



Bihar Urban Infrastructure Development Corporation Limited

A Government of Bihar Undertaking

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No. BUIDCo/PMU(ADB Project)Yo-106/16 Date: 14/06/2016

Sub: Addendum No. 01 under Bidding Document for Improvement of Water Supply System in
Gaya Municipal Corporation under Contract Package No. GA/WS/02

Bid Ref: BUIDCo/BUDIP-2/NCB/01 issues vide Letter No. BUIDCo/PMU (ADB Project) Yo-71/15-2
Dated 05th May 2016

Dear Sir/Madam,

The Bidding Document of Contract Package No GA/WS/02 is modified as per the enclosed Addendum No. 01. This modification is as per the Clause 8 of Section 1: Instructions to Bidders. The Bidding Document stands modified as per this Addendum and the Addendum shall be part of Bidding Document.

All prospective bidders are requested to incorporate the clarification and Addendum while submitting the Bids and submit duly signed copy of Addendum along with their technical bid.

Encl: As above


Addl. Program Director
BUDIP, BUIDCo

No.  152

Date: 14/06/2016

Copy to:

- Chief General Manager, BUIDCo
- General Manager (Tech/Works/Finance), BUIDCo\
- Executive Engineer, PIU, ADB Project, Gaya
- Manager (IT), BUIDCo, for uploading the same on website.
- All Prospective Bidders....


Addl. Program Director
BUDIP, BUIDCo



Bid Ref No: BUIDCo/BUDIP-2/NCB/01

Contract Package No: GA/WS/02

Package Name: Improvement of Water Supply System in Gaya Municipal Corporation

Addendum 01

SNo.	Clause/Section Reference		Existing Provision	Amended. Now to be read as
1.	ITB 11.3 (d) section 2	BDS	ITB 11.3 (d) The Bidder shall submit with its Price Bid the following additional documents: NIL	ITB 11.2 (g) The Bidder shall submit with its Price Bid the following additional documents: NIL
2.	ITB 22.1	BDS	The deadline for bid submission is Date: 15/06/ 2016 Time: 15:00 Hrs	The deadline for bid submission is Date: 05/07/ 2016 Time: 15:00 Hrs
3.	ITB 25.1	BDS	The bid opening of Technical Bids shall take place Date: 15/06/ 2016 Time: 15:30 Hrs	The bid opening of Technical Bids shall take place Date:05/07/ 2016 Time: 15:30 Hrs
4.	2.4.2;Section 3 – Evaluation & Qualification Criteria	Experience in Key Activities	1. Development of at least 10 tube wells having cumulative production capacity of 15 MLD within the last seven years.	1. Development/Redevelopment /Installation of at least 10 tube wells within the last seven years.
5.	Section 4	Bidding Forms		Wherever ICB is written, replace it with NCB.
6.	Section 4A , Volume 1	Technical Schedule to be provided		Technical schedule added as Schedule A to Sec 4A (Technical Bid) is as Annexure 1 to this Addendum 1.
7.	Section 4: Preamble to BOQ; 1.8		The contractor will have to ensure all his equipment/machinery, staff including skilled and unskilled labour and protection against damages to third party for which he will have to provide insurance	The contractor will have to ensure all his equipment/machinery, staff including skilled and unskilled labour and protection against damages to third party for

SNo.	Clause/Section Reference		Existing Provision	Amended. Now to be read as
	Contract Price 2 nd para		policies to cover up all of above, and will be reimbursed on production of actual payment receipts . Moreover he will renew the policies before their expiry. It is mandatory to comply with the condition, otherwise he will not be allowed to proceed with the work.	which he will have to provide insurance policies to cover up all of above. Moreover he will renew the policies before their expiry. It is mandatory to comply with the condition, otherwise he will not be allowed to proceed with the work.
8.	Section 4BBOQ 4.179 Bill No.9 Item No 9.1.2	Bill No. 9	Vertical Motor as per IS: 9283-1995 and as per specification and suitable for pumps duty condition, 1500 rpm, 131 kW including installation and connection etc. complete and as per direction of Engineer in charge.	Supply, delivery erection and commissioning of Energy efficient Vertical Hollow Shaft Motor as per IS: 325 suitable for 400 V, 1500 RPM, 50 Hz and suitable for Vertical Turbine pump and as per specification and suitable for pumps duty condition, 131 KW
9.	Section 4B: BOQ Bill No.9 Item No 9. 2	Submersible Pump Sets	<i>"Supply, Install, Testing and Commissioning of ISI marked as per IS 8034, submersible Pumping Sets comprising of Submersible Motor of sufficient horsepower coupled to a Pump of required duty conditions with water cooling with 415V, 3000/1500 rpm and as per specification with following duty conditions including removal of existing pump set."</i>	<i>"Supply, Install, Testing and Commissioning of ISI marked as per IS 8034, submersible Pumping Sets comprising of Submersible Motor of sufficient horsepower coupled to a Pump of required duty conditions with water cooling with 415V, 3000/1500 rpm and as per specification with following duty conditions."</i>
10.	2.6.1 (77) , Section 6, Volume 1	Water quality	The Contractor shall supply treated water that complies with the CPHEEO norms, presented in Schedule 3 of Section 8 [<i>Particular Conditions of Contract</i>].	The contractor shall supply water with minimum residual chlorine level of 0.2 PPM at the consumer end
11.	Technical specification Volume 2 Part 1, para 3 Page 230	Failure to Attain Guaranteed Discharge and Power Consumption	If during Performance Guarantee Tests, the discharge and energy power consumption of any of the pumps are found to be lesser than the guaranteed figures specified in Technical Schedule Section VII B; Volume 4,	If during Performance Guarantee Tests, the discharge and energy power consumption of any of the pumps are found to be lesser than the guaranteed figures specified in Technical Schedule Section 4A Volume 1
12.	1.16 volume 2 Part 1 Page 28	1.16 Electro chlorinator a dose of 3mg/l could be given to TW water..... a dose of 2mg/l could be given to TW water.....
13.	6.7.5, Volume 2 Part-1 Page 86	Drawings and Data	6.7.5. DRAWINGS All Drawings, data, technical particulars, calculations, detailed literature, catalogues, test certificates etc shall be submitted by the contractor along with the bid as well as after award of contract	6.7.5 Deleted

SNo.	Clause/Section Reference		Existing Provision	Amended. Now to be read as
14.	Volume 2 Page 38		Lighting , Bath and Toilet fittings	Electrical fittings, Bath and Toilet fittings shall be added as Annexure 2 at the end of page 38 of volume 2 as added Annexure 2 of this Addendum 01.
15.	Section 8: Page 8.15 Risks and Responsibility Para 3	Risk and Responsibility	“all risks resulting or arising from the design, material or workmanship of the Plant and Material supplied or construction of the Works or the materials used therein, notwithstanding any testing carried out by or witnessed by the Employer or the Engineer during the Works period; and”	“all risks resulting or arising from the material or workmanship of the Plant and Material supplied or construction of the Works or the materials used therein, notwithstanding any testing carried out by or witnessed by the Employer or the Engineer during the Works period; and”
16.	Section 6: Annex 1 – Chapter VII – Environment Management Plan Para 246.	Initial Environmental Examination and Environmental Management plan		<i>Add following text at the end of para 246:</i> “The Contractor shall comply with all applicable national, provincial, and local environmental laws and regulations. The Contractor shall (a) comply with the measures relevant to the contractor set forth in the Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA), the Environmental Management Plan (EMP) and any corrective or preventative actions set forth in a Safeguards Monitoring Report that the Employer will prepare from time to time to monitor implementation; (b) make available a budget for all such environmental and social measures; (c) provide the Employer with a written notice of any unanticipated environmental impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE or EIA, the EMP and prepare required actions; (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and (e) reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction; and (f) submit to Employer monthly monitoring report on EMP Implementation. The IEE (including EMP) is attached hereto as Appendixes”.

**Addl. Program Director
BUDIP, BUIDCo**

ANNEXURE 1

Technical Schedule

(To be completed by the Bidder)

1.0 Introduction

Technical Schedules cover only the few technical details of equipment offered by the bidder.

1.1.1 Submersible pumps

Description	Unit	Particulars as specified	Particulars to be provided by the contractor
Type		Submersible water filled	
Manufacturer			
Country of origin			
Model No.			
Pumpset total weight	kg		
Duty: capacity	l/s		
Duty head	m		
Rated power	kW	0-15 kW	
Efficiency	%		
Details of guide rail system:			
Materials:			
casing		Cast Iron FG 200 IS: 210	
impeller		Bronze grade LTB 2 of IS: 318 or Stainless steel grade X 12 Cr12 of IS 6911 or IS 6603 or glass filled Polyphenylene oxide (modified PPO) or glass filled Polycarbonate of IS 8034	
Guide rails			

1.1.2 Submersible pumps

Description	Unit	Particulars as specified	Particulars to be provided by the contractor
Type		Submersible water filled	
Manufacturer			
Country of origin			
Model No.			
Pumpset total weight	kg		
Duty: capacity	l/s		
Duty head	m		
Rated power	kW	16-25 kW	
Efficiency	%		
Details of guide rail system:			
Materials:			
casing		Cast Iron FG 200 IS: 210	
impeller		Bronze grade LTB 2 of IS:	

		318 or Stainless steel grade X 12 Cr12 of IS 6911 or IS 6603 or glass filled Polyphenylene oxide (modified PPO) or glass filled Polycarbonate of IS 8034	
Guide rails			

1.1.3 Submersible pumps

Description	Unit	Particulars as specified	Particulars to be provided by the contractor
Type		Submersible water filled	
Manufacturer			
Country of origin			
Model No.			
Pumpset total weight	kg		
Duty: capacity	l/s		
Duty head	m		
Rated power	kW	26-35 kW	
Efficiency	%		
Details of guide rail system:			
Materials:			
casing		Cast Iron FG 200 IS: 210	
impeller		Bronze grade LTB 2 of IS: 318 or Stainless steel grade X 12 Cr12 of IS 6911 or IS 6603 or glass filled Polyphenylene oxide (modified PPO) or glass filled Polycarbonate of IS 8034	
Guide rails			

1.1.4 Submersible pumps

Description	Unit	Particulars as specified	Particulars to be provided by the contractor
Type		Submersible water filled	
Manufacturer			
Country of origin			
Model No.			
Pumpset total weight	kg		
Duty: capacity	l/s		
Duty head	m		
Rated power	kW	36-45 kW	
Efficiency	%		
Details of guide rail system:			
Materials:			

casing		Cast Iron FG 200 IS: 210	
impeller		Bronze grade LTB 2 of IS: 318 or Stainless steel grade X 12 Cr12 of IS 6911 or IS 6603 or glass filled Polyphenylene oxide (modified PPO) or glass filled Polycarbonate of IS 8034	
Guide rails			

1.1.5 Submersible pumps

Description	Unit	Particulars as specified	Particulars to be provided by the contractor
Type		Submersible water filled	
Manufacturer			
Country of origin			
Model No.			
Pumpset total weight	kg		
Duty: capacity	l/s		
Duty head	m		
Rated power	kW	More than 46 kW	
Efficiency	%		
Details of guide rail system:			
Materials:			
casing		Cast Iron FG 200 IS: 210	
impeller		Bronze grade LTB 2 of IS: 318 or Stainless steel grade X 12 Cr12 of IS 6911 or IS 6603 or glass filled Polyphenylene oxide (modified PPO) or glass filled Polycarbonate of IS 8034	
Guide rails			

The duty of pumping plant will be decided as per actual approved discharge and head as per site condition.

1.2 Vertical Pumps

S.No.	Particulars	Units	Particulars as specified	Particulars to be provided by the contractor
1.	Rated Discharge (Q)	Cum/Hr.	500	
2.	Design head (h)	M	60	
3.	Rated speed			
	a) Pump	Rpm	1500	
	b) Motor	Rpm	1500	
4.	Pump Output (1)	kW		

S.No.	Particulars	Units	Particulars as specified	Particulars to be provided by the contractor
	$x (2) / 102$			
5.	Head loss in column assembly and discharge head	M		
6.	Head loss at suction strainer	M		
7.	Head loss at suction bell mouth	M		
8.	Bowl assembly head (H) = (2) + (5) + (6) + (7)	M		
9.	Bowl assembly output (1) x (8)/ 102	kW		
10.	Bowl efficiency	%		
11.	Input to bowl assembly (9)/ (10) x 100	kW		
12.	Power loss in thrust bearing	kW		
13.	Power loss in the line shaft bearing, stuffing box, flexible coupling and shaft losses.	kW		
14.	Input to pump (11) + (12) + (13)	kW		
15.	Pump efficiency (4) / (14)		Minimum 80%	
16.	Motor efficiency at load corresponding to rated conditions.	%	Minimum 90%	
17.	Input to motor (14)/ (16) x 100			
18.	Guaranteed overall efficiency of pump-motor set (4)/ (17) x 100	%		
19.	NPSH required at operating head corresponding to highest water level with single pump operation	M		
20.	Minimum Submergence required at	M		

S.No.	Particulars	Units	Particulars as specified	Particulars to be provided by the contractor
	operating head corresponding lowest water level with single pump operation			
21.	Life of thrust bearing (calculations giving maximum hydraulic thrust encountered, capacity of thrust bearing etc. shall be enclosed to substantiate life of thrust bearing)	Hrs.	40,000	
22.	Material of Construction			
	Bell Mouth		Cast Iron: IS 210 Gr. FG 220	
	Bowl, Impeller Guide		Cast Iron: IS 210 Gr. FG 220	
	Impeller		Stainless Steel: ASTM A 351 CF8M	
	Shafts		Stainless Steel: AISI 431	
	Shaft Sleeve with surface hardening of 350 BHN- min.		Stainless Steel: AISI 410	
	Transmission Shaft Couplings		Stainless Steel: AISI 410 / 431	
	Sleeve for Bearing		Stainless Steel: AISI 304	
	Suction Strainer		Stainless Steel: AISI 304	

The duty of pumping plant will be decided as per actual approved discharge and head as per site condition.

1.3 433V Motor Schedule

S.No.	Particulars	Units	Particulars as specified	Particulars to be provided by the contractor
1.	Pump head at which maximum power is required within specified working range of pump head (As specified in	M		

	Section – 6)			
2.	Corresponding discharge	LPS		
3.	Corresponding pump efficiency	%		
4.	Maximum power required by pump $\frac{\{(1) \times (2)\}}{102} \times 100$ (3)	kW		
5.	Margin at 5 % over maximum power required by pump. (4) x 0.05	kW		
6.	Margin at 10 % over power required by pump at duty point	kW		
7.	Minimum motor rating required	kW		
8.	Rating of motor offered	kW		
9.	Efficiency		Minimum Eff -2 Category	

1.4 11/0.433 KV Transformer

S.No.	Description	Unit	Particulars as specified	Particulars to be provided by the contractor
1	Make			
2	Applicable standards			
3	Type/Designation			
4	Full load rating	MVA	1.0	
	Rated no- load voltages HV	kV	11	
5	LV	kV	0.433	
6	Guaranteed impedance voltage at rated current for all taps	%		
7	Guaranteed efficiency at 75 Deg C at unity P.F at full load	%		
8	External short circuit withstand capacity	MVA		

	Tappings on winding			
	On-load/off circuit taps			
9	Full power tapping range	%		
10	OFF load tap changer			
(a)	Make			
(b)	Type designation			
11	Minimum clearance height for lifting core and windings from tank	mm		
12	Bushings:			
(a)	Rated voltage class	kV		
(b)	Rated current	A		
(c)	Free space required at top for removal	mm		
13	Guaranteed no load losses (core loss and dielectric loss) at 100% rated voltage and frequency	kW		
14	Guaranteed no-load current:			
(a)	When excited from LV side at 100% rated voltage	A		
(b)	When excited from LV side at 110% rated voltage	A		
15	Wheels:			
(a)	Plain/flanged		Flanged	
(b)	Unidirectional/bidirectional		Bidirectional	
(c)	Quantity			
(d)	Gauge (s)			
16	Vacuum withstand capability:	mm of Hg.	Minimum 760mm of Mercury	
17	Weights			
(a)	Core winding assembly	Kg		
(b)	Oil	Kg		
(c)	Tank, Coolers and fittings			
(d)	Total	Kg		
(e)	Untanking weight	Kg		
18	Shipping section			
19	Size of largest package (L x B x H)	mm		
20	Weight of the largest package	Ton		
21	Hydraulic jack			
(a)	Make			
(b)	Type			
(c)	Number			
(d)	Capacity			

22	General outline drawing enclosed with the tender showing the transformer with all its fittings and accessories in plan, front and side elevations and other details	Yes/ No	Yes	
23	Whether GA Drawings/ Documents/ Literature / Catalogues etc. as per Volume-2, Part-2 enclosed with the bid	Yes/ No	Yes	
24	Whether copies of type test certificates/ report as per the latest standards enclosed with the bid	Yes/ No	Yes	
25	Whether copies of user's certificates enclosed with bid	Yes/ No	Yes	
26	Whether all routine/type/acceptance tests will be carried out as specified (If not, furnish list)	Yes/ No	Yes	

1.5 Starter

S.No.	Description	Unit	Particulars as specified	Particulars to be provided by the contractor
1	Type of Starter		DOL/ ASD/ Soft	
2	Name of Manufacturer			
3	Rating	kW		
4	Protection required		Minimum Over current, under voltage, single phasing, Phase reversal, Electronic Timer.	

ANNEXURE 2

List of Fittings and works to be done under Lighting in pump house, Toilet& Bath room, Control Room, Chlorinator Room, Chlorine shade, Tonner Room and each floor of the Operator office

S.No.	Work Description	Unit	For one Pump House	For one Toilet & Bathroom	For one Control Room	For Chlorine shade	For Chlorinator Room	For Tonner Room	For Each floor of Operator office
1	Light Point/Fan Points -								
	Medium point	No.	3	3	6	3	3	3	22
2	3 Pin 6 Amp socket outlet on Separate Board								
	Medium point -exceeding 3 m. but not exceeding 6 m. in length.	No.	1	1	2	1	1	1	10
3	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification 4x2.5 Sq.mm.	m	30	10	60	30	30	30	220
4	METALLIC SWITCH BOXES - Supply and fixing of following size on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required MS Box size - 200 mm X 250 mm X 60 mm	No.	1	0	2	1	1	1	4

S.No.	Work Description	Unit	For one Pump House	For one Toilet & Bathroom	For one Control Room	For Chlorine shade	For Chlorinator Room	For Tonner Room	For Each floor of Operator office
5	SUB MAINS IN SURFACE RIGID STEEL CONDUIT IN COPPER CONDUCTOR - Wiring for sub-mains with PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid steel ISI marked conduit of suitable size(conduit included) including connection painting etc, as required as per specification - 2 WIRE SUB MAIN - 4.0 sq mm cable	m	15	10	30	15	15	15	60
6	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link ,415 Volt - 32 Amps.	No.	1	0	2	1	1	1	1
7	Supplying and fixing as per specification Caution / Danger Board as of approved make & design with necessary material complete. Large Size	No.	2	0	4	2	2	2	2
8	Supplying and fixing as per specification Switch of approved make ISI marked with necessary material complete. 6 Amp Flush type	No.	4	4	8	4	4	4	22
9	Supplying and fixing as per specification socket outlet of approved make & ISI marked with necessary material complete - 6 Amp 250 Volt 3 / 5 Pin Flush type	No.	1	1	2	1	1	1	10
10	Supplying,Fixing and Testing of Compact Flourescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make -36 W	No.	5	2	10	5	5	5	6

S.No.	Work Description	Unit	For one Pump House	For one Toilet & Bathroom	For one Control Room	For Chlorine shade	For Chlorinator Room	For Tonner Room	For Each floor of Operator office
11	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, delux type, including fixing on wall as required, with necessary material complete Fitting(suitable for GLS w/o lamp upto 36 watt Retorted CFL	No.	1	0	2	1	1	1	1
12	Supplying, fixing & testing of approved make of low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall/ Ceiling on wooden round block including wiring & connection as required and suitable for CFL as following :- (without lamp) - 2 Nos 36 watt CFL	No.	2	0	4	2	2	2	10
13	P & F double ball bearing capacitor start ceiling fan of approved make complete with regulator and other accessories as required : 900mm sweep	No.	0	0	0	0	0	0	6
14	P&F of capacitor start single phase metallic blade fresh air fan, in existing opening including cost of hardware , flexible copper conductor ,making connections, testing etc. as	No.	0	0	0	0	0	0	1

S.No.	Work Description	Unit	For one Pump House	For one Toilet & Bathroom	For one Control Room	For Chlorine shade	For Chlorinator Room	For Tonner Room	For Each floor of Operator office
	required. 225 mm sweep								
15	P & F 4 star rated vertical storage water heater with outer casing made of M.S.sheet finished with anticorrosive powder coating,inner tank made of pure electrolytic copper/stainless steel , Tubular copper sheathed and Nickel plated heating element/ twin ceramic cartridge heating element, stem type thermostat and thermal cut out,Dual indicating lamps for power supply and thermostat,PUF insulation, Pressure relasevalve,fusible plug etc. as required held in position with 4 no. rack bolts,duly wired with 3 core 2.5 Sqmm PVC insulated & sheathed copper conductor and 16 A three pin plug top,including making inlet,outlet heavy gauge C.P. connection,testing etc. as required.: 6 litre	No.	0	0	0	0	0	0	1

Bath & Toilet Fittings

S.No.	Fittings	Quantity
1	Over head Shower	1
2	Shower arm closet	1
3	Hand shower	1
4	Divertor	1
5	Spout	1
6	Table top Basin	1
7	Pillar Cock (basin spout)	1
8	Commode (wall hanged WC)	1
9	Health faucet	1
10	Slim-concealed flushing tank kit (Tank, Floor mounting frame, installation kit)	1
11	Flushing Plate	1
12	Soft closing Seat Cover	1
13	Angle cock	1
14	Water tap	3
15	Nanitrap – jali	1
16	Waste Coupling	1
17	Braided Hose pipe	1