ITEMIZED LIST OF WATER AND SANITATION ITEMS
IN ACCORDANCE WITH PARAGRAPH 8 OF
THE SECURITY COUNCILRESOLUTION 1302 (2000)

AS OF 10 AUGUST 2000

TABLE OF CONTENT:

I PIPES and FITTINGS

(Excluding all items that may be notifiable under resolution 1051)

I-A(GEWS) UPVC Pipes & fittings for network maintenance

No	Description
1	Supplying U.P.V.C pipes (315) mm dia. of tyton-joint with rubber rings. 10 bar
2	Ditto but (280)mm. dia. 10 bar
3	Ditto but (225)mm. dia. 10 bar
4	Ditto but (160)mm. dia. 10 bar
5	Ditto but (110)mm. dia. 10 bar
6	Ditto but (90)mm. dia. 10 bar
7	Supplying U.P.V.C pipes (400) mm dia. of tyton-joint with rubber rings. 6 bar
8	All socket tees complets with eubber rings. 10 bar for dia (315x315)mm
9	Ditto for dia (315x280)mm
10	Ditto for dia (315x225)mm
11	Ditto for dia (315x160)mm
12	Ditto for dia (315x110)mm
13	Ditto for dia (280x280)mm

No	Description
14	Ditto for dia (280x225)mm
15	Ditto for dia (280x160)mm
16	Ditto for dia (280x110)mm
17	Ditto for dia (225x225)mm
18	Ditto for dia (225x160)mm
19	Ditto for dia (225x110)mm
20	Ditto for dia (225x90)mm
21	Ditto for dia (160x160)mm
22	Ditto for dia (160x110)mm
23	Ditto for dia (160x90)mm
24	Ditto for dia (110x110)mm
25	Ditto for dia (110x90)mm
26	Ditto for dia (90x90)mm
27	End socket bend complete with rubber rings (10) bar as below: 0^0 bend for 315 mm dia
28	45^0 bend for 315 mm dia
29	$22^1/_2$ bend for 315 mm dia
30	90^0 bend for 280mm dia
31	45^0 bend for 280 mm dia
32	$22^1/_2$ bend for 280 mm dia
33	90^0 bend for 225 mm dia
34	45^0 bend for 225mm dia
35	$22^1/_2$ bend for 225 mm dia
36	90^0 bend for 160 mm dia
37	45^0 bend for 160mm dia
38	90^0 bend for 110 mm dia
39	45^0 bend for 110mm dia
40	Supplying (1000) mm dia UPVC socket and spigat pipe with rubber joint,according to the requirements of DIN 8061, 8062,and 19532 for working pressare of 6 bar
41	to (900)mm dia
42	to (800)mm dia
43	to (700)mm dia
44	to (600)mm dia
45	to (500)mm dia
46	to (400)mm dia
47	to (300)mm dia
48	to (250)mm dia
49	to (200)mm dia
50	to (150)mm dia
51	to (100)mm dia
52	to (80)mm dia
53	to (50)mm dia
54	Supplying (200 x 100) mm dia UPVC tee junction 76 bar
55	Ditto (250 x 100)mm dia
56	Ditto (300 x 100)mm dia
57	Ditto (100 x 500)mm dia

No	Description
58	Ditto (100 x 600)mm dia
59	Ditto (200 x 250)mm dia
60	Ditto (500 x 400)mm dia
61	Ditto (500 x 600)mm dia
62	Stoppers (100) mm dia
63	Ditto (150)mm dia
64	Heavy duty covers manholes 550 mm dia
65	Ditto but (600 x 900) mm dia
66	Galvanized steel pipe (6m)and diameter (160)mm ventilating columns with the fittings up
67	Ditto but (200)mm diameter
68	UPVC tee janchon pipes (400 x 100)mm dia
69	Ditto (200 x 150)mm dia
70	Ditto (250 x 150)mm dia
71	Ditto (300 x 150)mm dia
72	Ditto (400 x 150)mm dia
73	Ditto (500 x 150)mm dia
74	Ditto (600 x 150)mm dia
75	Ditto (150 x 150)mm dia

I-B (BWSA) UPVC pipes and fittings For network maintenance

UPVC PIPES AND FITTINGS FOR SEWERS AND SHALL COMPLY WITH THE REQUIRMENTS OF (DIN 8061 – 8062) - WALL THICKNES TO COMPLY WITH DIN 8062 . ALL PIPES AND FITTINGS SHALL HAVE RUBBER RING JOINTS + 10% ADDITIONAL QUANTITY OF RUBBER RING JOINTS :

No	PIPES
76	Diameter 250 mm
77	= 315 mm
78	= 400 mm
79	500 mm
80	600 mm

No	FITTINGS
81	T Socket – Spigot 250 110 mm
82	T Socket – socket 250 110 mm
83	T Socket - Spigot 315 110 mm
84	T S socket – socket 315 110 mm
85	Saddle 250 110 mm
86	Saddle 315 110 mm

I-C (GWSA) POLYETHYLENE PIPES AND FITTINGS

No	Description
	A- polyethylene pipes should be worksing under 12 bars pressure all pupes should db supplied to our stores in a form of pundles not than (30) m each quantities as follows :
	NOMINAL SIZE
87	1- 13 mm
88	2- 19 mm
89	3- 25 mm
90	4- 37 mm
91	5- 50)mm
92	6- 63 mm
	B- UP.V.C sadldle :
93	-(90) mm dia with brass farrule suitable to connect polyethilene line pipe mentioned in Item (a) above of (13) mm dia
94	- Ditto but to connect (19)mm dia
95	- Ditto but to connect (25)mm dia
96	-(110) mm dia with brass farrule suitable to connect polyethilene line pipe mentioned in item (a) above of (13) mm dia
97	- Ditto but to connect (19)mm dia
98	- Ditto but to connect (25)mm dia
99	- Ditto but to connect (37)mm dia
100	-(160) mm dia with brass farrule suitable to connect polyethilene line pipe mentioned in item (a) above of (13) mm dia
101	- Ditto but to connect (19)mm dia
102	- Ditto but to connect (25)mm dia
103	- Ditto but to connect (37)mm dia
104	- Ditto but to connect (50)mm dia
105	-(225) mm dia with brass farrule suitable to connect polyethilene line pipe mentioned in item (a) above of (13) mm dia
106	- Ditto but to connect (19)mm dia
107	- Ditto but to connect (25)mm dia
108	- Ditto but to connect (37)mm dia
109	- Ditto but to connect (50)mm dia
110	- Ditto but to connect (63)mm dia
111	C- Tapping tool complete with ratcet , (3) cutter for p.v.c , saddle adaptor, pipe adeptor and partable tool bol with hexogen key and lever for tapping saddle branch dia as follows : (16 - 25) mm (32 - 40)mm (50 - 63) mm

I-D (GEWS) Ductile Iron pipes & fittings

No	Description
112	Supplying (1200) mm dia. Ductile iron socket and spigot pipe class (K9) of tyton joint with rubber rings , according to the internat:onal standard (ISO – 2531) .
113	Ditto (1000) mm dia.
114	Ditto (900) mm dia.
115	Ditto (800) mm dia.
116	- Ductile iron double flanged bend with flanged socket and spigot a- 1200 mm dia - bend 90^0 b- 1000 mm dia - bend 90^0 c- 900 mm dia - bend 90^0 d- 800 mm dia body - bend 90^0
117	- Ductile iron express double socket bends complete with rubber rings and stainless steel bolts /nuts with washers :- A- 1200 mm dia a.1- bend 45^0 a.2- bend $22^1/_2{}^0$ B- 1000 mm dia b.1- bend 45^0 b.2- bend $22^1/_2{}^0$ C- 900 mm dia c.1- bend 45^0 c.2- bend $22^1/_2{}^0$
118	Ductile Iron all flanged tee complete as per specified A- 1200 mm dia . body a.1-1200 mm dia . branch a.2-1000 mm dia . branch a.3-900 mm dia . branch a.4-800 mm dia . branch
	B- 1000 mm dia . body b.1-1000 mm dia . branch b.2-900 mm dia . branch b.3-800 mm dia . branch
	C- 900 mm dia . body c.1-900 mm dia . branch c.2-800 mm dia . branch
	D- 800 mm dia . body d.1- 800 mm dia . branch d.2- 700 mm dia . branch
	d.3- 600 mm dia . branch
	d.4- 500 mm dia . branch
119	- Ductile iron double socket (express) tapers with rubber rings and stainless steel bolts /nuts with washers :- a- (1200 x 1000)mm dia

No	Description
	b- (1000 x 900)mm dia c- (1000 x 800)mm dia d- (900 x 800)mm dia e- (800 x 700)mm dia f- (800 x 600)mm dia
120	Supplying (600) mm dia. Ductile iron socket and spigot pipe class (K9) of tyton joint with rubber rings , according to the international standard (ISO – 2531) .
121	Ditto (500) mm dia.
122	Ditto (450) mm dia.
123	Ditto (400) mm dia.
124	Ditto (350) mm dia.
125	Ditto (300) mm dia.
126	Ditto (250) mm dia.
127	Ductile Iron double flanged beds with flanged socket express and spigot A- 600 mm dia - bend 90^0 B- 500 mm dia - bend 90^0 C- 450 mm dia - bend 90^0 D- 400 mm dia - bend 90^0 E- 350 mm dia - bend 90^0
128	- Ductile iron express double socket bends with rubber rings and stainless steel bolts /nuts with washers :-
	A- 600 mm dia a.1- bend 45^0 a.2- bend $22^1/_2{}^0$
	B- 500 mm dia b.1- bend 45^0 b.2- bend $22^1/_2{}^0$
	C- 450 mm dia c.1- bend 45^0 c.2- bend $22^1/_2{}^0$
	D- 400 mm dia d.1- bend 45^0 d.2- bend $22^1/_2{}^0$
	E- 350 mm dia e.1- bend 45^0 e.2- bend $22^1/_2{}^0$
	F- 300 mm dia
	f.1- bend 90^0 f.2- bend 45^0 f.3- bend $22^1/_2{}^0$
	G- 250 mm dia g.1- bend 90^0

No	Description
	g.2- bend 45^0 g.3- bend $22^1/_2{}^0$
129	- Ductile iron double socket (express) tapers complete with rubber rings and stainless steel bolts /nuts with washers :- a- (600 x 500)mm dia b- (600 x 450)mm dia c- (600 x 400)mm dia d- (500 x 450)mm dia e- (500 x 400)mm dia f- (500 x 350)mm dia g- (450 x 400)mm dia h- (450 x 350)mm dia I- (450 x 300)mm dia j- (400 x 350)mm dia k- (400 x 300)mm dia l- (400 x 250)mm dia m- (350 x 300)mm dia n- (350 x 250)mm dia o- (350 x 200)mm dia p- (250 x 200)mm dia w- (250 x 150)mm dia y- (200 x 150)mm dia
130	Ductile Iron all flanged tee complete with flanged socket and spigot A- 600 mm dia . body a.1-600 mm dia . branch a.2-500 mm dia . branch a.3-450 mm dia . branch a.4-400 mm dia . branch a.5-350 mm dia . branch a.6-300 mm dia . branch a.7-250 mm dia . branch
	B- 500 mm dia . body b.1-500 mm dia . branch b.2-450 mm dia . branch b.3-400 mm dia . branch b.4- 350 mm dia . branch b.5- 300 mm dia . branch b.6- 250 mm dia . branch
	C- 450 mm dia . body c.1-450 mm dia . branch
	c.2-400 mm dia . branch
	c.3- 350 mm dia . branch c.4- 300 mm dia . branch c.5- 250 mm dia . branch
	D- 400 mm dia . body d.1- 400 mm dia . branch d.2- 350 mm dia . branch d.3- 300 mm dia . branch
131	d.4- 250 mm dia . branch

No	Description
	E- 350 mm dia . body e.1- 350 mm dia . branch e.2- 300 mm dia . branch e.3- 250 mm dia . branch
	F- 300 mm dia . body f.1- 300 mm dia . branch f.2- 250 mm dia . branch
	G- 250 mm dia . body g.1- 250 mm dia . branch
132	Ductile Iron flanged branch on double socket express tee complete with rubber rings and stainless steel bolts / nuts with wassher : A- 600 mm dia . body a.1-100 mm dia . branch
	B- 500 mm dia . body b.1-100 mm dia . branch b.2-150 mm dia . branch
	C- 450 mm dia . body c.1-100 mm dia . branch c.2-150 mm dia . branch
	D- 400 mm dia . body d.1- 80 mm dia . branch d.2- 100 mm dia . branch d.3- 150 mm dia . branch
	E- 350 mm dia . body e.1- 80 mm dia . branch e.2- 100 mm dia . branch e.3- 150 mm dia . branch
	F- 300 mm dia . body f.1- 80 mm dia . branch f.2- 100 mm dia . branch f.3- 150 mm dia . branch
	G- 250 mm dia . body g.1- 80 mm dia . branch g.2- 100 mm dia . branch g.3- 150 mm dia . branch
133	Supplying (1200) mm dia. Ductile iron socket and spigot pipe class (K9) of tyton joint with rubber rings , according to the internat:onal standard (ISO – 2531) .
	Ditto (150) mm dia.
	Ditto (100) mm dia.
	Ductile Iron all flanged tee complete with flanged socket and spigotas below: A- 200 mm dia . body 200 mm dia . branch 150 mm dia . branch 100 mm dia . branch
	B- 150 mm dia . body 150 mm dia . branch 100 mm dia . branch
	C- 100 mm dia . body

No	Description
	100 mm dia . branch
134	Ductile Iron flanged branch on double socket express tee complete with rubber rings and stainless steel bolts / nuts with wassher : A- 200 mm dia . body 80 mm dia . branch 150 mm dia . branch 100 mm dia . branch 200 mm dia . branch
	B- 150 mm dia . body 80 mm dia . branch 100 mm dia . branch 150 mm dia . branch
	C- 100 mm dia . body 80 mm dia . branch 100 mm dia . branch
135	Ductile iron express double socket bends with rubber rings and stainless steel bolts /nuts and washers :
	A- 600 mm dia bend 90^0 bend 45^0 bend $22^1/_2{}^0$
	B- 500 mm dia bend 90^0 bend 45^0 bend $22^1/_2{}^0$
	C- 450 mm dia bend 90^0 bend 45^0 bend $22^1/_2{}^0$
136	- Ductile iron double socket (express) tapers complete with rubber rings and stainless steel bolts with nuts and washers : a- (200 x 150)mm dia b- (200 x 100)mm dia c- (150 x 100)mm dia d- (100 x 80)mm dia

I-E(BWSA): Ductile iron pipes and fittings

SUPPLY OF SPIGOT AND SOCKET DUCTILE IRON PIPES
ACCORDING TO ISO STANDARD 2531 TYPE K=9 WITH THE FOLLOWING TECHNICAL SPECIFICATIONS:
1- INTERNAL PRESSURE PROOF TEST = 50 BARS
2- WALL THICKNESS SHOULD BE ACCORDING TO THE FOLLOWING FORMULA :
e = 5-8+0.003 ND
WHERE , e = WALL THICKNESS IN (mm)
ND = NOMINAL DIAMETER (mm)
3- LENGTH OF EACH PIPE SEGMENT SHOULD BE 6 METERS
4- PIPES OF PUSH JOINT.
5- PIPES SHOULD HAVE ASPEN CEMENT MORTAR INSIDE LINING AND OUT SIDE BITUMEN COATING.

137	A- DUCTILE IRON PIPES WITH NOMINAL DIAMETER OF 100 mm INCLUDING RUBBER JOINTS.
138	B- DITTO. WITH NOMINAL DIAMETER OF 150 mm INCLUDING RUBBER JOINTS.
139	C- DITTO. WITH NOMINAL DIAMETER OF 200 mm INCLUDING RUBBER JOINTS.
140	D- DITTO. WITH NOMINAL DIAMETER OF 300 mm INCLUDING RUBBER JOINTS.
141	E- DITTO. WITH NOMINAL DIAMETER OF 400 mm INCLUDING RUBBER JOINTS.
142	F- DITTO. WITH NOMINAL DIAMETER OF 500 mm INCLUDING RUBBER JOINTS.
143	G- DITTO. WITH NOMINAL DIAMETER OF 600 mm INCLUDING RUBBER JOINTS.
144	H- DITTO. WITH NOMINAL DIAMETER OF 700 mm INCLUDING RUBBER JOINTS.
145	I- DITTO. WITH NOMINAL DIAMETER OF 800 mm INCLUDING RUBBER JOINTS.
146	J- DITTO. WITH NOMINAL DIAMETER OF 900 mm INCLUDING RUBBER JOINTS.
147	K- DITTO. WITH NOMINAL DIAMETER OF 1000 mm INCLUDING RUBBER JOINTS.

DUCTILE IRON PIPES
ACCORDING TO ISO STANDARD 2531 WITH THE FOLLOWING TECHNICAL SPECIFICATIONS:
a- FLANGES SHOULD BE OF TYPE NP 16.
b- FITTINGS SHOULD HAVE A CEMENT MORTAR INSIDE LINING AND OUT SIDE BITUMEN COATING.
c- HYDROSTATIC LEAK- TIGHTNESS TEST PRESSURE SHOULD BE NOT LESS THEN 25 BARS.
d- WALL THICKNESS SHOULD BE ACCORDING TO THE FOLLOWING FORMULA :
e = 7+0.014 ND FOR TEES.
e = 6+0.012 ND FOR OTHER FITTINGS.
- SCOPE OF SUPPLY
THE SCOPE OF SUPPLY INCLUDE ALL NECESSARY RUBBER JOINTS, GASKETS, WASHERS, BOLTS , NUTS ANDGLANDS.
ALL SOCKET JOINTS SHALL BE MECHANICAL JOINTS.

148	**a- DOUBLE FLANGE BEND -90 °- Nominal Diameter (mm) : 100**
149	**b- DITTO . Nominal Diameter (mm): 150**
150	**c- DITTO Nominal Diameter (mm) : 200**

151	**d- DOUBLE SOCKET BEND --90 °- Nominal Diameter (mm) : 100**
152	**e- DITTO Nominal Diameter (mm): 150**
153	**f- DITTO Nominal Diameter (mm) : 200**
154	**g- DOUBLE FLANGE BEND 45° Nominal Diameter (mm) : 100**
155	**h- DITTO Nominal Diameter (mm) : 150**
156	**i- FLANGE SPIGOT Nominal Diameter (mm) : 100**
157	**j- FLANGE SOCKET Nominal Diameter (mm) : 150**
158	**k- ALL SOCKET TEE 150X100 mm**
159	**l- ALL SOCKET TEE 100X100 mm**
160	**m- DOUBLE FLANGE REDUCER 150X100**
161	**n- FLANGE SPIGOT Nominal Diameter (mm) :300**
162	**m- FLANGE SOCKET Nominal Diameter (mm) : 300**
163	**p- DOUBLE SOCKET COLLAR NOMINAL DIA MM: 400**
164	**q- DOUBLE SOCKET BEND --90 °- Nominal Diameter (mm) :300**
165	**r- DOUBLE SOCKET BEND --90 °- Nominal Diameter (mm) :400**
166	***S.DOUBLE SOCKET BEND 45* °- Nominal Diameter (mm) :300**
167	**T- DOUBLE SOCKET BEND --45 °- Nominal Diameter (mm) : 400**

I-F: Crossing rivers pipes

No	Description
168	Ductile iron pipes Thrust resistance Joint (locked -Joint) complete with rubber rings as below :- a- 1000 mm dia
169	b- 900 mm dia
170	c- 800 mm dia
171	d- 700 mm dia
172	e- 600 mm dia
173	f- 500 mm dia
174	g- 450 mm dia
175	h- 400 mm dia
176	i- 350 mm dia
177	j- 300 mm dia
178	k- 250 mm dia
179	l- 200 mm dia
180	m- 150 mm dia
181	n- 100 mm dia

I – G Strainers (GWSA)

No	Description
182	Flanged Strainer complete with foot valve :- a- (100) mm dia b- (150)mm dia c- (200) mm dia d- (250) mm dia e- (300) mm dia f- (350) mm dia g- (400) mm dia h- (450) mm dia i- (500) mm dia j- (600) mm dia k- (700) mm dia

I-G(GWSA): Maintenance fittings

No	Description
183	Stainless steel repair clamps with rubber gasket and stainless steel bolts :- a- 600 mm. Dia. b- 500 mm .dia. c- 450 mm .dia. d- 400 mm .dia. e- 350 mm. Dia. f- 300 mm. Dia. g- 250 mm. Dia. h- 200 mm. Dia. i- 150 mm. Dia. j- 100 mm. Dia.
184	Couplings (Expansion joint)flat end for steel pipes :- a- 800 mm. Dia. b- 600 mm .dia. c- 500 mm .dia. d- 450 mm .dia. e- 400 mm. Dia. f- 350 mm. Dia. i- 300 mm. Dia. j- 250 mm. Dia. k- 200 mm. Dia. l- 150 mm. Dia.
185	Dctile iron express collars complete with rubber rings stainless steel bolts/nuts and washers as below :- a- 1000 mm. dia. b- 900 mm. Dia. c- 800 mm. Dia. d- 700 mm. Dia. e- 600 mm. Dia. f- 500 mm .dia. g- 450 mm .dia. h- 400 mm .dia. i- 350 mm. Dia. j- 300 mm. Dia. k- 250 mm. dia. l- 200 mm. dia. m- 150 mm. Dia. n- 100 mm. dia.

No	Description
186	Couplings (Expansion joint) flanged end for steel pipe :- a- 800 mm. dia. b- 600 mm. dia. c- 500 mm. dia. d- 450 mm .dia. e- 400 mm .dia. f- 350 mm. dia. g- 300 mm. dia. h- 250 mm. Dia I- 200 mm. Dia j- 150 mm. Dia

II PUMPS

(Excluding all items that may be notifiable under resolution 1051)

II-A: Horizontal Split Case Pumps

1- Complete electrical horizontal split case pumps with motors, starters, spare parts as mentioned below .
   - Impeller of bronze, shaft of stainless steel.
2- Squirrel cage motor, 3 Ph., 400 V, 50 Hz., IP55, Class F insulation coupled to the pump on steel frame except the item with mark x must be slipring
3- Starter must be (star- delta) starter for motor above (5) KW., below must be (D.O.L) starter.
   - Motor rating must be (20%) more power required.
   * (N PSH) of the pump not more than 5 Mt .
   * The efficiency of the pumps should be not less70 % accept the multistage pumps and
   - 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.
4- Spare parts for each pump
   One) Impeller
   Two) Shaft sleeve
   Three) Casing wear ring
   Four) Set of Ball Bearing (for motor and pump)
5- Supply each pump gate valve 2 No. , NoN -return valve 1 No.
   Note : M S must be multistage.

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
187		Wasit	Al suwaira w.t.p	250	80	S.C	1500
188		Wasit	New Nummaniya w.t.p	165	40	S.C	1500
189		Wasit	Old Nummaniya w.t.p	120	40	S.C	1500
190		Wasit	Old Nummaniya w.t.p	120	20	S.C	1500
191		Wasit	New Nummaniya w.t.p	160	20	S.C	1500
192		Wasit	Al –Ahrar w.t.p	165	50	S.C	1500
193		Wasit	Al –Ahrar w.t.p	170	20	S.C	1500
194		Wasit	Jasan w.t.p	100	50	S.C	1500
195		Wasit	Jasan w.t.p	120	20	S.C	1500
196		Wasit	Sheikh saad w.t.p	80	50	S.C	1500
197		Wasit	Al Dubouni w.t.p	55	50	S.C	3000
198		Wasit	Al Dubouni w.t.p	60	25	S.C	1500
199		Wasit	Al Mazraa w.t.p	90	50	S.C	1500
200		Wasit	Al Mazraa w.t.p	60	25	S.C	1500
201		Wasit	Al Dahnouk w.t.p	350	20	S.C	1500
202		Wasit	Al Dahnouk w.t.p	230	50	S.C	1500
203		Wasit	Kut w.t.p	850	20	S.C	1500
204		Wasit	Kut w.t.p	650	40	S.C	1500
205		Wasit	Al Hay w.t.p	550	50	S.C	1500
206		Wasit	Al Hay w.t.p	450	20	S.C	1500
207		Wasit	Al Hay w.t.p	450	40	S.C	1500
208		Wasit	Al Suwaira w.t.p	550	40	S.C	1500
209		Wasit	Al Muaffaqiya w.t.p	90	20	S.C	1500
210		Wasit	Al Muaffaqiya w.t.p	80	40	S.C	1500
211		Wasit	Al Zubaidia w.t.p	55	40	S.C	3000
212		Wasit	Al Zubaidia w.t.p	60	20	S.C	1500
213		Wasit	Sheikh saad w.t.p	180	20	S.C	1500
214		Wasit	Sheikh saad w.t.p	80	100	S.C	1500
215		Wasit	Sheikh saad w.t.p	80	50	S.C	3000
216		Wasit	Um Sunayem w.t.p	60	20	S.C	1500
217		Wasit	Um Sunayem w.t.p	55	40	S.C	3000
218		Wasit	Al Suwaira w.t.p	650	50	S.C	1500
219		Wasit	Al Suwaira w.t.p	650	20	S.C	1500
220		Wasit	Al Suwaira w.t.p	500	85	S.C	1500
221		Wasit	Al Suwaira w.t.p	150	80	S.C	1500
222		Wasit	Al Samideen wal Muntasireen C.U.	110	20	S.C	1500
223		Wasit	Al Samideen wal Muntasireen C.U.	90	40	S.C	1500
224		Wasit	Al Bashar w.t.p	60	20	S.C	1500
225		Wasit	Al Bashar w.t.p	55	50	S.C	3000
226		Wasit	Wasit W.T.P	60	20	S.C	1500
227		Wasit	Wasit W.T.P	90	40	S.C	1500
228		Wasit	Al Aziziya w.t.p	600	10	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
229		Wasit	Al Aziziya w.t.p	400	20	S.C	1500
230		Missan	Amara w.t.p Unified	600	20	S.C	1500
231		Missan	Amara w.t.p Unified	550	40	S.C	1500
232		Missan	Boosting Station	120	60	S.C	1500
233		Missan	Al Rafiden w.t.p	350	40	S.C	1500
234		Missan	Al Rafiden w.t.p	400	20	S.C	1500
235		Missan	Al Kahla, almajer, aladil, al musharah , ali-sharqia , kumat ,qalut salhia w.t.p	120	40	S.C	1500
236		Missan	Al Kahla, almajer, aladil, al musharah , ali-sharqia , kumat ,qalut salhia w.t.p	150	20	S.C	1500
237		Basrah	Al Hussen Boosting Station	930	60	S.C	1500
238		Basrah	Al Hussen Boosting Station	750	120	S.C	1500
239		Basrah	Al Mudaina W.T.P	200	50	S.C	1500
240		Basrah	Al Jasem	100	60	S.C	1500
241		Basrah	Shatt - Al Hel	50	50	S.C	2900
242		Basrah	Garma No. (2)	50	50	S.C	2900
243		Basrah	Shatt – Arab W.T.P	480	9	S.C	1500
244		Basrah	Al –Mufeqeya Boosting Station	160	80	S.C	1500
245		Basrah	Khor AL Zubair W.T.P	378	60	S.C	1500
246		Basrah	Khor AL Zubair W.T.P	405	6	S.C	1500
247		Basrah	Khor AL Zubair W.T.P	540	11	S.C	1500
248		Basrah	Al Dair W.T.P	250	50	S.C	1500
249		Basrah	Al Dair W.T.P	200	20	S.C	1500
250		Basrah	Al Bratheaa W.T.P	400	60	S.C	1500
251		Basrah	Al Bratheaa W.T.P	400	25	S.C	1500
252		Basrah	Al -Faw W.T.P	400	79	S.C	1500
253		Basrah	Al -Faw W.T.P	300	20	S.C	1500
254		Basrah	Faw Net Work	50	50	S.C	2900
255		Basrah	Faw Net Work	200	50	S.C	1500
256		Basrah	Old Al-Mudaina w.t.p	200	20	S.C	1500
257		Basrah	Old Al-Mudaina w.t.p	200	80	S.C	1500
258		Basrah	Al Bratheaa w.t.p	1500	90	S.C	1500
259		Basrah	Al Suwaip w.t.p	200	60	S.C	1500
260		Basrah	Al Basrah Unified w.t.p	1000	80	S.C	1500
261		Basrah	Al Basrah Unified w.t.p	400	60	S.C	1500
262		Basrah	Old Al Shuwaiba w.t.p	400	60	S.C	1500
263		Basrah	Al Ribat w.t.p	200	50	S.C	1500
264		Basrah	Abo –Alkasib w.t.p	200	50	S.C	1500
265		Basrah	Abo –Alkasib w.t.p	200	50	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
266		Basrah	Abo –Alkasib w.t.p	50	50	S.C	2900
267		Al Muthana	Hay -Al Saniya	300	80	S.C	1500
268		Al Muthana	Al Daraje w.t.p	60	50	S.C	3000
269		Al Muthana	Al Daraje w.t.p	60	20	S.C	1500
270		Al Muthana	Al Majed w.t.p	60	50	S.C	3000
271		Al Muthana	Al –HALAL Village	60	50	S.C	3000
272		Al Muthana	Al –HALAL w.t.p	100	50	S.C	1500
273		Al Muthana	Storm Station	100	20	S.C	1500
274		Al Muthana	Storm Station	150	20	S.C	1500
275		Al Muthana	Storm Station	200	20	S.C	1500
276		Al Muthana	Al Warka W.T.P	300	20	S.C	1500
277		Al Muthana	Al Warka W.T.P	216	60	S.C	1500
278		Al Muthana	Al Warka W.T.P	216	90	S.C	1500
279		Al Muthana	Al Warka W.T.P	216	15	S.C	1500
280		Al Muthana	Ramathan Boosting	500	40	S.C	1500
281		Al Muthana	Al Karama Boosting	100	70	S.C	3000
282		Al Muthana	Al Majed - Al – Mamlaha B.S	300	70	S.C	1500
283		Al Muthana	Al Mamlaha B.S	216	60	S.C	1500
284		Al Muthana	Al -Entsar B.S	100	40	S.C	1500
285		Al Muthana	Al Rsala Residenital Building	100	60	S.C	1500
286		Al Muthana	Al Askan Residenital Building	25	20	S.C	1500
287		Al Muthana	New Project	675	90	S.C	1500
288		Al Muthana	New Project	810	15	S.C	1500
289		Al Muthana	Al Kader w.t.p	216	40	S.C	1500
290		Al Muthana	Al Sakak Houses	120	50	S.C	1500
291		Al Muthana	New Rumaitha W.T.P	700	80	S.C	1500
292		Al Muthana	New Rumaitha W.T.P	200	60	S.C	1500
293		Al Muthana	New Rumaitha W.T.P	800	12	S.C	1500
294		Al Muthana	New Rumaitha W.T.P	510	15	S.C	1500
295		Al Muthana	New Rumaitha W.T.P	300	15	S.C	1500
296		Al Muthana	New Rumaitha W.T.P	375	90	S.C	1500
297		Al Muthana	New Rumaitha W.T.P	180	90	S.C	1500
298		Al Muthana	New Rumaitha W.T.P	200	70	S.C	1500
299		Al Muthana	New Rumaitha W.T.P	20	20	S.C	1500
300		Al Muthana	New Rumaitha W.T.P	100	50	S.C	1500
301		Al Muthana	New Rumaitha W.T.P	600	21	S.C	1500
302		Al Muthana	New Rumaitha W.T.P	800	12	S.C	1500
303		Diala	Al Abara W.T.P	160	11	S.C	1500
304		Diala	Abo –Sadia W.T.P	600	8	S.C	1500
305		Diala	Abo –Sadia W.T.P	315	15	S.C	1500
306		Diala	Abo –Sadia W.T.P	90	60	S.C	1500
307		Diala	Abo –Sadia W.T.P	200	60	S.C	1500
308		Diala	Baladroz W.T.P	210	20	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
309		Diala	Baladroz W.T.P	210	30	S.C	1500
310		Diala	Baladroz W.T.P	220	60	S.C	1500
311		Diala	Baladroz W.T.P	110	60	S.C	1500
312		Diala	Baladroz W.T.P	100	60	S.C	1500
313		Diala	Baladroz W.T.P	75	60	S.C	3000
314		Diala	Baladroz W.T.P	110	30	S.C	1500
315		Diala	Old Al Muqdadiya W.T.P.	350	11	S.C	1500
316		Diala	Old Al Muqdadiya W.T.P.	180	50	S.C	1500
317		Diala	Beni – Saad W.T.P	410	10	S.C	1500
318		Diala	Beni – Saad W.T.P	160	50	S.C	1500
319		Diala	Beni – Saad W.T.P	200	60	S.C	1500
320		Diala	Beni – Saad W.T.P	350	60	S.C	1500
321		Diala	Kanaan W.T.P	200	15	S.C	1500
322		Diala	Kanaan W.T.P (M.S)	65	91	S.C	1500
323		Diala	Kanaan W.T.P	135	75	S.C	1500
324		Diala	Kanaan W.T.P	65	52	S.C	3000
325		Diala	Kanaan W.T.P	360	11	S.C	1500
326		Diala	Al Khalis W.T.P	675	35	S.C	1500
327		Diala	Al Khalis W.T.P	780	30	S.C	1500
328		Diala	Al Khalis W.T.P	625	30	S.C	1500
329		Diala	Al Khalis W.T.P (M.S)	100	100	S.C	1500
330		Diala	Baquba W.T.P	1050	10	S.C	1500
331		Diala	Baquba W.T.P	600	20	S.C	1500
332		Diala	Baquba W.T.P	300	68	S.C	1500
333		Diala	Baquba W.T.P	420	100	S.C	1500
334		Diala	Baquba W.T.P	420	36	S.C	1500
335		Diala	Baquba W.T.P	300	100	S.C	1500
336		Diala	Khanaqin W.T.P	250	125	S.C	1500
337		Diala	Khanaqin W.T.P	630	12	S.C	1500
338		Diala	Boosting Station	600	70	S.C	1500
339		Diala	Boosting Station	60	50	S.C	3000
340		Diala	Boosting Station	160	50	S.C	1500
341		Diala	Boosting Station	120	82	S.C	1500
342		Diala	Jalwla W.T.P	420	36	S.C	1500
343		Diala	Jalwla W.T.P	400	40	S.C	1500
344		Diala	Jalwla W.T.P	250	70	S.C	1500
345		Diala	Jalwla W.T.P	275	12	S.C	1500
346		Diala	Qura – Taba W.T.P	312	30	S.C	1500
347		Diala	Qura – Taba W.T.P	86	68	S.C	3000
348		Diala	Qura – Taba W.T.P (M.S)	60	96	S.C	1500
349		Diala	Qura – Taba W.T.P	90	66	S.C	3000
350		Diala	Qura – Taba W.T.P	450	24	S.C	1500
351		Diala	Qura – Taba W.T.P (M.S)	50	100	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
352		Diala	Al Munathraa W.T.P (M.S)	100	100	S.C	1500
353		Diala	Al Tahrer W.T.P	630	20	S.C	1000
354		Diala	Al Tahrer W.T.P	550	36	S.C	1500
355		Thiqar	Nasseriah Unified W.T.P	820	20	S.C	1500
356		Thiqar	Nasseriah Unified W.T.P	796	170	S.C	1500
357		Thiqar	Nasseriah Unified W.T.P	900	30	S.C	1000
358		Thiqar	Al Shatra W.T.P	575	20	S.C	1500
359		Thiqar	Al Shatra W.T.P	575	65	S.C	1500
360		Thiqar	Al Refayi W.T.P	250	50	S.C	1500
361		Thiqar	Al Refayi W.T.P	300	20	S.C	1500
362		Thiqar	Al Refayi W.T.P	300	20	S.C	1500
363		Thiqar	Al Refayi Village W.T.P	125	20	S.C	1500
364		Thiqar	Al Refayi Village W.T.P	120	40	S.C	1500
365		Thiqar	Qalaat Sukkur W.T.P	420	40	S.C	1500
366		Thiqar	Qalaat Sukkur W.T.P	420	20	S.C	1500
367		Thiqar	Qalaat Sukkur W.T.P	90	60	S.C	3000
368		Thiqar	Qalaat Sukkur W.T.P (M.S)	90	100	S.C	1500
369		Thiqar	Qalaat Sukkur W.T.P	600	20	S.C	1500
370		Thiqar	Al –Fajer W.T.P	60	40	S.C	1500
371		Thiqar	Al –Fajer W.T.P	64	20	S.C	1500
372		Thiqar	Al –Nasir W.T.P	60	40	S.C	1500
373		Thiqar	Al –Nasir W.T.P	64	20	S.C	1500
374		Thiqar	Suq Al – Shuqi W.T.P	205	40	S.C	1500
375		Thiqar	Suq Al – Shuqi W.T.P	120	50	S.C	1500
376		Thiqar	Wafah Al -Qaid Boosting	600	100	S.C	1500
377		Thiqar	Garmat –Beni -Saeed W.T.P	60	40	S.C	3000
378		Thiqar	Garmat -Beni -Saeed W.T.P	64	20	S.C	1500
379		Thiqar	Al Fahod W.T.P	200	40	S.C	1500
380		Thiqar	Al Fahod W.T.P	205	30	S.C	1500
381		Thiqar	Al Dawyia W.T.P	90	20	S.C	1500
382		Thiqar	Al Dawyia W.T.P	90	40	S.C	1500
383		Thiqar	Al Baathya W.T.P	200	40	S.C	1500
384		Thiqar	Al Baathya W.T.P	200	20	S.C	1500
385		Thiqar	Al Eslah W.T.P	90	40	S.C	1500
386		Thiqar	Al Eslah W.T.P	90	20	S.C	1500
387		Thiqar	Old Nasseriah W.T.P	250	30	S.C	1500
388		Thiqar	Old Nasseriah W.T.P	250	50	S.C	1500
389		Salaheldeen	Tikrit W.T.P 2 nd stage	850	41	S.C	1500
390		Salaheldeen	Tikrit W.T.P 2 nd stage	750	57	S.C	1500
391		Salaheldeen	Old Tikrit W.T.P	450	60	S.C	1500
392		Salaheldeen	Old Tikrit W.T.P	400	40	S.C	1500
393		Salaheldeen	Al Ougi W.T.P	200	25	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
394		Salaheldeen	Al Ougi W.T.P	120	60	S.C	1500
395		Salaheldeen	Al Ailam W.T.P	250	30	S.C	1500
396		Salaheldeen	Al Ailam W.T.P (M.S)	60	60	S.C	1500
397		Salaheldeen	New Al Dor W.T.P	430	25	S.C	1500
398		Salaheldeen	New Al Dor W.T.P	414	50	S.C	1500
399		Salaheldeen	New Al Dor W.T.P	300	80	S.C	1500
400		Salaheldeen	Old Al Dor W.T.P	250	50	S.C	1500
401		Salaheldeen	Old Al Dor W.T.P	60	40	S.C	3000
402		Salaheldeen	Al – Sharqid W.T.P	350	25	S.C	1500
403		Salaheldeen	Al – Sharqid W.T.P	225	40	S.C	1500
404		Salaheldeen	Al – Sharqid W.T.P	120	100	S.C	3000
405		Salaheldeen	Al – Sharqid W.T.P	288	25	S.C	1500
406		Salaheldeen	Al – Sharqid W.T.P	288	40	S.C	1500
407		Salaheldeen	Old Al – Sharqid W.T.P	150	25	S.C	1500
408		Salaheldeen	Old Al – Sharqid W.T.P	96	30	S.C	1500
409		Salaheldeen	Al – Sharqid Villiage W.T.P	350	25	S.C	1500
410		Salaheldeen	Al – Sharqid Villiage W.T.P	120	100	S.C	3000
411		Salaheldeen	Al - Sharqid W.T.P No. (2)	210	25	S.C	1500
412		Salaheldeen	Al -Sharqid W.T.P No. (2)	144	40	S.C	1500
413		Salaheldeen	Al –Fairs W.T.P	95	20	S.C	1500
414		Salaheldeen	Al –Fairs W.T.P	95	60	S.C	1500
415		Salaheldeen	Al –Tarmiyah W.T.P	90	20	S.C	1500
416		Salaheldeen	Al –Tarmiyah W.T.P	90	50	S.C	1500
417		Salaheldeen	Old Dozz W.T.P	180	80	S.C	1500
418		Salaheldeen	Samarra W.T.P	800	60	S.C	1500
419		Salaheldeen	Samarra W.T.P	450	50	S.C	1500
420		Salaheldeen	Al –Fairs W.S.S	1495	15	S.C	1500
421		Salaheldeen	New Balad W.T.P	250	20	S.C	1500
422		Salaheldeen	Ishaqi – Uthrap W.T.P	130	30	S.C	1500
423		Salaheldeen	Ishaqi – Uthrap W.T.P	90	60	S.C	1500
424		Salaheldeen	Ishaqi – Uthrap W.T.P	360	102	S.C	1500
425		Salaheldeen	Ishaqi – Uthrap W.T.P	420	82	S.C	1500
426		Salaheldeen	Ishaqi – Uthrap W.T.P	575	20	S.C	1500
427		Salaheldeen	Balad W.S.S.	250	25	S.C	1500
428		Salaheldeen	Balad W.S.S.	500	25	S.C	1500
429		Salaheldeen	New Al –Thoayia W.S.S	250	25	S.C	1500
430		Salaheldeen	Old Al –Thoayia W.S.S	250	25	S.C	1500
431		Salaheldeen	New Al –Thoayia W.S.S	210	45	S.C	1500
432		Salaheldeen	Old Al –Thoayia W.S.S	210	45	S.C	1500
433		**Baghdad**	Old Madain W.T.P.	264	68	S.C	1500
434		Baghdad	Old Madain W.T.P.	264	12	S.C	1500
435		Baghdad	New Madain W.T.P.	900	17	S.C	1500
436		Baghdad	Al Rashidya W.T.P	780	14	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
437		Baghdad	Al –Muhmodia W.T.P.	1050	15	S.C	1500
438		Baghdad	Al –Muhmodia W.T.P.	1000	37	S.C	1500
439		Baghdad	Al –Muhmodia B.S.	500	15	S.C	1500
440		Baghdad	Al- Lateffai W.T.P	300	15	S.C	1500
441		Baghdad	Al- Lateffai W.T.P	300	5	S.C	1500
442		Baghdad	Al- Lateffai W.T.P	100	30	S.C	1500
443		Baghdad	Al-Rashida W.T.P	183	11	S.C	1500
444		Baghdad	Al-Rashida W.T.P	800	11	S.C	1500
445		Baghdad	Al-Rashida W.T.P	450	55	S.C	1500
446		Baghdad	Al-Rashida W.T.P	195	60	S.C	1500
447		Baghdad	Al-Rashida W.T.P	150	58	S.C	1500
448		Baghdad	Al-Rashida W.T.P	735	40	S.C	1500
449		Baghdad	Al-Rashida W.T.P	600	12	S.C	1500
450		Baghdad	Al-Nahrawin Boosting	500	80	S.C	1500
451		Baghdad	Al-Nahrawin Boosting	1000	85	S.C	1500
452		**Najaf**	Najaf W.T.P	2280	196	S.C	1500
453		**Kerbala**	Jadwal Al-Gharbi W.T.P	120	40	S.C	1500
454		=	Jadwal Al-Gharbi W.T.P	120	20	S.C	1500
455		=	Jadwal Al-Gharbi W.T.P	60	40	S.C	3000
456		=	Jadwal Al-Gharbi W.T.P	60	20	S.C	1500
457		=	Boosting Station	1200	42	S.C	1500
458		=	Project No. (7)	1400	17	S.C	1000
459		=	Project No. (7)	1350	50	S.C	1000
460		=	Project No. (7)	540	9	S.C	1000
461		=	Ain –Tamer Boosting Station	350	100	S.C	1500
462		=	Al-Uriba Boosting Station	1200	40	S.C	1500
463		=	Al-Hindaya W.T.P	735	25	S.C	1500
464		=	Al-Hindaya W.T.P	445	46	S.C	1500
465		=	Al-Hindaya W.T.P	333	60	S.C	1500
466		=	Al-Hindaya W.T.P	1200	25	S.C	1500
467		=	Al-Hindaya W.T.P	762	30	S.C	1500
468		=	Sewage Project	500	30	S.C	1000
469		=	Old Al-Hindaya W.T.P	160	25	S.C	1500
470		=	Old Al-Hindaya W.T.P	150	60	S.C	1500
471		**Babil**	New –Hilla W.T.P	1600	7	S.C	1000
472		**taemeem**	Different Place	540	70	S.C	1500
473		**=**	Different Place	900	30	S.C	1500
474		=	Al Zap Unified W.T.P (M.S)	100	80	S.C	1500
475		=	Al Zap W.T.P (M.S)	90	100	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
476		=	Al Zap Village (M.S) W.T.	80	60	S.C	1500
477		=	Al Zap Village (M.S) W.T.	85	20	S.C	1500
478		=	Al Reyadh Village W.T.	312	20	S.C	1500
479		=	Al Reyadh W.T.	200	60	S.C	1500
480		=	Al Reyadh W.T.	220	20	S.C	1500
481		**taemeem**	Al Abassy w.t.	140	70	S.C	1500
482		=	Al Abassy w.t.	160	20	S.C	1500
483		=	Al Daquk w.t.p	375	60	S.C	1500
484		=	Al Daquk w.t.p	380	20	S.C	1500
485		=	Taza W.T.	260	60	S.C	1500
486		=	Taza W.T.	280	20	S.C	1500
487		=	Hassan Village W.T.	80	20	S.C	1500
488		=	Hassan Village W.T.	70	60	S.C	3000
489		=	Tal Ali W.T.	150	70	S.C	1500
490		=	Tal Ali W.T.	160	30	S.C	1500
491		=	Al Toon Kobry W.T.	400	60	S.C	1500
492		=	Al Toon Kobry W.T.	420	20	S.C	1500
493		=	Al DEBIS W.T.	600	20	S.C	1500
494		=	Al DEBIS W.T.	800	20	S.C	1500
495		=	Al DEBIS W.T.	600	20	S.C	1500
496		=	Al DEBIS W.T.	300	60	S.C	1500
497		=	Al DEBIS W.T./3300 volts	500	500	S.C	1500
498		**Qadeseaya**	Diwaniya W.T. *	1150	17	S.C	1500
499		=	Diwaniya W.T. *	1000	16	S.C	1500
500		=	Diwaniya W.T. *	225	64	S.C	1500
501		=	Diwaniya W.T. *	350	21	S.C	1500
502		=	Diwaniya W.T. *	600	10	S.C	1500
503		=	Diwaniya W.T. *	1000	53	S.C	1500
504		=	Diwaniya W.T. *	300	33	S.C	1500
505		=	Diwaniya W.T. *	300	15	S.C	1500
506		=	Diwaniya W.T. *	590	17	S.C	1500
507		=	Al Shameayah W.T.	425	40	S.C	1500
508		=	Al Shameayah W.T.	290	55	S.C	1500
509		=	Al Shameayah W.T.	270	53	S.C	1500
510		=	Al Shameayah W.T.	261	53	S.C	1500
511		=	Al Qammas W.T.	150	40	S.C	1500
512		=	Al Qammas W.T.	200	20	S.C	1500
513		=	Al Bdeer W.T.	150	20	S.C	1500
514		=	Al Bdeer W.T.	90	40	S.C	1500
515		=	Al Dagara W.T.	300	24	S.C	1500
516		=	Al Dagara W.T. (M.S)	90	84	S.C	3000
517		=	Al Dagara W.T. (M.S)	150	73	S.C	1500
518		**Nenewa**	Al-Mousel right bank w.t	1440	35	S.C	1500
519		=	Al-Mousel right bank w.t	1380	90	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
520		=	Al-Mousel right bank w.t	1380	60	S.C	1500
521		=	Al-Mousel right bank w.t	960	60	S.C	1500
522		=	Al-Mousel lift bank w.t	1000	30	S.C	1500
523		=	Al-Mousel lift bank w.t	960	60	S.C	1500
524		=	Al-Mousel lift bank w.t	1190	80	S.C	1500
525		=	Al-Mousel lift bank w.t	1190	53	S.C	1500
526		=	Al-Mousel lift bank w.t	1000	80	S.C	1500
527		=	Al-Mousel lift bank w.t	130	55	S.C	1500
528		=	Hamam Al-Alel W.T.P	200	40	S.C	1500
529		=	Hamam Al-Alel W.T.P	250	20	S.C	1500
530		=	Al-Hather W.T.P	300	190	S.C	1500
531		=	Al-Hather W.T.P	350	75	S.C	1500
532		=	Al-Baiaj W.T.P	150	20	S.C	1500
533		=	Makhmor W.T.P	400	50	S.C	1500
534		=	Makhmor W.T.P	60	70	S.C	1500
535		=	Makhmor W.T.P	100	120	S.C	1500
536		=	Makhmor W.T.P	200	20	S.C	1500
537		=	Al-Hamdanya W.T.P	200	60	S.C	1500
538		=	Al-Hamdanya W.T.P	600	40	S.C	1500
539		=	Al-Hamdanya W.T.P	210	35	S.C	1500
540		Nenewa	Al-Shikan W.T.P	90	30	S.C	1500
541		=	Rabia a W.T.P	150	20	S.C	1500
542		=	Tal Akaif W.T.P (M.S)	100	255	S.C	1500
543		=	Tal Akaif W.T.P	100	20	S.C	1500
544		=	Tal Akaif W.T.P (M.S)	600	180	S.C	1500
545		=	Tal Akaif W.T.P (M.S)	200	116	S.C	1500
546		=	Tal Akaif W.T.P	1200	47	S.C	1500
547		=	Singaar W.T.P	60	80	S.C	1500
548		=	Hamadit W.T.P	90	30	S.C	1500
549		=	Hamadit W.T.P	60	40	S.C	1500
550		=	Hamadit W.T.P	90	50	S.C	1500
551		=	Hamadit W.T.P	60	40	S.C	1500
552		=	Zemar W.T.P	61	36	S.C	1500
553		=	Zemar W.T.P (M.S)	210	25	S.C	1500
554		=	Al-Kaira W.T.P	144	30	S.C	1500
555		=	Al-Kaira W.T.P	144	50	S.C	1500
556		=	Al-Kaira W.T.P	60	30	S.C	1500
557		=	Al-Shora W.T.P	300	40	S.C	1500
558		=	Al-Shora W.T.P	144	30	S.C	1500
559		=	Al-Shora W.T.P	280	80	S.C	1500
560		=	Al-Shora W.T.P	50	75	S.C	1500
561		=	Al-Rashidya w.t.p	150	15	S.C	1500
562		=	Al-Rashidya w.t.p	100	15	S.C	1500
563		=	Al-Rashidya w.t.p (M.S)	100	100	S.C	1500
564		=	Tal afer W.T.P	1050	15	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
565		=	Tal afer W.T.P	850	115	S.C	1500
566		=	Tal afer W.T.P	250	200	S.C	1500
567		=	Tal afer W.T.P	300	18	S.C	1500
568		=	Tal afer W.T.P	600	125	S.C	1500
569		=	Tal afer W.T.P	90	50	S.C	1500
570		=	Tal afer W.T.P	300	50	S.C	1500
571		=	Tal afer W.T.P (M.S)	240	150	S.C	1500
572		=	Tal afer W.T.P(M.S)	60	140	S.C	1500
573		=	Al-Hamadanya W.T.P	720	30	S.C	1500
574		=	Al-Hamadanya W.T.P	900	165	S.C	1500
575		=	Al-Hamadanya W.T.P	120	40	S.C	1500
576		=	Al-Hamadanya W.T.P	180	90	S.C	1500
577		=	Al-Hamadanya W.T.P	780	52	S.C	1500
578		=	Al-Hamadanya W.T.P	500	40	S.C	1500
579		=	Gir -Gaber W.T.P (M.S)	150	125	S.C	1500
580		=	Gir –Gaber W.T.P	150	20	S.C	1500
581		=	Gir -Gaber W.T.P (M.S)	90	90	S.C	1500
582		=	Gir -Gaber W.T.P (M.S)	90	100	S.C	1500
583		=	Gir –Gaber W.T.P	90	30	S.C	1500
584		=	Gir –Gaber W.T.P	150	30	S.C	1500
585		Nenewa	Al - Quraj W.T.P	400	35	S.C	1500
586		=	Al – Quraj W.T.P	200	150	S.C	1500
587		=	Al – Quraj W.T.P	90	60	S.C	1500
588		=	Al - Quraj W.T.P (M.S)	150	100	S.C	1500
589		=	Al-Kware W.T.P	550	40	S.C	1500
590		=	Al-Kware W.T.P	180	70	S.C	1500
591		=	Al-Kware W.T.P (M.S)	90	100	S.C	1500
592		=	Al-Dindin W.T.P	650	60	S.C	1500
593		=	Al-Dindin W.T.P	45	15	S.C	1500
594		=	Al-Kware W.T.P	900	8	S.C	1000
595		=	Al-Kware W.T.P (M.S)	100	200	S.C	1500
596		=	Dabaka W.T.P(M.S)	75	200	S.C	1500
597		=	Tal a fer W.T.P(M.S)	250	200	S.C	1500
598		=	Tal a fer W.T.P(M.S)	150	200	S.C	1500
599		=	Makhmor W.T.P (M.S)	150	200	S.C	1500
600		=	Makhmor W.T.P	100	60	S.C	1500
601		=	Makhmor W.T.P (M.S)	100	125	S.C	1500
602		=	Makhmor W.T.P	200	20	S.C	1500
603		=	Makhmor W.T.P (M.S)	400	160	S.C	1500
604		=	Qadissia Boosting Station	200	35	S.C	1500
605		=	Boosting Station inside mosul	400	50	S.C	1500
606		=	Boosting Station inside mosul	90	60	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
607		=	Boosting Station inside mosul	400	60	S.C	1500
608		=	Boosting Station inside mosul	144	40	S.C	1500
609		=	Boosting Station inside mosul	500	60	S.C	1500
610		=	Boosting Station inside mosul	500	50	S.C	1500
611		=	Boosting Station inside mosul	60	40	S.C	1500
612		=	Boosting Station inside mosul	400	50	S.C	1500
613		=	Boosting Station inside mosul	500	60	S.C	1500
614		=	Boosting Station inside mosul	640	80	S.C	1500
615		=	Boosting Station inside mosul	500	60	S.C	1500
616		=	Boosting Station inside mosul	400	50	S.C	1500
617		=	Boosting Station inside mosul	500	50	S.C	1500
618		Nenewa	Boosting Station inside mosul	250	40	S.C	1500
619		=	Boosting Station inside mosul	20	40	S.C	1500
620		=	Boosting Station inside mosul	144	60	S.C	1500
621		=	Boosting Station inside mosul	200	60	S.C	1500
622		=	Boosting Station inside mosul	600	50	S.C	1500
623		=	Boosting Station inside mosul	250	60	S.C	1500
624		=	Boosting Station inside mosul	300	60	S.C	1500
625		**Anbar**	Ramadi W.T.P	1000	68	S.C	1500
626		=	New Ramadi W.T.P	300	20	S.C	1500
627		=	Al-Fallaja W.T.P	700	80	S.C	1500
628		=	Old Al-Fallaja W.T.P	350	50	S.C	1500
629		=	Al-Namaia W.T.P	250	50	S.C	1500
630		=	Unified Heet -Kabasia w.t.p	350	60	S.C	1500
631		=	Kabasia W.T.P	150	160	S.C	1500
632		=	Unified Heet -Kabasia w.t.p	60	53	S.C	1500

No	Governorate		Project Name	Q	H	Motor	
	Code no.	Name		m3/h	mt.	Type	R P.M
633		=	Unified Heet w.t.p	30	61	S.C	1500
634		=	Unified Heet Village w.t.p	210	51	S.C	1500
635		=	Old Heet w.t.p	250	40	S.C	1500
636		=	Old Heet w.t.p	250	60	S.C	1500
637		=	Yogaslive W.T.P	200	60	S.C	1500
638		=	Al-Frait W.T.P	150	60	S.C	1500
639		=	Al-Karma W.T.P	700	50	S.C	1500
640		=	Al-Karhol Line	320	57	S.C	1500
641		=	Al-Samah line	240	62	S.C	1500
642		=	Al-Karma W.T.P	600	10	S.C	1500
643		=	Al-Karma W.T.P	750	60	S.C	1500
644		=	West –desert W.T.P	700	190	S.C	1500
645		=	West –desert W.T.P	700	171	S.C	1500
646		=	West –desert W.T.P	600	200	S.C	1500
647		=	West –desert W.T.P	600	132	S.C	1500
648		=	West –desert W.T.P	600	250	S.C	1500
649		=	West –desert W.T.P& Al-Qaim	375	70	S.C	1500
650		=	Deferent Sites	1000	70	S.C	1500
651		=	Rawa W.T.P	200	70	S.C	1500
652		=	Rawa W.T.P	180	90	S.C	1500
653		=	Rawa W.T.P	150	70	S.C	1500
654		**Anbar**	Rawa W.T.P	180	80	S.C	1500
655		=	Al-Tharther W.T.P	105	150	S.C	1500
656		=	Al-Tharther W.T.P	50	100	S.C	1500
657		=	Al-Tharther W.T.P	75	100	S.C	1500
658		=	Al-Tharther W.T.P	75	75	S.C	1500
659		=	Al-Eabadey W.T.P	60	20	S.C	1500
660		=	Al-Eabadey W.T.P	100	80	S.C	1500
661		=	Al-Ratiba W.T.P	150	100	S.C	1500
662		=	Al-Habaniya W.T.P	100	55	S.C	1500
663		=	Al-Habaniya W.T.P	72	40	S.C	1500
664		=	Al-Habaniya W.T.P	216	40	S.C	1500
665		=	Anna W.T.P	470	50	S.C	1500
666		=	Al-Ramadiy W.T.P	1050	20	S.C	1500
667		=	Al-Ramadiy W.T.P	350	20	S.C	1500
668		=	Al-Falloja W.T.P	500	40	S.C	1500
669		=	Al-Falloja W.T.P	410	20	S.C	1500

II-B: Horizontal End -suction Pump for compact unit

1- Complete electrical horizontal end -suction pump with motors, starters, spare parts as mentioned below
 - Impeller of Bronze, shaft of stainless steel.

2- Squirrel cage motor, 3 Ph., 400 V, 50 Hz., IP55, Class F insulation coupled to the pump on steel frame.

3- 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.

*(N PSH) of the pump not more than 5 M .

* The efficiency of the pumps should be not less 70 % accept the multistage pumps and

- 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,(3 No.) , (2 No.) push button- all on front of cabinet.

Five) 3 set of wiring diagram

- Spare parts for each pump

One) Impeller

Two) Shaft sleeve

Three) 2 No. sets of coupling rubber and pins .

Four) Set of Ball Bearing (for motor and pump) .(2 set)

No	Q	H	Motor	
	m3/h	mt.	Type	R.P.M
670	60	20	S.C	1500
671	60	50	S.C	1500
672	60	60	S.C	1500
673	250	20	S.C	1500
674	14	35	S.C	3000
675	200	15	S.C	1500
676	200	40	S.C	1500
677	200	60	S.C	1500
678	100	100	S.C	1500
679	50	71	S.C	1500
680	60	70	S.C	1500
681	60	40	S.C	1500
682	250	25	S.C	1500
683	250	60	S.C	1500
684	75	20	S.C	1500
685	75	60	S.C	2900
686	50	20	S.C	1500
687	150	20	S.C	1500
688	140	40	S.C	1500

II-C: *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 exceptcode 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%) .

No	Gov. Name	Project Name	Q (m^3/hr)	H (m)	R.P.M.	Shaft length (m)	Suc.dia. mm	Del. dia. mm
689	Basrah	C Sewage lifting station	1100	30	1450	2.1	300	250
690		Basrah Sewage T.P	180	7.2	720	4.9	150	150
691		Basrah unified w.t.p.*	1025	20	1480	6.2		
692		Sewage station No. 14	900	20	1450	2.3	300	250
693		Sewage station No. 3	250	7	1450	1.75	200	150
694		Sewage station No.6& No.9	A-450	7	1450	2.25	250	200
			B-900	9	1450	2.25	300	250
695		Sewage station No. 16 &17	3000	12	980	2.45	500	500
696		The 25 AQUA CU.*	1025	15	1480	6.2		350
697	Thiqar	Area Sew. Station	500	10	970	5.1	250	200
698	=	Nasseriah main sewage lifting stat.	1700	10	735	6.15	400	350
699	=	Nasseriah main sewage lifting stat.	4000	10	585	4.6	600	550
700	=	Nasseriah Sewa. T.P	250	20	970	7.2	250	200
701	=	Nasseriah Sewa. T.P	1000	10	975	Direct link (Noshaft)	300	250
702	=	Nasseriah Sewa. T.P	500	10	970	direct link (Noshaft)	250	200
703	=		1080	20	900			
704	=		360	20	900			
705	Thiqar		720	20	900			
706	=		540	20	900			
707	=	Sewage station	180	20	900			
708	=	Sewage station	1800	20	900			
709	Najaf	AL-Najaf sew. Project	1746	11.5	980			
710		AL-Najaf sew. Project	90	12	960			
711		AL-Najaf sew. Project	162	12.5	1450	motor direct coupled to the pump		
712		New Water T.P	1630	12	950			
713	AL-Muthana	ALQitar Boosting Station	100	34	2900			
714	Nenewa	AL-Mosul (left bank)* w.t.p.	2200	40	900	13.390	500	500
715	=	AL-Mosul (left bank)* w.t.p.	2200	40	998		500	500
716	=	Dindan W.T.P	450	15				

No	Gov. Name	Project Name	Q (m^3/hr)	H (m)	R.P.M.	Shaft length (m)	Suc.dia. mm	Del. dia. mm
717	=	Left bank W.T.P	1600	10	1450			
718			435	20	1500			
719	Babil	Hilla sew. T.P	180	20	1500	motor direct coupled to the pump		
720	=	Sewage station	4140	16	1500			
721	Qaddisyia	Diwanya Sewage	432	18	1475		10	225
722	=	Qaddisyia Sewage	325	14	970		225	150
723	Salahdeen	Brawjly Borehole	50	132	2900			
724		Brawjly W.T.P	50	40	2900			
725		Brawjly Borehole	50	132	2900			

(*) : mixflow pump

III Ball Bearings

(Excluding all items that may be notifiable under resolution 1051)

No	Gov. name	Ball Bearing no.
726	Nenewa	29324
727	=	6026
728	=	7317
729	=	6317
730	=	6224
731	=	7224
732	=	6226
733	=	7310
734	=	7312
735	=	7313
736	=	6316
737	=	6318
738	=	6319
739	=	6320
740	=	6322
741	=	N4 224 E
742	=	N3 22N
743	=	N 312 E
744	=	N4 322
745	=	N4 317
746	=	N4 318
747	=	N4 319
748	=	6220
749	=	6211
750	=	7214
751	=	6217
752	=	6222
753	=	6314
754	=	6216
755	=	6212
756	=	6306
757	=	6311
758	=	6406
759	=	6308
760	=	6312
761	=	6307
762	=	6309
763	=	6312
764	=	6313
765	=	6411
766	=	6305
767	=	6209

No	Gov. name	Ball Bearing no.
768	=	N4 215
769	nenewa	3312
770	Baghdad	6311
771	=	6308
772	=	6315
773	=	6305
774	=	6306
775	=	6206
776	=	6309
777	=	6310
778	=	6216
779	=	6312
780	=	6414
781	=	6217
782	=	6313
783	=	6205
784	=	6307
785	=	6313 C3
786	=	N 216 - E CP
787	=	6209 C3
788	=	6314
789	=	N 317
790	=	6310 C3
791	Najaf	6311
792	=	6322
793	=	6319
794	=	7314
795	=	6314
796	=	6212
797	=	6306
798	=	6309
799	=	6324
800	=	6317
801	=	6307
802	=	6313
803	=	6316
804	=	6320
805	=	6311
806	=	6315
807	=	313 NU
808	=	315
809	Kerbala	MJ 2 1 /2
810	=	6320
811	=	6414
812	=	6314
813	=	N U 318
814	=	6318
815	=	6307

No	Gov. name	Ball Bearing no.
816	Kerbala	6306
817	=	6206
818	=	6308
819	=	6310
820	=	6307
821	=	6311
822	=	6312
823	=	6411
824	AL-Anbar	6410
825	=	6305
826	=	7311
827	=	314 N S
828	=	R M S 14
829	=	R M S 159 / 16
830	=	1 /4 / 3
831	=	1 /4 /1
832	=	6204
833	=	6304
834	=	6310
835	=	6209
836	=	6321
837	=	6317
838	=	6318
839	=	7321
840	=	6224
841	=	N S 624
842	=	6315
843	=	6312
844	=	6307
845	=	6306
846	=	7310
847	=	3301
848	=	3310
849	=	6000
850	=	6205
851	=	6206
852	=	6308
853	=	6309
854	=	6311
855	=	6300
856	=	6312
857	=	6313
858	=	6406
859	=	216
860	=	212
861	=	309
862	=	7320
863	AL-Anbar	NU 320

No	Gov. name	Ball Bearing no.
864	=	NU 318
865	=	NU 311
866	=	3311
867	Qadissia	6216
868	=	6310
869	=	6314 ZZ
870	=	6216 Z Z
871	=	6312 2 R S
872	=	6211
873	=	N U - 22125
874	=	3211
875	=	6315 / C3
876	=	N U 2305
877	=	56207 NA
878	=	FG 207
879	=	22216 H C
880	=	NU P 309 E N
881	=	63062 Z
882	=	30207
883	=	6308 2 R S
884	=	6317 C 3
885	=	6320 C 3
886	=	6321
887	=	N 321
888	=	6217
889	=	N 217
890	=	6309
891	=	6311
892	=	6316
893	=	6305
894	=	6414
895	=	6313
896	=	N U 316
897	=	N U 314
898	=	NU 2220
899	=	6220 C3
900	=	7316 B
901	=	N U 320
902	=	23026 E S
903	=	29426 E
904	=	31315
905	=	2316 NU
906	=	23230
907	=	22316 C
908	=	24152 C
909	=	24136 C
910	Qadissia	7310 B
911	=	7310 C3

No	Gov. name	Ball Bearing no.
912	=	7312 C3
913	Tameem	6310
914	=	6309
915	=	6308
916	=	6307
917	=	6311
918	=	6305
919	=	6306
920	=	6315
921	=	6322
922	=	6210
923	=	6312
924	Mesaan	6305
925	=	6306
926	=	6308
927	=	6309
928	=	6310
929	=	6311
930	=	6411
931	=	6410
932	=	6314
933	=	6315
934	=	6316
935	=	6317
936	Muthana	6312 C3
937	=	7314
938	=	N 314
939	=	6308 C3
940	=	1- 1 / 4
941	=	N 1 1 / 4
942	=	N U 222
943	=	6217
944	=	6306
945	=	6308
946	=	6312
947	=	6305
948	=	G 204
949	=	6212
950	=	6208
951	=	6206
952	=	6315
953	=	6316
954	=	6317
955	=	7314 B
956	=	314 N
957	Muthana	222 N
958	=	6309
959	=	6310

No	Gov. name	Ball Bearing no.
960	=	6307
961	Basrah	692 Z1
962	=	6407 Z2
963	=	6211 Z2
964	=	6410 Z2
965	=	6314 Z2
966	=	6309 Z2
967	=	6294 Z2
968	=	6313 Z2
969	=	6308 Z2
970	=	6209 Z2
971	=	6305 Z2
972	=	6210 Z2
973	=	6310 Z2
974	=	6306 Z2
975	=	6406 Z1
976	=	6311 Z2
977	=	6312 Z2
978	=	214 N
979	=	6307 Z2
980	=	6315 Z2
981	=	6206 Z2
982	=	6205 Z2
983	=	6202 Z2
984	=	6203 Z3
985	Wasit	6305
986	=	6306
987	=	6307
988	=	6308
989	=	6309
990	=	6310
991	=	6311
992	=	6312
993	=	6313
994	=	6314
995	=	6315
996	=	6316
997	=	6317
998	=	6318
999	=	6319
1000	=	6320
1001	=	6205
1002	=	6206
1003	=	6207
1004	Wasit	6208
1005	=	6209
1006	=	6210
1007	=	6211

No	Gov. name	Ball Bearing no.
1008	=	6212
1009	=	6213
1010	=	6214
1011	=	6215
1012	=	3305
1013	=	3306
1014	=	3307
1015	=	3308
1016	=	3309
1017	=	3310
1018	=	3311
1019	=	3312
1020	=	3313
1021	=	3314
1022	=	3315
1023	=	3316
1024	=	3317
1025	=	3318
1026	=	3319
1027	=	3320
1028	=	7305
1029	=	7306
1030	=	7307
1031	=	7308
1032	=	7309
1033	=	7310
1034	=	7311
1035	=	7312
1036	=	7313
1037	=	7314
1038	Diala	6308
1039	=	6315
1040	=	6309
1041	=	6305
1042	=	6207
1043	=	6209
1044	=	6307
1045	=	6310
1046	=	6312
1047	=	6313
1048	=	6409
1049	=	6306
1050	=	R MS 14
1051	Diala	6216
1052	=	6204
1053	=	6316
1054	=	6206
1055	=	6208

No	Gov. name	Ball Bearing no.
1056	=	633 L Z
1057	=	6410
1058	=	6304
1059	=	R M S 10
1060	=	R M S 12
1061	Salaheldeen	6305
1062	=	6307
1063	=	6308
1064	=	6311
1065	=	6313
1066	=	6315
1067	=	6317
1068	=	6318
1069	=	6319
1070	=	6406
1071	=	6411
1072	=	6312
1073	=	N U 317
1074	=	N U 319
1075	=	NU 322
1076	=	N U 318
1077	=	6205
1078	=	6208
1079	=	6210
1080	=	6212
1081	=	N U 315
1082	=	R M S 10
1083	=	R M S 16 / 15
1084	=	2 R S 6309
1085	=	2 R S 6307
1086	=	2 R S 6306
1087	=	2 R S 6308
1088	=	M J I 3 / 4
1089	=	N U 319
1090	=	N U 219
1091	=	7316
1092	=	N 212
1093	=	N 313
1094	=	6310
1095	=	6309
1096	=	6314
1097	=	6308
1098	Salaheldeen	7309
1099	=	7310
1100	=	7311
1101	=	7312
1102	=	7314
1103	=	N 324

No	Gov. name	Ball Bearing no.
1104	=	6306
1105	=	N U 312
1106	=	6313
1107	=	N U 215
1108	=	N U 216
1109	=	1 3 / 4
1110	=	6317
1111	=	6206
1112	=	R M S 14
1113	=	M Z T 13 / 19
1114	=	6319 NU
1115	=	6318 NU
1116	Thiqar	6004
1117	=	6206
1118	=	6305
1119	=	6306
1120	=	6307
1121	=	6308
1122	=	6309
1123	=	6310
1124	=	6311
1125	=	6312
1126	=	6313
1127	=	6314
1128	=	6315
1129	=	6316
1130	=	6317
1131	=	6207
1132	=	6208
1133	=	6209
1134	=	6210
1135	=	6215
1136	=	6217
1137	=	6406
1138	=	6405
1139	=	3318
1140	=	2211
1141	=	22320
1142	=	N U 320 / C3
1143	=	N U 318
1144	=	3216
1145	Thiqar	3313
1146	=	220
1147	=	N U 218
1148	=	217
1149	=	7317
1150	=	216
1151	=	23026

No	Gov. name	Ball Bearing no.
1152	=	32318
1153	=	2317
1154	=	7411
1155	=	6416
1156	=	7320
1157	=	2209
1158	=	7409
1159	=	N 319
1160	=	6319
1161	=	N 207
1162	=	N 205
1163	=	6318
1164	=	6324
1165	=	2307
1166	=	6328
1167	=	3211
1168	=	6211
1169	=	6212
1170	=	5305
1171	=	6034
1172	=	1305
1173	=	3406

IV: ELECTRICAL MATERIALS

(Excluding all items that may be notifiable under resolution 1051)

IV-A GWSA

STARTERS

Starters as follows (Rating in Amper) with type indicated

No	Starters Type	Rating (A)
1174	S-D	500
1175	S-D	400
1176	S-D	350
1177	S-D	320
1178	S-D	300
1179	S-D	250
1180	S-D	220
1181	S-D	200
1182	S-D	180
1183	S-D	160
1184	S-D	140
1185	S-D	120
1186	S-D	110
1187	S-D	100
1188	S-D	90
1189	S-D	80
1190	S-D	75
1191	S-D	60
1192	S-D	50
1193	S-D	45
1194	S-D	30
1195	S-D	22
1196	S-D	15
1197	S-D	11
1198	DOL	8
1199	DOL	6
1200	S-R (5 STAGE) WITH IMPEDANCE	1100
1201	S-R (5 STAGE) WITH IMPEDANCE	1300
1202	S-D	1000

Electric Motors

No	Governorate		Project Name	KW	r.p.m	Type
		Name				
1203		Wasit	1/ 4 million gallon C.U	30	1500	S.C
1204		Muothana	Rumaitha W.T.P	5.5	1500	V.S.C
1205		=	Rumaitha W.T.P *	0.15	1180	S.C
1206		Basrah	Karma C.U (1)	0.55	2900	V.S.C
1207		=	R.O / W.P.S	160	1500	S.C
1208		=	Karma C.U (2)	0.37	2900	V.S.C
1209		=	Kore -Al-Zber W.T.P	18.5	2930	S.C
1210		=	Kore -Al-Zber W.T.P	4	1500	V.S.C
1211		=	Kore -Al-Zber W.T.P	0.55	1500	V.S.C
1212		=	Kore -Al-Zber W.T.P	1.1	1500	V.S.C
1213		=	Al-Mudina W.T.P	45	1500	S.C
1214		=	Compact Unite	55	1500	S.C
1215		=	R.O / W.P.S	315	1500	S.C
1216		=	R.O / W.P.S	220	1500	S.C
1217		=	AQUA C.U.	7.5	1500	S.C
1218		=	(25) million Project	18.5	1500	S.C
1219		Missan	Unified W.T.P	120	1500	S.C
1220		=	Unified W.T.P	90	1500	S.C
1221		=	1/ 4 million gallon C.U	18.5	1500	S.C
1222		=	1/ 4 million gallon C.U	45	1500	S.C
1223		=	Unified Project	37.5	1000	S.C
1224		=	Al-Rafidan W.T.P	37.5	1500	S.C
1225		=	Raw Water B.S	150	750	S.C
1226		Diala	Baquba W.T.P	185	1500	S.C
1227		=	Baquba W.T.P	110	1500	S.C
1228		=	Baquba W.T.P	90	1500	S.C
1229		=	Baquba W.T.P	75	1500	S.C
1230		=	Baquba W.T.P	55	1500	S.C
1231		=	Baquba W.T.P	37	1500	S.C
1232		=	Baquba W.T.P	15	1000	S.C
1233		=	Kanaan W.T.P	30	1000	S.C
1234		=	Kanaan W.T.P	7.5	1400	S.C
1235		=	Baldroz	6	1000	S.C
1236		=	Al-Khalis *	1.5	1500	S.C
1237		=	Baldroz	3	1000	V.S.C
1238		=	Al-Saadiya W.T.P *	3.5	1000	S.C
1239		=	Kan Beni - Saad *	2	1000	S.C
1240		=	Kan Beni - Saad *	4	1000	V.S.C
1241		=	Kan Beni - Saad *	5	1000	V.S.C
1242		=	Jalawla W.T.P	1	1500	S.C
1243		=	Jalawla W.T.P	59	1500	S.C
1244		Nenewa	Motor for electric Valve	0.34	1350	S.C
1245		Nenewa	Motor for electric Valve	0.55	900	S.C
1246		=	Motor for electric Valve	0.27	900	S.C

No	Governorate		Project Name	KW	r.p.m	Type
		Name				
1247		=	Motor for electric Valve	0.13	1400	S.C
1248		=	Motor for electric Valve	0.18	1400	S.C
1249		=	Mousal Right Bank W.T.P *	510	1500	S.C
1250		=		510	1500	S.C
1251		=		250	1500	S.C
1252		=		200	1500	S.C
1253		=		185	1500	S.C
1254		=		160	1500	S.C
1255		=		120	1500	S.C
1256		=		100	1500	S.C
1257		=		75	1500	S.C
1258		=		50	1500	S.C
1259		=		37.5	1500	S.C
1260		=		25	1500	S.C
1261		=		18.5	1500	S.C
1262		=		12.5	1500	S.C
1263		=		7.5	1500	S.C
1264		Tameem	Bor -holles (submersible)	15	3000	V.S.C
1265		=	Bor -holles (submersible)	22	3000	V.S.C
1266		Salahelden	Bafaq C.U *	3	3000	S.C
1267		=	Al-Shirqad W.T.P	75	1500	S.C
1268		=	Al-Shirqad W.T.P	37.5	1500	S.C
1269		=	Al-Shirqad W.T.P	18.5	1500	S.C
1270		=	Old Al-Shirqad W.T.P	15	1500	S.C
1271		=	Old Al-Shirqad W.T.P	11	1500	S.C
1272		=	Old Al-Shirqad W.T.P	7.5	1500	S.C
1273		=	Talol Al-Baaj	160	3000	S.C
1274		=	Al-Jarnaf C.U.	60	1500	S.C
1275		=	Al-Shirqad No. (2)	22	1500	S.C
1276		=	Baaja C.U.	18.5	1500	S.C
1277		=	Al-Shirqad No. (2)	15	1500	S.C
1278		=	Bafaq C.U. in Al-Dor *	3	3000	S.C
1279		Baghdad	Al-Rashedya w.t.p for scraper *	1.5	1500	S.C
1280		Najaf	Sewage Project	5.5	1500	V.S.C
1281		=	Sewage Project	7.5	1500	V.S.C
1282		Qadissia	Diwanyah W.T.P	90	1500	S.C
1283		=	Diwanyah W.T.P	250	1500	S.C
1284		=	Diwanyah W.T.P	75	1500	S.C
1285		=	1/ 4 million gallon C.U	18.5	3000	S.C
1286		Qadissia	Diwanyah W.T.P	5.5	1500	S.C
1287		=	Diwanyah W.T.P	11	1500	S.C
1288		=	Diwanyah W.T.P	2.2	1000	V.S.C
1289		=	Sewage Project	45	1500	V.S.C
1290		Qadissia	Sewage Project	1.1	1500	V.S.C
1291		=	Diwanyah B.S	7.5	1500	S.C
1292		=	Diwanyah W.T.P	45	1500	V.S.C

No	Governorate		Project Name	KW	r.p.m	Type
		Name				
1293		Anbar	west desert (B4)	670	1500	S.R
1294		=	west desert (all pump station)	540	1500	S.R
1295		=	west desert (A1)	450	1500	V.S.C
1296		=	west desert (T.P)	100	1500	S.C
1297		=	west desert (T.P) / P.S	11	1500	S.C
1298		=	west desert (B6)	380	1500	S.C
1299		=	west desert (T.P)	7.5	3000	S.C
1300		=	west desert (B)	160	1500	S.C

* *THE MOTOR MUST BE WITH FLANGE .*

Wire Winding For Electrical Motors

No	Standard	size
1301	32	0.28
1302	31	0.29
1303	30	0.31
1304	29	0.35
1305	28	0.38
1306	27	0.43
1307	26	0.47
1308	25.5	0.48
1309	25	0.5
1310	24.5	0.54
1311	24	0.56
1312	23	0.61
1313	22	0.71
1314	21.5	0.75
1315	21	0.81
1316	20	0.9
1317	19.5	0.95
1318	19	1
1319	18.5	1.12
1320	18	1.20
1321	17.5	1.3
1322	17	1.4

Circuit breaker

- Air circuit breaker moulded case 380v , 50H7 , 3phase 3pole with thermal over load, magnetic short circuit protection breaker from 1600 A will be motorized type.
- Circuit breaker from 1600 A will be motorized type .
- Mininture Circuit breaker from (25)A and below.
- Breaking capacity as follows :
  a- Circuit breaker rating 1000 A and above (100)KA.
  b- Circuit breaker below 1000 A to (300 A) 50 KA .
  c- Circuit breaker below 300 A will be 30 KA.

No	Rabing(A)
1323	10
1324	16
1325	20
1326	25
1327	32
1328	40
1329	63
1330	80
1331	100
1332	150
1333	160
1334	200
1335	250
1336	300
1337	400
1338	500
1339	800
1340	1000
1341	1250
1342	1600
1343	2000
1344	2500
1345	3200
1346	4000
1347	5000

Contactors

No	Rating	Voltage of coil
	(A)	(V)
1348	400	SF6 (3.3kv)
1349	700	380
1350	600	380
1351	450	380
1352	400	380
1353	330	380
1354	300	380
1355	210	380
1356	180	380
1357	150	380
1358	120	380
1359	100	380
1360	80	380
1361	63	380
1362	45	380
1363	20	380
1364	16	380
1365	630	220
1366	500	220
1367	450	220
1368	400	220
1369	350	220
1370	300	220
1371	280	220
1372	250	220
1373	225	220
1374	200	220
1375	180	220
1376	160	220
1377	150	220
1378	125	220
1379	100	220
1380	80	220
1381	63	220
1382	50	220
1383	40	220
1384	30	220
1385	25	220
1386	20	220
1387	16	220
1388	10	220

IV-B ELECTRICAL SUPPLIES (BWSA)

MEASUREMENT EQUIPMENT	
1389	DIGITAL MULTIMETER FOR ELECTRICAL MEASUREMENTS - APPROVED TO ISO 9002 - IMPACT RESISTANT WITH SUITABLE CAX - OVER LOAD PROTECTION AND RUSED ON ALL RANGES - MEASUREMENT RANGE : DC VOLTAGE 400mv – 1000 v AC VOLTAGE 400mv - 750 v DC CURRENT 4mA - 10A AC CURRENT 4mA - 10A RESISTANCE 400 Ω - 40 M Ω CAPACITANCE 4nf=1uf BATTERY : 1.5 V DC
1390	DIGITAL CLIP - ON AMMETER - MEASURES LARGE CURRENT INTENSIMES : 0-200-200A,AC,DC AC VOLTAGE 0 - 750 v DC VOLTAGE 0-200V RESISTANCE 0 - 2000 Ω BATTERY : 9 V DC
1391	INSULATION TESTER TEST VOLTAGE : 250V → 0-200 MOHM 500V → 0-200 MOHM 1000V → 0-2000 MOHM WITH SUITABLE BAG $LEADS
1392	HAND TACHOMETERS FOR BOTH CLOCKWISE $ ANTI CLOCK WISE ROTATION - ACCURACY ± 0.1 R/MIN - DIGITAL DISPLAY (4 DIGITS) - MEASURING RANGE R/MIN : 5-19999 M/MIN : 0.05 - 19999.9
1393	INDUSTRIAL THERMOMETER (INFRARED TYPE) - MEASURING RANG : 50 - + 150 C° - RESOLIETEAM : 0.1 - ACCURACY ± 1 - BATTERY : 9V DC
1394	TOOL KIT FOR ELECTRICIANS - WIRE STRIPPER , STRIPPING KNIFE. FOR CABLES , SCREWDRIVERS SET (BOTH STRAIGHT SLOT $ PHILLIPS HEAD) , SIDE CUTTERS , WATER PUMP PLIERS , COMBINATION PLIERS , ROUND NOSE PHERS ALL IN SUITABLE TOOL BOX

1395	TOOL KIT FOR MECHANICAL WORK - HEXAGON SOCKET SET , TOINTED SOCKER SPANNER SET PHILLIPS SCREW DRIVER SET , SLOT HEAD SCREW DRIVER SET, FLAT CHISEL , HAMMER , LONG NOSED PLIERS , COMBINATION PLIERS , UNIVERSAL PLIERS , PIPE WRENCH , CASSELTE WITH 19 HIGH SPEED DRILLS IN STEP OF 0.5 mm SAW , RING SPANNER SET , ALLEN KEY SET ALL IN SUITABLE TOOL BOX.

1396	ALL BEARING EXTRACTOR MANUAL TYPE WITH THREE SIZES ADJUSTABLE TYPE
1397	ALL BEARING EXTRACTOR HYDRAULIC TYPE WITH ALL ACCESSORIES

1398	DIGITAL CLAMP AMMETER FOR MEASURING CURRENT
1399	VOLTAGE PROBE ; AC & D.C VOLTAGES
1400	COMPLETE SET OF SPANNERS 8 MM TO 36MM
1401	COMPLETE SET OF RING SPANNERS 8MM TO 36 MM
1402	DIGITAL AVO 20 AMPS, 1000 VAC ,500VDC
1403	MEGGER 1000V
1404	COMPLETE SET SCREW DRIVERS
1405	HYDRAULIC BALL BEARING PULLER
1406	PIPE WRENCH 8,12,18,24,36,48 INCH

1407	CONTACTOR EH 100 55 KW 200 A 3POLE 415 V COIL 380-400 V 50 HZ
1408	CONTACTOR EH 90 55 KW 380-415 V COIL 380-400 V 50 HZ
1409	CONTACTOR EH 300 250 KW 380- 415 V COIL 380-400 V 50 HZ
1410	CONTACTOR EH 210 160 KW 380- 415 V COIL 380-400 V 50 HZ
1411	CONTACTOR EH 175 380- 415 V COIL 380-400 V 50 HZ
1412	FUSE CYL. EI 33 500V 10 A 3-PHASE 10X38
1413	SEQUNCE RELAY EWS 8A 250V 3-PHASE
1414	YD RELAY Y 9A US 100-415V AC1 230 6A 400V 3.8A
1415	CURRENT TRANSFORMER TA 30 A 200/5
1416	CURRENT TRANSFORMER TA 30 A 500/5
1417	CURRENT TRANSFORMER A 300/5
1418	AMMETER 300/5 A
1419	AMMETER 200/5 A RANGE (0-600A)

1420	OVER LOAD T135 DU RANG (80-110)A
1421	OVER LOAD T450 DU RANG (220-310)A
1422	OVER LOAD T200 DU RANG (150-200)A
1423	POWER SWITCH 500A IEC 947
1424	POWER SWITCH 250A T200 K 11 IEC 947-3 SK616
1425	POWER SWITCH 315A IT315 K 111
1426	PUSH BOTTON GREEN SK 616 00-B ITH : 10A
1427	PUSH BOTTON SK 616 003-A 230 V MAX 2W

1428	CONTACTOR TYPE OKYM 5W22 STROMBERG ITH 400 A 415V
1429	CONTACTOR TYPE ASEA 800 A
1430	CONTACTOR TYPE ASEA 300 A
1431	CONTACTOR TYPE ASEA 200 A

1432	PLUMMER BLOCK SKF. SN 216+1216
1433	PLUMMER BLOCK SKF. SN 213+1213
1434	SPHERICAL ROLLER BEARING 6322
1435	BEARING 6310
1436	BEARING 6307
1437	BEARING 6207
1438	BEARING 6315
1439	BEARING 7318
1440	BEARING 22216
1441	BEARING 1209
1442	NAC 205
1443	BALL BEARING SKF 6307/C3
1444	MOTOR BEARINGS SKF 6310/C3
1445	BEARING 6214
1446	BEARING FOR MOTOR 6322C3
1447	BEARING FOR MOTOR 6313 C3 , 6312C3
1448	BALL BEARING FOR MOTOR NO. 6317 C3
1449	BALL BEARING FOR MOTOR NO. 6320 C3
1450	THRNST BEARRING 6309 (SKF)
1451	LINE BEARING 6211 (SKF)

	LOW VOLTAGE (400 VAC, 3PH, 50HZ) **AUTOMATIC OPERATION , (USING CONTECTORS OR CIRCUIT BREAKERS)** **SUTABLE FOR STAND BY GENERATORS** **MECHANICAL AND ELECTRICAL INTEROCKS TO PROVIDE SAFE** **OPERATION EITHER FROM MAIN OR GENERATOR** **INCLUSED IN SUTABLE BOARD TO BE WALL MOUNTED** **LUMP INDICATORS FOR VOLTAGE SOURS**
1452	400A
1453	630A
1454	1250A
1455	800A

V AIR COMPRESSORS

(Excluding all items that may be notifiable under resolution 1051)

Compressors with jack –Hammer

No	Description
1456	Air Compressor With spare parts 360 ft/min
1457	Ditto but 250 ft/min .
1458	Ditto but 175 ft/min .
1459	Ditto but pressure (12 - 14) bar

1460	**AIR COMPRESSORS**
7 BAR **T.M : 1250** **MAX SPEED : 1000 R.P.M** **Q :81 M3/H**	

Air Blowers

No	Capacity (m^3/h)	Head (m)
1461	1600	10
1462	800	10
1463	600	10
1464	300	10
1465	400	10
1466	250	10
1467	200	10
1468	100	10

Thermal Over Load

No	Rating (A)
1469	(480 - 510)
1470	(440-460)
1471	(240- 260)
1472	(190 - 220)
1473	(170- 200)
1474	(150-175)
1475	(140-160)
1476	(130- 150)
1477	(110-130)
1478	(105-125)
1479	(90 -110)
1480	(75- 105)
1481	(65- 80)
1482	(50- 70)
1483	(45 -57)
1484	(40 -80)
1485	(30 -50)
1486	(25 -35)
1487	(24 - 40)
1488	(20 - 60)
1489	(18 - 25)
1490	(15 -20)
1491	(9- 12)

No	Rating (A)
1492	(3 - 6)
1493	(0.5 - 1.5)
1494	(0.4-1)

VI: SEWAGE SYSTEM EQUIPMENT AND PARTS

(Excluding all items that may be notifiable under resolution 1051)

SPARE PARTS FOR SEWAGE TREATMENT PLANTS	
1495	**Gear box : size MHT 2** **Rating 1.5 kw** **output 71.3 rpm** **ratio 20.34:1**
1496	**Gear box : size MHT 3** **Rating 1.5 kw** **output 46 rpm** **ratio 31.48:1**
1497	**TRANSFOR MERS (INDUSTRIAL TYPE) INDOOR**
1498	**3M.V.A , 11KV- 3.46KV**
1499	**600 K.V.A, 3.3 KV – 400V**
1500	**100 K.V.A , 3.3 KV – 400V**
1501	**2 M.V.A , 11KV –400 V**
1502	**750 K.V.A, 3.3KV –400V**
1503	**1M .V.A, 11KV –400 V**
1504	**250 K.V.A, 3.3 KV – 400V**
1505	**500 K.V.A ,3.3 KV –400 V**
1506	**1 M.V.A, 3.3KV – 400 V**
1507	**ELECTRICAL MOTORS**
1508	**Sequirral cage induction motor: 7.5 kw, 380v ,17.6 A, 975 RPM ,V1 , delta connection class F IP 55**
1509	**Sequirrel cage .: 15 kw, 380v ,31 A, 1440 RPM ,V1 , delta connection class F IP 55**
1510	**Slip ring : 105 HP ,3.3kv ,585 rpm, Ip 23,v1 ,Vrot = 400 Irat =119A class F**
1511	**Slip ring :,3.3kv 220kw,422 rpm, Ip 23, ,Vrat 500 Irat =252A class F-**
1512	**Slip ring : 160 kw ,3.3kv ,492 rpm,V1 , class F-**

1513	**Slip ring : 400v,297 kw , ,585 rpm,V1 , (F1) class F- Ip 23**
1514	**Slip ring : 160 kw ,3.3kv ,720 rpm,V1 , class F- Ip 23**
1515	**Slip ring: 90 kw ,3.3kv ,720 rpm,V1 , class F- Ip 23**

1516	**GRAPHITE BRUSHES :** **Copper –graphite brushes with flexible wire coated by anti corrosive metal : 60*40*30 mm**
1517	**AIR blowers roots type** **Capacity :1000m3/HR** **Power :30 kw** **Pressure:600 MBAR** **Speed : 1610** **AIR blowers roots type** **Capacity :1000m3/HR** **Power :30 kw** **Pressure:600 MBAR** **Speed : 1610** **Equipped with electric motor squirrel cage** **Power rate :30 kw** **1500 RPM** **Ip55 class f 380 v 50 HZ**
1518	**AIR blowers roots type** **Capacity :4200m3/HR** **Power :110 kw** **Pressure:600 MBAR** **Speed : 1155** **Equipped with electric motor squirrel cage** **Power rate :110 kw** **1500 RPM** **Ip55 class f 380 v 50 HZ**
1519	**Wineflex coupling flexacier** **Length of seg . 155.9 mm** **Thicknass 4.06 mm** **Width.91.3mm** **Pitch no 1.48**

EQUIPMENT FOR SEWAGE NETWORK REPAIRS

1520	**Trench Boxes for reliable shoring , depth of excavation up to 6.0 m, width up to 4.5m , pipe sizes up to 1000mm**

Pipe stoppers for pipe diameters:	
1521	**315 mm**
1522	**400 mm**
1523	**500 mm**
1524	**600 mm**
1525	**700 mm**
1526	**800 mm**
1527	**900 mm**
1528	**1000 mm**

VII: SPARE PARTS FOR MOSUL WATER TREATMENT PLANTS

(Excluding all items that may be notifiable under resolution 1051)

Spare part for Mosul (left side) w.t.p.

No	Item Description
1529	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
1530	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
1531	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
1532	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
1533	Bearing centre sleeve, part No.(54.00).Dimension (TM80).Material (C45N)
1534	Bearing bush. part (54.50). Dimension (109/127x100). Material (Silicon-Carbid)
1535	Deflector. Part NO. (50.10). Dimension (00/146x16). Material (ULTRAMID)
1536	Impiller. Part NO. (23.00). Dimension (LA667x77). Material (1.4408)
1537	Shaft screw. Part NO.(90.42). Dimension (M10x20). Material (A4-70)
1538	Shaft sleeve. Part NO. (52.30). Dimension (91/109x100). Material (Silicon -Carbid)
1539	Shaft sleeve. Part NO. (52.40). Dimension (A86/95x170). Material (1.4021.05)

VIII VEHICLE SPARE PARTS (Excluding all items that may be notifiable under resolution 1051) **VIII–A: Spare part for (Volvo , Cater pillar, Foun, Hino, Kawsaky) Cars & Equipment spare part of caterpillar equipment**

No	Item.	p.No.	Des.
1540	1-	5D 9553	Cutting Edge
	2-	IU 3301	Cutting tip
	3-	2P 8889	CyI. Liner
	4-	IW 6757	Ring set.
	5-	6V 2209	gasket Kit
	6-	6N 7005	Nozzle
	7-	2W 6091	Ring set.
	8-	8N 6000	cylinder nead
	9-	1N 4304	cylinder nead
	10-	1N1301	cylinder nead
	11-	8N 1188	cylinder nead
	12-	4N 6116	Fule pump
	13-	6N 7527	plunger bushing
	14-	4N 6860	cartridge
	15-	8N 1831	Nozzle
	16-	8N 5510	Turbocharge
	17-	8J 0448	Fuel inj. pump
	18-	4N 6859	Turbo charge
	19-	7N 2834	Kit
	20-	6N 9653	Oil cooler
	21-	2S 8959	Seal
	22-	8A 2252	Piston
	23-	4N 6258	Bearing
	24-	8S 7762	Ring set
	25-	4V 7062	Disk
	26-	8J 498	Pump
	27-	4V 5415	Kit
	28-	3T 3421	Stator
	29-	6N 9915	Valve
	30-	6N 9916	Valve
	31-	1W 3058	Water pump
	32-	1W 6756	Air compressor
	33-	6H 2577	Universal Joint
	34-	7N 128	Oil cooler
	35-	7N 165	Oil cooler
	36-	2P 0661	Water pump
	37-	9S 8914	Kit
	38-	5S 7232	Valv
	39-	5S 6452	Valv

VIII-B: Spare Part Of Volvo Cars

No	Item.	p.No.	Des.
1541	1-	275099 or 275036	Cyl. Liner Kit
	2-	275551	Gasket Kit
	3-	276122 or 275531	Gasket
	4-	275304	Piston ring Kit
	5-	467517	Oil pump
	6-	276155 or 275570	Oil pump Kit
	7-	270100	Big end bearing Kit
	8-	270439	Main bearing Kit
	9-	270101	Big end bearing Kit
	10-	270440	Main bearing Kit
	11-	1699789-467915	Water pump
	12-	276802-275615	Water pump Kit
	13-	423125	Pulley
	14-	467466	Fule inj. pump
	15-	243083	Feed pump
	16-	240808	pump unit
	17-	240423	Delivery valver
	18-	243742	Delivery valver
	19-	3826073-70703	Hand pump
	20-	238896	Nozzle
	21-	467309	Turbo charge
	22-	465930-240340	Start motor
	23-	240488	Solenoid switch
	24-	240493-1578140	Starter solenide
	25-	1624089	Alternator
	26-	1610144	Spring pin
	27-	244343	Diode plate
	28-	1625880-244426	Carbon brush Kit
	29-	1698433-244340	Rotor
	30-	1527474-267143	Clutch
	31-	267236-1668372	Clutch
	32-	1668373-1526047	Drive plate
	33-	1527693-267156	Rel. bearing
	34-	1669488-1581209	Master cylinder
	35-	273660	Repair Kit
	36-	1673067	Clutch serne
	37-	966458	Nipple
	38-	271194-273447	Repair Kit
	39-	232367	Centre bearing

No	Item.	p.No.	Des.
	40-	1587787	Hydraulic pump
	41-	1695596	Plate
	42-	1695592	Shaft
	43-	1695594	Rotor Kit
	44-	3090417-1695595	Rotor Kit
	45-	150221	Hub
	46-	1588406	Screw
	47-	362166	Nut
	48-	8151816-1584340	Roller bearing
	49-	8151820-184088	Roller bearing
	50-	1089552-1587792	Seal ring
	51-	1608293-1581604	Screw
	52-	8153600-1504951	Relay

VIII–C: Spare Part for Fouen Cars

No	Item.	p.No.	Description.
1542	1-	0601-248(090)	Radiator
	2-	1614-532	Way Valve
	3-	3298-785	Hydrwlic engine
	4-	5122-080	Roller brush
	5-	5122-074	Disk brush
	6-	001431-4106	Prusser regulator
	7-	385410-0231	Universal joint gross
	8-	3402500215	Relese regulator
	9-	0012503803	clutch disc
	10-	3520303702	crank shaft
	11-	3524700092	Filtter element
	12-	0031510501	starting motor
	13-	0061542402	Alternator
	14-	1701-054	Starter
	15-	1702-117(102)	Generator
	16-	0039975492	V. belt
	17-	0048-244	V. belt
	18-	010074-6201	Ingection pump
	19-	1710-074(246)	Light
	20-	0000178621	Nozzle holder
	21-	0000173912	Nozzle
	22-	7845-225	Plunger nozzle
	23-	7845-480(171)	Exhaust pipe
	24-	1716-019	Switch
	25-	1616-126	Nose line
	26-	0000900050	Fuel feed pump
	27-	0000900250	Fuel pump
	28-		Bush pistom ring for engine
	29-		Bush pistom ring for rear engine

VIII-D: Spare Part Of Hino Cars KB 422

No	Item.	p.No.	Des.
1543	1-	11110-1292	Clyinder head
	2-	13216-1230	Piston
	3-	11467-1180	Liner
	4-	04010-0160	Gasket
	5-	16100-1161	Pump
	6-	27020-1380	Alternator
	7-	28100-1400	Startor
	8-	13011-1630	Ring Set
	9-	13201-1280	Bearing
	10-	13201-1300	Bearing
	11-	13011-1330-1340	Ring
	12-	11701-1161	Bearing
	13-	11704-1161	Bearing
	14-	11703-1161	Bearing
	15-	1111202000	Vacum pump
	16-	32210-1113	Boo star
	17-	32200-1011	Repair Kit
	18-	3140-1060	Cylinder
	19-	27700-1100	Regulator
	20-	29100-1032	compressor
	21-	22000-1011	Ing. Pump
	22-	60617-2300	Nozzle
	23-	22104-1050	Element
	24-	9828-01168	Oil seal
	25-	22509-1060	pump
	26-	11011-1171	Washer
	27-	29191-1080	Piston Ring
	28-	29106-1070	Piston Ring
	29-	29101-1020	Valv ass
	30-	29110-1040	cylinder
	31-	29185-1040	Bearing
	32-	29173-1010	Bearing
	33-	9828-25110	Oil Seal
	34-	27330-1310	Rotor
	35-	27410-1350	Stator as.
	36-	990-063042	Bearing
	37-	990-062032	Bearing
	38-	28150-1320	Switch
	39-	28160-1210	Armature

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

VIII-E: Spare Part Of Kawsaky 70 , 80

No	Item.	p.No.	Des.
1544	1-	YZ 1136102190	Water pump
	2-	YZ 1811000451	stator
	3-	YZ 1812001780	Alter nator
	4-	YZ 9822500720	Cutt out
	5-	YZ 9812009513	Feed pump
	6-	YZ 41201210	Kit
	7-	L010	Kit
	8-	YZ 1878181649	Oil cooler
	9-	YZ 1217000841	Fan
	10-	YZ 210609201	Kit
	11-	822522	Pump
	12-	YK1161071100	Pump
	13-	YK 1189022105	Valve
	14-	YZ 1125510030	Valve
	15-	YZ 1125520030	Air compressor
	16-	YZ 1191000621	Lever
	17-	05C0151L000	Control
	18-	05D0191L001	Cylinder
	19-	53C0441L100	Cylinder
	20-	53C0451L100	Valve
	21-	YTU38	Transmisson
	22-	RIF277T	Torque
	23-	YKY88271X YKY7071X YRS 4078100000A	Radiator

VIII-F: Spare Part for Scaina Model 1981

No	No.	Description	lorry part. No (DS)	ciesspit part No. (SN)	Qty
1545	1	Turbo charger	252320		
	2	Cylinder block	295214	295214	10
	3	Cylinder liner	273759	235828	30
	4	In take valve	324573	324573	60
	5	Exhaust valve	232018	232018	60
	6	Set intake valve	289517	289517	60
	7	Set exhaust valve	289518	289518	60
	8	set of piston	307079	307081	20
	9	set of piston ring	550170	550170	30
	10	connecting rod	318062	318062	15
	11	Bushing	170094	170094	120
	12	set of bearing shell	279620	279620	30
			279621	279621	30
			279622	279622	30
			279623	279623	30
			279624	279624	30
			279625	279625	30
			279626	279626	30
	13	Crank shaft	279580	279580	20
	14	Fly wheel	306991	306991	15
	15	Vibration damper	131296	131296	15
	16	Cam shaft	238401	228830	50
	17	Set of cam shaft bearing	157274	157274	60
	18	Set of cam shaft bearing	131115	131115	60
	19	Set of cam shaft bearing	131455	131455	60
	20	Set of push rod	271676	271676	30
	21	Oil pump	301473	301473	50
	22	Ball bearing for oil pump	152897	152897	50
	23	Lubrication oil cleaner	300162	300162	25
	24	Oil cooler	266794	266794	50
	25	Set of bearing shall	274610	274610	50
			274611	274611	50
			274612	274612	50

No	No.	Description	lorry part. No (DS)	ciesspit part No. (SN)	Qty
			274613	274613	50
			274614	274614	50
			274615	274615	50
			274616	274616	50
	26	Radiator	310080	310080	20
	27	Rep-kit for injection pump	550137	550137	60
	28	Rep-kit for centrifugal gover	559138	559138	60
	29	Rep-kit for feed pump	550140	550140	60
	30	Rep-kit for primiry filter	550300	550300	30
	31	Rep-kit for clutch servo	550432	550432	50
	32	Water pump	292761	292761	70
	33	Ball bearing lnner	228836	228836	50
	34	Ball bearing outer	258267	258267	20
	35	Fan	232169	232169	50
	36	Feed pump	211005	192847	100
	37	Set of nozzle	232149	232144	30
	38	Fuel cleaner	303797	303797	60
	39	Disc	304398	304398	60
	40	Lining set	550432	550432	15
	41	Gear pump	194838	194838	50
	42	Ball bearing clutch	550421	550421	50
	43	Clutch servo	298953	298953	50
	44	Set rep-kit for hydraulic cylinder	292962	292962	20
	45	Set rep-kit for clutch	550421	550421	150
	46	Gear box	314748	314748	50
	47	Three way valve	317340	317340	150
	48	Magnetic vavle	303470	303470	10
	49	Cross joint	294380	294380	50
	50	Central gear	304243	304207	50
	51	Central gear	322576	317387	50
	52	Pump with motor	309776	309776	50
	53	Spring brake champer	295387	295390	50
	54	Stator motor	163394	163394	50
	55	Rotor	305154	305154	50
	56	Ball bearing	305156	305156	100

No	No.	Description	lorry part. No (DS)	ciesspit part No. (SN)	Qty
	57	Stator	308508	308508	50
	58	Alternator	305152	305152	50
	59	Diod	305158	305158	50
	60	Main shaft	317960	317960	30
	61	Driving shaft	297903	297903	15
	62	Brush plate	308507	308507	150
	63	Insulation	193511	193511	150
	64	Stator relay	192976	192976	150
	65	Stub axles	131430	131430	20
	66	Oil pressure valve	259100	259100	20
	67	Power steering gear	319975	319975	20
	68	Oil pressure manimeter	275750	275750	20
	69	Injection pump	279077	302133	50
	70	Alternator	279698	279698	50
	71	Ball bearing	168248	168248	50
	72	Hub damper	277611	305742	15
	73	Ball bearing clutch	14831	14831	60
	74	Inter prop shaft	317505	317505	15
	75	Set of complete parts of chassis			50

IX VEHICLES

(Excluding all items that may be notifiable under resolution 1051)

Garbage Containers Hook Loader trucks & carbage container

No	Description
1546	Garbage Containers Hook Loader trucks
1547	Garbage containers

Cesspool empiter tanker

No	Description
1548	Cesspool empiter tanker

CESSPOOL EMPTIER	
1549	**CHASSIS CAB : 4 X 2** **ENGINE: 6 CYLINDER, 4 STROKE. TURBOCHARGER** **POWER: NOT LESS THAN 240 HP.** **CLUTCH : SINGLE PLATE** **GEAR BOX : 8 SPEED** **G. V. W : NOT LESS THAN 19 TON** **PAYLOAD : NOT LESS THAN 12 TON** **TIER SIZE : 1200 X 20 DISK TYPE** **TANK CAPACITY : NOT LESS THAN 10000 L** **FLOW RATE :600 m^3 /h**

HIGH PRESSURE CESSPOOL EMPTIER

1550	**CHASSIS CAB: 8X4** **ENGINE: DIESEL , WATER COOLED , 6 CYLINDER IN LINE** **ENGINE TURBOCHARGED AND ENTER COOLED , DIRECT FUEL INJUNCTION TROPICAL FAN, FUEL FILTER , SINGLE BOX TYPE** **POWER: NOT LESS THAN 288 HP.** **CLUTCH: SINGLE PLATE DRY CLUTCH F&S , TYPE MFZ„ 430 HYDRAULICALLY OPERATED , AIR ASSISTED . ASBESTOS – FREE LININGS** **GEAR BOX : ZF 18S 151 SYNCHROMESH GEAR BOX 16 POWER WARD SPEEDS , 2 REVERSE , STICK SHIFT.** **MAX VACUUM : 800 MBAR** **MAX AIR VOLUME : UNLOADED RPM** **1500 RPM 5900 CBM/TIM** **1795 RPM 7070 CBM/TIM** **2025 RPM 7970 CBM/TIM** **2200 RPM 8660 CBM/TIM** **MEASUREMENTS (APPROX.) WIDTH 2460 MM** **LENGTH 8270 MM** **HEIGHT 2820 MM** **TIRE SIZE : 1200 X 20** **WHEEL : 8.5X20** **WEIGHT : NOT LESS THAN 13.4 TONS**

MINI GARBAGE COLLECTOR	
1551	**CHASSIS CAB 4X2** **ENGINE : 4 CYLINDER, WATER COOLED, DIRECT ENG. DIESEL ENG.** **POWER : 20-100 H.P** **CLUTCH : SINGLE PLATE** **GEAR BOX : 6 SPEED** **CAPACITY : 8 M3** **COMPACT RATIO : 6:1**

X. TRAFFIC SAFETY MATERIALS

(Excluding all items that may be notifiable under resolution 1051)

No	Description
1552	road studs (reflective pavement marker) size 10 x 10 x1.75 cm , both faces are reflective in the same color : A. white color . B. yellow color .
1553	road studs (reflective pavement marker) size 10 x 10 x1.75 cm , one face in reflective for one directional viewing : A. white color . B. yellow color .
1554	road studs (reflective pavement marker) size 22 x 10 x4.5 cm , both faces are reflective in the same color : A. white color . B. yellow color .
1555	road studs (reflective pavement marker) size 22 x 10 x4.5 cm ,one face reflective : A. white color . B. yellow color .
1556	conventional epoxy adhesive (one or tow - component) required to sticks and firmly to pavement of the above mentioned
1557	Cones made of reflective material in two color (red and white) used for safety in road operation : A. cones with height of 70 cm . B. cones with height of 70 cm .

XI. MISCELLANEOUS

(Excluding all items that may be notifiable under resolution 1051)

XI-A 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 fy is 460 N/mm^2 for bars 4P to and including 16mm in diameter, and 425 N/mm^2 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 expeuse. The test to be according to the above standard .The steel shall be free from oil , paint , mill scale, dirt and loose rust.

No	Bar Size in millimeter
1558	6
1559	8
1560	10
1561	12
1562	16
1563	18
1564	20
1565	22
1566	25
1567	Tie wire

XI-C: Office Equipment

1568	**MODERN PHOTO COPY MACHINE**

1569	**MODERN TYPEWRITERS**