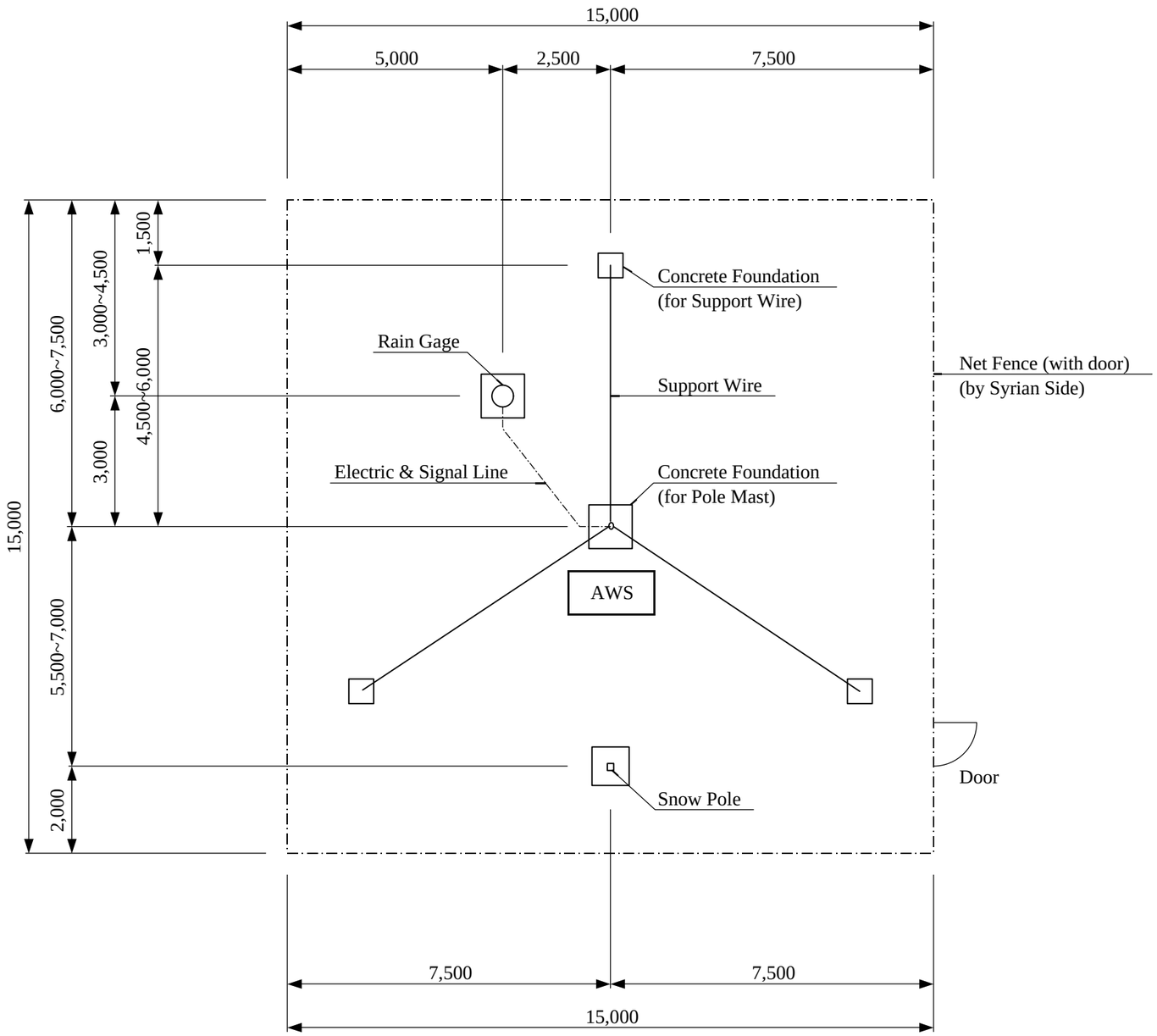
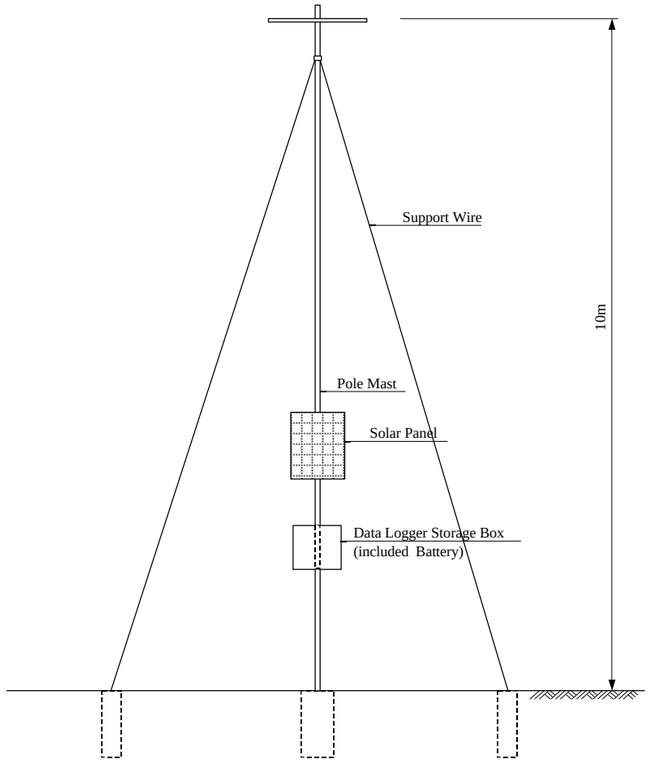
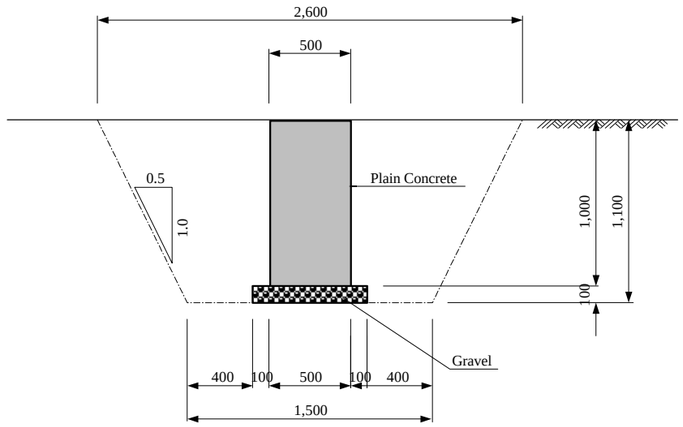
添 付 資 料 1



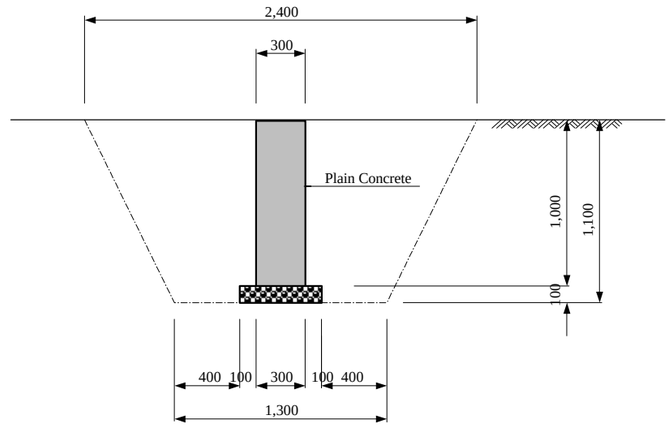
INSTALLATION DRAWING OF AWS & SNOW POLE



SIDE VIEW



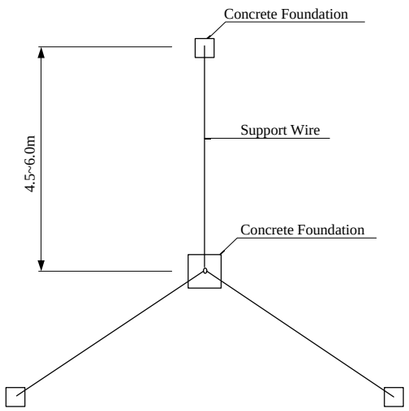
SECTION A - A



SECTION B - B

PLAN

PLAN



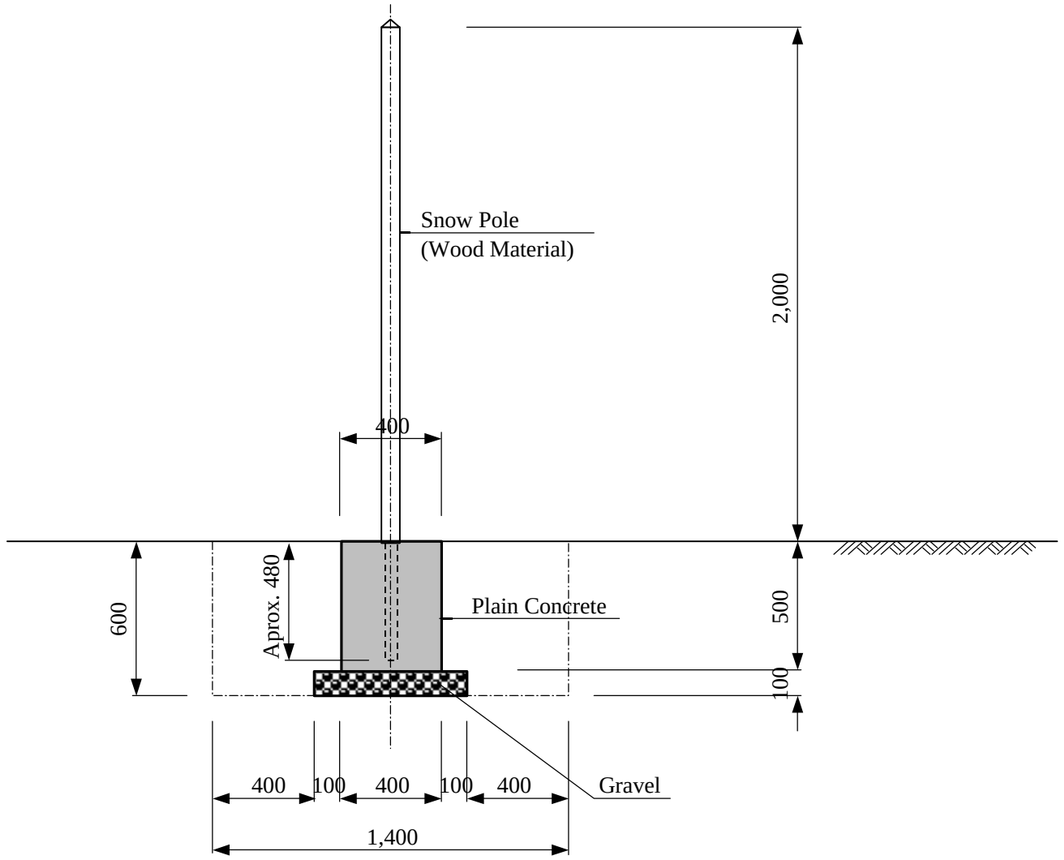
TOP VIEW

POLE FOUNDATION

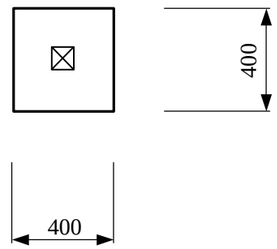
SUPPORT WIRE FOUNDATION

Note : Installs in 21 place

DETAIL OF AWS (Automatic Weather Station) FOUNDATION



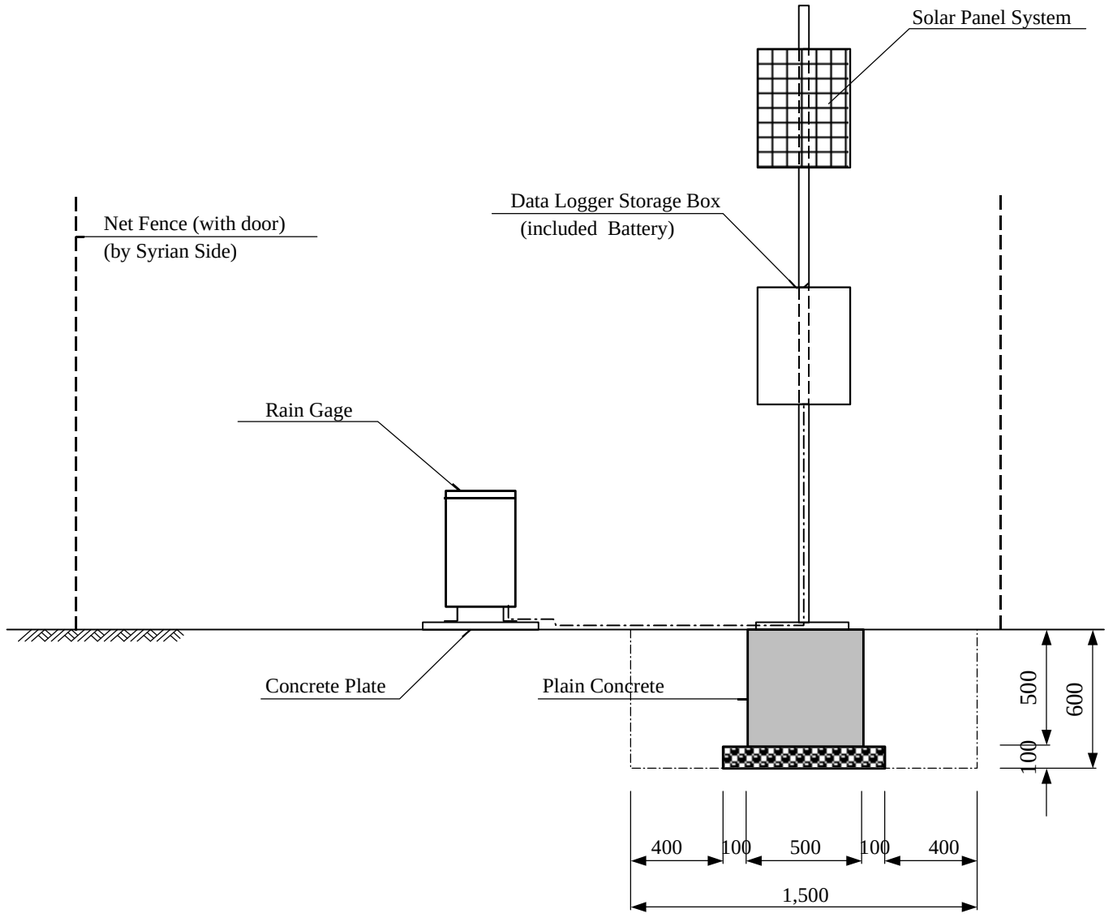
SIDE VIEW



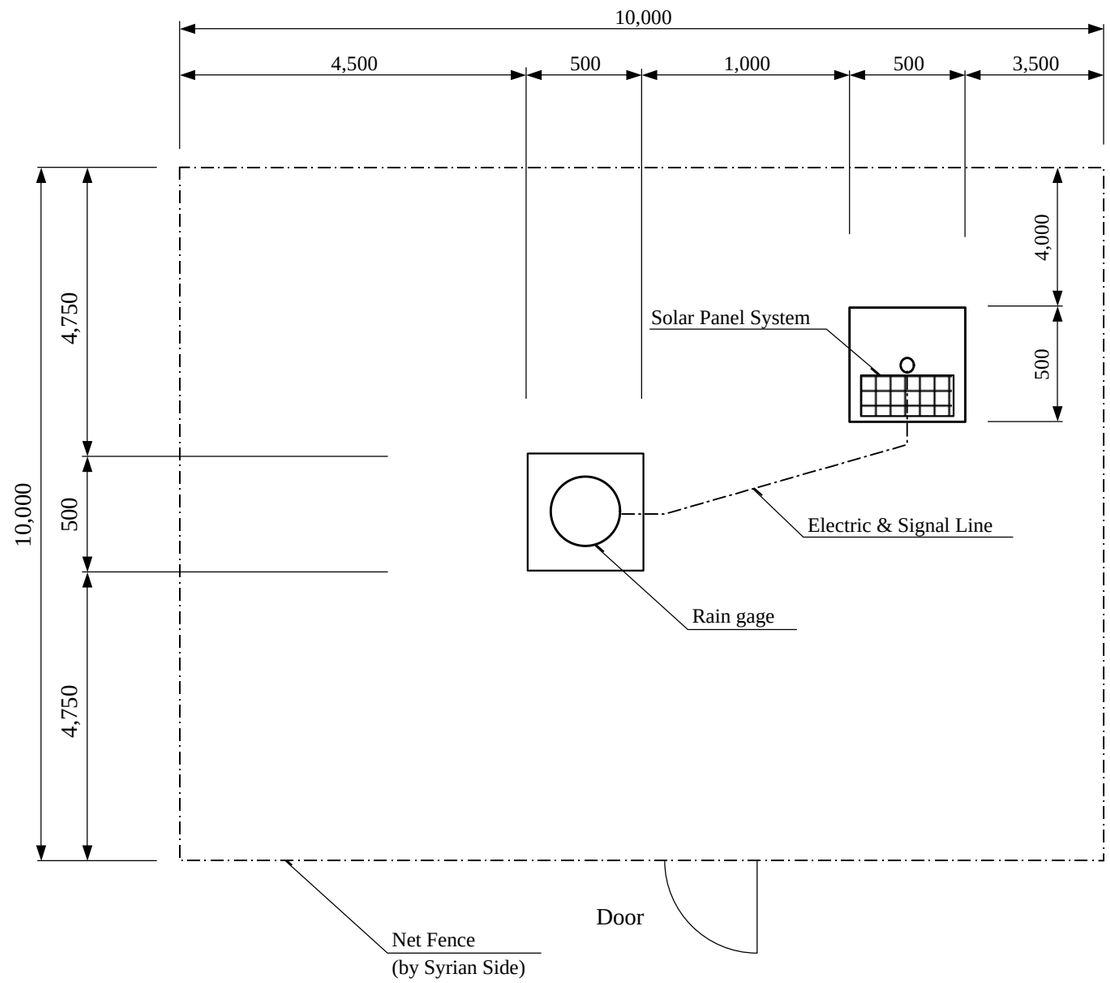
PLAN

Note : Installs in 22 place

INSTALLATION DRAWING OF SNOW POLE



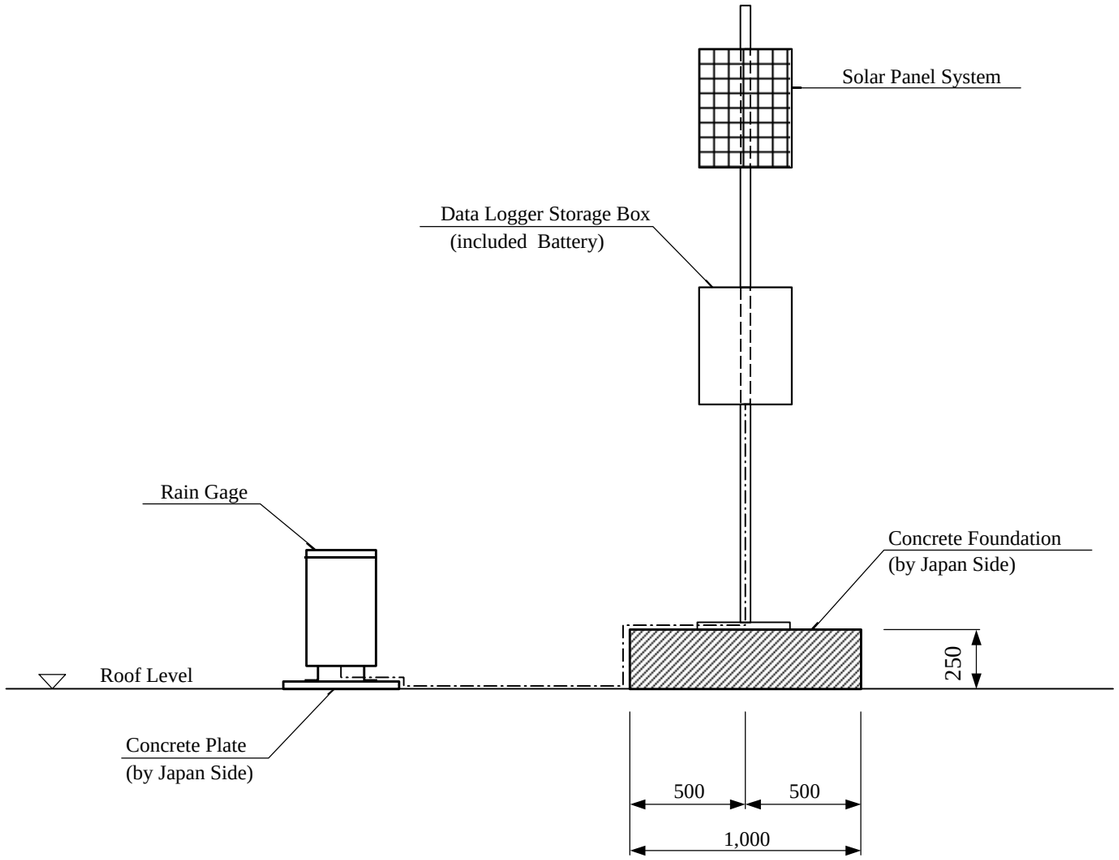
FRONT VIEW



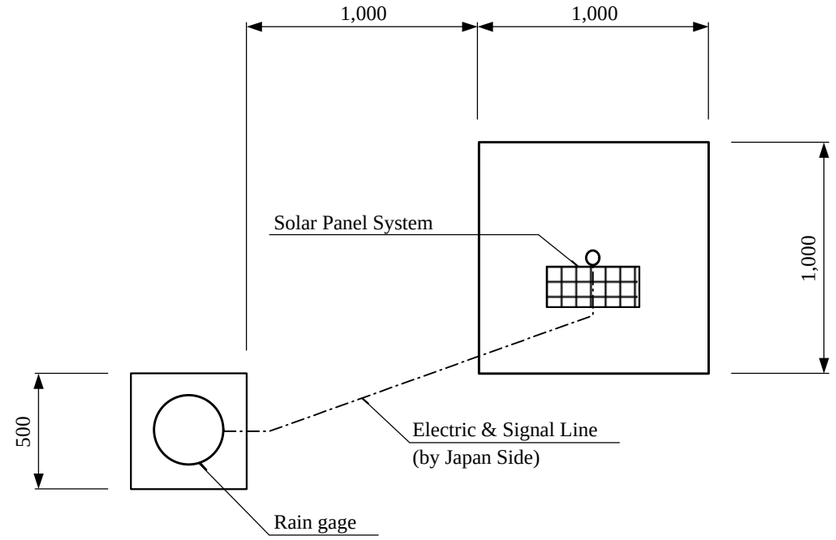
PLAN

Note : Installs in 23 place

INSTALLATION DRAWING OF RAINFALL OBSERVATION SYSTEM (Type-1)



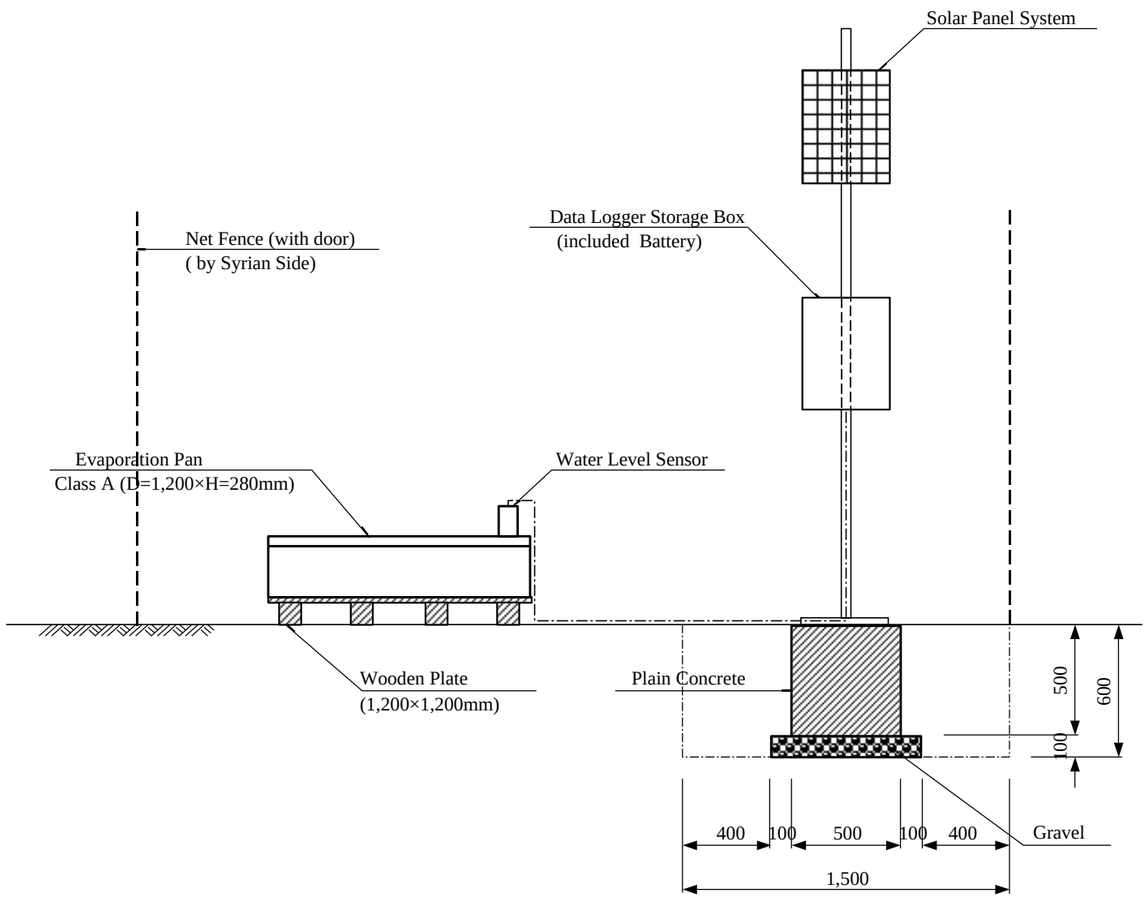
FRONT VIEW



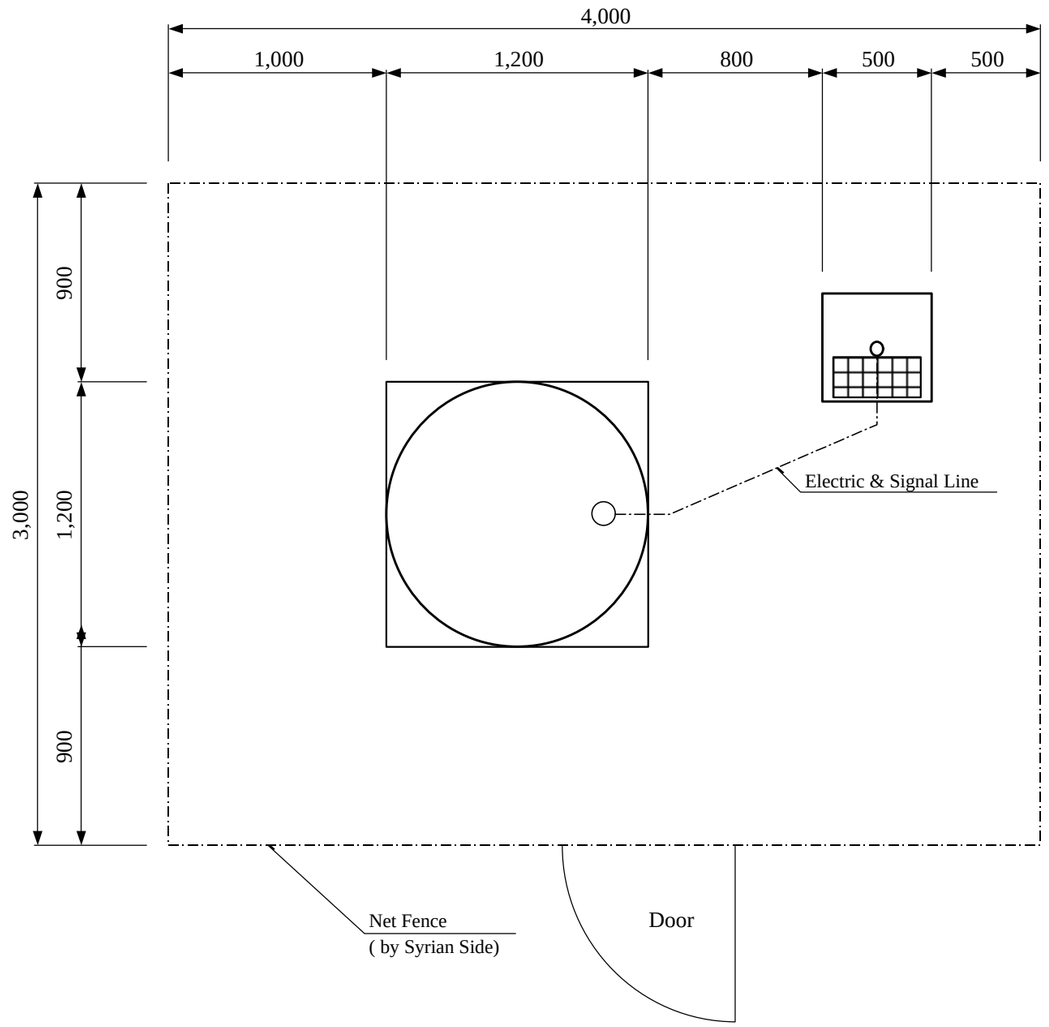
PLAN

Note : Installs in 1 place

INSTALLATION DRAWING OF RAINFALL OBSERVATION SYSTEM (Type-2)



SIDE VIEW



PLAN

INSTALLATION DRAWING OF EVAPORATION OBSERVATION SYSTEM

Wether Station List

Barada-Awaj Basin

Barada River Basin

Station No		Longitude/Latitude		Observation Item			
B/D	Lodger	X	Y	AWS	Snowfalll	Rainfall	Evapo.
BWs1	108	35 ° 59 ' 22 "	33 ° 39 ' 50 "	○	○		
BWs2	110	36 ° 3 ' 29 "	33 ° 32 ' 12 "	○	○		
BW3	93	36 ° 5 ' 35 "	33 ° 44 ' 3 "	○			
BW4	107	36 ° 6 ' 56 "	33 ° 47 ' 28 "	○			
BW5	112	36 ° 25 ' 17 "	33 ° 36 ' 7 "	○			
BW6	88	33 ° 50 ' 10 "	36 ° 26 ' 14 "	○			
BW7	98	36 ° 28 ' 31 "	33 ° 35 ' 2 "	○			
BW8	99	36 ° 33 ' 38 "	33 ° 27 ' 14 "	○			
BW9	92	36 ° 38 ' 33 "	33 ° 44 ' 12 "	○			
BW10	95	36 ° 53 ' 18 "	33 ° 39 ' 38 "	○			
BRS1	109	36 ° 0 ' 39 "	33 ° 34 ' 31 "		○	○	
BRS2	86	36 ° 20 ' 10 "	33 ° 40 ' 25 "		○	○	
BRS3	89	36 ° 28 ' 3 "	33 ° 44 ' 39 "		○	○	
BRS4	87	36 ° 23 ' 23 "	33 ° 45 ' 29 "		○	○	
BR1	94	36 ° 42 ' 26 "	33 ° 35 ' 51 "			○	
Sub-Total				10	6	5	0

Awaj River Basin

Station No		Longitude/Latitude		Observation Item			
B/D	Lodger	X	Y	AWS	Snowfalll	Rainfall	Evapo.
AWs1	101	35 ° 53 ' 40	33 ° 22 ' 53 "	○	○		
AWs2	113	35 ° '	33 ° ' "	○	○		
AW3	111	36 ° 16 ' 19	33 ° 6 ' 43 "	○			
AW4	97	36 ° 35 ' 9	32 ° 59 ' 16 "	○			
ARS1	100	35 ° 57 ' 51	33 ° 25 ' 9 "		○	○	
ARS2	103	35 ° 59 ' 56	33 ° 21 ' 23 "		○	○	
ARS3	102	36 ° 3 ' 25	33 ° 18 ' 51 "		○	○	
ARS4	91	36 ° 9 ' 11	33 ° 25 ' 38 "		○	○	
ARS5	104	36 ° 6 ' 20	33 ° 15 ' 60 "		○	○	
ARS6	105	36 ° 12 ' 7	33 ° 14 ' 4 "		○	○	
ARS7	96	36 ° 38 ' 24	32 ° 53 ' 53 "		○	○	
AR1	106	36 ° 15 ' 52	33 ° 19 ' 35 "			○	
AR2	90	36 ° 30 ' 56	33 ° 6 ' 5 "			○	
Sub-Total				4	9	9	0

Coastal Basin

Latakia

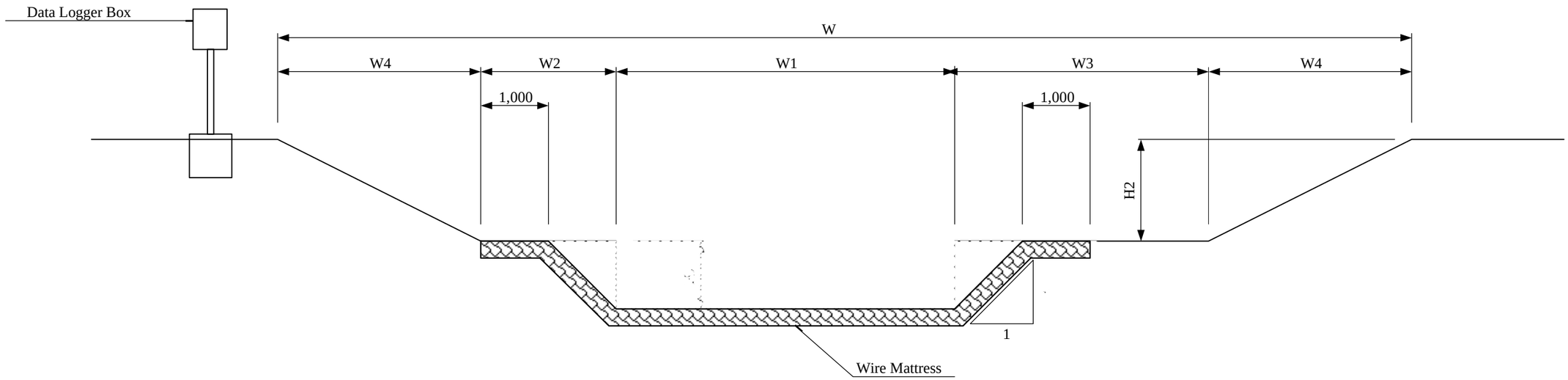
Station No		Longitude/Latitude		Observation Item			
B/D	Lodger	X	Y	AWS	Snowfalll	Rainfall	Evapo.
CW1	9	36 ° 55 ' 3 "	35 ° 38 ' 21 "	○			
CW2	2	36 ° 6 ' 25 "	35 ° 44 ' 31 "	○			
CWs3	1	36 ° 10 ' 16 "	35 ° 44 ' 41 "	○	○		
CWs4	5	36 ° 10 ' 5 "	35 ° 36 ' 26 "	○	○		
CRS1	6	36 ° 9 ' 32 "	35 ° 40 ' 15 "		○	○	
CRS2	4	36 ° 5 ' 18 "	35 ° 33 ' 56 "		○	○	
CR1	7	36 ° 58 ' 44 "	35 ° 41 ' 24 "			○	
CR2	8	36 ° 1 ' 12 "	35 ° 49 ' 50 "			○	
CR3	3	36 ° 1 ' 44 "	35 ° 36 ' 26 "			○	
CE1 (Balloran)	10	35 ° 54 ' 4 "	35 ° 45 ' 53 "				○
CE2 (Teshreen)	13	35 ° 55 ' 3 "	35 ° 38 ' 21 "				○
CE3 (Althaw)	12	35 ° 58 ' 54 "	35 ° 32 ' 7 "				○
CE4 (Skabara)	11	36 ° 1 ' 38 "	35 ° 19 ' 40 "				○
Sub-Total				4	4	5	4

Tarutus

Station No		Longitude/Latitude		Observation Item			
B/D	Lodger	X	Y	AWS	Snowfalll	Rainfall	Evapo.
CWs5	2	36 ° 15 ' 14 "	35 ° 4 ' 30 "	○	○		
CW6	4	35 ° 58 ' 23 "	34 ° 57 ' 25 "	○			
CW7	10	36 ° 8 ' 20 "	34 ° 42 ' 4 "	○			
CRS3	1	36 ° 12 ' 54 "	35 ° 11 ' 20 "		○	○	
CRS4	7	36 ° 22 ' 24 "	34 ° 44 ' 33 "		○	○	
CR4	3	35 ° 55 ' 14 "	35 ° 4 ' 36 "			○	
CR5	5	35 ° 59 ' 24 "	34 ° 49 ' 39 "			○	
CR6	6	36 ° 11 ' 58 "	34 ° 43 ' 55 "			○	
CE5		° ' "	° ' "				○
CE6		° ' "	° ' "				○
Sub-Total				3	3	5	2

Total	AWS	Snowfalll	Rainfall	Evapo.
	21	22	24	6

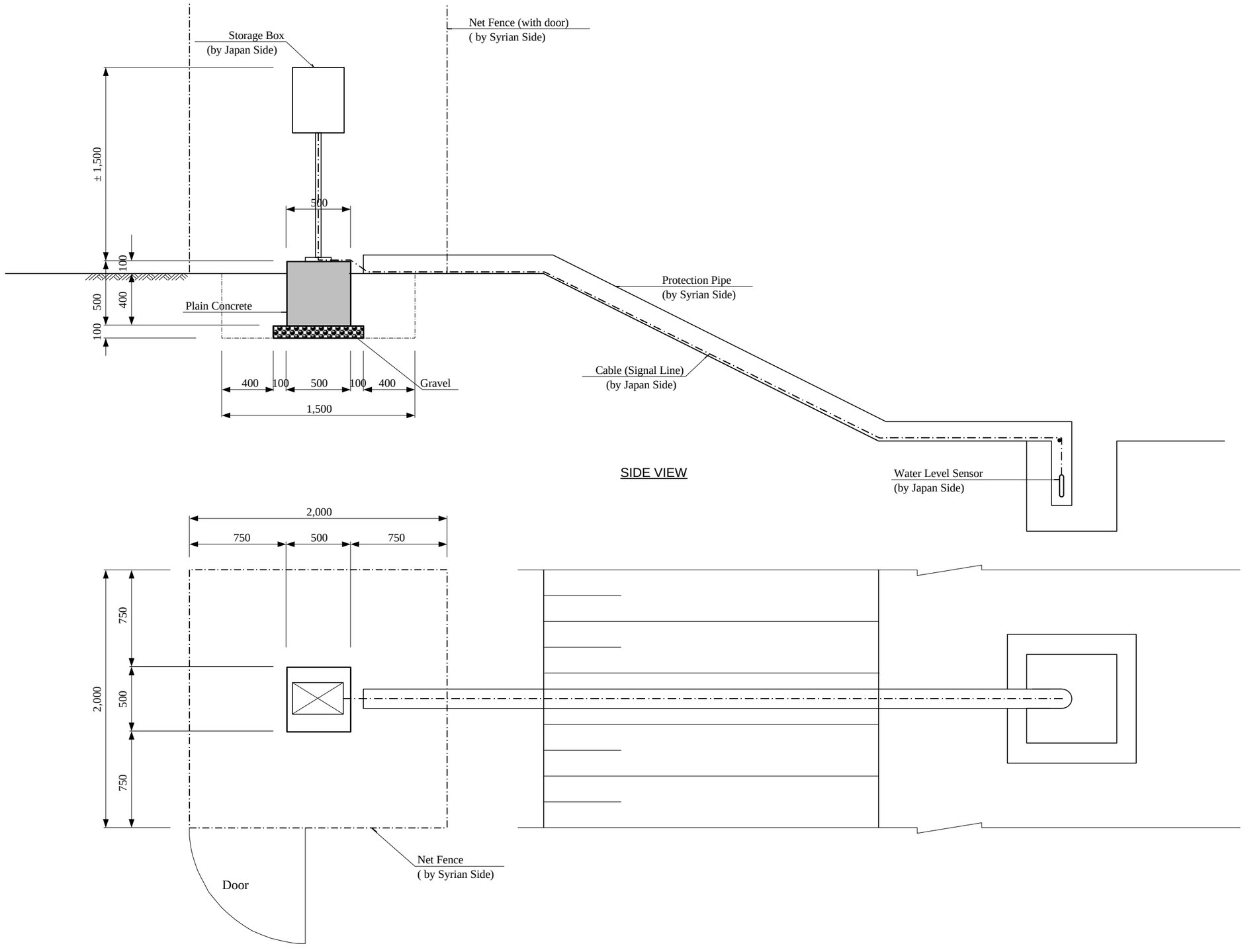
AWS: Automatic system with Wind speed/direction, Relative humidity/air temperature, Global soler radiation, Sunshane duretion and Rainfall gauges



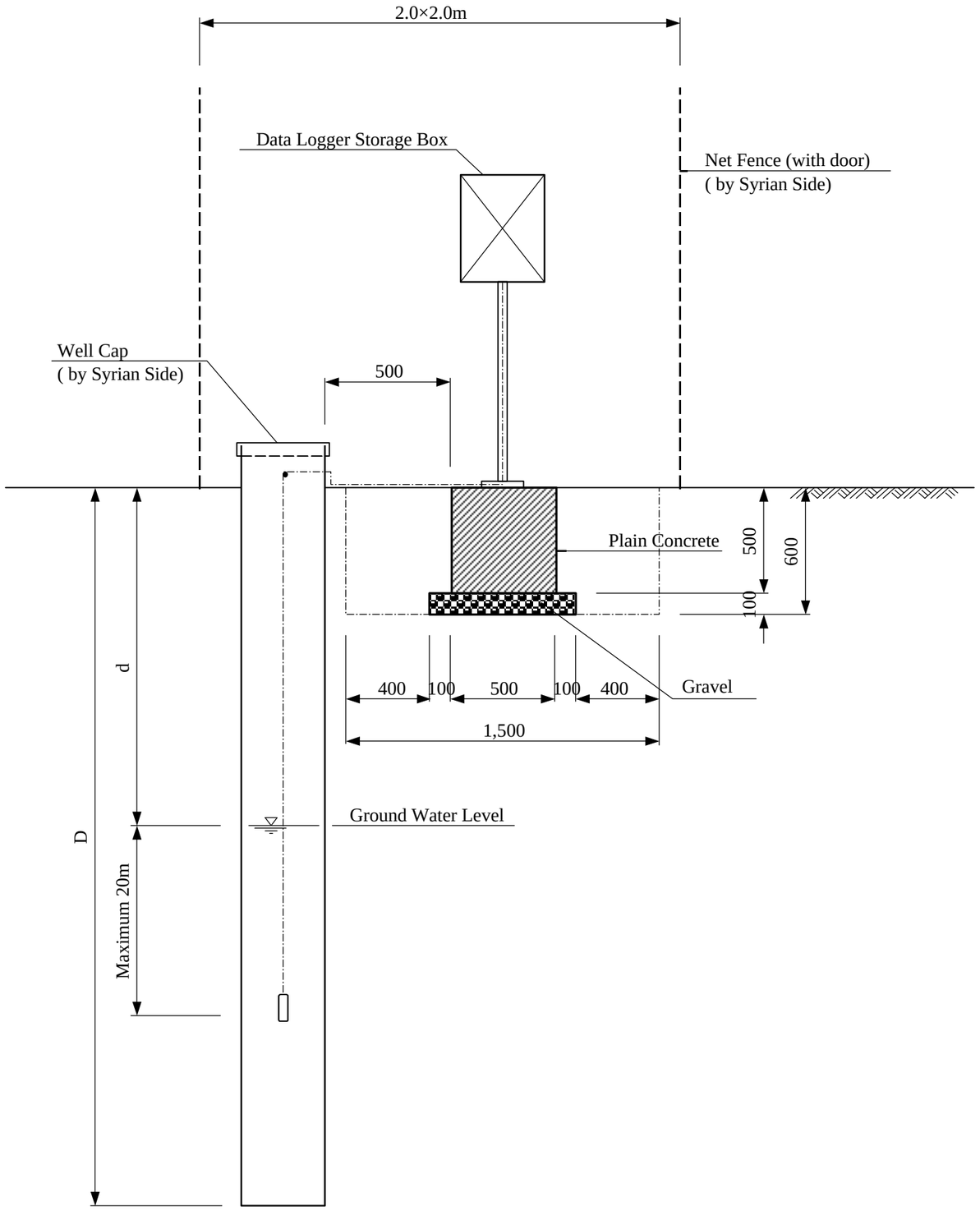
DIMENTION

River No.	H1	H2	W1	W2	W3	W4	W
A-7	1,000	2,000	500	2,000	2,000	4,000	12,500
B-2	500	1,300	5,000	2,000	2,800	2,600	15,000
CL-1	500	1,200	2,000	2,000	2,200	2,400	11,000
CL-6	500	3,000	4,000	2,000	2,000	4,500	17,000

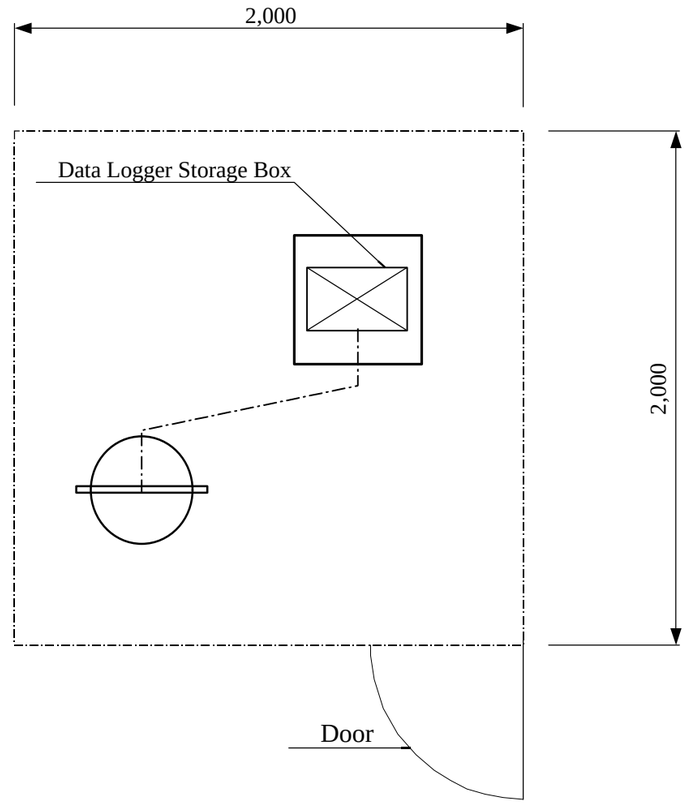
STANDARD SECTION OF RIVER FAIRING



INSTALLATION DRAWING OF WATER LEVEL OBSERVATION SYSTEM

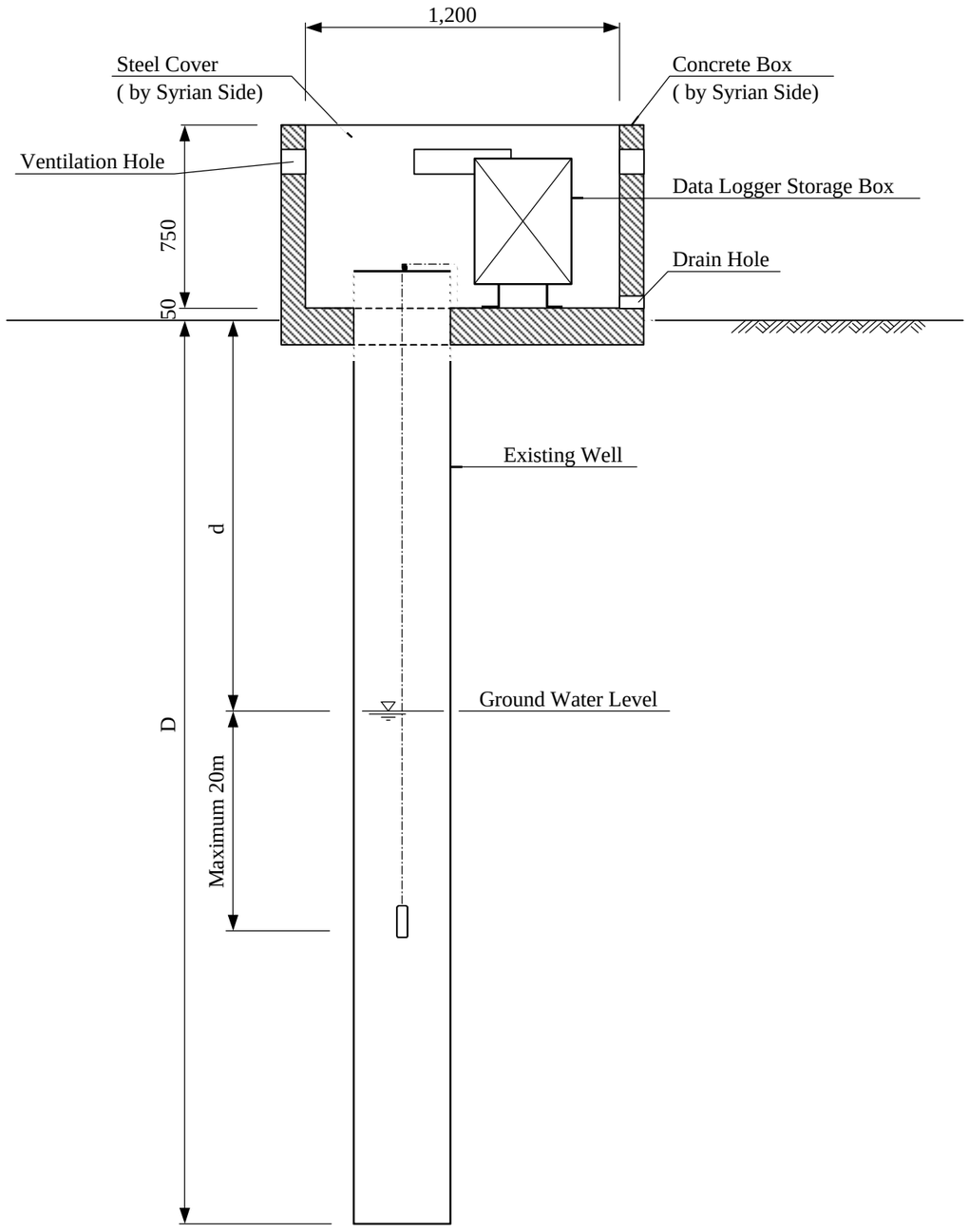


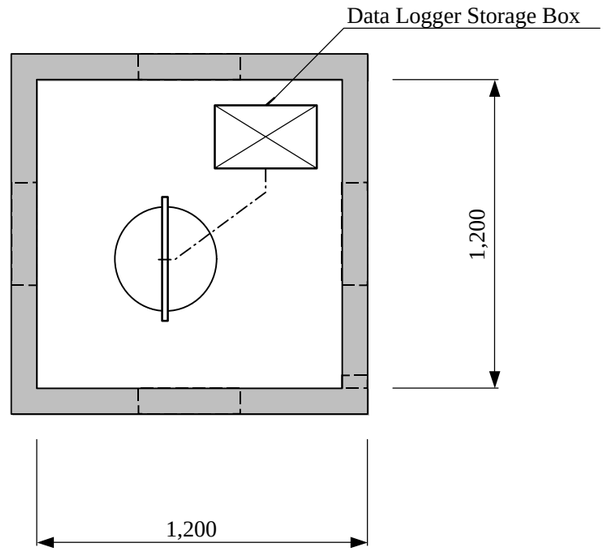
Net Fence



Note : Installs in 40 place

INSTALLATION DRAWING OF GROUND WATER OBSERVATION SYSTEM (Type-1)

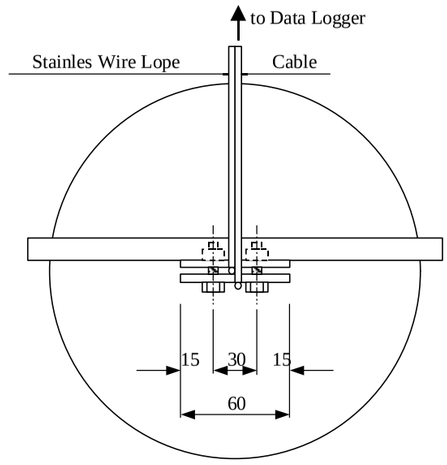


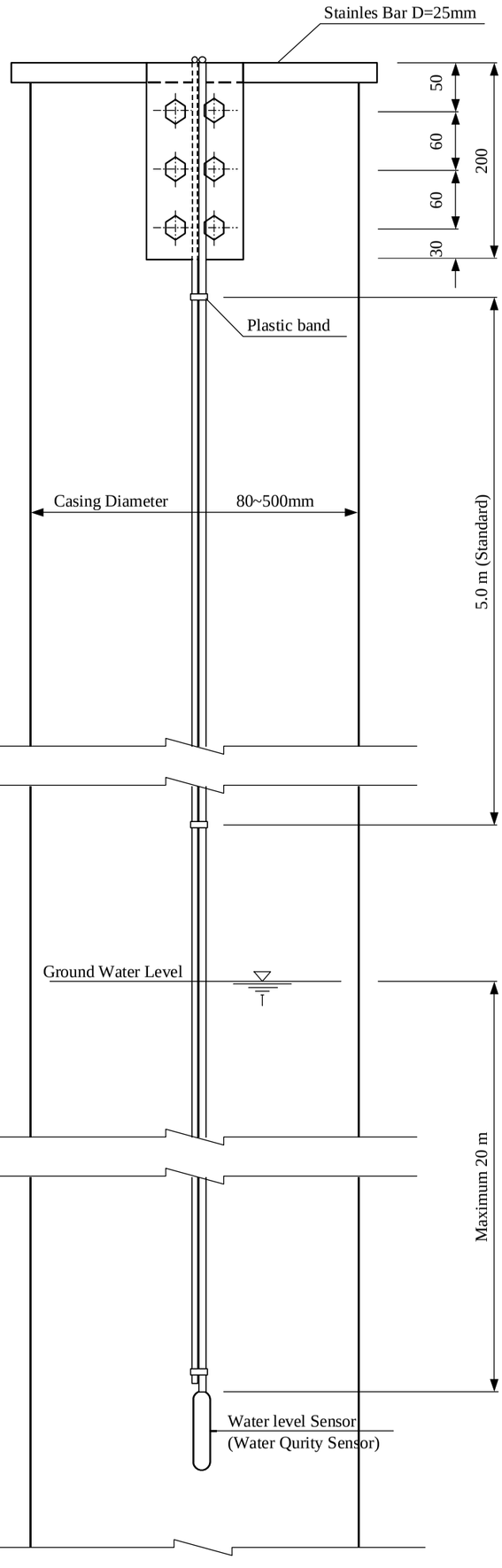


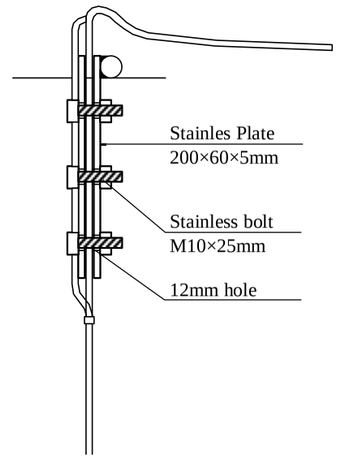
Note : Installs in 104 place

INSTALLATION DRAWING OF GROUND WATER OBSERVATION SYSTEM (Type-2)

Detail of Ground Water Measuring System







Well List

Coastal Basin : Latakia

Well No.	Well Location		Well Dia.	Well Depth	d	Observation Item		Cable Length	Observatio System Type	
	X	Y				Water Level	Water Quality		Type-1	Type-2
			(mm)	D(m)	(m)			(m)		
Lat-1	36 ° 46 ' 31 "	35 ° 36 ' 5 "	300	10	3	○	○	30	○	
Lat-6	35 ° 50 ' 46 "	35 ° 35 ' 3 "	320	35	0.4	○		30	○	
Lat-8	35 ° 55 ' 4 "	35 ° 27 ' 3 "	2×2m	7	2	○	○	30	○	
Lat-14	35 ° 50 ' 23 "	35 ° 39 ' 27 "	200	25	0.7	○		30	○	
Lat-19	35 ° 54 ' 15 "	35 ° 42 ' 26 "	300	18	0.8	○		30	○	
Lat-25	35 ° 50 ' 28 "	35 ° 31 ' 14 "	900	6	0.5	○	○	30	○	
Lat-31	35 ° 55 ' 25 "	35 36 ' 24 "	320	70	10	○		50	○	
Lat-33	36 ° 0 ' 0 "	35 ° 28 ' 58 "	300	70	15	○		50	○	
Aband.1	° ' "	° ' "	3,000		2	○	○	30	○	
Weo-H8	36 ° 1 ' 24 "	35 ° 20 ' 12 "	100		1	○		30	○	
Weo-32	36 ° 1 ' 30 "	35 ° 19 ' 12 "	150		25	○		50	○	
Weo-18	36 ° 2 ' 35 "	35 ° 19 ' 54 "	150		11	○		50	○	
Weo-Zama	36 ° 3 ' 56 "	35 ° 21 ' 26 "	150		145	○		200	○	
Weo-Qssabin	36 ° 1 ' 23 "	35 ° 19 ' 53 "	100		25	○		50	○	
Weo-Basmalekh	36 ° 7 ' 10 "	35 ° 17 ' 58 "	500		390					
Weo-Ain Qita	36 ° 7 ' 5 "	35 ° 18 ' 44 "	200		125	○		150	○	
Weo-Al Badwi	36 ° 0 ' 46 "	35 ° 15 ' 49 "	300		320					
Weo-Al Sin	35 ° 57 ' 53 "	35 ° 15 ' 47 "	500		25	○	○	50	○	
Sub-Total						16	5		16	0

Coastal Basin : Tartus

Well No.	Well Location		Well Dia.	Well Depth	d	Observation Item		Cable Length	Observatio System Type	
	X	Y				Water Level	Water Quality		Type-1	Type-2
			(mm)	D(m)	(m)			(m)		
Tart-1	35 ° 54 ' 2 "	34 ° 50 ' 13 "	350	12	1	○	○	30	○	
Tart-2	35 ° 55 ' 1 "	34 ° 47 ' 47 "	300	63	4	○	○	30	○	
Tart-14	35 ° 56 ' 27 "	34 ° 44 ' 0 "	360	10	0.5	○	○	30	○	
Tart-19	36 ° 2 ' 12 "	34 ° 40 ' 8 "	300	40	0.5	○		30	○	
Tart-24	36 ° 0 ' 39 "	34 ° 42 ' 30 "	430	50	1	○		30	○	
Tart-31	35 ° 59 ' 36 "	34 ° 44 ' 43 "	400	20	0.5	○		30	○	
Tart-52	35 ° 57 ' 19 "	35 ° 10 ' 56 "	300	75	15	○	○	50	○	
Tart-53	36 ° 1 ' 4 "	35 ° 13 ' 11 "	270		83	○		150	○	
Tart-54	35 ° 4 ' 35 "	35 ° 19 ' 33 "	150		25	○		50	○	
Al Zireh	35 ° 58 ' 50 "	35 ° 13 ' 18 "	200		3	○	○	30	○	
Ghrib	35 ° 57 ' 22 "	35 ° 13 ' 38 "	250		3	○	○	30	○	
IBG 1	° ' "	° ' "	250		10	○	○	50	○	
RO 1	35 ° 53 ' 36 "	34 ° 55 ' 44 "	150		40	○	○	80	○	
RO 2	36 ° 6 ' 41 "	34 ° 58 ' 57 "	150		25	○		50	○	
RO 3	36 ° 12 ' 49 "	35 ° 0 ' 10 "	150		12	○		50	○	
RO 4	36 ° 11 ' 20 "	35 ° 6 ' 57 "	150		40	○		80	○	
RO 5	36 ° 8 ' 8 "	35 ° 4 ' 22 "	150		12	○		50	○	
RO 6	36 ° 11 ' 44 "	35 ° 3 ' 7 "	150		50	○		80	○	
Sub-Total						18	8		18	0

Barada Awaji Bsin : Gota

Well No.	Well Location		Well Dia.	Well Depth	d	Observation Item		Cable Length	Observatio System Type	
	X	Y				Water Level	Water Quality		Type-1	Type-2
			(mm)	D(m)	(m)			(m)		
911R	33 ° 13 ' 2 "	36 ° 22 ' 32 "	100	167	35	○		80		○
910R	33 ° 14 ' 55 "	36 ° 13 ' 13 "	80	190	62	○		100		○
913R	33 ° 11 ' 18 "	36 ° 28 ' 31 "	120	250	110	○	○	150		○
209K	33 ° 26 ' 22 "	36 ° 33 ' 3 "	170	100	70	○	○	100		○
207K	33 ° 26 ' 9 "	36 ° 37 ' 2 "	150	106	40	○		80		○
126K	33 ° 24 ' 14 "	36 ° 33 ' 34 "	200	82	60	○		100		○
577	33 ° 18 ' 44 "	36 ° 14 ' 48 "	270	75	44	○	○	80		○
16RK	33 ° 30 ' 18 "	36 ° 29 ' 9 "	150	62	17	○	○	50		○
905R	33 ° 30 ' 6 "	36 ° 34 ' 8 "	100	150	85	○	○	150		○
906R	33 ° 29 ' 39 "	36 ° 35 ' 40 "	110	156	61	○	○	100		○
908R	33 ° 16 ' 27 "	36 ° 31 ' 19 "	150	130	56	○		100		○
146RK	33 ° 35 ' 92 "	36 ° 16 ' 57 "	130	164	17	○		50		○
904R	33 ° 33 ' 7 "	36 ° 15 ' 29 "	90	101	7	○		50		○
19G	33 ° 41 ' 1 "	36 ° 21 ' 17 "	350	120	70	○		100		○
193K	33 ° 27 ' 1 "	36 ° 17 ' 13 "	210	251	37	○	○	80		○
246AK	33 ° 29 ' 12 "	36 ° 19 ' 46 "	90	63	34	○	○	80		○
111RK	33 ° 25 ' 40 "	36 ° 29 ' 11 "	150	150	20	○	○	50		○
110K	33 ° 25 ' 6 "	36 ° 27 ' 44 "	90	33	11	○		50		○
912R	33 ° 24 ' 36 "	36 ° 25 ' 43 "	150	135	71	○	○	100		○
907R	33 ° 35 ' 21 "	36 ° 26 ' 15 "	150	160	20	○		50		○
112RK	33 ° 35 ' 3 "	36 ° 28 ' 31 "	350	210	9	○	○	50		○
113RK	33 ° 34 ' 6 "	36 ° 28 ' 59 "	150	155	22	○	○	50		○
96RK	33 ° 33 ' 50 "	36 ° 31 ' 45 "	100	125	70	○	○	100		○
261K	33 ° 34 ' 14 "	36 ° 26 ' 35 "	170	250	5	○	○	30		○
91RK	33 ° 0 0 "	36 ° 0 ' 0 "	90	55	11	○	○	50		○
167K	33 ° 33 ' 36 "	36 ° 36 ' 21 "	170	100	16	○		50		○
903R	33 ° 31 ' 29 "	36 ° 34 ' 40 "	100	151	26	○		50		○
169K	33 ° 38 ' 6 "	36 ° 37 ' 49 "	150	101	51	○		80		○
918R	33 ° 14 ' 19 "	36 ° 6 ' 4 "	110	350	63	○		100		○
141RK	33 ° 45 ' 26 "	36 ° 43 ' 15 "	100	127	85	○		150		○
138K	33 ° 40 ' 7 "	36 ° 41 ' 50 "	125	80	45	○		80		○
139K	33 ° 42 ' 26 "	36 ° 42 ' 53 "	100	100	25	○		50		○
164RK	33 ° 33 ' 0 "	36 ° 39 ' 51 "	90	150	51	○		80		○
30K	33 ° 33 ' 1 "	36 ° 39 ' 51 "	85	41	30	○		80		○
94RK	33 ° 39 ' 38 "	36 ° 53 ' 38 "	100	129	66	○		100		○
902R	33 ° 36 ' 22 "	36 ° 38 ' 53 "	100	150	77	○		100		○
98RK	33 ° 35 ' 24 "	36 ° 34 ' 40 "	100	132	77	○		100		○
202RK	33 ° 39 ' 43 "	36 ° 51 ' 47 "	160	165	71	○		100		○
291K	33 ° 28 ' 13 "	36 ° 16 ' 34 "	160	120	40	○	○	80		○
171RK	33 ° 9 ' 43 "	36 ° 13 ' 5 "	90	150	52	○	○	80		○
901R	33 ° 44 ' 28 "	36 ° 37 ' 33 "	90	115	58	○		100		○
155K	° ' "	° ' "	150		35	○		80		○
16V	° ' "	° ' "	250		145	○		200		○
978R	° ' "	° ' "	150		60	○	○	100		○
83RK	° ' "	° ' "	150		20	○		50		○
Sub-Total						45	18		0	45

Barada Awaji Bsin : Kalamon

Well No.	Well Location		Well Dia.	Well Depth	d	Observation Item		Cable Length	Observatio System Type	
	X	Y				Water Level	Water Quality		Type-1	Type-2
			(mm)	D(m)	(m)			(m)		
Ky2	33 ° 54 ' 22 "	36 ° 36 ' 4 "	220		103	○		150		○
Ky4	33 ° 47 ' 14 "	36 ° 24 ' 33 "	200	316	247	○		300		○
Sub-Total						2	0	2	0	2

Barada Awaji Bsin : Haramon

Well No.	Well Location		Well Dia.	Well Depth	d	Observation Item		Cable Length	Observatio System Type	
	X	Y				Water Level	Water Quality		Type-1	Type-2
			(mm)	D(m)	(m)			(m)		
2T	33 ° 31 ' 43 "	36 ° 14 ' 58 "	150	67	25	○		50	○	
3T	33 ° 15 ' 22 "	36 ° 18 ' 47 "	150	65	25	○		50	○	
4T	33 ° 31 ' 35 "	36 ° 18 ' 15 "	140	78	25	○	○	50		○
831	33 ° 17 ' 59 "	35 ° 57 ' 48 "	150	50	4	○		30		○
179K	33 ° 20 ' 38 "	35 ° 59 ' 34 "	220		21	○		50		○
184K	33 ° 20 ' 35 "	35 ° 59 ' 18 "	220		7	○		50		○
842	33 ° 31 ' 38 "	36 ° 18 ' 26 "	220		30	○		50		○
828	33 ° 24 ' 55 "	36 ° 2 ' 7 "	150		65	○		100		○
832	33 ° 17 ' 56 "	35 ° 52 ' 42 "	150		7	○		50		○
833	33 ° 18 ' 3 "	35 ° 57 ' 27 "	220		4	○		30		○
46K	33 ° 19 ' 13 "	36 ° 4 ' 34 "	100		7	○	○	50		○
829	33 ° 24 ' 3 "	36 ° 5 ' 48 "	220		40	○		80		○
10T	33 ° 31 ' 49 "	36 ° 18 ' 50 "	150		31	○	○	80		○
6T	33 ° 31 ' 36 "	36 ° 18 ' 21 "	150		28	○		50		○
I	33 ° 31 ' 43 "	36 ° 18 ' 13 "	2,000		25	○		50	○	
190K	33 ° 27 ' 3 "	36 ° 10 ' 13 "	220		87	○	○	150		○
25M	33 ° 40 ' 57 "	41 ° 23 ' 53 "	500		34	○	○	80		○
19M	33 ° 40 ' 5 "	36 ° 0 ' 16 "	220		46	○		80		○
29M	33 ° 45 ' 36 "	36 ° 1 ' 2 "	350		132	○		200		○
26M	33 ° 46 ' 0 "	36 ° 1 ' 8 "	350		180	○		200		○
176RK	34 ° 14 ' 3 "	36 ° 24 ' 13 "	250		170	○		200	○	
805	33 ° 34 ' 6 "	36 ° 7 ' 6 "	200		153	○	○	200		○
804C	33 ° 33 ' 7 "	36 ° 5 ' 33 "	210		187	○		250		○
952R	33 ° 35 ' 44 "	36 ° 3 ' 45 "	90		3	○		30		○
210K	33 ° 52 ' 36 "	36 ° 5 ' 39 "	450		215	○		250		○
951R	33 ° 37 ' 15 "	36 ° 1 ' 52 "	110		33	○		80		○
178K	33 ° 38 ' 32 "	36 ° 27 ' 17 "	220		165	○		200		○
28M	33 ° 37 ' 27 "	41 ° 59 ' 37 "	220		123	○		150		○
20M	33 ° 38 ' 15 "	41 ° 58 ' 48 "	80		2	○		30		○
14M	33 ° 15 ' 42 "	41 ° 25 ' 22 "	220		97	○		150		○
24M	33 ° 38 ' 13 "	41 ° 58 ' 37 "	160		110	○		150		○
1A	33 ° 17 ' 56 "	35 ° 52 ' 42 "	1,500		2	○		30	○	
894	33 ° 36 ' 23 "	36 ° 7 ' 48 "	150		78	○		100		○
140K	33 ° 31 ' 15 "	36 ° 15 ' 21 "	100		3	○		30		○
830	33 ° 22 ' 25 "	36 ° 3 ' 45 "	220		70	○		100		○
835	33 ° 17 ' 42 "	35 ° 57 ' 38 "	150		9	○		50		○
265K	33 ° 30 ' 4 "	36 ° 1 ' 21 "	220		40	○		80		○
920R	33 ° 15 ' 96 "	35 ° 59 ' 0 "	250		30	○	○	50		○
919R	33 ° 16 ' 42 "	36 ° 0 ' 52 "	250		56	○		100		○
57K	33 ° 18 ' 48 "	35 ° 53 ' 29 "	80		4	○		30		○
811	33 ° 9 ' 34 "	36 ° 0 ' 33 "	200		141	○		200		○
49K	33 ° 22 ' 13 "	35 ° 52 ' 46 "	80		4	○		30		○
50K	33 ° 21 ' 43 "	35 ° 51 ' 25 "	80		4	○		30		○
868	33 ° 22 ' 46 "	35 ° 52 ' 44 "	240		24	○		50		○
823	33 ° 22 ' 38 "	35 ° 52 ' 46 "	240		6	○		50		○
823A	33 ° 22 ' 34 "	35 ° 52 ' 40 "	150		5	○		30		○
823B	33 ° 22 ' 33 "	35 ° 52 ' 38 "	220		0.5	○		30		○
166K	33 ° 25 ' 8 "	35 ° 57 ' 32 "	200		10	○		50		○
836	33 ° 23 ' 41 "	35 ° 54 ' 22 "	100		9	○		50		○
863	33 ° 23 ' 42 "	35 ° 54 ' 11 "	300		18	○		50		○
825A	33 ° 23 ' 37 "	35 ° 54 ' 13 "	200		5	○	○	30		○
864	33 ° 23 ' 29 "	35 ° 54 ' 14 "	350		1	○		30		○
3L	33 ° 30 ' 4 "	36 ° 27 ' 14 "	200		40	○	○	80	○	
42K	33 ° 33 ' 3 "	36 ° 21 ' 24 "	220		62	○		100		○
802	33 ° 15 ' 59 "	35 ° 50 ' 39 "	150		129	○		150		○
924R	33 ° 33 ' 16 "	36 ° 28 ' 42 "	150		70	○	○	100		○
14RX	° ' "	° ' "	150		150	○	○	200		○
812	° ' "	° ' "	200		108	○		150		○
966R	° ' "	° ' "	140		40	○	○	80		○
981R	° ' "	° ' "	145		80	○		100		○
809B	° ' "	° ' "	300		60	○	○	100		○
955R	° ' "	° ' "	150		60	○	○	100		○
956R	° ' "	° ' "	150		60	○	○	100		○

付　属　資　料

付属資料１　調査団員・氏名

1．調査団員氏名

(1) 基本設計調査団員名簿

深澤　公雄	団長	JICA 無償資金協力部業務第四課
白岩　弘行	業務主任/水資源管理	㈱ ﾊﾟｼﾌｨｯｸｺﾝｻﾙﾀﾝﾂｲﾝﾀｰﾅｼｮﾅﾙ
佐々木　洋介	機材計画	㈱ ﾊﾟｼﾌｨｯｸｺﾝｻﾙﾀﾝﾂｲﾝﾀｰﾅｼｮﾅﾙ
三浦　光夫	運営維持管理計画	㈱ ﾊﾟｼﾌｨｯｸｺﾝｻﾙﾀﾝﾂｲﾝﾀｰﾅｼｮﾅﾙ
本多　実	積算/調達計画	㈱ ﾊﾟｼﾌｨｯｸｺﾝｻﾙﾀﾝﾂｲﾝﾀｰﾅｼｮﾅﾙ

(2) 基本設計概要説明団員名簿

長澤　一秀	団長	JICA シリア事務所長
白岩　弘行	業務主任/水資源管理	㈱ ﾊﾟｼﾌｨｯｸｺﾝｻﾙﾀﾝﾂｲﾝﾀｰﾅｼｮﾅﾙ
佐々木　洋介	機材計画	㈱ ﾊﾟｼﾌｨｯｸｺﾝｻﾙﾀﾝﾂｲﾝﾀｰﾅｼｮﾅﾙ

付属資料２　調 査 行 程

2．調査行程

(1) 基本設計調査（コンサルタント団員）日程

日順	日付	曜日	調査内容	備考
1	2/22	土	12:45 成田発（AF275）、17:20 パリ着	パリ
2	23	日	13:15 パリ発、18:55 ダマスカス着	ダマスカス
3	24	月	9:00 ＪＩＣＡ事務所、10:00 在シリア日本国大使館表敬、水資源情報センター表敬・打合せ、企画庁表敬	ダマスカス
4	25	火	9:00 灌漑省大臣表敬、 10:00 水資源情報センター協議	ダマスカス
5	26	水	10:00 水資源情報センター協議、M／D（案）協議	ダマスカス
6	27	木	10:00 M／D 署名立会い、情報収集	ダマスカス
7	28	金	バラダ流域現地調査、団内打合せ	ダマスカス
8	3/1	土	資料情報収集、15:00 ラタキアへ移動	ラタキア
9	2	日	8:30 WRIC CB 打合せ、ラタキア流域現地調査	ラタキア
10	3	月	8:30 GDCB 総局長表敬、ラタキア流域現地調査	ラタキア
11	4	火	海岸付近現地調査、タルトスへ移動	タルトス
12	5	水	9:00 GDCB タルトス事務所長表敬、タルトス流域現地調査	タルトス
13	6	木	9:00 タルトス流域現地調査	ダマスカス
14	7	金	機材配置の検討	ダマスカス
15	8	土	祝日、機材配置の検討	ダマスカス
16	9	日	9:00 GDBAB 総局長表敬、12:30 ＷＲＩＣで打合せ	ダマスカス
17	10	月	9:00 気象庁・WRIC と打合せ（機材配置計画）	ダマスカス
18	11	火	9:00 アワジ河流域現地調査	ダマスカス
19	12	水	9:00 バラダ河流域現地調査	ダマスカス
20	13	木	BAB の機材配置計画打合せ	ダマスカス
21	14	金	休日	ダマスカス
22	15	土	8:15 GDBAB 打合せ・情報収集	ダマスカス
23	16	日	8:30 プロ技チームと打合せ（全般）	ダマスカス
24	17	月	9:00: BAB WRIC と打合せ	ダマスカス
25	18	火	10:00 CB 及び BAB の WRIC と打合せ	ダマスカス
26	19	水	ＢＡＢ流域現地調査、現地調査結果取りまとめ	ダマスカス
27	20	木	ＪＩＣＡ報告、大使館報告（キャンセル）、帰国便変更手続き	ダマスカス
28	21	金	休日	ダマスカス
29	22	土	8:55 ダマスカス発 15:10 パリ着、23:25 パリ発（AF276）	パリ
30	23	日	19:05 成田着	

(2) 概要説明日程

日順	日付	曜日	調査内容	備考
1	6/20	金	成田発 10:30（0S 052）、ウィーン着 15:50	ウィーン
2	21	土	ウィーン発 15:00 (OS 841)、 ダマスカス着 7:00	ダマスカス
3	22	日	ＪＩＣＡ打合せ、灌漑省表敬、WRIC と打合せ	ダマスカス
4	23	月	水位計･気象観測所設置予定現地確認／議論（GDBAB）	ダマスカス
5	24	火	水位計･気象観測所設置予定現地確認／議論（GDBAB）、移動	ラタキア
6	25	水	水位計･気象観測所設置予定現地確認／議論（GDCB）	ラタキア
7	26	木	水位計･気象観測所設置予定現地確認／議論（GDCB）	タルトス
8	27	金	水位計･気象観測所設置予定現地確認／議論（GDCB）	タルトス
9	28	土	水位計･気象観測所設置予定現地確認（GDCB）／議論、移動	ダマスカス
10	29	日	水位計･気象観測所設置予定現地確認／議論（GDBAB）	ダマスカス
11	30	月	水位計･気象観測所設置予定現地確認／議論（GDBAB）	ダマスカス
12	7/1	火	技術打合せ／協議	ダマスカス
13	2	水	技術打合せ／協議	ダマスカス
14	3	木	灌漑省挨拶・WRIC 打合せ、JICA 報告、大使館報告	ダマスカス
15	4	金	ダマスカス発 7:00 (OS 7182)、 ウィーン着 11:15、 ウィーン発 14:00 (OS 051)	ウィーン
16	5	土	成田着 8:25	

付属資料３　関係者（面会者）リスト

3．関係者（面会者）リスト

オフィス	名　前	役　職
在シリア大使館	奥田 健	二等書記官
JICA 事務所	長澤 一秀	所長
	大竹 茂	次長
JICA プロ技長期専門家	伊藤和久	リーダー
	染矢武彦	水文専門家
	杉浦伸郎	調整員
JICA プロ技短期専門家	加藤 泉	専門家
	笹原 武志	専門家
	丹 三雄	専門家
企画庁(State Planning Commission)	Mr.Bassan Al Sibal	Deputy Head
農業・灌漑企画局	Mr. Muneer Alzuhili	Director
灌漑省(Ministry of Irrigation)	Mr. Mohamed Radwon Martini	Minister
	Mr. Mohamed Adnan Merza	Deputy Minister
メインセンター(MC)	Dr. Bachar J. Faiad	Director
	Mr. Yahia Tujjar	Sub Director
バラダ・アワジ流域総局(GDBAB)	Dr. Jamil Fallouh	General Dorector
水資源情報管理センター(GDBAB WRIC)	Mr. Ahmad Abdullah	Director
執行部	Eng. Muhmud Abo Haileh	Director
沿岸部流域総局(GDCB)	Eng. Tareq Ibrahim	General Dorector
水資源情報管理センター(GDCB WRIC)	Eng. Abdulhakim H. Boissa	Director

付属資料４　当該国の社会経済状況

（国別基本情報抜粋）

4. 当該国の社会経済状況

（1／2）

国名	シリア・アラブ共和国
	Syrian Arab Republic

一般指標					
政体	共和制	※1	首都	ダマスカス(Damascus)	※2
元首	バッシャール・アル・アサド大統領	※3	主要都市名	ダマスカス(Damascus)、アレッポ(Aleppo)、ラタキア(Latakia)	※17
独立年月日	1946 年 4 月 17 日	※3	労働力総計	516 万人（'00）	※6
主要民族/部族名	アラブ人 90%、他にアルメニア系 5%、クルド系 3%	※3	義務教育年数	6 年間	※13
主要言語	アラビア語（公用語）	※1	初等教育就学率	91%（'96）	※4
宗教	イスラム教 85%（スンニー派 70%、アラウィ派 12%） キリスト教 13%	※1,3	中等教育就学率	38%（'96）	※4
国連加盟年	1945 年 10 月 24 日	※12	成人非識字率	73.6%（'99）	※4
世銀加盟年	1947 年 4 月 10 日	※7	人口密度	88.09 人/km2（'02 推計）	※6
IMF 加盟年	1947 年 4 月 10 日	※7	人口増加率	3.10%（'02 推計）	※6
国土面積	18.5 万 km²（日本の約半分）	※2	平均寿命	平均 70.90（'99 推計）	※4
総人口	1,715 万人（'02 年推定）	※8	5 歳未満児死亡率	30／1000（'99 年）	※4
			カロリー供給率	－	※

経済指標					
通貨単位	シリア・ポンド	※2	貿易量		
為替レート	1 US$ = 49.65 （2001 年）	※8	商品輸出	62 億ドル（'02）	※8
会計年度	Dec.31	※8	商品輸入	49 億ドル（'02）	※8
国家予算			輸入カバー率	－	※14
歳入総額	196,127 百万 SP（'99） (39.5 億ドル)	※9	主要輸出品目	石油・石油製品、果物・野菜、繊維製品、綿花	※1
歳出総額	190,300 百万 SP（'99） (38.3 億ドル)	※9	主要輸入品目	機械類、金属・金属製品、食料品、化学製品	※1
総合収支	5,827 百万 SP (1.2 億ドル)	※9	日本への輸出	16 百万ドル（2001 年）	※16
ODA 受取額	4.09 億ドル（'95～'99）	※18	日本からの輸入	185 百万ドル（2001 年）	※16
国内総生産(GDP)	170 億ドル（'00）	※6			
一人当たりの GNP	940 ドル（'00）	※6	総国際準備	53,620 百万ドル（2000 年）	※6
分野別 GDP	農業 24.07%（'00）	※6	対外債務残高	217 億ドル（'00）	※6
	工業 30.23%（'00）	※6	対外債務返済率 (DSR)	6.4%（'98）	※1
	製造業 26.96%（'00）	※6			
	サービス業 45.70%（'00）	※6	インフレ率	0.9%（'02）	※8
産業別雇用	農業： 男 23% 女 47%（'90）	※4			
	工業： 男 30% 女 13%（'90）	※4			
	サービス業: 男 47% 女 40%（'90）	※4	国家開発計画	第９次５ヶ年計画：2001-2005	※11
実質 GDP 成長率	3.5%（'01）	※8			

気象（1961～1990 年平均） 観測地：ダマスカス（北緯 33 度 25 分、東経 36 度 31 分、標高 611 m） ※5

月	1	2	3	4	5	6	7	8	9	10	11	12	平均／計
降水量	34.6	32.4	23.7	14.2	4.9	0.6	0.0	0.0	0.1	11.1	24.3	36.8	182.7
平均気温	6.2	8.0	11.2	15.7	20.4	24.6	26.6	26.2	23.3	18.5	12.3	7.5	16.7

※1 最新世界各国要覧 10 訂版
※2 シリア・アラブ共和国概観（外務省）
※3 世界年鑑 2003（共同通信社）
※4 国別貧困情報 シリア（国際協力事業団）
※5 理科年表 2000（国立天文台編）
※6 World Development Indicators 2003(WB)
※7 BRD Membership List(WB)
IMF Members' Financial Data by Country(IMF)
※8 CIA- The World Fact Book 2002
※9 Government Finances Statistics Yearbook 2000 (IMF)
※10 Human Development Report 2000,2001 (UNDP)
※11 Country Profile (EIU), 外務省資料等
※12 United Nations Member States
※13 Statistical Yearbook 1999 (UNESCO)
※14 Global Development Finance 2001 (WB)
※15 International Financial Statistics Yearbook 2001 (IMF)
※16 世界各国経済情報ファイル 2002（世界経済情報サービス）
※17 The Europe World Year Book 2002

国名	シリア・アラブ共和国
	Syrian Arab Republic

※18

我が国における ODA の実績					（単位：億円）
項目＼年度	1995	1996	1997	1998	1999
技術協力	73.74	98.90	103.82	98.30	73.30
無償資金協力	4.81	20.67	68.86	76.05	59.10
有償資金協力	1,414.29	1,705.11	2,029.06	2,065.83	1,926.37
総額	1,492.84	1,824.68	2,201.74	2,240.18	2,058.77

※18

当該国に対する我が国 ODA の実績					（支出純額、単位：百万ドル）
項目＼年度	1995	1996	1997	1998	1999
技術協力	14.63	19.38	17.12	16.20	12.87
無償資金協力	17.60	12.64	26.57	15.84	18.54
有償資金協力	90.03	2.84	22.63	17.98	104.76
総額	122.27	34.87	66.33	50.02	136.17

※19

OECD 諸国の経済協力実績(2000 年)					（支出純額、単位：百万ドル）
	贈与(1) （無償資金協力・技術協力）	有償資金協力 (2)	政府開発援助 (ODA) (1)+(2)=(3)	その他政府資金及び民間資金 (4)	経済協力総額 (3)+(4)
二国間援助 （主要供与国）	59.30	38.00	97.30	270.60	367.90
1.Japan	30.70	33.70	64.40	-15.30	49.10
2.France	11.50	1.70	13.20	-22.10	-8.90
3.Germany	11.90	0.10	12.00	373.40	385.40
4.Italy	0.20	2.60	2.80	-473.60	-470.80
多国間援助 （主要援助機）	41.40	-2.70	38.70	-14.20	24.50
1.UNRWA			22.70	0.00	22.70
2.WFP			4.60	0.00	4.60
そ の 他	0.60	21.90	22.50	0.00	22.50
合　　計	101.30	57.20	158.50	256.30	414.80

※20

援助受入れ窓口機関	
技術協力	
無償	
協力隊	

※18　我が国の政府開発援助 2000（国際協力推進協会）
※19　International Development Statistics (CD-ROM) 2002 OECD
※20　JICA 資料

付属資料５　討議議事録（M／D）

1．討議議事録（M／D）

(1)基本設計調査

Minutes of Discussions
on Basic Design Study on the Project for
The Development of Hydrological and Meteorological Observation Network
In
Syrian Arab Republic

In response to a request from the Government of Syrian Arab Republic (hereinafter referred to as "Syria"), the Government of Japan decided to conduct a Basic Design Study on the Project for the Development of Hydrological and Meteorological Observation Network (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent a Basic Design Study Team (hereinafter referred to as "the Team") to Syria headed by Kimio FUKAZAWA, Fourth Project Management Division, Grant Aid Management Department, JICA, and is scheduled to stay in the country from 23rd February to 1st March, 2003.

The Team held a series of discussions with the responsible persons of Ministry of Irrigation of the Government of Syria and conducted a field survey at the study area.

In the course of discussions and a field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

Damascus, 27th February, 2003

深澤 公雄

Mr. Kimio FUKAZAWA
Leader,
Basic design Study Team
JICA
Japan

Eng. Mohammed Adnan MERZA
Vice Minister,
Ministry of Irrigation
Syrian Arab Republic

Mr. M. Bassam Al SIBAI
Deputy Head,
State Planning Commission
Syrian Arab Republic

ATTACHMENT

1. Objective of the Project

The objective of the Project is to procure necessary equipment in Water Resources Information Center (WRIC) composed of Basin Center in General Directorate of Barada-Awaj (GDBAB) and General Directorate of Coastal Basin (GDCB), and Main Center in MOI, to improve information and management system of water resources in the Barada-Awaj and Coastal Basin.

2. Project Site

The Project sites are Water Resources Information Center (WRIC) in Barada-Awaj and Coastal Basins as shown in ANNEX 1.

3. Responsible and Implementing Agencies

The responsible organization is Ministry of Irrigation (MOI).

The implementing organization is Water Resources Information Center (WRIC) as shown in ANNEX 2.

4. Items requested by the Government of Syria

After discussions with the Team, items listed in ANNEX 3 were finally requested by the Government of Syria. However, the final components of the project will be decided after further studies and analysis.

5. Japan's Grant Aid Scheme

5-1. Government of Syria has understood the system of the Japan's Grant Aid explained by the Team; the main feature is described in ANNEX 4.

5-2. Government of Syria will take necessary measures, described in ANNEX 5, for the smooth implementation of the Project, on condition that Japan's grant aid is extended to the Project.

6. Schedule of the Study

6-1. The consultants will proceed to further studies in Syria until 21 March, 2003.

6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents around June 2003.

6-3. In case that the contents of the draft report are acceptable in principle by the government of Syria, JICA will complete the final report and send it to the Government of Syria around August 2003.

7. Other relevant items

7-1. Installation works for equipment

Works for setting up equipment by Japan's Grant Aid will be undertaken by Japan's side.

7-2. Vehicles

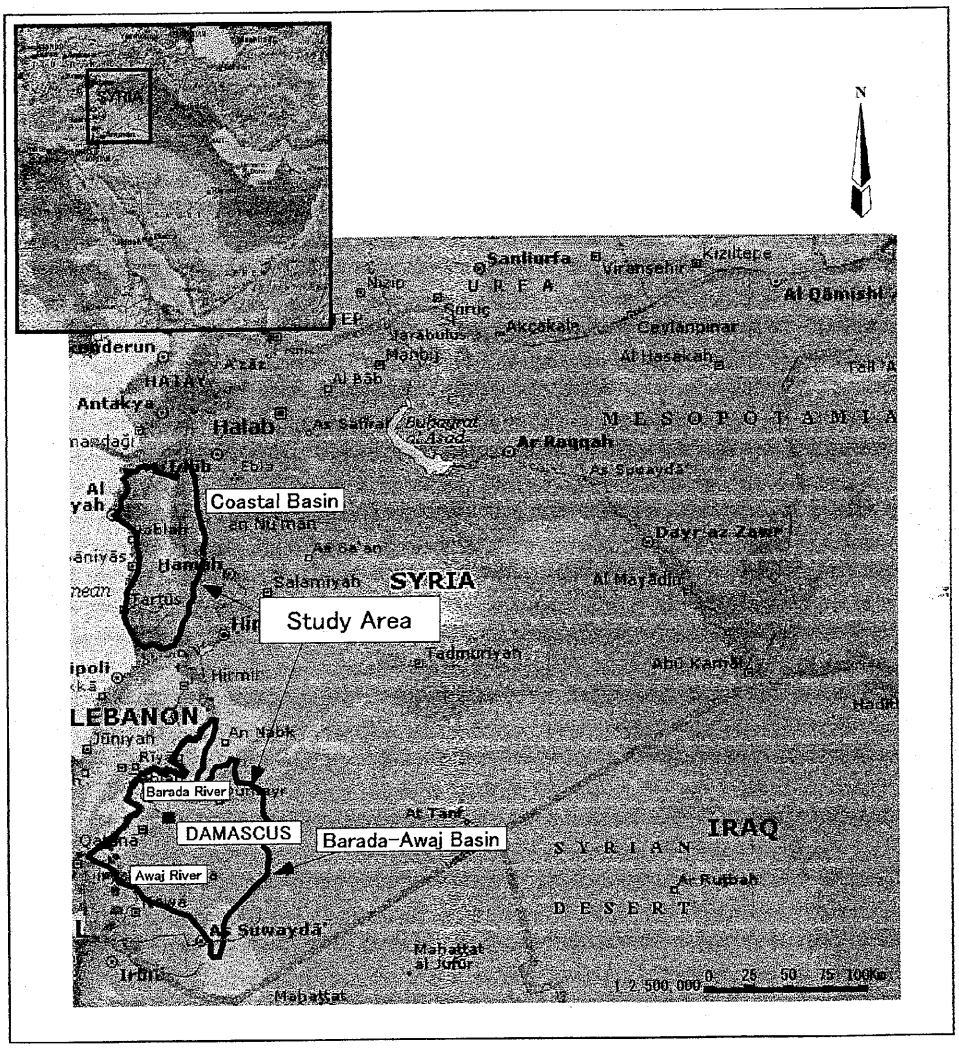
Number of vehicles requested by Syrian side will be changed/reduced since the Project-type cooperation has already prepared 4 vehicles. The exact number will be decided after further studies by the consultants.

7-3. Personnel Assignment to WRIC

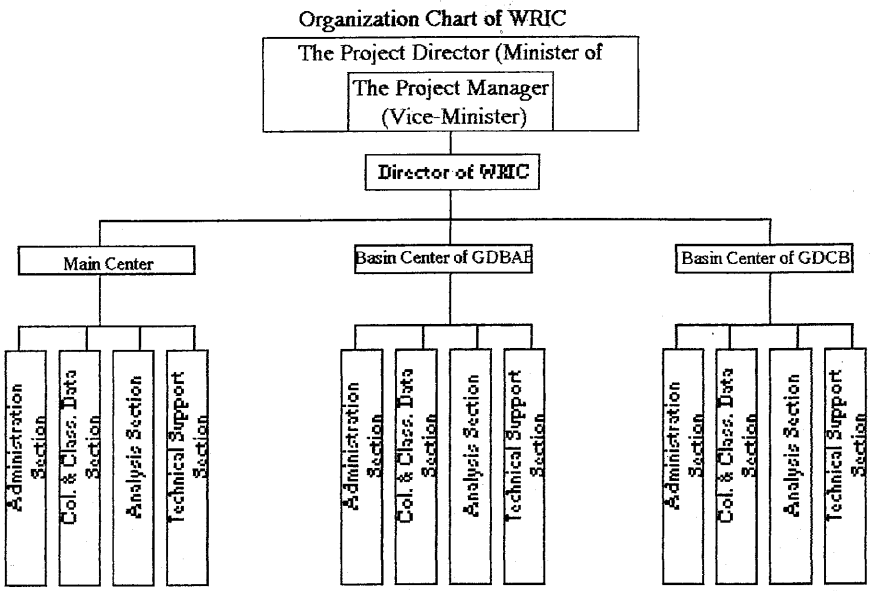
Syrian side will submit a concrete personnel plan of three Water Resources Information Centers in order to justify the proper operation and maintenance of the equipment in future.

7-4. Office Supplies

Basically, office supplies on the request are to be eliminated, for Project-type cooperation is going to provide necessary office supplies.



LOCATION MAP


Organization Chart of WRIC
The Project Director (Minister of
The Project Manager
(Vice-Minister)
Director of WRIC
Main Center
Basin Center of GDBAE
Basin Center of GDCB
Administration Section
Col. & Class. Data Section
Analysis Section
Technical Support Section
Administration Section
Col. & Class. Data Section
Analysis Section
Technical Support Section
Administration Section
Col. & Class. Data Section
Analysis Section
Technical Support Section

ANNEX 3

Result of Discussion on Items Requested

1. Equipment for Meteorological Observation

No.	Description	Measurement Items	Priority
1.	Automatic Weather Station	Wind speed including direction	A
		Air temperature/Relative humidity	A
		Global radiation	A
		Evaporation with sensor	A
		Air pressure	A
		Sunshine sensor	A
		Precipitation for rain and snow	A
		Data logger with PC card	A
		Enclosure	A
		Pole, Installation arms and fittings	A
		Power supply source including solar panel and battery	A
2.	Rain Gauge	Auto rain gauge (rain and snow)	A
		Manual rain gauge (rain and snow)	Deleted
3.	Recording Evaporation Gauge	Evaporation	A
4.	Digital Wind Meter	Wind speed and direction	Deleted

2. Equipment for Hydrological Observation (Surface water measurement)

No.	Description	Measurement Items	Priority
5.	Portable Auto Water Current Meter	Velocity of water (range: 0.025 – 3.0 m/s or more)	A
6.	Ultrasonic Water Meter	Discharge of water	A
7.	Mobile Measuring Device, Cable-Suspended Current Meter	Velocity of water (range: 0.025 – 3.0 m/s)	A
8.	Portable Water Level Meter (20 m)	Water depth (measurement by tape)	A
9.	Auto Water Level Recorder (10 m)	Water level gauging	A
10.	Multi-Parameter Water Quality Meter, Portable	EC, Temp, TDS, pH, DO, Cl, Nitrate, Aluminum, Ammonia, and Turbidity	A

3. Equipment for Hydrological Observation (Ground water measurement)

No.	Description	Measurement Items	Priority
11-1.	Portable Water Level Meter	Water level and temp. (100m tape)	A
11-2.	Portable Water Level Meter	Water level and temp. (200m tape)	A
11-3.	Portable Water Level Meter	Water level and temp. (300m tape)	A
12.	Data Logger	Groundwater level and temp.	A
13-1.	Data Logger with Cable Sensor	GW level, temp., pH, EC (100m cable)	A
13-2.	Data Logger with Cable Sensor	GW level, temp., pH, EC (200m cable)	A
13-3.	Data Logger with Cable Sensor	GW level, temp., pH, EC (300m cable)	A

4. Related Equipment

No.	Description	Measurement Items	Priority
14.	Water Sampler	Sampling water (length: 100m)	A
15.	Portable GPS	Coordinates	Deleted
16.	Well Logging Equipment	Lithology of wells	A
17.	Geoelectorical Device	Groundwater exploration	Deleted
18.	Refraction Seismic Device	Subsurface Ilithology	Deleted
19.	Field Photometer	Water quality analysis in the field	Deleted
20.	Field Vehicles	Field works	A
21.	Digital Camera	Field works	Deleted
22.	Laptop PC		Deleted

5. Office Equipment

No.	Description	Priority
23.	Computer	Deleted
24.	A0 Scanner	Deleted
25.	A0 Plotter	Deleted
26.	A0 Digitizer	Deleted
27.	A3 Colored-Laser Printer	Deleted
28.	Laser Printer	Deleted
29.	Software	Deleted

6. Training (Soft Component) Priority A

ANNEX 4

JAPAN'S GRANT AID

2.1 Japan's Grant Aid Scheme

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

(1) Grant Aid Procedures

Japan's Grant Aid Scheme is executed through the following procedures:

• Application	(Request made by a recipient county)
• Study	(Basic Design Study conducted by JICA)
• Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
• Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

Firstly, the application or a request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for the Grand Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the recipient country.

Finally, for the smooth implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

(2) Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereafter referred to as "the Study") conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

i) Confirmation of the background, objectives, and benefits of the requested Project and also institutional capacity of agencies concerned of the recipient

country necessary for the Project's implementation.

ii) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.

iii) Confirmation of items agreed upon by both parties concerning the basic concept of the Project.

iv) Preparation of a Basic Design of the Project,

v) Estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

(3) Japan's Grant Aid Scheme

1) Exchange of Notes (E/N)
Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

2) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consulting firm(s) and (a) contractor(s) and final payment to them must be completed.

However in case of delays in delivery, installation or construction due to unforeseen factors such as natural disaster, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

3) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the

purchase of the products or services of a third country.

However, the prime contractors, namely, consulting, constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

4) Necessity of the "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

5) Undertakings required to the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

i) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction,
ii) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
iii) To secure buildings prior to the procurement in case the installation of the equipment,
iv) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
v) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
vi) To accord Japanese nationals, whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

6) "Proper Use"

The recipient country is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

7) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

8) Banking Arrangements (B/A)

a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its

designated authority under the Verified Contracts.

b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

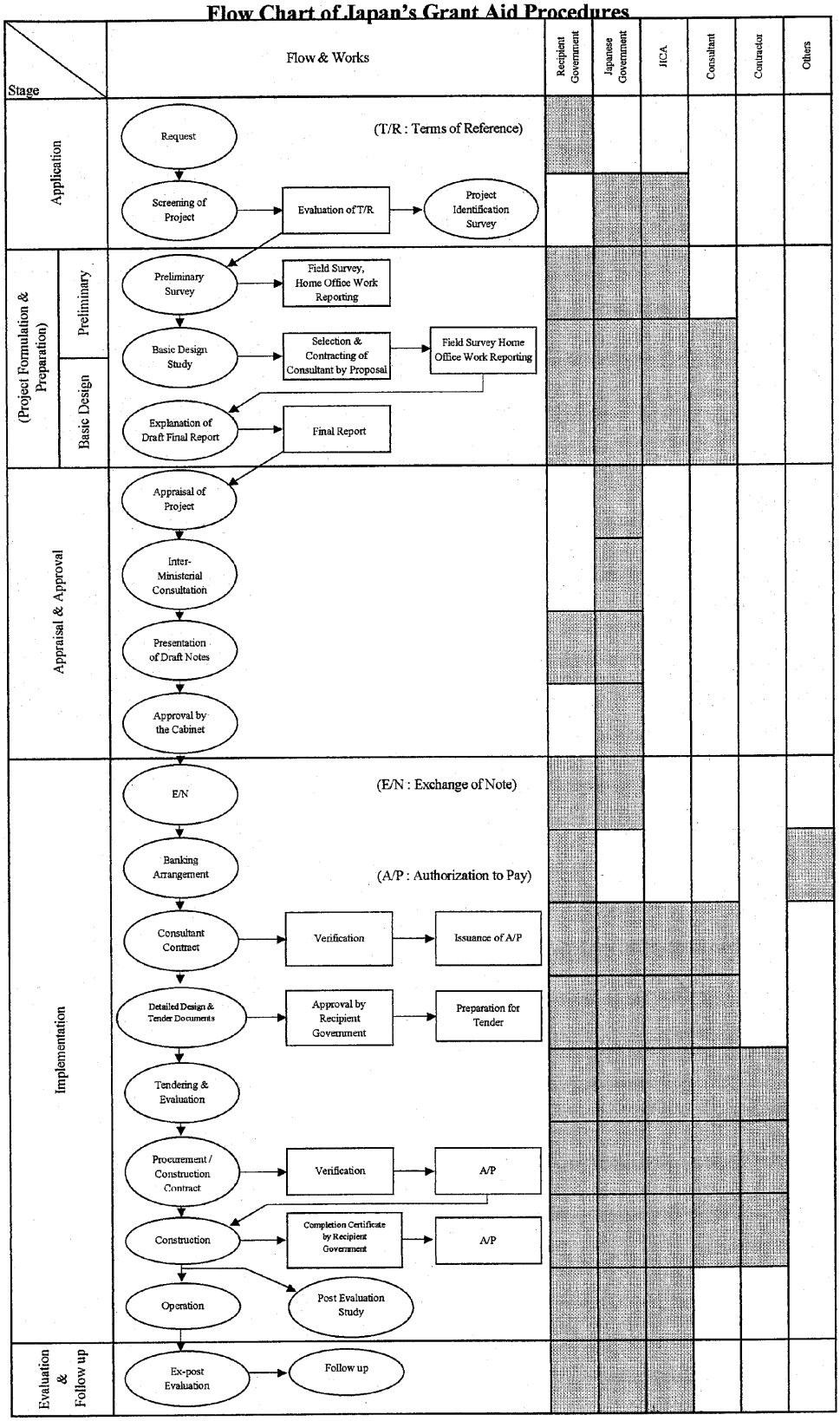
9) Authorization to Pay (A/P)
The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

2.2 Grant Aid Procedure

(1) Flowchart of Japan's Grant Aid Procedures
Refer to **Fig. 1.**

Figure 1.

Flow Chart of Japan's Grant Aid Procedures



ANNEX 5

Major Undertakings to be Taken by Each Government

No.	Items	To be Covered by Grant Aid	To be Covered by Recipient Side
1	To bear the following commissions to the Japanese bank for the banking services based upon the B/A		
	1) Advising commission of A/P		○
	2) Payment commission		○
2	To ensure unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		○
	3) Internal transportation from the port of disembarkation to the project site	●	
3	To accord Japanese nationals, whose services may be required in connection with the supply of the products and the services under the verified contact, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		○
4	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		○
5	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		○
6	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for the transportation and installation of the equipment		○

B/A: Banking Arrangement
A/P: Authorization to Pay