

The International Committee of the Red Cross

WATER & HABITAT DEPARTMENT

Btera / Intake / Rehabilitation

Btera / Amarah / Missan

10/12/2017

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Item	Description	Unit	Qty	Unit Price (USD)	Total Price (USD)
<p>The work shall include supplying all required new bolts, rubber washers, cable trays to hold the cables and wires for offering the maximum safety to the operators, supporters where needed. Test certificate shall be provided for any items, if the ICRC asks for. The materials supplied by the contractor must be from the best quality in the IRAQI local market unless specifically mentioned to be imported from outside the country. The work shall include on site testing and operating successfully.</p> <p>The works must be planned and executed in such a way that to avoid a total shut down the water pumping system. If the item cannot be implemented without a complete shutdown, it must be limited to the minimum and be arranged in collaboration with the site management or to carry out during night time.</p> <p>The supply and installation of all valves mentioned in the BoQ can to be partially or totally cancelled, if the old one/s is/are found to be functional after dismantling.</p>					
A	Pumps, fittings and pipes with accessories				
1	Intake 3 - Akwa				
1.1	Supply all required materials, equipment, and skilled labor to dismantle and take out existing old horizontal pump of discharge Q = 600 m ³ /h, head H = 20 m, and motor power P = 75 kW.	LS	2		0
1.2	Supply all required materials, equipment, and skilled labor to deliver and install a new (e- end) type horizontal pump of discharge/flow Q = 650 m ³ /h, water head H = 20 m, revolutions per minute RPM = 1450 RPM, with bronze impeller, motor power P = 55 kW (4 pole) from European origin or equivalent respected trade mark. The work includes supplying all the required accessories and doing any required modification to the foundation of the pump, if needed. And pressure gage 10 bar on outlet of the pump. The work shall be done properly according to technical specifications and instructions of ICRC engineers.	LS	2		0
1.3	Supply and install DN350mm either galvanized thickness 8mm or cast iron PN16 pipe with flange for the section side each piece 2.5 meter length .	ML	10		0
1.4	Supply and install concentric reducer DN 350mm fro water suction pipe side, and second reducer side according to new pump inlet opening size, either GI or carbon steel .	No	2		0
1.5	Supply and install new DN300mm PN16 elbow90 degree flange type .	No	2		0
1.6	Supply and install new DN350mm PN16 foot valve heavy duty with strainer 3mm thickness stainless steel plate, the item including all required materials for holding supporters to the suction pipe and foot valve.	No	2		0
1.7	Supply and install DN300mm cast iron PN16 reducer flange type to fit with the outlet of the new pump .	No	2		0
1.8	Supply and install DN 300mm PN16 heavy duty Non-return valve flange type to connect with the outlet opining of the pump.	No	2		0
1.9	Supply and and install conect DN300 ,PN 16 beterfly valve with gear box.	No	2		0
1.10	Supply and install all requiered fittings needed to conect perfectly the outlet lines to the main DN300mm delivery pipe to the settling tanks. (such as elbows & T-sections, supporters)	Ls	1		0
1.11	Supply and install on steel stand, outdoor type 55KW two stage starter (star-delta) contain (MCB, contactors, timers, phase failer, thermal protection) lamp volt meter, curent meter, Hertize cages, all must be from original western made or equivalent. Use the old cables available on the site. The work shall be done according to technical specifications and instructions of ICRC engineers.	Ls	2		0

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Item	Description	Unit	Qty	Unit Price (USD)	Total Price (USD)
1.12	Supply and install galvanized corrugated sheets thickness 1.56mm (gage 16) with supports beams to build rain / sun shade, using the existing main structures. The work includes removing all damaged materials and hand over to the site managements .	m ²	12		0
1.13	Supply all required materials, equipment, and skilled labour to paint the structure with three layers of oil paint of good quality, drying time between each layer according to specifications, not less than 6 hours .	Ls	1		0
SUB TOTAL					0
2	Intake 2 - Fatima & Al Nieda	EA			
2.1	Supply all required materials, equipment, and skilled labour to deliver and install a new (e- end) type horizontal pump of discharge/flow Q = 250 m ³ /h, water head H = 20 m, revolutions per minute RPM = 1450 RPM, with bronze impeller, motor power P = 22 kW (4 pole) from European origin respected trade mark. The work includes any required modification to the foundation of the pump, if needed. And pressure gage oil type 10 bar on the outlet of the pump. The work to be completed properly according to technical specifications and instructions of ICRC engineers.	No	1		0
2.2	Supply and install DN225mm either galvanized thikness 8mm or cast iron PN16 pipe with flange for the section side each piece 2.5 meter length .	ML	10		0
2.3	Supply and install concentric reducer DN 225mm flange type for water suction pipe side, and second reducer side according to new pump inlet opening size, either GI or carbon steel .	No	1		0
2.4	Supply and install new DN225mm PN16 elbow90 degre flange type.	No	1		0
2.5	Supply and and install new DN225mm PN16 foot valve heavy duty with strainer 3mm thikness stainless steel plate, the item includ all required materials for holding supporters to the suction pipe and foot valve.	No	1		0
2.6	Supply and install DN300mm cast iron PN16 reducer flange type to fit with the outlet of the new pump .	No	1		0
2.7	Supply and install DN 225mm PN16 havy duty Non-return valve flange type to be connect on the outlet opining of the pump.	No	1		0
2.8	Supply and install DN225, PN 16 beterfly valve with gear box.	No	1		0
2.9	Install by supplying all requiered fittings needed to conect perfectly the outlet lines to the main DN300mm delivery pipe to the settling tanks. (such as elbows & T-sections ,supporters)	LS	1		0
2.10	Supply and install on steel stand, outdoor type two stage starter 22KW contain (MCB, contactors, timers, phase faller ,thermal protection) lamp volt meter, curent meter, Hertize cages, all must be from original western made. Used the old cables available on the site.	No	1		0
SUB TOTAL					0
3	Inake 4 - Abo Romana & Wathba - Submirsible pumps -				
3.1	Supply all required materials, equipment, and skilled labour to deliver and install submirsible pump Q=225m ³ /h, water head H=20m, power 22KW, 3 phase, (4pole)1450RPM, star delta with stanless steel strainer. From European or equivalant origin respected trade mark. The work to be completed properly according to technical specifications and instructions of ICRC engineers.	No	3		0

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Item	Description	Unit	Qty	Unit Price (USD)	Total Price (USD)
3.2	Supply and install DN160mm either galvanized thickness 8mm or cast iron PN16 pipe with flange for the section side each piece 2.5 meter length .	ML	15		0
3.3	Supply and install DN 160mm PN16 havy duty Non-return valve flange type to be connect on the outlet opining of the submirsible pump.	No	3		0
3.4	Install by supplying all requiered fittings needed to conect perfectly the outlet lines to the main DN300mm delivery pipe to the setling tanks .(such as elbows &T-sections ,Supporters)	LS	3		0
3.5	Supply and install on steel stand, outdoor type two stage starter 22KW contain (MCB, contactors, timers, phase faller , thermal protection) lamp volt meter, curent meter, Hertize cages, all must be from original western or equivalnt made. Make the connection by using the old cables available on the site.	No	3		0
SUB TOTAL					0
B	Required work to rehabilitate the intake structures				
4	Intake 2 - Niedo & Fatmia Intake				
4.1	Supply all required materials, equipment and everything is needed to rehabilitate the existing steel intake structure as follows:				
4.1.A	Supply and replace the collapsed column by new suitable H-section beam 200mm size and hammer the H- section piles to reach at least 3 meter depth from the river bed, if the soil is weak, the hammering must continue until it devlops strong capacity to hold 400kg static load.	LS	1		0
4.1.B	Readjust the remaining part of the structure and re-connect to the existing main part in proper way, the work include supply and install 150mm steel channels beam.	LS	1		0
4.2	Supply all required materials, equipment, and skilled labour to paint the structure by three layers of oil paint of good quality, drying time between each layer according to specifications, not less than 6 hours .	LS	1		0
4.3	Supply all required materials, equipments, skilled labour to build cat lader from the intake floor to the river bed to surve for inspection and maintenance, use DN50mm gelvanized pipe, with entrance gate on top of the floor .	LS	1		0
SUB TOTAL					0
5	Intake 4 - Abou Rumana and Wathba				
5.1	Supply all required materials and skill labour to dismantle the old Chequer plate, add new support chequers section beams of size 100mm width 3 meter each 0.5m for walkway length 20 meter. Refix the old Chequer plate by replacing the existing 3 smooth thin plate by new roughing plate size (120mm x2400mm), thickness 4mm. The work to be completed properly according to technical specifications and instructions of ICRC engineers.	LS	1		0

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Item	Description	Unit	Qty	Unit Price (USD)	Total Price (USD)
5.2	Supply all the materials, equipment, and skilled labour to erect handrail to the walk way for 20 meter length. Using 100mm steel channel thickness 4mm haight 1 meter, for each 0.5 meter use vertical supportors and extend the vertical support channel to 2.5 meter, each one meter length to hold the new supplied cable tray and two horizontal pipes of DN50mm thickness 4mm, from each side. as per explanation at the site visit. The work to be completed properly according to technical specifications and instructions of ICRC engineers.	LS	1		0
5.3	Supply galvanized corrugated sheets thickness 1.56mm (gage 16) with required support beams to build rain/sun shade, using the existing main structure .	m ²	12		0
5.4	Supply all the materials, equipment, and skilled labour to paint the structure by three layers of oil paint of good quality, drying time between each layer according to specifications, not less than 6 hours .	LS	1		0
5.5	Supply all required materials, equipment, and skilled labour to deliver and install 6 tons mobile chain to lift pumps. Include all he required materialy needed to implement the work according to the order of the ICRC engineer.	No	1		0
5.6	Supply all materials, equipments, skilled labour to build cat lader from the intake floor to the river bed for inspection and maintenace, use DN50mm gelvanized pipe, with enterance mobile gate .	LS	1		0
SUB TOTAL				0	0
C	Electrical work - at each intake location				0
6	Supply three electrical 400W projecters with transformer 220V and install one for each intake (Intake 2, Intake 3 and Intake 4) with connection to the power source and operation bottom. The work includs supplying all the required equipments and labor to install the electrical item according to the specification and ICRC engineer.	No	3.00		-
6.1	Supply and install main circuit breakers (MCB) capacity 1250A, 3phase, 4connections must be from Schneider Group with certificate. The work includes to supply all required accessories and connect the MCB with public grid and backup generator according to technical specifications and instructions of ICRC engineers..	LS	1		-
SUB TOTAL					0
TOTAL					0
Estimated duration		calendar days			

