

Bill of Quantities

Wadi Al Seer – Amman - Jordan

1.1.3	<p>supply and install Chain link steel Fence (Baqlawa) in two locations with clear height 2.0m including a steel gate at spring yard including one steel gate as per drawings, specifications and special conditions:</p> <ol style="list-style-type: none"> 1. Steel Fences above top of Rock-Cut (above shoring wall) at the high level. 2. Steel Fence above the existing boundary stone wall to protect all spring yard 3. Steel gate of two leaf, H=2.65m & W=3.0m 	L.M L.M No.	25 45 1
1.1.4	<p>Demolishing and removing the old concrete Canal (existing concrete canals) and rebuild a new reinforced concrete canal as per Specification & Drawings, the work included all excavation, backfilling, steel rebar, casting concrete, curing and all the required materials, tools and equipment that required to complete the works and operate the canals.</p> <p>- Demolishing the old canals and construction a new reinforced concrete Canals Inside Al Dalia spring</p>	L.M	28
1.1.5	<p>Execute a Concrete Collector Tank (Underground Water Tank) for Al Dalia Spring water at spring source with dimension of 1.8mX1.8m with height of 1.65m as per drawings, the prices including ready mix concrete, reinforcement steel, water stop, asphalt paint from outside with contact with soil, excavation, backfilling, base course materials (20cm) compaction curing and all necessary work required to complete the activities and operate the tank as required, the works as per General and Special Conditions in the tender.</p>	No.	1

Bill of Quantity

Rehabilitation of Al Deir spring yard

Iraq Al Amir – Amman - Jordan

Item No.	Item description	Unit	Qty.
1	<p>The contractor shall supply and pouring a reinforced concrete to execute a three number of upstands for the existing manholes openings as per drawings and design, the concrete shall be not less than 250 kg/cm², and reinforcement steel grade 60 with yield strength 420N/mm² and with steel diameters as per drawings, the prices including ready mix concrete, reinforcement steel, formwork (shuttering, two number of heavy duty manholes cover, curing and everything required to complete the work according to the drawings, specifications, and instructions of the supervising engineer, the price including cutting and trimming the existing opening by grinder or mechanical scissor, and bonding epoxy, and the contractor must be sure that the water of canal shall be running and not stop the flow of water during implementation of all parts of rehabilitation works.</p> <ul style="list-style-type: none"> - Concrete of three upstands for existing manholes <ul style="list-style-type: none"> a. <u>Two upstands</u> with inner dimensions (75x75cm) and height 50 cm, including two heavy duty steel cover as per drawings b. <u>One upstand</u> with inner dimension (90x140cm) and height 50cm, including cover of steel grill with dimension (90x140cm) as per drawings. 	No	2
		No	1

Item No.	Item description	Unit	Qty.
2	<p>Supplying, installing, testing and commissioning of reinforced concrete pipes conforming to Jordanian standard specifications 289/1994, according to the terms and specifications of the tender, and the price includes everything necessary to operate the lines.</p> <ul style="list-style-type: none"> - Pipe Dia. 400mm (for Drainage Line of rainwater) 	L.M	6

3	<p>Supply, install and execute a grill with dimension of Width=0.6m, Total length=4.0m and height=1.0m for drainage the rainwater from the area toward the stream that located near the existing road, the work including ready mix concrete shall be not less than 250 kg/cm², and reinforcement steel grade 60 with yield strength 420N/mm², formwork (shuttering), grill cover, curing and everything required to complete the work according to the drawings, specifications, and instructions of the supervising engineer.</p> <ul style="list-style-type: none"> - Grill (Width=0.6m X height=1.0m), with Length= 4.0m 	No	1
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Bill of Quantity

Rehabilitation of Tarabil spring yard

Iraq Al Amir – Amman - Jordan

Item No.	Item description	Unit	Qty
1	<p>The contractor shall supply and pouring a reinforced concrete to execute a new canal and new walls (rising the old walls) as per drawings and design, the concrete shall be not less than 250 kg/cm², and reinforcement steel grade 60 with yield strength 420N/mm² and with diameters as per drawings, the prices including ready mix concrete, reinforcement steel, formwork (shuttering), excavation, backfilling, base course (15cm), Blinding Concrete 10cm, compaction, curing and everything required to complete the work according to the drawings, specifications, and instructions of the supervising engineer, the price including demolishing and removing the old canal in the same path of new canal and demolishing or trimming the old walls that required to rising with anew walls, and the contractor must be sure that the water of canal shall be running and not stop the flow of water during implementation of all parts of rehabilitation works.</p> <p style="margin-left: 40px;">- Concrete Canal as per section A-A in drawings - Reinforced walls (Wall No. 1,2,3) as per drawing and location</p>	L.M M3	25 1.1
2	<p>Same as Item No.1, but the concrete shall be 300 kg/cm² for the concrete culvert which will place at the stream path before stream waterfall.</p> <p style="margin-left: 40px;">- Concrete Culvert with bumpers as per section B-B</p>	M3	14

Item No.	Item description	Unit	Qty.
3	<p>Supply, install and execute Manholes for spring water, at the location of crossing the road, and as per terms, specifications and drawings, which have implemented to move the spring water from spring canals to the existing concrete pipes below the road, the prices including ready mix concrete, heavy duty manhole cover, reinforcement steel ...etc.</p> <p style="margin-left: 40px;">- Model (6) with Dim. (0.8X0.8) m</p>		

		No.	1
	<p>Supply and install Chain link steel Fence (Baqlawa) above the existing retaining wall, with clear height 2.0m, the vertical pipes of fence shall be welding by plate (15cmX15cmX6mm) with inner supporting with pipes and plat, the plates shall have 4 holes with dia. 10mm in the corners in order to fix these plates with the existing retaining wall by used Fischer bolts 10mm.</p> <p>- Steel Fences above Soil Nails wall & Gabion Wall</p>	L.M	10

Bill of Quantity

Rehabilitation of Al Kursi spring yard

Wadi Al Seer – Amman - Jordan

Item No.	Item description	Unit	Qty.
1	Rehabilitation work for <u>Al Kursi Spring</u>, the work includes the following: Site Works: Cleaning and Leveling Site work includes the following:		
1.1	D. Cleaning and leveling the spring yard: the contractor is to remove all debris, excavated materials, rocks boulders, Stones, unnecessary roots, Grass, obstacles, rubbles, excavation output which are not reusable by other works and any obstacles listed or not listed in contract, off site to an approved location as per directions by consultant supervisor/Engineer and Authorities approval, and keep the site clean and Level as per Drawings.	Item	1
	E. Excavation and offset 2m in the elevation 2 & 3 for soil cut around the spring source in order to implement a gabion wall at the excavation area to stabilize the soil cut there and to as per drawings and specifications.		
	F. Detection of Spring Source to be ready for shoring by soil nails system: contractor to Excavate Carefully in the spring source throw soil-cut to find the exact water flow location this will facilitate to assign the location of reinforcement collector water tank, which will have implemented to carry the spring water from the source (soil-cut) Contractor to follow the instruction by consultant supervisor/Engineer.	M3	180
		Item	1

Item No.	Item description	Unit	Qty
1.2	Supply and installation Soil Nails Wall (shoring system) with apply of shotcrete and including all components to complete the shoring system of soil surfaces or profile or soil-cut (existing cut) as per specification, drawings and special conditions that available in the tender, the work includes everything required to complete the activities: 1- shotcrete facing (initial and final facing) including steel mesh and reinforcement steel as specified. - Initial Facing with steel mesh and (thick. 3 - 4 in) - Final Facing with steel rebar and (thick. 6 and 10 in) 2- soil nails bars with all accessories and components - Soil nails wall for shoring Soil-cut profile - Soil nails Wall for shoring of spring opening		
		M2	70
		M2	70
		No.	76
		No.	6

1.1.3	Supply and installation of Gabion Walls for Soil shoring and supporting inside Al Kursi Spring yard for the elevations number 2&3 as per plan, the work include all necessary to complete the work, including steel mesh, gabion components as per specification, excavation backfilling and etc. - Gabion Wall (Stones and steel mesh cage)	M3	180
1.1.4	Supply and install Chain link steel Fence (Baqlawa) above shoring wall of soil cut area, with clear height 2.0m including one steel gate as per drawings, specifications and special conditions: - Steel Fences above Soil Nails wall & Gabion Wall - Steel gate of two leaf, H=2.65m & W=3.0m (as per drawings)	L.M No.	30 1
	Execute a Concrete Collector Tank (Underground Water Tank) for Al Kursi Spring water at spring source with dimension of 1.8mX1.8m with height of 1.65m as per drawings, the prices including ready mix concrete, heavy duty manhole cover, reinforcement steel, water stop, asphalt paint from outside with contact with soil, excavation, backfilling, base course materials (20cm) compaction curing and all necessary work required to complete the activities and operate the tank as required, the works as per General and Special Conditions in the tender.	No	1

Item No.	Item description	Unit	Qty.
1.1.6	Supply and installation an interlock tiles with dimensions 10X20X6.5cm in different colors according to the owner's choice and the samples provided by the contractor, the work includes a layer of compacted sand with a thickness of 10cm with all the necessary slopes and everything necessary according to the specifications, drawings and instructions of the supervising engineer. - Interlock tiles for spring yard 10X20X6.5cm	M2	90
	Execution and construction a stones-steps with cement mortar, the work including supply and delivery stone and required material to construct all of work, and the stones shall be in different sizes, these stone-steps to be access for human to enter the spring yard. Execution of a steps (staircase) consist of stone with regular alignments and widths, with including Faces Gaps Grouting and according to the required levels, heights and locations, the work including excavation, leveling, machine etc. to complete the activities as per drawings and consultant approvals.		

	- Stone Step for Al Kursi Spring Yard	M2	28
	Supply and installation a guardrail (road rail) at the boarder of existing road with spring yard to protect the vehicles of fall down inside spring yard. the work specification shall be as per Ministry of Public Works & Housing (MPWH) and traffic department, the work including excavation, leveling backfilling and all necessary to complete the required work as specification and consultant instructions.	L.M	25

Item No.	Item description	Unit	Qty.
1.3	<p>Drainage line (concrete pipes) for Spring water:</p> <p>A. Supplying, installing, testing and commissioning of reinforced concrete pipes conforming to Jordanian standard specifications 289/1994, according to the terms and specifications of the tender, and the price includes excavation, backfilling, compaction, installation pipes, materials, and everything necessary to operate the lines.</p> <ul style="list-style-type: none"> - Pipe Dia. 900mm (for spring water Line) <p>B. Supply, install and execute Manholes for drainage line of storm water, as per terms, specifications and drawings, which have implemented in the stream path to drainage the stream's water to the valley inlet. the prices including ready mix concrete, heavy duty manhole cover, reinforcement steel ...etc.</p> <ul style="list-style-type: none"> - Model (2) with Dim. (1.4X1.4) m for Pipe Dia.900mm 	L.M	10
		No.	1

Bill of Quantity

Rehabilitation of Iraq Al Amir Canal

Iraq Al Amir – Amman - Jordan

Item No.	Item description	Unit	Qty.
1	<p>The contractor shall supply and pouring a reinforced concrete to execute a new canal as per drawings and design, the concrete shall be not less than 250 kg/cm², and reinforcement steel grade 60 with yield strength 420N/mm² and with diameters as per drawings, the prices including ready mix concrete, reinforcement steel, formwork (shuttering), excavation, backfilling, base course (15cm), Blinding Concrete 10cm, compaction, curing and everything required to complete the work according to the drawings, specifications, and instructions of the supervising engineer, the price including demolishing and removing the old canal in the same path of new canal, also the price including the required number of canal sliding-gate (Steel control Gate) as mentioned below, and the contractor must be sure that the water of canal shall be running and not stop the flow of water during implementation of all parts of rehabilitation works.</p> <ul style="list-style-type: none">- Concrete Canal as per drawings- Steel sliding gate (control gate) as specified	L.M No	114 8
2	<p>Supply, install and execute Manholes for drainage line of storm water, as per terms, specifications and drawings, which have implemented in the stream path to drainage the stream's water to the valley inlet. the prices including ready mix concrete, heavy duty manhole cover, reinforcement steel ...etc.</p> <ul style="list-style-type: none">- Model (6) with Dim. (0.80X0.80) m	L.M	2

Bill of Quantity
Rehabilitation of Qasr Al-Amir Canal
Iraq Al Amir – Amman - Jordan

Item No.	Item description	Unit	Qty.
1	<p>The contractor shall supply and pouring a reinforced concrete to execute a new canal as per drawings and design, the concrete shall be not less than 250 kg/cm², and reinforcement steel grade 60 with yield strength 420N/mm² and with diameters as per drawings, the prices including ready mix concrete, reinforcement steel, formwork (shuttering), excavation, backfilling, base course (15cm), Blinding Concrete 10cm, compaction, curing and everything required to complete the work according to the drawings, specifications, and instructions of the supervising engineer, the price including demolishing and removing the old canal in the same path of new canal, also the price including the required number of canal sliding-gate (Steel control Gate) as mentioned below, and the contractor must be sure that the water of canal shall be running and not stop the flow of water during implementation of all parts of rehabilitation works.</p> <ul style="list-style-type: none"> - concrete Canal as per drawings - Steel sliding gate (control gate) as specified 	L.M No	255 5

Bill of Quantity

Rehabilitation of Abu Al-Batayeh Canal

Wadi Al Seer – Amman - Jordan

Item No.	Item description	Unit	Qty.
1	<p>The contractor shall supply and pouring a reinforced concrete to execute a new canal as per drawings and design, the concrete shall be not less than 250 kg/cm², and reinforcement steel grade 60 with yield strength 420N/mm² and with diameters as per drawings, the prices including ready mix concrete, reinforcement steel, formwork (shuttering), excavation, backfilling, base course (15cm), Blinding Concrete 10cm, compaction, curing and everything required to complete the work according to the drawings, specifications, and instructions of the supervising engineer, the price including demolishing and removing the old canal in the same path of new canal, also the price including the required number of canal sliding-gate (Steel control Gate) as mentioned below, and the contractor must be sure that the water of canal shall be running and not stop the flow of water during implementation of all parts of rehabilitation works.</p> <ul style="list-style-type: none">- concrete Canal as per drawings- Steel sliding gate (control gate) as specified	L.M No	700 15