

**Conveyance System of El Sheikh Gaber El Sabbah Canal
Between KM 108.466 and KM 118.560
El Salaam No.7 (Bir El Abd) Pumping Station
(Package-2)
Cost Estimate**

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency US\$	
				Unit	Amount	Unit	Amount
DT-0800	Discharge Tank						
DT-0801	Stripping	m ³	12,500	1.5	18,750		
DT-0802	Excavation (2), below the level of embankment	m ³	24,000	2.50	60,000		
DT-0803	Fill (1), for canal	m ³	18,500	3.25	60,125		
DT-0804	Fill (2), for embankment	m ³	107,000	2.75	294,250		
DT-0805	Backfill (1), for structure	m ³	892	3.25	2,899		
DT-0806	Stone Pitching with Mortar Caulking	m ³	4,290	90	386,100		
DT-0807	Mortar Lining (0.10m thick)	m ²	7,710	15	115,650		
DT-0808	Polyethylene Sheet (1.5mm thick)	m ²	7,710	20	154,200		
DT-0809	Concrete Lining (0.25m thick), ck=225kgf/m ²	m ²	5,910	58	342,780		
DT-0810	Concrete Lining (0.20m thick), ck=225kg/cm ²	m ²	1,800	48	86,400		
DT-0811	Plain Concrete, ck=180kgf/cm ²	m ³	52	186	9,672		
DT-0812	Reinforced Concrete (2), ck=275kgf/cm ² , 100kg/m ³	m ³	749	611	457,639		
DT-0813	Bitumen Coating (Coal Tar Painting)	m ²	526	4	2,104		
DT-0814	Water Stop (w=0.20m)	m	24	57	1,368		
DT-0815	Expansion Joint	m ²	142	165	23,430		
DT-0816	Contraction Joint	m ²	106	83	8,798		
DT-0817	Handrail (H=0.9m)	m	64	258	16,512		
DT-0818	Miscellaneous Steel (Steel Ladder, etc.)	ton	1	4,500	4,500		
DT-0819	Additional Reinforcement (Steel Bar No.52)	ton	4	2,300	9,200		

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency US\$	
				Unit	Amount	Unit	Amount
DT-0820	Surface Course of Asphalt Paved Road (Asphalt Concrete of 5cm thick)	m ²	3,450	9	31,050		
DT-0821	Prime coat	m ²	3,450	1	3,450		
DT-0822	Upper Subgrade (Macadam Layer of 0.30m)	m ²	3,580	10	35,800		
DT-0823	Lower Subgrade (0.25m thick Laterite Pavement)	m ²	3,580	6	21,480		
DT-0824	Laterite Paved Road (0.25m thick Laterite Pavement)	m ²	4,150	6	24,900		
DT-0826	Laterite Pavement of 0.2m thick on Berms, etc.	m ²	5,690	5	28,450		
DT-0827	Excavation of Pits for Planting Trees	Km	1.4	300	420		
DT-0828	Supply of Clayey Soil for Pits	Km	1.4	2,500	3,500		
DT-0829	Plantation of Gasuarina Tree	Km	0.9	500	450		
DT-0830	Plantation of Acacia Tree	Km	0.5	500	250		
DT-0830	Care of Trees	Km	1.4	2,500	3,500		
DT-0831	Drip Irrigation Systems for Pay Item No. DT-0829 and DT-0830	L.S.	1		5,600		
DT-800	Total				1,755,588		

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El Salaam No.7 (Bir El Abd) Pumping Station
(Package-2)
Cost Estimate**

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency US\$	
				Unit	Amount	Unit	Amount
OR-0900	No.3 Access Road						
OR-0901	Stripping	m ³	77,200	1.5	115,800		
OR-0902	Excavation	m ³	20,200	2.25	45,450		
OR-0903	Fill	m ³	333,000	3.25	1,082,250		
OR-0904	Stone Pitching with Mortar Caulking	m ³	13,700	90	1,233,000		
OR-0905	Surface Course of Asphalt Paved Road (Asphalt Concrete of 5cm thick)	m ²	65,800	9	592,200		
OR-0906	Prime coat	m ²	65,800	1	65,800		
OR-0907	Upper Subgrade (Macadam Layer of 0.30m)	m ²	68,300	10	683,000		
OR-0908	Lower Subgrade (0.25m thick Laterite Pavement)	m ²	68,300	6	409,800		
OR-0900	Total				4,227,300		

Bill of Unit Price

(Package-2)

Ser. No.	Description	Unit	Unit Price Egyptian Pound	Remarks
1	Excavation (1), above embankment	m ³	2.25	above bank level
2	Excavation (2), below embankment	m ³	2.50	below bank level
3	Fill (1), for canal	m ³	3.25	backfilling
4	Fill (2), for embankment	m ³	2.75	embankment
5	Trimming of Side Slopes of Concrete Lined Canal	m ³	3.00	
6	Fill with Laterite and Laterite Bedding	m ³	25	
7	Laterite Pavement of 0.2m thick on Berms, etc.	m ²	5	
8	Stone Pitching with Mortar Caulking	m ³	90	
9	Crushed Gravel Bedding	m ³	35	
10	Mortar Lining of 10cm thick	m ²	15	
11	Polyethylene Sheet (1.5mm thick)	m ²	20	
12	Concrete Lining (0.25m thick)	m ²	58	
13	Concrete Lining (0.20m thick)	m ²	48	
14	Leakage Test	No.	7,500	
15	Reinforced Concrete (1) ck=275kgf/cm ² , 80kg/m ³	m ³	607	
16	Reinforced Concrete (2) ck=275kgf/cm ² , 100kg/m ³	m ³	611	
17	Fino Concrete, 275kgf/cm ²	m ³	216	
18	Plain Concrete, 180kgf/cm ²	m ³	186	
19	Bitumen Coating	m ²	4	
20	Ladder Rung & Miscellaneous Steel	ton	4,500	
21	Additional Reinforcement (Steel Bar No. 52)	ton	2,300	
22	Laterite Paved Road (0.25m thick Laterite Pavement)	m ²	6	
23	Surface Course of Asphalt Paved Road (Asphalt Concrete of 5cm thick)	m ²	9	
24	Prime Coat	m ²	1	
25	Upper Subgrade (Macadam Layer of 0.30m)	m ²	10	
26	Lower Subgrade (0.25m thick Laterite Pavement)	m ²	6	
27	Kilometer Sign	No.	250	
28	Excavation of Pits for Planting Trees	Km	300	
29	Supply of Clayey Soil for Pits	Km	2,500	
30	Plantation of Gasuarina Trees	Km	500	
31	Plantation of Acacia Trees	Km	500	
32	Care of Trees	Km	2,500	

Bill of Unit Price

(Package-2)

Ser. No.	Description	Unit	Unit Price Egyptian Pound	Remarks
33	Drip Irrigation Systems	Km	4,000	
34	Marble Staff Gauge	m	125	
35	Water Stop (w=0.20m)	m	57	
36	Expansion Joint	m ²	165	
37	Contraction Joint	m ²	83	
38	Handrail (H=1.10m)	m	250	16.99 kg/m
39	Kilometer Post	No.	1,081	
40	Riprap	m ³	60	
41	Dowel Bars (φ 19, L=1.0m)	No.	8	
42	Net Wire Fence H=1.5m	m ²	20	
43	Stone Pitching without Mortar Caulking	m ³	60	
44	Excavation (3); (with Dewatering)	m ³	33	
45	Backfill (2); (with Dewatering)	m ³	42	
46	Reinforced Concrete (1); (with Dewatering), 80 kg/m ³	m ³	743	
47	Reinforced Concrete (2); (with Dewatering), 100 kg/m ³	m ³	747	
48	Reinforced concrete (3) (Fcu=300kgf/cm ²), 170 kg/m ³	m ³	772	Building Works
49	Handrail (H=0.90m)	m	258	17.55 kg/m
50	Green Belt (Width 50m of Planting Trees)	m	290	
51	Secondary Concrete, ck=275kgf/cm ² , 10 kg/m ³	m ³	218	
52	Brick Wall t=0.24m	m ³	200	
53	Mortar Steel Trowel	m ²	14	
54	Non Slip Tile Facing	m	57	
55	Drain Pit with Gravel Filter and PVC φ 100	No.	17	
56	Stripping	m ³	1.5	
57	Laterite and Crushed Gravel Pavement including trimming	m ²	12	

Breakdown of Unit Price

(Package-2)

Pay Item No. PP-0789: Drain Pit with Gravel Filter and PVC ϕ 100

Pay Item	Description	Unit	Quantity	Unit L.E	Amount Egyptian Pound
	Crushed Gravel Bedding	m3	0.125	35	4.38
	PVC (D=100mm)	m	0.6	21	12.60
	Excavation	m3	0.125	2.25	0.28
	Total	No.			17

Pay Item PP-0766: Laterite and Crushed Gravel Pavement including trimming

Pay Item	Description	Unit	Quantity	Unit L.E	Amount Egyptian Pound
	Laterite (t=0.2m)	m3	0.2	25	5
	Crushed Gravel (t=0.2m)	m3	0.2	35	7
	Total	m2			12

**Conveyance System of El Sheikh Gaber El Sabbah Canal
Between KM 118.560 and KM 132.500
(Package-3)
Cost Estimate**

SUMMARY AND TOTAL

Pay Item No.	Item of Works	Amount Egyptian Pound	Remarks
CC-0300	No.3 Open Canal	94,781,000	
Total		94,781,000	

**Conveyance System of El Sheikh Gaber El Sabbah Canal
Between KM 118.560 and KM 132.500
Cost Estimate**

Pay Item	Description	Unit	Quantity	Unit L.E	Amount Egyptian Pound
CC-0300	No.3 Open Canal				
CC-0301	Excavation (1), above embankment	m ³	1,850,000	2.25	4,162,500
CC-0302	Excavation (2), below embankment	m ³	1,660,000	2.50	4,150,000
CC-0303	Fill (1), for canal	m ³	1,720,000	3.25	5,590,000
CC-0304	Fill (2), for embankment	m ³	2,270,000	2.75	6,242,500
CC-0305	Trimming of Side Slopes of Concrete Lined Canal	m ³	136,000	3.00	408,000
CC-0306	Fill with Laterite and Laterite Bedding	m ³	2,000	25.00	50,000
CC-0307	Laterite Pavement of 0.2m thick on Berms, etc.	m ²	115,000	5.00	575,000
CC-0308	Stone Pitching with Mortar Caulking	m ³	230,000	90	20,700,000
CC-0309	Crushed Gravel Bedding	m ³	3,100	35	108,500
CC-0310	Mortar Lining of 10cm thick	m ²	464,000	15	6,960,000
CC-0311	Polyethylene Sheet (1.5mm thick)	m ²	461,000	20	9,220,000
CC-0312	Concrete Lining (0.25m thick), ck=275kgf/cm ²	m ²	339,000	58	19,662,000
CC-0313	Concrete Lining (0.20m thick), ck=275kgf/cm ²	m ²	108,000	48	5,184,000
CC-0314	Leakage Test	No.	28	7,500	210,000
CC-0315	Reinforced Concrete (1) other than Bridge Deck ck=275kgf/cm ² , 50kg/m ³	m ³	6,200	601	3,726,200
CC-0316	Reinforced Concrete (2) for Bridge Deck, ck=275kgf/cm ² , 130kg/m ³	m ³	1,000	617	617,000
CC-0317	Fino Concrete, 275kgf/cm ²	m ³	100	216	21,600
CC-0318	Plain Concrete, 180kgf/cm ²	m ³	800	186	148,800
CC-0319	Bitumen Coating	m ²	5,700	4.00	22,800
CC-0320	Ladder Rung & Miscellaneous Steel	ton	1	4,500	4,500
CC-0321	Additional Reinforcement (Steel Bar No. 52)	ton	50	2,300	115,000
CC-0322	Laterite Paved Road (0.25m thick Laterite Pavement)	m ²	189,000	6.00	1,134,000
CC-0323	Surface Course of Asphalt Paved Road (Asphalt Concrete of 5cm thick)	m ²	182,000	9.00	1,638,000
CC-0324	Prime Coat	m ²	182,000	1.00	182,000
CC-0325	Upper Subgrade (Macadam Layer of 0.30m)	m ²	189,000	10.00	1,890,000
CC-0326	Lower Subgrade (0.25m thick Laterite Pavement)	m ²	189,000	6.00	1,134,000

Pay Item	Description	Unit	Quantity	Unit L.E	Amount Egyptian Pound
CC-0327	Kilometer Sign	No.	15	250	3,750
CC-0328	Excavation of Pits for Planting Trees	Km	148	300	44,400
CC-0329	Supply of Clayey Soil for Pits	Km	148	2,500	370,000
CC-0330	Plantation of Gasurina Trees	Km	92	500	46,000
CC-0331	Plantation of Acacia Trees	Km	56	500	28,000
CC-0332	Care of Trees	Km	148	2,500	370,000
CC-0333	Drip Irrigation Systems for Pay Item Nos. CC-0330 and CC-0331	L.S.	1		56,000
CC-0334	Marble Staff Gauge	m	48	125	6,000
CC-0300	Total				94,780,550

Bill of Unit Price

(Package-3)

Ser. No.	Description	Unit	Unit Price Egyptian Pound	Remarks
1	Excavation (1), above embankment	m ³	2.25	above bank level
2	Excavation (2), below embankment	m ³	2.50	below bank level
3	Fill (1), for canal	m ³	3.25	
4	Fill (2), for embankment	m ³	2.75	embankment
5	Trimming of Side Slopes of Concrete Lined Canal	m ³	3.00	
6	Fill with Laterite and Laterite Bedding	m ³	25	
7	Laterite Pavement of 0.2m thick on Berms, etc.	m ²	5	
8	Stone Pitching with Mortar Caulking	m ³	90	
9	Crushed Gravel Bedding	m ³	35	
10	Mortar Lining of 10cm thick	m ²	15	
11	Polyethylene Sheet (1.5mm thick)	m ²	20	
12	Concrete Lining (0.25m thick)	m ²	58	
13	Concrete Lining (0.20m thick)	m ²	48	
14	Leakage Test	No.	7,500	
15	Reinforced Concrete (1) other than Bridge Deck ck=275kgf/cm ² , 50kg/m ³	m ³	601	
16	Reinforced Concrete (2) for Bridge Deck, ck=275kgf/cm ² , 130kg/m ³	m ³	617	
17	Fino Concrete, 275kgf/cm ²	m ³	216	
18	Plain Concrete, 180kgf/cm ²	m ³	186	
19	Bitumen Coating	m ²	4	
20	Ladder Rung & Miscellaneous Steel	ton	4,500	
21	Additional Reinforcement (Steel Bar No. 52)	ton	2,300	
22	Laterite Paved Road (0.25m thick Laterite Pavement)	m ²	6	
23	Surface Course of Asphalt Paved Road (Asphalt Concrete of 5cm thick)	m ²	9	
24	Prime Coat	m ²	1	
25	Upper Subgrade (Macadam Layer of 0.30m)	m ²	10	
26	Lower Subgrade (0.25m thick Laterite Pavement)	m ²	6	
27	Kilometer Sign	Nos.	250	
28	Excavation of Pits for Planting Trees	Km	300	
29	Supply of Clayey Soil for Pits	Km	2500	
30	Plantation of Gasuarina Trees	Km	500	

Bill of Unit Price

(Package-3)

Ser. No.	Description	Unit	Unit Price Egyptian Pound	Remarks
31	Plantation of Acacia Trees	Km	500	
32	Care of Trees	Km	2500	
33	Drip Irrigation Systems	Km	4,000	L=14 Km
34	Marble Staff Gauge	m	125	

**Conveyance System of El Sheikh Gaber El Sabbah Canal
Main Power Substation (for El Salaam No.7 P.S.)
(Package-4)
Cost Estimate**

SUMMARY AND TOTAL

Pay Item No.	Item of Works	Local Currency Amount Egyptian Pound	Foreign Currency Amount
SE-0400	Main Power Substation (Electrical Works)	39,214,000	
WB-0400	Main Power Substation (Building Works)	1,284,000	
AB-0400	Administration (Building Works)	842,000	
Total		41,340,000	

**Conveyance System of El Sheikh Gaber El Sabbah Canal
Main Power Substation (for El Salaam No.7 P.S.)
(Package-4)
Cost Estimate**

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency	
				UnitPrice	Amount	UnitPrice	Amount
SE-0400	Main Power Substation (Electrical Works)						
SE-0401	Power Transformer: Outdoor type 66/11 kV, 50 Hz, 3-Phase, 25 MVA	unit	4	1,943,052	7,772,209		
SE-0402	Voltage Detector Rated voltage: 66 kV, 3-Phase, 50 Hz	unit	2	38,861	77,722		
SE-0403	Earthing switch: 72.5 kV, 1250 A 50 Hz, 3 - pole, Air disconnect Manual operation, indoor type	unit	2	582,916	1,165,831		
SE-0404	66 kV Disconnect: 72.5 kV, 1250 A 50 Hz, 3 - pole, Air disconnect Electric Motor driven type	unit	4	388,610	1,554,442		
SE-0405	66 kV Disconnect Electric Motor driven type 1000A DS-P1, DS-P2, DS-P3 and DS-P4	unit	4	349,749	1,398,998		
SE-0406	66 kV Disconnect Manual operation type 800A	unit	2	233,166	466,333		
SE-0407	66 kV Circuit Breaker (Indoor type) Gas Insulated Circuit Breaker 3-Phase, 50 Hz, 72.5 kV, 25 kA, 1250 A Hydraulic or Electric motor operation type	unit	2	466,333	932,665		
SE-0408	Ditto, but rating current: 800 A	unit	4	466,333	1,865,330		
SE-0409	66 kV Current transformer (Indoor type) Rated as 66 kV, 3-Phase, 50 Hz, 1250/5A Rated Burden: 60 VA	unit	2	155,444	310,888		
SE-0410	Ditto, but Primary current: 400 A	unit	4	155,444	621,777		

Pay Item	Description	Unit	Quantity	Local Currency		Foreign Currency	
				Egyptian Pound	Amount	Unit	Price
SE-0411	66kV Capacitance Potential Device 66 kV/110 V	unit	3	174,875	524,624		
SE-0412	66 kV Lightning Arrester: Serge gap type 84 kV, 10,000 A with operation time counter	unit	2	77,722	155,444		
SE-0413	Cubicle type 11kV Switchgears: IP 55 Vertical self standing type, made of sheet steel (See DWG. SSE-404) Neutral Grounding Panel Grounding current transformer, lightning arrester and neutral line disconnecting switch	unit	4	777,221	3,108,884		
SE-414	Ditto, but 11 kV Cable termination Panel Terminal for 11 kV XLPE 400mm2 x 9	unit	4	116,583	466,333		
SE-0415	Ditto, but VCB Panel VCB 12 kV, 2000 A, 40 kA, drawable type	unit	4	567,371	2,269,485		
SE-0416	Ditto, but 11 kV Feeder Panel VCB 12 kV, 3000 A, 40 kA, drawable type GCT and Grounding over current relay	unit	2	1,088,109	2,176,219		
SE-0417	Ditto, but Lightning Arrester Panel VCB 12 kV, 1000 A, 40 kA, drawable type and Lightning arrester	unit	2	621,777	1,243,553		
SE-0418	Ditto, but 11 kV Feeder Panel VCB 12 kV, 400A, 40 kA, drawable type	unit	2	621,777	1,243,553		
SE-0419	Ditto, but Bus-Tie Panel VCB 12 kV, 3000 A, 40 kA, drawable type and CT x 2	unit	1	1,088,109	1,088,109		
SE-0420	Station Transformer Panel Indoor cubicle, vertical self standing, IP 55 (See DWG. SSE-404) Transformer Panel (Dry type transformer) 11 kV/380-220 V, 500 kVA	unit	2	582,916	1,165,831		

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency	
				UnitPrice	Amount	UnitPrice	Amount
SE-0421	Ditto, but Transformer feeder Panel VCB: 12.5 kV, 3-Pole, 600 A, 40 kA Drawable, manual operation type	unit	2	621,777	1,243,553		
SE-0422	Ditto, but Low Voltage Distribution Panel Main MCCB: 3-Pole+N 800A x 2 Bus-Tie MCCB: 3-Pole +N 800 A Branch MCCB: 3-Pole+N 100A x 10	unit	1	310,888	310,888		
SE-0423	Relay Panel: Indoor vertical stand type, IP 55	unit	1	388,610	388,610		
SE-0424	66 kV Substation Control Board Consist of remote operation switches, status indication lamps, alarm indication and mimic diagram.	unit	1	310,888	310,888		
SE-0425	DC Power Unit: Metal clad type, IP 55 Battery: Alkaline type 220V, 500Ah Charger: Thyristor, AC -Phase, 380V, 50A DC Circuit Breaker: 2-Pole, 100A x 2 and 2-Pole 50A x 8	unit	1	139,900	139,900		
SE-0426	Cubicle type 11 kV VCB Panel: IP 55 Vertical self standing, unit enclosed type Installed in No.7 Pumping Station Power cable lead-in Panel For 11 kV XLPE (1C-500mm ² x 4) x 3	unit	2	83,065	166,131		
SE-0427	Ditto, but Power receiving panel Draw out type VCB: 12 kV, 3000 A,	unit	2	668,896	1,337,791		
SE-0428	Ditto, but PT panel 2-PTs: 11kV/110V, 50VA	unit	2	215,679	431,358		
SE-0429	66kV aerial busbars (AC1) Heat resistance aluminum alloy stranded wire, Sectional area: 1600mm ²	m	240	486	116,580		

Pay Item	Description	Unit	Quantity	Local Currency		Foreign Currency	
				Egyptian Pound	Amount	UnitPrice	Amount
SE-0430	Aerial earthing conductor Hard drawn copper stranded conductor 5mm diameter.	m	40	16	648		
SE-0431	66 kV aerial bus bar (AC2) Aluminum Pipe 60 mm diameter	m	200	486	97,150		
SE-0432	66 kV aerial bus bar (AC3) Aluminum Pipe 50 mm diameter	m	300	421	126,295		
SE-0433	Insulators/Bushing Consist of insulator, accessories and fittings 4-Couple of 250 mm diameter. Disk type Insulator	pc.	12	1,133	13,601		
SE-0434	Ditto, but Line post insulator For 66kV busbars, 190 mm diameter. 740 mm length	pc.	18	1,781	32,060		
SE-0435	Wall through Bushing (WB1) 66 kV, 2000 A	pc.	6	8,096	48,575		
SE-0436	Wall through Bushing (WB2) 66 kV, 800 A	pc.	12	5,181	62,176		
SE-0437	11 kV Feeder cable 11 kV XLPE 1C-400 mm2	m	470	583	273,964		
SE-0438	Control and Operation cables include with terminals, accessories and fittings Copper tape shielding type SCC 4C-10 mm2	m	875	113	99,174		
SE-0439	Ditto, but SCC 4C-6 mm2	m	385	97	37,403		
SE-0440	Ditto, but SCC-4C-4 mm2	m	2,030	81	164,346		
SE-0441	Ditto, but SCC-3C-4 mm2	m	1,190	65	77,073		
SE-0442	Underground grounding grid wire Bare stranded copper, 120 mm2	m	1,000	16	16,192		
SE-0443	Indoor grounding conductor Bare stranded copper, 70 mm2	m	80	10	777		
SE-0444	Grounding rod Copper rod: 14mm diameter, 3m length	unit	34	324	11,010		

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency	
				UnitPrice	Amount	UnitPrice	Amount
SE-0445	Grounding plate Copper plate: 900mm x 900mm, thickness: more than 1.5mm	unit	11	1,619	17,811		
SE-0446	Grounding conductor in Cable pit Bare stranded copper, 70 mm ²	m	330	10	3,206		
SE-0447	Grounding for structure/foundations Bare stranded copper, 120 mm ²	unit	300	16	4,858		
SE-0448	Underground feeder cables for No.7 Pumping Station including excavation and backfilling Consist of cables, connectors, fittings, conduits, supporters, accessories and etc. as required. 11 kV XLPE 1-Core, 500 mm ²	m	6,000	648	3,886,010		
SE-0449	Manhole: inside dimension 2 x 2 x 2.5 m Made of reinforced concrete include with cable support brackets, steps, drainage system and heavy weight withstand type cast iron manhole cover	set	6	9,715	58,290		
SE-0450	Cable trench: Width=1.5 m, Depth=0.6 m and Width=1m, Depth=0.4m including excavation and backfilling with sheet steel cover	m	160	810	129,534		
SE-0400	Total				39,214,084		

**Conveyance System of El Sheikh Gaber El Sabbah Canal
Main Power Substation (for El Salaam No.7 P.S.)**

**(Package-4)
Cost Estimate**

Pay Item	Description	Unit	Quantity	Local Currency		Foreign Currency	
				Egyptian Pound	Amount	Unit Price	Amount
WB-0400	Main Power Substation (Building Works)						
WB-0401	Excavation and disposal for building	m3	2,017	2.25	4,538		
WB-0402	Backfill including supply of material	m3	1,900	3.25	6,175		
WB-0403	Final grading	m2	7,520	1	7,520		
WB-0404	Lean concrete 75 mm thick.	m3	137	186	25,482		
WB-0405	Reinforced concrete (Fcu=275kg/cm2) for foundation and slab on grade, including reinforcing deformed bars (Grade 36/52) 120 kg/m3 and form works	m3	360	615	221,400		
WB-0406	Reinforced concrete (Fcu=300kg/cm2) for grade beams, columns, walls beams and slabs, including reinforcing deformed bars (Grade 36/52) 130 kg/m3 and form works	m3	482	764	368,248		
WB-0407	Masonry brick wall works (cement bricks) including reinforced concrete lintel and bond beams where necessary, t=240mm	m3	500	200	100,000		
WB-0408	Cement plastering, t=20mm	m2	4,160	14	58,240		
WB-0409	Steel ladders w/painting	kg	200	4.5	900		
WB-0410	Checked plates, t=4.5mm	kg	7,144	4.5	32,148		
WB-0411	Wire mesh fencing, complete	m2	59	200	11,800		
WB-0412	Wire mesh doors, complete	m2	9	300	2,700		
WB-0413	Bituminous waterproofing membrane with insulation 500mm, covered with cement mortar 70 mm and cement tiles.	m2	1,425	30	42,750		
WB-0414	Paint on plastered walls, exterior	m2	2,080	16	33,280		

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency	
				Unit Price	Amount	Unit Price	Amount
WB-0415	Paint on plastered walls, interior	m2	2,080	16	33,280		
WB-0416	Paint on ceiling	m2	1,344	16	21,504		
WB-0417	Steel door, including painting	kg	100	3.8	380		
WB-0418	Steel main access door, including glazing and	kg	1,020	3.8	3,876		
WB-0419	Aluminum window	m2	130	375	48,750		
WB-0420	Fixed aluminum louver	m2	6	375	2,250		
WB-0421	Separate cement floor finishing, with hardener including base (H=100mm)	m2	1,344	20	26,880		
WB-0422	Lighting fixture: Ceiling surface mounted open type IP 51, for fluorescent lamp 32 watt -1 Type: B - FL321	set	36	250	9,000		
WB-0423	Ditto, but for fluorescent lamp 32 watt - 2 Type: B-FL322	set	18	150	2,700		
WB-0424	Lighting fixture: High ceiling mounted type with metallic reflector IP 51, for 400 watt high-pressure sodium lamp Type: D-HPS400	set	15	500	7,500		
WB-0425	Lighting fixture: Wall mounted type with plastic cover IP 65, for fluorescent lamp 32 watt -1 Type: G - FL321	set	3	150	450		
WB-0426	Emergency lighting fixture: Ceiling or wall mounted open type IP 51, for incandescent lamp 100 watt powered by DC 100 V , Type: H-IL100	set	26	250	6,500		
WB-0427	Socket outlet: Wall surface flush mounted type AC Single Phase 220 V, 2-Pole with earth pole 15 amp double	set	31	50	1,550		
WB-0428	Ditto, but 30 amp single outlet	set	7	120	840		
WB-0429	Socket outlet: Wall surface mounted type AC 3-Phase 380 V, 3-Pole with earth pole 30 amp single outlet	set	5	120	600		
WB-0430	Lighting switch: Wall surface flush mounted type, one way switch, AC 250 V, 10 amp	set	6	50	300		
WB-0431	Ditto, but remote control switch for magnetic contactor installed in distribution board	set	3	250	750		
WB-0432	Distribution board: Wall surface mounted metallic cabinet type DB-SS1	set	1	500	500		

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency	
				Unit Price	Amount	Unit Price	Amount
WB-0433	Ditto, but DB-SS2	set	1	500	500		
WB-0434	Lighting main feeder cable from Station Transformer Panel to DB-SS1 600V XLPE 3C+N 25 mm ²	m	20	80	1,600		
WB-0435	Ditto, but to DB-SS2 600V XLPE 3C+N 35 mm ²	m	40	100	4,000		
WB-0436	Wiring for lighting system, consist of PVC wires of 4 mm ² , steel conduit 20 mm, conduit accessories, cable connections, outlet boxes, mounting fittings and necessary devices.	L.S.	1		106,900		
WB-0437	Wiring for socket outlet system, consist of PVC wires of 4 mm ² , steel conduit 20 mm, conduit accessories, cable connections, outlet boxes, mounting fittings and necessary devices.	L.S.	1		53,800		
WB-0438	Grounding conductors for distribution board, lighting fixtures and socket outlets	L.S.	1		13,000		
WB-0439	Ventilation, axial flow type supply fan, 600 mm dia. x 250 mm x 2.2kw, with 8 Nos. SAH-HS 750 x 200 34CMM	No.	1	700	700		
WB-0440	Roof water down pipes, cast iron diam. 150 mm	m	34	60	2,040		
WB-0441	Portable fire extinguishers	set	18	1,000	18,000		
WB-0442	Lightning Protection	L.S.	1		1,000		
WB-0400	Total				1,284,331		

**Conveyance System of El Sheikh Gaber El Sabbah Canal
Main Power Substation (for El Salaam No.7 P.S.)
(Package-4)
Cost Estimate**

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency	
				Unit Price	Amount	Unit Price	Amount
AB-0400	Administration (Building Works)						
AB-0401	Excavation and disposal for building	m3	1,135	2.25	2,554		
AB-0402	Backfill including supply of material	m3	1,053	3.25	3,422		
AB-0403	Lean concrete 75 mm thick.	m3	18	186	3,348		
AB-0404	Reinforced concrete (Fcu=275kg/cm2) for foundation and slab on grade, including reinforcing deformed bars (Grade 36/52) 120kg/m3 and form works	m3	144	615	88,560		
AB-0405	Reinforced concrete (Fcu=300kg/cm2) for grade beams, columns, walls beams and slabs, including reinforcing deformed bars (Grade 36/52) 130kg/m3 and form works	m3	234	764	178,776		
AB-0406	Cinder concrete, using light weight aggregates	m3	5.4	200	1,080		
AB-0407	Masonry brick wall works (cement bricks) including reinforced concrete lintel and bond beams where necessary, t=240mm	m3	235	200	47,000		
AB-0408	Masonry brick wall works (lime sand bricks) including reinforced concrete lintel and bond beam where necessary, t=250mm	m3	90	288	25,920		
AB-0409	Cement plastering, t=20mm	m2	1,960	14.0	27,440		
AB-0410	Steel ladders w/painting	kg	110	4.5	495		
AB-0411	Checkered plates, t=4.5mm	kg	987	4.5	4,442		

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency	
				Unit Price	Amount	Unit Price	Amount
AB-0412	Bituminous waterproofing membrane with insulation 500mm, covered with cement mortar 70 mm and cement tiles.	m2	625	30	18,750		
AB-0413	Paint on plastered walls, exterior	m2	413	16	6,608		
AB-0414	Paint on plastered walls, interior	m2	1,133	16	18,128		
AB-0415	Paint on ceiling	m2	409	16	6,544		
AB-0416	Steel door, including painting	kg	700	3.8	2,660		
AB-0417	Steel door, with glazing, including painting	kg	300	3.8	1,140		
AB-0418	Aluminum window	m2	36	375	13,500		
AB-0419	Wooden door, including painting	m2	16	375	6,000		
AB-0420	Mirror, W60cm x H 75cm	set	5	200	1,000		
AB-0421	Separate cement floor finishing, with hardener including base (H=100mm)	m2	256	20	5,120		
AB-0422	Ceramic floor tiles, 150 x 150 x 10 mm, including cement mortar screeding for adjustment	m2	39	106	4,134		
AB-0423	Ceramic wall tiles, 200 x 200 x 6 mm and skirting (H=100)	m2	131	50	6,550		
AB-0424	Terrazzo floor tiles, 250 x 250 x 25 mm and skirting (H=100) including cement mortar screeding for adjustment	m2	281	40	11,240		
AB-0425	Suspended ceiling, acoustical types	m2	168	300	50,400		
AB-0426	Kitchen unit for pantry	LS	1		1,000		
AB-0427	Lighting fixture: Ceiling surface mounted type with metallic low brightness louver IP 51, for fluorescent lamp 32 watt -2 Type: A-FL322	set	20	250	5,000		
AB-0428	Lighting fixture: Ceiling surface mounted open type IP 51, for fluorescent lamp 32 watt -3 Type: B - FL321	set	15	250	3,750		
AB-0429	Ditto, but for fluorescent lamp 32 watt - 2 Type: B-FL322	set	35	150	5,250		

Pay Item	Description	Unit	Quantity	Local Currency		Foreign Currency	
				Egyptian Pound	Amount	Unit Price	Amount
AB-0430	Lighting fixture: Pole top mounted type area lighting fixture IP65, for 125 watt sodium lamp Type: F-SONI25	set	50	300	15,000		
AB-0431	Emergency lighting fixture: Ceiling or wall mounted open type IP 51, for incandescent lamp 100 watt powered by DC 100 V, Type: H-IL100	set	27	100	2,700		
AB-0432	Socket outlet: Wall surface flush mounted type AC Single Phase 220 V, 2-Pole with earth pole 15 amp double outlet	set	33	50	1,650		
AB-0433	Ditto, but 30 amp single outlet	set	4	120	480		
AB-0434	Socket outlet: Wall surface mounted type AC 3-Phase 380 V, 3-Pole with earth pole 30 amp single outlet	set	2	120	240		
AB-0435	Lighting switch: Wall surface flush mounted type, switch, AC 250 V, 10 amp	set	13	50	650		
AB-0436	Lighting switch, Wall surface flush mounted type, three way switch AC 250 V, 10 amp	set	2	100	200		
AB-0437	Distribution board: Wall surface mounted metallic cabinet type DB-SS3	set	1	500	500		
AB-0438	Exterior lighting control panel: Wall surface mounted metallic cabinet type ELC	set	1	500	500		
AB-0439	Lighting main feeder cable from Station Transformer Panel to DB-SS1 600V XLPE 3C+N 25 mm ²	m	75	80	6,000		
AB-0440	Wiring for lighting system, consist of PVC wires of 4 mm ² , steel conduit 20 mm, conduit accessories, cable connections, outlet boxes, mounting fittings and necessary devices.	LS	1		25,900		
AB-0441	Wiring for socket outlet system, consist of PVC wires of 4 mm ² , steel conduit 20 mm, conduit accessories, cable connections, outlet boxes, mounting fittings and necessary devices.	LS	1		25,900		

Pay Item	Description	Unit	Quantity	Local Currency Egyptian Pound		Foreign Currency	
				Unit Price	Amount	Unit Price	Amount
AB-0442	Wiring for exterior lighting system, consist of 600 V XLPE 4c-16 mm ² , 3C-16 mm ² or 2C-8 mm ² in plastic conduit 30 mm	LS	1		56,700		
AB-0443	Grounding conductors for distribution board, lighting fixtures and socket outlets	LS	1		5,800		
AB-0444	Ventilation, wall mounted exhaust fan, 250 mm dia. x 18CMM x 25W	No.	2	500	1,000		
AB-0445	Ventilation, wall mounted exhaust fan, 300 mm dia. x 28CMM x 50W	No.	1	600	600		
AB-0446	Ventilation, wall mounted exhaust fan, 400 mm dia. x 82CMM x 0.4KW	No.	1	700	700		
AB-0447	Ventilation, O.A. (outside air) supply fan, 550 mm dia. x 185 CMM x 2.5KW with SAR 750 x 200 34CMM (6 Nos.)	No.	1	700	700		
AB-0448	Air conditioners, split type, wall mounted, cooling cap. 4KW	No.	3	6,000	18,000		
AB-0449	Air conditioners, split type, ceiling suspended, cooling cap. 12KW	No.	2	15,000	30,000		
AB-0450	Air conditioners, split type, cooling cap. 10KW	No.	1	12,000	12,000		
AB-0451	Roof water down pipes, cast iron diam. 150 mm	m	18	60	1,080		
AB-0452	Water closet, including flush valves	set	4	400	1,600		
AB-0453	Wall urinals, including flush valves	set	3	150	450		
AB-0454	Lavatories	set	5	300	1,500		
AB-0455	Service sink	set	1	250	250		
AB-0456	Floor drains 50 mm dia. Including trap as specified and defined on the drawing.	set	9	100	900		

Pay Item	Description	Unit	Quantity	Local Currency		Foreign Currency	
				Egyptian Pound	Amount	Unit Price	Amount
AB-0457	Water supply system including piping works, elevated water tank, isolation valves and all fittings necessary to complete the works as specified and defined on the drawing.	LS	1		20,000		
AB-0458	Drainage system including piping works, septic tank, evaporation pit, manholes and all fittings necessary to complete the works as specified and defined on the drawing.	LS	1		50,000		
AB-0459	Portable fire extinguishers	set	10	1,000	10,000		
AB-0460	Lightning Protection	LS	1		1,000		
AB-0400	Total				841,811		

Bill of Unit Price

(Package-4)

Ser. No.	Description	Unit	Unit Price Egyptian Pound	Remarks
1	Excavation (1), above embankment	m ³	2.25	above bank level
2	Excavation (2), below embankment	m ³	2.50	below bank level
3	Fill (1), for canal	m ³	3.25	backfilling
4	Fill (2), for embankment	m ³	2.75	embankment
5	Trimming of Side Slopes of Concrete Lined Canal	m ³	3.00	
6	Fill with Laterite and Laterite Bedding	m ³	25	
7	Laterite Pavement of 0.2m thick on Berms, etc.	m ²	5	
8	Stone Pitching with Mortar Caulking	m ³	90	
9	Crushed Gravel Bedding	m ³	35	
10	Mortar Lining of 10cm thick	m ²	15	
11	Polyethylene Sheet (1.5mm thick)	m ²	20	
12	Concrete Lining (0.25m thick)	m ²	58	
13	Concrete Lining (0.20m thick)	m ²	48	
14	Leakage Test	No.	7,500	
15	Reinforced Concrete (1) ck=275kgf/cm ² , 80kg/m ³	m ³	607	
16	Reinforced Concrete (2) ck=275kgf/cm ² , 100kg/m ³	m ³	611	
17	Fino Concrete, 275kgf/cm ²	m ³	216	
18	Plain Concrete, 180kgf/cm ²	m ³	186	
19	Bitumen Coating	m ²	4	
20	Ladder Rung & Miscellaneous Steel	ton	4,500	
21	Additional Reinforcement (Steel Bar No. 52)	ton	2,300	
22	Laterite Paved Road (0.25m thick Laterite Pavement)	m ²	6	
23	Surface Course of Asphalt Paved Road (Asphalt Concrete of 5cm thick)	m ²	9	
24	Prime Coat	m ²	1	
25	Upper Subgrade (Macadam Layer of 0.30m)	m ²	10	
26	Lower Subgrade (0.25m thick Laterite Pavement)	m ²	6	
27	Kilometer Sign	No.	250	
28	Excavation of Pits for Planting Trees	Km	300	
29	Supply of Clayey Soil for Pits	Km	2,500	
30	Plantation of Gasuarina Trees	Km	500	
31	Plantation of Acacia Trees	Km	500	
32	Care of Trees	Km	2,500	

Bill of Unit Price

(Package-4)

Ser. No.	Description	Unit	Unit Price Egyptian Pound	Remarks
33	Drip Irrigation Systems	Km	4,000	
34	Marble Staff Gauge	m	125	
35	Water Stop (w=0.20m)	m	57	
36	Expansion Joint	m ²	165	
37	Contraction Joint	m ²	83	
38	Handrail (H=1.10m)	m	250	16.99 kg/m
39	Kilometer Post	No.	1,081	
40	Riprap	m ³	60	
41	Dowel Bars (φ 19, L=1.0m)	No.	8	
42	Net Wire Fence H=1.5m	m ²	20	
43	Stone Pitching without Mortar Caulking	m ³	60	
44	Excavation (3); (with Dewatering)	m ³	33	
45	Backfill (2); (with Dewatering)	m ³	42	
46	Reinforced Concrete (1); (with Dewatering), 80 kg/m ³	m ³	743	
47	Reinforced Concrete (2); (with Dewatering), 100 kg/m ³	m ³	747	
48	Reinforced concrete (3) (Fcu=300kgf/cm ²) , 170 kg/m ³	m ³	772	Building Works
49	Handrail (H=0.90m)	m	258	17.55 kg/m
50	Green Belt (Width 50m of Planting Trees)	m	290	
51	Secondary Concrete, ck=275kgf/cm ² , 10 kg/m ³	m ³	218	
52	Brick Wall t=0.24m	m ³	200	
53	Mortar Steel Trowel	m ²	14	
54	Non Slip Tile Facing	m	57	
55	Drain Pit with Gravel Filter and PVC φ 100	No.	17	
56	Stripping	m ³	1.5	
57	Laterite and Crushed Gravel Pavement including trimming	m ²	12	
58	Reinforced concrete (2) (Fcu=275kgf/cm ²) , 120 kg/m ³	m ³	615	Building Works
59	Reinforced concrete (3) (Fcu=300kgf/cm ²) , 130 kg/m ³	m ³	764	Building Works
60	Final Grading	m ²	1	
61	Cement Plastering	m ²	14	
62	Paint	m ²	16	

Unit Price of Reinforced Concrete and Plain Concrete

Egyptian Pond

No.	Description	Clk (kgf/cm ²)	Steel No.	R.W. (kg/m ³)	unit	unit price
	Portland Cement Type I					
	NSDO Reinforced Concrete	275	37	140	m3	575
	NSDO Reinforced Concrete	275	37	230	m3	700
	Steel Bar No.37				kg	2.1
	Steel Bar No.52				kg	2.3
	Reinforced Concrete	275	52	140	m3	603
	Reinforced Concrete	275	52	230	m3	746
	MED Reinforced Concrete	300	37	120	m3	563
	MED Reinforced Concrete	300	37	100	m3	563
	MED Reinforced Concrete	300	37	160	m3	738
	Reinforced Concrete, bundle	300	52	120	m3	587
	Reinforced Concrete under floors level	300	52	100	m3	583
	Reinforced Concrete over floors level	300	52	160	m3	770
	Package-1 & 3					
	Reinforced Concrete (1)	275	52	50	m3	585
	Reinforced Concrete (2)	275	52	130	m3	601
	Package-2					
	Reinforced Concrete (1)	275	52	80	m3	591
	Reinforced Concrete (2)	275	52	100	m3	595
	Reinforced Concrete (1) with dewatering	275	52	80	m3	591
	Reinforced Concrete (2) with dewatering	275	52	100	m3	595
						unit price
						136
						727
						136
						731

No.	Description	Ck (kgf/cm ²)	Steel No.	R. W. (kg/m ³)	unit	unit price	
	Secondary Concrete	275	52	10	m ³	202	
	Building Works						
	Reinforced Concrete (3)	300	Grade 36/52	170	m ³	772	
	Package-4						
	Building Works						
	Reinforced Concrete (2)	275	Grade 36/52	120	m ³	599	
	Reinforced Concrete (3)	300	Grade 36/52	130	m ³	764	
	Plain Concrete	180			m ³	175	
	Plain Concrete (Building Works)	200			m ³	190	
	Fino Concrete	275			m ³	200	
	Concrete Lining, t=25 cm	225			m ²	55	220
	Concrete Lining, t=20 cm	225			m ²	45	225
	Concrete Lining, t=10cm	275			m ²	17	170

	unit	unit price			
Portland Cement Type I	kg	0.220			
Portland Cement Type V	kg	0.265			
Balance	kg	0.045			

Use of Portland Cement Type V					
Package-1 & 3	Cement	unit price		Unit Price Type-I	Unit Price Type-V
Reinforced Concrete (1)	350	0.045	16	585	601
Reinforced Concrete (2)	350	0.045	16	601	617
Reinforced Concrete (2) for Box Culvert			16	771	955

Package-2					
Reinforced Concrete (1)	350	0.045	16	591	607
Reinforced Concrete (2)	350	0.045	16	595	611
Reinforced Concrete (1) with dewatering	350	0.045	16	727	743
Reinforced Concrete (2) with dewatering	350	0.045	16	731	747
Building Works					
Reinforced Concrete (3)				772	-
Secondary Concrete	350	0.045	16	202	218
Package-4					
Building Works					
Reinforced Concrete (1)	350	0.045	16	599	615
Reinforced Concrete (2)				764	-

Plain Concrete	kg	250	0.045	11	175	186
Fino Concrete	kg	350	0.045	16	200	216
Concrete Lining, t=25 cm	kg	300	0.045	3.4	55	58
Concrete Lining, t=20 cm	kg	300	0.045	2.7	45	48
Concrete Lining, t=10cm	kg	350	0.045	1.6	17	19

Quotation	Q'ty	unit price	Price	Overhead	
Reinforced Concrete for Box Culvert				1.20	617
Case-1 Concrete (ck=240kgf/m2)	1	341	341		19,053
Reinforced Bar	130	1.72	224		
Steel Form	2.0	59	118		
			683	819	25,298
Box Culvert	80.64	54.76	25.88	m3/m	
			51.8	m2/m	
Form			2.0	m2/m3	
Case-2 Concrete (ck=240kgf/m2)	1	270	270		
Reinforced Bar	130	1.65	215		
Steel Form	2.0	59	118		
			603	723	22,326
			Average	771	23,812
Case-3 Concrete (ck=240kgf/m2)	1	166	166	1996	
Suez Bridge Reinforced Bar	130	2.1	273	1.25	Price escalation
1996 Steel Form	2	38	76		
			515	619	
				773	
Case-3-2 Concrete (ck=300kgf/m2)	1	169	169		
Suez Bridge Reinforced Bar	130	2.1	273		
1996 Steel Form	2	38	76		
			518	622	
				778	
			Average	774	23,901
Scaffolding	0.3	885.5	266	266	
Supporting	2.1	10.45	22	22	
				1,062	32,781
Unit Price of Reinforced Concrete for Box Culvert			90%	955	29,503

T-1 Temporary Works (Dewatering for Pumping Station)

rate 30.88
 1US\$ 3.42
 1US\$ 105.60

Ser.	Description	Unit	Quantities	Unit Price		Total	Amount		Remarks
				Local Currency	Foreign Currency		Local Currency	Foreign Currency	
A1	Mobilization	L.S	1					7,000	
A2	Deep Well Insatation	L.S	1					401,000	
A3	Pump Operation	day	30	4,000		4,000	120,000	120,000	1 month
A4	Distribution Panel	unit	3	10,000		10,000	30,000	30,000	300,000
A5	Cable	L.S	1				81,000	81,000	2,500,000
A6	Header Pipe (D=350mm)	m	670	80		80	54,000	54,000	7,500
	Sub-Total							686,000	21,182,000
B1	Pump Operation	day	270	4,000		4,000	1,080,000	1,080,000	9 months
C1	Demobilization							7,000	
	Pump Operation	day	60	4,000		4,000	240,000	240,000	2 months
	Sub-Total							247,000	
						TOTAL	(A+B+C)	2,013,000	¥62,156,000
PC-0303	Excavation (3)	m3	27,400	8	Dewatering	33		905,200	
PC-0328,9	Reinforced Concrete	m3	7,920			136			140 kg/m3
PC-0327	Reinforced Concrete (1)	m3	1,190	591		136	16	743	865,563
PC-0328	Reinforced Concrete (2)	m3	6,730	595		136	16	747	4,922,077
PC-0306	Backfill (2)	m3	7,810	10		32		325,100	100 kg/m3
								7,017,940	

Breakdown of Steel Pipe Unit Price

Item	unit	Q'ty	unit cost		Foreign Currency		Local Currency		
			US\$	LE	US\$	LE	US\$	LE	
Material Cost	ton	15.732	695		10,934				40%
Fabrication Cost	ton	15.732	310				16,679		18%
External coating	m2	92	35				11,012		12%
Sub Total					10,934		27,691		
Freight cost					0				
Inland Transportation	ton	15.732	19	65			1,022		1%
Installation Cost	LS	1	1,557	5,325			5,325		6%
Mortar lining	m2	90.5	60				18,571		20%
X-ray cost		12	58	198			2,380		3%
Sub Total					0		27,298		
Total					10,934		54,990		100%
per linear meter					911		4,582		92,383
									7,699 LE/m
									40% 60%
Double Bend	pc	6	12,360	42,270	30,017		150,964		
Installation	pc	6		5,324			31,944		
Test	pc	6		400			2,400		
Sub Total					30,017		185,308		
Single Bend	pc	84	10,179	34,812	346,087		1,740,591		
Installation	pc	84		5,324			447,216		
Test	pc	84		440			36,960		
Sub Total					346,087		2,224,767		
Total of Bend						376,103	2,410,075		
	m	27,685.8	911	4,582	25,225,778		126,869,237		
Pipe + Bend Total					25,601,882		129,279,311		
					Adopted Unit Price		LE/m		
per linear meter	m	27,867			919	4,639	7,781		
					40%	60%			

Exchange Rate as of April 3, 2000

1 US\$ 105.60 Yen

3.42 LE

1 LE 30.88 Yen