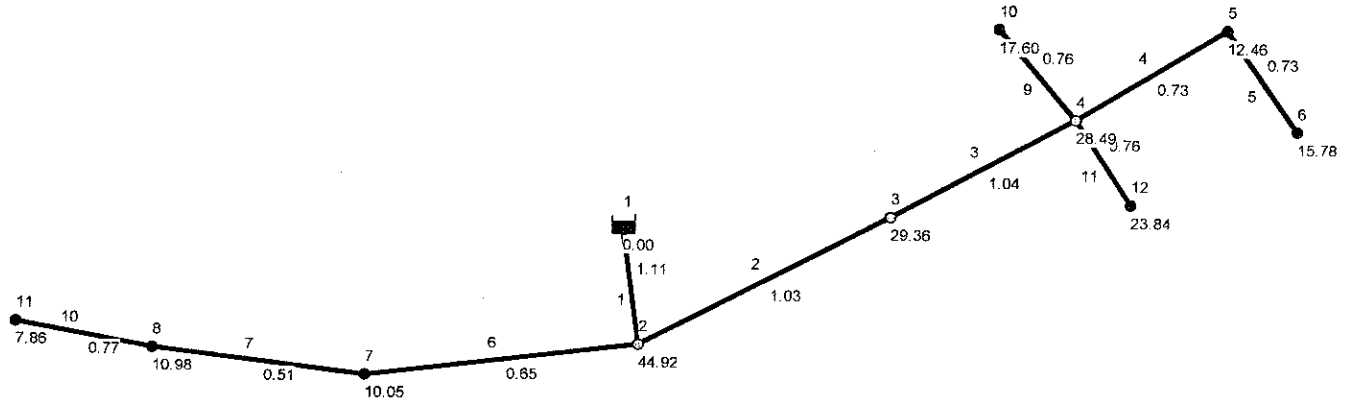
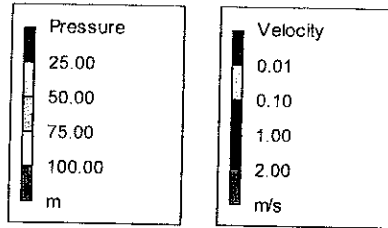


Chapter 7

Hydraulic Calculation Results

Figure K7-1 Layout of K1-1 system for Hydraulic Calculation



K7-1

Table K7-1 Dimension of Network system

Node ID	Elevation m	Demand LPS	Head m	Pressure m
Junc 2	650	1.92	694.92	44.92
Junc 3	650	4.47	679.36	29.36
Junc 4	642	1.50	670.49	28.49
Junc 5	650	0.00	662.46	12.46
Junc 6	640	3.68	655.78	15.78
Junc 7	680	2.56	690.05	10.05
Junc 8	675	0.00	685.98	10.98
Junc 11	675	2.56	682.86	7.86
Junc 10	645	1.50	662.60	17.60
Junc 12	645	1.50	668.84	23.84
Resvr 1	700	-19.69	700.00	0.00

K7-2

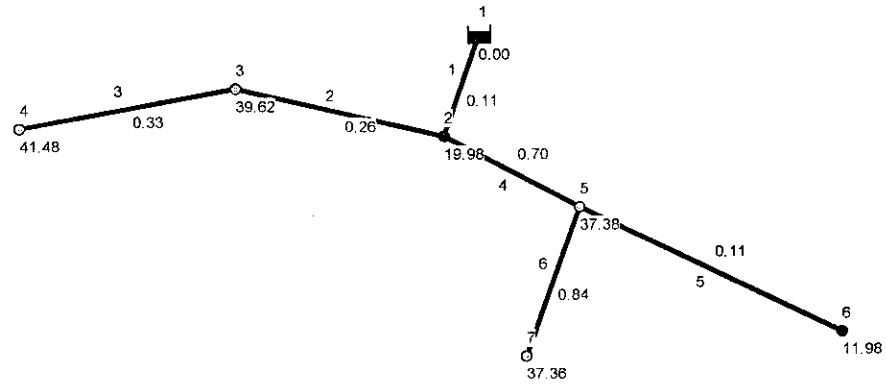
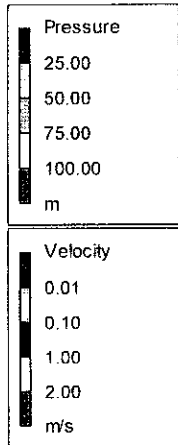
Table K7-2 Results of Network Link

Link ID	Length m	Diameter mm	Flow LPS	Velocity m/s	Headloss m/km
Pipe 2	1700	125	12.65	1.03	9.15
Pipe 3	720	100	8.18	1.04	12.32
Pipe 4	960	80	3.68	0.73	8.36
Pipe 5	800	80	3.68	0.73	8.36
Pipe 6	960	100	5.12	0.65	5.07
Pipe 7	960	80	2.56	0.51	4.23
Pipe 10	260	65	2.56	0.77	11.99
Pipe 9	480	50	-1.50	0.76	16.42
Pipe 11	100	50	1.50	0.76	16.42
Pipe 1	600	150	19.69	1.11	8.47

K7-3

Figure K7-2 Layout of K2-1 system for Hydraulic Calculation

Day 1, 12:00 AM



K7-4

Table K7-3 Dimension of Network system

Node ID	Elevation m	Demand LPS	Pressure m
Junc 2	690	0.65	19.98
Junc 3	670	0.65	39.62
Junc 4	665	0.65	41.48
Junc 5	670	1.65	37.38
Junc 6	695	0.21	11.98
Junc 7	660	1.65	37.36
Resvr 1	710	-5.46	0.00

K7-5

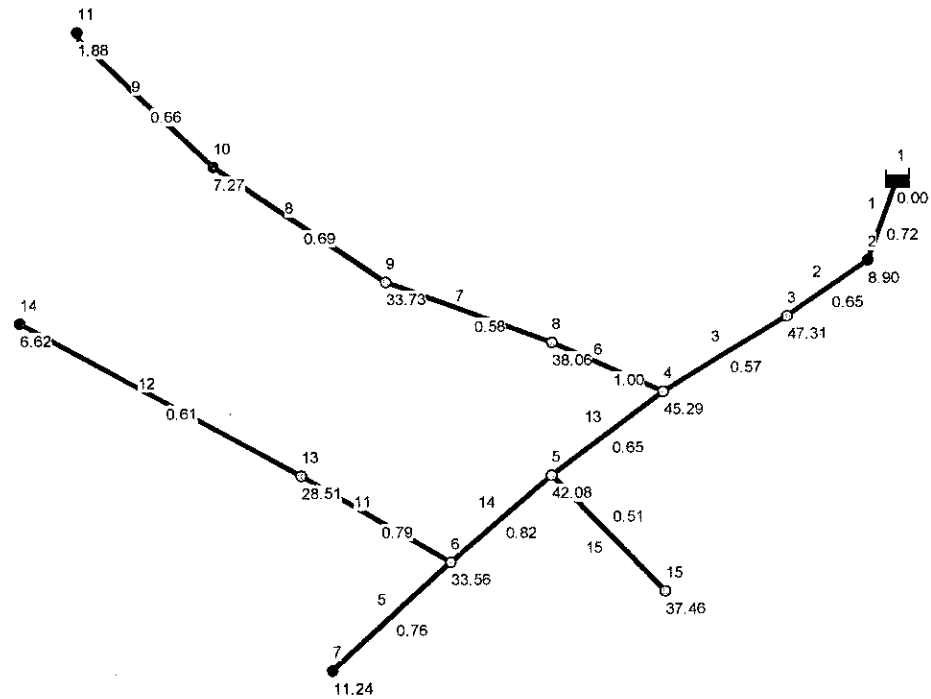
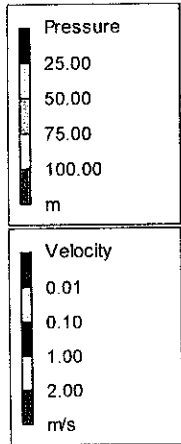
Table K7-4 Results of Network Link

Link ID	Length m	Diameter mm	Flow LPS	Velocity m/s	Headloss m/km
Pipe 1	300	250	5.46	0.11	0.06
Pipe 2	300	80	1.30	0.26	1.22
Pipe 3	900	50	0.65	0.33	3.48
Pipe 4	340	80	3.51	0.70	7.64
Pipe 5	870	50	0.21	0.11	0.46
Pipe 6	510	50	1.65	0.84	19.66

K7-6

Figure K7-3 Layout of K2-3 system for Hydraulic Calculation

Day 1, 12:00 AM



K7-7

Table K7-5 Dimension of Network system

Node ID	Elevation m	Demand LPS	Pressure m
Junc 2	690	1.25	8.90
Junc 3	650	1.25	47.31
Junc 4	650	0.00	45.29
Junc 5	650	0.00	42.08
Junc 6	650	0.00	33.56
Junc 7	660	1.50	11.24
Junc 8	650	2.10	38.06
Junc 9	650	0.62	33.73
Junc 10	660	1.00	7.27
Junc 11	660	1.30	1.88
Junc 13	650	1.43	28.51
Junc 14	660	1.20	6.62
Junc 15	650	1.00	37.46
Resvr 1	700	-12.65	0.00

K7-8

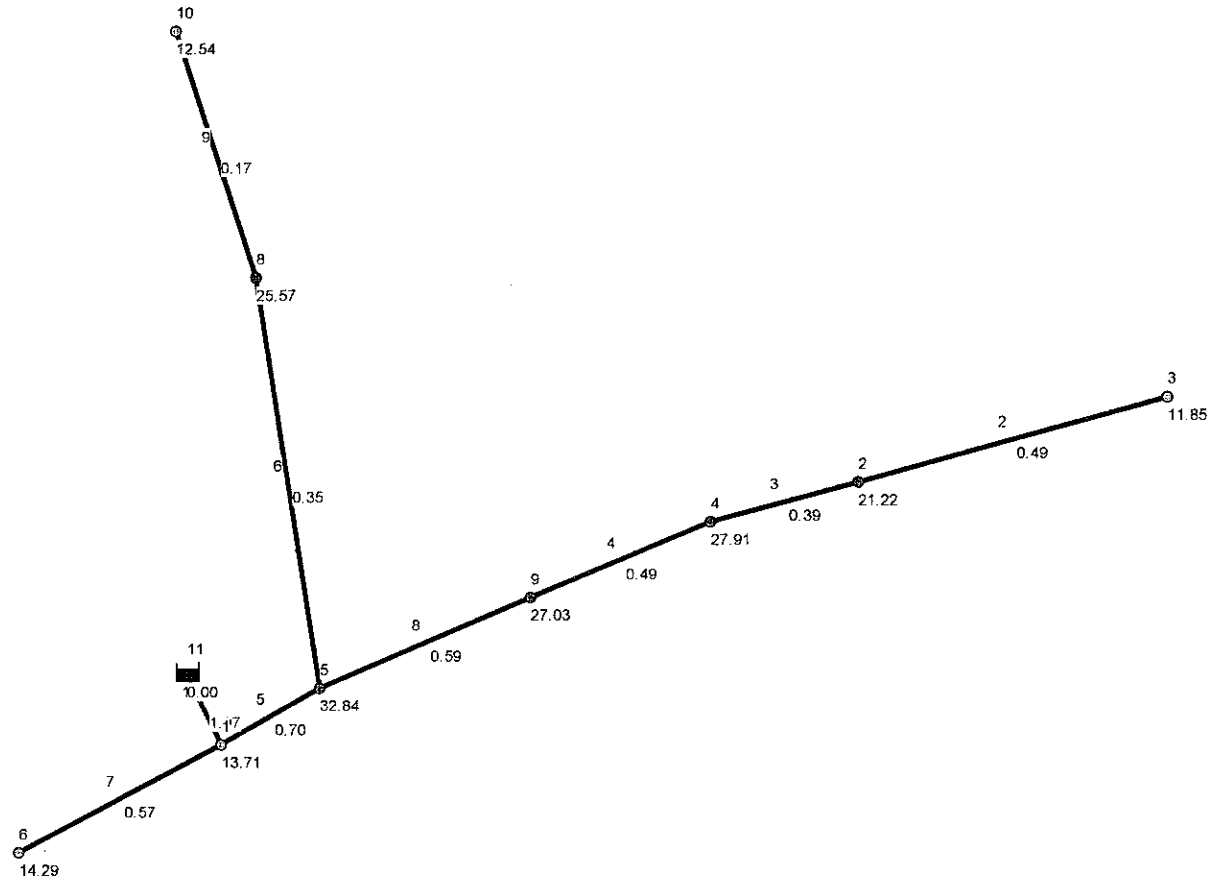
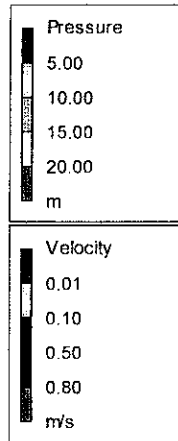
Table K7-6 Results of Network Link

Link ID	Length m	Diameter mm	Flow LPS	Velocity m/s	Headloss m/km
Pipe 1	300	150	12.65	0.72	3.65
Pipe 2	530	150	11.40	0.65	3.00
Pipe 3	840	150	10.15	0.57	2.41
Pipe 5	750	50	1.50	0.76	16.42
Pipe 6	480	80	5.02	1.00	15.05
Pipe 7	800	80	2.92	0.58	5.41
Pipe 8	1680	65	2.30	0.69	9.80
Pipe 9	430	50	1.30	0.66	12.55
Pipe 11	400	65	2.63	0.79	12.61
Pipe 12	1100	50	1.20	0.61	10.81
Pipe 13	630	100	5.13	0.65	5.09
Pipe 14	820	80	4.13	0.82	10.39
Pipe 15	600	50	1.00	0.51	7.70

K7-9

Figure K7-4 Layout of K3-1 system for Hydraulic Calculation

Day 1, 12:00 AM



K7-10

Table K7-7 Dimension of Network system

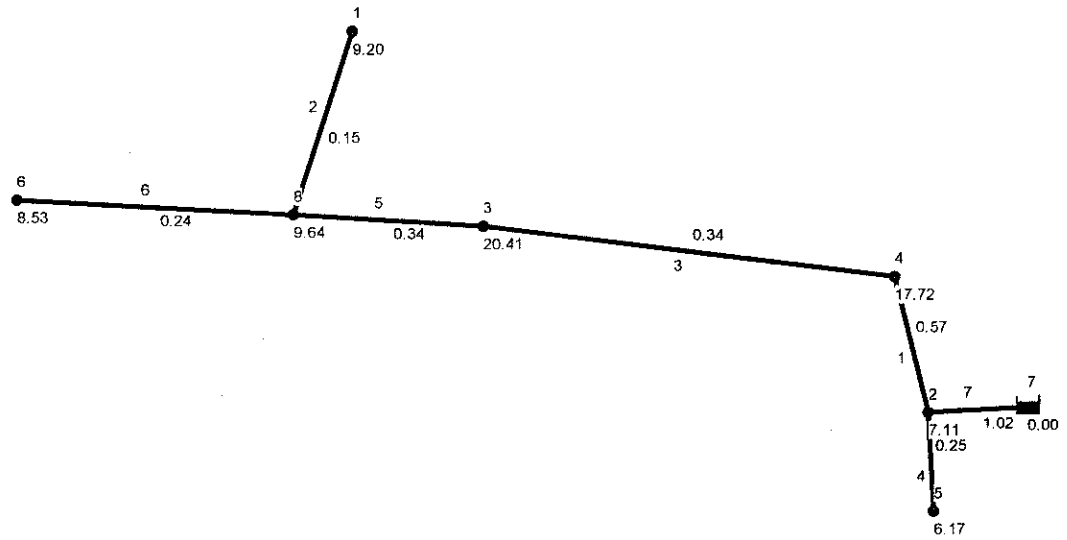
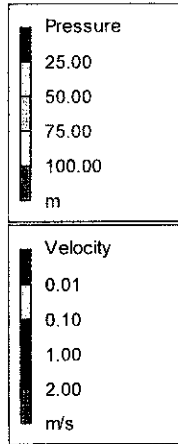
Node ID	Elevation m	Demand LPS	Pressure m
Junc 2	705	0.33	21.22
Junc 3	710	0.97	11.85
Junc 4	700	0.33	27.91
Junc 5	705	2.86	32.84
Junc 6	720	2.86	14.29
Junc 8	708	0.36	25.57
Junc 9	705	0.33	27.03
Junc 1	725	0.00	13.71
Junc 10	720	0.33	12.54
Resvr 11	740	-8.37	0.00

Table K7-8 Results of Network Link

Link ID	Headloss m/km
Pipe 2	7.27
Pipe 3	3.39
Pipe 4	5.15
Pipe 6	3.88
Pipe 8	7.26
Pipe 5	5.83
Pipe 7	5.21
Pipe 9	1.03
Pipe 10	12.88

Figure K7-5 Layout of K4-1 system for Hydraulic Calculation

Day 1, 12:00 AM



K7-13

Table K7-9 Dimension of Network system

Node ID	Elevation m	Demand LPS	Pressure m
Junc 3	660	0.00	20.41
Junc 4	665	1.80	17.72
Junc 5	680	2.00	6.17
Junc 6	670	1.20	8.53
Junc 8	670	1.20	9.64
Junc 1	670	0.30	9.20
Junc 2	680	6.00	7.11
Resvr 7	688	-12.50	0.00

K7-14

Table K7-10 Results of Network Link

Link ID	Length m	Diameter mm	Flow LPS	Velocity m/s	Headloss m/km
Pipe 3	1500	100	-2.70	0.34	1.54
Pipe 5	500	100	2.70	0.34	1.54
Pipe 6	1050	80	1.20	0.24	1.05
Pipe 2	500	50	-0.30	0.15	0.87
Pipe 1	1100	100	-4.50	0.57	3.98
Pipe 4	1050	100	2.00	0.25	0.89
Pipe 7	100	125	12.50	1.02	8.95

K7-15