

WATER & SANITATION

Deterioration in this sector has manifested itself most seriously in the decrease in quantities & Quality of potable water and in inadequate sanitation for the population both of which have contributed to sharp increases in the incidence of water - born diseases .

There are 210 water treatment plants and 1200 compact water treatment units , and thousands kilometers of transmission pipes of different kinds . also there are 36 boosting station .

There are (10) sewage treatment networks with treatments plants that partially serve (10) provincial capitals of centre / southern Iraq , all these are near stand still and dispose raw domestic sewage to to the river directly , in addition to that there are (520) sewage lifting station and storme water pumping station .

The immediate need for complete rehabilitation totalling to 600 million dollars . in addition to 300 million dollar to complete the unfinished projects to serve 1.8 million inhabitants .

The garbage collecting had been neglected due to the shortage of allocations and this sector needs alone 100 million to purches spare parts and new equipment.

GENERAL ESTABLISHMENT FOR WATER AND SEWERAGE REQUIREMENT

Code	Description	Qty.
SECTION 1	Aluminuim Salphate	20000ton
SECTION 2	Chlorine gas	2000 ton
SECTION 3	Bleaching powder	1000 ton
SECTION 4	Chlorinators with spare parts	2000
SECTION 5	Alum dosing pump	500
SECTION 6	Chlorine boosting pumps	1200
SECTION 7	Equipments for water treatment plants	9
SECTION 8	Ductial Iron Pipes and Fittings	1500 k.m
SECTION 9	Horizontol pump	442
SECTION 10	Ball- bearing	10000
SECTION 11	UPVC pipe with fittings	5000 k.m
SECTION 12	Amphibious dredger	7
SECTION 13	Tyre shovel	120
SECTION 14	Fork lift	30
SECTION 15	Lorry and Trailer	180
SECTION 16	Cars for transport employeres	30
SECTION 17	Pick-up cars	300
SECTION 18	Compressore with jack-Hammer	30
SECTION 19	Sewage diesel pumps	82
SECTION 20	Vertical pumps	59
SECTION 21	Diesel generator	402
SECTION 22	Steel Reinforcement	67500 ton
SECTION 23	Cotton and rubber rein forced hose of different diameters for compact unit and cesspit sewage	28000ml
SECTION 24	Wireless system for najaf/ kufa water supply scheme	L.S
SECTION 25	Stainless steel repair clamp for pipe	30000 No
SECTION 26	Compact unit	300
SECTION 27	Computers with printers and accessories	L.S
SECTION 28	Circuite breakers	919
SECTION 29	Excavator	113
SECTION 30	Dumpers	60
SECTION 31	Battries & battry charger	6000
SECTION 32	T yers	8000
SECTION 33	Vehicals	10
SECTION 34	Carbage collecting vehicles	100
SECTION 35	Carbage containers hook loader trucks & 4-3 m ³ hook lifted Carbage containers	50
SECTION 36	17000 liters drinking water tankers	150
SECTION 37	Tractor with track (3 ton)	100
SECTION 38	Grader	60
SECTION 39	Bulldozer tractor	60
SECTION 40	Paver finisher	40
SECTION 41	Spare part for (Volvo , Cuter piller, Foun, Hino, Kawsaky) Cars & Equipment	L.S

Code	Description	Qty.
SECTION 42	Spare part for traffic light and planner road	L.S
SECTION 43	Equipment for basarh raw water pump ststion	11
SECTION 44	Spare part for mosul water treatment plants	L.S
SECTION 45	Polyethylene pipes	4860000m.l
SECTION 46	Fire extinguisher foam	125000 litter
SECTION 47	Equipiment for compressed air	32
SECTION 48	Land crusier	200
SECTION 49	Radio Communication System	L.S

SECTION (1)

Aluminium Sulphate

Code	Description	Qty
03-02-00001	Aluminium Sulphate in 50 Kg bags	20000 Ton

SECTION (2)

Supply Chlorine Gas

Code	Description	Qty
03-02-00002	Filling (1) ton cylinder with chlorine gas & Supply new cylinder of 50 kg with chlorine gas	1000 ton 1000 ton
	total	2000 ton

SECTION (3)

BLEACHING POWDER

(CALCIUM HYPOCHLORITE)

Code	Description	Qty
03-02-00003	Supply Bleaching Powder (calcium hypochlorite)	1000 TON

SECTION 4

CHLORINATROS with spare parts for all Governarates

Code	Description	Qty
03-02-00004	WALL MOUNTED, 500 gm / h.	300
03-02-00005	WALL MOUNTED, 1000 gm / h.	500
03-02-00006	DITTO BUT 2000 gm / h.	400
03-02-00007	5000 FLOOR MOUNTED	400
03-02-00008	8000 FLOOR MOUNTED	100
03-02-00009	10000 FLOOR MOUNTED	200
03-02-00010	20000 FLOOR MOUNTED	100
TOTAL		2000

SECTION 5

Alumina dosing pumps

Alumina dosing pumps :-

Alum sulphate motor driven chemical dosing pump for aluminium sulphate solution capacity & discharge pressure as mentioned above.

- The motor suitable for operation at 380v, 3ph so HZ power supply.
 - Manual adjustment of stroke length with accessories for each dosing pumps.
 - Strainer, injector.
 - Relief valve.
 - The suction incharge and discharge flexible UV resistance tube connection length 20 m.
 - Maintenance kit composed for each dosing pump.
 - Tank UV resistance improved version capacity 60 liter for dosing pump capacity 5.5 L / H.
 - 4 diaphragm.
 - 4 seat.
 - 4 balls.
 - 1 nozzle spring.
 - 2 valve assembly.
 - Starter dol for each pump with cable length 20 m.
- Starter dol contain one gutaeter and one over load and 2 push - button on the front door of cabinet IP56 with lighting lamp on-off- fuit.

Code	Governorate Name	Project Name	Q (L/hr)	Head (m)	Qty
03-02-00011	Qadisya	AL-Hamza W.T.P	1000	40	24
03-02-00012		AL-Shameya W.T.P	400	40	25
03-02-00013	Baghdad	AL- Mahmodia W.T.P	800	100	26
03-02-00014		Al-Rashedeya W.T.P	1100	100	8
03-02-00015		Al-Yousfia W.T.P	80	50	8
03-02-00016		AL- Latifeya W.T.P	80	50	4
03-02-00017		Al-Medaan W.T.P	1100	50	8
03-02-00018	Thigar	Qala-Sukair W.T.P	600	30	8
03-02-00019		Compact unit soag al shegokt	55	30	10
03-02-00020		Compact unit ehabaysh	55	30	8
03-02-00021	Mesan	Amara W.T.P	500	30	4
03-02-00022		Qalat salih	100	25	8
03-02-00023		Compact unit	35	30	20
03-02-00024		Alselam W.T.P	55	30	4
03-02-00025		Compact unit bafac	5.5	26	30
03-02-00026	Deyala	Perwana W.T.P	200	20	2
03-02-00027		Hibiab W.T.P	100	10	2
03-02-00028		Qara teppa	160	30	4
03-02-00029		Abo saidda W.T.P	400	70	4
03-02-00030		Bni saad W.T.P	550	30	4
03-02-00031		Baldroiz W.T.P	400	30	3
03-02-00032		Bohriz W.T.P	860	30	4

Code	Governorate Name	Project Name	Q (L/hr)	Head (m)	Qty
03-02-00033	Kerbela	AL-Husaniya W.T.P	30	25	6
03-02-00034		AL-Husaniya W.T.P	15	25	20
03-02-00035		Water supply seh.kerbela No. 7	1000	50	4
03-02-00036	Wassit	Sheausaad W.S.R	450	25	2
03-02-00037		AL-Suwera W.S.P	600	30	6
03-02-00038		AL-Hai W.S.CH	600	30	6
03-02-00039		Compact unit 50m ³ / h	25	30	28
03-02-00040		AL-Deboni (old)	50	30	6
03-02-00041		AL-Nuamaniya W.S.C	150	30	6
03-02-00042	Babil	Compound unit	5.5	30	20
03-02-00043	Basrah	Basrah unified W.T.P	520	20	8
03-02-00044		AL-Bradeya W.T.P	260	20	8
03-02-00045		AL-Kerma W.T.P (2)	27	20	8
03-02-00046		Balad mohazzem (C.U)	50	20	4
03-02-00047		AL-Labany W.T.P	200	15	4
03-02-00048		AL-Labany C.U	179	15	4
03-02-00049		AL-Mehella C.U	200	15	12
03-02-00050		AL-Jaser C.U	122	15	2
03-02-00051		Balad C.U	122	15	2
03-02-00052		Balad AL-Mehazim	122	15	2
03-02-00053		Jecour C.U	122	15	2
03-02-00054		AL-Sanker C.U	122	15	2
03-02-00055		Compact units	5.5	30	8
03-02-00056	Nenewa	Mousel Left bank (new)	1000	50	8
03-02-00057		AL-Hadra	200	50	4
03-02-00058		Hamam AL-Alil	100	50	4
03-02-00059		AL-Shoura	120	50	4
03-02-00060		Compact units	5.5	50	20
03-02-00061		AL-Qaraj	200	50	4
03-02-00062		AL-Selameeyah	500	50	12
03-02-00063		Mousel left bank (old)	500	50	8
03-02-00064		Mousel right bank	800	50	12
03-02-00065	Salahdeen	Is hake- yathra W.T.P	300	50	6
03-02-00066		Samarra W.T.P	300	50	6
03-02-00067		New balad W.T.P	150	30	6
03-02-00068		Old balad W.T.P	100	30	4
03-02-00069		Old dauliah W.T.P	100	30	4
03-02-00070		New dauliah W.T.P	100	30	6
03-02-00071		Tikrit W.T.P 2 nd stag	800	30	6
03-02-00072		Tikrit W.T.P 2 nd stag	400	20	6
03-02-00073		AL-Uoga W.T.P	400	20	6
03-02-00074		Old tikiet W.T.P	400	20	6
03-02-00075		AL- Alam W.T.P	250	10	4
03-02-00076		New & Old sharqad W.T.P	200	30	8

Total 500

Section -6-

CHLORINE BOOSTING PUMPS

Vertical pump type, running At 2900 R.P.M complete with shaft, impeller, vans from stainless steel complete with motor, 400 V, 50 Hz, 3 Phase, IP 55, Class F insulation B5 with (D.O.L) starter,.

The motor power plus (10 %) .

(D.O.L.) starter metal cabinet , IP 56 for each pump contain:

One) Main isolating switch, with (3) fuses

Two) Contactor.

Three) over load.

Four) Phase failure.

Five) 3 Current transformer

On front of the cabinet must contain :-

One) Amper meter, with selector switch and Voltmeter with selector switch .

Two) 3- indication lamp.

Three) 2- push button.

- Spare parts for each pump .

One) Set of ball Bearing (pump)

Two) Set of ball Bearing (motor)

Three) One set of mechanical seal.

Code	Governorate		Project Name	Capacit y (m ³ /h)	Head (m)	Qty
	Code No.	Name				
03-02-00077		Anbar	Hydrantechnic Compact Unit (local) (18 no.)	12	80	100
03-02-00078		Baghdad	Al Madaain W.T.P. (Old)	4	100	34
03-02-00079		Basrah	1/4 Million gallon per day CU's (EMEC) (2 Units)	2	80	8
03-02-00080			1/4 Million gallon per day CU's (Hydrotechnik) (2 Units)	25	80	8
03-02-00081			1/4 Million gallon per day CU's (Local) (12 Units)	2	80	40
03-02-00082			1/4 Million gallon per day CU's (Preussag) (3 no.)	2	80	12
03-02-00083			Al Bradhiya W.T.P.	30	70	4
03-02-00084			Al Faiha W.T.P.	8	80	8
03-02-00085			Al Jubaila C.U. Complex (AQUA - 5 no.)	8	110	16
03-02-00086			Al Jubaila W.T.P	10	80	8
03-02-00087			Al Mudaina (old) W.T.P.	15	70	4
03-02-00088			Al Mudaina C.U. (Local)	8	80	8

Code	Governorate		Project Name	Capacit y (m ³ /h)	Head (m)	Qty
	Code No.	Name				
03-02-00089			Al Qurna C.U. Complex (AQUA - 2 no.)	8	80	4
03-02-00090			Al Shuwaiba C.U. Complex (AQUA, 4 no.)	20	80	16
03-02-00091			Al Suwailih C.U. (Local)	8	80	4
03-02-00092			Al Suwaip (old) W.T.P.	8	80	8
03-02-00093			Al Zuwayn C.U. (Local)	8	80	8
03-02-00094			Basrah unified W.T.P.	25	70	4
03-02-00095			Fao Boosting Station	15	80	4
03-02-00096			Khor al Zubair WTP	20	80	8
03-02-00097			Muhaila C.U. Complex (AQUA, 3 no.)	15	80	10
03-02-00098			Shattal Arab unified W.T.P.	20	80	4
03-02-00099			Sihan W.T.P.	20	80	4
03-02-00100		Diala	Baquba W.S.S. + Boosting Station	12	80	12
03-02-00101			EMEC Compact Units (15 no.)	2	80	36
03-02-00102			Hydrantechnic Compact Unit (local) (14 no.)	2	80	36
03-02-00103		Kerbala	Ain Altamir Station WP/BS No. 2	2	80	8
03-02-00104			Al Hawra Boosting Station No. 1 WP/BS	3	105	8
03-02-00105			Governorate Compact Units (Emec) WP/CU (5 no.)	2	80	20
03-02-00106		Missan	1/4 Million gallons/day (Emec) CU's (21 no.)	2	80	60
03-02-00107			Al Adil W.T.P.	30	80	4
03-02-00108			Al Azair W.T.P.	8	80	4
03-02-00109			Al Kahla W.T.P.	8	80	4
03-02-00110			Al Musharah (urban) W.T.P.	4	80	8
03-02-00111			Al Salam W.T.P.	8	80	8
03-02-00112			Amara unified W.T.P.	20	80	4
03-02-00113		Muthana	Al Karama Boosting Station	2	80	8
03-02-00114			Al Kuder Boosting Station	2	80	8
03-02-00115			Al Mualak Boosting Station	4	60	8
03-02-00116			Al Salman and Busaiah Project	2	80	8
03-02-00117			Sewage Compact Units (2 no.)	3	60	8
03-02-00118			Water Compact Units (Emec) (6 no.)	2	80	20
03-02-00119			Intisar Boosting Station	100	34	4
03-02-00120		Najaf	Compact unit (Emec) (10 no.)	2	80	30
03-02-00121			Compact units (Preussag) (6 no.)	2	80	20
03-02-00122			AL-Manathira W.T	12	60	8
03-02-00123			AL-Mishkab W.T.P	12	60	8
03-02-00124			AL-Haydariyah W.P	12	60	8
03-02-00125			New najaf kufa B.S	16	60	16
03-02-00126			Water compact unit (Local) (4 no.)	2	80	16
03-02-00127		Ninewah	EMEC Compact Unit (18 no.)	2	80	26
03-02-00128			Makhmor W.T.P (new)	200	205	10
03-02-00129			Telaafrr W.T.P (old and extension	250	200	10

Code	Governorate		Project Name	Capacity (m ³ /h)	Head (m)	Qty
	Code No.	Name				
03-02-00130		Qadissia	Al Ain Water Project W.T.P.	2	80	4
03-02-00131			Al Gharib Water Project W.T.P.	2	80	4
03-02-00132			Al Hamza (Old) W.T.P.	12	80	4
03-02-00133			Diwanyah Sewage Project SP/TP	9	100	8
03-02-00134			Diwanyah Water Project W.T.P.	9	162	16
03-02-00135			Old shamiyah	4	80	8
03-02-00136			Al Diwanyah w.t.p	10	160	8
03-02-00137			Al Diwanyah B.S.	16	200	4
03-02-00138			Al Daghara w.t.p	9	200	4
03-02-00139		Salaheldin	EMEC Compact Units (52 no.)	20	80	100
03-02-00140		Thiqar	1/4 million gallon/day CU's (Emec) (7 no.)	2	80	12
03-02-00141			1/4 million gallon/day CU's (Hydrotechnik) (8 no.)	2	80	16
03-02-00142			1/4 million gallon/day CU's (Local) (9 no.)	5	80	20
03-02-00143			Al Bat'ha W.T.P.	8	80	4
03-02-00144			Al Dawayah W.T.P.	5	80	4
03-02-00145			Al Fuhoud W.T.P.	15	80	4
03-02-00146			Al Iskan Al Sinayee Sewage Treatment Plant	15	80	4
03-02-00147			Al Islah W.T.P.	2	80	4
03-02-00148			Al Refayi (Rural) W.T.P.	2	80	4
03-02-00149			Al Refayi (Urban) W.T.P.	5	80	4
03-02-00150			Nasseriah (Old) W.T.P.	15	80	4
03-02-00151			Nasseriah Sewage Treatment Plant	6	80	8
03-02-00152			Nasseriah Unified W.T.P.	8	80	8
03-02-00153			The 'Protein' WTP	2	80	8
03-02-00154		Wasit	1/4 million gallons/day CU's (Emec) - Scattered Units (12 no.)	2	80	16
03-02-00155			1/4 million gallons/day CU's (Hydrotechnik) - Scattered Units (7 no.)	2	80	6
03-02-00156			Al Bashayer W.T.P.	2	80	8
03-02-00157			Al Hay W.T.P.	25	80	8
03-02-00158			Al Izza C.U. Complex (Emec; 2 no., Hydrotechnik; 1 no., Preussag; 2 no.)	8	80	8
03-02-00159			Al Jamaheer C.U. Complex (Hydrotechnik, 4 no.)	2	80	8
03-02-00160			Al Karama (I) C.U. Complex (Emec; 1no, Hydrotechnik; 2 no., Preussag; 1 no.)	2	80	12
03-02-00161			Al Nasir C.U. Complex (Emec; 2 no., Hydrotechnik; 3 no.)	2	80	12
03-02-00162			Al Suwaira W.T.P.	25	80	8
03-02-00163			Al Zubaidiya W.T.P.	3	70	8
03-02-00164			Badra (Al Dahnouk) W.T.P.	10	80	8
03-02-00165			Kut W.T.P.	15	80	8

Code	Governorate		Project Name	Capacit y (m ³ /h)	Head (m)	Qty
	Code No.	Name				
03-02-00166			Sheikh Saad W.T.P.	10	70	8
03-02-00167			Um Sunayem W.T.P.	2	70	8
03-02-00168			Wasit district W.T.P.	2	60	8
03-02-00169			Zain Al Qaws C.U. Complex (Emec; 1 no., Hydrotechnik; 3 no.)	2	80	8
03-02-00170		Babel	AL-Hasimia WTP	20	80	8
03-02-00171			AL- Kifil WTP	20	80	6
03-02-00172			AL-Sadia WTP	20	80	6
03-02-00173		Tameem	Verise WTP	20	80	22
TOTAL						120 0

SECTION 7

EQUIPMENT FOR WATER AND SEWAGE TREATMENT PLANTS

Complete electrical and mechanical equipment consist of different type of pumps, electrical switch boards , cables , pipes , trans,formers , diesel genarators , air blowers , chlorinators , scrapers ,,etc , for water treatment plant .

Code	Cov.name	Project name .	capacity m3/h	Qty.
03-02-00174	Baghdad	Abo-Gharib water treatment plant	1000	1
03-02-00175	Anbar	Rawa water treatment plant	1000	1
03-02-00176	Anbar	Al-Qaeem water treatment plant	1000	1
03-02-00177	Salah-Al-Deen	Al-ouja water treatment plant	1000	1
03-02-00178	Salah-Al-Deen	Tuz-Kufri water treatment plant	4000	1
03-02-00179	Salah-Al-Deen	Balad sewage treatment plant	390	1
03-02-00180	Salah-Al-Deen	Qadissia water treatment plant	3000	1
03-02-00181	Nenawa	Tal-Afar water treatment plant	8000	1
03-02-00182	Wasit	Al-Hai-Muafaqa water treatment plant	1500	1
			Total	9

SECTION 8

Ductile Iron pipes and Fittings

Code	Description	Qty
03-02-00183	Supplying (1200) mm dia. Ductile iron socket and spigot pipe class (K9) of tyton joint with rubber rings , according to the international standard (ISO - 2531) .	50000ml
03-02-00184	Ditto (1000) mm dia.	50000ml
03-02-00185	Ditto (900) mm dia.	50000ml
03-02-00186	Ditto (800) mm dia.	50000ml
03-02-00187	Ditto (600) mm dia.	100000 M.L
03-02-00188	Ditto (500) mm dia.	100000 M.L
03-02-00189	Ditto (450) mm dia.	200000 M.L
03-02-00190	Ditto (400) mm dia.	50000 M.L
03-02-00191	Ditto (350) mm dia.	200000 M.L
03-02-00192	Ditto (300) mm dia.	100000 M.L
03-02-00193	Ditto (250) mm dia.	150000 M.L
03-02-00194	Ditto (200) mm dia.	100000 M.L
03-02-00195	Ditte (150) mm dia.	100000 M.L
03-02-00196	Ditte (100) mm dia.	200000 M.L
03-02-00197	Duoble flanged gate valves complete with (sockets and spigot) flanged pieces : A - 400 mm dia B - 350 mm dia C - 300 mm dia D - 250 mm dia E - 200 mm dia F - 150 mm dia	50 NO. 50 NO. 50 NO. 100 NO. 100 NO. 100 NO.
03-02-00198	Ductile Iron all flanged tee complete as per specified : 1st- 500 mm dia . body 100 mm dia . branch B- 450 mm dia . body 100 mm dia . branch C- 350 mm dia . body 150 mm dia . branch 100 mm dia . branch D- 150 mm dia . body 150 mm dia . branch 100 mm dia . branch	60 NO. 60 NO. 60 NO. 60 NO. 60 NO. 60 NO.

SECTION -9- Horizontal Split Case Pumps

- Complete electrical horizontal split case pumps with motors, starters, spare parts as mentioned below except the pump for compact unite must be end-suction
- Impeller of bronze, shaft of stainless steel.
- Squirrel cage motor, 3 Ph., 400 V, 50 Hz., IP55, Class F insulation coupled to the pump on steel frame.
- Starter must be (star- delta) starter for motor above (5) KW., below must be (D.O.L) starter.
- Motor rating must be (10%) more power required.
- Each starter must be steel cabinet IP 56 contain :-
One) Main isolating switch with main fuses.
Two) Contactors overload relay, timer
Three) phase failure
Four) (Ammeter, Voltmeter with selector switch indicating lamps, push button- all on front of cabinet.
- Spare parts for each pump
One) Impeller
Two) Shaft sleeve
Three) Casing wear ring
Four) Set of Ball Bearing (for motor and pump)

Code	Governorate		Project Name	Q m ³ /h	H mt.	Qty	Motor	
	Cod e no.	Name					Type	R.P. M
03-02-00201		Basrah	Al bratheaa	1500	90	6	S.C	1500
03-02-00202		=	Hai Al hussain B.S.	500	60	2	S.C	1500
03-02-00203		=	Al Mufeqeya w.s.c	160	80	6	S.C	1500
03-02-00204		=	Old al shaiba w.s.c	400	50	6	S.C	1500
03-02-00205		=	Al shaiba compact	200	50	8	S.C	1500
03-02-00206		=	25 million w.s.c	205	15	8	S.C	1500
03-02-00207		=	Al hartha compact unit	50	60	8	S.C	1500
03-02-00208		=	Al hartha compact	500	15	4	S.C	1500
03-02-00209		=	Al Rebatt w.s.c	200	50	8	S.C	1500
03-02-00210		Muthana	Al Rumetha new w.s.c	670	90	6	S.C	1500
03-02-00211		=	Al Eskan compact	60	71	4	S.C	1500
03-02-00212		Meisan	Umara C.U.	200	40	8	S.C	1500
03-02-00213		=	Al Maymoona w.s.c	140	40	4	S.C	1500
03-02-00214		Nenewa	Al-mousel right bank w.s.w (H.L)	1400	60	4	S.C	1500
03-02-00215		=	Al-mousel right bank w.s.c (L.L)	1500	38	4	S.C	1500
03-02-00216		=	Al-mousel B.S.	300	60	4	S.C	1500
03-02-00217		=	Al Selameya w.s.c (l.l.p)	700	40	8	S.C	1500
03-02-00218		=	Tal afer w.s.c (new)	1100	20	4	S.C	1500
03-02-00219		=	Compact unit	50	60	12	S.C	1500
03-02-00220		=	Tal afer w.s.c (new)	850	115	4	S.C	1500
03-02-00221		=	mousel (B.S) lift bank	1200	100	6	S.C	1500
03-02-00222		=	Al Salameya old w.s.c	120	40	2	S.C	1500

Code	Governorate		Project Name	Q m3/h	H mt.	Qty	Motor	
	Cod e no.	Name					Type	R.P. M
03-02-00223		=	Al Salameya w.s.c	180	90	2	S.C	1500
03-02-00224		=	Tal Al kaim (al kware) w.s.c	120	200	4	S.C	1500
03-02-00225		Baghdad	Al Medaeen (w.s.c) old	264	12	4	S.C	1500
03-02-00226		=	New Al medaeen w.s.c	800	17	2	S.C	1500
03-02-00227		=	Al Rashedeya w.s.c	780	14	12	S.C	1500
03-02-00228		=	Mahmodeyah	1050	15	4	S.C	1500
03-02-00229		=	Mahmodeyah	1000	37	4	S.C	1500
03-02-00230		=	Al Latifiya w.s.c	300	50	6	S.C	1500
03-02-00231		=	Al Latifiya w.s.s	100	30	4	S.C	1500
03-02-00232		=	Al Rashedya wtp	183	11	6	S.C	1500
03-02-00233		=	Al Rashedya wtp	800	11	6	S.C	1500
03-02-00234		=	Al Rashedya wtp	600	12	6	S.C	1500
03-02-00235		Kerbala	Al Husanina C.U.	100	60	8	S.C	1500
03-02-00236		=	Al Husanina w.t.p	120	30	8	S.C	1500
03-02-00237		=	Al Salameya w.t.p	60	40	8	S.C	1500
03-02-00238		=	Kerbela w.t.p (No.7)	1450	17	2	S.C	1500
03-02-00239		=	Kerbela w.t.p (No.7)	1350	49	2	S.C	1500
03-02-00240		=	Jerof Albo Amer	90	60	2	S.C	1500
03-02-00241		=	Al Jadwal al garbi w.t.p	90	60	2	S.C	1500
03-02-00242		=	Compact /50 gallon	14	35	20	S.C	1500
03-02-00243		=	Compact Unit	60	60	8	S.C	1500
03-02-00244		Wasit	Compact Unit	55	40	20	S.C	1500
03-02-00245		=	Compact Unit	14	35	20	S.C	1500
03-02-00246		Babil	Al Mahaweal w.s.c	258	40	4	S.C	1500
03-02-00247		=	Al Mahaweal w.s.c	180	25	4	S.C	1500
03-02-00248		=	Compact Unit	60	20	20	S.C	1500
03-02-00249		Thigar	Al Proteen C.U.	200	50	4	S.C	1500
03-02-00250		=	Al Proteen C.U.	205	40	2	S.C	1500
03-02-00251		=	Al Nasereya w.t.p	970	30	6	S.C	1500
03-02-00252		Diala	Kan Ben -sad	410	12	4	S.C	1500
03-02-00253		=	Kan Ben -sad	160	50	2	S.C	1500
03-02-00254		=	Kan Ben -sad	200	60	2	S.C	1500
03-02-00255		=	Kan Ben -sad	540	70	2	S.C	1500
03-02-00256		=	Abd Al Hamed	160	25	2	S.C	1500
03-02-00257		=	Al Maqdadea w.t.p Old	350	11	4	S.C	1500
03-02-00258		=	New -Al Maqdadea w.t.p	310	15	2	S.C	1500
03-02-00259		=	Berwan w.t.p	150	10	4	S.C	1500
03-02-00260		=	Qaratapa w.s.c	120	40	2	S.C	1470
03-02-00261		=	Qaratapa w.s.c	90	60	4	S.C	1500
03-02-00262		=	Qaratapa w.s.c	600	96	4	S.C	1500
03-02-00263		=	Qaratapa w.s.c	500	10	6	S.C	1500
03-02-00264		=	Mendly w.t.p	420	40	4	S.C	1500

Code	Governorate		Project Name	Q m ³ /h	H mt.	Qty	Motor	
	Cod e no.	Name					Type	R.P. M
03-02-00265		=	Buhruz w.t.p	430	10	4	S.C	1500
03-02-00266		=	Buhruz w.t.p	650	30	4	S.C	1500
03-02-00267		Tameem	Al Hawaga w.t.p	60 L/sec	60	6	S.C	1500
03-02-00268		=	Al Hawaga w.t.p	400 g/min	20	6	S.C	1500
03-02-00269		=	Al Zap Unified	80	60	4	S.C	1500
03-02-00270		=	Al Zap Unified	80	96	4	S.C	1500
03-02-00271		=	Al Zap Unified	110	20	4	S.C	1500
03-02-00272		=	Al Daquk w.t.p	312	20	4	S.C	1500
03-02-00273		=	Al Daquk w.t.p	75	60	4	S.C	1500
03-02-00274		=	Al Daquk w.t.p	250	15	2	S.C	1500
03-02-00275		=	Al Kasa w.t.p	200	70	4	S.C	1500
03-02-00276		=	Al Kasa w.t.p	150	60	4	S.C	1500
03-02-00277		=	Al Kasa w.t.p	204	60	4	S.C	1500
03-02-00278		=	Al Kasa w.t.p	90	40	4	S.C	1500
03-02-00279		=	Al Abassy w.t.p	120	70	4	S.C	1500
03-02-00280		Salah- Aldeen	Ishaki-yathrab	90	60	4	S.C	1500
03-02-00281		=	Ishaki-yathrab	130	30	4	S.C	1500
03-02-00282		=	Samarah w.t.p	750	60	4	S.C	1500
total						442		

SECTION -10-
BALL BEARING

Skf or Fag Ball bearing as mentioned below

Code	Gov. name	Project name	Ball Bearing no.	Qty.
03-02-00283	Nenewa	Mosul W.T.P.s general	7310	60
03-02-00284		Mosul W.T.P.S general	7214	40
03-02-00285		Mosul W.T.P.s general	630922	51
03-02-00286		Mosul W.T.P.s general	6411	40
03-02-00287		Mosul W.T.P.s general	RMS 15116	50
03-02-00288		Mosul W.T.P.S general	RMS 8	50
03-02-00289		Mosul W.T.P.S general	RMS 10	50
03-02-00290		Mosul W.T.P.S general	6322C3 or SKF Nu22EC	30
03-02-00291		Telaafar WTP (Unified)	7214	20
03-02-00292		Mosul unified W.S.S	Nu 322	50
03-02-00293		Mosul unified W.S.S	Nu 228	50
03-02-00294		Mosul unified W.S.S	6213	20
03-02-00295		Mosul unified W.S.S	Nu 213	50
03-02-00296		Mosul unified W.S.S	NU/NJ 314	30
03-02-00297		Mosul unified W.S.S	6314	30
03-02-00298		Shekhan W.S.S	7310	30
03-02-00299		Baaj W.S.S	7310	30
03-02-00300		Al-Hadra W.S.S	7314	30
03-02-00301		Al-Hadra W.S.S	7409	30
03-02-00302		Mosul left bank (old)	6411	30
03-02-00303		Qaraj W.S.S	2210	30
03-02-00304	Missan	Consumables	6305/2 Z	30
03-02-00305		Consumables	6307/2 Z	30
03-02-00306		Consumables	6315 /2 Z	30
03-02-00307		Consumables	6317 /2 Z	30
03-02-00308		Consumables	6220/2 Z	40
03-02-00309		Consumables	6309	20
03-02-00310		Consumables	6304	20
03-02-00311		Consumables	6410	40
03-02-00312		Consumables	6314	40
03-02-00313		Consumables	6311	40
03-02-00314		Consumables	6310	50
03-02-00315		Consumables	6305	40
03-02-00316		Consumables	6406	40
03-02-00317		Consumables	6307	40
03-02-00318	Wasit	Consumables	6307-2Z	30
03-02-00319		Consumables	7310	20
03-02-00320		Consumables	6206	20
03-02-00321		Consumables	6209	30
03-02-00322		Consumables	6210	20
03-02-00323		Consumables	6208	20

Code	Gov. name	Project name	Ball Bearing no.	Qty.
03-02-00324		Consumables	6305	20
03-02-00325		Consumables	6307	20
03-02-00326		Consumables	6308	30
03-02-00327		Consumables	6309	20
03-02-00328		Consumables	6310	40
03-02-00329		Consumables	6311	30
03-02-00330		Consumables	6312	20
03-02-00331		Consumables	6313	20
03-02-00332		Consumables	6314	20
03-02-00333		Consumables	7307	20
03-02-00334		Consumables	6406	20
03-02-00335		Consumables	6306	20
03-02-00336		Consumables	6305-2Z	20
03-02-00337		Consumables	6409	20
03-02-00338	Thiqar	Consumables	309	20
03-02-00339		Consumables	B6406	10
03-02-00340		Consumables	MH 6319	10
03-02-00341		Consumables	NTN 314	10
03-02-00342		Consumables	B7313	30
03-02-00343		Consumables	C3 6215	30
03-02-00344		Consumables	208	30
03-02-00345		Consumables	6305	30
03-02-00346		Consumables	6306	30
03-02-00347		Consumables	6307	30
03-02-00348		Consumables	6308	40
03-02-00349		Consumables	6309	30
03-02-00350		Consumables	6310	40
03-02-00351		Consumables	SKF 3318	20
03-02-00352		Consumables	SKF 2211	20
03-02-00353		Consumables	SKF 22320C	30
03-02-00354		Consumables	3318-953847	30
03-02-00355		Consumables	Nu 320/C3	30
03-02-00356		Consumables	Nu 318-954037	30
03-02-00357		Consumables	SKF 3216	30
03-02-00358		Consumables	SKF 3313	30
03-02-00359		Consumables	SKF 23026	30
03-02-00360		Consumables	SKF NU 220	30
03-02-00361		Consumables	SKF NU 218	30
03-02-00362		Consumables	SKF NU 318	30
03-02-00363		Consumables	6206/2 Z	30
03-02-00364		Consumables	6305/2 Z	20
03-02-00365		Consumables	6307/2Z	50
03-02-00366		Consumables	6209	10
03-02-00367		Consumables	7317	40
03-02-00368		Consumables	N 217	30
03-02-00369		Consumables	7411	10

Code	Gov. name	Project name	Ball Bearing no.	Qty.
03-02-00370		Consumables	6313	20
03-02-00371		Consumables	6315	20
03-02-00372		Consumables	2317	30
03-02-00373		Consumables	N320	30
03-02-00374		Consumables	3N20	20
03-02-00375		Consumables	1613 (2 track)	40
03-02-00376		Consumables	6205	40
03-02-00377		Consumables	6207	20
03-02-00378		Consumables	6208	20
03-02-00379		Consumables	6210	20
03-02-00380		Consumables	6316	30
03-02-00381		Consumables	6311	30
03-02-00382		Consumables	6312	30
03-02-00383		Consumables	6314	30
03-02-00384		Consumables	SKF NU 216	30
03-02-00385		Consumables	SKF 32318	30
03-02-00386		Consumables	SKF 6318	30
03-02-00387		Consumables	SKF 6320	30
03-02-00388	Basrah	Consumables	6306	60
03-02-00389		Consumables	6311	60
03-02-00390		Consumables	6314	60
03-02-00391		Consumables	6411	20
03-02-00392		Consumables	6304	40
03-02-00393		Consumables	3318	20
03-02-00394		Consumables	6305	40
03-02-00395		Consumables	6309	40
03-02-00396		Consumables	6312	40
03-02-00397		Consumables	6406	40
03-02-00398		Consumables	6308	60
03-02-00399		Consumables	6407	40
03-02-00400		Consumables	6218	30
03-02-00401		Consumables	6021	30
03-02-00402		Consumables	7314	30
03-02-00403		Consumables	6307	40
03-02-00404		Consumables	3313	30
03-02-00405		Consumables	6215	30
03-02-00406		Consumables	6413	30
03-02-00407		Consumables	6306	40
03-02-00408		Consumables	6315	40
03-02-00409		Consumables	6405	40
03-02-00410		Consumables	6208	40
03-02-00411		Consumables	6210	40
03-02-00412		Consumables	6318	30
03-02-00413		Consumables	6409	30
03-02-00414	Anbar	Rawa - Kalaa compact unit (C.U.type)	6305	30

Code	Gov. name	Project name	Ball Bearing no.	Qty.
03-02-00415		Rawa-Kalaa compact unit (C.U.type)	6317	30
03-02-00416		Old Heet and Hai Al-Baker	6209	30
03-02-00417		Old Heet and Hai Al-Baker	6310	30
03-02-00418		Old Heet and Hai Al-Baker	6308	20
03-02-00419		Ana W.T.P	6308	20
03-02-00420		Ana W.T.P	6309	20
03-02-00421		Haditha W.T.P	6306	20
03-02-00422		Haditha W.T.P	6307	20
03-02-00423		Haditha W.T.P	6315	20
03-02-00424		West Desirt	6410	40
03-02-00425		West Desirt	6321	40
03-02-00426		West Desirt	6317	30
03-02-00427		West Desirt	7410	30
03-02-00428		West Desirt	7317	30
03-02-00429		West Desirt	7321	30
03-02-00430		West Desirt	7410	30
03-02-00431	Qadissia	Storm Water station	NU 320	30
03-02-00432		Storm Water station	7316	30
03-02-00433		Compact Units (Emec)	6206	30
03-02-00434	Al-Muthana	Al-Karama B.S	RMS 14	30
03-02-00435		Al-Karama B.S	MJ 13/4"	30
03-02-00436		Hai Al-Siraa B.S	6308	30
03-02-00437		Hai Al-Siraa B .S	6406	30
03-02-00438		Al-Mualak and Al-Majed st.(2no)	6308	30
03-02-00439		Al-Mualak and Al-Majed st.(2no)	6406	30
03-02-00440		Al-Kuder B.S	6406	20
03-02-00441		Al-Kuder B.S	6308	20
03-02-00442		Old Rumitha water project	6312	20
03-02-00443		Old Rumitha water project	6308	20
03-02-00444		Old Rumitha water project	6319	20
03-02-00445		Old Rumitha water project	6406	20
03-02-00446		Old Rumitha water project	7310	20
03-02-00447		Old Rumitha water project	6313	20
03-02-00448		Old Rumitha water project	6305	20
03-02-00449		Al-Warkaa water project	RMS14,JM13/4"	20
03-02-00450		Al-Warkaa water project	6308	10
03-02-00451		Al-Warkaa water project	6406	10
03-02-00452		Al-Warkaa water project	6219	10
03-02-00453		Al-Warkaa water project	6305	10
03-02-00454		New Rumitha /Semawa	6308	20
03-02-00455	Kerbala	Various names compact unit (Bafag)wp/cu(29no)	6206	20

Code	Gov. name	Project name	Ball Bearing no.	Qty.
03-02-00456		Governorate compact unit (Emec) wp/cu(5 no)	6307	20
03-02-00457		Ginif Al-Bu Amir or Jadwal AlGharbi project WTP	6308	20
03-02-00458		Ginif Al-Bu Amir or Jadwal AlGharbi project WTP	7310	20
03-02-00459		Ginif Al-Bu Amir or Jadwal AlGharbi project WTP	6310	20
03-02-00460		Ginif Al-Bu Amir or Jadwal AlGharbi project WTP	4304	20
03-02-00461		Ginif Al-Bu Amir or Jadwal AlGharbi project WTP	6307	20
03-02-00462		Old Hindyah water project	6310	40
03-02-00463		Al-Khyrat water project wtp	6405	20
03-02-00464		Al-Khyrat water project wtp	6407	30
03-02-00465		Al-Khyrat water project wtp	6305	30
03-02-00466		Al-Khyrat water project wtp	6308	30
03-02-00467		Al-Khyrat water project wtp	6206	30
03-02-00468		Al-Khyrat water project wtp	6309	30
03-02-00469		Project No. 7 W.T.P.	6320	30
03-02-00470		Project No.7 W.T.P.	6314	30
03-02-00471		Project No .7 W.T.P.	MJ 2 1/2"	20
03-02-00472		Project No.7 W.T.P.	1209 K	40
03-02-00473		Project No .7 W.T.P.	6414	40
03-02-00474		Hai Al-Hussain water project	6311	20
03-02-00475		Hai Al-Hussain water project	7411	20
03-02-00476		AL-Uroba P.S	318 NU	50
03-02-00477		AL-Uroba P.S	6314	20
03-02-00478		AL-Uroba P.S	6316	20
03-02-00479		Hai AL-Hussain W.T.P	6411	20
03-02-00480		Hai AL-Hussain W.T.P	6317	29
03-02-00481		Gurf AL bo aamer W.T.P	6308	20
03-02-00482		gurf al bo aamer W.T.P	6310	20
03-02-00483		Gurf Al boamer W.T.P	6307	20
03-02-00484		Khairat W.T.P	6309	20
03-02-00485		Khairat W.T.P	6305	20
03-02-00486		Khairat W.T.P	6209	20
03-02-00487		Khairat W.T.P	6408	20
03-02-00488		Husseneya C.U	6307	20
03-02-00489		Husseneya C.U	6305	20
03-02-00490		Husseneya C.U	6208	20
03-02-00491		Husseneya C.U	6206	20
03-02-00492	Diala	Al-Abara (AbdoHamid) W.T.P.	6306	20

Code	Gov. name	Project name	Ball Bearing no.	Qty.
03-02-00493		Al-Howaish W.T.P.	6305	20
03-02-00494		Al-Howaish W.T.P.	6306	20
03-02-00495		Al-Howaish W.T.P.	6209	20
03-02-00496		Al-Howaish W.T.P.	6205	20
03-02-00497		Khalis (Sindiya) W.T.P.	6313	30
03-02-00498		Khalis (Sindiya) W.T.P.	6309	20
03-02-00499		Khalis (Sindiya) W.T.P.	6308	20
03-02-00500		Al-Abara (Abdu Hamid) W.S.S.	6306	20
03-02-00501		Al-Abara (Abdu Hamid) W.S.S.	6305	20
03-02-00502		Al-Abara (Abdu Hamid) W.S.S.	MRS/15	20
03-02-00503		Mandili W.T.P.	1/11 MRG	20
03-02-00504		Mandili W.T.P.	6036	20
03-02-00505		Abo Saida	6309	20
03-02-00506		Abo Saida	6306	20
03-02-00507		Abo Saida	6311	20
03-02-00508		Abo Saida	6316	20
03-02-00509		Bafag compact units	6026	60
03-02-00510		Bafag compact units	6028	60
03-02-00511		Bafag compact units	6212	60
03-02-00512		Bafag compact units	6210	40
03-02-00513		Bafag compact units	6214	40
03-02-00514		Baquba W.S.S + B.S	6319	20
03-02-00515		Khan Beni Saad W.S.S	6312	20
03-02-00516		Khan Beni Saad W.S.S	6310	20
03-02-00517		Khan Beni Saad W.S.S	6318	20
03-02-00518		Khan Beni Saad W.S.S	6308	20
03-02-00519	Salah Al-Deen	Consumables	6313	80
03-02-00520		Bafag compact units	6309	80
03-02-00521		Emec compact units (52 No)	6305	100
03-02-00522		Ishaki -yathrab w.t.p	N2/2	20
03-02-00523		Ishaki -yathrab w.t.p	N3/3	20
03-02-00524		Ishaki -yathrab w.t.p	Nu319	20
03-02-00525		Al Faris w.t.p	RMS 10	80
03-02-00526		Al Faris w.t.p	6310	40
03-02-00527		Brawijla w.t.p	6314	20
03-02-00528		Brawijla w.t.p	6315	20
03-02-00529		Brawijla w.t.p	6308	20
03-02-00530		Brawijla w.t.p	6306	20
03-02-00531		Al Sharqit w.t.p	6311	60
03-02-00532		Al Tarmia w.t.p	63072RS	20
03-02-00533		Al Tarmia w.t.p	63082RS	20
03-02-00534		Al Tarmia w.t.p	63092RS	20
03-02-00535		Samara w.t.p	6317	40

Code	Gov. name	Project name	Ball Bearing no.	Qty.
03-02-00536		Samara w.t.p	6315	60
03-02-00537		Samara w.t.p	6314	40
03-02-00538		Samara w.t.p	6312	20
03-02-00539		Samara w.t.p	6310	20
03-02-00540		Samara w.t.p	6306	20
03-02-00541		Samara w.t.p	6319N4	20
03-02-00542		Balad w.t.p	RMS8	20
03-02-00543		Balad w.t.p	RMS10	20
03-02-00544		Balad w.t.p	RMS12	20
03-02-00545		Biji w.t.p	7309	20
03-02-00546		Biji w.t.p	7310	20
03-02-00547		Biji w.t.p	7311	40
03-02-00548		Biji w.t.p	7312	40
03-02-00549		Biji w.t.p	7314	40
03-02-00550		Biji w.t.p	7316	20
03-02-00551		Biji w.t.p	Nu319	40
03-02-00552		Tikrit w.t.p	6308	100
03-02-00553		Tikrit w.t.p	6306	40
03-02-00554		Tikrit w.t.p	6312	40
03-02-00555		Tikrit w.t.p	312 Nu	20
03-02-00556		Tikrit w.t.p	6315	40
03-02-00557	Najaf	Compact units (Emec) 10	6210	20
03-02-00558		Compact units (Emec) 10	6310	20
03-02-00559		Compact units (Emec) 10	6312	20
03-02-00560		Compact units (Emec) 10	6308	20
03-02-00561		New and Old Al-Qadissia	6307	20
03-02-00562		water project Al-Qadissia	6305	20
03-02-00563		water project Al-Qadissia	6308	20
03-02-00564		Unified Najaf / Kufa water	6220	40
03-02-00565		Unified Najaf /Kufa water	6416	20
03-02-00566		Unified Najaf /Kufa water	1319k+H319	20
03-02-00567		Unified Najaf /Kufa	7314	20
03-02-00568		Unified Najaf /Kufa	6312	20
03-02-00569		Unified Najaf /Kufa	6306	20
03-02-00570		Unified Najaf /Kufa	6309	20
03-02-00571		New Najaf /Kufa	6315	40
03-02-00572		New Najaf /Kufa	315	20
03-02-00573		New Najaf /Kufa	315	20
03-02-00574		Compact units	6208	40
03-02-00575		Compact units	6309	40
03-02-00576		AL-Mishkab	6406	20
03-02-00577		AL-Mishkab	6206	20
03-02-00578		New and Old Al-Qadissia	6310	20
03-02-00579	Babil	General item for compact units	4305	100

Code	Gov. name	Project name	Ball Bearing no.	Qty.
03-02-00580		General item for compact units	6306	40
03-02-00581		General item for compact units	6303	40
03-02-00582		General item for compact units	6314	40
03-02-00583	Baghdad	Al-Madaain W.T.P. (old)	311	20
03-02-00584		Al-Madaain W.T.P. (old)	6214	20
03-02-00585		Al-Madaain W.T.P. (old)	6213	20
03-02-00586		New Rashdiya W.T.P.	6308	20
03-02-00587		New Rashdiya W.T.P.	6209	20
03-02-00588		New Rashdiya W.T.P.	6310	20
03-02-00589		New Rashdiya W.T.P.	6311	20
03-02-00590		New Rashdiya W.T.P.	6312	20
03-02-00591		New Rashdiya W.T.P.	6313	20
03-02-00592		New Rashdiya W.T.P.	N308 ECP	20
03-02-00593		New Rashdiya W.T.P.	N318 ECP	20
03-02-00594	Tameem	Different wells	7310	100
03-02-00595		Different wells	6310	100
03-02-00596		Different walls	6309	100
03-02-00597		Karkuk water supply	Nu 320 E	40
03-02-00598		Karkuk water supply	6320 C3	40
03-02-00599		Karkuk water supply	6220	20
03-02-00600		Karkuk water supply	NJ220	20
03-02-00601		Karkuk water supply	6228 C3 Roll -bearing	20
03-02-00602		Karkuk water supply	NU 228C3 Roll -bearing	50
03-02-00603		Karkuk water supply	K 2317 AC3	40
03-02-00604		Karkuk water supply	32313 A	20
03-02-00605		Karkuk water supply	NC 3028	20
03-02-00606		Karkuk water supply	6220	20
03-02-00607		Karkuk water supply	22336	20
03-02-00608		Karkuk water supply	6305	30
03-02-00609		Karkuk water supply	Nu 319 Roll-bearing	100
03-02-00610		Karkuk water supply	6311	20
03-02-00611		Karkuk water supply	6308	20
03-02-00612		Karkuk water supply	R.M.S 14	40
03-02-00613		Karkuk water supply	6210	20
03-02-00614		Karkuk water supply	6314	20
03-02-00615		Karkuk water supply	6307	20
03-02-00616		Karkuk water supply	6315	20
03-02-00617		Karkuk water supply	6312	20
TOTAL				10000

SECTION 11

UPVC PIPES

for maintenance of the networks in all Governarates in Iraq

Code	Description	Qty - M.L
03-02-00618	Supplying U.P.V.C pipes (225) mm dia. of tyton-joint with rubber rings. 10 bar	800000
03-02-00619	Ditto but (160)mm. dia. 10 bar	1000000
03-02-00620	Ditto but (110)mm. dia. 10 bar	2500000
03-02-00621	Ditto but (90)mm. dia. 10 bar	200000
03-02-00622	Supplying U.P.V.C pipes (315) mm dia. of tyton-joint with rubber rings. 6 bar	200000
03-02-00623	Ditto but (400)mm. dia. 6 bar	100000
03-02-00624	Ditto but (500)mm. dia. 6 bar	100000
03-02-00625	Ditto but (600)mm. dia. 6 bar	100000
03-02-00626	upvc adapter 110mm dia. 10 bar with rubbering	200
03-02-00627	upvc adapter 160mm dia. 10 bar with rubbering	200
03-02-00628	upvc adapter 90mm dia. 10 bar with rubbering	150

Section -12-

Amphibious Dredger

Code	Description	Qty
03-02-00629	Amphibious hydraulic excavator	3
03-02-00630	Dredger Capacity 1000 m³/hr	2
03-02-00631	Dredger Capacity 500 m³/hr	2
TOTAL		7

Section (13)

Tire Shovels

Code	Description	Qty
03-02-00632	Tire shovel	120

SECTION (14)

fork lift

Code	Description	Qty
03-02-00633	diesle enging , hydrostactic transmission , with spare part.	
	1- 5 ton capacity	15
	2- 3 ton capacity	15

SECTION (15)

Lorry and trailer

Code	Description	Qty
03-02-00634	2 carrier axles , diesel engine , power steering , pneumatic brackning double cabinet , 18 No. tyers ,with spare parts . 1- Lorry 10 ton	60
03-02-00635	2- Lorry 15 ton	30
03-02-00636	3- Trailer with lorry 35 ton	30
03-02-00637	4- Lift up truck	60

SECTION (16)

Cars for transport employeres

Code	Description	Qty
03-02-00638	Desil engine , manual gear , capacity 21 passangers , with spare parts.	30

SECTION (17)

pick up - Cars

Code	Description	Qty
03-02-00639	1 ton cpacity banzin enging , power steering , 2WD aircondition , 4 doors , 1999 model with spare parts.	200
03-02-00640	2 ton capacity diesel enging , power steering , aircondition , 4 doors , 1999 model with spare parts.	100

SECTION (18)
Compressors With Jack-Hammer

Code	Description	Qty.
03-02-00641	Compact and comparatively4 wheel compressor Power provided must be by water - cooledThe compressors must be suitable for the economic and typical working demands of multi-tool contract work360 ft/min complete with all accessories and spare parts for 2 years for each compressor and heavy duty breakers	10
03-02-00642	Ditto but 250 ft/min .	10
03-02-00643	Ditto but 175 ft/min .	10
Total		30

Section (19)

Sewerage Diesel Pumps

Mobile sewage diesel pump Cast iron casing self priming, Clean out and impeller inspection covers open cast iron impeller handling spherical solids up to 100 mm in Diameter Replaceable cast iron wear plate Carbide / Tungsten Carbide Mechanical seal with Grease Lubrication Unit mounted on two wheeled site trailer with pneumatic tractor tread tiers with (150 L) fuel tank Set of spare parts as recommended by the manufacturer

Code	Gov. Name	Project Name	Q (m ³ /hr)	H (m)	Qty*
03-02-00644	The guar	Hay Al Shuhadaa sewage B.S.	12	12	2
03-02-00645	=	Hay Al Shuhadaa sewage B.S.	90	20	14
03-02-00646	=	Sewage B.S. Al shameay all	200	30	4
03-02-00647	=	Sewage B.S. sooq al sheayokh	150	100	4
03-02-00648	=	Water supply schem al refaae	90	12	4
03-02-00649	Measan	Sewage B.S. Omara	200	20	4
03-02-00650	Naynewa	Mosul water supply	60	20	4
03-02-00651		Mosul water supply	60	15	4
03-02-00652		Mosul water supply	100	15	8
03-02-00653	Basrah	Basrah water supply schem	50	20	20
03-02-00654	Tameem	Al Hawage w.t.p	250	15	8
03-02-00655	=	Al Zap Unified w.t.p	250	15	16
03-02-00656	=	Al Daquk w.t.p	250	15	8
03-02-00657	Qadisia	Qadisia Water	120	30	4
03-02-00658	=	Qadisia Water	250	15	4
03-02-00659	Salah aldeen	Salah aldeen water	120	30	4
03-02-00660	=	Salah aldeen water	250	15	4
03-02-00661	Muthana	Muthana water	120	30	4
03-02-00662	=	Muthana water	250	15	4
03-02-00663	Kerbala	Kerbala water	120	30	4
03-02-00664	=	Kerbala water	250	15	4
03-02-00665	Najaf	Najaf water	120	30	4
03-02-00666	=	Najaf water	250	15	4
03-02-00667	Wasit	Wasit water	120	30	4
03-02-00668	=	Wasit water	250	15	4
03-02-00669	Dyala	Dyala water	120	30	4

Code	Gov. Name	Project Name	Q (m ³ /hr)	H (m)	Qty*
03-02-00670	=	Dyala water	250	15	4
03-02-00671	Baghdad	Baghdad water	120	30	4
03-02-00672	=	Baghdad water	250	15	4
TOTAL					164*

SECTION (20)

Vertical Pumps

Complete vertical pump (end suction) type with squirrel cage motor , 400 v, 3 ph, 50 hz, IP 55, class F insulation, B5 with star delta starter (for all items except code no. which are mix flow pump).

- Impeller for vertical pump must be cast iron, shaft must stainless steel.
- Suction pipe from the bottom, delivery pipe must be upper side
- code no. are mix flow pump, casing must be split at the suction flange, made from grained cast iron.
- Impeller, shaft must be stainless steel.
 - shaft bearing and seals should be water lubricated type.
- For both (vertical pump, mix flow pump) must supplied with all required fittings (adaptor) to suit the delivery and suction pipe with stand steel (base plate).
- For each pump must supplied with (star-delta) starter contain :-
 - One) - Main isolating switch with fuses.
 - Two) Contactors, overload relay, timer.
 - Three) Phase failure.
 - Four) On front of steel cabinet, IP 56 indication lamp and push button, ampermeter with selector switch, voltmeter with selector switch.
- Spare parts for each pump
 - a) Impeller
 - b) Shaft
 - Three) Set of ball bearing (pump and motor)
- Motor power must equil (rated power + 10%) .

Code	Gov. Name	Project Name	Q (m ³ /hr)	H (m)	R.P. M.	Shaft length (m)	Qty	Su c.d ia.	De l. dia .
03-02-00673	Basrah	C Sewage lifting station	1100	30	1450	2.1	2	12"	10"
03-02-00674		Basrah Sewage T.P	180	7.2	720	4.9	2	6"	6"
03-02-00675		Basrah unified w.t.p.*	1025	20	1480	6.2	5		
03-02-00676		Sewage station No. 14	900	20	1450	2.3	2	12"	10"
03-02-00677		Sewage station No. 3	250	7	1450	1.75	2	8"	6"
03-02-00678		Sewage station No. 6	450	7	1450	2.25	2	10"	8"
03-02-00679		Sewage station No. 9	900	9	1450	2.25	1	12"	10"
03-02-00680		Sewage station No. 16 &17	3000	12	980	2.45	6	20"	20"
03-02-00681		The 25 AQUA CU.*	1025	15	1480	6.2	7		14"
03-02-00682	Thiqar	Area Sew. Station	500	10	970	5.1	4	10"	8"
03-02-00683		Nasseriah main sewage lifting stat.	1700	10	735	6.15	3	16"	14"

Code	Gov. Name	Project Name	Q (m ³ /hr)	H (m)	R.P. M.	Shaft length (m)	Qty	Su c.d ia.	De l. dia .
03-02-00684		Nasseriah main sewage lifting stat.	4000	10	585	4.6	1	24 "	22 "
03-02-00685		Nasseriah Sewa. T.P	250	20	970	7.2	2	10 "	8"
03-02-00686		Nasseriah Sewa. T.P	1000	10	975	direct link (No shaft)	3	12 "	10 "
03-02-00687		Nasseriah Sewa. T.P	500	10	970	direct link (No shaft)	1	10 "	8"
03-02-00688	Najaf	AL-Najaf sew. Project	1746	11. 5	980		2		
03-02-00689		AL-Najaf sew. Project	90	12	960		3		
03-02-00690		AL-Najaf sew. Project	162	12. 5	1450	motor direct coupled to the pump	2		
03-02-00691	AL- Muthana	ALQitar Boosting Station	100	34	2900		3		
03-02-00692	Nenewa	AL-Mosul (left bank)* w.t.p.	2200	40	900	13.390	4	20 "	20 "
03-02-00693	Babil	Hilla sew. T.P	180	20	1500	motor direct coupled to the pump	2		
TOTAL									

(*) : mixflow pump

SECTION (21)
DIESEL GENERATOR

Code	Governorate name	Project name	Rating KVA	Qty.
03-02-00694	Anbar	Al- Walled water project	250	1
03-02-00695	Anbar	New Ramadi W.T.P.	1250	2 *
03-02-00696	Anbar	Qarma Unified W.T.P	650	1
03-02-00697	Anbar	prwana W.T.P.	500	1
03-02-00698	Anbar	Old Al- Qaeim W.T.P	650	1
03-02-00699	Anbar	Thibaha well	100	2
03-02-00700	Anbar	Al- Baker	400	1
03-02-00701	Anbar	New Falluja	1000	2 *
03-02-00702	Anbar	Al Ramadi Al Kabir wtp	750	2
03-02-00703	Anbar	Al Neamia Dafar wtp	350	1
03-02-00704	Anbar	West desert boosting station (B1)	850	4
03-02-00705	Anbar	West desert boosting station (B4)	850	2
03-02-00706	Mothana	Al-Salman W.T	250	3
03-02-00707	Mothana	Al-Khadar W.T	500	1
03-02-00708	Mothana	Beseyah W.T	100	1
03-02-00709	Mothana	Al-Iskan W.T.P	75	1
03-02-00710	Mothana	Al-Warkaa W.T.P	650	1
03-02-00711	Mothana	Al-Malaab sewage (B.S)	75	1
03-02-00712	Mothana	Al-Najmey W.T.P	100	1
03-02-00713	Mothana	Al Samawa Rumaith Unified W.T.P.	1000	2 *
03-02-00714	Mothana	Sewage station	75	2
03-02-00715	Mothana	Sewage station	150	2
03-02-00716	Mothana	Compact Unit	30	2
03-02-00717	Qadessiya	Dewaniya (S.T.P)	1000	1
03-02-00718	Qadessiya	Al-Shafeaya (P.S)	500	1
03-02-00719	Qadessiya	Al-Saleheya (P.S)	300	1
03-02-00720	Qadessiya	Diwaniya Unified W.T.P	1000	2 *
03-02-00721	Qadessiya	Diwaniya Boosting city	1000	2 *
03-02-00722	Qadessiya	Alin W.T.P	75	1
03-02-00723	Qadessiya	Sadir Al- Dagharra Villiage W.T.P.	400	1
03-02-00724	Qadessiya	Al- Salahya Boosting Station	150	1
03-02-00725	Qadessiya	Al- Hamza W.T.P. (new) (LLP)	300	1
03-02-00726	Qadessiya	Compact Unit 50 m ³ /h	75	12
03-02-00727	Qadessiya	Compact Unit 14 m ³ /h	30	3
03-02-00728	Qadessiya	Diwaniya Sewage plant	1250	1
03-02-00729	Qadessiya	Sewage pump stations	75	5
03-02-00730	Qadessiya	Storm pump stations	200	3
03-02-00731	Wasit	Al-Kut (W.T.P)	1000	1
03-02-00732	Wasit	Al-Nuamanea (W.T.P)	300	1
03-02-00733	Wasit	Al-AEzza (com.unit)	250	1
03-02-00734	Wasit	Hai Al-Jamaheer (unit)	250	1
03-02-00735	Wasit	Al-Ezza (W.T.P)	200	1

Code	Governorate name	Project name	Rating KVA	Qty.
03-02-00736	Wasit	Jassan (W.T.P)	150	1
03-02-00737	Wasit	Al-Zubaideya (W.T.P)	150	1
03-02-00738	Wasit	Al-Karama	250	1
03-02-00739	Wasit	sewage pump station	75	1
03-02-00740	Wasit	Al- Hay (W.T.P)	750	1
03-02-00741	Wasit	Al- Ahrar (W.T.P)	250	1
03-02-00742	Wasit	Al- Suwaira (W.T.P)	1000	1
03-02-00743	Wasit	Al-Nuamaneya (W.T.P)	650	1
03-02-00744	Wasit	Al- Dubony (W.T.P)	200	1
03-02-00745	Wasit	Zein -Al- Qaws C. U.	250	1
03-02-00746	Wasit	Al- Mowafakiyah plant	250	1
03-02-00747	Wasit	Old Al- Aziziya (W.T.P)	300	1
03-02-00748	Wasit	Wasit (W.T.P)	200	1
03-02-00749	Wasit	Al- Dhnok- Badra (W.T.P)	500	1
03-02-00750	Wasit	Jassan (W.T.P)	300	1
03-02-00751	Wasit	Al-Zubaideya (W.T.P)	250	1
03-02-00752	Wasit	Al-Bashair (W.T.P)	250	1
03-02-00753	Wasit	Al- Samadan & Almantsiarn (W.T.P)	200	1
03-02-00754	Wasit	Al- Hafraiyy (W.T.P)	200	1
03-02-00755	Wasit	sewage pump station	650	4
03-02-00756	Wasit	sewage pump station	30	5
03-02-00757	Wasit	sewage station	100	10
03-02-00758	Wasit	Um Snam	250	1
03-02-00759	Wasit	Al Mazraa	100	1
03-02-00760	Wasit	Al Qadessiya C.U.	250	1
03-02-00761	Wasit	Nasr C.U.	300	1
03-02-00762	Najaf	Najaf sewage plant	1000	1
03-02-00763	Najaf	Raw water treatment plant	1250	2 *
03-02-00764	Najaf	Al-Kufa water treatment	1250	1
03-02-00765	Najaf	Al-Hiadria W.T.P.	200	1
03-02-00766	Najaf	Sewage station pump	75	1
03-02-00767	Najaf	Al-Wafa station pump	100	1
03-02-00768	Najaf	Manithra Compact Unit	250	1
03-02-00769	Najaf	Compact Unit 50 m ³ /h	75	10
03-02-00770	Najaf	Compact Unit 14 m ³ /h	30	2
03-02-00771	Najaf	Al Najaf kufa (new) w.t.p	1000	3
03-02-00772	Najaf	Al Najaf Boosting station (new)	750	4
03-02-00773	Karbala	Al-Khairat	250	1
03-02-00774	Karbala	Al-Gahes	200	1
03-02-00775	Karbala	Ain Tamor	400	1
03-02-00776	Karbala	Hendia sewerage	100	1
03-02-00777	Karbala	Al-Gadwal Al-Garbi	300	1
03-02-00778	Karbala	Al-Hur	100	1
03-02-00779	Karbala	Sewage P.S	650	1
03-02-00780	Karbala	Main Substation	250	2

Code	Governorate name	Project name	Rating KVA	Qty.
03-02-00781	Karbala	Hussaineya	250	1
03-02-00782	Karbala	Al- Hendia W.T.P. (Old)	400	1
03-02-00783	Karbala	Salamia W.T.P.	150	1
03-02-00784	Karbala	Al-Hendia sewerage station	150	2
03-02-00785	Karbala	Project No. (7) low lift	500	1
03-02-00786	Karbala	Project No. (7) high lift	850	1
03-02-00787	Karbala	Compact Unit 50 m ³ /h	75	9
03-02-00788	Karbala	Sewage station P2	400	1
03-02-00789	Karbala	Sewage station P3	300	1
03-02-00790	Karbala	Sewage station P5	150	1
03-02-00791	Karbala	Residential building station	200	1
03-02-00792	Basrah	sewage pump station (9)	200	1
03-02-00793	Basrah	sewage pump station (Hussain)	75	1
03-02-00794	Basrah	sewage pump station (24)	500	1
03-02-00795	Basrah	Al-Labani (W.T.P)	750	1
03-02-00796	Basrah	Muhaila C.U. complex	500	1
03-02-00797	Basrah	Muhagran C.U. No. 2	250	1
03-02-00798	Basrah	Hamdan C.U.	150	1
03-02-00799	Basrah	Hamdan clarify (W.T.P)	400	1
03-02-00800	Basrah	Al- Mudaina C.U.	200	1
03-02-00801	Basrah	Basrah Sewage Station (C)	1000	1
03-02-00802	Babel	Babel W.T.P. new (pump station)	1250	1
03-02-00803	Babel	Babel W.T.P. new (raw water pump)	500	1
03-02-00804	Babel	New - Musaib W.T.P.	1250	2 *
03-02-00805	Babel	Old - Musaib W.T.P.	300	1
03-02-00806	Babel	Al- Kifl W.T.P.	200	1
03-02-00807	Babel	Al-Shomaly W.T.P.	200	1
03-02-00808	Babel	Al- Mahaweel W.T.P.	300	1
03-02-00809	Babel	Al- Hashimiyah W.T.P.	200	1
03-02-00810	Babel	Compact Unit 50 m ³ /h	75	10
03-02-00811	Babel	Al-Qadisiya W.T.P.	75	1
03-02-00812	Babel	Raw water W.T.P.	250	1
03-02-00813	Babel	Sewage Pump Station	75	5
03-02-00814	Babel	Compact Unit 100 m ³ /h	100	2
03-02-00815	Nenewah	Al-Shoora	400	1
03-02-00816	Nenewah	Mekmoor (New) WSS	650	1
03-02-00817	Nenewah	Al-Selameya (Hamdaneya)	1250	1
03-02-00818	Nenewah	Al-Hamdaneya (center)	650	1
03-02-00819	Nenewah	Al-Sandoqy trunksewer	400	1
03-02-00820	Nenewah	Qaraj W.T.P.	400	1
03-02-00821	Nenewah	Badosh W.T.P.	250	1
03-02-00822	Nenewah	Rabia a W.T.P.	75	1
03-02-00823	Nenewah	Rabia a well	30	1
03-02-00824	Nenewah	New Al-Quer W.T.P.	625	1
03-02-00825	Nenewah	New Al-Quer W.T.P. (low lift)	250	1

Code	Governorate name	Project name	Rating KVA	Qty.
03-02-00826	Nenewah	Senjer well	30	1
03-02-00827	Nenewah	Senjer W.T.P.	100	1
03-02-00828	Nenewah	Al-Shekhan W.T.P.	75	1
03-02-00829	Nenewah	New Al-Shekhan W.T.P.	150	1
03-02-00830	Nenewah	Al-Shekhan well	30	1
03-02-00831	Nenewah	Al-Baiaj W.T.P.	75	1
03-02-00832	Nenewah	Al-Baiaj well	30	1
03-02-00833	Nenewah	Al-Somode W.T.P.	250	1
03-02-00834	Nenewah	Faida / Domiz W.T.P.	150	1
03-02-00835	Nenewah	Faida / Domiz well	30	1
03-02-00836	Nenewah	Mousel Boosting station	150	1
03-02-00837	Nenewah	Tel -Al-Rman Boosting	150	1
03-02-00838	Nenewah	Makhmor W.T.P. old	500	1
03-02-00839	Nenewah	Alewah Boosting City	650	1
03-02-00840	Nenewah	Al-Qoush W.T.P. Unified	1000	1
03-02-00841	Nenewah	Mousel city Boosting	650	1
03-02-00842	Nenewah	Sad Saddam Compact Unite	650	1
03-02-00843	Nenewah	Wana W.T.P.	250	1
03-02-00844	Nenewah	Telkaf Compact Unite	100	2
03-02-00845	Nenewah	Al-Hatra W.T.P.	1250 / 11K V	1
03-02-00846	Nenewah	Al-Hamdanya W.T.P. Unified	1250	2 *
03-02-00847	Nenewah	Al-Khthra Boosting station	650	1
03-02-00848	Nenewah	Moussl Boosting station (sun)	650	1
03-02-00849	Nenewah	Al-Karaze Boosting	400	1
03-02-00850	Nenewah	Al-Tameem Boosting	650	1
03-02-00851	Nenewah	Al-Zenjelly Boosting	250	1
03-02-00852	Nenewah	Al-Dwassa Boosting	400	1
03-02-00853	Nenewah	Old Taleifer and extersion	1250	2
03-02-00854	Nenewah	Aske mousel /Boosting station	1000	2
03-02-00855	Nenewah	Old Al quer w.t.p	250	1
03-02-00856	Nenewah	Boosting station in al quer	250	1
03-02-00857	Salah Al-Deen	Balad WSS New	650	1
03-02-00858	Salah Al-Deen	Ishaki -yathrab w.t.p	1000	1
03-02-00859	Salah Al-Deen	Balad sewage	150	1
03-02-00860	Salah Al-Deen	Al-Shariqia W.T.P.	650	2
03-02-00861	Salah Al-Deen	Compact Unit 50m ³ /h	75	2

Code	Governorate name	Project name	Rating KVA	Qty.
03-02-00862	Salah Al-Deen	Tulol - Al- Baj W.T.P.	500	1
03-02-00863	Salah Al-Deen	Compact Unit	100	3
03-02-00864	Salah Al-Deen	Al-Oaja W.T.P.	400	1
03-02-00865	Salah Al-Deen	Sewage station	75	6
03-02-00866	Salah Al-Deen	Old Tuz - W.T.P.	400	1
03-02-00867	Salah Al-Deen	Compact Unit 50m ³ /h No. 5	250	1
03-02-00868	Salah Al-Deen	Compact Unit 50m ³ /h No. 3	75	10
03-02-00869	Salah Al-Deen	Compact Unit 14m ³ /h	30	2
03-02-00870	Salah Al-Deen	Al-Dor W.T.P.	500	1
03-02-00871	Salah Al-Deen	Samaira W.T.P.	1000	1
03-02-00872	Salah Al-Deen	Old Balad W.T.P.	150	1
03-02-00873	Salah Al-Deen	Al- Duliaha W.T.P	200	1
03-02-00874	Salah Al-Deen	Al-Fairs W.T.P.	250	1
03-02-00875	Salah Al-Deen	Al-Fairs Sewage pump station	150	2
03-02-00876	Salah Al-Deen	Tariama W.T.P.	250	1
03-02-00877	Salah Al-Deen	Beji sewage station	100	2
03-02-00878	Salah Al-Deen	Al-Abaiaji W.T.P.	250	1
03-02-00879	Salah Al-Deen	Al-Alam W.T.P.	250	1
03-02-00880	Salah Al-Deen	New Balad W.T.P.	650	1
03-02-00881	Mesan	Main draing station	200	1
03-02-00882	Mesan	Ali sharqi W.T.P.	200	1
03-02-00883	Mesan	Al-Adil W.T.P.	300	1
03-02-00884	Mesan	Al-Hwafaith Compact unit	150	2
03-02-00885	Mesan	Al-Wahida Compact unit	150	2
03-02-00886	Mesan	Al-Amaira sewage station	500	1
03-02-00887	Mesan	Residantial Building station	150	1
03-02-00888	Mesan	Al majer Compact unit	150	1

Code	Governorate name	Project name	Rating KVA	Qty.
03-02-00889	Mesan	Al-uriba sewage station	100	1
03-02-00890	Mesan	Amair W.T.P.	1000	1
03-02-00891	Mesan	Al Iskan Al senaee	250	1
03-02-00892	Mesan	Sewage Station	200	3
03-02-00893	Baghdad	Al-Yousifia Villiage W.T.P.	750	1
03-02-00894	Baghdad	Al-Yousifia W.T.P.	1000	1
03-02-00895	Baghdad	Al-Muhmoiday sewage station	100	4
03-02-00896	Baghdad	Al-Nahrawan W.T.P.	750	1
03-02-00897	Baghdad	Abu Graib sewage station	250	1
03-02-00898	Baghdad	Al Jissir main sewage station	1000	1
03-02-00899	Baghdad	Al Jissir old sewage station	100	1
03-02-00900	Tameem	Al-Toon cipri W.T.P.	300	1
03-02-00901	Tameem	Al-Reath W.T.P.	250	1
03-02-00902	Tameem	Taza W.T.P.	150	1
03-02-00903	Tameem	Al-Abassia W.T.P.	150	1
03-02-00904	Tameem	Daqooq W.T.P.	100	1
03-02-00905	Tameem	Domeiz Sewage station	250	1
03-02-00906	Tameem	Sadiam Sewage station	75	1
03-02-00907	Tameem	Different well	75	10
03-02-00908	Diala	Baquba W.T.P.	1250	1
03-02-00909	Diala	Baquba station	1000	1
03-02-00910	Diala	Kalias W.T.P.	1250	1
03-02-00911	Diala	Kalias station	1250	1
03-02-00912	Diala	Saif - saad station & Ahaliay	750	2
03-02-00913	Diala	Al-Mainsory W.T.P.	1000	1
03-02-00914	Diala	JalaLaw W.T.P. (H.L)	650	1
03-02-00915	Diala	JalaLaw W.T.P. (L.L)	400	1
03-02-00916	Diala	Kanana W.T.P.	650	1
03-02-00917	Diala	Al Sindia W.T.P.	650	1
03-02-00918	Diala	Sewage station	100	1
03-02-00919	Diala	Compact Unit 50 m ³ /h	75	5
03-02-00920	Diala	Old Al-Mansoria W.T.P.	300	1
03-02-00921	Diala	Abad - Al Hamed W.T.P.	650	1
03-02-00922	Thiqar	Al-Nasiria W.T.P.	1250	3 *
03-02-00923	Thiqar	Shat Al-Kaser station	250	1
03-02-00924	Thiqar	Old Nasiria W.T.P.	500	1
03-02-00925	Thiqar	Sewage station	150	1
03-02-00926	Thiqar	Compact Unit 50 m ³ /h	75	10
03-02-00927	Thiqar	Al-Qraaf W.T.P.	100	1
03-02-00928	Thiqar	Al-Raifai W.T.P.	400	1
03-02-00929	Thiqar	Storm - station	75	10
03-02-00930	Thiqar	Al-Fajer W.T.P.	100	1
03-02-00931	Thiqar	Al-Hamar W.T.P.	75	1
03-02-00932	Thiqar	Al-Qharaf compact unit	200	1
03-02-00933	Thiqar	Al-Fthelia compact unit	75	1

Code	Governorate name	Project name	Rating KVA	Qty.
03-02-00934	Thiqar	Proteen W.T. (sooq al shukh)	150	1
03-02-00935	Thiqar	Al-Fajr C. U.	75	1
TOTAL				402

* Means synchronizing system must be supplied for parallel operating .

*If the needed generated voltage is 11kv all needed equipment must be supplied like stepup transformer and 11 kv circuit breaker.

Section (22) Steel Reinforcement

a) Specification

All bar steel be high -yield - stress deformed bars complying with BS 4449.

Minimum tensile properties per specified BS.

Yield or characteristic strength f_y is 460 N/mm² for bars 4P to and including 16mm in diameter, and 425 N/mm² for larger bars.

The supplier shall provide the establishment with certificates from the manufactures confirming that all steel supplied is in accordance with above standard .

The supplier have to test aspecimens of the bars {one specimen for each 10000 kg of steel bars } and to be choosen by the establishment in baghdad .The test shall be done by the {National center for construction laboratories } and to be at the supplies expouse. The test to be according to the above standard .

The steel shall be free from oil , paint , mill scale, dirt and loose rust.

b)Quantity

Code	Bar Size in millimeter	Qty. (ton)
03-02-00936	6	500
03-02-00937	8	2000
03-02-00938	10	15000
03-02-00939	12	15000
03-02-00940	16	12000
03-02-00941	18	12000
03-02-00942	20	1000
03-02-00943	22	1000
03-02-00944	25	8000
03-02-00945	Tire wire	1000
TOTAL		67500

SECTION (23)

Cotton And Rubber Rein Forced Hoses Of Different Size

Code	Description	Qty.(Roll)
	<u>hoss:-</u> the specification below quantity as	
03-02-00946	1-hose pipe reinforced by spiral wire size 75 mm diameter 10 m length complete with coupling and clamp on one side for discharge of preclarified water.	500
03-02-00947	2-Ditto but with size 100mm.	500
03-02-00948	3-Ditto but with size 160mm.	500
03-02-00949	4-Ditto but with size 200mm.	500
03-02-00950	5- hose pipe cotton manufacture complete with coupling and clamp on one side for discharge for waste water .size 100 mm length 10m.	400
03-02-00951	6-Ditto but size 160 mm.	400
	TOTAL	28000 ml

Section (24)
Wireless System
for Najaf/Kufa Water supply scheme

Code	Governorate name	Project name	Qty.
03-02-00952	Najaf	<p>Complete radio (wireless) system (speech communication) via (V.H.F) to link the main water treatment works (in kufa) with the other stations (low lift station, Booster station, and Al Najaf dirctorate for w & s and elevated storage tanks , as well as two mobile (aerial sets) also old Najaf - kufa treatment plant ..</p> <p>It must be complete with the necessary control panel power supplies batteries, chargers, aerials , towers ... etc.</p> <p>The operating frequency of the system offered must be in the range (146 – 175 MHZ).</p> <p>NOTE: (approval for the selected frequency must be taken from the communication office).</p> <p>Master station to be located in the treatment plant. The out stations are as shown in the attached diagram.</p> <p>The mobile radios will operate as follows :-</p> <p>During the polling process , agap of , 10 seconds will be left after each station has replied.</p> <p>The mobile radio operator will hear this gap in transmission and will then press his transmit button and request the master station to acknowledge him therefore only the master station can suspend polling .</p>	L.S

Note :-

Towers (of suitable high) must be supplied with all its necessary equipment for the master station and out side stations where ever required.

Section (25)

Stainless Steel Repair Clamp for Pipe

Code	Diameter (mm)	Qty(No.)
03-02-00953	100	2500
03-02-00954	150	2500
03-02-00955	200	2000
03-02-00956	250	2000
03-02-00957	300	3000
03-02-00958	350	3000
03-02-00959	400	3000
03-02-00960	450	2000
03-02-00961	500	2000
03-02-00962	600	2000
03-02-00963	700	2000
03-02-00964	800	2000
03-02-00965	1000	2000
TOTAL		30000

ON (26) COMPACT UNIT

Code	Cov.name	Project name .	capacitym3/h	Qty
03-02-00966	Basrah	Abo-Skher boosting station	200	88
03-02-00967	Basrah	Abo-AL Khassib	200	16
03-02-00968	Basrah	Shuaba	200	14
03-02-00969	Basrah	Zubalr	200	18
03-02-00970	Messan	Amarah city	200	30
03-02-00971	Waset	Kute city	200	30
03-02-00972	Waset	Muaffaqa	200	14
03-02-00973	Theqar	Nasseriah	200	26
03-02-00974	Theqar	Suq- AL sheyok	200	12
03-02-00975	Anbar	Faluga	200	14
03-02-00976	Muthane	Rumetha	200	8

03-02-00977	Babil	AL- Hashmiya	200	6
03-02-00978		Mahaweel	200	6
03-02-00979	Salah AL-den	Tarmiah	200	6
03-02-00980		Hay AL-qadessiah	200	12
Total	300			

SECTION (27)

COMPUTERS COMPLETE WITH PRINTER AND ACCESSORIES

Code	No.	Description	QTY
03-02-00981	item 1	<p>PANTIUM II 266 MHz (INTEL CHIPSET)</p> <ul style="list-style-type: none"> - 64 MB RAM. -512 KB CACHE . -HARD DISK 4 GB . -14" SVGA MONITOR AND CARD (2 MB) -AGP 4 MB SGRAM, 3 D CARD VIDIO MEMORY . -FLOPPY DRIVE HIGH DENSITY 3.5" -MOUSE, PAD AND COVER . -A/ L KEY BOARD (WINDOWS COMPATIBLE) . -MULTY MEDIA KIT (SPEAKER 240 W (2 NO.) , CD-ROM DRIVE (READ ONLY) WITH SPEED 40 X , PCI SOUND CARD) -MINI TOWER CASE 230 W . • EACH COMPUTER SHOULD BE SUPPLIED WITH ADVANCED SOFT - WARE PACKAGE SEALED 1997/ 1998 , SUCH AS : • OPERATING SYSTEM (DOS , WINDOWS WITH ARABIC LANGUGE SUPPORT VERSION). • WINWORD WITH ARABIC LANGUGE SUPPORT VERSION / UNDER WINDOWS . • FOXPRO / UNDER WINDOWS. • ANTI - VIRUS (SCAN , V SHALLED) . • DISK DIAGNOSTIC . • HARVARD GRAPHIC /UNDER WINDOWS . • EXCEL / UNDER WINDOWS. • 3 D STUDIO <p>Note : ALL THE SOFTWARE SHOULD BE SUPPLIED WITH THEIR MANUAL .</p>	45

Code	No.	Description	QTY
03-02-00982	item 2	<p>PANTIUM II 366 MHz (INTEL CHIPSET)</p> <ul style="list-style-type: none"> - 128 MB RAM. -512 KB CACHE . -HARD DISK 4 GB . -17" SVGA MONITOR AND CARD (2 MB) -AGP 4 MB SGRAM, 3 D CARD VIDIO MEMORY . -FLOPPY DRIVE HIGH DENSITY 3.5" -MOUSE, PAD AND COVER . -A/ L KEY BOARD (WINDOWS COMPATIBLE) . -MULTY MEDIA KIT (SPEAKER 240 W (2 NO.) , CD-ROM DRIVE (READ AND WRITE) WITH SPEED 40 X , PCI SOUND CARD) MINI TOWER CASE 230 W . • EACH COMPUTER SHOULD BE SUPPLIED WITH ADVANCED SOFT - WARE PACKAGE SEALED 1997/ 1998 , SUCH AS : • OPERATING SYSTEM (DOS , WINDOWS WITH ARABIC LANGUGE SUPPORT VERSION). • WINWORD WITH ARABIC LANGUGE SUPPORT VERSION / UNDER WINDOWS . • FOXPRO / UNDER WINDOWS. • ANTI - VIRUS (SCAN , V SHALLED) . • DISK DIAGNOSTIC . • HARVARD GRAPHIC /UNDER WINDOWS . • EXCEL / UNDER WINDOWS. • 3 D STUDIO <p>Note : ALL THE SOFTWARE SHOULD BE SUPPLIED WITH THEIR MANUAL .</p>	13

Code	No.	Description	QTY
03-02-00983	item 3	PANTIUM II 400 MHz (INTEL CHIPSET) - 128 MB RAM. -512 KB CACHE . -HARD DISK 8 GB . -20" SVGA MONITOR AND CARD (8 MB) -AGP 8 MB SGRAM, 3 D CARD VIDIO MEMORY . -FLOPPY DRIVE HIGH DENSITY 3.5" -MOUSE, PAD AND COVER . -A/ L KEY BOARD (WINDOWS COMPATIBLE) . -MULTY MEDIA KIT (SPEAKER 240 W (2 NO.) , CD-ROM DRIVE (READ AND WRITE)WITH SPEED 40 X , PCI SOUND CARD) -MIDI TOWER CASE 230 W . <ul style="list-style-type: none"> • EACH COMPUTER SHOULD BE SUPPLIED WITH ADVANCED SOFT - WARE PACKAGE SEALED 1997/ 1998 , SUCH AS : • OPERATING SYSTEM (DOS , WINDOWS WITH ARABIC LANGUGE SUPPORT VERSION). • WINWORD WITH ARABIC LANGUGE SUPPORT VERSION / UNDER WINDOWS . • FOXPRO / UNDER WINDOWS. • ANTI - VIRUS (SCAN , V SHALLED).. • DISK DIAGNOSTIC . • STAAD III - ISDS VERSIONS 18 /20 . • (PROFESSIONA (VERSION) SAP 90. • (2D+3D) AUTOCAD 13 /14 . • HARVARD GRAPHIC /UNDER WINDOWS . • EXCEL / UNDER WINDOWS. • 3 D STUDIO • Note : ALL THE SOFTWARE SHOULD BE SUPPLIED WITH THEIR MANUAL . 	2
03-02-00984	item 4	A. DOT MATRIX PRINTER EPSON LQ - 2170	54
		B. HP LASER JET 6 (COLOR) PRINTER, WITH FIVE EXTRA TONERS	2
		C. HP LAISER JET6 (BLACK AND WHITE), WITH FIVE EXTRA TONERS.	4
		D. RIBBON CARTRIDGES FOR EPSON LQ - 2170 PRINTER N.B : each box consist of (100 ribbon)	3
03-02-00985	item 5	POWER SUPPLY (UPS) -I/P VOLTAGE 220-240V -O/P VOLTAGE 220V WITH VOLTAGE REGULATOR	60

Code	No.	Description	QTY
03-02-00986	item 6	A. HP SCANNER . -SCANNER A4, WITH ADVANCED OCR SOFTWARE FOR BOTH ARABIC AND ENGLISH LANGUAGES . -30 BIT COLOR, PARALLEL PORT CONNECTION. -400×800 dpi OPTICAL RESOLUTION -4800×4800 dpi RESOLUTION.	4
		B. HP SCANNER. -SCANNER A0, WITH ADVANCED OCR SOFTWARE FOR BOTH ARABIC AND ENGLISH LANGUAGES . -30 BIT COLOR, PARALLEL PORT CONNECTION. -400×800 dpi OPTICAL RESOLUTION -4800×4800 dpi RESOLUTION.	2
03-02-00987	item 7	PEN PLOTTER (COMPATIBLE WITH COMPUTER MENTIONED IN ITEM 3 ABOVE) . SHEET SIZE A0, SHEET FEED (ROLL + SHEET FEED OPTIONAL) ACCEPT USER -DEFINE SHEET SIZE .	1
03-02-00988	item 8	A. VGA PROJECTOR 16 BIT COLORS, RESOLUTION 1024 × 768 WITH CABLE , CASE , PORTABLE SCREEN (95"× 95") AND STAND (COMPATIBLE WITH COMPUTER MENTIONED IN ITEM 3 ABOVE) MUST BE SUPPLIED WITH ITS CARDS. .	2
		B. PHOTO GRAPHIC CAMERA, SONY MAVICA (COMPATABLE WITH COMPUTER MENTIONED IN ITEM 3 ABOVE) MUST BE SUPPLIED WITH ITS CARDS.	2
		3rd. VIDIO INPUT / OUTPUT INTERFACE (COMPATABLE WITH COMPUTER MENTIONED IN ITEM 3 ABOVE) MUST BE SUPPLIED WITH ITS CARDS.	2
03-02-00989	item 9	ZIP DRIVE 100 MB (WITH 5 MEDIA) .	30
03-02-00990	Item 10	FLOPPY DISKETTES 3.5" H.D. (3M OR SONY)	60 BOXES
03-02-00991	Item 11	FANFOLD PAPER LETTER SIZE 8 1/2"×11" (DOUBLE WITH SELF CARBON)	10 BOXES
03-02-00992	Item 12	A. ARABIC/ENGLISH WORD PROCESSOR: - 15" PAPER CAPACITY - 10-20 CHARACTER PITCH - WORD PROCESSOR FORMATTING FACILITIES - ARABIC/ENGLISH SPELL CHECKER WITH NOT LESS THAN (120000) WORDS DICTIONARY - CRT DISPLAY 80 CHARACTERS × 25 LINES - USER DICTIONARY UP TO (2000) WORDS - (1) FLOPPY DRIVE FOR DOCUMENTS SAVING AND RETRIEVING	1
		B. ELECTRICAL TYPE WRITER ARABIC/ENGLISH	1

Code	No.	Description	QTY
03-02-00993	Item 13	PANTIUM II 450 MHz (INTEL) -CD -ROM DRIVE (READ AND WRITE) -HARD DISK 10 GB . -15" SVGA MONITOR -AGP 4 MB SGRAM, 3 D CARD VIDIO MEMORY . -FLOPPY DRIVE HIGH DENSITY 3.5" -MOUSE, PAD AND COVER . -A/ L KEY BOARD (WINDOWS COMPATIBLE) . -Video card in -out	3
03-02-00994	Item 14	PANTIUM II 333 MHz (INTEL) -CD -ROM DRIVE 40 X -HARD DISK 6 GB . -15" SVGA MONITOR -AGP 4 MB SGRAM, 3 D CARD VIDIO MEMORY . -FLOPPY DRIVE HIGH DENSITY 3.5" -MOUSE, PAD AND COVER . -A/ L KEY BOARD (WINDOWS COMPATIBLE) . -Video card in -out	2
03-02-00995	Item 15	-DATA SHOW	5
03-02-00996	Item 16	Color ink jet printer (paper size 100*70 cm)	5
03-02-00997	Item 17	Camera (digital)	5

NOTE : COMPUTERS IN ITEM 1, 2, 3 MUST BE BRAND - NEW AND THE COMPONENT SUPPLIED FROM THE SAME SUPPLIER .

SECTION (28)

Circuit breaker

- Air circuit breaker moulded case of 380 V. 50 Hz. 3 phase, with thermal overload, magnetic short circuit. and earth leakage protection and single phasing protection for circuit breaker rating from (630) A and breaking capacity as mentioned in the list below:-

- Circuit breaker from 2000 A and above must be draw able type and rating below that must be of fixed type.

Code	Gov. name	Project name	Rating(A)	Qty.	breakin g capacity (KA)
03-02-00998	Anbar	New falluja W.S.S	2500	1	80
03-02-00999		West desert W.T.P	1600	5	80
03-02-01000		Ramadi (New) W.T.P	160	5	30
03-02-01001		New Haditha W.T.P	800	3	50
03-02-01002		New Haditha W.T.P	630	2	50
03-02-01003	Babil	Saddat AL-Hindiya W.S.S	1000	2	80
03-02-01004		Compact units	100	20	30
03-02-01005		Compact units	150	30	30
03-02-01006		Compact units	250	10	30
03-02-01007		Compact units	300	16	30
03-02-01008		Compact units	400	6	30
03-02-01009		Compact units	500	6	50
03-02-01010		Compact units	25	89	5
03-02-01011		AL-Musayab unifed W.T.P	200	3	30
03-02-01012		AL-Musayab unified W.T.P	100	3	30
03-02-01013		AL-Musayab unified W.T.P	630	3	50
03-02-01014		New Hilla W.T.P	10	20	5
03-02-01015		NEw Hilla W.T.P	6	20	5
03-02-01016	Baghdad	Preussag C.U (14 NO)	100	10	30
03-02-01017		Emec C.U	100	10	30
03-02-01018		Emec C.U	60	50	20
03-02-01019		AL-Jissr B.S	100	2	30
03-02-01020		New Rashdiya W.T.P	630	1	50
03-02-01021		AL-Madain uniefied W.T.P	100	2	30
03-02-01022		Bafag C.U 70unit	25	25	5
03-02-01023	Basrah	AL-Hussein Quarter B.S	630	1	50
03-02-01024		Sihan W.T.P	1250	2	80
03-02-01025		AL-Mudaina(old) W.T.P	60	2	20
03-02-01026		AL-Shuwaiba / AL-Jubaila	1600	1	80
03-02-01027		AL-Faiha W.T.P	25	1	5
03-02-01028		AL-Suwailih C.U (Local)	160	1	30
03-02-01029		shalhat AL-Hassan	100	1	30
03-02-01030		The (25) AQUA C.U	3200	2	100

Code	Gov. name	Project name	Rating(A)	Qty.	breakin g capacity (KA)
03-02-01031		AL-Mudaina C.U (Local)	250	1	30
03-02-01032		AL-Zuwayn C.U (Local)	250	2	30
03-02-01033		Khor al-zubair W.T.P	63	1	20
03-02-01034		Khor al-zubair W.T.P	250	1	30
03-02-01035		Muhaila C.U (complex)	1000	2	80
03-02-01036		Muhaila C.U (complex)	150	2	30
03-02-01037		Basrah unified W.T.P	1000	2	80
03-02-01038		AL-Bradhiya W.T.P	80	3	20
03-02-01039		AL-Bradhiya W.T.P	250	3	30
03-02-01040		AL Suwaip (old) W.T.P	100	3	30
03-02-01041		Shattal Arab unified	400	1	50
03-02-01042		Fao Boosting station	630	4	50
03-02-01043		1/4 million gallon /day C.U preussag 3NO	100	1	30
03-02-01044		1/4 million gallon /day (Local) C.U	100	3	30
03-02-01045		AL-Izz C.U complex	1000	2	80
03-02-01046		AL-Izz C.U complex	100	4	30
03-02-01047		AL-Jubaila	630	2	50
03-02-01048		AL-Jubaila	500	2	50
03-02-01049		AL-Jubaila	100	5	30
03-02-01050		AL-Jubaila	50	2	20
03-02-01051		AL-Labani W.T.P	1000	1	80
03-02-01052		AL-Suwaiba C.U complex AQUA	160	4	30
03-02-01053		AL-Suwaiba C.U complex AQUA	100	6	30
03-02-01054		shatt al-arb unified	250	1	30
03-02-01055		AL-Qurna complex	500	1	50
03-02-01056	Diala	Abo said W.T.P	1500	2	80
03-02-01057		Khanaqin W.S.S	100	2	30
03-02-01058		Mandili W.S.S	400	1	30
03-02-01059		Mandili W.S.S	200	2	30
03-02-01060		Baquba W.S.S+Boosting stalen	630	2	50
03-02-01061		Khanaqin W.S.S	700	1	50
03-02-01062		Khanaqin W.S.S	150	5	30
03-02-01063		Emec compact unit	50	5	20
03-02-01064		Emec compact unit	100	5	30
03-02-01065		Emec compact unit	125	5	30
03-02-01066		AL-Mansooriyu W.T.P	275	2	30
03-02-01067		AL-Mansooriyu W.T.P	400	2	30
03-02-01068		Baladrooz W.T.P (new)	630	1	50
03-02-01069		Baladrooz W.T.P (new)	100	2	30

Code	Gov. name	Project name	Rating(A)	Qty.	breakin g capacity (KA)
03-02-01070		Khalis (sindiya) W.T.P	600	1	50
03-02-01071	Kerbala	Project 7 W.T.P	2000	1	80
03-02-01072		Project 7 W.T.P	3150	2	100
03-02-01073		AL-Hawra Boosting station	50	1	20
03-02-01074		Kerbela sew .T. plant	250	2	30
03-02-01075		Kerbela sew .T. plant	125	6	30
03-02-01076		Kerbela sew .T. plant	400	1	30
03-02-01077		Kerbela sew .T. plant	125	2	30
03-02-01078		Hai AL-Hussain W.T.P	400	2	30
03-02-01079		Girif Albu Amir	50	1	20
03-02-01080		Unified hindyah W.T.P	50	2	20
03-02-01081		Unified hindyah W.T.P	630	1	50
03-02-01082		Compact units	32	6	10
03-02-01083		Compact unIts	60	2	20
03-02-01084		Kerbela sew. treatment plant	1000	2	80
03-02-01085		P2 sew pumping station	400	2	50
03-02-01086		P2 sew pumping station	1000	1	80
03-02-01087		P3 sew pumping station	400	1	50
03-02-01088		P5 sew pumping station	125	1	30
03-02-01089		Kerbela sew T.P	630	1	50
03-02-01090		sewage	1800	1	80
03-02-01091		sewage	1000	2	80
03-02-01092		sewage	800	1	50
03-02-01093		sewage	400	2	50
03-02-01094		sewage	150	2	30
03-02-01095		Al-Uroba P.S	400	4	50
03-02-01096		Safi Qadem	800	1	50
03-02-01097		Hussenya	80	3	20
03-02-01098		Hussenya	100	2	30
03-02-01099	Missan	AL-Butaira C.U	100	6	30
03-02-01100		AL-Karama	160	3	30
03-02-01101		AL-Muqatil C.U	80	3	20
03-02-01102		AL-Muqatil C.U	160	2	30
03-02-01103		AL-Karama C.U	100	8	30
03-02-01104		Kumait W.T.P	500	1	50
03-02-01105		Saddam general hospital	100	2	30
03-02-01106		Intermediary sew. Station	400	2	30
03-02-01107		Ali AL-Gharbi W.T.P	100	2	30
03-02-01108		1/4 million gallon / day C.U emec	100	2	30
03-02-01109		1/4 million gallon / day C.U emec	80	5	20
03-02-01110		1/4 million gallon / day C.U hydrotechnic	100	1	30

Code	Gov. name	Project name	Rating(A)	Qty.	breakin g capacity (KA)
03-02-01111		1/4 million gallon / day C.U Local	100	1	30
03-02-01112		AL-Musharah(urban) W.T.P	250	1	30
03-02-01113		AL-Rafidain W.T.P	400	2	30
03-02-01114		AL-Rafidain W.T.P	630	1	50
03-02-01115		Kumait W.T.P	100	1	30
03-02-01116		AL-Adil W.T.P	1600	1	80
03-02-01117	ALMuthana	AL-Warka W.T.P	40	1	10
03-02-01118		AL-Mualak B.S	100	1	30
03-02-01119		AL-Kuder W.T.P	80	2	20
03-02-01120		AL-Kuder W.T.P	100	1	30
03-02-01121		AL-Kuder boosting station	200	1	30
03-02-01122		Samawa ground storage tank	400	5	30
03-02-01123		Old Rumaith W.T.P	630	5	50
03-02-01124		Old Rumaith W.T.P	200	1	30
03-02-01125	Najaf	AL-Waau S.pumping station	300	1	30
03-02-01126		Imarat sew. pumping station	250	1	30
03-02-01127		Iskan sewage pumping station	250	1	30
03-02-01128		AL-Ghadir sew.pumping station	200	1	30
03-02-01129		AL-Mishkab W.T.P	600	1	50
03-02-01130		AL-Mishkab	600	1	50
03-02-01131		AL-Mishkab	200	1	30
03-02-01132		AL-Mishkab	100	3	30
03-02-01133		AL-Manatira	200	4	30
03-02-01134		AL-Manatira	100	4	30
03-02-01135		Hai AL-Saad B.S	400	8	30
03-02-01136		Hai AL-Saad B.S	1500	1	80
03-02-01137		Hai AL-Saad B.S	400	3	30
03-02-01138		Unified najal kufa	250	3	30
03-02-01139		Unified najal kufa	300	3	30
03-02-01140		Unified najal kufa	1500	1	80
03-02-01141		Unified najal kufa	800	1	50
03-02-01142		Unified najal kufa	400	1	30
03-02-01143		Unified najal kufa	600	1	50
03-02-01144		Unified najal kufa	200	1	30
03-02-01145		New Najaf-Kufa B.S	2500	8	80
03-02-01146		New Najaf-Kufa B.S	1600	4	80
03-02-01147		New Najaf-Kufa B.S	1200	3	80
03-02-01148		New Najaf-Kufa B.S	1000	1	80
03-02-01149		New Najaf-Kufa B.S	630	10	50
03-02-01150		New Najaf-Kufa B.S	400	3	30
03-02-01151		New Najaf-Kufa B.S	160	6	30

Code	Gov. name	Project name	Rating(A)	Qty.	breakin g capacity (KA)
03-02-01152		New Najaf-Kufa B.S	100	3	30
03-02-01153		New Najaf-Kufa B.S	63	1	20
03-02-01154		New Najaf-Kufa T.P	1250	4	80
03-02-01155		Najaf sewage plant	2500	1	80
03-02-01156	Nenewa	Mosul W.T.P general requirment	400	2	30
03-02-01157		Mosul W.T.P general requirment	630	5	50
03-02-01158		Mosul W.T.P general requirment	150	10	30
03-02-01159		Mosul W.T.P general requirment	200	10	30
03-02-01160		Mosul W.T.P general requirment	250	10	30
03-02-01161		Mosul W.T.P general requirment	300	10	30
03-02-01162		Badosh WSS.	53	5	20
03-02-01163		Shikhan	100	10	30
03-02-01164		AL-Gaiyara	150	10	30
03-02-01165		Humam Al Alieal	200	10	30
03-02-01166		AL-Shoora W.SS	250	10	30
03-02-01167		AL-Shoora W.SS	300	10	30
03-02-01168		Hamdaney W.SS	1250	2	80
03-02-01169	Qadissia	AL-Hamza (old) W.T.P	630	2	50
03-02-01170		AL-Hamza (old) W.T.P	150	10	30
03-02-01171		Diwanyah W.T.P	160	2	30
03-02-01172		Diwanyah W.T.P	200	2	30
03-02-01173		Diwanyah sew. plant	630	3	50
03-02-01174		Diwanyah sew. plant	400	1	30
03-02-01175		Diwanyah sew. plant	2500	1	80
03-02-01176		Diwanyah sew. plant	125	6	30
03-02-01177		Diwanyah sew. plant	100	6	30
03-02-01178		Diwanyah sew. plant	150	6	30
03-02-01179		Afik water projct	630	1	50
03-02-01180		Uniefied shamyah W.T.P	1600	3	50
03-02-01181		Uniefied shamyah W.T.P	1250	1	50
03-02-01182		Uniefied shamyah W.T.P	400	1	30
03-02-01183		New & old AL-Budair W.T.P	250	1	30
03-02-01184	Salah Aldeen	Ishaqi & yathrib W.S.S	1200	2	50
03-02-01185		Tikrit W.S.S (2 nd stage)	1000	1	50
03-02-01186		Tikrit W.S.S (2 nd stage)	400	1	30
03-02-01187		Balad W.S.S	630	1	50
03-02-01188		Ishaki-Yathrib unified	60	2	20
03-02-01189		Tikret W.S.S (2nd stage)	630	2	50
03-02-01190		Tikret W.S.S (1st stage)	250	1	30
03-02-01191		Ishaki -Yathrib unified	400	2	30
03-02-01192		Ishaki -Yathrib unified	100	2	30
03-02-01193		Ishaki -Yathrib unified	60	2	20
03-02-01194		Ishaki -Yathrib unified	300	11	30

Code	Gov. name	Project name	Rating(A)	Qty.	breakin g capacity (KA)
03-02-01195		Ishaki - Yathrib unified	200	4	30
03-02-01196		Ishaki - Yathrib unified	150	4	30
03-02-01197		Ishaki - Yathrib unified	50	3	20
03-02-01198	Thiqar	AL-Fuhoud W.T.P	250	3	30
03-02-01199		AL-Fuhoud W.T.P	100	4	30
03-02-01200		AL-Islah	400	1	30
03-02-01201		AL-Islah	100	3	30
03-02-01202		1/4 million gallon / day C.U emec	100	1	30
03-02-01203		1/4 million gallon / day C.U passavan	100	2	30
03-02-01204		Bafag C.U	25	5	5
03-02-01205		AL-Nasr W.T.P	100	2	30
03-02-01206		AL-Nasr W.T.P	63	1	20
03-02-01207		Iskan AL-Sinayee lifting station	65	4	20
03-02-01208		Iskan AL-Sinayee lifting station	250	4	30
03-02-01209		AL-Iskan AL-Sinayee sew.T.P	16	2	5
03-02-01210		AL-Iskan AL-Sinayee sew.T.P	10	2	5
03-02-01211		Qalaat sukkur W.T.P	1000	2	80
03-02-01212	Wasit	AL-Mazraa W.T.P	80	1	20
03-02-01213		AL-Karama C.U	250	2	30
03-02-01214		AL-Nasir C.U	350	2	30
03-02-01215		AL-Hay W.T.P	100	4	30
03-02-01216		Zain AL-Qaws	250	1	30
03-02-01217		AL-Aziziya W.T.P	300	2	30
03-02-01218		AL-Aziziya W.T.P	200	1	30
03-02-01219		AL-Aziziya W.T.P	160	3	30
03-02-01220		AL-Aziziya W.T.P	100	5	30
03-02-01221		Kut W.T.P	350	4	30
03-02-01222		Kut W.T.P	250	2	30
03-02-01223		Kut W.T.P	1250	1	80
03-02-01224		AL-Suwaira W.T.P	1000	1	80
03-02-01225		Sheikh saad W.T.P	80	3	20
03-02-01226		Sheikh saad W.T.P	100	3	30
03-02-01227		AL-Hay W.T.P	200	2	30
03-02-01228		AL-Zubaidiya	250	1	30
03-02-01229		Um sunayam	400	1	30
03-02-01230		AL-Ahrar	600	1	50
03-02-01231		1/4 million gallon / day hydrotechnic	150	2	30
				919	

SECTION (29)

EXCAVTER

Code	Description	Qty
03-02-01232	A- Backhoe loaders	38
03-02-01233	B-Wheel exc avter	38
03-02-01234	C-Grawler excavter	37

SECTION (30)

Dumpers

Code	Description	Qty
03-02-01235	A- 1 ton capacity diesle engine , with spare parts	30
03-02-01236	B- 2 ton	30
total		60

SECTION (31)

Battries

Code	Description	Qty
03-02-01237	Battries acid must be dry :-	
	60 A 10-12 cell	1000
	90 A 15 cell	1200
	135 A 20 cell	1200
	180 A 25 cell	2000
03-02-01238	Ni-cd battery as follow:-	
	1.2 V 60A 20 Cell	30
	1.2 V 200A 20 Cell	22
	1.2 V 200A 172 Cell	30
	24 V 80 A	135
	1.5 V 75 A 192 Cell	383
03-02-01239	Battery charger (380)V 3.ph, must be portable type and the speed of the charger must be low and high with indication lamp for control	30

SECTION (32)

Tyers

All Tyres should be polyester (nylon) and steel

Code	Description	Qty
03-02-01240	<u>Tyers :-</u>	
	1- 1200 x 20 PR 18 with tube and auxelaries	1600
	2- 1100 x 20 PR 18 with tube and auxelaries	1000
	3- 1000 x 20 PR 16 with tube and auxelaries	1000
	4- 900 x 20 PR 16 with tube and auxelaries	1000
	5- 750 x 16 PR 12 with tube and auxelaries	800
	6- 700 x 16 PR 12 with tube and auxelaries	100
	7- 650 x 16 PR 12 with tube and auxelaries	200
	8- 650 x 14 PR 8 with tube	200
	9- 185 x 14 PR 8 with tube	100
	10- 195 x 14 PR 8 with tube	100
	11- 700 x 15 PR 10 with tube and auxelaries	200
	12- 600 x 8 PR 15 with tube and auxelaries	125*
	13- 600 x 10 PR 15 with tube and auxelaries	125*
	14- 1200 x 24 with tube and auxelaries	200
	15- 100 x 20 with tube and auxelaries	500
	16- 1300 x 24 with tube and auxelaries	300
	17- 16.5 x 14 x 28 with tube and auxelaries	200
	18- 20.5 x 25 with tube and auxelaries	100
	19- 17.5 x 25 with tube and auxelaries	60
	20- 750 x 25 with tube and auxelaries	120
	21- 175 x 13 with tube and auxelaries	120
	total	8000

The face for tyres must be tough and slotted to itemes (1 , 2 , 3 , 4 , 12 , 13 , 14 , 15 . 16 , 18 , 19 , 20)

SECTION (33)

VEHICALS

Code	Description	Qty
03-02-01241	Pick up (one cabinet) (1.5-2) ton with spare parts as recomended by supplier .	10

SECTION (34)

Carbage collection vehicles

Code	Description	Qty
03-02-01242	Carbage collection vehicles	100

SECTION (35)

Carbage Containers Hook Loader trucks & (4-3)m³ hook lifting carbage container No. 200 .

Code	Description	Qty
03-02-01243	Carbage Containers Hook Loader trucke & (4-3)m ³ hook lifting carbage container No. 200	50

SECTION (36)

WATER TANKER

Code	Description	Qty
03-02-01244	17,000 liters drinking water tanker	60*
	16,000 liters drinking water tanker	100*
	8,000 liters drinking water tanker	100*
03-02-01245	fire extinguisher vechile with 6000-8000 liter water tanker	270**
total		150

SECTION (37)

Tractor and Trailer

Code	Description	Qty
03-02-01246	Tractor with truck 3 ton	100

- Diesel engine with in line nozzle.
- 4 cylinder -4 stroke
- Not less than 80 HP. -2200 rpm
- Water color .-90 L capacity of feule tank
- Dry clutch -4-speed -power steering
- Brake fluid -12V Battry
- 750 x 16 size of front type
- 28 size of rear type
- the capacity of trailer 3 ton

* amended 30 November 99

** amended 30 November 99and 22 February 2000

SECTION (38)

Grader

Code	Description	Qty
03-02-01247	Grader	60

6 cylinder in line .
output 250 HP
cooling system .. water cooled engine equipied with engine oil cooler
and transmission oil cooler
fuel system .. high injection pump with directed injection nozzle
transmission
power shift
6-speeds forward
6-speeds reversing
4 wheel drive
plate lenght 3.6 mts (2 parts)
brake system- numatic
tires size
1300 x 24 or 1400 x 24
agregalture type

SECTION (39)

BULLDOZER TRACTOR

Code	Description	Qty
03-02-01248	BULLDOZER TRACTOR	60

6 cylinder in line .
output 250 HP
cooling system .. water cooled engine equipied with
engine oil cooler and transmission oil cooler
engine must be equipied with turbo charger .
fuel system .. high injection pump with directed
injection nozzle .
transmission
power shift
6-speeds forward
6-speeds reversing

SECTION (40)

PAVER FINISHER

Code	Description	Qty
03-02-01249	PAVER FINISHER	40

paver finisher must be hydrostatically driven paver designed to lay most materials used in road constructions

D screed must be combined (tamping and vibrating) and hydraulically extendible . width basic 2.5 mt.

Maximum build width 8.50 mt.

Extensions 2.50 mt.

Screed heating is provided by four burners using propane gas and forced draught air

from electrically driven blowers

hopper capacity 13 000 kg

paver must be mounted on two tracks .

Section (41)
Spare part for (Volvo , Cuter pillar, Foun, Hino, Kawsaky)
Cars & Equipment

spare part of caterpillar equipment

Code	Item.	p.No.	Des.	Qty.
03-02-012 50	1-	5D 9553	Cutting Edge	100
	2-	IU 3301	Cutting tip	1000
	3-	2P 8889	CyI. Liner	360
	4-	IW 6757	Ring set.	240
	5-	6V 2209	gasket Kit	200
	6-	6N 7005	Nozzle	360
	7-	2W 6091	Ring set.	240
	8-	8N 6000	cylinder nead	15
	9-	1N 4304	cylinder nead	15
	10-	1N1301	cylinder nead	15
	11-	8N 1188	cylinder nead	15
	12-	4N 6116	Fule pump	20
	13-	6N 7527	plunger bushing	120
	14-	4N 6860	cartridge	40
	15-	8N 1831	Nozzle	180
	16-	8N 5510	Turbocharge	40
	17-	8J 0448	Fuel inj. pump	40
	18-	4N 6859	Turbo charge	20
	19-	7N 2834	Kit	50

20-	6N 9653	Oil cooler	20
21-	2S 8959	Seal	100
22-	8A 2252	Piston	100
23-	4N 6258	Bearing	100
24-	8S 7762	Ring set	100
25-	4V 7062	Disk	100
26-	8J 498	Pump	10
27-	4V 5415	Kit	100
28-	3T 3421	Stator	20
29-	6N 9915	Valve	100
30-	6N 9916	Valve	100
31-	1W 3058	Water pump	20
32-	1W 6756	Air compressor	20
33-	6H 2577	Universal Joint	30
34-	7N 128	Oil cooler	60
35-	7N 165	Oil cooler	60
36-	2P 0661	Water pump	10
37-	9S 8914	Kit	20
38-	5S 7232	Valv	100
39-	5S 6452	Valv	100

Spare Part Of Volvo Cars

code	Item.	p.No.	Des.	Qty.	
03-02-01251	1-	275099 or 275036	Cyl. Liner Kit	300	
	2-	275551	Gasket Kit	180	
	3-	276122 or 275531	Gasket	100	
	4-	275304	Piston ring Kit	300	
	5-	467517	Oil pump	60	
	6-	276155 or 275570	Oil pump Kit	30	
	7-	270100	Big end bearing Kit	200	
	8-	270439	Main bearing Kit	200	
	9-	270101	Big end bearing Kit	200	
	10-	270440	Main bearing Kit	200	
	11-	1699789-467915	Water pump	70	
	12-	276802-275615	Water pump Kit	100	
	13-	423125	Pulley	50	
	14-	467466	Fule inj. pump	70	
	15-	243083	Feed pump	150	
	16-	240808	pump unit	100	
	17-	240423	Delivery valver	100	
	18-	243742	Delivery valver	150	
	19-	3826073-70703	Hand pump	100	
	20-	238896	Nozzle	600	
	21-	467309	Turbo charge	50	
	22-	465930-240340	Start motor	50	
	23-	240488	Solenoid switch	100	
	24-	240493-1578140	Starter solenide	100	
	25-	1624089	Alternator	50	
	26-	1610144	Spring pin	100	
	27-	244343	Diode plate	50	
	28-	1625880-244426	Carbon brush Kit	200	
	29-	1698433-244340	Rotor	70	
	30-	1527474-267143	Clutch	50	
	31-	267236-1668372	Clutch	50	
	32-	1668373-1526047	Drive plate	50	
	33-	1527693-267156	Rel. bearing	50	
	34-	1669488-1581209	Master cylinder	25	
		35-	273660	Repair Kit	100
		36-	1673067	Clutch serne	30
		37-	966458	Nipple	30
	38-	271194-273447	Repair Kit	100	
	39-	232367	Centre bearing	50	
	40-	1587787	Hydraulic pump	100	

code	Item.	p.No.	Des.	Qty.
	41-	1695596	Plate	100
	42-	1695592	Shaft	100
	43-	1695594	Rotor Kit	100
	44-	3090417-1695595	Rotor Kit	100
	45-	150221	Hub	100
	46-	1588406	Screw	500
	47-	362166	Nut	500
	48-	8151816-1584340	Roller bearing	50
	49-	8151820-184088	Roller bearing	50
	50-	1089552-1587792	Seal ring	50
	51-	1608293-1581604	Screw	100
	52-	8153600-1504951	Relay	1000

Spare Part Of Fowen Cars

code	Item.	p.No.	Des.	Qty.
03-02-01252	1-	0601-248(090)	Radiator	10
	2-	1614-532	Way Valve	40
	3-	3298-785	Hydrwlic engine	10
	4-	5122-080	Roller brush	200
	5-	5122-074	Disk brush	200
	6-	001431-4106	Prusser regulator	20
	7-	385410-0231	Universal joint gross	20
	8-	3402500215	Relese regulator	60
	9-	0012503803	clutch disc	60
	10-	3520303702	crank shaft	4
	11-	3524700092	Filtter element	200
	12-	0031510501	starting motor	10
	13-	0061542402	Alternator	10
	14-	1701-054	starter	10
	15-	1702-117(102)	Generator	10
	16-	0039975492	V. belt	50
	17-	0048-244	V. belt	50
	18-	010074-6201	Ingection pump	10
	19-	1710-074(246)	Light	20
	20-	0000178621	Nozzle holder	600
	21-	0000173912	Nozzle	600
	22-	7845-225	Plunger nozzle	40
	23-	7845-480(171)	Exhaust pipe	20
	24-	1716-019	Switch	40
	25-	1616-126	Nose line	20
	26-	0000900050	Fuel feed pump	40
	27-	0000900250	Fuel pump	20
	28-		Bush pistom ring for engine	20 set
	29-		Bush pistom ring for rear engine	20 set

Spare Part Of Hino Cars KB 422

Code	Item.	p.No.	Des.	Qty.
03-02-01253	1-	11110-1292	Cylinder head	300
	2-	13216-1230	Piston	1200
	3-	11467-1180	Liner	1200
	4-	04010-0160	Gasket	2000
	5-	16100-1161	Pump	50
	6-	27020-1380	Alternator	100
	7-	28100-1400	Startor	100
	8-	13011-1630	Ring Set	1200
	9-	13201-1280	Bearing	1200
	10-	13201-1300	Bearing	1200
	11-	13011-1330-1340	Ring	1200
	12-	11701-1161	Bearing	1200
	13-	11704-1161	Bearing	1200
	14-	11703-1161	Bearing	1200
	15-	1111202000	Vacum pump	400
	16-	32210-1113	Boo star	1000
	17-	32200-1011	Repair Kit	1000
	18-	3140-1060	Cylinder	500
	19-	27700-1100	Regulator	500
	20-	29100-1032	compressor	100
	21-	22000-1011	Ing. Pump	50
	22-	60617-2300	Nozzle	2400
	23-	22104-1050	Element	2000
	24-	9828-01168	Oil seal	250
	25-	22509-1060	pump	150
	26-	11011-1171	Washer	200
	27-	29191-1080	Piston Ring	150
	28-	29106-1070	Piston Ring	150
	29-	29101-1020	Valv ass	150
	30-	29110-1040	cylinder	150
	31-	29185-1040	Bearing	150
	32-	29173-1010	Bearing	150
	33-	9828-25110	Oil Seal	150
	34-	27330-1310	Rotor	100
	35-	27410-1350	Stator as.	100
	36-	990-063042	Bearing	150
	37-	990-062032	Bearing	150
	38-	28150-1320	Switch	150
	39-	28160-1210	Armature	150

Code	Item.	p.No.	Des.	Qty.
	40-	990-062020	Bearing	100
	41-	9828-20210	Oil seal	100
	42-	9881-20115	Bearing	100

Spare Part Of Kawsaky 70 , 80

Code	Item.	p.No.	Des.	Qty.
03-02-01254	1-	YZ 1136102190	Water pump	10
	2-	YZ 1811000451	stator	10
	3-	YZ 1812001780	Alter nator	10
	4-	YZ 9822500720	Cutt out	30
	5-	YZ 9812009513	Feed pump	60
	6-	YZ 41201210	Kit	50
	7-	L010	Kit	40
	8-	YZ 1878181649	Oil cooler	20
	9-	YZ 1217000841	Fan	10
	10-	YZ 210609201	Kit	40
	11-	822522	Pump	5
	12-	YK1161071100	Pump	5
	13-	YK 1189022105	Valve	100
	14-	YZ 1125510030	Valve	100
	15-	YZ 1125520030	Air compressor	55
	16-	YZ 1191000621	Lever	10
	17-	05C0151L000	Control	10
	18-	05D0191L001	Cylinder	10
	19-	53C0441L100	Cylinder	10
	20-	53C0451L100	Valve	10
	21-	YTU38	Transmisson	2
	22-	RIF277T	Torque	5
	23-	YKY88271X YKY7071X YRS 4078100000A	Radiator	5

Section (42)
Spare part for traffic light and planner rood

Code	Item.	Description of Items	Qty.
03-02-01255	1-	Bulb set cpI. With bilux	50
	2-	Bulb set f. working lamps	50
	3-	Bulb set f. beacon lamps	50
	4-	Glass f. beacon lamps	50
	5-	Fuses (8, 16, 25A)	2000
	6-	Electric control switch	10
	7-	Head Lamp glass , left	50
	8-	Head Lamp glass , right	50
	9-	Blinker glass left	50
	10-	Blinker glass right	50
	11-	Blinker CPI. left	30
	12-	Blinker CPI. right	30
	13-	Rear Lamp CPI. left	30
	14-	Rear Lamp CPI. right	30
	15-	Wiper balde	100
	16-	Wiper arm	20
	17-	Rear view mirror	100
	18-	Tank cover	300
	19-	Inter come system	50
	20-	carrrier Wheel cpi	200
	21-	type f. suoot	50
	22-	wheel (Aiming device)	50
	23-	Type f. support wheel	200
	24-	(Aiming device)	30
	25-	Type for mercedes	30
	26-	Wiper motor	50
	27-	Supprot wheel cpI. (Aiming device)	30
	28-	Container f.brake fluid	80
	29-	Main bracke cylinder	80
	30-	Differntial gear f. rear axle	80
	31-	Exterior front wheel	80
	32-	Bearing	80
	33-	Speedo meter cabel	20
	34-	Ignition switch	40
	35-	Air filter insert	500
	36-	Oil filter insert	500
	37-	Fuel pump	50
	38-	Water pump	50

Code	Item.	Description of Items	Qty.
	39-	Carburetor	50
	40-	Voltage reglater	30
	41-	Generator	50
	42-	Raditor Assy	30
	43-	Starter	50
	44-	Disterbuter cpl	100
	45-	Conact set	400
	46-	Ignition plug	2000
	47-	Gasket F. cyI nderhead	30
	48-	Engine gasket set	30
	49-	Muffler cpl.(silecer + pipe)	50
	50-	Oil pan gasket	100
	51-	Liquid clutch cpl. (hydro-trawsm)	30
	52-	Oil filter F. autom	500
	53-	Diaphragm F. hot air	300
	54-	Electrical main jet	100
	55-	Air regulator	50
	56-	Igntion plug V W	2000
	57-	Contact set V W	40
	58-	Distributor VW	50
	59-	Distributor cap VW	150
	60-	Carburettor VW	50
	61-	Starter VW	50
	62-	Fule pump VW	50
	63-	Generator VW	30
	64-	Ignition switch VW	100
	65-	Ignition coil VW	50
	66-	V-belt VW	100
	67-	Pulley VW	20
	68-	Oil filter cap VW W	100
	69-	Fuel tank cap VW	100
	70-	air filter compressor	200
	71-	Paint tank / stirrer	300
	72-	Paint tank / gasket	300
	73-	Tank exit gasket	150
	74-	Gasket for manhole	150
	75-	Gasket set for stirrer	50
	76-	Free wheel	30
	77-	Pneumatic cylinder for stirrer	60
	78-	Manometer	60
	79-	Safety valve	100
	80-	Paint cock	200

Code	Item.	Description of Items	Qty.
	81-	M of tecalan hose , pu-4	200
	82-	Sleeve nut F. tecalan hose	200
	83-	3- path cock	30
	84-	Main paint hose	40
	85-	Pressure regulator	50
	86-	Hand switch for spray gun	100
	87-	Repair sets for pressure regulator	100
	88-	Signal lamp 12 v/125 w	200
	89-	Fuses	2000
	90-	Manometer	200
	91-	Quick coupling	150
	92-	Magnetic valve	100
	93-	Repair sets for magnetic valve	100
	94-	Magnetic coil	1560
	95-	Meter cv- tube 12 mm dia	50
	96-	Back pressure valve	50
	97-	Meter tecalan hose 4mm dia	100
	98-	sets of cutting rings , 12mm Solvent Tank :	200
	99-	Gasket for solvent tank	150
	100-	Safety valve 1/4	50
	101-	Solvent	50
Hand Spray Gun :			
	102-	Hand spray gun cpl with paint peaker	200
	103-	Air head	150
	104-	Paint nozzle	150
	105-	Needle packing	300
	106-	Valve spring	300
	107-	Packing	300
	108-	Valve spring	150
	109-	Needle spring	150
	110-	Paint needle	150
	111-	Counter screw	50
	112-	Valve cone	50
	113-	Needle packing	300
Hoses And Connections:			
	114-	Set of paint hoses, cpl .	200
	115-	Set of atomizing air hoses, cpl .	200
	116-	Set of control air paint hoses, cpl .	200
	117	Distributor	100
Marking Head :			

Code	Item.	Description of Items	Qty.
	118	Spray guns zsepl. with control cylinder	100
	119	Ring nut	150
	120	Paint nozzle	200
	121	Orifice	200
	122	Air nozzle (G77)	300
	123	Paint needle 7 dia .	300
	124	Teflon valve	300
	125	O-Ring	600
	126	Valve sleeve	600
	127	Valve spring	300
	128	Needle spring	300
	129	Air connection	150
	130	Needle screw plug	200
	131	Plug	200
	132	Adjuster nut	200
	133	Nut	200
	134	O-ring	600
	135	O-ring	600
	136	Needle protection	600
	137-	O- ring	600
	138-	Needle packing	600
	139-	set of standard part	10
spare parts for traffic light controller			
	140-	traffic light head 300 mm	3000
	141-	Itologen	50000
	142-	Lithium battery	1000
	143-	Ienses 300 mm	1500
	144-	Transfor men 220v	1000
	145-	cable size 40 x 2.5 mm ²	100 K.m.

SECTION (43)
EQUIPMENT FOR BASRAH RAW WATER PUMP STATION

Code	Description	Qty
03-02-01256	33/11KV (2*17 MVA) Sub-Station	1
03-02-01257	Water Hammer System	5
03-02-01258	Cathodic protection for pumping main	5
Total		11

SECTION (44)

Spare Part For Mosul Water Treatment Plants

Spare part for mosul (left side) w.t.p			
Code		Item Description	Qty
03-02-01259	1.1	ASEA contactor, EH 9-10, Iec 158-1, Vdelta E 0660, AC3 220 , 380 V, Ith=25A, SK 812 003 for electrical genenator 1250 K.V.A	2
03-02-01260	1.2	ASEA contactor, EH 6-22E, Iec 337-1, Vdelta E 0660, AC11 110-220 , 380 V, Ith=25A, SK 811 023 for electrical genenator 1250 K.V.A	2
03-02-01261	1.3	ASEA flag relay, 5615 453-D, N=11000, D=0, 132 mm, R=460 OHM., RxsF 1, RK 271-003-AD for electrical genenator 1250 K.V.A	4
03-02-01262	1.4	ASEA relay, RASA 4, RK861-001-BA, u1=u2, 110-120, V/220-240 V, 50-60 HZ., Df2 HZ. for electrical genenator 1250 K.V.A	4
03-02-01263	1.5	Spare parts for vertical cetrifugal pump, type HA 500/64-15, HALBERG registration No. PGG 14192/99-5, No. of relevant sectional drawing 127 5489-26-0104, Q=2200 m ³ /hr, H=40 m as per attached sheet. Supplier, HALBERG, Maschinen bau GmbH, Telex: 484833, SWEEDEN	
03-02-01264	1.5.1	Bearing centre sleeve, part No.(54.00).Dimension (TM80).Material (C45N)	8
03-02-01265	1.5.2	Bearing bush. part (54.50). Dimension (109/127x100). Material (Silicon-Carbid)	100
03-02-01266	1.5.3	Deflector. Part NO. (50.10). Dimension (100/146x16). Material (ULTRAMID)	4
03-02-01267	1.5.4	Impiller. Part NO. (23.00). Dimension (LA667x77). Material (1.4408)	8
03-02-01268	1.5.5	Shaft screw. Part NO.(90.42). Dimension (M10x20). Material (A4-70)	200
03-02-01269	1.5.6	Shaft sleeve. Part NO. (52.30). Dimension (91/109x100). Material (Silicon -Carbid)	150
03-02-01270	1.5.7	Shaft sleeve. Part NO. (52.40). Dimension (A86/95x170). Material (1.4021.05)	8

SECTION (45)

POLYETHYLENE PIPES

Code	Description	Qty m.l
03-02-01271	A- polyethylene pipes should be according to B.S1972/67 (class D) all pipes should be supplied to our stores in a form of bundles (100) meter each. quantities as follows .	
	NOMINAL SIZE	
	1- ½ inch (12)mm	1 000 000
	2- ¾ inch (18)mm	500 000
	3- 1" inch (25)mm	500 000
	4- 1½ inch (37)mm	200 000
	5- 2" inch (50)mm	200 000
	TOTAL	2 400 000
03-02-01272	B- Supplying Nozzle (class D) fixed the polyethylene pipes with brass ferrule cocks ,as flow:-	
	DIMS	
	1- ½ inch (12)mm	20 000
	2- ¾ inch (18)mm	10 000
	TOTAL	4860000

SECTION (46)

FIRE EXTINGUISHER FOAM

Code	Description	Qty (litter)
03-02-01273	<p>1- Using For Fire Fighting Type (A,B,C,E).</p> <p>2- Used By Inductors Or Fire Fighting Vehicles Or Fire Extinguisher</p> <p>3- contain anti corrosion agent .</p> <p>4- not have any physiological side effect on the user</p> <p>5- high efficiency to remove the effect and hazards the dropped material by covering it's completely .</p> <p>6- the expire date no less than five years .</p> <p>7- packing in plastic container which don't react with the foam.</p> <p>The capacity of the container no less than 20 litter .</p>	125000

SECTION (47)

EQUIPMENT FOR COMPRESSED AIR

Code	Description	Qty
03-02-01274	Filling compressed air apparatus:- 1- Designed to fill (charge) breathing cylinders apparatus. 2- charging pressure should be no less than 200 bar. 3- the apparatus should be working by electric motor no less than 2700 rpm . (three phases). 4- equipped with moisture and dust filters . 5- equipped with pressure meters to check outer cylinder .	16
	CARBON DIOXIDE FILLING APPARTUS :- 1- equipped with a compressor to charge the carbon dioxide cylinder . 2- the minimum filling pressure no less than 150 bar. 3- equipped with pressure meters to check the pressure in the main cylinder and filling cylinders . 4- equipped with sensitive balance to check gas cylinder in the outer cylinders . 5- the apparatus fill five outer small cylinder simultaneous usly with presser mentioned above .	16

SECTION (48)

LAND CRUSIER

Code	Description	Qty
03-02-01275	LAND CRUSIER	200

SECTION (49)
Radio Communication System

Code	item	Description	Qty
03-02-01276	1	<u>Two way radio communication system</u> -Teletec p-1000 portable radio -Built-in scrambling -200 Synthesized channels -Tone channel Guard (CTCSS) -1/5 Watts RF Output power -Simplex/Half Duplex -Scan with priority -146-174 MHZ, wide band operation -500 m watt audio output -< 0.25 micro V sensitivity at 12 dB SINAD -More than -70 dB Intermodulation -50 Ohm RF Input /Output Impedance - +/- 5 KHz Maximum Frequency Deviation -25 KHz Channel Spacing -Durable Metal Case -Transmit Time Limiter (TTL) -Password Feature -Automatic No. Identification (ANI) -Programmed By PC -Emergency Mode -8 Character Alphanumeric Display -Helical Stubby Antenna DTMF Keypad (Encoder & Decoder) Belt Clip Rechargeable Battery	600

8	Antenna -Modile DB -222 -3 d B Gain -50 Meters of RG213/RG214Coaxial Cable -Omnidirectional Base Station Antenna	200
9	Complete Set of Service Manuals	10
10	Spare Antenna for item 1	200
11	Carrying case w/belt loop	200
12	Base Station & Antenna -VHF (146-174MHZ) -99 Channels -40 Watts -Scan with priority -220 VAC power supply -6d B Gain Omnidirectional Antenna -ANI/ID Encoder	6
13	Mobile Antenna -3 d B Gain Omnidirectional Antenna - Magnetic Mount -RG58 Coaxial Cable with Connectors	500
14	Base Station Antenna - Base Station Antenna -6d B Gain Omnidirectional Antenna - Model DB -224	6
15	Base Station Antenna - Base Station Antenna -9d B Gain Omnidirectional Antenna - Model DB -228	2
16	Programming Kit -Pentium II PC - Programming soft ware -PC Interface	4
17	1/2 Cable Accessories Kit -N(M) & N(F) Connectors -Grounding kit -Hoisting Grip -8 ft Jumper	10

18	Test Equipment Set -IFR Service monitor -Oscilloscope -Multimeter -Bench power supply -Wattmeter	4
19	Work Bench -work bench with shelf -Bench wiring kit -Tools kit -Soldering station	4
20	½ Helix cable set -150 meters -Model LDF4-50A	10
21	Hydraulic Tower -30 Meters Height -Supports one Antenna	2
22	Note Book PC	6
23	PC with Laser Printer	2
24	spare parts for items above as a percentage 20 %	

03-02-01277	1	<u>Consoles Recorders And Related Equipment</u> <u>Communication Console</u> -10 RF Channels -4 CRT Operator positions -Ani Decoder -Foot -switch -4 Telephone lines	4
	2	Digital Recorder -24 Channels capacity	4
	3	Base Station -VHF (146-174MHZ) -4 wire interface -Interfacing with console -100 watts RF Amplifier -Simplex/Full Duplex operation -220 VAC power supply	40
	4	½ cable accessories kit -N(M) & N(F) Connectors -Grounding kit -Hoisting Grip -8 ft Jumper	8
	5	½ Heliac cable set -150 meters -Model LDF4-50A	8
	6	Base Station Antenna - Base Station Antenna -9d B Gain Omnidirectional Antenna - Model DB -228	8
	7	Transmitter Combiner -10 channels -VHF (146-174MHZ) -50 KHZ spacing	4
	8	Receiver Multicoupler -12 Ports -VHF (146-174MHZ)	4
	9	spare parts for items above as apercentage 20 %	

03-02-01278	1	Paging System Proposal Paging Terminal -POCSAG format -220 VAC operation -support numeric pagers -Remote console -5000 subscribers capacity Expandable to 10.000 subscribers	1
	2	Paging Transmitter -VHF operation 148-174 MHZ -Hot standby configuration -200 watts FR O/P power -Interface to paging terminal above -220 VAC operation -Cabinet -9d B Gain Ante 1mna -150 meters of 1/2 heliax cable -2 Connectors for 1/2 cable -2 Grounding kits -8 ft jumper	1
	3	Pagers -Numeric, POCSAG , VHF* *Pagers are full featured with vibrator	750
	4	Documentation (3 sets)	1
	5	Alkaline Batteries	3000
	6	spare parts for items above as apercentage 20 %	

03-02-01279	Aluminium hydroxide	5,000	mt
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QTY	DESCRIPTION	QTY	UNIT
03-02-01280	specialist pumps	11	
03-02-01281	specialist pump	1	
03-02-01290	Sodium Hydroxide Liquor cooler and Hydrogen chloride gas coolers	3	
03-02-01292	Sight Glass, rubber lined with vulcoferran	42	
03-02-01293	HCL pumps & spares	4 pcs	
	Caustic soda pumps w/spares	6 No. 4 Lots	
	Mercury pumps w/ spares	16 No. 16 sets	
	Brine pumps w/spares	6 No 6 lot	
	Sulphuric acid pumps	7 No	
	Spare parts for centrifugal pumps	4 No	
03-02-01294	Chlorine gas fan and spare parts	3	Nos
03-02-01295	Freon Compressor	1	No
	Chlorine Compressor System	2	Set
03-02-01296	Specialist valve	250	NOS
03-02-01297	5 ton crab travelling crane	4	NOS
03-02-01298	PH analyzers	2	EA
	PH sensors	8	EA
03-02-01300	Vacuum type circuit switch	17	SET
03-02-01301	Flexible cell cover	16	SET
03-02-01302	coolers for sulphuric acid and chlorine gas	2	

CODE	DESCRIPTION	QTY	UNIT
03-02-01303	Complete centrifugal pumps with base and motor	20	
03-02-01304	Complete vacuum pump with circulating liquid ring Q=15 M3/HR	2	
03-02-01305	Complete air compressor with base & motor (gas elmo pump) Q=14140 M3/HR	2	
03-02-01306	Complete mercury pump with motor Q=1 M3/H	5	
03-02-01307	Complete liquid ring compressor with base & motor Q=180 M3/H	1	
03-02-01308	Complete compressor with base & motor	4	
03-02-01309	Complete radial blower with base & motor Q=600 M3/H	2	
03-02-01310	Complete radial HCL gas exhauster with base & motor (horizontal) Q: (150-200) M3/H	1	
03-02-01311	Complete Brine Filter	3	
03-02-01312	Spare parts for short circuiting switch 10 KA		
03-02-01313	Mercury Cell Accessories	20	Pcs
03-02-01314	Spare parts for instrumentation	40	Pcs
03-02-01315	PVDF pipes, fittings and valves		
03-02-01316	Pumps of different types and capacities with accessories	34	
03-02-01317	Fans of different type with accessories	5	
03-02-01318	Compressors of different types with accessories	3	
03-02-01319	Valves lined with rubber of different types	121	
03-02-01320	Hard rubber of different types	16	Ton
03-02-01321	Instrumentation, transformers, switches		
03-02-01322	Inner & outer burner tubes for (HCL) unite	10	EA
03-02-01323	Short circuit switch vacuum switch	64	
03-02-01324	Flexible cell cover with accessories	16	
03-02-01325	Sulphuric acid cooler (heat)	2	

03-02-01326	Mercury pressure switch; Flow meter for brine and soft water	20 32	
03-02-01327	Refueling tanker with spare parts	250	unit