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| **PR #: PR BGD 108399** | **Tender #:** **IQ08-RFP-108399** |
| **PR/MAR Description:** Rehabilitation of Nahar Al-basha compact water treatment plant in Qurna, Basra 200 m3/h | |

**Essential Specifications and Testing Requirements**

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| **Items** | **Testing Method**  (Lab Test, Visual, Certificate...) | **Target Value** | **Performed / Reviewed by:** |
| Supply, install, operate, and test a new (Electrical water Pump with a base) Q= 225 m3/hr., H=25m | Product manufacture certificate of origin | Horizontal Low lift pumps  Supply, install, operate, and test a new (Electrical water Pump with a base) of either type (KSP, Grundfos, Wilo) (German, Hungarian, Danish origin), Certificate of origin and inspection documents are required.  Pump: - (separated type), Q= 225 m3/hr., H=25m, (impeller made from brass, shaft made from stainless steel.  Electrical motor: (45 KW, 380 V, 50 Hz, 3-Ph, 1465 r.p.m, IP55, class F, star delta starter, base plate, and grad) casing made of cast iron.  The price includes supply and installs 1 check valve 6", 1 butterfly valve of 6", and 1 flexible join of 6", (with English, American, French, German, Japanese, Belgian, Dutch) and with all connection accessories couplings, miniatures, flanges, and screws with supply & connect a new copper electrical cables size (4\*16mm2) (Turkish ,Jorden, UAE origin) . | Engineers from Mercy Corps and Directorate of Water |
| Supply, install, operate, and test new submersible pumps Q= 20 m3/h, H=10 m | Product manufacture certificate of origin | Low lift pumps (For filling system of intake pumps)  Supply, install, operate and test new submersible pumps with either types of (KSP, Grundfos, Wilo) (German, Dutch , Hungry) origin with certificate of origin .  Q= 20 m3/h, H=10 m, 380V, 50 Hz, 3-Ph, 1500 r.p.m, and IP68, iron cast, shaft and impeller made of stainless steel, ( with English, American, French, German, Japanese, Belgian, Dutch), with supply & connect a new copper electrical cables size (2\*4mm2) (Turkish, Jorden, UAE origin) The work includes supplying all materials for the installation of the new submersible pumps with supply, connecting, and welding all required pipes for installing the new submersible pumps and providing all the requirements to achieve a proper performance with removing the old pump . | Engineers from Mercy Corps and Directorate of Water |
| Supply and install electric boards for the submersibles (Schneider or ABB) | Physical verification | Supply materials, tools, and manpower to supply and install new electrical distribution board (Starters) for new 2 submersible pumps, the works include supplying and connecting all electrical devices ( circuit breakers three phases main size 160 A (nu. 1), circuit breaker three phases secondary size 100A(nu.2),circuit breaker three phases secondary size 40 A(nu.2), starters, contactors, overloads, timers, phase failures, board metal box) with types of ( Schneider, ABB), a design and sample must prepared by electrical engineer and to be approved by MC and DoW | Engineers from Mercy Corps and Directorate of Water |
| Supply, install, operate and test a new (Electrical water Pump with base) Q= 200 m3/hr., H=60m | Product manufacture certificate of origin | Horizontal high lift pumps  Supply, install, operate and test a new (Electrical water Pump with base) of Type(KSP, Grundfos,Willo) (German, Hungarian, Danish origin ), Certificate of origin and inspection documents are required.  Pump:- (separated type), Q= 200 m3/hr., H=60m,(impeller made from brass, shaft made from stainless steel.  Electrical motor: (75 KW, 380 V, 50 Hz, 3-Ph, 1465 r.p.m, IP55, class F, star delta starter, iron base plate.) casing made of cast iron.  The price includes supply and installs 1 check valve 6", 1 butterfly valve of 6", and 1 flexible join of 6", (with German, Hungarian, Danish)origins and with all connection accessories couplings, reducers, flanges, and screws with supply & connect a new copper electrical cables size (4\*25mm2) (Turkish ,Jorden, UAE) | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation of sedimentation tanks | Visual verification | Sedimentation tank  Supply materials, tools and manpower to maintain sedimentation tanks with dimensions (12×2.5 ×2.5) m for each tank, The work includes:  - Completely washing and cleaning the walls and bottom using (sandblast) to remove the calcifications, rust, and any other material and prepare the tanks to paint with epoxy.  -Removing all the accumulated sludge and heavy stacks of mud,  -Repairing any defective parts in internal and external walls, bottom, repairing any leakage points.  - Replacing the damaged and missing steel plates in order to restore the tank as per its original design.  - Replacing the lamella sheet with Polyethylene sheets or PVC sheets with thick 3mm, black color , with the stainless steal spacers between panels.  Inside surfaces: Shot blasted, one coat of suitable primer (UAE ,KUWIT, Jorden origin ) followed by one coat of non-toxic epoxy paint to AWWA Standard C210-78 to a dry film thickness of 150 microns., external surfaces: Shot blasted, one coat of epoxy sealing primer to a dry film thickness of 145 microns, followed by one coat of polyurethane paint to 40 microns. | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation of Collection tanks | Physical verification | Collection tank  Supply materials, tools, and manpower to maintain the collection tank with dimensions (6×2.5 ×2.5) m, The work includes completely washing and cleaning the walls and bottom using ( sandblast ) to remove the calcifications, rust and prepare the tanks to paint with epoxy. removing all the accumulated sludge and heavy stacks of mud, repairing any defective parts in internal and external walls, bottom, repairing any leakage points, replacing the damaged and missing steel plates in order to restore the tank as per its original design, the inside surfaces: Shot blasted, one coat of suitable primer (UAE وKUWIT, Jorden origin ) followed by one coat of non-toxic epoxy paint to AWWA Standard C210-78 to a dry film thickness of 150 microns., external surfaces: Shot blasted, one coat of epoxy sealing primer to a dry film thickness of 145 microns, followed by one coat of polyurethane paint to 40 microns. | Engineers from Mercy Corps and Directorate of Water |
| Cleaning, and rehabilitation of two filters (6\*2.5 m) coating with epoxy thickness (135 microns 2 layers). | Visual verification and Product manufacture certificate of origin | Supply materials, tools, and manpower to maintain on 2 filter holding tanks, with dimensions (D=2.5m, L=6m), the work includes: -  -Removal of current medium from high pressure sand filter, with removed medium to be disposed to an agreed site by the approval of MC Engineer. The Contractor shall agree a safe method of work with the MC Engineer prior to work commencing.  - Remove (sand & gravel) layers and old nozzles, the contractor Should remove all debris and waste to the proper dump location approved by the municipality. the price includes cleaning the filters from inside and outside by using "sandblast" to remove the calcifications, rust and prepare the filters to paint with epoxy.  - maintain and weld the nozzles' base plate and supporting it by using I beam channel 6", filters' base and out the frame, all the necessary cutting, welding, and fixing works by using steel badges, and maintain filter remaining parts with:  - coating the internal face with one prime layer and two layers of an alimentary epoxy thickness (135 microns) (UAE وKUWIT, Jorden origin ) (The epoxy should consist of two components, Solvent-free epoxy resin coating for potable water-resistant to corrosion, chemical attack, and abrasion and is suitable for application to reservoirs, tanks, silos, water treatment works, on-toxic, Contractor shall submit certificates and evidence confirming appropriateness and suitability of this material for use with potable water), and externally filter with suitable oil paint, the painting should do by using one layer of the anti-rust paint and two-layer of oil-based paint ( UAE وKUWIT, Jorden origin ).  - Supply and install new nozzles made from plastic-based on local market availability for all filters number of nozzles is not less than 500 in each filter to provide Q=200m3/h.  -supply and install new vent valves of (English, American, French, German, Japanese, Belgian, Dutch).  - replace the damaged parts with new ones (washers, pressure gauge, bolts) of  according to the specifications of the Directorate of water and Site engineer's instructions. | Engineers from Mercy Corps and Directorate of Water |
| Cleaning , replace media of filters and coating with alimentary epoxy thickness (135 microns 2 layer | Visual verification and Product manufacture certificate of origin | Supply materials, tools, and manpower to supply and install media filters of the following specification:  1) 10 cm even layer of lightly compacted coarse gravel, (9.5 - 13.5 mm), washed prior to installation. Gravel supplied should be in accordance with BS 1438:2004  2) 10 cm even layer of lightly compacted medium gravel (6.5 - 9.5 mm), washed prior to installation. Gravel supplied should be in accordance with BS 1438:2004  3) 10 cm even layer of lightly compacted fine gravel (2.5 - 6.5 mm), washed prior to installation. Gravel supplied should be in accordance with BS 1438:2004  4) Quartz sand (0.6 - 0.65 mm), compacted to within 40 cm of the water inlet pipe. In accordance to EN 12904, Type 1, free of clay, dust, organic matter or any other contamination. Density of 2.6 g/cm3 and a bulk density of 1500 kg/m2. Of a round, spherical nature, yellow in color. Supplied in 25 kg PE-bags, palletized and shrink-wrapped. Similar to that supplied by (Al-Nawafeth) or equivalent. Prior to installation the contractor shall supply a certificate from an accredited laboratory showing the results of a sieve test, which has been undertaken in accordance to ASTM C 136. | Engineers from Mercy Corps and Directorate of Water |
| Supply and install the main electrical distribution board (Schneider or ABB) | Visual verification | Supply materials, tools, and manpower to rehabilitate the main electrical distribution board (cabinet), the works include supplying and connecting all new electrical devices in the board like (circuit breakers size 160 A(nu.2), starters, Three Phase Contactor 65KW (nu.6),, overloads(40-60 A(nu.2)), timers(nu.2), and phase failures(nu.4)) with ( ABBوSchneider type ) (to be fitted with new electrical devices for the WTP after rehabilitation)and (remove all old electrical devices existing in the board), also supply & connection indication lamps, Ammeters, voltmeter with selector switch, terminals, cable glands and fixation, Bus bars, and all the necessary wiring, the work including supply and install new Electric circuit breaker 3-PH with 630A board' with good origin( ABB or equivalent), maintain or replace and painting the damaged or missed doors of the board, with all requirements to make all electrical device in the board work in good condition and regularly form according to the specifications of the directorate of water | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation of electrical generator (Perkins )of 250 KVA capacity, 230/400 V, 3-phase | Visual verification | Supply materials, tools, and manpower to maintain the electrical generator (Perkins )of 250 KVA capacity, 230/400 V, 3-phase, 1500 r.p.m, 50 HZ, the works include replacing all electrical devices and mechanical parts to the generator to be able to function work with full manufacture power under high temperature that reaches 55° with warranty 3 months or 200 operation hours.  The work includes supply operational materials for the generator including 2 batteries size (120A, 12V), Oil 200 liter packed in container density 20W-50 (changed), and starters system, exhaust, and radiator. And 6 sets of oil and air filters suitable for Perkins generator 250KVA, all operation parts should be from German, Hungarian, Danish for installing on existing electrical generator brand Perkins capacity of 250 KVA capacity. | Engineers from Mercy Corps and Directorate of Water |
| supply and install check valve and butterfly valve | Visual verification | |  | | --- | | Supply and install Shut-off butterfly valve size (2)",  PN16 with rubber seal of a (Dutch, American,  English, Danish, French, German, Japanese, Belgian) Disk/ductile, cast iron with epoxy coated, standers ISO top flange for direct mounting double flange (long type)) | | Supply and install Shut-off butterfly valve size (4)",  PN16 rubber seal of a (Dutch, American, English,  Danish, French, German, Japanese, Belgian) Disk/ductile, cast iron with epoxy coated, standers  ISO top flange for direct mounting double flange  (long type) | | Supply and install Shut-off butterfly valve size (6)",  PN16 type with rubber seal with origin of (Dutch, American, English, Danish, French, German, Japanese, Belgian) Disk/ductile, cast iron with epoxy coated,  standers ISO top flange for direct mounting double  flange (long type) | | Supply and install Shut-off butterfly valve size (6)",  PN16 Gearbox type with rubber seal of a (Dutch,  American, English, Danish, French, German, Japanese, Belgian))  Disk/ductile, cast iron with epoxy coated, standers  ISO top flange for direct mounting double flange (long type) | | Supply and install Shut-off butterfly valve size 8",  PN16 sandwich type with rubber seal of a (Dutch,  American, English, Danish, French, German,  Japanese, Belgian)) Disk/ductile, cast iron with epoxy coated, standers ISO top flange for direct mounting double flange (long type) | | Supply and install pressure gauge 25 bar, 1\2",  made from steel of (Dutch, American, English,  Danish, French, German, Japanese, Belgian) origin. | | Engineers from Mercy Corps and Directorate of Water |

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| Rehabilitation of the intake platform | Visual verification | Supply materials, tools, and manpower to repair and maintain all damage in the intake platform, the work including supply and installing 70m2 of new corrugated galvanized steel sheets with the thickness (0.6mm) instead of old ones, the price includes doing a door for intake platform made from BRC and steel section (3\*1.5)inch with dimensions (1.5\*2)m, and painting the platform by using one layer of the anti-rust paint and three layers of the oil base paint with three layers, the cost including prepare and clean the platform before doing painting process | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation of the ductile water pipeline diameter of 8 inches between the intake pumps and the WTP | Visual verification | Supply materials, tools, and manpower to repair and maintain all damage in the ductile water pipeline diameter of 8 inches between the intake pumps and the WTP, the work includes supplying, Install, and connecting 6 pipe diameters 8 inches in length 6m for each one with a minimum pressure 10 bar and the German, Hungarian, Danish instead of the damage pipes where should re-joint of the other old pipes(not damage) by using RUBBER GASKET and all requirements for quality and safety work. | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation of the existing low lift pump capacity of 225 m3/h ,H=25 meters | Visual verification | Supplying the materials and operating on maintaining the existing low lift pump capacity of 225 m3/h \* 25 meters  the work include maintaining the centrifugal pump, replacing Ball-bearings, coupling, the price including rewinding an electric motor( if any) (replacing all damaged parts) with all the required works and reinstalling, testing and operating the pumps to be in functional mode and according to the guidance of the supervisor engineer. and check the efficiency of the pump For the Iraqi technical specifications, | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation of the sunshade 100m2 | Visual verification | Supply materials, tools, and manpower to make maintenance on the sunshade the work including supply and installing 100m2 of new corrugated galvanized steel sheets(ribbed sheets ) with the thickness (0.6mm) instead of old ones, the price including painting the sunshade structure, all pipes in the unit, by using one layer of the anti-rust paint and three-layer of oil base paint, the price including prepare and clean the sunshade before painting process and according to the specifications of DOW | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation of the low lift pump Q=200m3/h, H=25m | Visual verification | Supplying the materials and operating on maintaining the low lift pump capacity of 200 m3/h \* 25 meters  the work:  the work include maintaining the centrifugal pump, replacing Ball-bearings, coupling, the price including rewinding an electric motor (if any) (replacing all damaged parts) with all the required works and reinstalling, testing and operating the pump. | Engineers from Mercy Corps and Directorate of Water |
| Supply and install Fast mixer unit, 1.5 KW and 940 r.p.m | Visual verification and Product manufacture certificate of origin | Fast mixer unit  Supply and install Fast mixer unit (1 in each sedimentation tank) with ( origin Dutch, American, English, Danish, French, German, Japanese, Belgian), specification of electric motor class F, IP55, 380 V, 3 phase, 1.5 KW and 940 r.p.m, shaft and impeller made from stainless steel, the price includes construct steel sunshade covered with corrugated sheet on it and proper modification to fix its base on all electromechanical connections (electrical cables, base steel frame.....etc.) to implement the work according to the specifications of Directorate of water | Engineers from Mercy Corps and Directorate of Water |
| Supply and install Low mixer unit, 0.75 KW and 50 rpm | Visual verification and Product manufacture certificate of origin | Low mixer unit  Supply and install Low mixer unit, (1 in each sedimentation tank) of ( origin Dutch, American, English, Danish, French, German, Japanese, Belgian) specification of electric motor class F, IP55, 380 V, 3 phase, 0.75 KW and 50 rpm., shaft, and propeller made from stainless steel, the price includes construct steel sunshade covered Corrugate sheet on it and proper modification to fix it base on all electromechanical connections (electrical cables, protection steel frame) to implement the work according to the specifications of Directorate of water. | Engineers from Mercy Corps and Directorate of Water |
| Supply, install, and testing Chlorine unit with 2 kg/h capacity, Q= 2m3\h, H=80m | Visual verification and Product manufacture certificate of origin | Chlorine Unit  Supply, install, and testing Chlorine unit with 2 kg/h capacity, the work includes supply and installs Chlorine Boosting Pump (Q= 2m3\h, H=80m)(German, Italian, English, American, Danish)), with an injector Alldoz type, flowmeters, connection accessories of copper pipes, bronze locks, and complete network of UPVC pipes with all device that damage or loss and all mechanical and electrical connection with the main electrical board, with all the works required to complete the job according to specifications of Directorate of water | Engineers from Mercy Corps and Directorate of Water |
| Supply, install, and testing Alum unit with 0.37KW, 220 L\h, = 0.75 KW, 50 Hz | Visual verification and Product manufacture certificate of origin | Alum. system  Supply, install, and testing Alum system, with origins of (British, German, French, Spanish, American, Japanese) the work includes (dosing pump 0.37KW, 220 L\h ) and mixer device with electrical motor power = 0.75 KW, 50 Hz, IP55) and all connection of accessories (valves and UPVC pipes with fitting, gauge, wirings, cables, control panel, 1m3 water tank, and steel frame) and all mechanical and electrical connection with the main electrical board, with all the works required to complete the job according to specifications of Directorate of water | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation of the Back-washing unit, compressor(200M3/H), and the water pump(200M3/h,H=15m | Visual verification | Back-washing unit  Supply materials, tools, and manpower to maintain and operate the Back-washing unit including the air blower compressor(200M3/H), and the water pump(200M3/h,H=15), and it should be connected to the new control panel, the price includes making a water trap on the form ( Ⴖ ) with high 3m by using a GI pipe with diameter 4", and maintaining all its pipes and fitting, and all the requirements to achieve the works according to the specifications of Directorate of water . | Engineers from Mercy Corps and Directorate of Water |
| supply, install, connect and test new manual changeover switch (three-position) 630 Amp | Visual verification | Manual changeover switch  Supply materials, tools, and manpower to supply, install, connect and test new manual changeover switch (three-position) 630 Amps, to be fixed inside the suitable box IP55 with dimensions (60\*50\*30) cm. preferred brands Schneider, ABB. And all connections cables between the main source, generator, and accessories with all requirements to complete the works according to the specifications of Directorate of water | Engineers from Mercy Corps and Directorate of Water |
| supply, install and connect a HDPE pipe length of 60 m and diameter of 10 inches | Visual verification | Drainage water steel pipe  Supply material, tools, and manpower to supply, install and connect a HDPE pipe conforms to the Iraqi Standard 1462 modified according to the International Organization for Standardization 2007/4427 of Iraqi or Egyptian origin, length of 60 m and diameter of 10 inches, to lengthen the end of the return water pipe of the river. The work includes digging 60 cm width and a depth of not less than 90 cm from the upper surface of the pipe, laying pipes, welding, and drawing water (if any). Then burial with sand at a layer of 20 cm below the pipe, 20 cm above the pipe, then burial with fine digging soil, then edging with the re-work of all the sidewalks and concrete pours that are raised to the width of the pipe track, the price includes make inspection manhole with internal dimensions (1\*1\*1)m with wall width 18cm, by using concrete C25, and cover it with checker plate one face thickness 3 mm with its ring made from steel L section size 2" thickness 3mm,The price includes all concrete casting works with a specification of 1:2:4, burial with space, good curbs, and the thickness of the casting is 20 cm for the street cross, taking into account the use of two layers of BRC measuring 5 mm. the path of new pipe from the WTP to the river with all requirements to make the work complete according to the specifications of Directorate of water | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitate the fence of the water treatment plant, high of 2.5m and length 35m | Visual verification | Supply material, tools, and manpower to rehabilitate the fence of the water treatment plant by demolishing and rebuilding one side of fence with a high of 2.5m and length 35m by using hollow concrete block dimensions (40\*20\*20)cm with clean sand and cement mortar mix ratio 1: 3, with plastering the external and internal walls by using sand and SRC cement mortar with 3cm thickness and mix ratio 1:2,  maintaining the exist 3 other sides fence by repairing all damages, crackers, and holes on both sides by using sand and SRC cement mortar with a 3cm thickness and a mix ratio of 1:3, | Engineers from Mercy Corps and Directorate of Water |
| Supply materials, tools, and manpower to paint the fence of the WTP | Visual verification | Supply materials, tools, and manpower to paint the fence of the WTP  and service building walls by using (plastic-based paint, similar to JOTUN paint), paints in three layers the price including clean and repair wall cracks, contractor to ensure proper filling of wall cracks with cement mortar and stones, approval of work by site engineer all works should be prepared form painting works, | Engineers from Mercy Corps and Directorate of Water |
| Rehabilitation the iron slide door for the CWTP with Dim.(4x2)m, the price includes : | Visual verification | Supplying materials ,tools and manpower to fix and rehabilitation the iron slide door for the CWTP with Dim.(4x2)m, the price includes :  -installing the door according to the instructions of the Site engineer.  - supply and install door's lock .  -painting the door both sides with three layers of paint type (JOTUN ) | Engineers from Mercy Corps and Directorate of Water |
| Supply and install hand wash basin Dim(55\*45)cm with tap mixer | Visual verification | Supply and install hand wash basin Dim(55\*45)cm with tap mixer, ( UAE or Turkish Origin), Mixer with chrome finish, galvanized coating from inside to resist saltwater, the contractor is responsible for all fittings, materials, the price including supply and connect galvanized water pipe 1/2" from the water heater to hand wash basin, all work required to complete this work. and according to the specifications of the Directorate of water | Engineers from Mercy Corps and Directorate of Water |
| Supply materials, tools and manpower required to supply install squatting toilet seat | Visual verification | Supply materials, tools and manpower required to supply install squatting toilet seat of (UAE or Turkish or other equivalent origins as approved by the supervisor engineer) with gully traps, connect with the main manhole by a sufficient plastic pipe with D(10)cm and cover around all sides with cement & sand mortar by mix ratio (1:3) . the price including re-covering the latrine floor to origin status before rehabilitation and completed the work as appropriate | Engineers from Mercy Corps and Directorate of Water |
| Supply, fix and install Chrome Finish Shower System | Visual verification | Supply, fix and install Chrome Finish Shower System kit with Control Handle, , Shower Heads of (1/2 inch) of good quality(Turkish or other equivalent origins | Engineers from Mercy Corps and Directorate of Water |
| Supply, install and test a new ceiling fan | Visual verification | Supply, install and test a new ceiling fan with 5-Speed Fan Control Switch, with (Turkish, India) and connect it to electric current with all necessary accessories and switch to complete the work. | Engineers from Mercy Corps and Directorate of Water |
| supply and install LED bulbs 75 watts with bulbs holder | Visual verification | Supply materials, tools, and manpower for supply and install LED bulbs 75 watts with bulbs holder with waterproof | Engineers from Mercy Corps and Directorate of Water |
| Supply and install a new LED floodlight of 600 watts white color. | Visual verification | projector Lighting  Supply and install a new LED floodlight of 600 watts white color (IP66), UAE, Jorden, Saudi) with electrical connection by using copper cables size (2X2.5mm2), and all necessary required to achieve work according to the specifications of Directorate of water | Engineers from Mercy Corps and Directorate of Water |
| Supply materials, tools, and manpower to clean site. | Visual verification | Site clearing  Supply materials, tools, and manpower to  - Cleaning and preparing the worksite before and after the rehabilitation process, work includes cleaning the yard of the water treatment plant from all obstacles ( bushes, reeds, accumulated sludge, debris, steel scrap, waste) to the proper dump location approved by the municipality, opening the blockages in the wash facilities of the service building, preparing and leveling the water treatment plant's yard in the appropriate form.  - Decommissioning, loading, transportation, and unloading the old water pumps to the store of the directorate of Water in Al-Qurnah water. | Engineers from Mercy Corps and Directorate of Water |
| Supply, install and operate manual chain with 3 ton | Visual verification | Supply, install and operate manual chain pulley to lift the submersible pumps with 3 ton, Turkish origin or equivalent. | Engineers from Mercy Corps and Directorate of Water |
| Supply and install flow meter double flange, size 10" | Visual verification | Supply and install flow meter double flange, size 10", made from steel of (Dutch, American, English, Danish, French, German, Japanese, Belgian) | Engineers from Mercy Corps and Directorate of Water |

**Non-Conformance:**

* In case of non-conformance for any of the above detailed conditions, the contractor will be responsible to re-do the service to the satisfaction of Mercy Corps staff and maximum benefit for beneficiaries. Otherwise, the contractor will not be paid for the provided service. Additionally, the contractor will be forfeited for any damages that occur because of improper implementation.
* The Contractor shall comply by removing all materials, equipment and tools marked as failing in an inspection or material tests are failed which lead to total partial failure. So that it is removed outside the site of project and/or to a suitable location according to the recommendations of relevant department and the Mercy Corps engineer and in accordance with the Iraqi laws in force in this regard.
* The above QC plan is considered a major part of the monitoring and evaluation plans when carrying out the work. Mercy Corps will not pay any amounts related to the quality control procedures, required tests and action in all of QC.
* The above plan points will be included as part of the contractor's evaluation processes later and a major indicator of his compliance with the work as stated in the contract and follow-up to the instructions of Mercy Corps engineers and the technical supervision committees from the competent authorities. This is to ensure that the best services are provided to the beneficiaries of the aforementioned project.
* The Contractor shall submit, in whole and not in part, to the entire above QC-plan. The mentioned points which includes proper planning at all stages of implementation to achieve the required inspections and control from the technical work
* team and thus reach the guarantee of access in the shortest and fastest way to achieve the best required quality in the stages of implementation, processing and final receipt.

**Visibility:**

* Mercy Corps may ask for Mercy Corps and donor logo visibility this WTP. Mercy Corps will advise contractors with specific visibility guidelines. Supplier/ contractor will not use any type of visibility without Mercy Corps’ consent.

**Location:**

* Mercy Corps provided the location of WTP in the SoW, which is Basra Governorate – Al-Qurna district