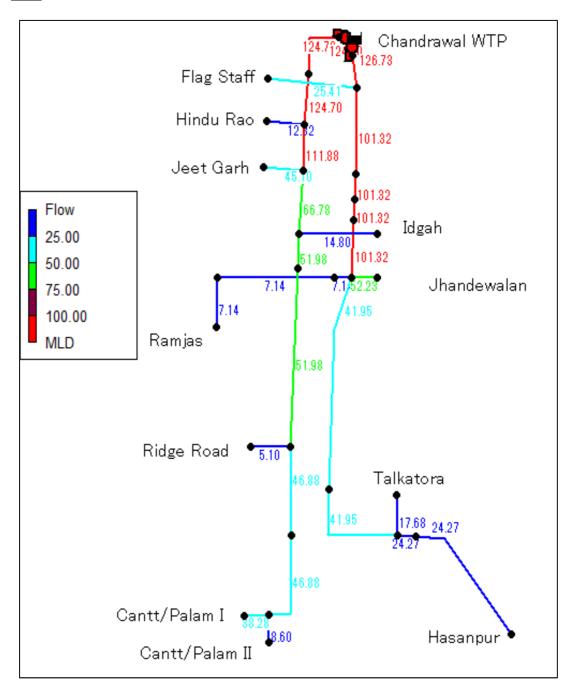
Sl. No	Sl. No. in Corrigend um	Page No	Subject	Pre-bid Query	DJB Reply on Pre-bid Queries	Clarification required on DJB Pre-bid Replies	2 nd Clarification
						undergone changes for bidders to reconsider.	
78			Form Exp 4.2(a)			Please clarify the difference between "Applicant's legal name" and "Applicant's party legal name"	"Applicant's party legal name" means "JV's party leagal name"
79			Form Exp 4.2(a)			"Role in Contract" doesn't have option to include Specialist experience as a subcontractor in JV. As clarified in the corrigendum & addendum 6 #9 "Specialist subcontractor's experience in similar capacity elsewhere will be considered" We believe that this section of Form Exp 4.2(a) should be modified accordingly.	It is clarified that accepted role of 'specialized sub contractor' is for 'specific construction experience in key activities'.(Form EXP-4.2 b).

H. Elevations (Transmission Network Pkg 3)

Pumps At WTP Line 1 (down to Cantt Palam): 125 MLD, 63 m head; Line 2 (down to Hasanpur): 127 MLD, 52 m head



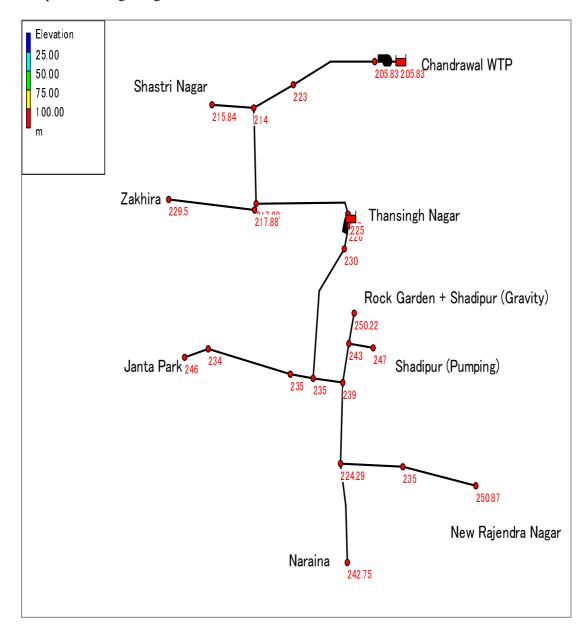
I. Flow



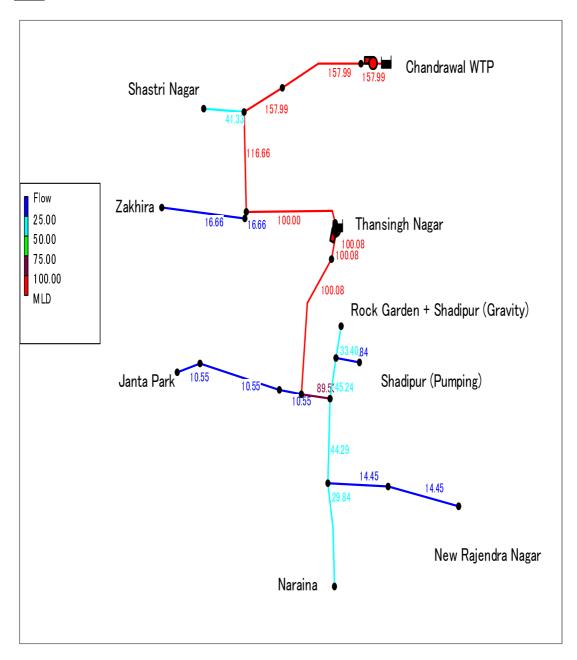
J. Elevations (Transmission Network Pkg 2)

Pump at WTP: 158 MLD, 34 m head

Pump at Thansingh Nagar: 100 MLD, 33 m head



K. Flow



L. Elevations (Transmission Network Pkg 4)

Pump at WTP: 68 MLD, 25 m head

