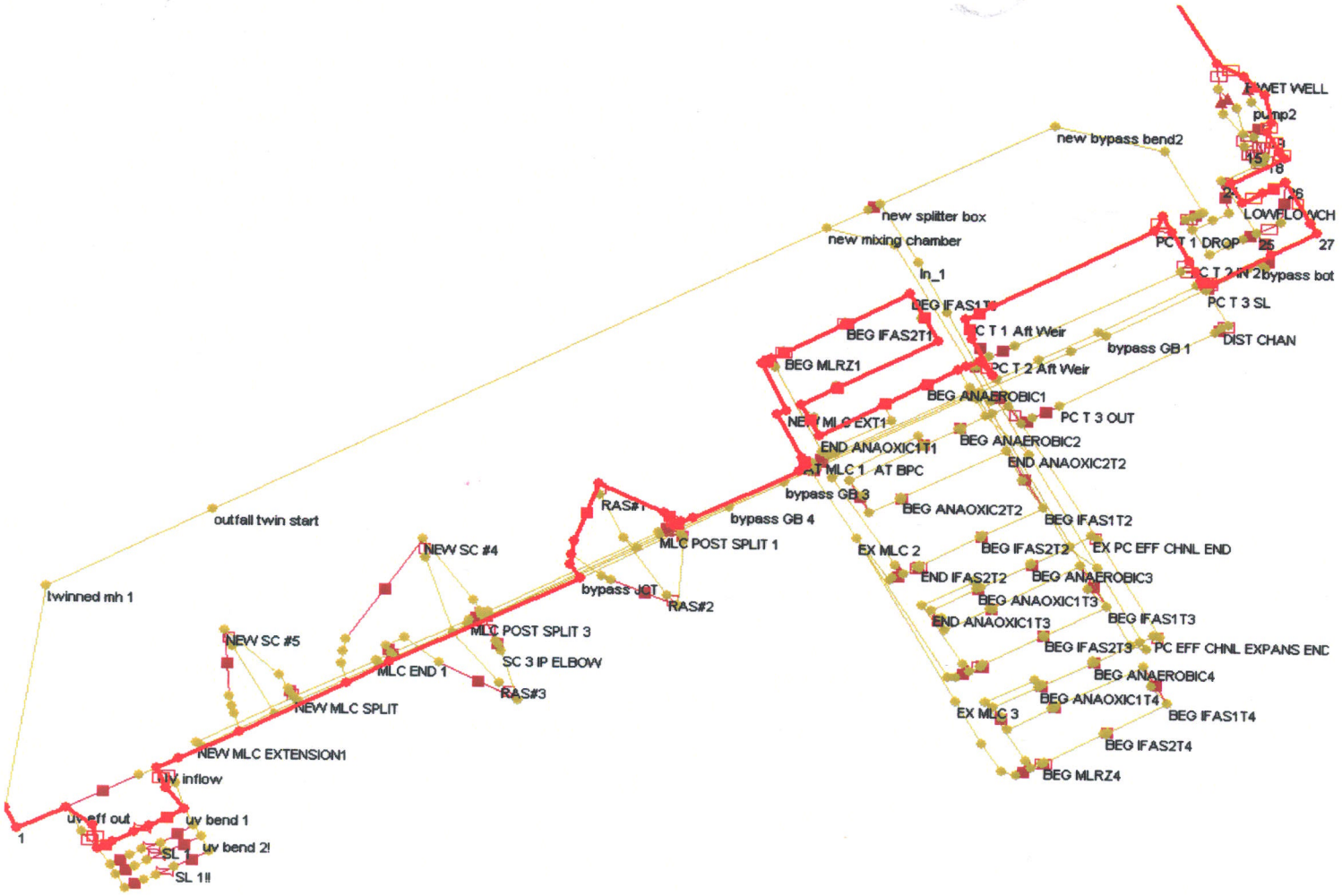
APPENDIX K

Additional Model Data Output Tables

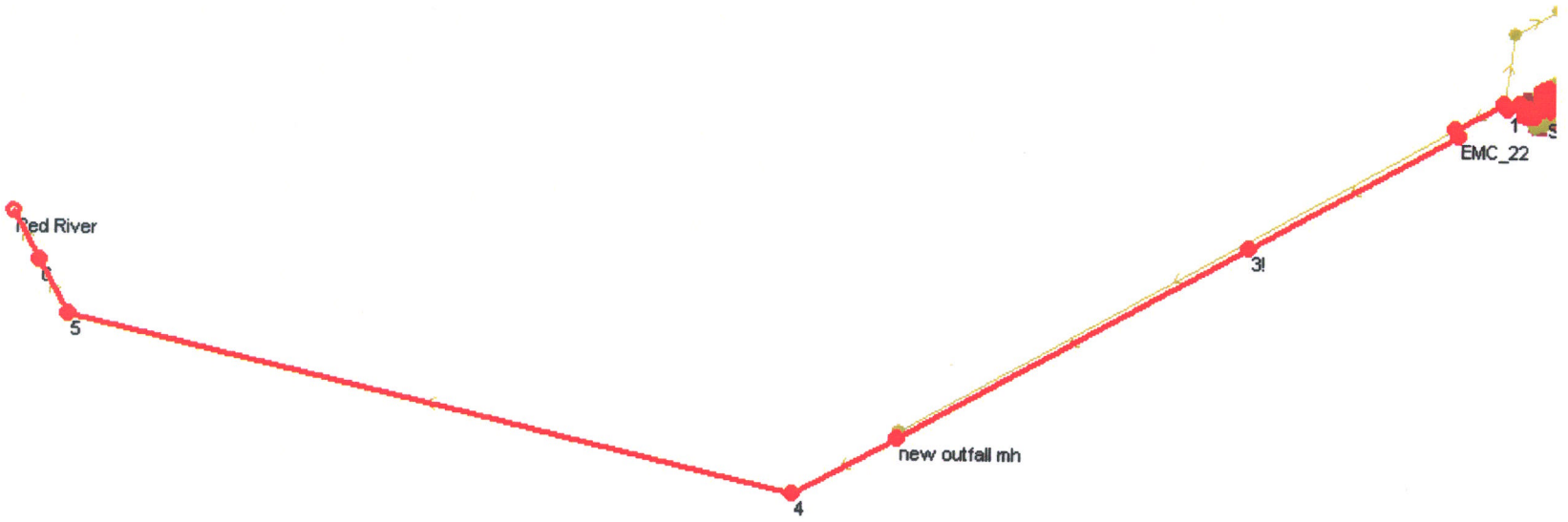
TM 45
SEWPCC Hydraulics Modeling
InfoWorks Modeling
Appendix Documents

20	ML/d
0.231	m3/s

SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Path

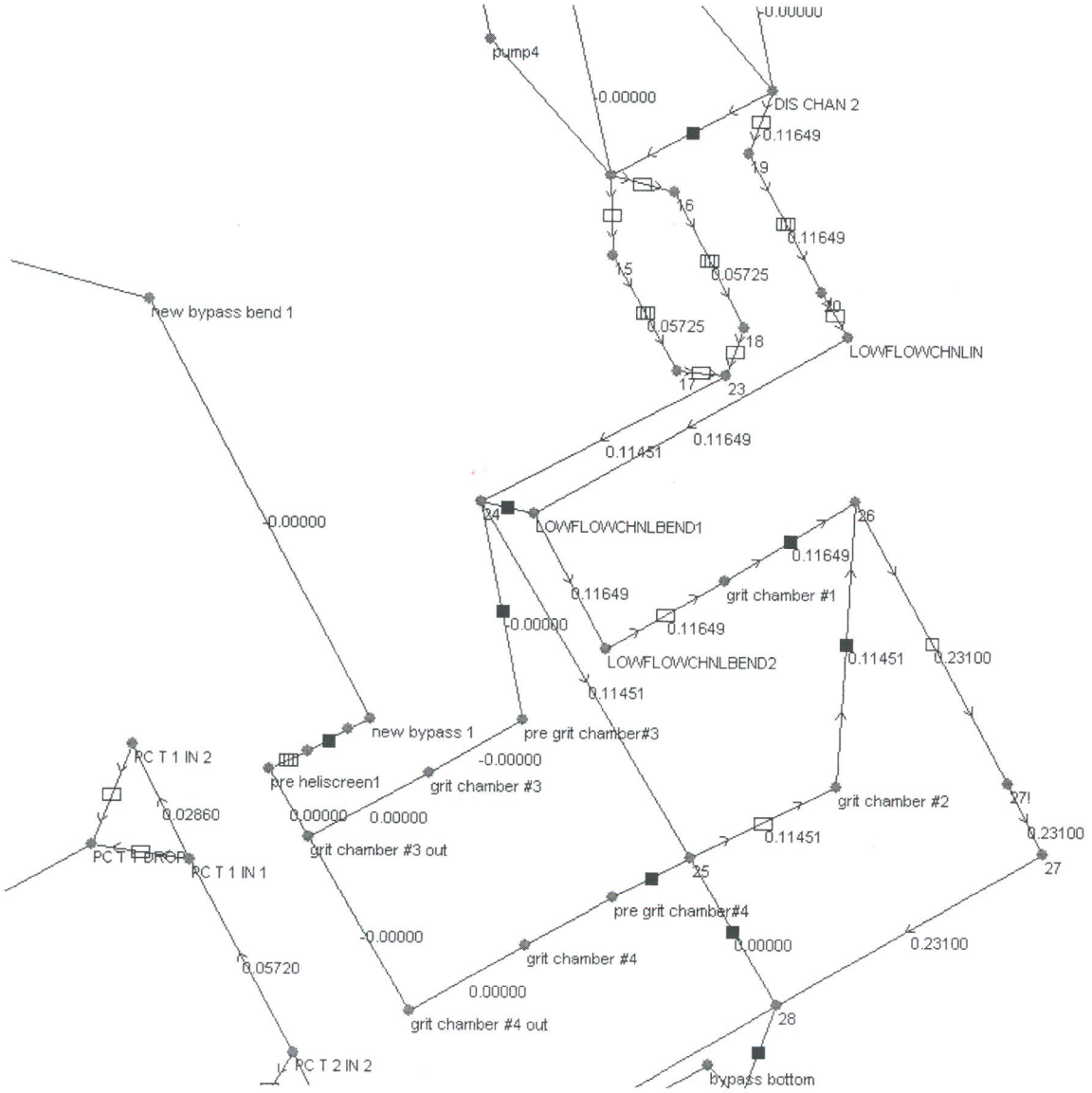


SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Path



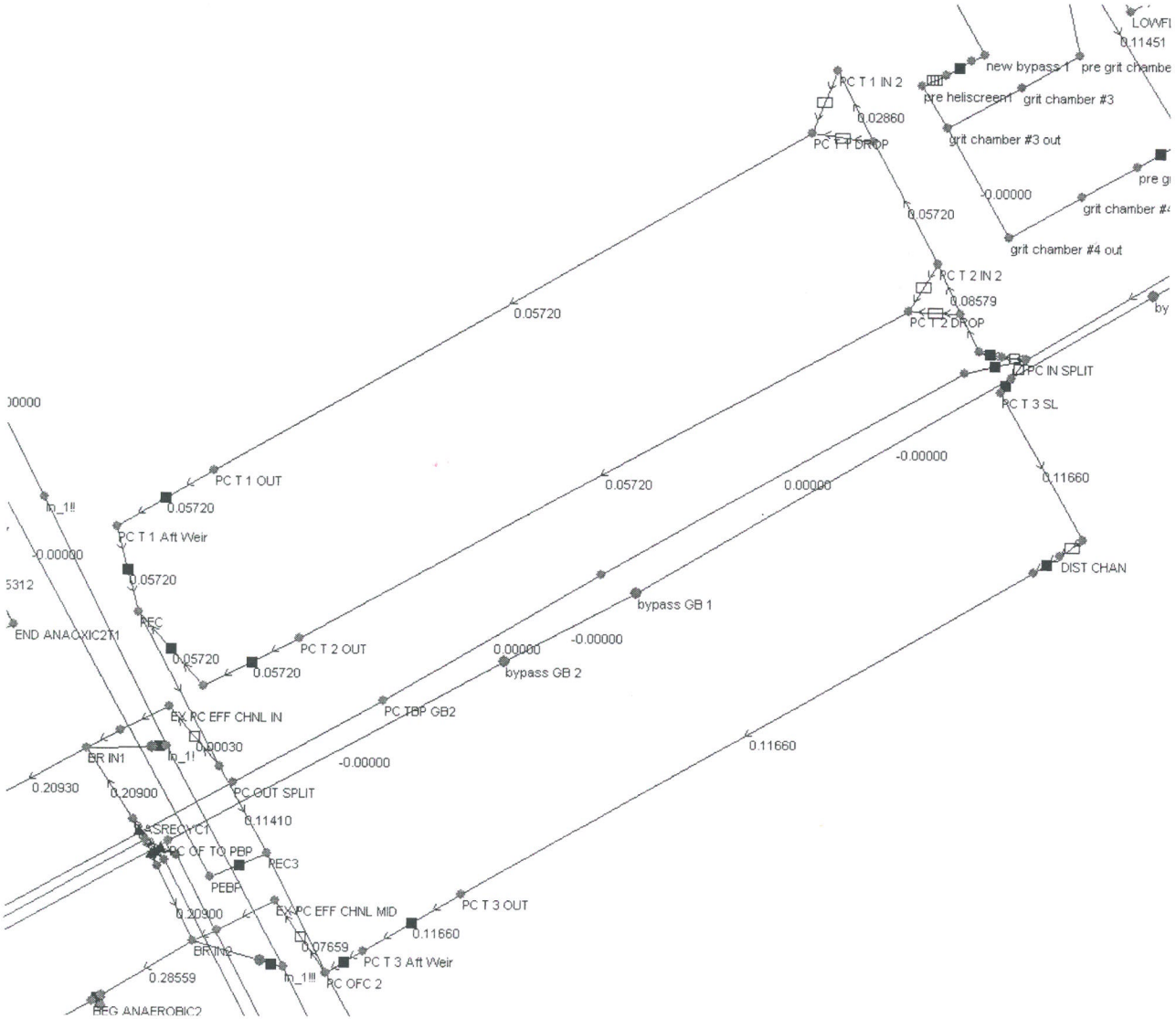
SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Flows - Headworks and Grit Tanks

Flowrate numbers shown on this figure are in m^3/s.



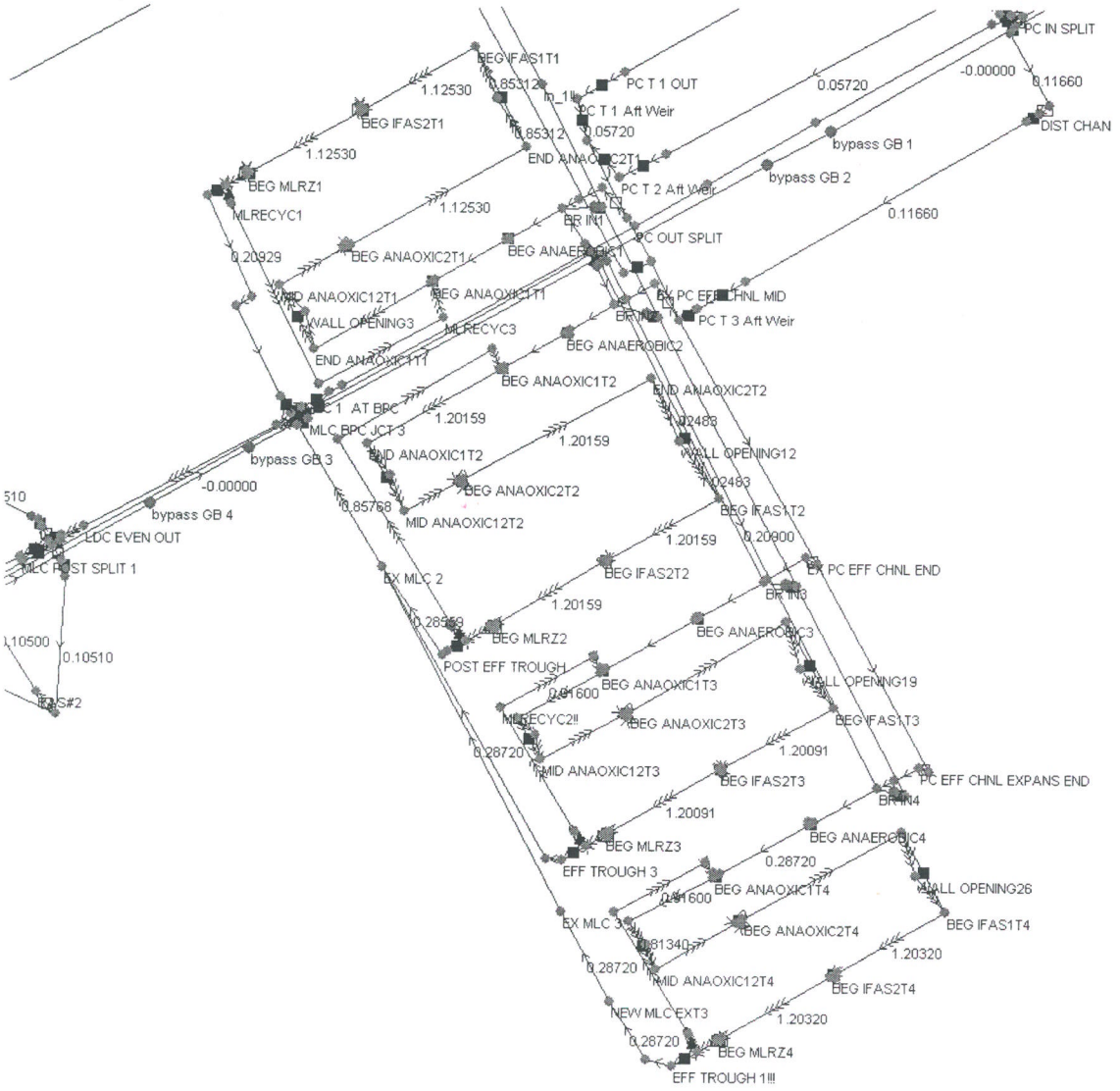
SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s **20 ML/d**
Flows - Primary Clarifiers

Flowrate numbers shown on this figure are in m^3/s.



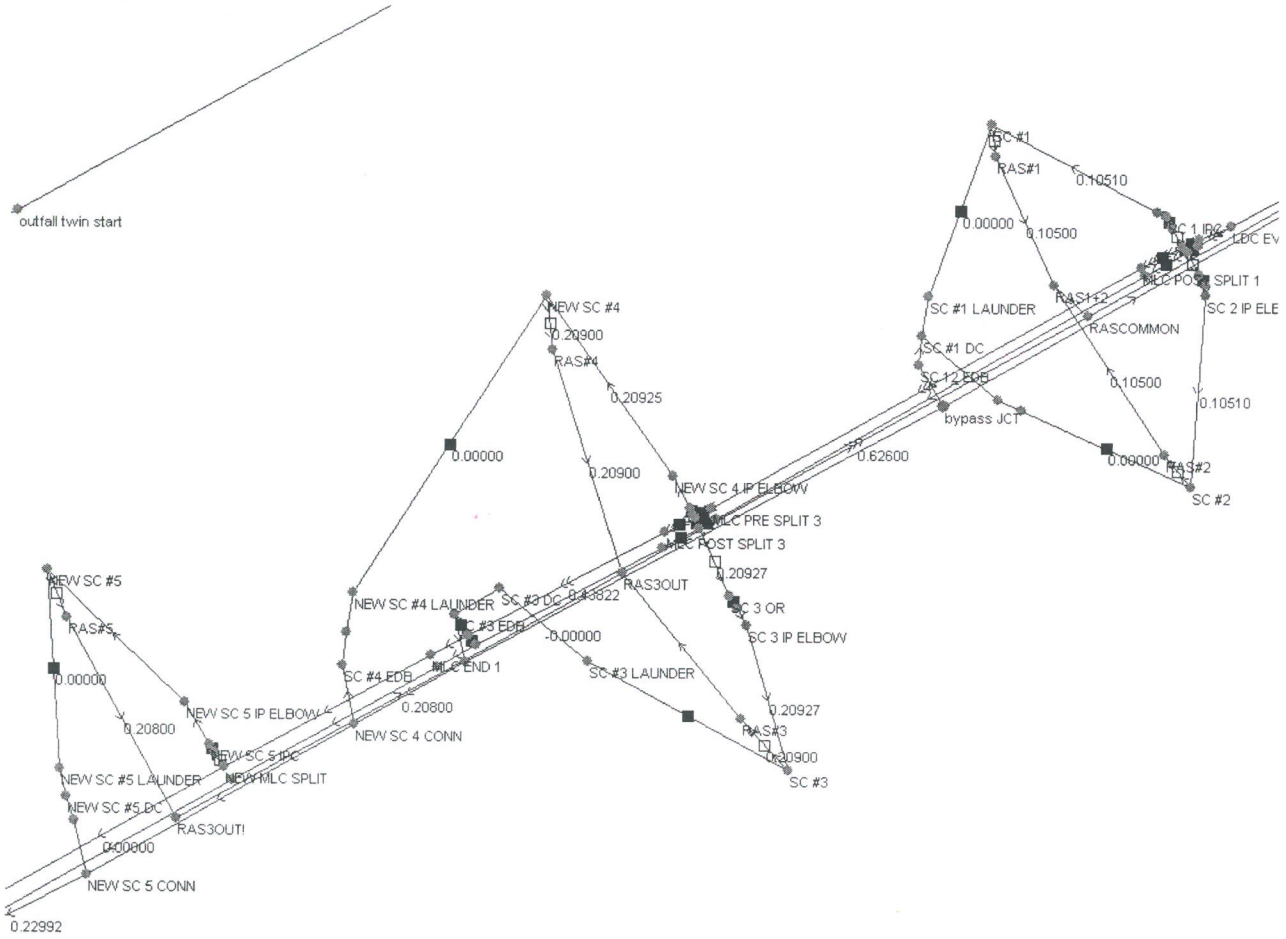
SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Flows - Bioreactors

Flowrate numbers shown on this figure are in m^3/s.



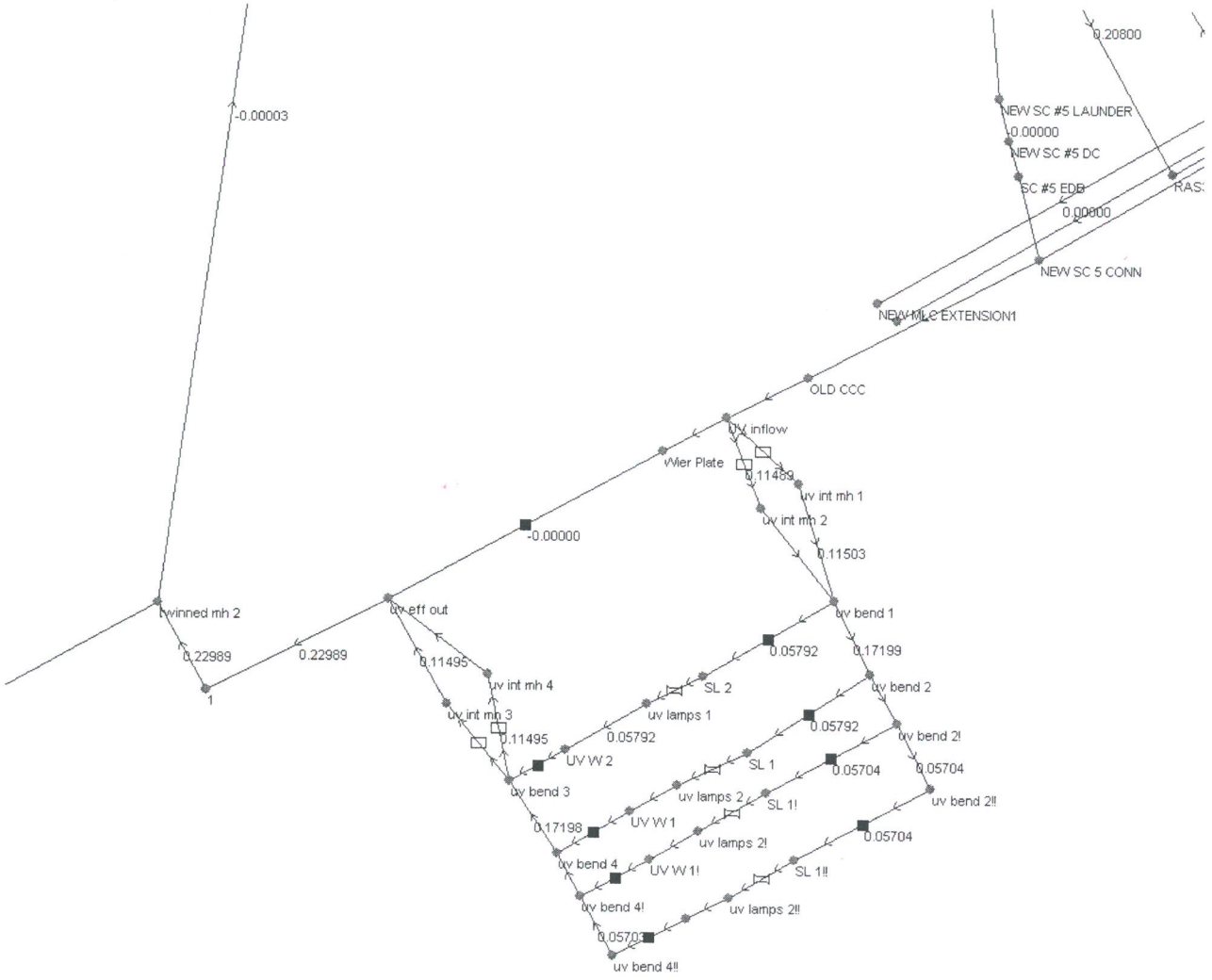
SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Flows - Secondary Clarifiers

Flowrate numbers shown on this figure are in m^3/s.



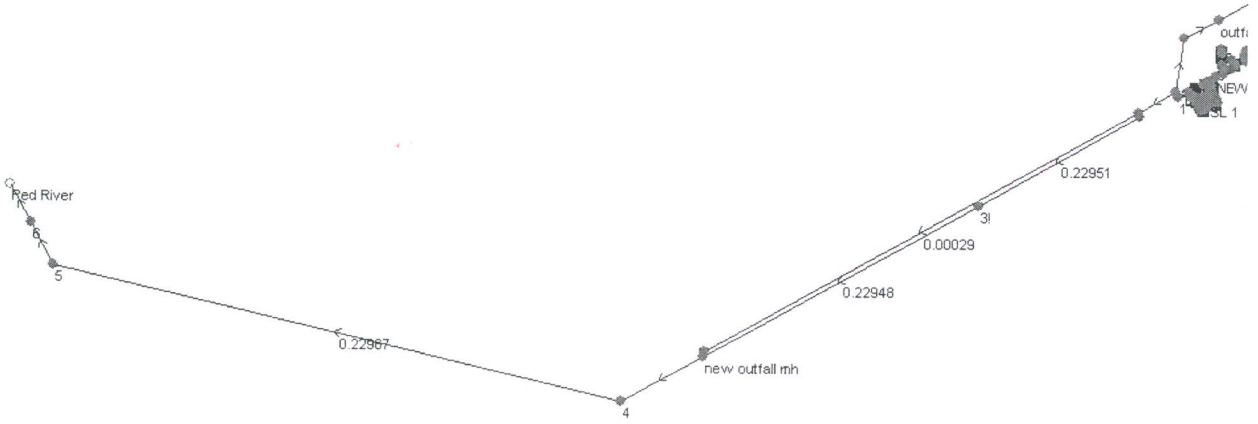
SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s **20 ML/d**
Flows - UV Building

Flowrate numbers shown on this figure are in m^3/s.

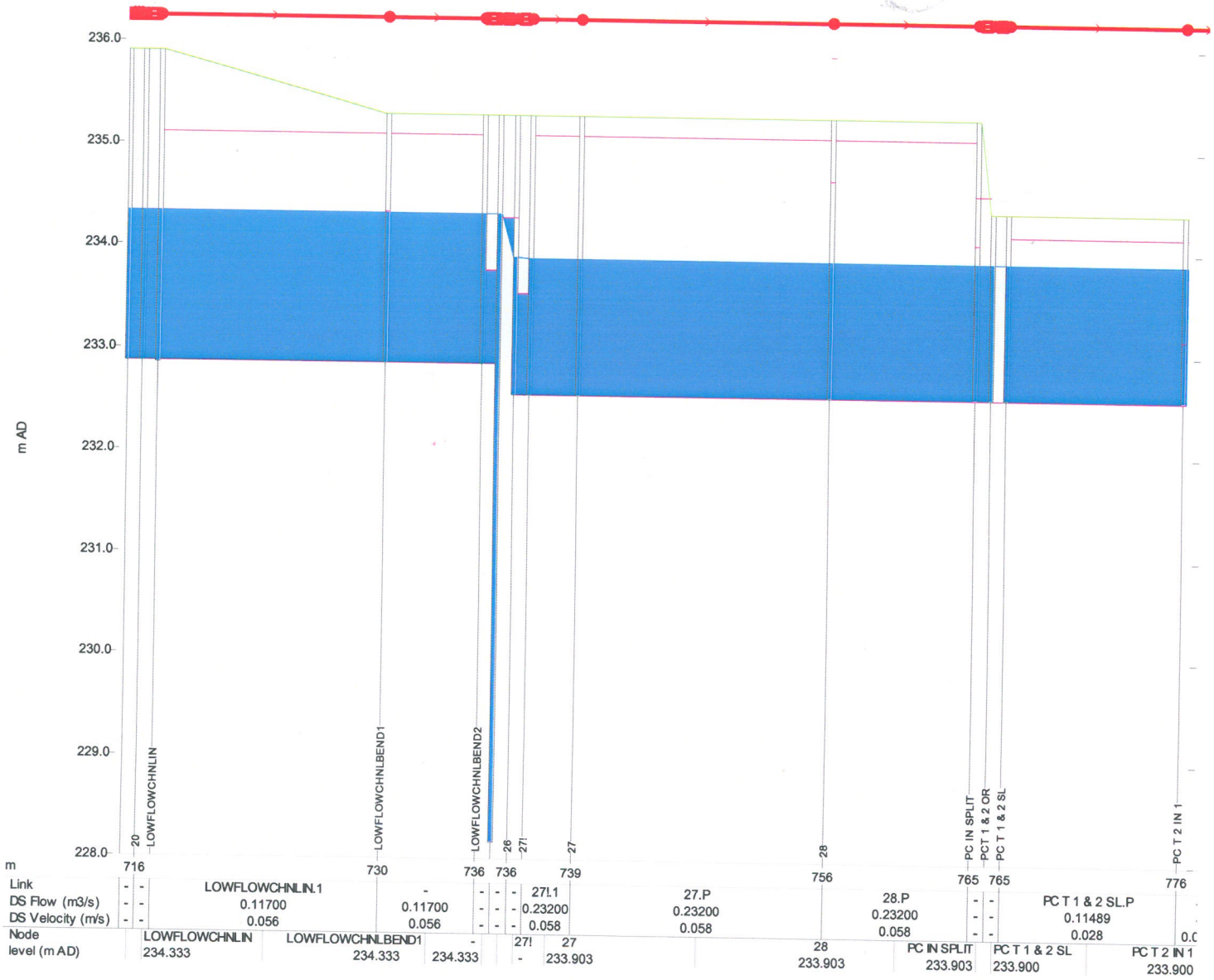


SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s **20 ML/d**
Flows - Outfall

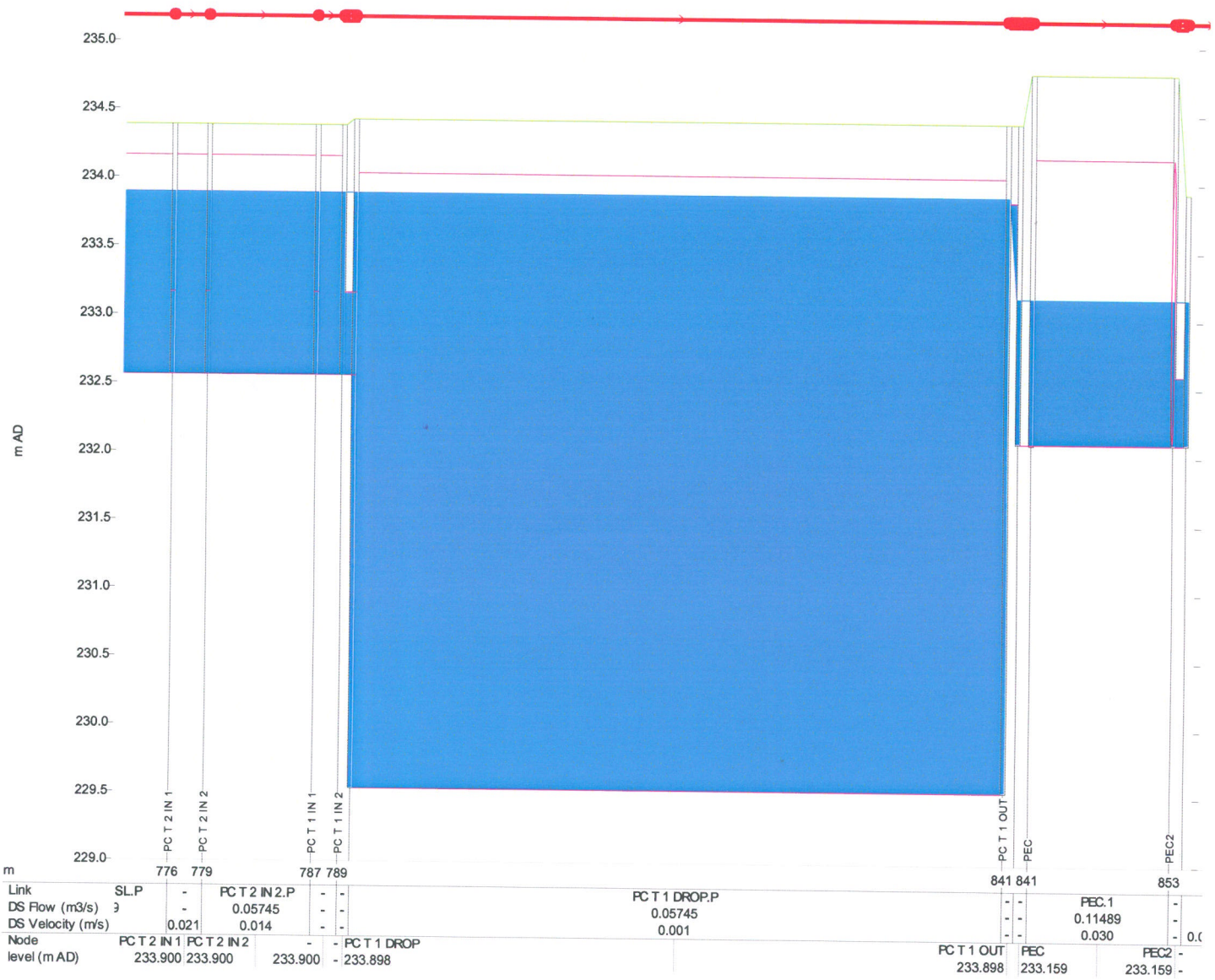
Flowrate numbers shown on this figure are in m^3/s.



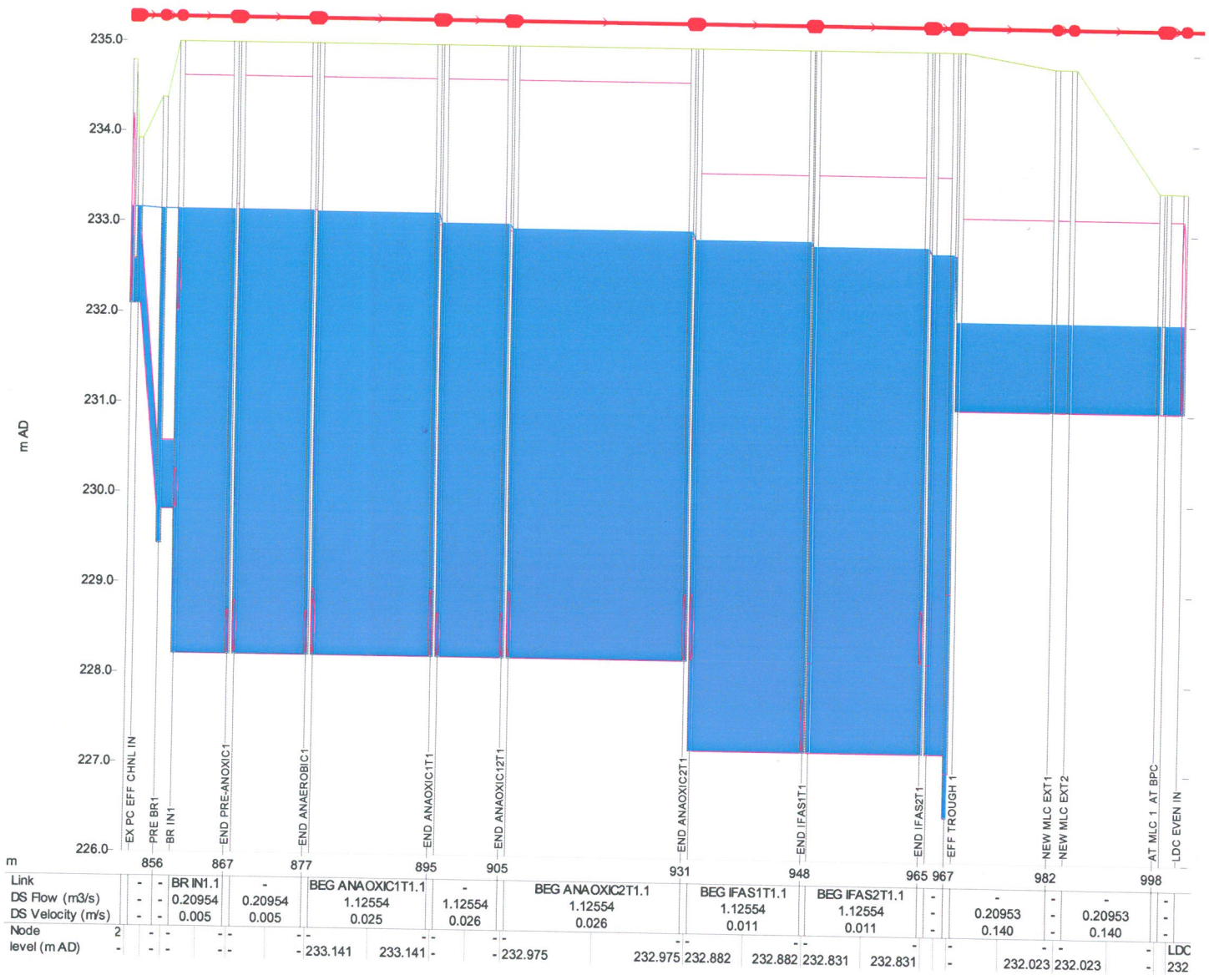
SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Profile - Headworks to Primary Clarifier



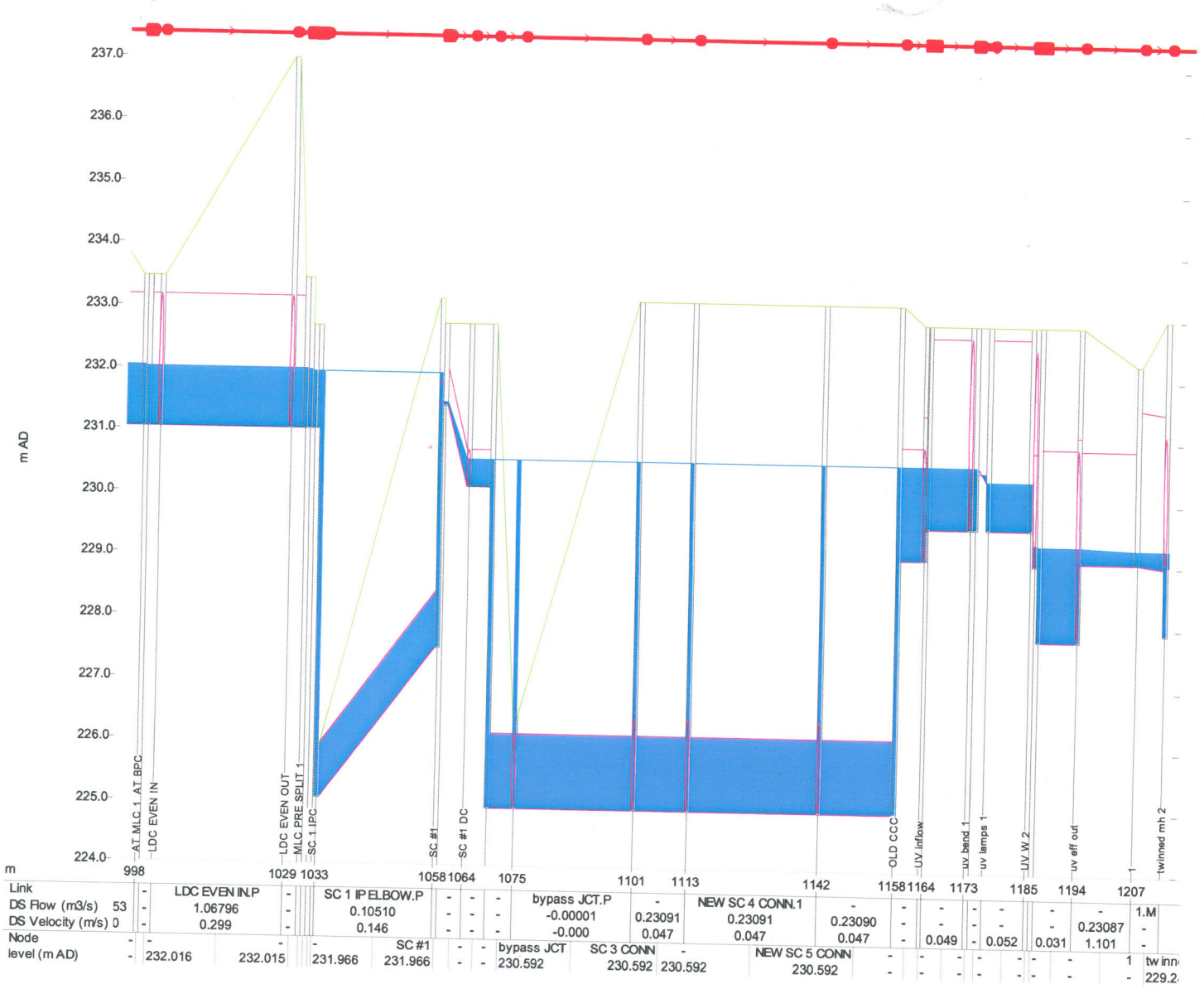
SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Profile - Primary Clarifier to Bioreactor



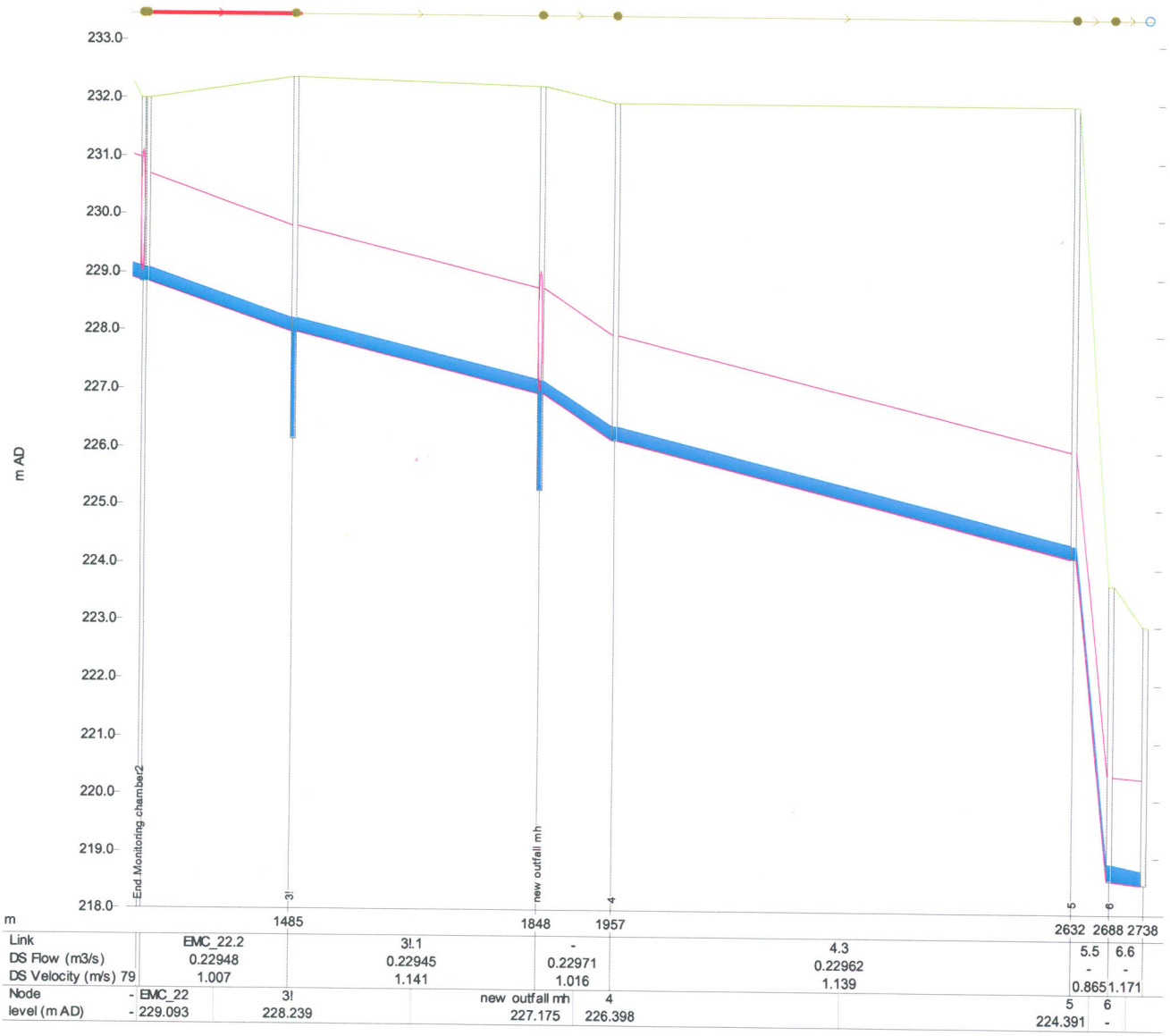
SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Profile - Bioreactor to Secondary Clarifier



SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Profile - Secondary Clarifier to UV Building



SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Profile



m		1485		1848	1957			2632	2688	2738
Link		EMC_22.2	3!.1	-		4.3		5.5	6.6	
DS Flow (m3/s)		0.22948	0.22945	0.22971		0.22962		-	-	
DS Velocity (m/s)	79	1.007	1.141	1.016		1.139		0.865	1.171	
Node	-	EMC_22	3!	new outfall mh	4			5	6	
level (m AD)	-	229.093	228.239	227.175	226.398			224.391	-	

SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Volume balance (%)
x1	220.319	-9.781	-57.7	0	0
INLET STRUC	219.61	-10.51	-103	0	0
E WET WELL	217	-9	-394.2	0	0
pump1	234.356	-1.644	-1.6	0	0
DIS CHAN 2	234.356	-1.624	-35.9	0	0
19	234.353	-1.564	-8.1	0	0
20	234.35	-1.565	-1.6	0	0
LOWFLOWCHNLIN	234.347	-1.568	-5.9	0	0
LOWFLOWCHNLBEND1	234.347	-0.755	-0.8	0	0
LOWFLOWCHNLBEND2	234.347	-0.755	-0.8	0	0
grit chamber #1	234.343	-0.962	-80.5	0	0
26	233.912	-1.19	-1.2	0	0
27!	233.903	-1.199	-1.2	0	0
27	233.903	-1.199	-1.2	0	0
28	233.903	-1.199	-1.2	0	0
PC IN SPLIT	233.903	-1.199	-1.2	0	0
PCT 1 & 2 OR	233.901	-0.262	-0.3	0	0
PC T 1 & 2 SL	233.9	-0.263	-0.3	0	0
PC T 2 IN 1	233.9	-0.263	-0.3	0	0
PC T 2 IN 2	233.9	-0.263	-0.3	0	0
PC T 1 IN 1	233.9	-0.263	-0.3	0	0
PC T 1 IN 2	233.9	-0.263	-0.3	0	0
PC T 1 DROP	233.898	-0.257	-0.3	0	0
PC T 1 OUT	233.898	-0.257	-0.3	0	0
PC T 1 Aft Weir	233.191	-0.964	-1	0	0
PEC	233.191	-1.559	-7.8	0	0
PEC2	233.191	-1.559	-1.6	0	0
EX PC EFF CHNL IN	233.18	-0.754	-2	0	0
PRE BR1	233.178	-1.213	-2.2	0	0
BR IN1	233.178	-1.472	-1.5	0	0
END PRE-ANOXIC1	233.178	-1.472	-1.5	0	0
BEG ANAEROBIC1	233.163	-1.487	-1.5	0	0
END ANAEROBIC1	233.163	-1.487	-1.5	0	0
BEG ANAOXIC1T1	233.153	-1.497	-1.5	0	0
END ANAOXIC1T1	233.153	-1.497	-1.5	0	0
MID ANAOXIC12T1	233.047	-1.603	-1.6	0	0
END ANAOXIC2T1	232.986	-1.664	-1.7	0	0
BEG ANAOXIC2T1	232.986	-1.664	-1.7	0	0
END ANAOXIC12T1	233.047	-1.603	-1.6	0	0
BEG IFAS1T1	232.887	-1.763	-1.8	0	0
END IFAS1T1	232.887	-1.763	-1.8	0	0
BEG IFAS2T1	232.836	-1.814	-1.8	0	0
END IFAS2T1	232.836	-1.814	-1.8	0	0

SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s 20 ML/d
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Volume balance (%)
BEG MLRZ1	232.781	-1.869	-1.9	0	0
END MLRZ1	232.781	-1.869	-1.9	0	0
EFF TROUGH 1	232.024	-2.626	-2.6	0	0
NEW MLC EXT1	232.024	-2.596	-2.6	0	0
NEW MLC EXT2	232.024	-2.596	-2.6	0	0
AT MLC 1 AT BPC	232.024	-1.147	-1.1	0	0
MLC BPC JCT 1	232.015	-1.156	-1.2	0	0
LDC EVEN IN	232.015	-1.157	-1.2	0	0
LDC EVEN OUT	232.015	-1.462	-1.5	0	0
MLC PRE SPLIT 1	232.014	-1.158	-1.2	0	0
MLC SPLIT 1	232	-1.172	-1.2	0	0
SC 1 OR	231.971	-0.541	-0.5	0	0
SC 1 IPC	231.968	-0.544	-1.3	0	0
SC 1 IP ELBOW	231.965	5.996	6	0	0
SC #1	231.965	-1.207	-1065.7	0	0
SC #1 LAUNDER	231.493	-1.273	-81.5	0	0
SC #1 DC	230.592	-2.174	-4.3	0	0
SC 1&2 EDB	230.592	-2.174	-3.3	0	0
bypass JCT	230.592	4.43	4.5	0	0
SC 3 CONN	230.592	-2.58	-47	0	0
NEW SC 4 CONN	230.592	-2.58	-47	0	0
NEW SC 5 CONN	230.592	-2.58	-47	0	0
OLD CCC	230.592	-1.968	-46.8	0	0
UV inflow	230.592	-2.278	-6.4	0	0
uv int mh 2	230.589	-2.081	-2.1	0	0
uv bend 1	230.589	-2.081	-2.1	0	0
SL 2	230.588	-2.082	-2.1	0	0
uv lamps 1	230.362	-2.308	-2.3	0	0
UV W 2	230.362	-2.308	-2.3	0	0
uv bend 3	229.343	-3.327	-3.3	0	0
uv int mh 4	229.335	-3.335	-3.3	0	0
uv eff out	229.335	-3.335	-190.1	0	0
1	229.302	-2.958	-76.9	0	0
twinned mh 2	229.288	-3.712	-9.7	0	0
End Monitoring chamber2	229.105	-2.895	-18.6	0	0
EMC_22	229.093	-2.907	-17.4	0	0
3!	228.239	-4.141	-4.6	0	0
new outfall mh	227.175	-5.075	-5.7	0	0
4	226.398	-5.552	-51.6	0	0
5	224.391	-7.559	-14.5	0	0
6	218.888	-4.832	-4.8	0	0
Red River					

SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s **20 ML/d**
Conduit Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
x1	1	0.099	0	0	0.00E+00	0.00086	0.099	0	0	39.2
pump1	1	0.856	0	0	0.00E+00	-1.00E-05	0.956	0	0	5.1
LOWFLOWCHNLIN	1	1.48	0.231	0.029	0.11	1.00E-05	1.48	0.231	0.11	30.5
LOWFLOWCHNLBEND1	1	1.48	0.19882	0.025	0.094	0	1.48	0.19882	0.094	13
27!	1	1.338	0.231	0.016	5.80E-02	0	1.338	0.231	0.058	12.6
27	P	1.338	0.231	0.016	0.058	0	1.338	0.231	0.058	64.6
28	P	1.338	0.231	0.016	5.80E-02	0	1.338	0.231	0.058	37.3
PC T 1 & 2 SL	P	1.335	0.1144	0.008	0.028	0	1.335	0.1144	0.028	45.6
PC T 2 IN 1	P	1.335	0.08579	0.006	2.10E-02	0	1.335	0.08579	0.021	11.4
PC T 2 IN 2	P	1.335	0.0572	0.004	1.40E-02	0	1.335	0.0572	0.014	34.6
PC T 1 IN 1	P	1.335	0.0286	0.002	7.00E-03	0	1.335	0.0286	0.007	8.5
PC T 1 DROP	P	4.358	0.0572	0	1.00E-03	0	4.358	0.0572	0.001	2058.3
PEC	1	1.086	0.1144	0.009	2.90E-02	0	1.086	0.1144	0.029	44.8
EX PC EFF CHNL IN	2	3.359	0.06227	0.007	0.122	0.0005	1.075	0.06227	0.131	1.7
PRE BR1	1	3.359	0.06227	0.007	0.122	3.00E-05	3.359	0.06227	0.122	1.3
BR IN1	1	4.959	0.27127	0.001	6.00E-03	0	4.959	0.27127	0.006	364.6
BEG ANAEROBIC1	1	4.944	0.27127	0.001	0.006	0	4.944	0.27127	0.006	497.4
BEG ANAOXIC1T1	1	4.934	1.18727	0.004	2.60E-02	0	4.934	1.18727	0.026	794.3
MID ANAOXIC12T1	1	4.828	1.18727	0.004	2.70E-02	0	4.828	1.18727	0.027	428.3
BEG ANAOXIC2T1	1	4.767	1.18727	0.004	0.027	0	4.767	1.18727	0.027	1185.8
BEG IFAS1T1	1	5.668	1.18727	0.002	0.011	0	5.668	1.18727	0.011	1761.6
BEG IFAS2T1	1	5.617	1.18727	0.002	0.011	0	5.617	1.18727	0.011	1745.8
BEG MLRZ1	1	5.562	1.18727	0.002	0.012	0	5.562	1.18727	0.012	299.1
EFF TROUGH 1	1	0.986	0.27127	0.058	1.80E-01	2.00E-05	0.986	0.27127	0.18	21.5
NEW MLC EXT1	1	0.986	0.27126	0.058	1.81E-01	2.00E-05	0.986	0.27127	0.18	3.7
NEW MLC EXT2	1	0.986	0.27126	0.058	1.81E-01	2.00E-05	0.986	0.27126	0.181	20.1
MLC BPC JCT 1	P	0.977	0.28258	0.051	1.58E-01	1.00E-05	0.977	0.28258	0.158	4.4
LDC EVEN IN	P	0.977	1.06696	0.097	0.299	3.00E-05	0.977	1.06697	0.298	101.8
LDC EVEN OUT	P	0.976	0.57323	0.104	0.321	5.00E-05	0.977	0.57323	0.321	5.7
SC 1 IPC	P	6.896	0.1051	0.007	1.37E-01	0.00312	0.93	0.1051	0.162	0.7
SC 1 IP ELBOW	P	4.432	0.1051	0.007	1.46E-01	0	6.896	0.1051	0.137	19
SC #1 LAUNDER	P	0.468	0	0	0	0.1609	0.061	0	0	0.9
SC #1 DC	P	0.468	0	0	0.00E+00	0	0.468	0	0	2.9
SC 1&2 EDB	P	5.65	0	0	0.00E+00	0	5.65	0	0	29.2
bypass JCT	P	5.65	-1.00E-05	0	0.00E+00	0	5.65	-1.00E-05	0	130
SC 3 CONN	1	5.65	0.22989	0.002	4.70E-02	0	5.65	0.22989	0.047	59.1
NEW SC 4 CONN	1	5.65	0.22989	0.002	0.047	0	5.65	0.22989	0.047	142.5
NEW SC 5 CONN	1	5.65	0.22989	0.002	4.70E-02	0	5.65	0.22989	0.047	80.6
OLD CCC	1	1.535	0.22988	0.024	0.098	0	1.535	0.22989	0.098	13.3
uv int mh 2	P	1.019	0.11487	0.016	4.90E-02	0	1.019	0.11487	0.049	21.2
uv lamps 1	P	0.792	0.05791	0.018	5.20E-02	0	0.792	0.05791	0.052	10.3
uv int mh 4	P	1.535	0.11493	0.008	3.10E-02	0	1.535	0.11493	0.031	32
uv eff out	P	0.245	0.22985	0.857	1.10E+00	0.0026	0.278	0.22985	0.913	3
1	M	0.288	0.22985	0.238	3.99E-01	0.00218	0.245	0.22985	0.47	3.3
twinned mh 2	1	0.235	0.22981	0.86	1.08E+00	0.00366	0.248	0.22982	1.001	11.2
EMC_22	1	0.255	-0.2295	0.284	-0.449	0	0.235	-0.2295	-0.488	2.7
EMC_22	2	0.259	0.22948	0.761	1.007	0.00396	0.243	0.2295	1.111	45.1
3!	1	0.238	0.22945	0.901	1.14E+00	0.00286	0.259	0.22948	1.007	81.9
new outfall mh	1	0.258	0.22971	0.771	1.02E+00	0.00714	0.215	0.22972	1.33	19.9
4	3	0.238	0.22962	0.9	1.14E+00	0.00293	0.258	0.22971	1.017	151.7
5	5	0.288	0.22962	0.619	8.65E-01	0.09941	0.211	0.22962	1.366	10
6	6	0.234	0.22961	0.934	1.17E+00	0.00225	0.288	0.22962	0.865	12

SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s **20 ML/d**
Weir Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Froude number	US Velocity (m/s)	Volume (m3)
grit chamber #1	W	-0.39	0.19882	0	0	0	0.041	0.19882	0.85	0.536	0
PCT 1 & 2 OR	W	1.335	0.1144	0.008	0.029	0	1.336	0.1144	0.008	0.029	0
PC T 1 OUT	W	-0.674	0.0572	0	0	0	0.033	0.0572	0.441	0.252	0
PC T 1 Aft Weir	W	1.086	0.0572	0.002	0.006	0	1.086	0.0572	0.002	0.006	0
END PRE-ANOXIC1	1	-0.037	0	0	0	0	-0.022	0	0	0	0
END ANAEROBIC1	1	0.003	0.03051	5.871	1.042	0	0.013	0.03051	0.727	0.259	0
END ANAOXIC1T1	1	0.047	0.66398	4.136	2.814	0	0.153	0.66398	0.707	0.867	0
END ANAOXIC12T1	1	0.036	0.58431	3.054	1.804	0	0.097	0.58431	0.677	0.661	0
END IFAS1T1	1	-0.014	0.35129	0	0	0	0.037	0.35129	0.85	0.512	0
END IFAS2T1	1	-0.019	0.33628	0	0	0	0.036	0.33628	0.85	0.505	0
END MLRZ1	1	-0.726	0.27127	0	0	0	0.031	0.27127	0.85	0.47	0
AT MLC 1 AT BPC	W	0.977	0.27126	0.073	0.227	0	0.986	0.27126	0.073	0.226	0
MLC PRE SPLIT 1	W	0.962	0.57323	0.106	0.326	0	0.976	0.57323	0.104	0.321	0
SC 1 OR	W	0.93	0.1051	0.02	0.062	0	0.933	0.1051	0.02	0.062	0
SC #1	W	-0.549	0	0	0	0	-0.077	0	0	0	0
uv bend 1	W	1.018	0.05791	0.013	0.04	0	1.019	0.05791	0.013	0.04	0
UV W 2	W	-0.957	0.05791	0	0	0	0.062	0.05791	0.85	0.661	0

SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s **20 ML/d**
Sluice Gate Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
INLET STRUC	1	-2.61	0	0	0	0	0	0	0	0
DIS CHAN 2	3	1.486	0.231	0.023	0.086	0	1.489	0.231	0.086	0
20	1	1.48	0.231	0.023	0.087	0	1.483	0.231	0.087	0
LOWFLOWCHNLBEND2	1	1.476	0.19882	0.048	0.143	0	1.48	0.19882	0.143	0
PC T 1 IN 2	S	1.333	0.0286	0.021	0.051	0	1.335	0.0286	0.051	0
END ANAOXIC2T1	1	0.304	1.18727	0.754	1.302	0	0.403	1.18727	0.983	0
UV inflow	1	1.019	0.11487	0.026	0.082	0	1.022	0.11487	0.082	0
uv bend 3	1	0.335	0.11493	0.138	0.25	0	0.343	0.11493	0.244	0

SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s **20 ML/d**
Orifice Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
26	1	1.338	0.231	0	0.294	0	2	1.347	9979.2	0.294
PC IN SPLIT	O	1.336	0.1144	0.015	0.055	0	2	1.338	4941.93	0.054
PEC2	1	1.075	0.06227	0	0.317	0	2	1.086	2689.96	0.317
MLC SPLIT 1	O	0.933	0.1051	0	0.535	0	2	0.962	4536.57	0.535

SEP Infowork Model Output Headworks to River
Flow 0.231 m3/s **20 ML/d**
Screen Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
19	B	1.483	0.231	0.023	0.087	0	1.486	0.231	0.086	0

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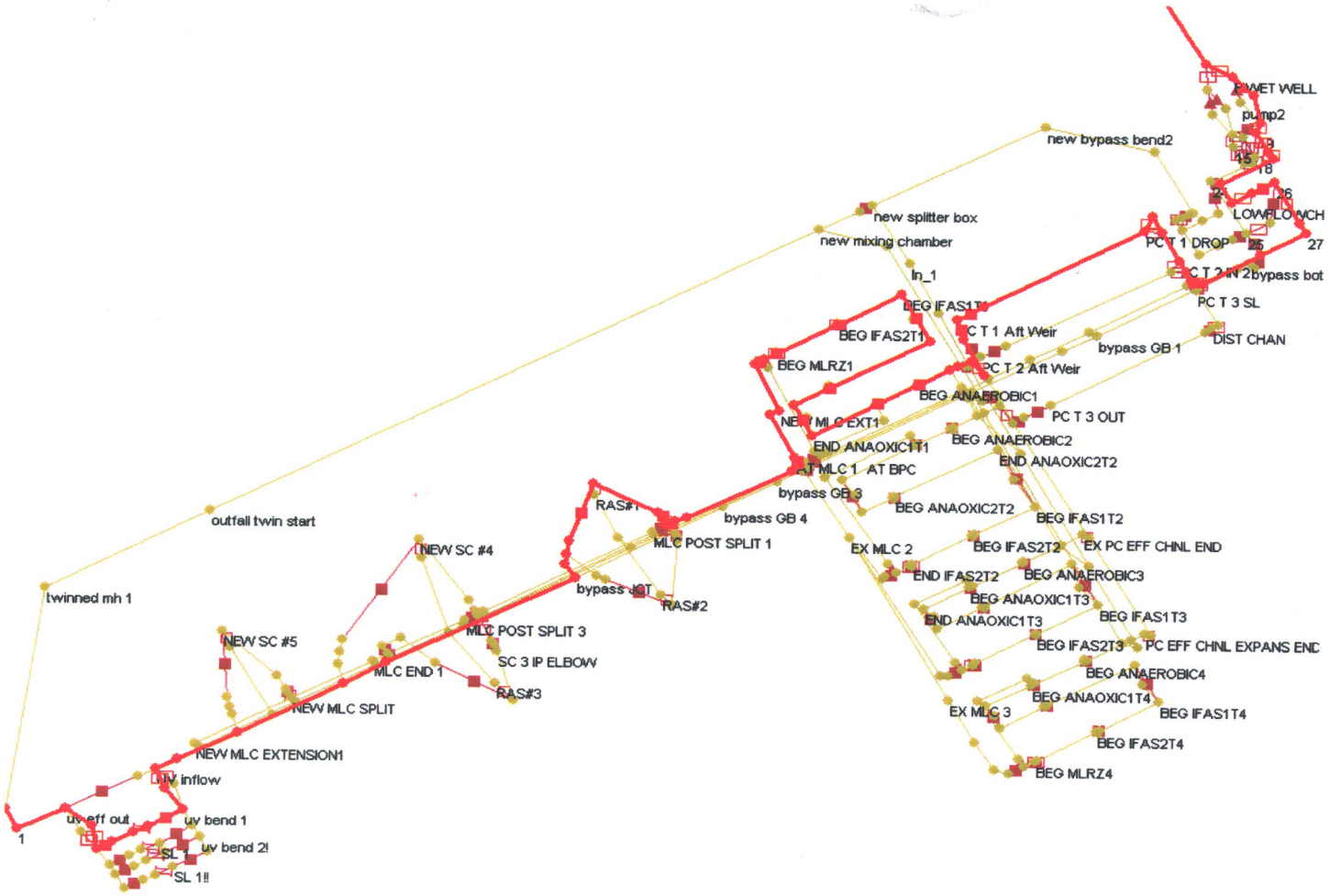
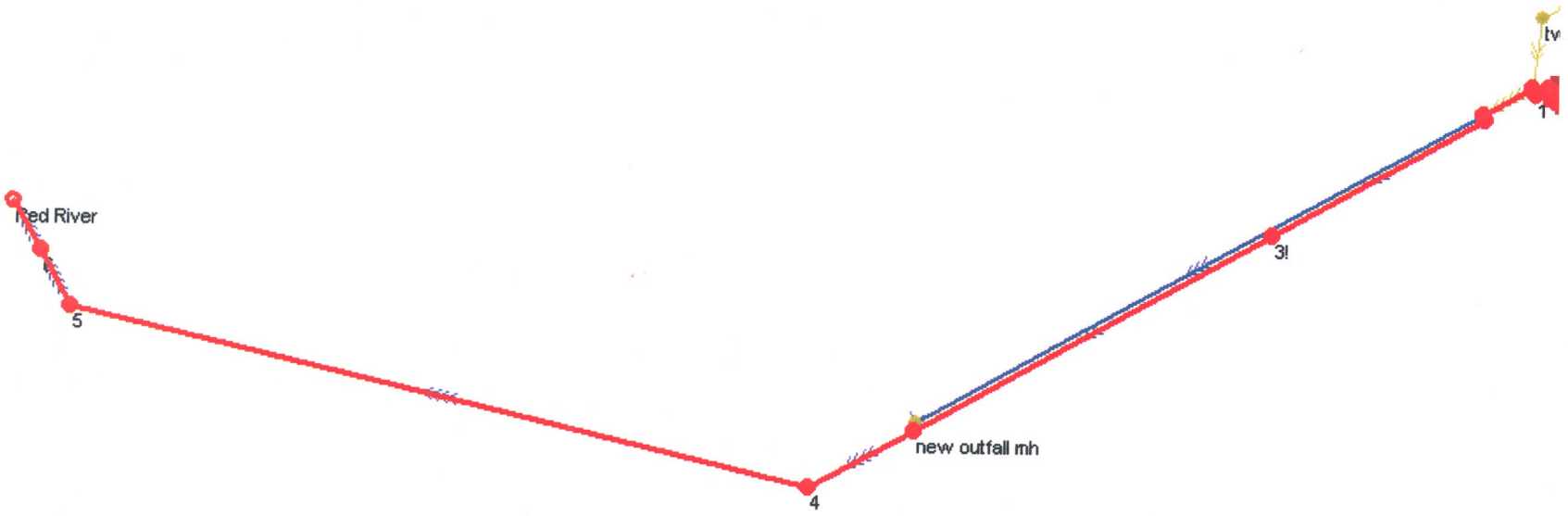
Appendix Documents

55	ML/d
0.635	m3/s

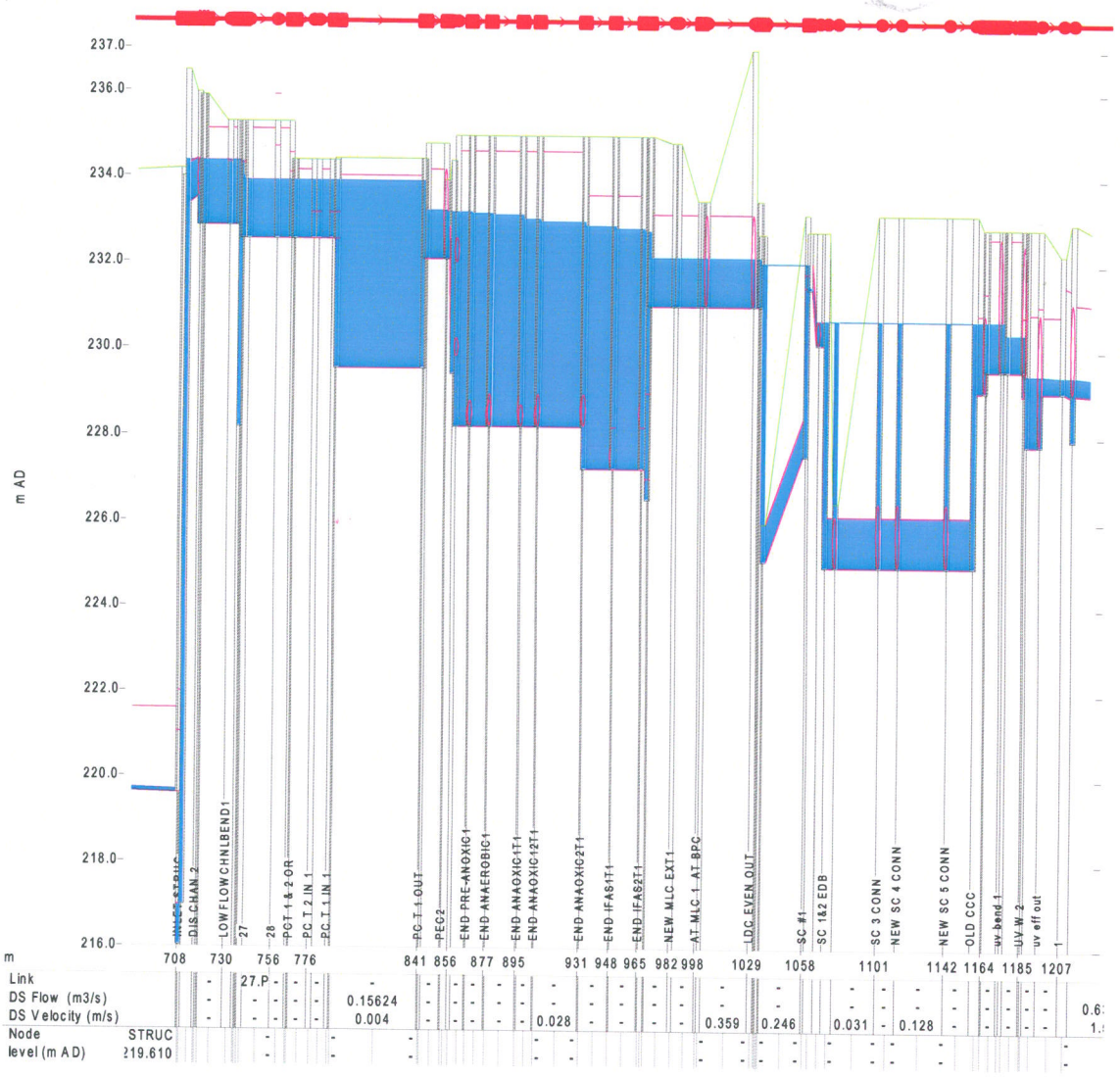
SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Path



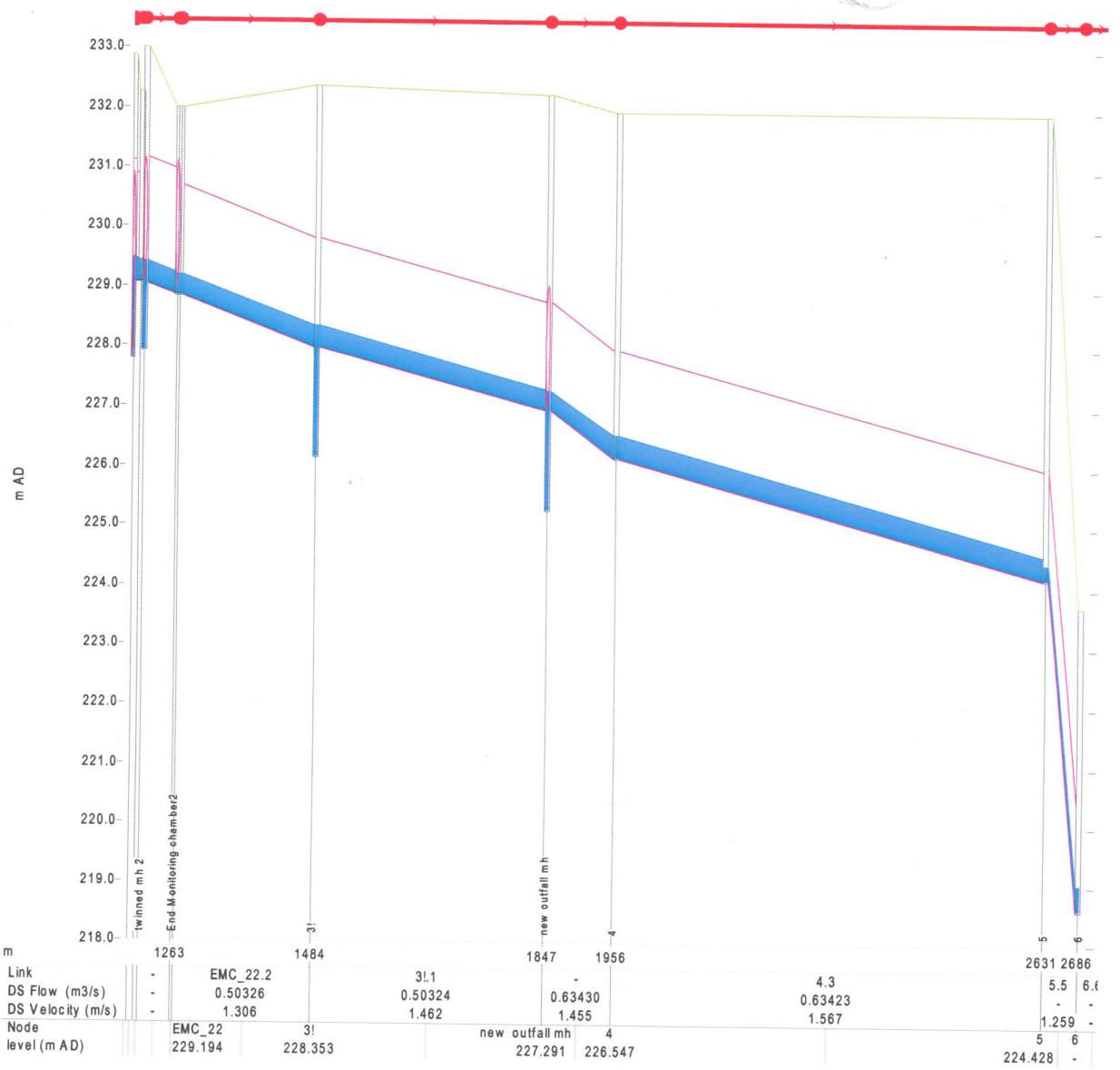
SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Path



SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Profile



SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s **55 ML/d**
Profile



SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Volume balance (%)
x1	220.319	-9.781	-57.7	0	0
UV W 2	230.422	-2.248	-2.2	0	0
uv lamps 1	230.422	-2.248	-2.2	0	0
uv int mh 4	229.476	-3.194	-3.2	0	0
uv int mh 2	230.712	-1.958	-2	0	0
UV inflow	230.718	-2.152	-5.7	0	0
uv eff out	229.476	-3.194	-182.1	0	0
uv bend 3	229.498	-3.172	-3.2	0	0
uv bend 1	230.712	-1.958	-2	0	0
twinned mh 2	229.422	-3.578	-9.3	0	0
SL 2	230.708	-1.962	-2	0	0
SC 3 CONN	230.72	-2.452	-44.6	0	0
SC 1&2 EDB	230.72	-2.046	-3.1	0	0
SC 1 OR	232.055	-0.457	-0.5	0	0
SC 1 IPC	232.051	-0.461	-1.1	0	0
SC 1 IP ELBOW	232.047	6.078	0	0	0
SC #1 LAUNDER	231.5	-1.266	-81	0	0
SC #1 DC	230.72	-2.046	-4.1	0	0
SC #1	232.046	-1.126	-994.1	0	0
Red River					
pump1	234.377	-1.623	-1.6	0	0
PRE BR1	233.195	-1.196	-2.2	0	0
PEC2	233.232	-1.518	-1.5	0	0
PEC	233.232	-1.518	-7.6	0	0
PCT 1 & 2 OR	233.922	-0.241	-0.2	0	0
PC T 2 IN 2	233.919	-0.244	-0.2	0	0
PC T 2 IN 1	233.919	-0.244	-0.2	0	0
PC T 1 OUT	233.915	-0.24	-0.2	0	0
PC T 1 IN 2	233.919	-0.244	-0.2	0	0
PC T 1 IN 1	233.919	-0.244	-0.2	0	0
PC T 1 DROP	233.915	-0.24	-0.2	0	0
PC T 1 Aft Weir	233.233	-0.922	-0.9	0	0
PC T 1 & 2 SL	233.919	-0.244	-0.2	0	0
PC IN SPLIT	233.927	-1.175	-1.2	0	0
OLD CCC	230.719	-1.841	-43.8	0	0
NEW SC 5 CONN	230.719	-2.453	-44.6	0	0
NEW SC 4 CONN	230.719	-2.453	-44.6	0	0
new outfall mh	227.291	-4.959	-5.1	0	0
NEW MLC EXT2	232.17	-2.45	-2.5	0	0
NEW MLC EXT1	232.17	-2.45	-2.5	0	0
MLC SPLIT 1	232.139	-1.033	-1	0	0
MLC PRE SPLIT 1	232.159	-1.013	-1	0	0
MLC BPC JCT 1	232.161	-1.01	-1	0	0
MID ANAOXIC12T1	233.053	-1.597	-1.6	0	0
LOWFLOWCHNLIN	234.365	-1.55	-5.8	0	0

SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Volume balance (%)
LOWFLOWCHNLBEND2	234.365	-0.737	-0.7	0	0
LOWFLOWCHNLBEND1	234.365	-0.737	-0.7	0	0
LDC EVEN OUT	232.16	-4.84	-4.8	0	0
LDC EVEN IN	232.161	-1.011	-1	0	0
INLET STRUC	219.61	-10.51	-103	0	0
grit chamber #1	234.357	-0.948	-79.2	0	0
EX PC EFF CHNL IN	233.198	-0.736	-1.9	0	0
END PRE-ANOXIC1	233.194	-1.456	-1.5	0	0
End Monitoring chamber2	229.196	-2.804	-18	0	0
END MLRZ1	232.785	-1.865	-1.9	0	0
END IFAS2T1	232.84	-1.81	-1.8	0	0
END IFAS1T1	232.891	-1.759	-1.8	0	0
END ANAOXIC2T1	232.989	-1.661	-1.7	0	0
END ANAOXIC1T1	233.161	-1.489	-1.5	0	0
END ANAOXIC12T1	233.053	-1.597	-1.6	0	0
END ANAEROBIC1	233.173	-1.477	-1.5	0	0
EMC_22	229.194	-2.806	-16.8	0	0
EFF TROUGH 1	232.17	-2.48	-2.5	0	0
E WET WELL	217	-9	-394.2	0	0
DIS CHAN 2	234.377	-1.603	-35.4	0	0
bypass JCT	230.72	4.558	0.3	0	0
BR IN1	233.194	-1.456	-1.5	0	0
BEG MLRZ1	232.785	-1.865	-1.9	0	0
BEG IFAS2T1	232.84	-1.81	-1.8	0	0
BEG IFAS1T1	232.891	-1.759	-1.8	0	0
BEG ANAOXIC2T1	232.989	-1.661	-1.7	0	0
BEG ANAOXIC1T1	233.161	-1.489	-1.5	0	0
BEG ANAEROBIC1	233.173	-1.477	-1.5	0	0
AT MLC 1 AT BPC	232.17	-1.001	-1	0	0
6	219.051	-4.669	-4.7	0	0
5	224.428	-7.522	-14.4	0	0
4	226.547	-5.403	-50.2	0	0
3!	228.353	-4.027	-4.4	0	0
28	233.927	-1.175	-1.2	0	0
27!	233.927	-1.175	-1.2	0	0
27	233.927	-1.175	-1.2	0	0
26	233.993	-1.109	-1.1	0	0
20	234.369	-1.546	-1.5	0	0
19	234.373	-1.544	-8	0	0
1	229.433	-2.827	-73.5	0	0

SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Conduit Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
x1	1	0.099	0	0	0.00E+00	0.00086	0.099	0	0	39.2
uv lamps 1	P	0.852	0.16047	0.046	1.33E-01	1.00E-05	0.852	0.16047	0.133	11.1
uv int mh 4	P	1.676	0.31721	0.019	7.70E-02	0	1.676	0.31721	0.077	34.9
uv int mh 2	P	1.142	0.31692	0.036	1.21E-01	1.00E-05	1.142	0.31692	0.121	23.8
uv eff out	P	0.379	0.63442	1	1.61E+00	0.00312	0.419	0.63442	1.398	5.4
twinned mh 2	1	0.376	0.63438	0.941	1.51E+00	0.00353	0.382	0.63439	1.472	21.3
SC 3 CONN	1	5.777	0.63444	0.005	1.28E-01	1.00E-05	5.778	0.63444	0.128	59.2
SC 1&2 EDB	P	5.778	0.1523	0.001	3.10E-02	0	5.778	0.1523	0.031	29.2
SC 1 IPC	P	6.978	0.1781	0.011	2.32E-01	0.00359	1.012	0.1781	0.27	0.7
SC 1 IP ELBOW	P	4.513	0.1781	0.012	2.46E-01	1.00E-05	6.977	0.1781	0.232	19.1
SC #1 LAUNDER	P	0.596	0.0731	0.038	1.01E-01	0.13927	0.068	0.0731	0.88	1.3
SC #1 DC	P	0.596	0.1523	0.079	2.10E-01	6.00E-05	0.596	0.1523	0.21	3.6
pump1	1	0.877	0	0	0.00E+00	-1.00E-05	0.977	0	0	5.1
PRE BR1	1	3.375	0.1129	0.012	2.21E-01	0.00011	3.376	0.1129	0.221	1.3
PEC	1	1.127	0.31254	0.023	7.60E-02	0	1.127	0.31254	0.076	46.6
PC T 2 IN 2	P	1.354	0.15624	0.01	3.80E-02	0	1.354	0.15624	0.038	35.1
PC T 2 IN 1	P	1.354	0.23433	0.016	0.057	0	1.354	0.23433	0.057	11.6
PC T 1 IN 1	P	1.354	0.07812	0.005	1.90E-02	0	1.354	0.07812	0.019	8.7
PC T 1 DROP	P	4.375	0.15624	0.001	4.00E-03	0	4.375	0.15624	0.004	2064.9
PC T 1 & 2 SL	P	1.354	0.31254	0.021	0.076	0	1.354	0.31254	0.076	46.3
OLD CCC	1	1.661	0.63444	0.052	2.53E-01	3.00E-05	1.661	0.63444	0.253	14.2
NEW SC 5 CONN	1	5.777	0.63444	0.005	1.28E-01	1.00E-05	5.777	0.63444	0.128	80.7
NEW SC 4 CONN	1	5.777	0.63444	0.005	1.28E-01	1.00E-05	5.777	0.63444	0.128	142.8
new outfall mh	1	0.407	0.6343	0.868	1.46E+00	0.00684	0.331	0.63431	1.961	38
NEW MLC EXT2	1	1.132	0.3219	0.056	1.87E-01	2.00E-05	1.132	0.3219	0.187	23.1
NEW MLC EXT1	1	1.132	0.3219	0.056	0.187	2.00E-05	1.132	0.3219	0.187	4.2
MLC BPC JCT 1	P	1.123	0.34504	0.051	0.168	1.00E-05	1.123	0.34504	0.168	5.1
MID ANAOXIC12T1	1	4.834	1.2379	0.004	2.80E-02	0	4.834	1.2379	0.028	423.1
LOWFLOWCHNLIN	1	1.498	0.31855	0.039	0.149	1.00E-05	1.498	0.31855	0.149	30.8
LOWFLOWCHNLBEND1	1	1.498	0.31783	0.039	1.49E-01	1.00E-05	1.498	0.31783	0.149	13.1
LDC EVEN OUT	P	1.121	0.78908	0.116	3.85E-01	6.00E-05	1.122	0.78908	0.385	6.5
LDC EVEN IN	P	1.122	1.47099	0.108	3.59E-01	4.00E-05	1.123	1.47099	0.358	117
EX PC EFF CHNL IN	2	3.376	0.1129	0.012	2.21E-01	0.00073	1.093	0.1129	0.237	1.7
EMC_22	2	0.373	0.50326	0.816	1.31E+00	0.0039	0.344	0.50327	1.472	75.4
EMC_22	1	0.346	-0.50327	0.395	-0.728	-0.00039	0.324	-0.50327	-0.777	3.7
EFF TROUGH 1	1	1.132	0.3219	0.056	0.187	2.00E-05	1.132	0.3219	0.187	24.7
bypass JCT	P	5.778	0.1523	0.001	0.031	0	5.778	0.1523	0.031	130.2
BR IN1	1	4.975	0.3219	0.001	0.007	0	4.975	0.3219	0.007	365.8
BEG MLRZ1	1	5.566	1.2379	0.002	0.012	0	5.566	1.2379	0.012	299.3
BEG IFAS2T1	1	5.621	1.2379	0.002	0.012	0	5.621	1.2379	0.012	1727
BEG IFAS1T1	1	5.672	1.2379	0.002	0.012	0	5.672	1.2379	0.012	1762.1
BEG ANAOXIC2T1	1	4.77	1.2379	0.004	2.80E-02	0	4.77	1.2379	0.028	1160.6
BEG ANAOXIC1T1	1	4.942	1.2379	0.004	2.70E-02	0	4.942	1.2379	0.027	796.4
BEG ANAEROBIC1	1	4.954	0.3219	0.001	7.00E-03	0	4.954	0.3219	0.007	488.9
6	6	0.384	0.63422	0.975	1.583	0.00251	0.451	0.63423	1.26	23.2
5	5	0.451	0.63423	0.711	1.259	0.09714	0.247	0.63423	2.982	13.9
4	3	0.387	0.63423	0.961	1.567	0.00293	0.407	0.6343	1.456	292.8
3!	1	0.345	0.50324	0.952	1.462	0.00288	0.373	0.50326	1.307	138.2
28	P	1.362	0.635	0.043	1.55E-01	1.00E-05	1.362	0.635	0.155	38
27	P	1.362	0.635	0.043	0.155	1.00E-05	1.362	0.635	0.155	65.8
27!	1	1.362	0.635	0.043	1.55E-01	1.00E-05	1.362	0.635	0.155	12.8
1	M	0.422	0.63442	0.369	7.51E-01	0.00167	0.376	0.63442	0.844	5

SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Weir Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
AT MLC 1 AT BPC	W	1.123	0.3219	0.071	0.235	0	1.132	0.3219	0.233	0
END ANAEROBIC1	1	0.011	0.05967	1.722	0.576	0	0.023	0.05967	0.286	0
END ANAOXIC12T1	1	0.039	0.62633	2.816	1.749	0	0.103	0.62633	0.67	0
END ANAOXIC1T1	1	0.053	0.70812	3.736	2.687	0	0.161	0.70812	0.878	0
END ANAOXIC2T1	1	-0.009	0.35544	0	0	0	0.089	0.35544	0.796	0
END IFAS1T1	1	-0.01	0.40261	0	0	0	0.041	0.40261	0.536	0
END IFAS2T1	1	-0.015	0.38815	0	0	0	0.04	0.38815	0.53	0
END MLRZ1	1	-0.58	0.3219	0	0	0	0.035	0.3219	0.498	0
END PRE-ANOXIC1	1	-0.027	0	0	0	0	-0.006	0	0	0
grit chamber #1	W	-0.309	0.31783	0	0	0	0.055	0.31783	0.627	0
MLC PRE SPLIT 1	W	1.101	0.78908	0.119	0.392	0	1.121	0.78908	0.385	0
PC T 1 Aft Weir	W	1.127	0.15624	0.004	0.015	0	1.128	0.15624	0.015	0
PC T 1 OUT	W	-0.632	0.15624	0	0	0	0.05	0.15624	0.307	0
PCT 1 & 2 OR	W	1.354	0.31254	0.021	0.077	0	1.357	0.31254	0.077	0
SC #1	W	-0.542	0.0731	0	0	0	0.004	0.0731	0.17	0
SC 1 OR	W	1.013	0.1781	0.03	0.096	0	1.017	0.1781	0.096	0
uv bend 1	W	1.138	0.16047	0.03	0.099	0	1.142	0.16047	0.099	0
UV W 2	W	-0.802	0.16047	0	0	0	0.122	0.16047	0.929	0

SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Sluice Gate Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
20	1	1.498	0.31855	0.031	0.118	0	1.502	0.31855	0.118	0
DIS CHAN 2	3	1.506	0.31855	0.031	0.118	0	1.51	0.31855	0.117	0
INLET STRUC	1	-2.61	0	0	0	0	0	0	0	0
LOWFLOWCHNLBEND2	1	1.49	0.31783	0.076	0.228	0	1.498	0.31783	0.228	0
PC T 1 IN 2	S	1.35	0.07812	0.057	0.14	0	1.354	0.07812	0.14	0
uv bend 3	1	0.476	0.31721	0.225	0.486	0	0.498	0.31721	0.464	0
UV inflow	1	1.142	0.31692	0.06	0.202	0	1.148	0.31692	0.201	0

SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Orifice Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
26	1	1.362	0.635	0	0.809	0	2	1.428	27432	0.809
MLC SPLIT 1	O	1.017	0.1781	0	0.907	0	2	1.101	7698.35	0.907
PC IN SPLIT	O	1.357	0.31254	0.04	0.147	0	2	1.362	13501.57	0.146
PEC2	1	1.093	0.1129	0	0.575	0	2	1.127	4877.32	0.575

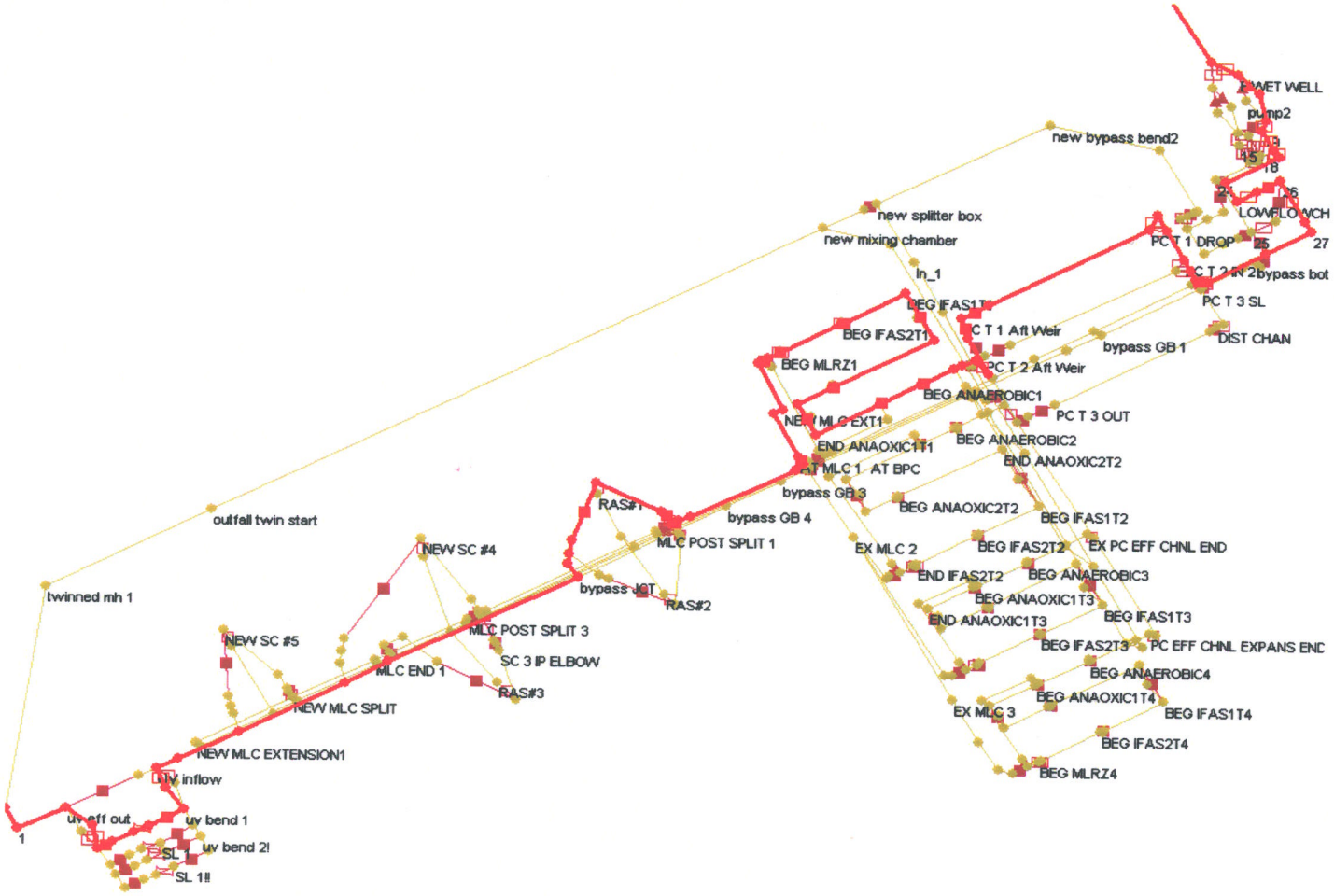
SEP Infowork Model Output Headworks to River
Flow 0.635 m3/s 55 ML/d
Screen Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
19	B	1.502	0.31855	0.031	0.118	0	1.506	0.31855	0.118	0

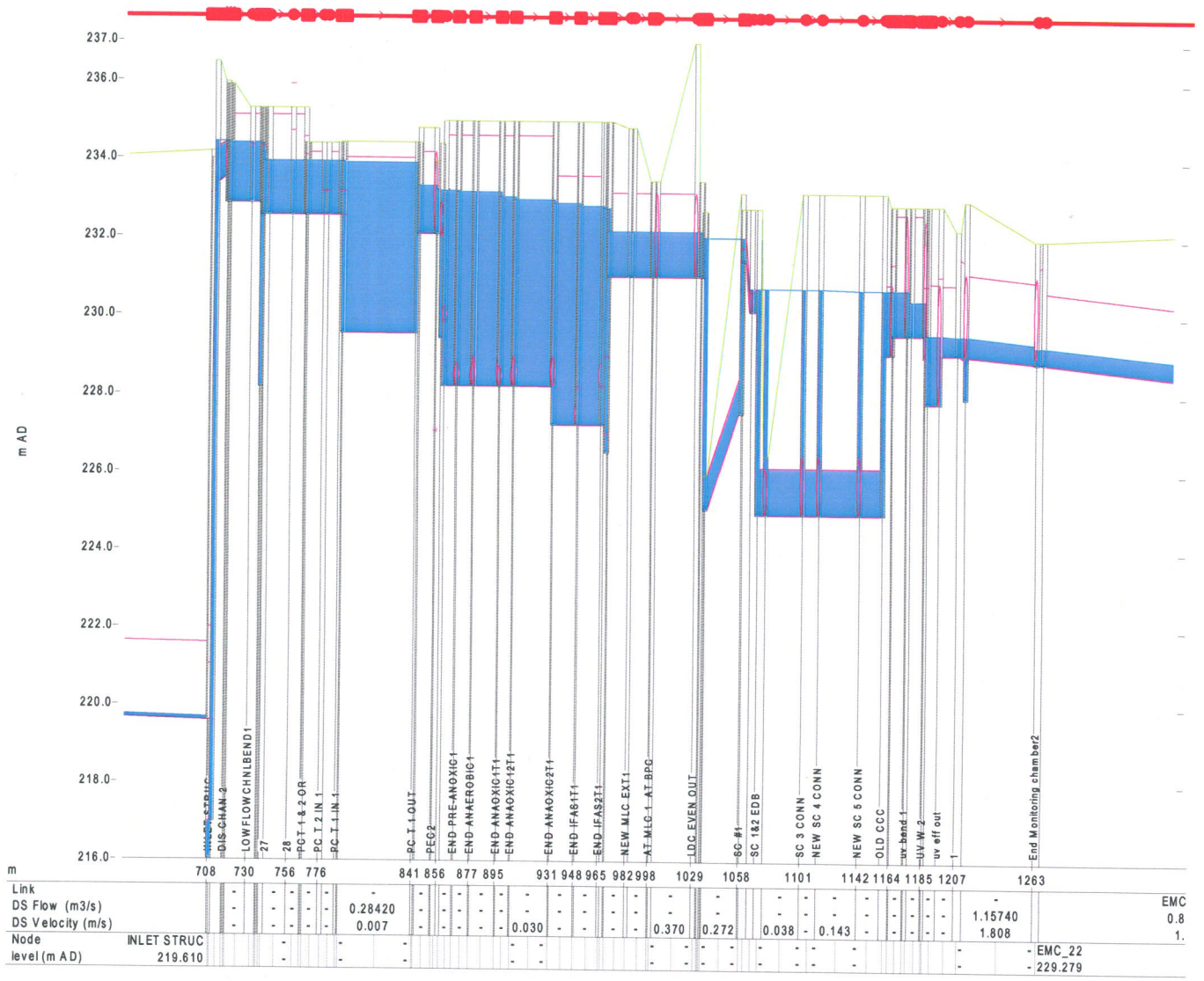
TM 45
SEWPCC Hydraulics Modeling
InfoWorks Modeling
Appendix Documents

100 ML/d
1.2 m3/s

SEP Infowork Model Output Headworks to River
Flow 1.157 m3/s 100 ML/d
Path



ABTP Infowork Model Output 'P' BLDG West
Flow 1.157 m3/s 100 ML/d
Profile



SEP Infowork Model Output Headworks to River
Flow 1.157 m3/s **100 ML/d**
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Max Level (m AD)	Max Flood Depth (m)	Volume balance (%)
UV W 2	230.431	-2.239	-2.2	0	230.431	-2.239	0
uv lamps 1	230.431	-2.239	-2.2	0	230.431	-2.239	0
uv int mh 4	229.576	-3.094	-3.1	0	229.576	-3.094	0
uv int mh 2	230.729	-1.941	-1.9	0	230.729	-1.941	0
UV inflow	230.736	-2.134	-5.6	0	230.736	-2.134	0
uv eff out	229.576	-3.094	-176.4	0	229.576	-3.094	0
uv bend 3	229.595	-3.075	-3.1	0	229.595	-3.075	0
uv bend 1	230.729	-1.941	-1.9	0	230.729	-1.941	0
twinned mh 2	229.545	-3.455	-9	0	229.545	-3.455	0
SL 2	230.724	-1.946	-1.9	0	230.725	-1.945	0
SC 3 CONN	230.737	-2.435	-44.3	0	230.738	-2.434	0
SC 1&2 EDB	230.737	-2.029	-3	0	230.738	-2.028	0
SC 1 OR	232.056	-0.456	-0.5	0	232.056	-0.456	0
SC 1 IPC	232.052	-0.46	-1.1	0	232.052	-0.46	0
SC 1 IP ELBOW	232.048	6.079	0	0	232.048	6.079	0
SC #1 LAUNDER	231.502	-1.264	-80.9	0	231.502	-1.264	0
SC #1 DC	230.738	-2.028	-4.1	0	230.738	-2.028	0
SC #1 Red River	232.047	-1.125	-993.5	0	232.047	-1.125	0
pump1	234.425	-1.575	-1.6	0	234.425	-1.575	0
PRE BR1	233.218	-1.173	-2.5	0	233.218	-1.173	0
PEC2	233.324	-1.426	-1.4	0	233.324	-1.426	0
PEC	233.324	-1.426	-7.1	0	233.324	-1.426	0
PCT 1 & 2 OR	233.943	-0.22	-0.2	0	233.943	-0.22	0
PC T 2 IN 2	233.937	-0.226	-0.2	0	233.937	-0.226	0
PC T 2 IN 1	233.937	-0.226	-0.2	0	233.937	-0.226	0
PC T 1 OUT	233.929	-0.226	-0.2	0	233.929	-0.226	0
PC T 1 IN 2	233.937	-0.226	-0.2	0	233.937	-0.226	0
PC T 1 IN 1	233.937	-0.226	-0.2	0	233.937	-0.226	0
PC T 1 DROP	233.929	-0.226	-0.2	0	233.929	-0.226	0
PC T 1 Aft Weir	233.325	-0.83	-0.8	0	233.325	-0.83	0
PC T 1 & 2 SL	233.938	-0.225	-0.2	0	233.938	-0.225	0
PC IN SPLIT	233.951	-1.151	-1.2	0	233.951	-1.151	0
OLD CCC	230.736	-1.824	-43.4	0	230.736	-1.824	0
NEW SC 5 CONN	230.737	-2.435	-44.3	0	230.737	-2.435	0
NEW SC 4 CONN	230.737	-2.435	-44.3	0	230.737	-2.435	0
new outfall mh	227.397	-4.853	-4.9	0	227.397	-4.853	0
NEW MLC EXT2	232.194	-2.426	-2.4	0	232.194	-2.426	0
NEW MLC EXT1	232.194	-2.426	-2.4	0	232.194	-2.426	0
MLC SPLIT 1	232.158	-1.014	-1	0	232.158	-1.014	0
MLC PRE SPLIT 1	232.181	-0.991	-1	0	232.181	-0.991	0
MLC BPC JCT 1	232.182	-0.989	-1	0	232.182	-0.989	0
MID ANAOXIC12T1	233.064	-1.586	-1.6	0	233.064	-1.586	0
LOWFLOWCHNLIN	234.404	-1.511	-5.7	0	234.404	-1.511	0

SEP Infowork Model Output Headworks to River
Flow 1.157 m3/s **100 ML/d**
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Max Level (m AD)	Max Flood Depth (m)	Volume balance (%)
LOWFLOWCHNLBEND2	234.403	-0.699	-0.7	0	234.403	-0.699	0
LOWFLOWCHNLBEND1	234.403	-0.699	-0.7	0	234.403	-0.699	0
LDC EVEN OUT	232.181	-4.819	-4.8	0	232.181	-4.819	0
LDC EVEN IN	232.182	-0.99	-1	0	232.182	-0.99	0
INLET STRUC	219.61	-10.51	-103	0	219.61	-10.51	0
grit chamber #1	234.385	-0.92	-76.9	0	234.385	-0.92	0
EX PC EFF CHNL IN	233.224	-0.71	-1.9	0	233.224	-0.71	0
END PRE-ANOXIC1	233.216	-1.434	-1.4	0	233.216	-1.434	0
End Monitoring chamber2	229.285	-2.715	-17.5	0	229.285	-2.715	0
END MLRZ1	232.791	-1.859	-1.9	0	232.791	-1.859	0
END IFAS2T1	232.845	-1.805	-1.8	0	232.845	-1.805	0
END IFAS1T1	232.896	-1.754	-1.8	0	232.896	-1.754	0
END ANAOXIC2T1	232.999	-1.651	-1.7	0	232.999	-1.651	0
END ANAOXIC1T1	233.176	-1.474	-1.5	0	233.176	-1.474	0
END ANAOXIC12T1	233.064	-1.586	-1.6	0	233.064	-1.586	0
END ANAEROBIC1	233.19	-1.46	-1.5	0	233.19	-1.46	0
EMC_22	229.279	-2.721	-16.3	0	229.279	-2.721	0
EFF TROUGH 1	232.195	-2.455	-2.5	0	232.195	-2.455	0
E WET WELL	217	-9	-394.2	0	217	-9	0
DIS CHAN 2	234.425	-1.555	-34.4	0	234.425	-1.555	0
bypass JCT	230.737	4.575	0.3	0	230.738	4.576	0
BR IN1	233.216	-1.434	-1.4	0	233.216	-1.434	0
BEG MLRZ1	232.791	-1.859	-1.9	0	232.791	-1.859	0
BEG IFAS2T1	232.845	-1.805	-1.8	0	232.845	-1.805	0
BEG IFAS1T1	232.896	-1.754	-1.8	0	232.896	-1.754	0
BEG ANAOXIC2T1	232.999	-1.651	-1.7	0	232.999	-1.651	0
BEG ANAOXIC1T1	233.176	-1.474	-1.5	0	233.176	-1.474	0
BEG ANAEROBIC1	233.19	-1.46	-1.5	0	233.19	-1.46	0
AT MLC 1 AT BPC	232.194	-0.977	-1	0	232.194	-0.977	0
6	219.196	-4.524	-4.5	0	219.196	-4.524	0
5	224.465	-7.485	-14.2	0	224.465	-7.485	0
4	226.687	-5.263	-48.9	0	226.688	-5.262	0
3!	228.454	-3.926	-4.3	0	228.455	-3.925	0
28	233.951	-1.151	-1.2	0	233.951	-1.151	0
27!	233.952	-1.15	-1.2	0	233.952	-1.15	0
27	233.952	-1.15	-1.2	0	233.952	-1.15	0
26	234.173	-0.929	-0.9	0	234.173	-0.929	0
20	234.411	-1.504	-1.5	0	234.411	-1.504	0
19	234.418	-1.499	-7.8	0	234.418	-1.499	0
1	229.551	-2.709	-70.4	0	229.551	-2.709	0

SEP Infowork Model Output Headworks to River
Flow 1.157 m3/s 100 ML/d
Conduit Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
x1	1	0.099	0	0	0	0.00086	0.099	0	0	39.2
uv lamps 1	P	0.861	0.17981	0.051	0.147	2.00E-05	0.861	0.17981	0.147	11.3
uv int mh 4	P	1.776	0.35541	0.02	0.082	0	1.776	0.35541	0.082	37
uv int mh 2	P	1.159	0.35506	0.04	0.134	1.00E-05	1.159	0.35506	0.134	24.1
uv eff out	P	0.494	0.71082	0.667	1.24	0.0019	0.519	0.71082	1.16	7.6
twinned mh 2	1	0.505	1.15774	0.967	1.808	0.00342	0.505	1.15775	1.805	31.9
SC 3 CONN	1	5.795	0.71083	0.006	0.143	1.00E-05	5.795	0.71083	0.143	59.2
SC 1&2 EDB	P	5.796	0.18911	0.001	0.038	0	5.796	0.18911	0.038	29.2
SC 1 IPC	P	6.979	0.19657	0.013	0.256	0.00371	1.014	0.19657	0.298	0.7
SC 1 IP ELBOW	P	4.514	0.19657	0.014	0.272	2.00E-05	6.978	0.19657	0.256	19.1
SC #1 LAUNDER	P	0.614	0.09157	0.041	0.124	0.13632	0.07	0.09157	1.076	1.4
SC #1 DC	P	0.614	0.18911	0.086	0.256	9.00E-05	0.614	0.18911	0.255	3.7
pump1	1	0.925	0	0	0	-1.00E-05	1.025	0	0	5.2
PRE BR1	1	3.397	0.19444	0.021	0.38	0.00033	3.398	0.19444	0.38	1.3
PEC	1	1.219	0.56865	0.037	0.128	0	1.219	0.56865	0.128	50.4
PC T 2 IN 2	P	1.372	0.2842	0.019	0.068	0	1.372	0.2842	0.068	35.6
PC T 2 IN 1	P	1.372	0.42615	0.028	0.102	0	1.372	0.42615	0.102	11.7
PC T 1 IN 1	P	1.372	0.14209	0.009	0.034	0	1.372	0.14209	0.034	8.8
PC T 1 DROP	P	4.389	0.2842	0.001	0.007	0	4.389	0.2842	0.007	2070.6
PC T 1 & 2 SL	P	1.372	0.56865	0.037	0.136	1.00E-05	1.373	0.56865	0.136	46.9
OLD CCC	1	1.679	0.71083	0.057	0.282	4.00E-05	1.679	0.71083	0.281	14.3
NEW SC 5 CONN	1	5.794	0.71083	0.006	0.143	1.00E-05	5.795	0.71083	0.143	80.7
NEW SC 4 CONN	1	5.795	0.71083	0.006	0.143	1.00E-05	5.795	0.71083	0.143	142.8
new outfall mh	1	0.548	1.15771	0.89	1.751	0.00652	0.436	1.15772	2.408	57.7
NEW MLC EXT2	1	1.156	0.40344	0.068	0.229	3.00E-05	1.156	0.40344	0.229	23.6
NEW MLC EXT1	1	1.156	0.40344	0.068	0.229	3.00E-05	1.156	0.40344	0.229	4.3
MLC BPC JCT 1	P	1.144	0.42635	0.061	0.204	2.00E-05	1.144	0.42635	0.204	5.2
MID ANAOXIC12T1	1	4.845	1.31944	0.004	0.03	0	4.845	1.31944	0.03	424.1
LOWFLOWCHNLIN	1	1.536	0.59753	0.07	0.273	3.00E-05	1.536	0.59753	0.273	31.6
LOWFLOWCHNLBEND1	1	1.536	0.58098	0.068	0.266	3.00E-05	1.536	0.58098	0.266	13.5
LDC EVEN OUT	P	1.143	0.82869	0.118	0.397	7.00E-05	1.143	0.82869	0.396	6.7
LDC EVEN IN	P	1.143	1.54706	0.111	0.37	4.00E-05	1.144	1.54706	0.37	119.2
EX PC EFF CHNL IN	2	3.399	0.19444	0.021	0.38	0.0012	1.117	0.19444	0.407	1.7
EMC_22	2	0.475	0.82967	0.843	1.533	0.00383	0.429	0.82967	1.768	104.5
EMC_22	1	0.435	-0.82967	0.462	-0.955	-0.00097	0.409	-0.82967	-1.014	4.6
EFF TROUGH 1	1	1.156	0.40344	0.068	0.229	3.00E-05	1.157	0.40344	0.229	25.2
bypass JCT	P	5.796	0.18911	0.001	0.038	0	5.796	0.18911	0.038	130.3
BR IN1	1	4.997	0.40344	0.001	0.009	0	4.997	0.40344	0.009	367.4
BEG MLRZ1	1	5.572	1.31944	0.002	0.013	0	5.572	1.31944	0.013	299.6
BEG IFAS2T1	1	5.626	1.31944	0.002	0.013	0	5.626	1.31944	0.013	1728.7
BEG IFAS1T1	1	5.677	1.31944	0.002	0.013	0	5.677	1.31944	0.013	1763.8
BEG ANAOXIC2T1	1	4.78	1.31944	0.004	0.03	0	4.78	1.31944	0.03	1163
BEG ANAOXIC1T1	1	4.957	1.31944	0.004	0.029	0	4.957	1.31944	0.029	798.8
BEG ANAEROBIC1	1	4.971	0.40344	0.001	0.009	0	4.971	0.40344	0.009	490.6
6	6	0.519	1.15769	0.986	1.884	0.00269	0.596	1.15769	1.558	34.6
5	5	0.596	1.15769	0.755	1.558	0.09519	0.285	1.15769	4.438	18.1
4	3	0.522	1.15769	0.978	1.874	0.00294	0.547	1.15771	1.752	443.4
3!	1	0.437	0.82966	0.991	1.724	0.00291	0.474	0.82967	1.534	193.2
28	P	1.386	1.158	0.076	0.278	2.00E-05	1.386	1.158	0.278	38.7
27	P	1.386	1.158	0.076	0.278	2.00E-05	1.387	1.158	0.278	67
27!	1	1.387	1.158	0.075	0.278	2.00E-05	1.387	1.158	0.278	13.1
1	M	0.545	0.71082	0.282	0.652	0.00094	0.494	0.71082	0.719	6.5

SEP Infowork Model Output Headworks to River
Flow 1.157 m3/s **100 ML/d**
Weir Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Velocity (m/s)	Volume (m3)
AT MLC 1 AT BPC	W	1.144	0.403	0.086	0.289	0	1.156	0.286	0
END ANAEROBIC1	1	0.026	0.114	0.970	0.487	-	0.04	0.315	0
END ANAOXIC12T1	1	0.049	0.70171	2.248	1.563	0	0.114	0.677	0
END ANAOXIC1T1	1	0.064	0.78209	3.088	2.446	0	0.176	0.89	0
END ANAOXIC2T1	1	-0.004	0.41662	0	0	0	0.099	0.839	0
END IFAS1T1	1	-0.005	0.48501	0	0	0	0.046	0.571	0
END IFAS2T1	1	-0.009	0.4713	0	0	0	0.045	0.565	0
END MLRZ1	1	-0.555	0.40344	0	0	0	0.041	0.537	0
END PRE-ANOXIC1	1	-0.01	0.04852	0	0	0	0.016	0.336	0
grit chamber #1	W	-0.129	0.58098	0	0	0	0.083	0.766	0
MLC PRE SPLIT 1	W	1.12	0.82869	0.122	0.404	0	1.143	0.397	0
PC T 1 Aft Weir	W	1.219	0.2842	0.007	0.025	0	1.22	0.025	0
PC T 1 OUT	W	-0.54	0.2842	0	0	0	0.064	0.305	0
PCT 1 & 2 OR	W	1.373	0.56865	0.038	0.138	0	1.378	0.138	0
SC #1	W	-0.54	0.09155	0	0	0	0.005	0.183	0
SC 1 OR	W	1.014	0.19655	0.034	0.106	0	1.018	0.106	0
uv bend 1	W	1.154	0.17978	0.033	0.11	0	1.159	0.109	0
UV W 2	W	-0.705	0.17978	0	0	0	0.131	0.964	0

SEP Infowork Model Output Headworks to River
Flow 1.157 m3/s **100 ML/d**
Sluice Gate Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
20	1	1.537	0.59753	0.056	0.216	0	1.544	0.59753	0.215	0
DIS CHAN 2	3	1.551	0.59753	0.055	0.214	0	1.558	0.59753	0.213	0
INLET STRUC	1	-2.61	0	0	0	0	0	0	0	0
LOWFLOWCHNLBEND2	1	1.518	0.58098	0.139	0.417	0	1.536	0.58098	0.417	0
PC T 1 IN 2	S	1.364	0.14209	0.104	0.255	0	1.372	0.14209	0.255	0
uv bend 3	1	0.576	0.35525	0.189	0.45	0	0.595	0.35525	0.435	0
UV inflow	1	1.159	0.3549	0.066	0.223	0	1.166	0.3549	0.222	0

SEP Infowork Model Output Headworks to River
Flow 1.157 m3/s 100 ML/d
Orifice Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)	
26	1	1.387	1.158	0	1.474	0	2	1.608	50025.6	1.474	0
MLC SPLIT 1	O	1.018	0.19655	0	1.001	0	2	1.12	8493.44	1.001	0
PC IN SPLIT	O	1.378	0.56865	0.071	0.263	0	2	1.386	24565.88	0.261	0
PEC2	1	1.119	0.19444	0	0.99	0	2	1.219	8399.92	0.99	0

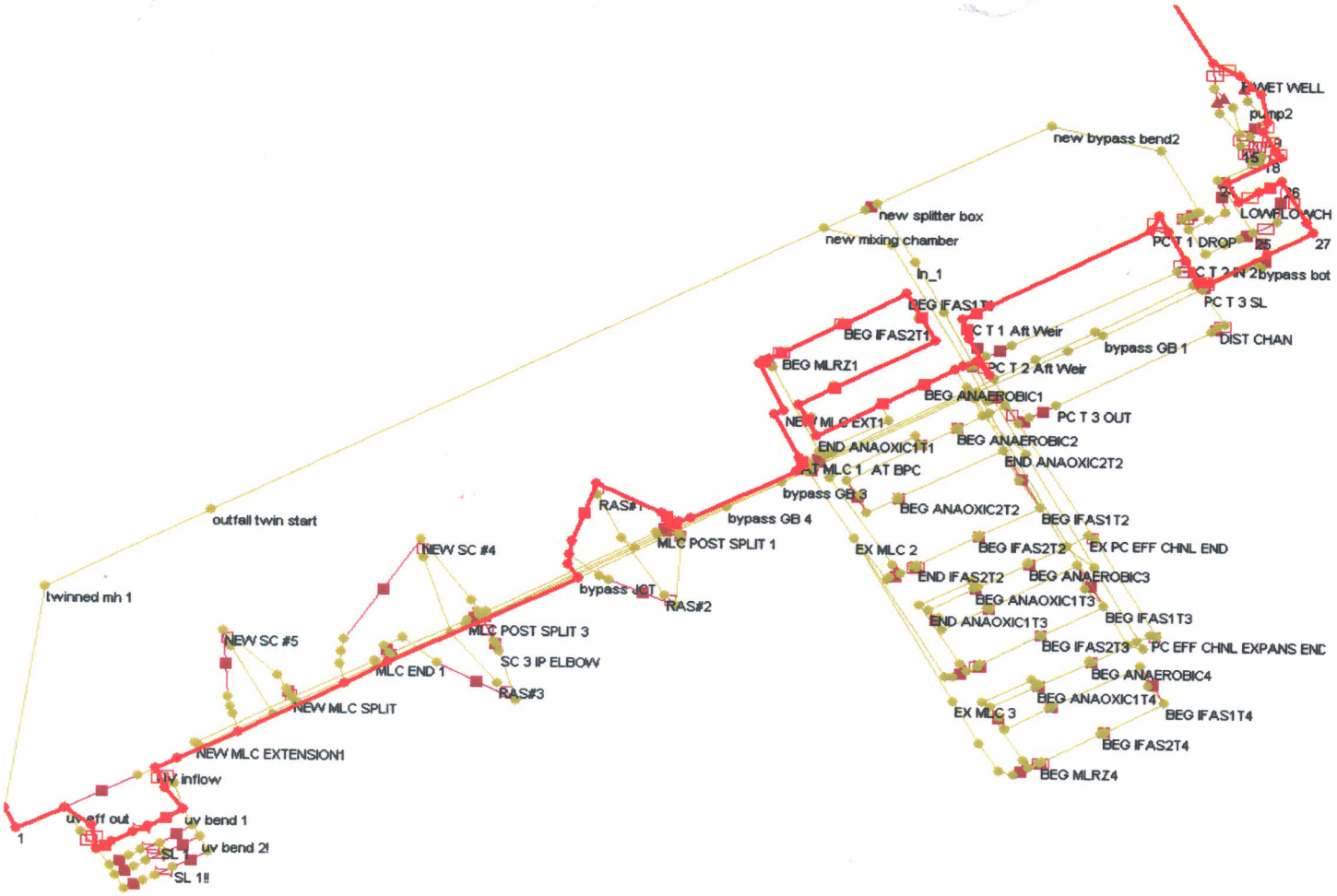
SEP Infowork Model Output Headworks to River
Flow 1.157 m3/s 100 ML/d
Screen Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
19	B	1.544	0.59753	0.055	0.215	0	1.551	0.59753	0.214	0

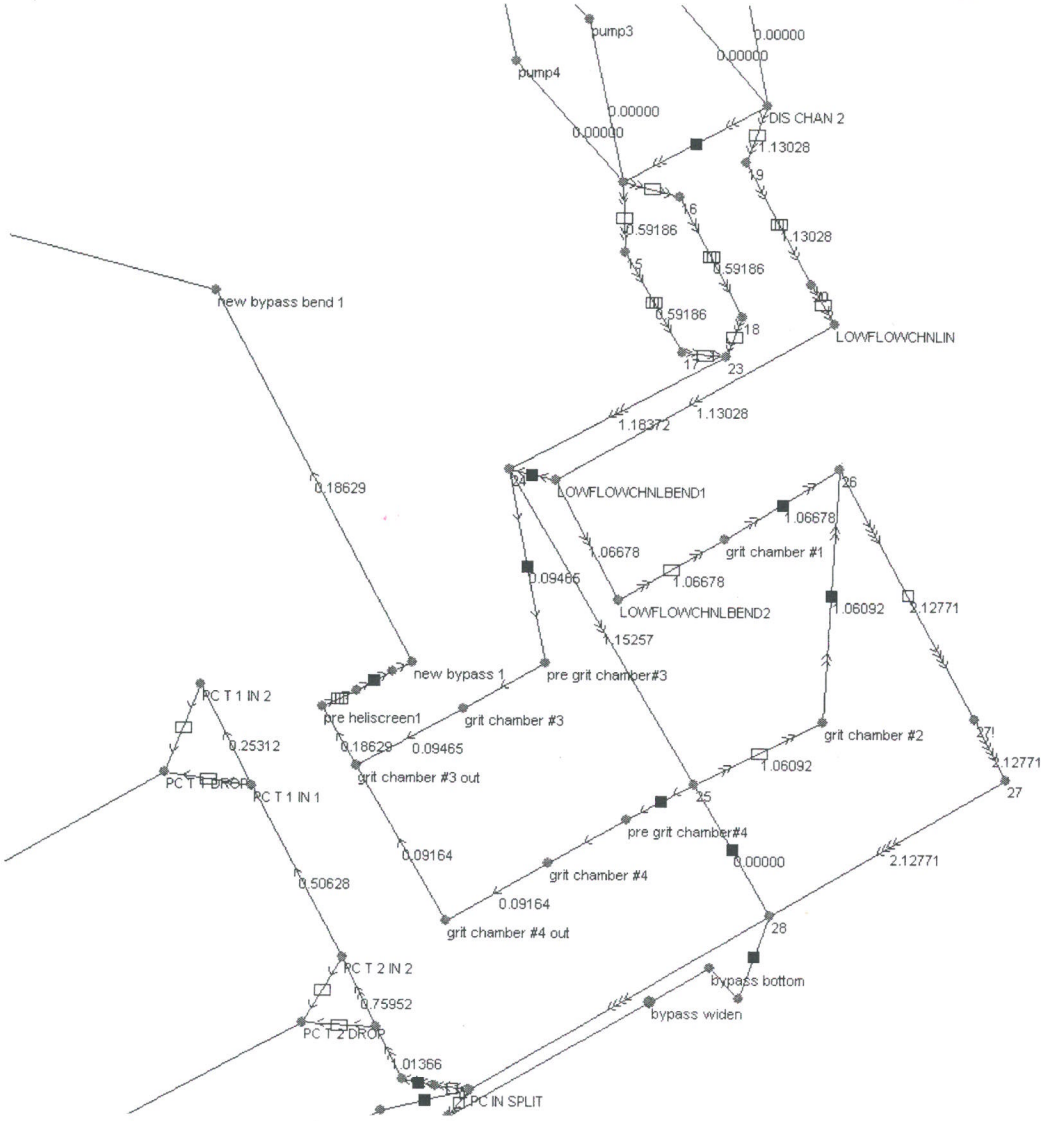
TM 45
SEWPCC Hydraulics Modeling
InfoWorks Modeling
Appendix Documents

200 ML/d
2.3 m3/s

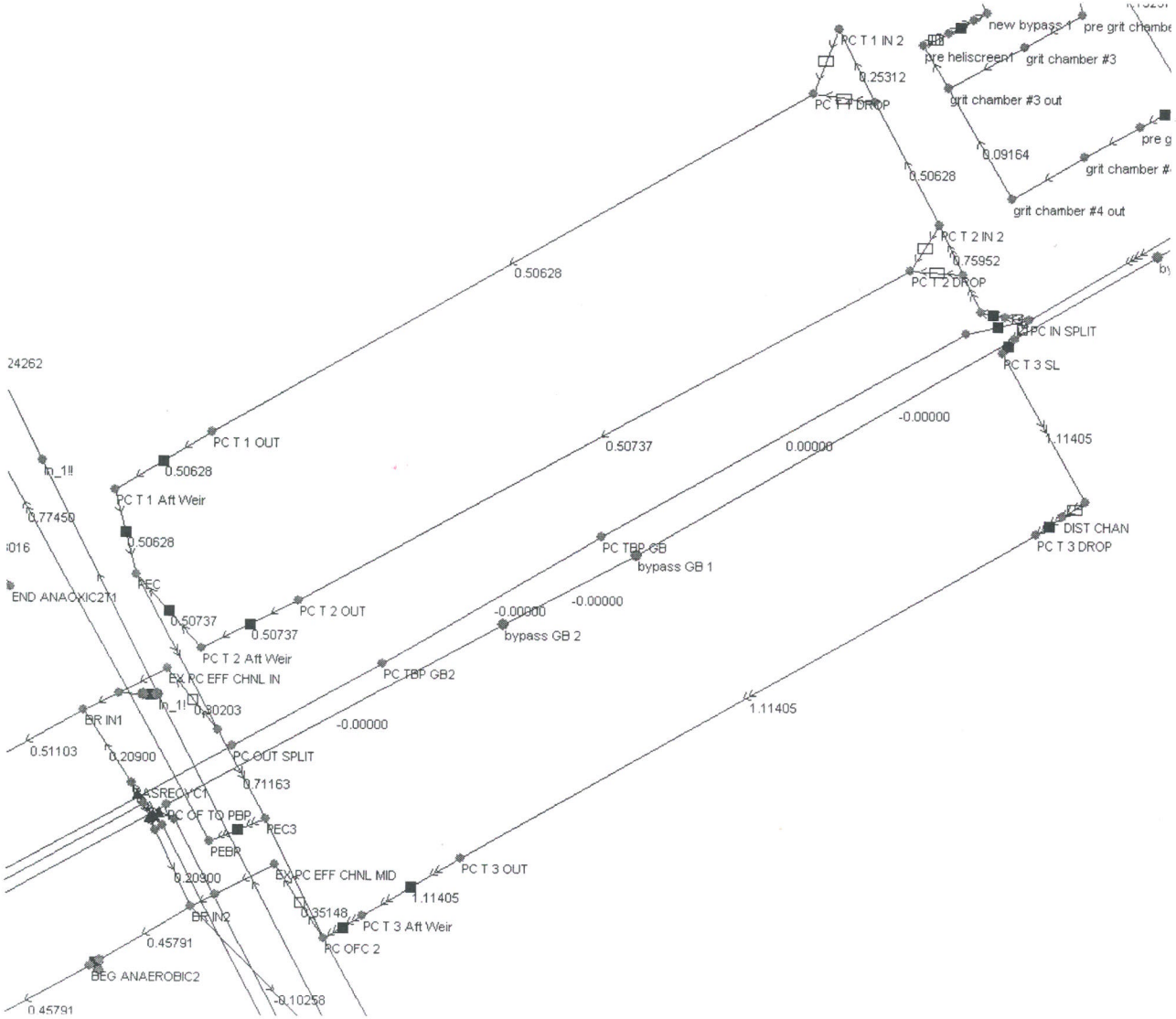
SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Path



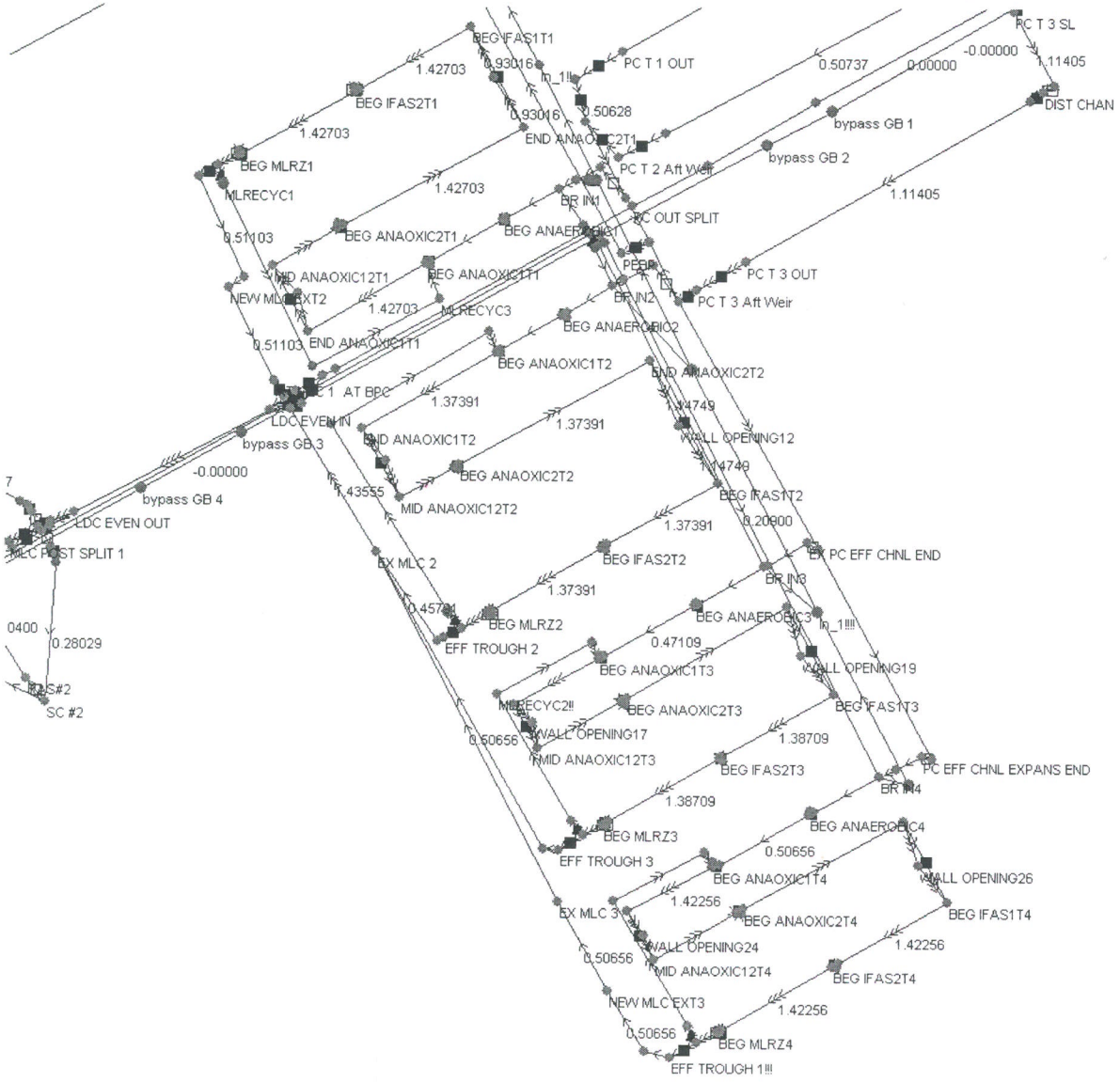
SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s **200 ML/d**
Flows - Headworks and Grit Tanks



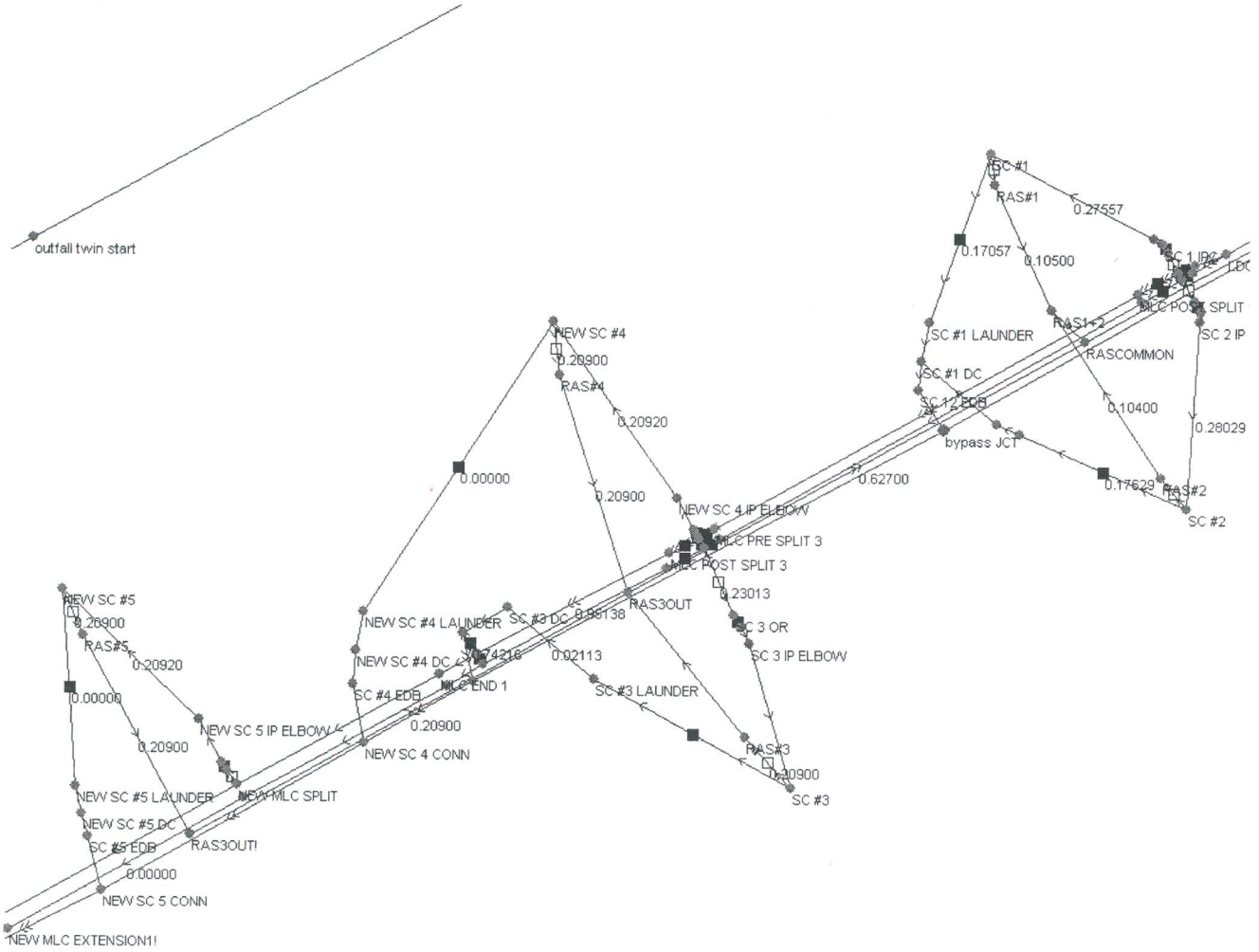
SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s **200 ML/d**
Flows - Primary Clarifiers



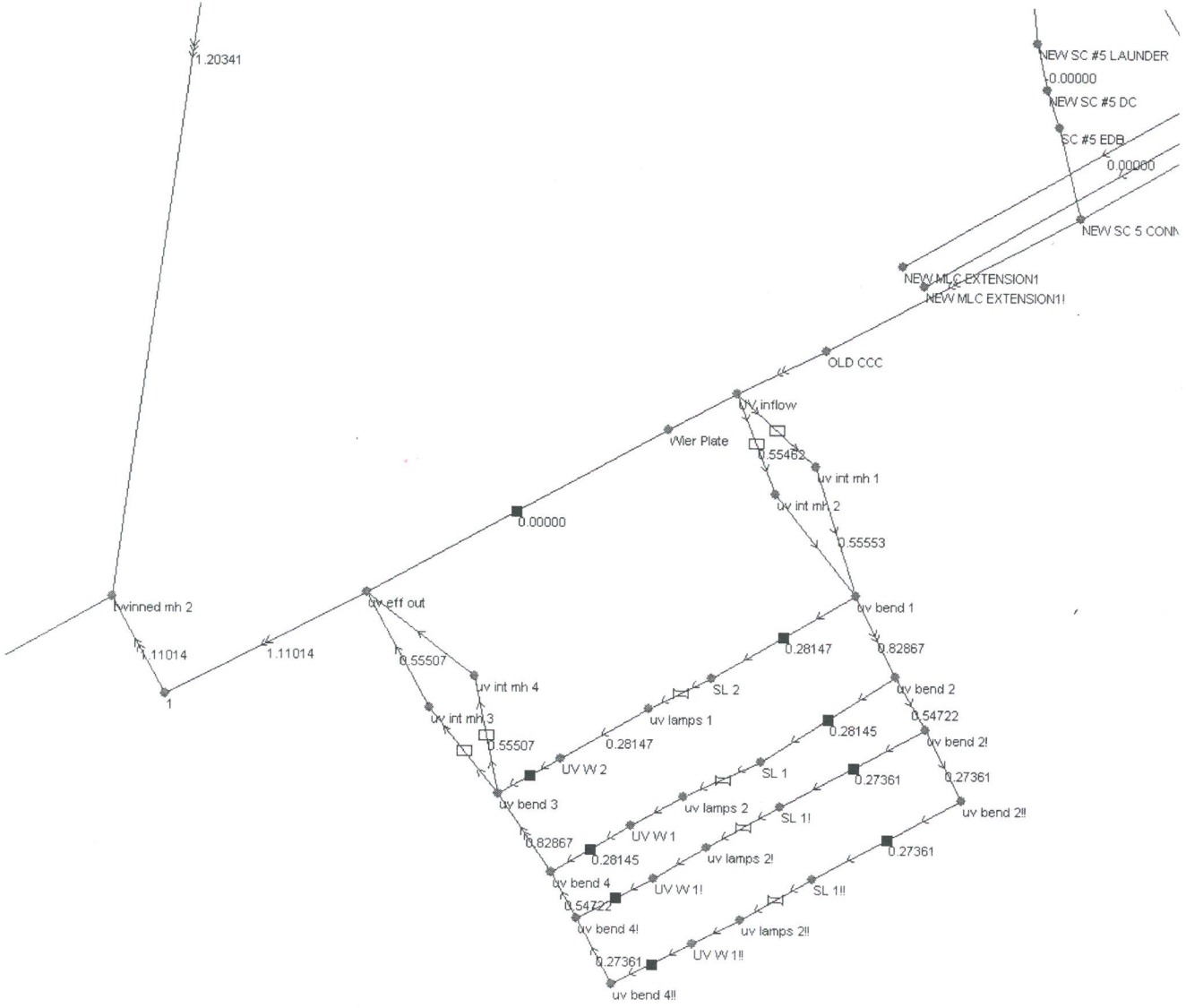
SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Flows - Bioreactors



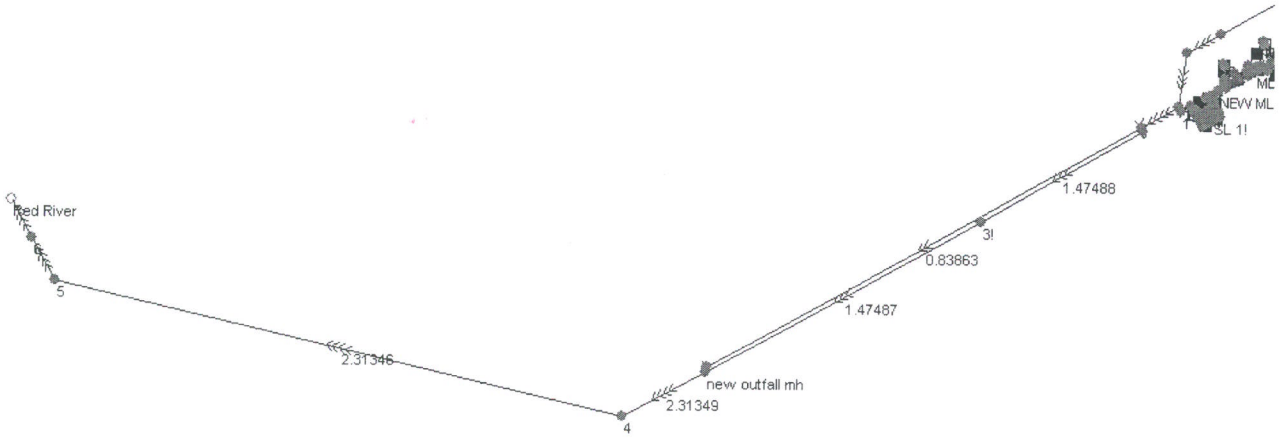
SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Flows - Secondary Clarifiers



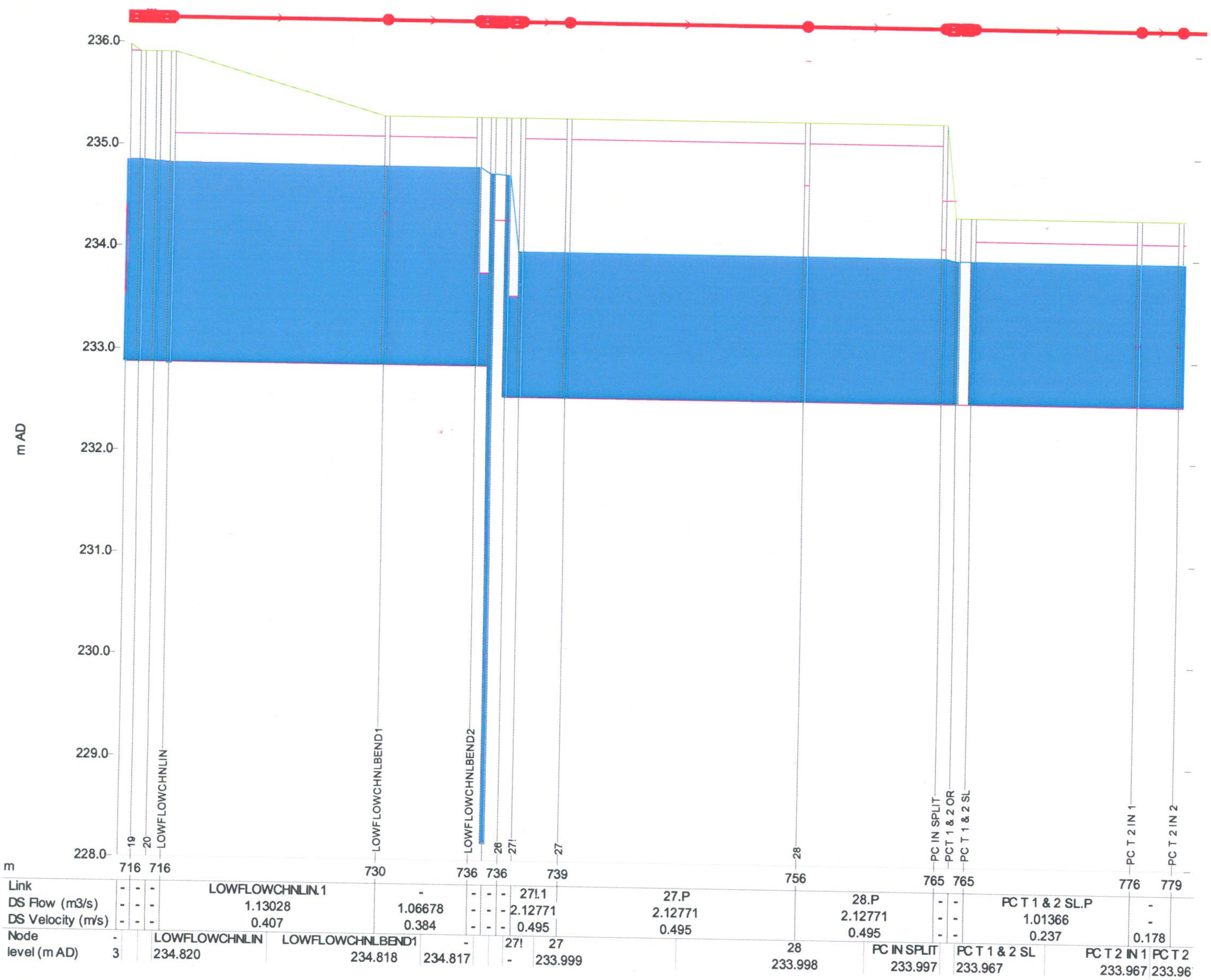
SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s **200 ML/d**
Flows - UV Building



SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s **200 ML/d**
Flows - Outfall



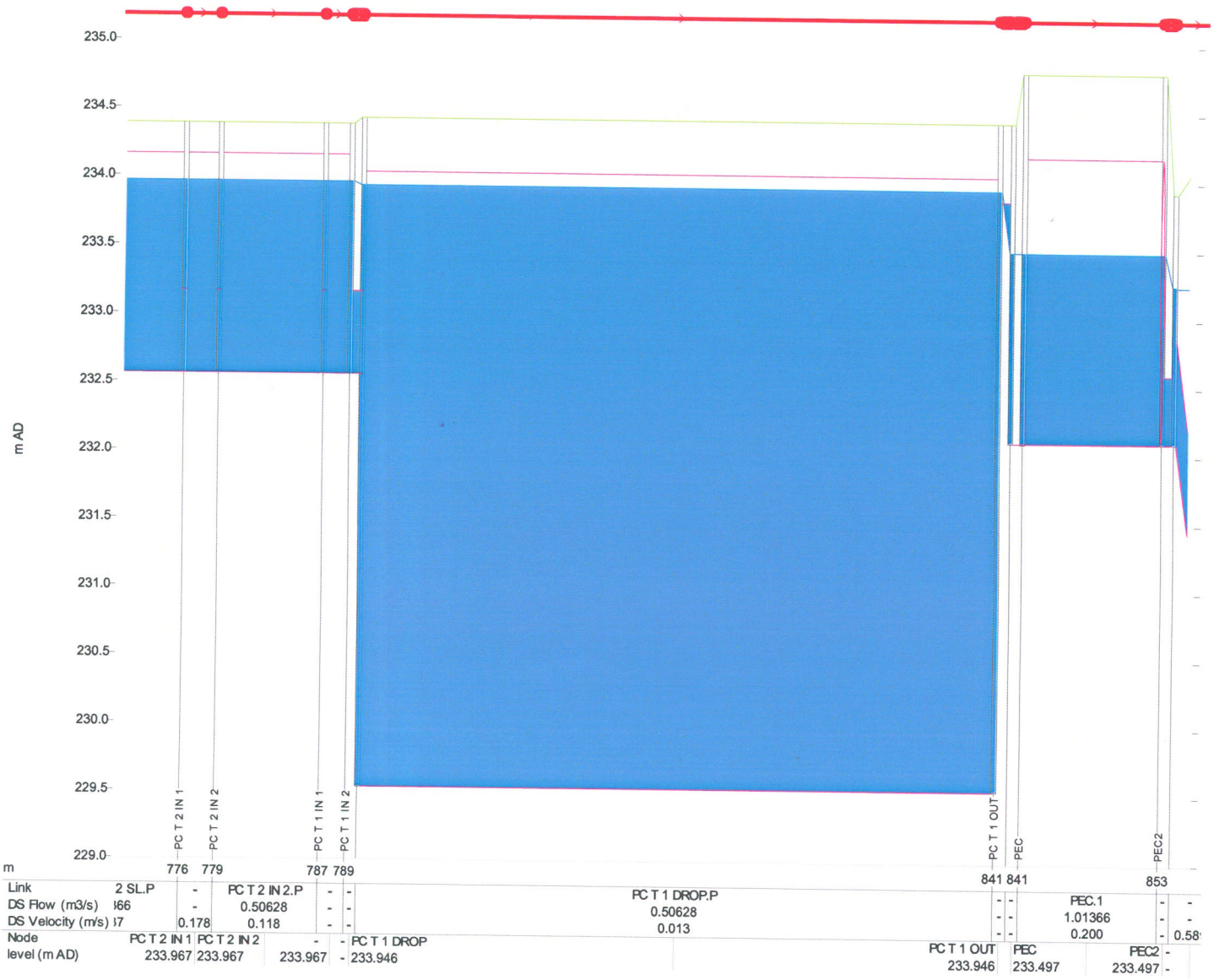
SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Profile - Headworks to Primary Clarifier



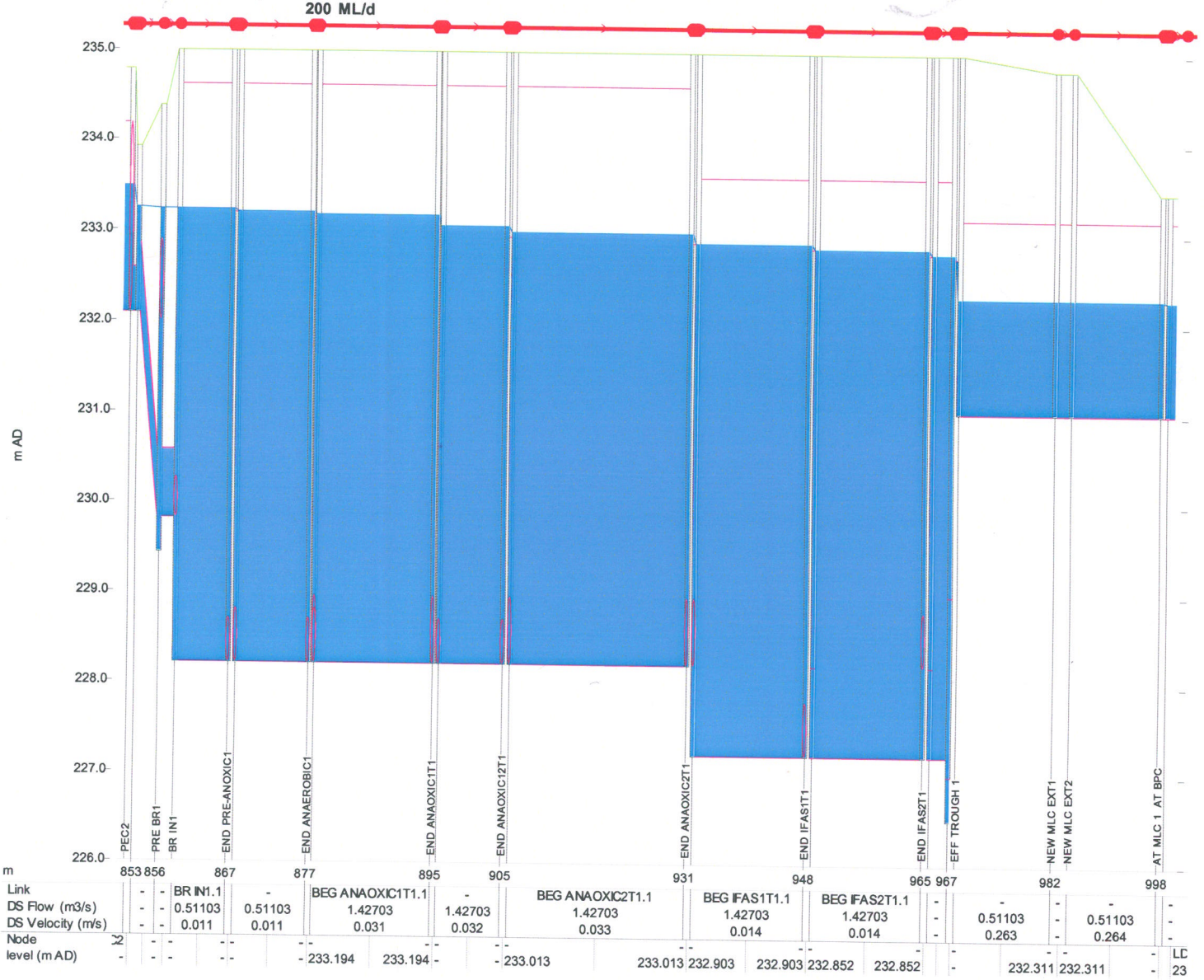
SEP_ Model_New Output 2 314 CMS (200 MLD) _080828_ADD_PROF_jF1.xls_Profile HW to PC

11/4/2008_8:14 AM

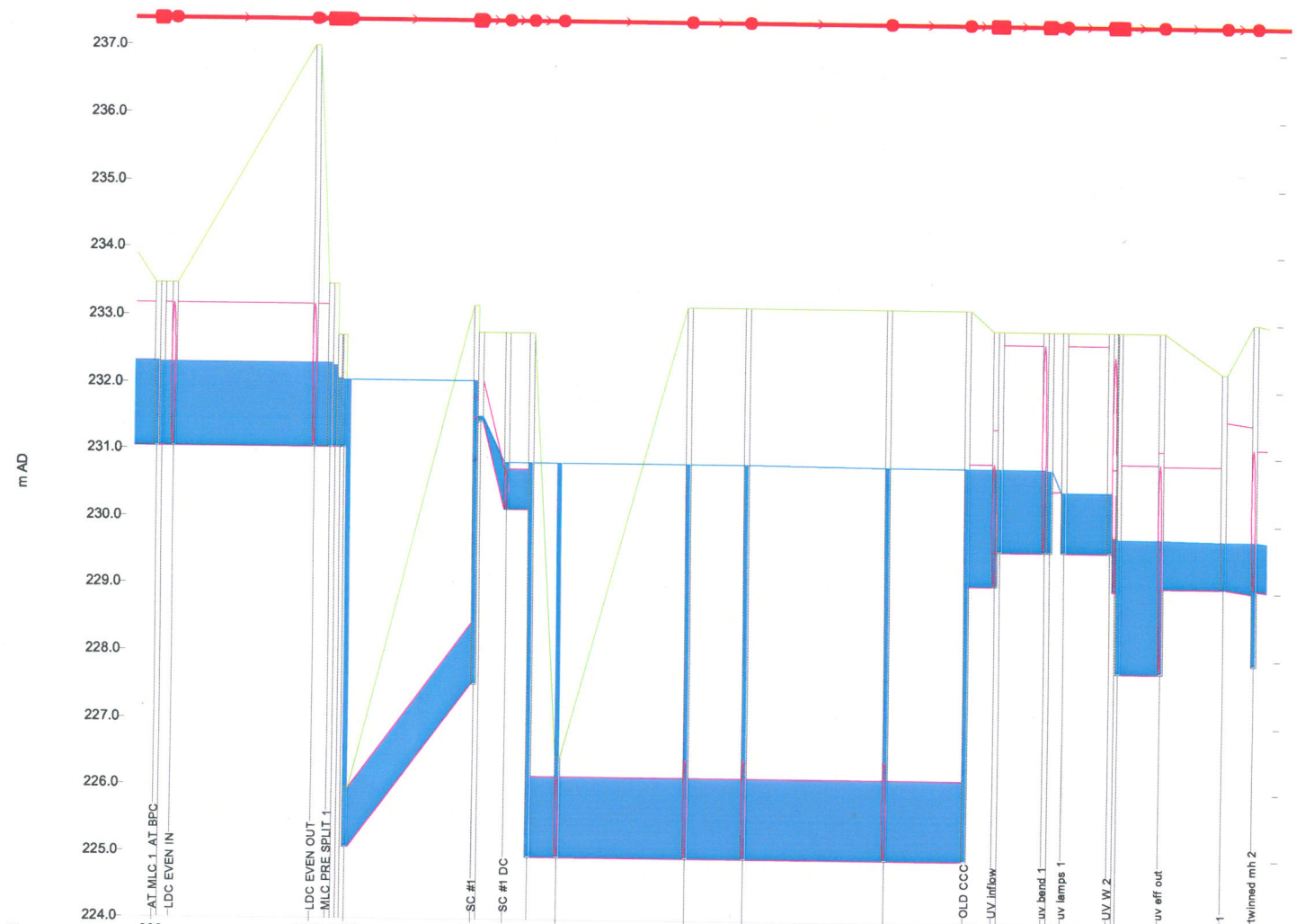
SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Profile - Primary Clarifier to Bioreactor



SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Profile - Bioreactor to Secondary Clarifier
200 ML/d



SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Profile - Secondary Clarifier to UV Building



m		998		1029	1033			1058	1064		1075		1101	1113		1142		1158	1164	1173		1185	1194		1207	
Link			LDC EVEN IN.P	-	SC 1 IP ELBOW.P	-	-	-		bypass JCT.P	-		NEW SC 4 CONN.1		-	-	-	-	-	-	-	-	-	1.M	
DS Flow (m3/s)	03		1.94658	-	0.27557	-	-	-		0.34686	1.11015		1.11015		1.11015	-	-	-	-	-	-	-	1.11014	-	
DS Velocity (m/s)	i4		0.424	-	0.381	-	-	-		0.070	0.224		0.224		0.224	-	0.195	-	0.219	0.115	1.186	-			
Node		-	-	-	-	SC #1	-	-	-		SC 3 CONN	-		NEW SC 5 CONN		-	-	-	-	-	-	-	1	tw inne		
level (m AD)		-	232.295	232.294	232.052	232.049	-	-	230.825		230.824	230.824		230.822		-	-	-	-	-	-	-	-	229.75		

SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Volume balance (%)
UV W 2	230.477	-2.193	-2.2	0	0
uv lamps 1	230.477	-2.193	-2.2	0	0
uv int mh 4	229.778	-2.892	-2.9	0	0
uv int mh 2	230.809	-1.861	-1.9	0	0
UV inflow	230.82	-2.05	-5.2	0	0
uv eff out	229.778	-2.892	-164.8	0	0
uv bend 3	229.804	-2.866	-2.9	0	0
uv bend 1	230.809	-1.861	-1.9	0	0
twinned mh 2	229.759	-3.241	-8.4	0	0
SL 2	230.803	-1.867	-1.9	0	0
SC 3 CONN	230.824	-2.348	-42.7	0	0
SC 1&2 EDB	230.825	-1.941	-2.9	0	0
SC 1 OR	232.064	-0.448	-0.4	0	0
SC 1 IPC	232.058	-0.454	-1	0	0
SC 1 IP ELBOW	232.052	6.083	0	0	0
SC #1 LAUNDER	231.509	-1.257	-80.5	0	0
SC #1 DC	230.828	-1.938	-3.9	0	0
SC #1	232.049	-1.123	-991.3	0	0
Red River pump1	234.853	-1.147	-1.1	0	0
PRE BR1	233.243	-1.148	-2.5	0	0
PEC2	233.497	-1.253	-1.3	0	0
PEC	233.497	-1.253	-6.3	0	0
PCT 1 & 2 OR	233.976	-0.187	-0.2	0	0
PC T 2 IN 2	233.967	-0.196	-0.2	0	0
PC T 2 IN 1	233.967	-0.196	-0.2	0	0
PC T 1 OUT	233.946	-0.209	-0.2	0	0
PC T 1 IN 2	233.967	-0.196	-0.2	0	0
PC T 1 IN 1	233.967	-0.196	-0.2	0	0
PC T 1 DROP	233.946	-0.209	-0.2	0	0
PC T 1 Aft Weir	233.498	-0.657	-0.7	0	0
PC T 1 & 2 SL	233.967	-0.196	-0.2	0	0
PC IN SPLIT	233.997	-1.105	-1.1	0	0
OLD CCC	230.821	-1.739	-41.4	0	0
NEW SC 5 CONN	230.822	-2.35	-42.8	0	0
NEW SC 4 CONN	230.824	-2.348	-42.7	0	0
new outfall mh	227.588	-4.662	-4.7	0	0
NEW MLC EXT2	232.311	-2.309	-2.3	0	0
NEW MLC EXT1	232.311	-2.309	-2.3	0	0
MLC SPLIT 1	232.264	-0.908	-0.9	0	0
MLC PRE SPLIT 1	232.293	-0.879	-0.9	0	0
MLC BPC JCT 1	232.295	-0.876	-0.9	0	0
MID ANAOXIC12T1	233.079	-1.571	-1.6	0	0
LOWFLOWCHNLIN	234.82	-1.095	-4.1	0	0
LOWFLOWCHNLBEND2	234.817	-0.285	-0.3	0	0

SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Volume balance (%)
LOWFLOWCHNLBEND1	234.818	-0.284	-0.3	0	0
LDC EVEN OUT	232.294	-4.706	-4.7	0	0
LDC EVEN IN	232.295	-0.877	-0.9	0	0
INLET STRUC	219.61	-10.51	-103	0	0
grit chamber #1	234.758	-0.547	-45.8	0	0
EX PC EFF CHNL IN	233.256	-0.678	-1.8	0	0
END PRE-ANOXIC1	233.238	-1.412	-1.4	0	0
End Monitoring chamber2	229.434	-2.566	-16.5	0	0
END MLRZ1	232.798	-1.852	-1.9	0	0
END IFAS2T1	232.852	-1.798	-1.8	0	0
END IFAS1T1	232.903	-1.747	-1.7	0	0
END ANAOXIC2T1	233.013	-1.637	-1.6	0	0
END ANAOXIC1T1	233.194	-1.456	-1.5	0	0
END ANAOXIC12T1	233.079	-1.571	-1.6	0	0
END ANAEROBIC1	233.211	-1.439	-1.4	0	0
EMC_22	229.424	-2.576	-15.4	0	0
EFF TROUGH 1	232.312	-2.338	-2.3	0	0
E WET WELL	217	-9	-394.2	0	0
DIS CHAN 2	234.853	-1.127	-24.9	0	0
bypass JCT	230.825	4.663	0.3	0	0
BR IN1	233.238	-1.412	-1.4	0	0
BEG MLRZ1	232.798	-1.852	-1.9	0	0
BEG IFAS2T1	232.852	-1.798	-1.8	0	0
BEG IFAS1T1	232.903	-1.747	-1.7	0	0
BEG ANAOXIC2T1	233.013	-1.637	-1.6	0	0
BEG ANAOXIC1T1	233.194	-1.456	-1.5	0	0
BEG ANAEROBIC1	233.211	-1.439	-1.4	0	0
AT MLC 1 AT BPC	232.31	-0.861	-0.9	0	0
6	219.432	-4.288	-4.3	0	0
5	224.548	-7.402	-13.8	0	0
4	226.931	-5.019	-46.7	0	0
3!	228.614	-3.766	-4.1	0	0
28	233.998	-1.104	-1.1	0	0
27!	234	-1.102	-1.1	0	0
27	233.999	-1.103	-1.1	0	0
26	234.748	-0.354	-0.4	0	0
20	234.83	-1.085	-1.1	0	0
19	234.843	-1.074	-5.6	0	0
1	229.763	-2.497	-64.9	0	0

SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Conduit Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
x1	1	0.099	0	0	0	0.00086	0.099	0	0	39.2
uv lamps 1	P	0.907	0.28147	0.073	0.219	3.00E-05	0.907	0.28147	0.218	11.9
uv int mh 4	P	1.978	0.55507	0.026	0.115	0	1.978	0.55507	0.115	41.2
uv int mh 2	P	1.239	0.55462	0.056	0.195	2.00E-05	1.239	0.55462	0.195	25.8
uv eff out	P	0.706	1.11014	0.523	1.186	0.00118	0.721	1.11014	1.153	12.2
twinned mh 2	1	0.715	2.31354	0.983	2.225	0.0035	0.719	2.31354	2.207	52
SC 3 CONN	1	5.882	1.11015	0.009	0.224	3.00E-05	5.882	1.11015	0.224	59.3
SC 1&2 EDB	P	5.883	0.34686	0.003	0.07	0	5.883	0.34686	0.07	29.3
SC 1 IPC	P	6.983	0.27557	0.018	0.359	0.00426	1.019	0.27557	0.417	0.7
SC 1 IP ELBOW	P	4.516	0.27557	0.019	0.381	8.00E-05	6.982	0.27557	0.359	19.1
SC #1 LAUNDER	P	0.704	0.17057	0.013	0.221	0.12155	0.077	0.17057	1.822	1.6
SC #1 DC	P	0.701	0.34686	0.025	0.449	3.10E-04	0.702	0.34686	0.449	3.9
pump1	1	1.353	0	0	0	-1.00E-05	1.453	0	0	5.3
PRE BR1	1	3.419	0.30203	0.032	0.589	0.00078	3.421	0.30203	0.589	1.3
PEC	1	1.392	1.01366	0.054	0.2	1.00E-05	1.392	1.01366	0.2	57.5
PC T 2 IN 2	P	1.402	0.50628	0.032	0.118	0	1.402	0.50628	0.118	36.3
PC T 2 IN 1	P	1.402	0.75952	0.048	0.178	1.00E-05	1.402	0.75952	0.178	12
PC T 1 IN 1	P	1.402	0.25312	0.016	0.059	0	1.402	0.25312	0.059	9
PC T 1 DROP	P	4.406	0.50628	0.002	0.013	0	4.406	0.50628	0.013	2077
PC T 1 & 2 SL	P	1.402	1.01366	0.064	0.237	2.00E-05	1.402	1.01366	0.237	47.9
OLD CCC	1	1.763	1.11015	0.076	0.427	9.00E-05	1.763	1.11015	0.427	14.7
NEW SC 5 CONN	1	5.879	1.11015	0.009	0.224	3.00E-05	5.88	1.11015	0.224	80.8
NEW SC 4 CONN	1	5.88	1.11015	0.009	0.224	3.00E-05	5.881	1.11015	0.224	143
new outfall mh	1	0.791	2.31349	0.876	2.127	0.00604	0.627	2.3135	2.901	96.3
NEW MLC EXT2	1	1.272	0.51103	0.075	0.264	4.00E-05	1.273	0.51103	0.263	25.9
NEW MLC EXT1	1	1.273	0.51103	0.075	0.263	4.00E-05	1.273	0.51103	0.263	4.8
MLC BPC JCT 1	P	1.257	0.55097	0.068	0.24	2.00E-05	1.257	0.55097	0.24	5.7
MID ANAOXIC12T1	1	4.86	1.42703	0.005	0.032	0	4.86	1.42703	0.032	425.4
LOWFLOWCHNLIN	1	1.951	1.13028	0.093	0.407	7.00E-05	1.952	1.13028	0.407	40.2
LOWFLOWCHNLBEND1	1	1.95	1.06678	0.088	0.384	6.00E-05	1.951	1.06678	0.384	17.1
LDC EVEN OUT	P	1.255	1.03589	0.129	0.451	8.00E-05	1.255	1.03589	0.451	7.3
LDC EVEN IN	P	1.256	1.94658	0.121	0.424	4.00E-05	1.257	1.94658	0.423	131
EX PC EFF CHNL IN	2	3.424	0.30203	0.032	0.589	0.00198	1.145	0.30203	0.632	1.7
EMC_22	2	0.634	1.47488	0.855	1.824	0.00376	0.574	1.47489	2.092	157.9
EMC_22	1	0.584	-1.47489	0.528	-1.263	-0.00178	0.554	-1.47489	-1.331	6.3
EFF TROUGH 1	1	1.273	0.51103	0.075	0.263	4.00E-05	1.274	0.51103	0.263	27.8
bypass JCT	P	5.882	0.34686	0.003	0.07	0	5.883	0.34686	0.07	130.4
BR IN1	1	5.019	0.51103	0.002	0.011	0	5.019	0.51103	0.011	369
BEG MLRZ1	1	5.579	1.42703	0.002	0.014	0	5.579	1.42703	0.014	300
BEG IFAS2T1	1	5.633	1.42703	0.002	0.014	0	5.633	1.42703	0.014	1730.8
BEG IFAS1T1	1	5.684	1.42703	0.002	0.014	0	5.684	1.42703	0.014	1766
BEG ANAOXIC2T1	1	4.794	1.42703	0.005	0.033	0	4.794	1.42703	0.033	1166.3
BEG ANAOXIC1T1	1	4.975	1.42703	0.004	0.031	0	4.975	1.42703	0.031	801.8
BEG ANAEROBIC1	1	4.992	0.51103	0.002	0.011	0	4.992	0.51103	0.011	492.7
6	6	0.741	2.31345	0.993	2.318	0.00299	0.832	2.31346	1.989	55
5	5	0.832	2.31346	0.795	1.989	0.0924	0.366	2.31346	6.171	26.9
4	3	0.742	2.31346	0.989	2.312	0.00297	0.79	2.31349	2.127	728.3
3!	1	0.628	1.47487	0.87	1.848	0.00282	0.634	1.47488	1.825	293.3
28	P	1.432	2.12771	0.132	0.495	6.00E-05	1.433	2.12771	0.495	40
27	P	1.433	2.12771	0.132	0.495	6.00E-05	1.434	2.12771	0.495	69.2
27!	1	1.434	2.12771	0.132	0.495	7.00E-05	1.434	2.12771	0.494	13.5
1	M	0.759	1.11014	0.268	0.731	0.00063	0.706	1.11014	0.786	9.2

SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Weir Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
AT MLC 1 AT BPC	W	1.257	0.51103	0.095	0.333	0	1.272	0.51103	0.329	0
END ANAEROBIC1	1	0.044	0.19339	0.723	0.478	0	0.061	0.19339	0.346	0
END ANAOXIC12T1	1	0.063	0.80214	1.793	1.406	0	0.129	0.80214	0.684	0
END ANAOXIC1T1	1	0.079	0.88039	2.542	2.234	0	0.194	0.88039	0.905	0
END ANAOXIC2T1	1	0.003	0.49687	196.915	33.557	0	0.113	0.49687	0.882	0
END IFAS1T1	1	0.002	0.58994	133.533	17.733	0	0.053	0.58994	0.602	0
END IFAS2T1	1	-0.002	0.58056	0	0	0	0.052	0.58056	0.606	0
END MLRZ1	1	-0.438	0.51103	0	0	0	0.048	0.51103	0.581	0
END PRE-ANOXIC1	1	0.011	0.15137	4.367	1.46	0	0.038	0.15137	0.436	0
grit chamber #1	W	0.446	1.06678	0.125	0.262	0	0.456	1.06678	0.256	0
MLC PRE SPLIT 1	W	1.226	1.03589	0.133	0.462	0	1.255	1.03589	0.451	0
PC T 1 Aft Weir	W	1.392	0.50628	0.011	0.039	0	1.393	0.50628	0.039	0
PC T 1 OUT	W	-0.367	0.50628	0	0	0	0.081	0.50628	0.306	0
PCT 1 & 2 OR	W	1.402	1.01366	0.065	0.241	0	1.411	1.01366	0.239	0
SC #1	W	-0.533	0.17057	0	0	0	0.007	0.17057	0.226	0
SC 1 OR	W	1.02	0.27557	0.047	0.148	0	1.026	0.27557	0.147	0
uv bend 1	W	1.233	0.28147	0.046	0.161	0	1.239	0.28147	0.16	0
UV W 2	W	-0.496	0.28147	0	0	0	0.177	0.28147	1.12	0

SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Sluice Gate Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
20	1	1.953	1.13028	0.073	0.322	0	1.963	1.13028	0.32	0
DIS CHAN 2	3	1.976	1.13028	0.072	0.318	0	1.986	1.13028	0.316	0
INLET STRUC	1	-2.61	0	0	0	0	0	0	0	0
LOWFLOWCHNLBEND2	1	1.891	1.06678	0.256	0.766	0	1.95	1.06678	0.766	0
PC T 1 IN 2	S	1.381	0.25312	0.186	0.454	0	1.402	0.25312	0.454	0
uv bend 3	1	0.778	0.55507	0.188	0.52	0	0.804	0.55507	0.503	0
UV inflow	1	1.239	0.55462	0.094	0.326	0	1.25	0.55462	0.323	0

SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Orifice Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
PEC2	1	1.151	0.30203	0	1.538	0	2	1.392	13047.68	1.538
PC IN SPLIT	O	1.411	1.01366	0.123	0.457	0	2	1.432	43789.9	0.451
MLC SPLIT 1	O	1.026	0.27557	0	1.403	0	2	1.226	11906.26	1.403
26	1	1.435	2.12771	0	2.709	0	2	2.183	91916.91	2.709

SEP Infowork Model Output Headworks to River
Flow 2.314 m3/s 200 ML/d
Screen Results

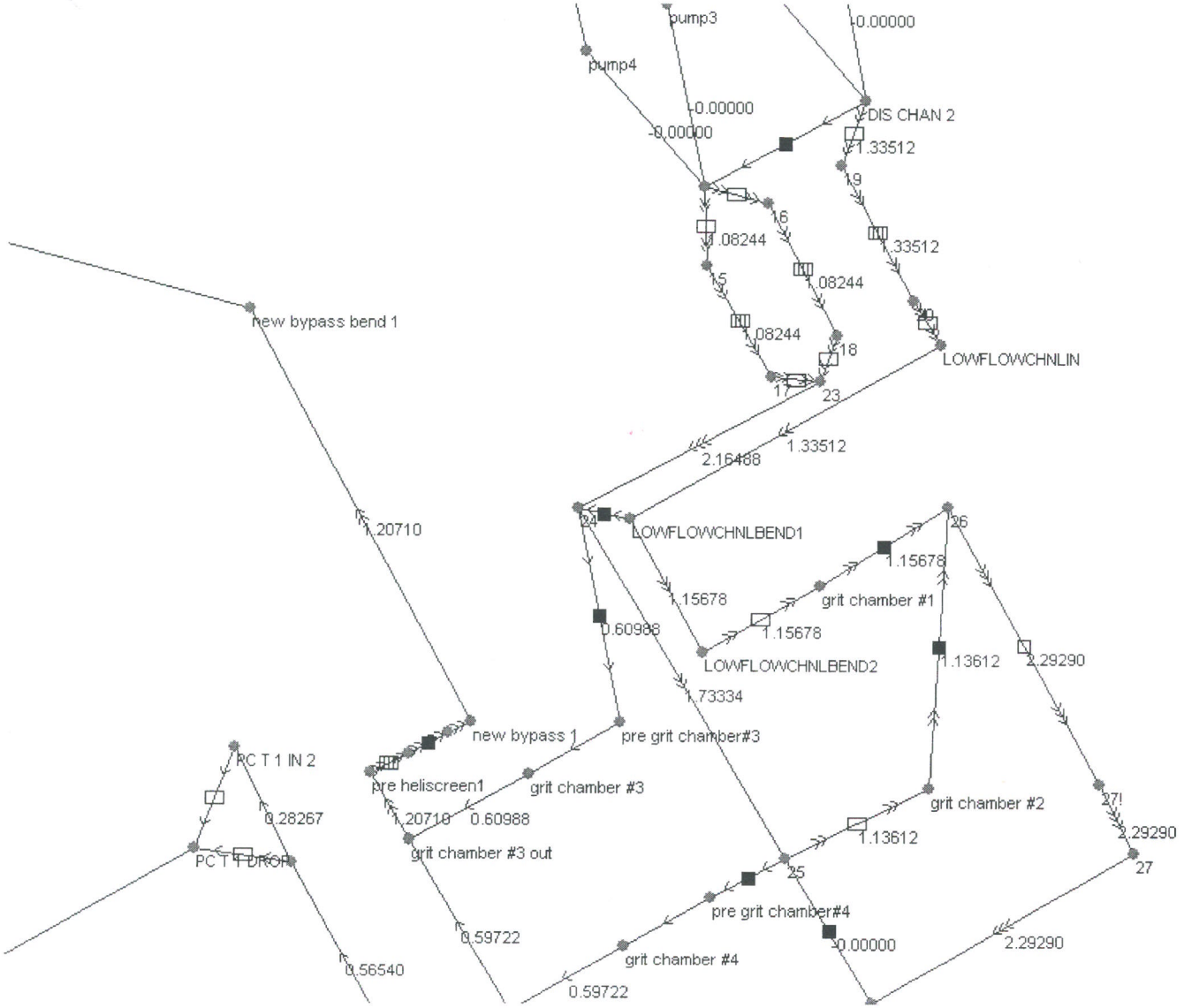
US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
19	B	1.963	1.13028	0.073	0.32	0	1.976	1.13028	0.318	0

TM 45
SEWPCC Hydraulics Modeling
InfoWorks Modeling
Appendix Documents

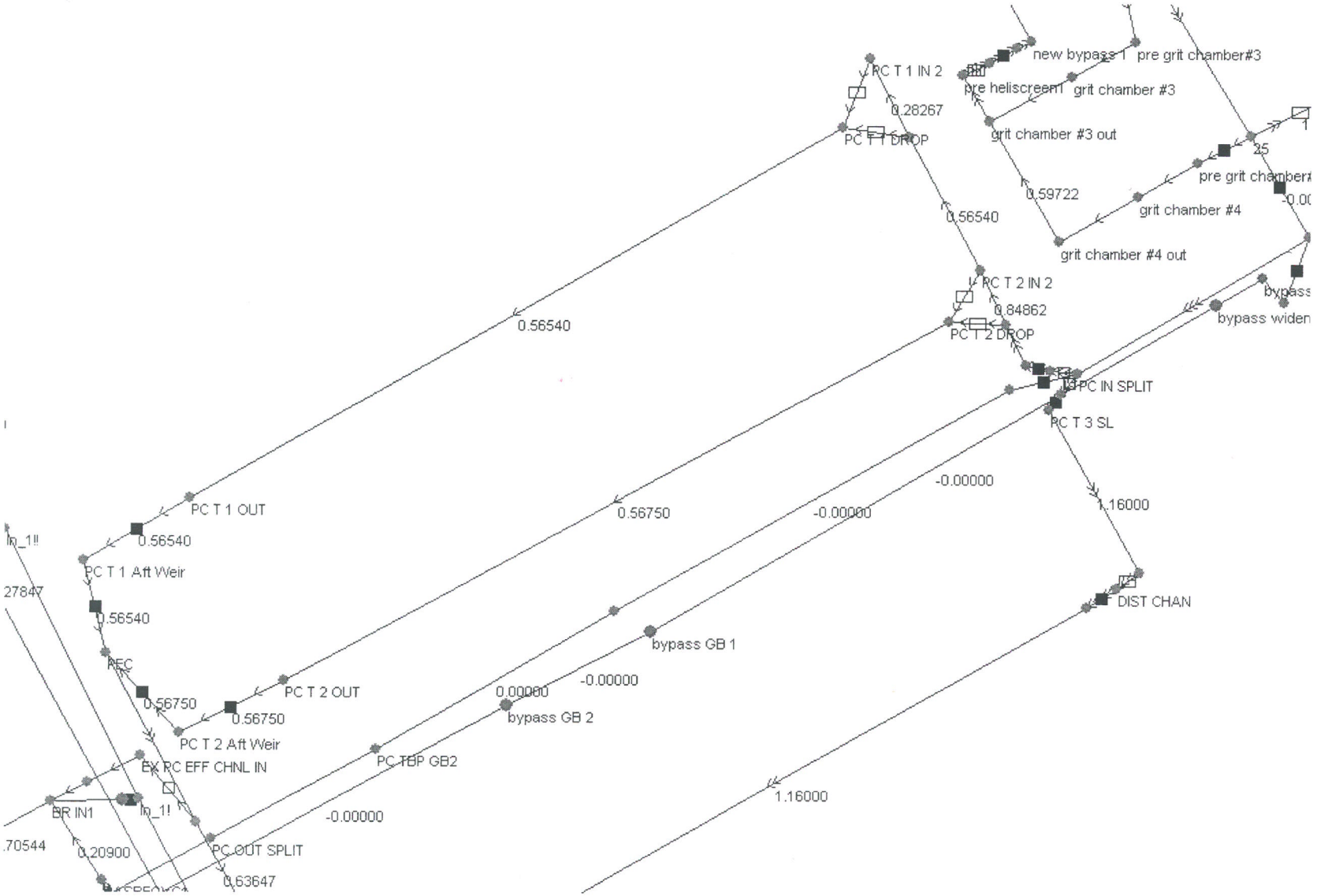
300 ML/d
3.5 m3/s

SEP Infowork Model Output Headworks to River
Flow 3.47 m3/s River Level at 229.00
Flows - Headworks & Grit Tanks

300 ML/d
Flowrate numbers shown on this figure are in m^3/s

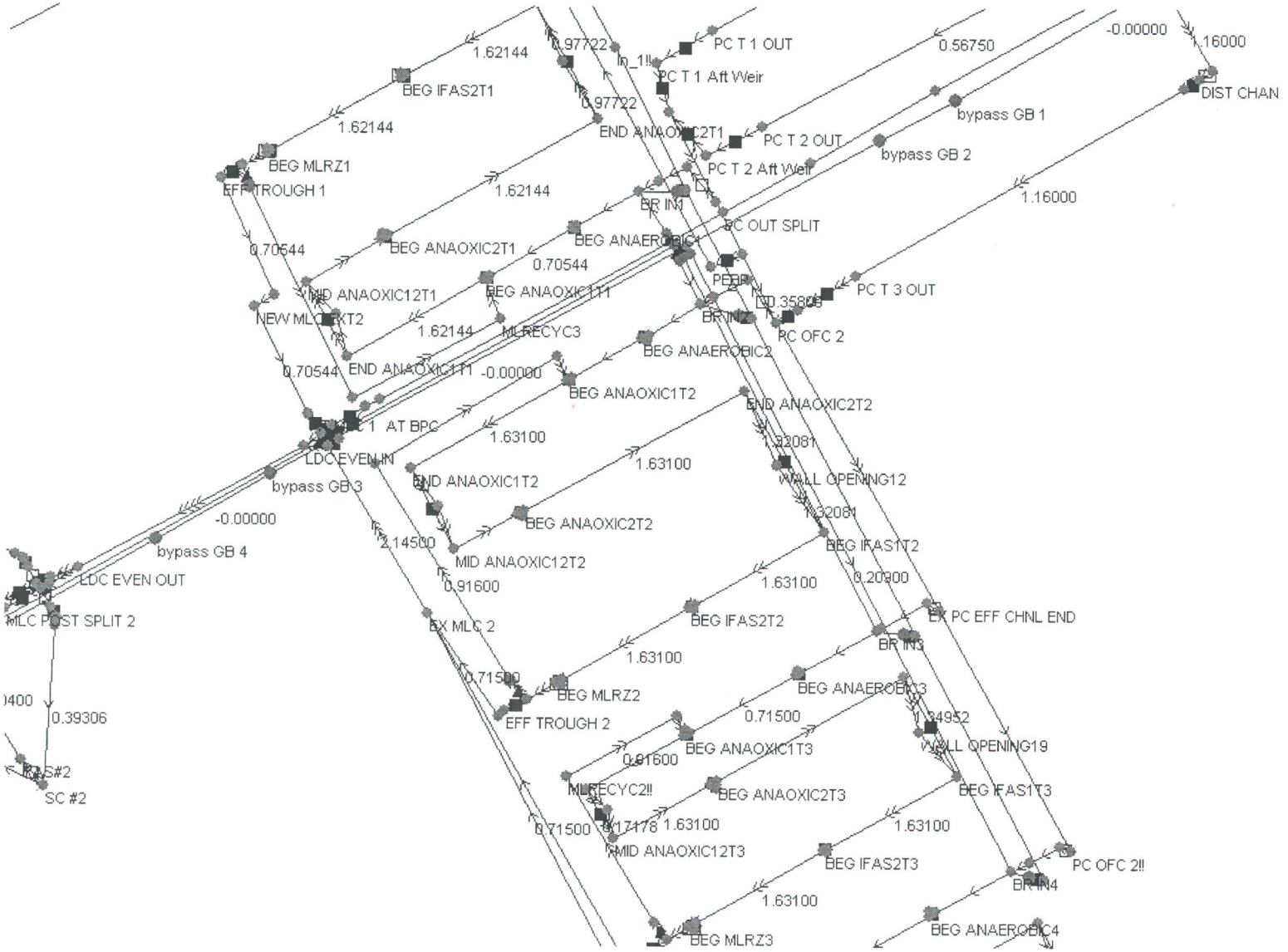


SEP Infowork Model Output Headworks to River
Flow 3.47 m3/s River Level at 229.00 **300 ML/d**
Flows - Primary Clarifiers **Flowrate numbers shown on this figure are in m^3/s**



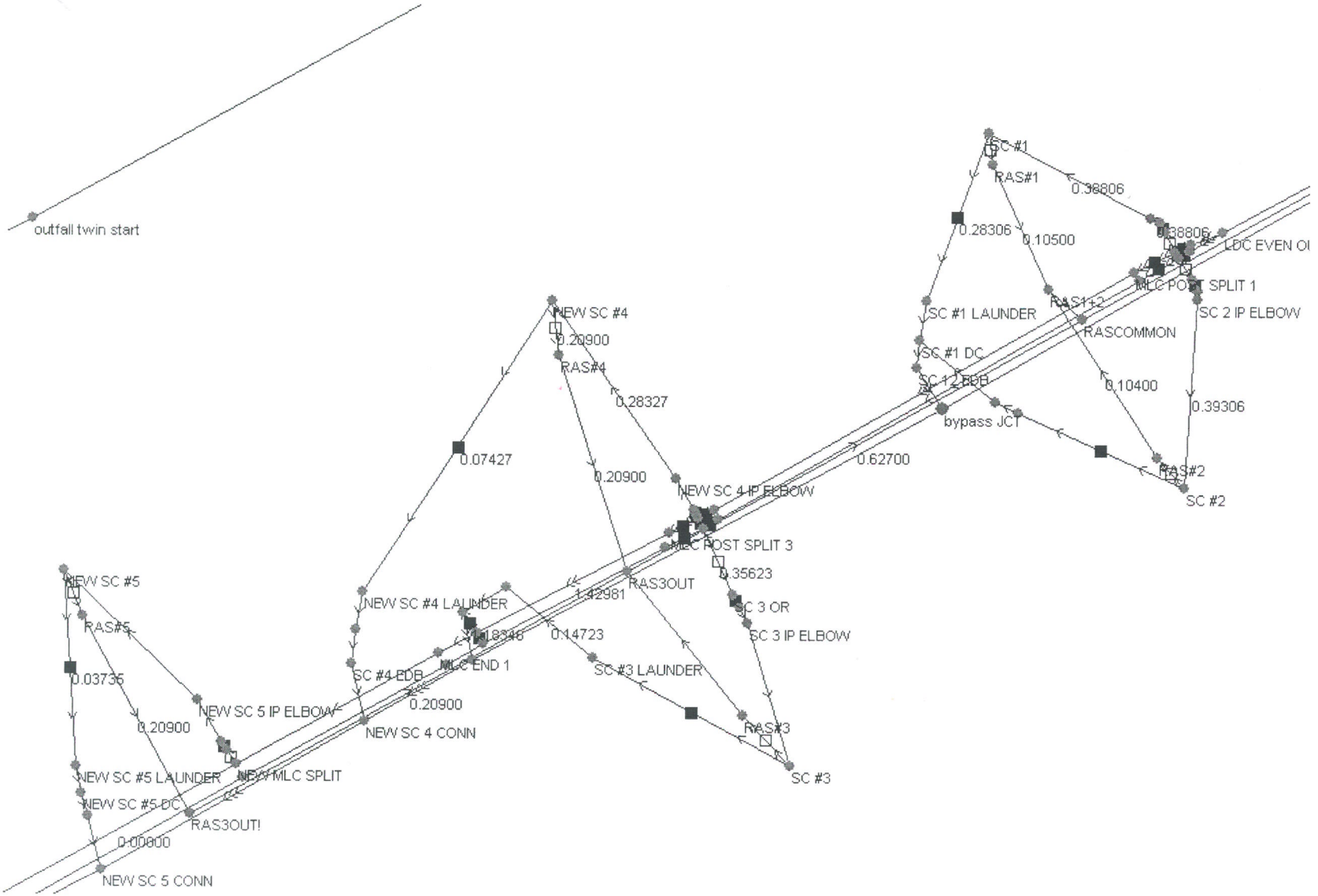
SEP Infowork Model Output Headworks to River
Flow 3.47 m3/s River Level at 229.00
Flows - Bioreactors

300 ML/d
Flowrate numbers shown on this figure are in m^3/s



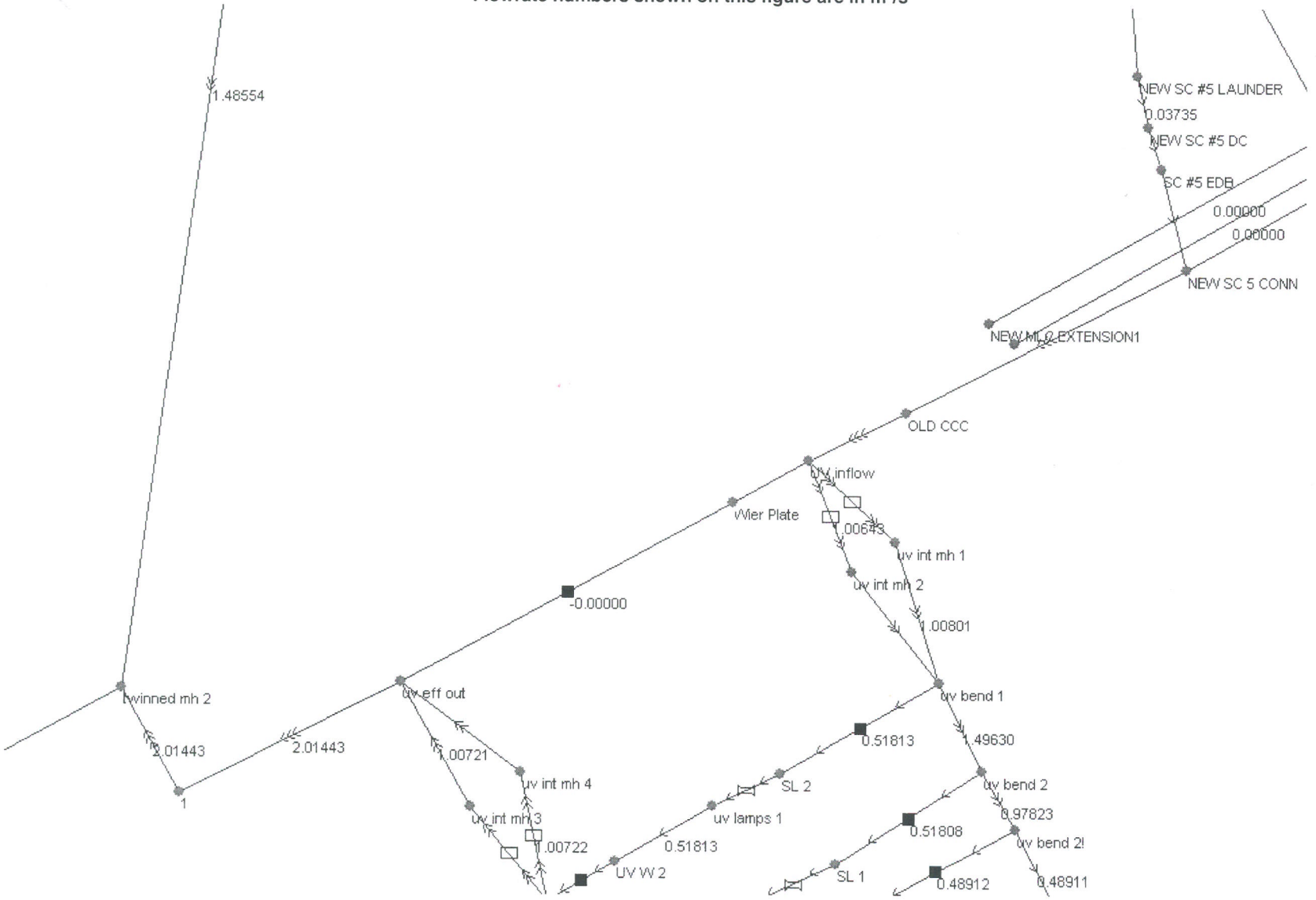
SEP Infowork Model Output Headworks to River
Flow 3.47 m3/s River Level at 229.00
Flows - Secondary Clarifiers

300 ML/d
Flowrate numbers shown on this figure are in m^3/s

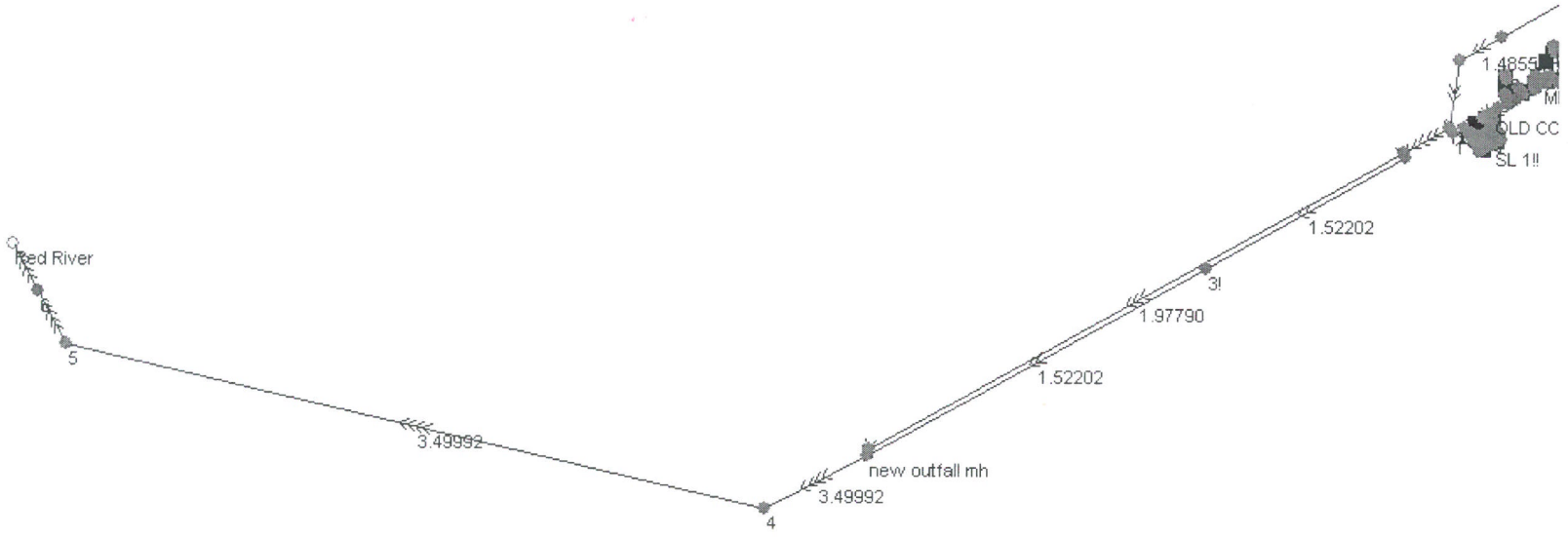


SEP Infowork Model Output Headworks to River
Flow 3.47 m3/s River Level at 229.00 **300 ML/d**
Flows - UV Building

Flowrate numbers shown on this figure are in m^3/s



SEP Infowork Model Output Headworks to River
Flow 3.47 m3/s River Level at 229.00 **300 ML/d**
Flows - Outfall **Flowrate numbers shown on this figure are in m^3/s**

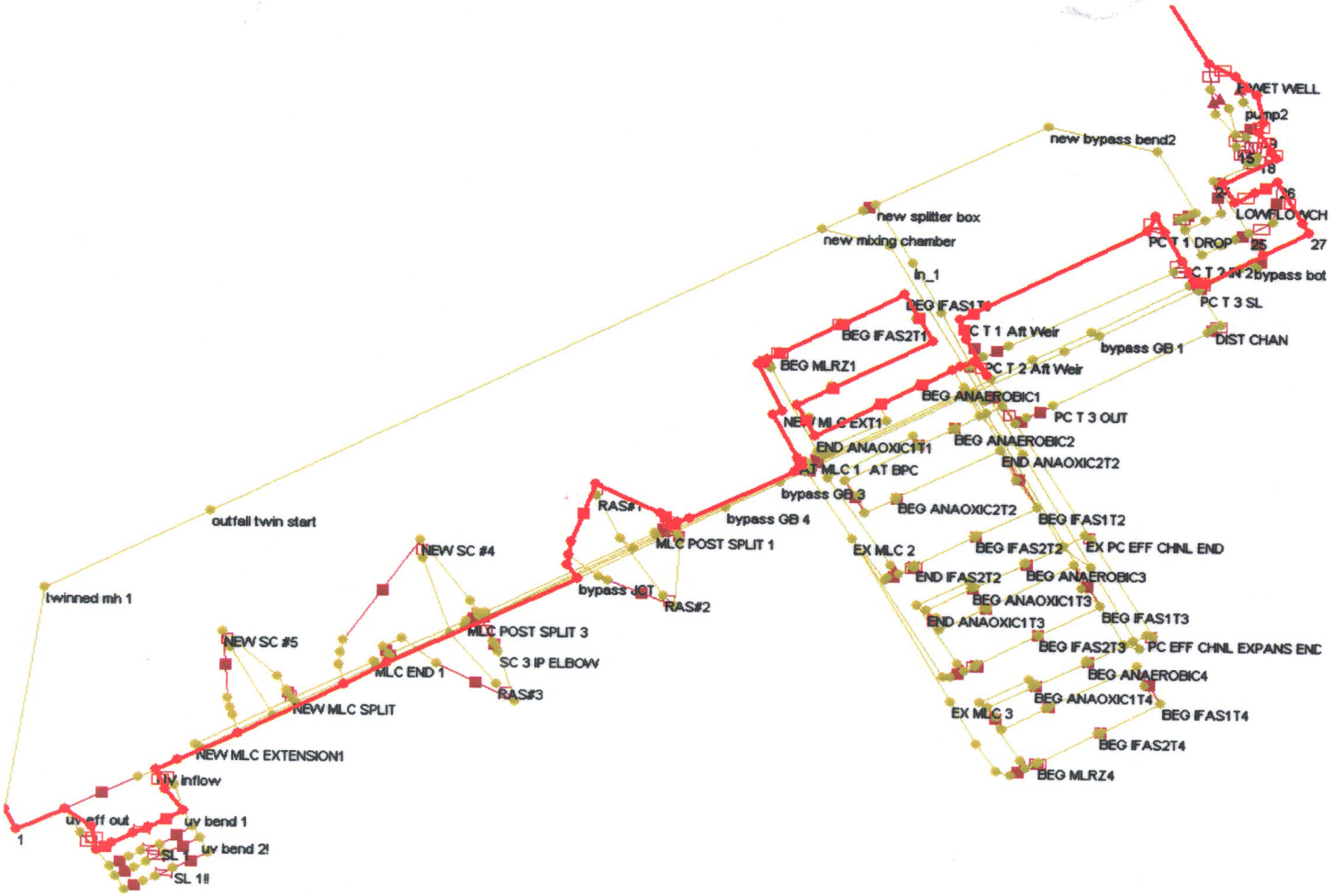


TM 45
SEWPCC Hydraulics Modeling
InfoWorks Modeling
Appendix Documents

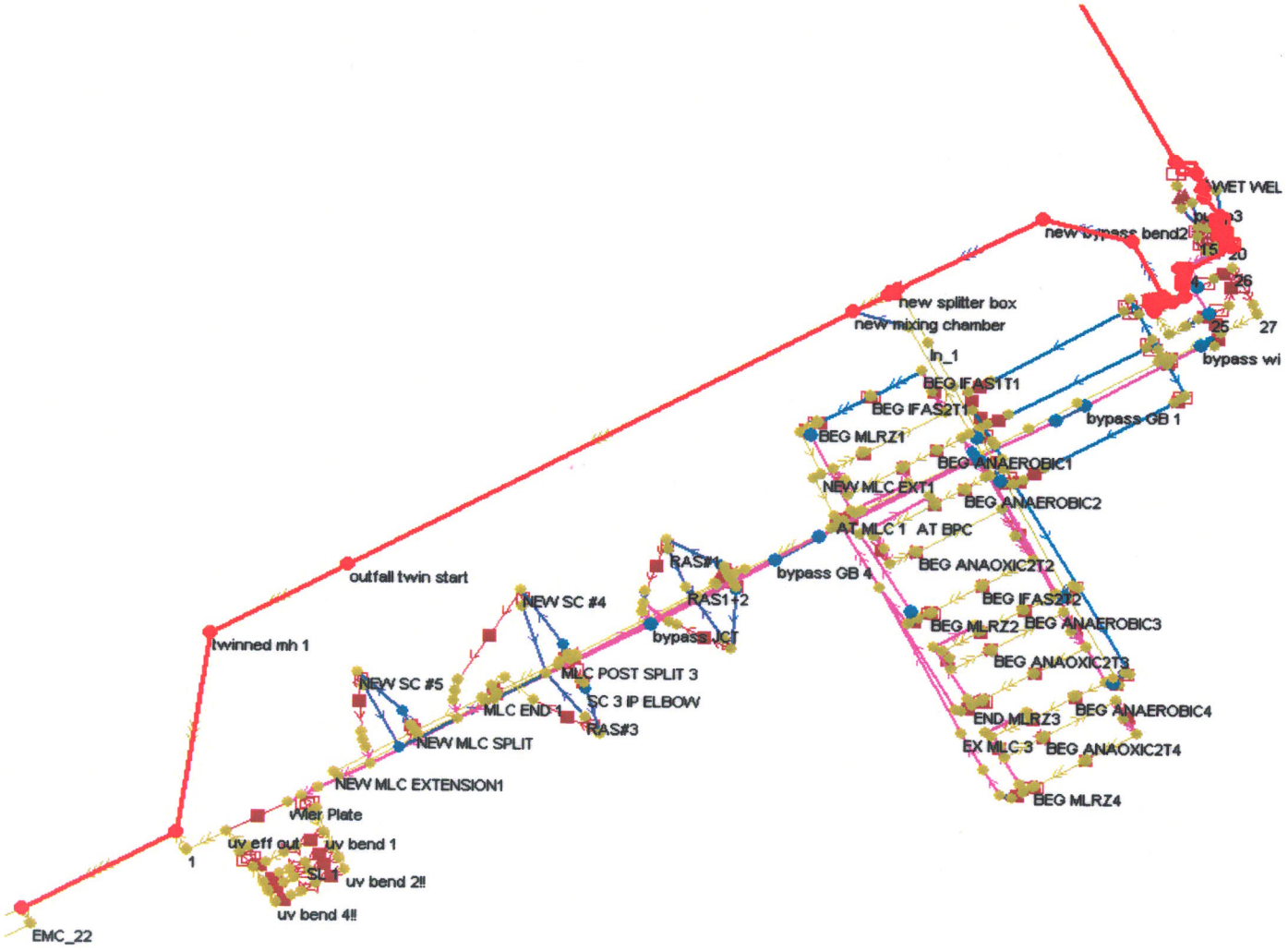
422 ML/d
4.4 m3/s

SEP Infowork Model Output Headworks to River
Flow 4.88 m3/s
Path

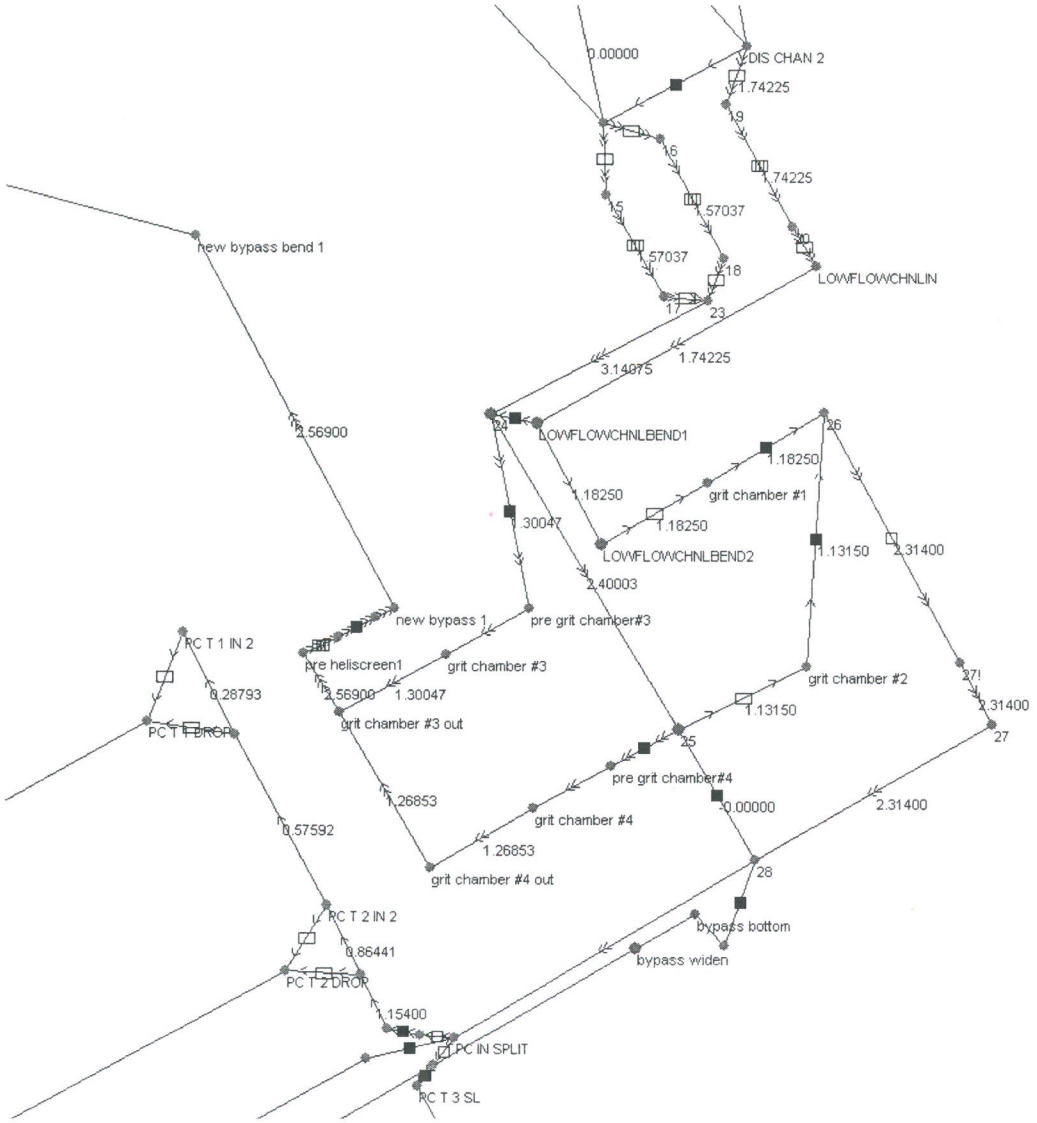
422 ML/d



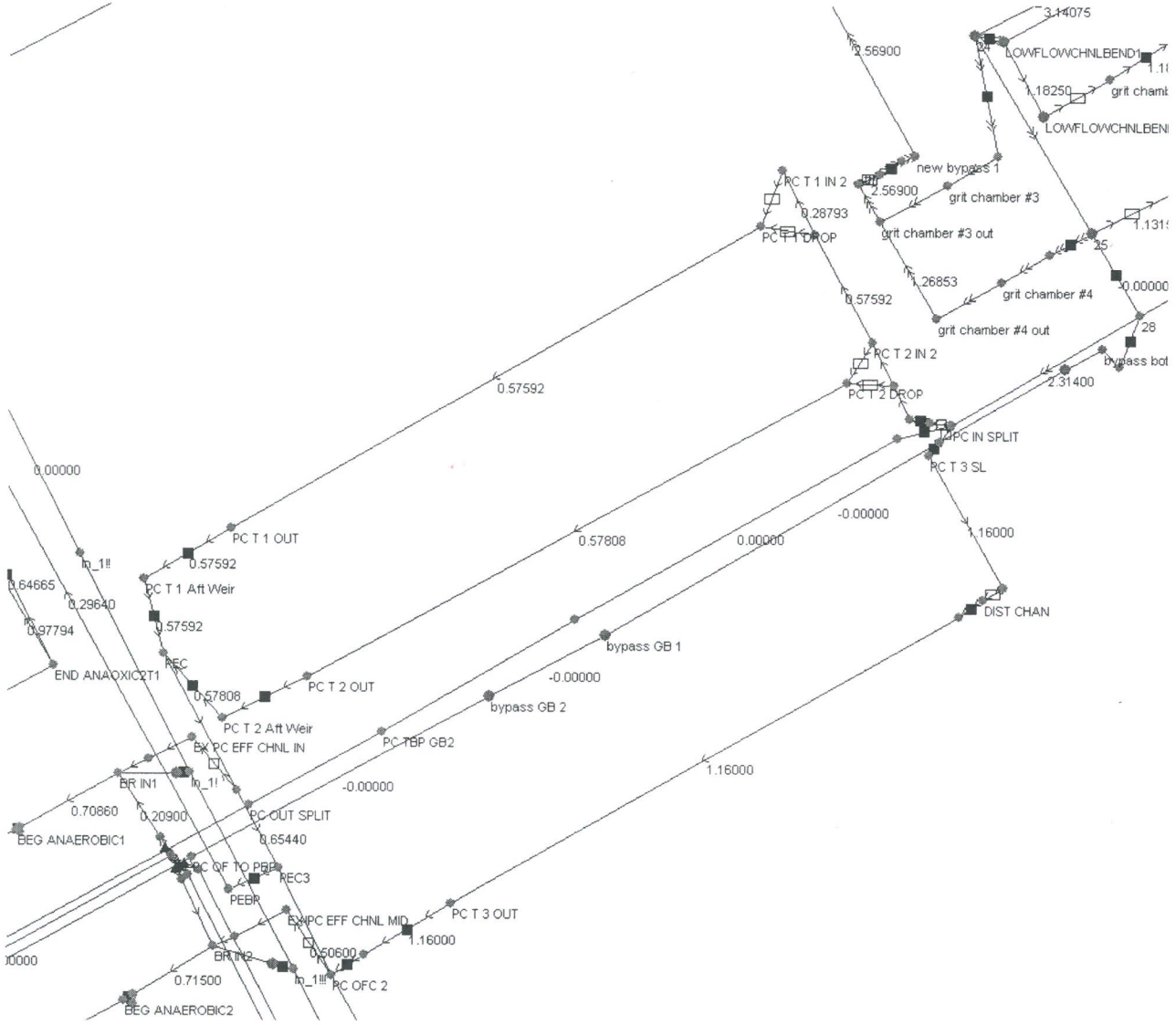
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s **422 ML/d**
Path



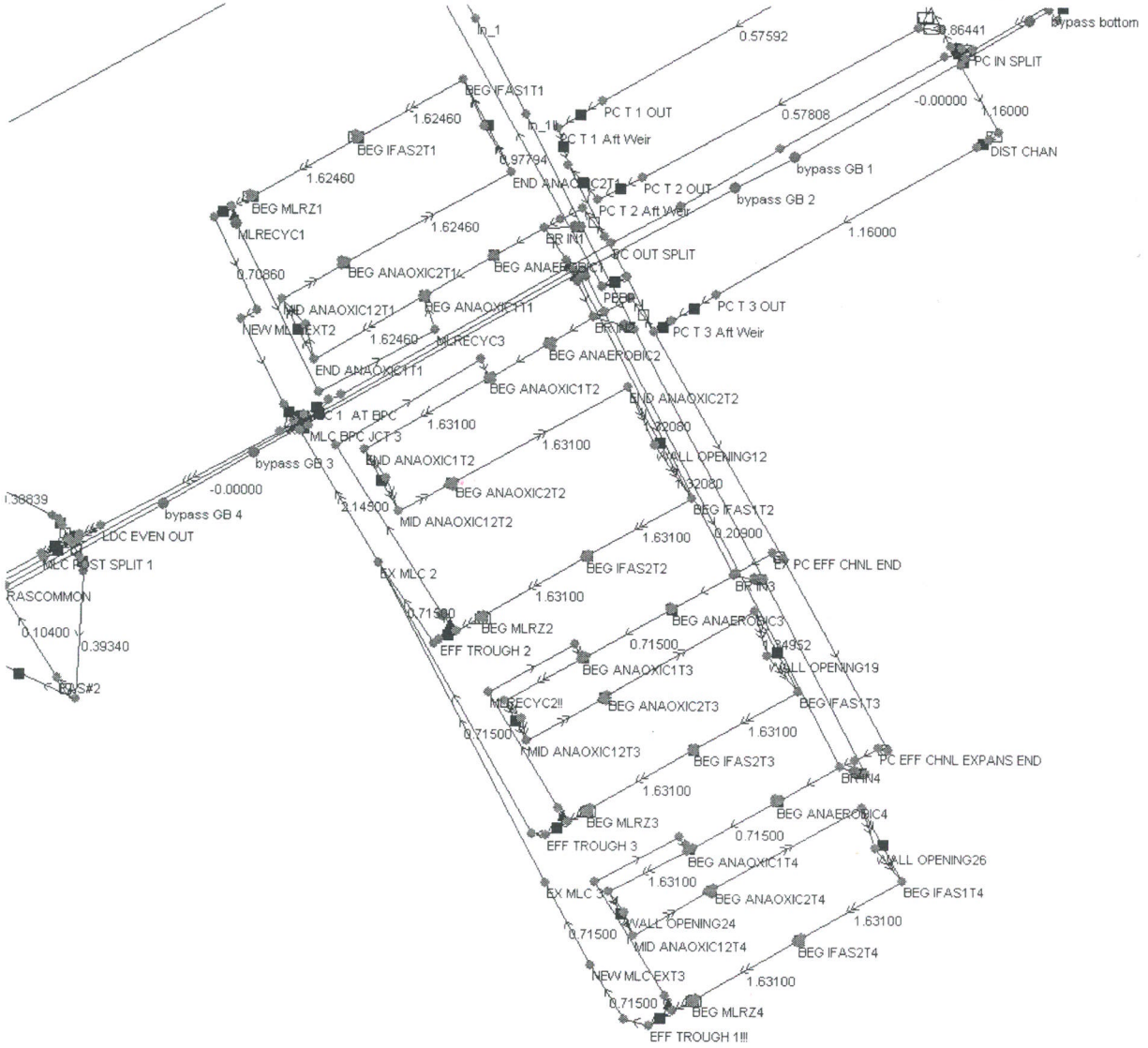
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s **422 ML/d**
Flows - Headworks and Grit Tanks **Flowrate number shown on this figure are in m^3/s.**



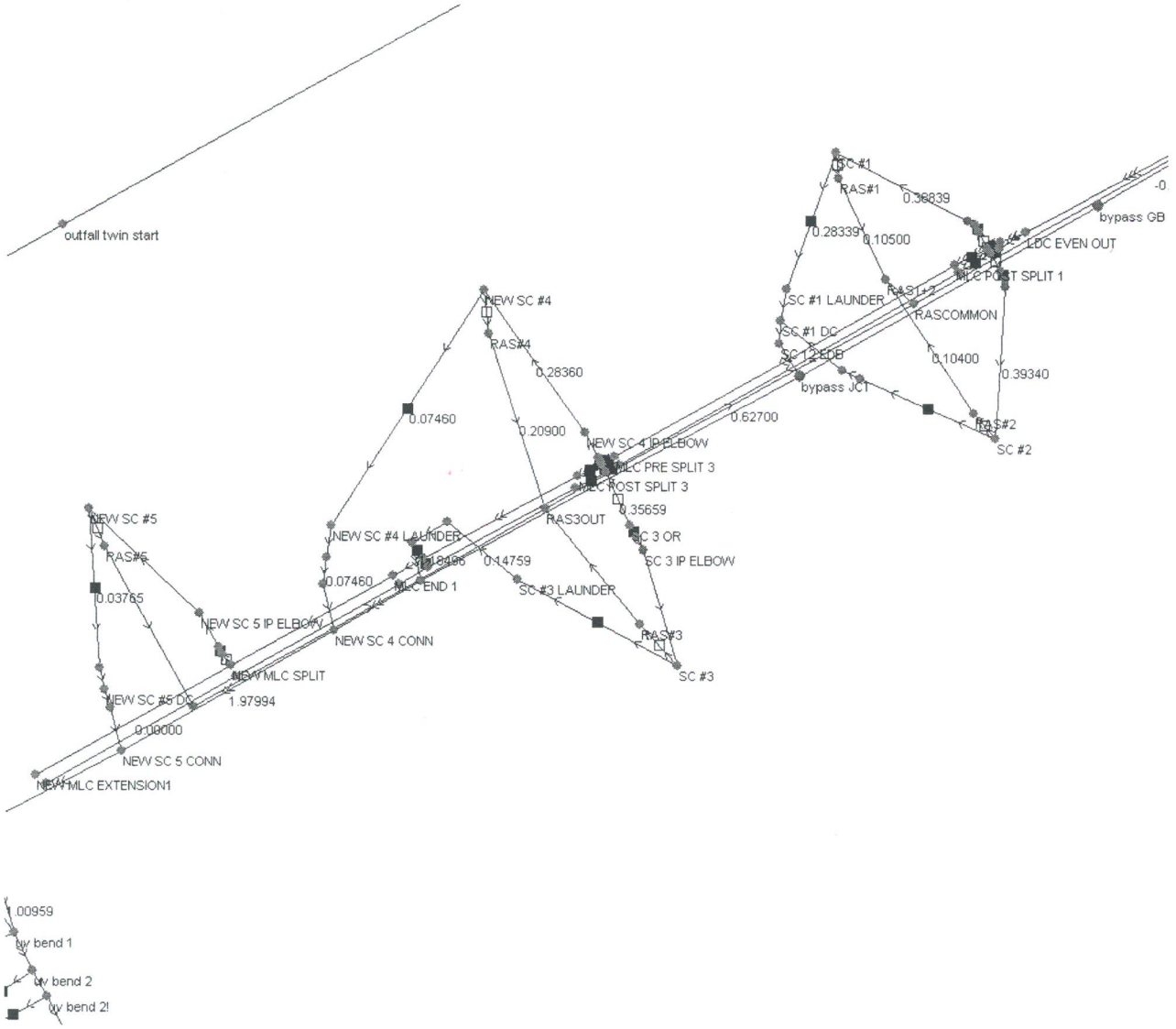
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s **422 ML/d**
Flows - Primary Clarifiers **Flowrate number shown on this figure are in m^3/s.**



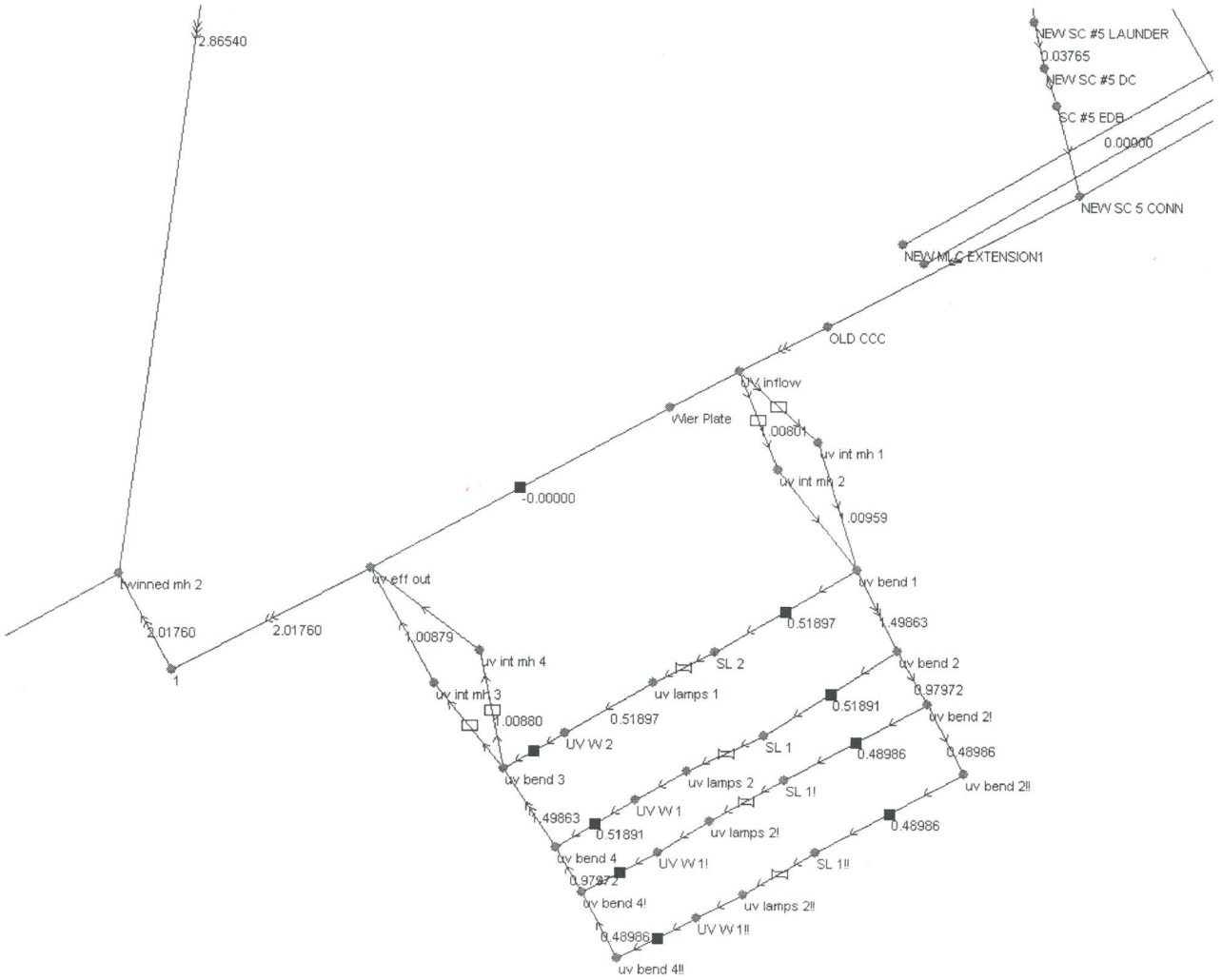
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s **422 ML/d**
Flows - Bioreactors **Flowrate number shown on this figure are in m^3/s.**



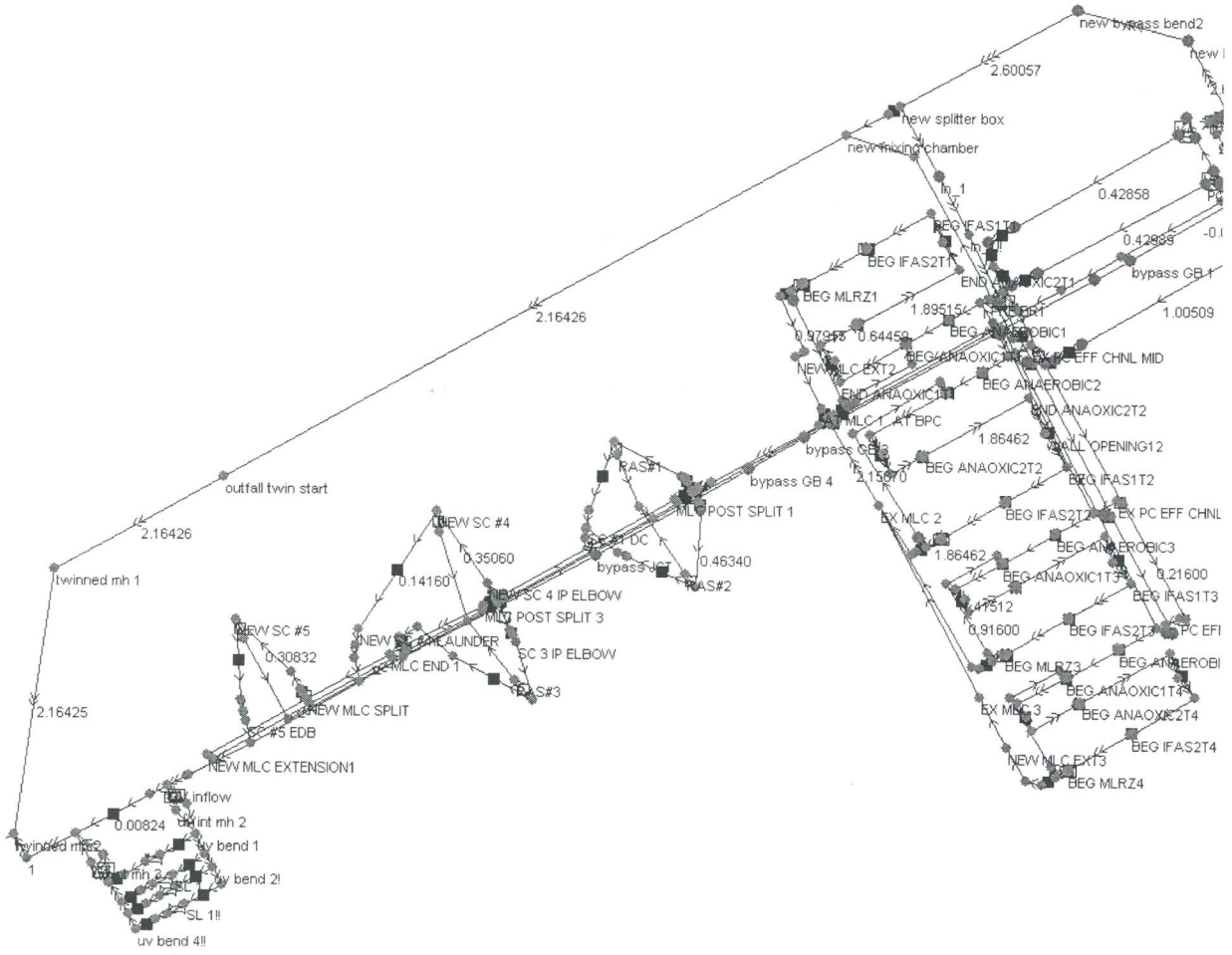
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s **422 ML/d**
Flows - Secondary Clarifiers **Flowrate number shown on this figure are in m^3/s.**



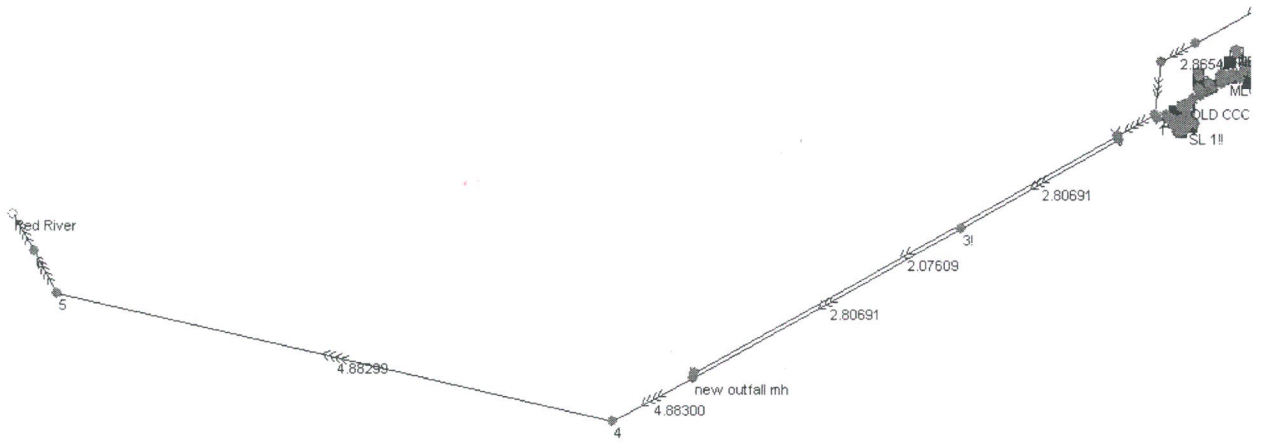
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s **422 ML/d**
Flows - UV Building **Flowrate number shown on this figure are in m^3/s.**



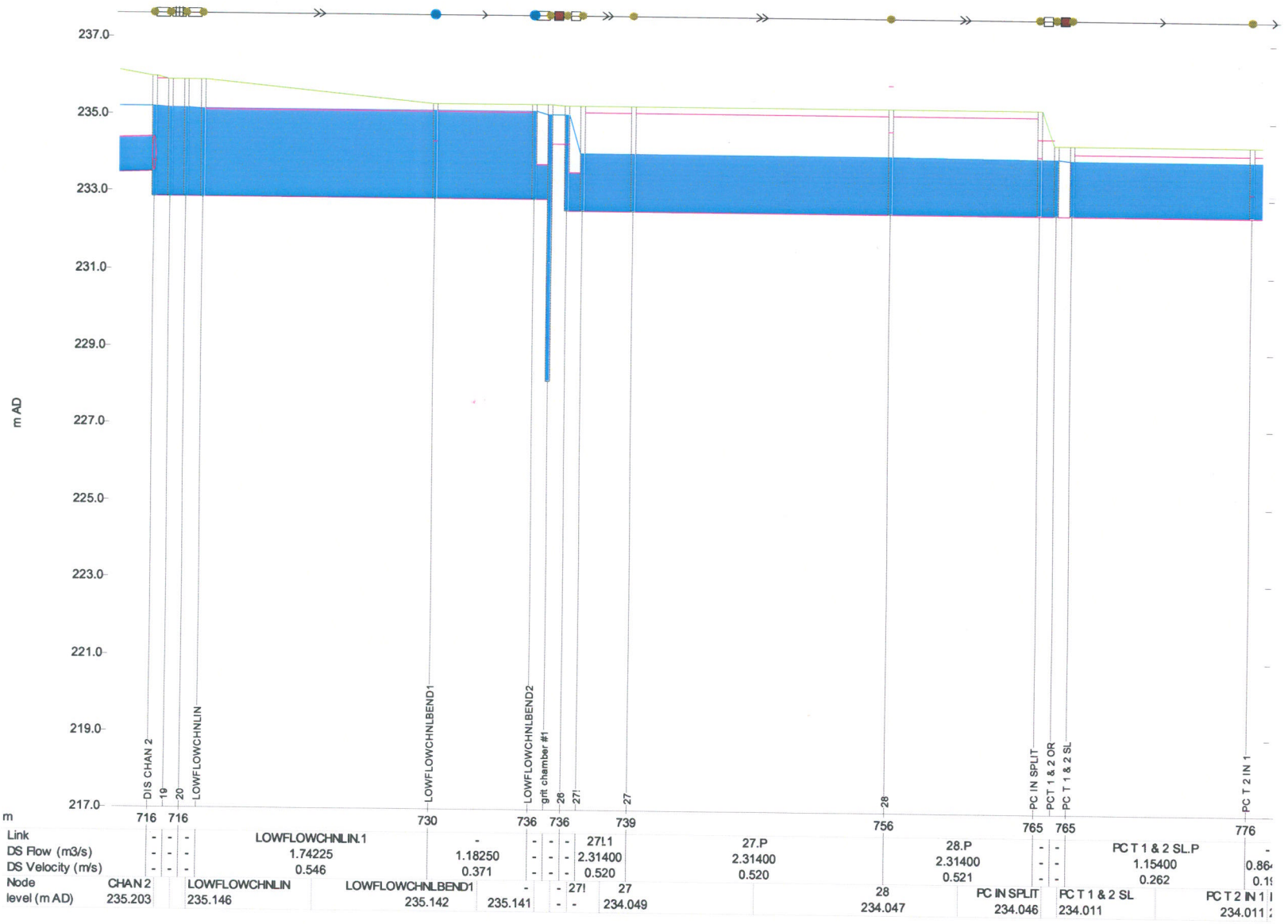
SEP Infowork Model Output Bypass
Flow 4.88 m3/s **422 ML/d**
Path



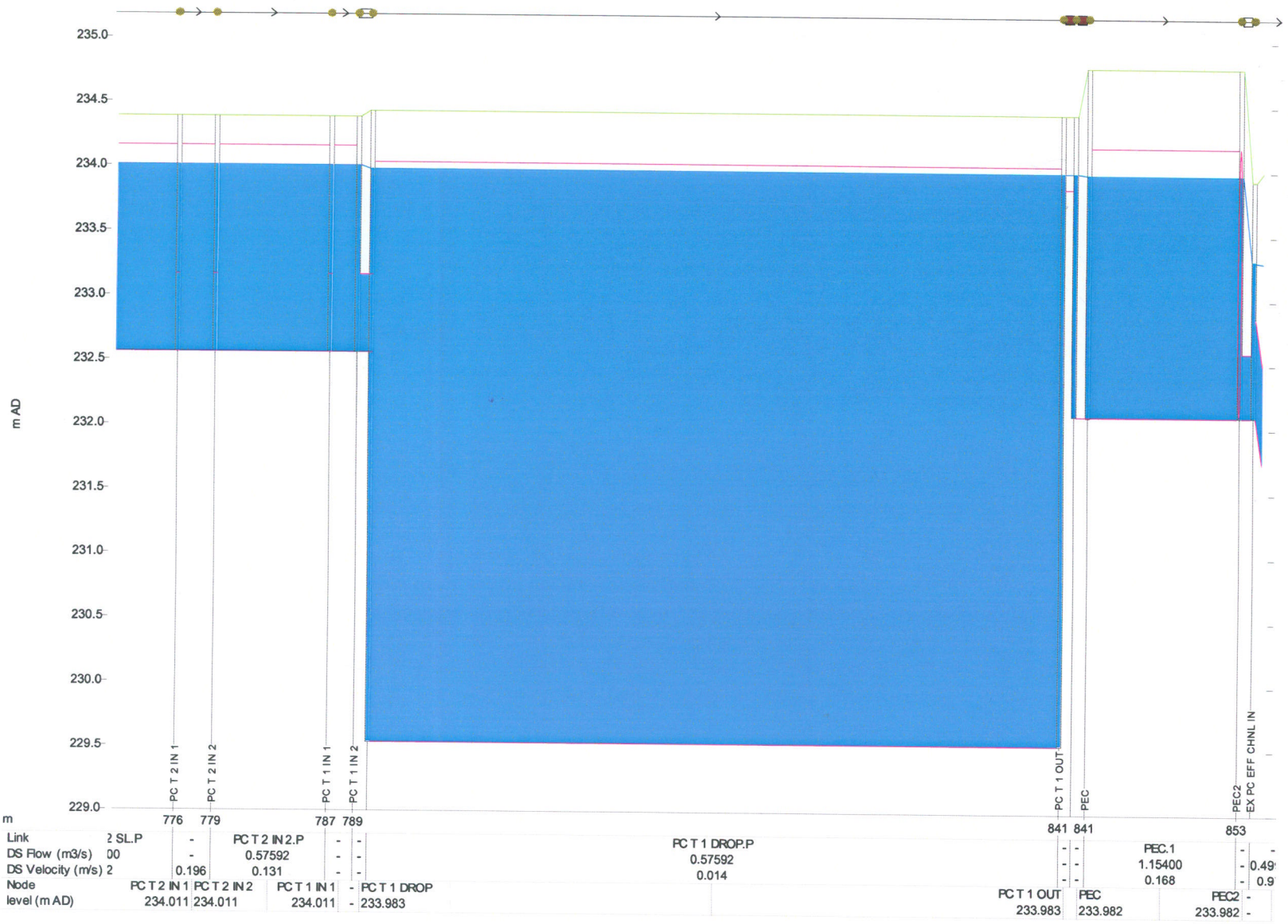
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s **422 ML/d**
Flows - Outfall **Flowrate number shown on this figure are in m^3/s.**



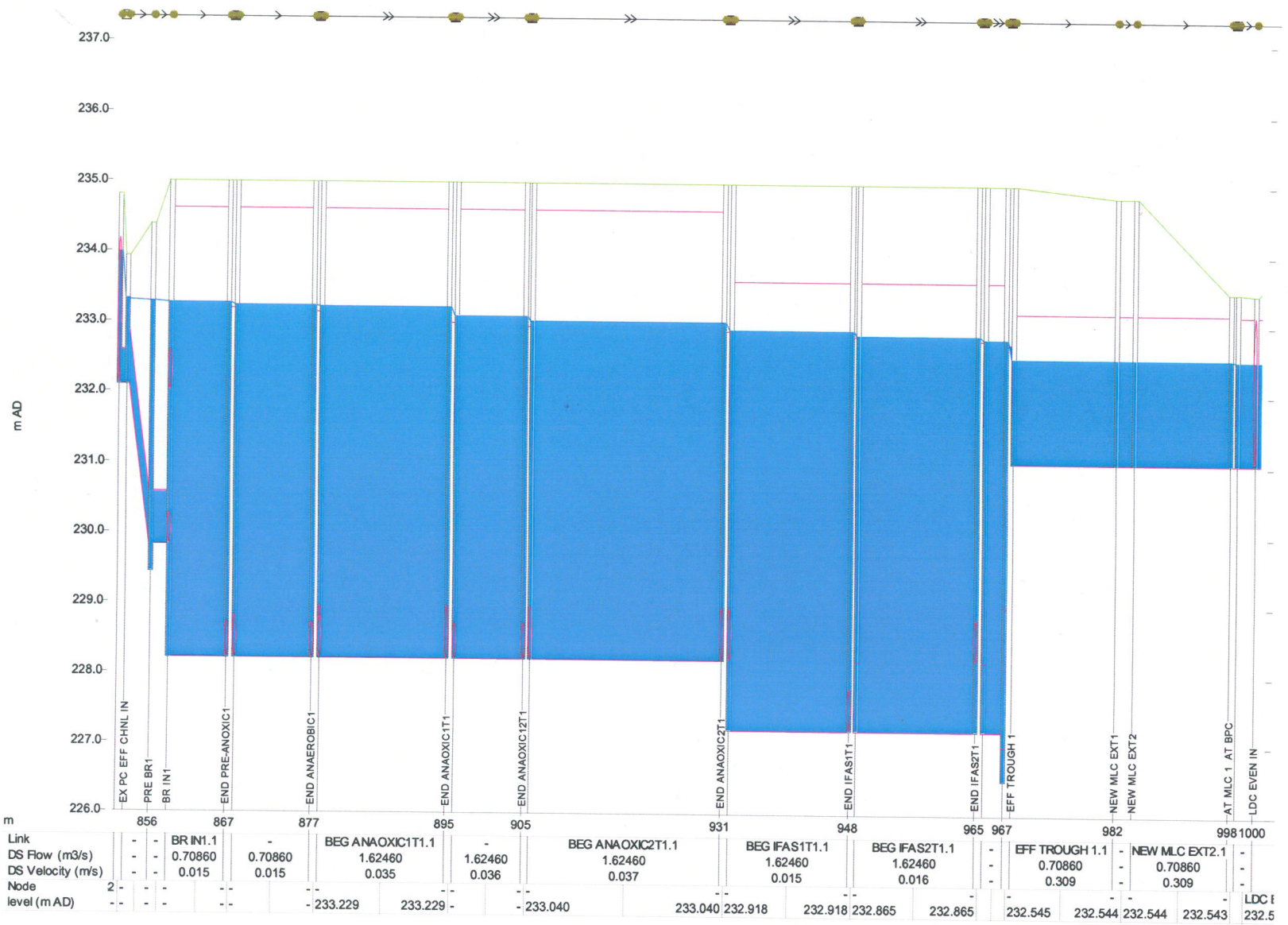
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Profile - Headworks to Primary Clarifier



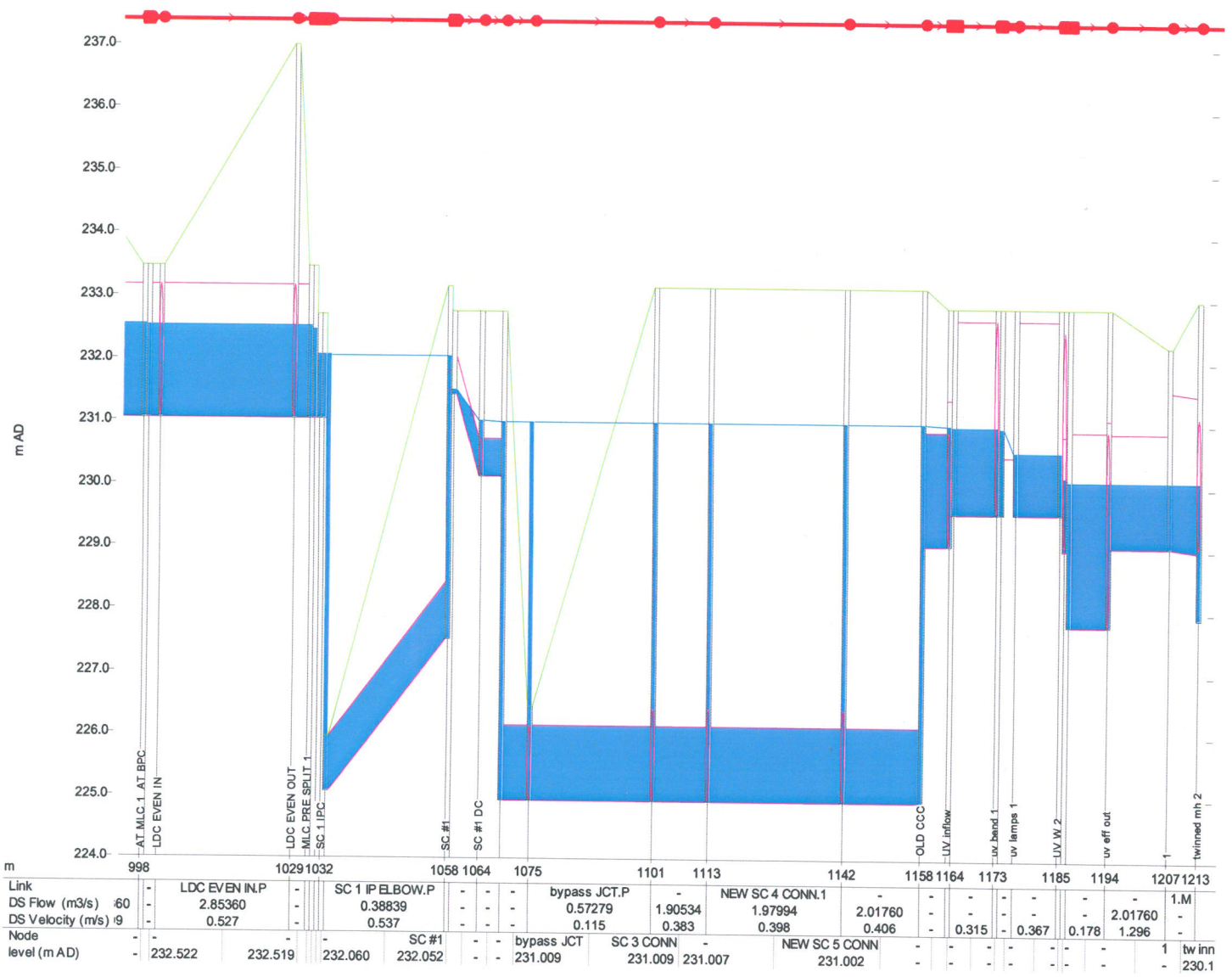
SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Profile - Primary Clarifier to Bioreactor



SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Profile - Bioreactor to Secondary Clarifier

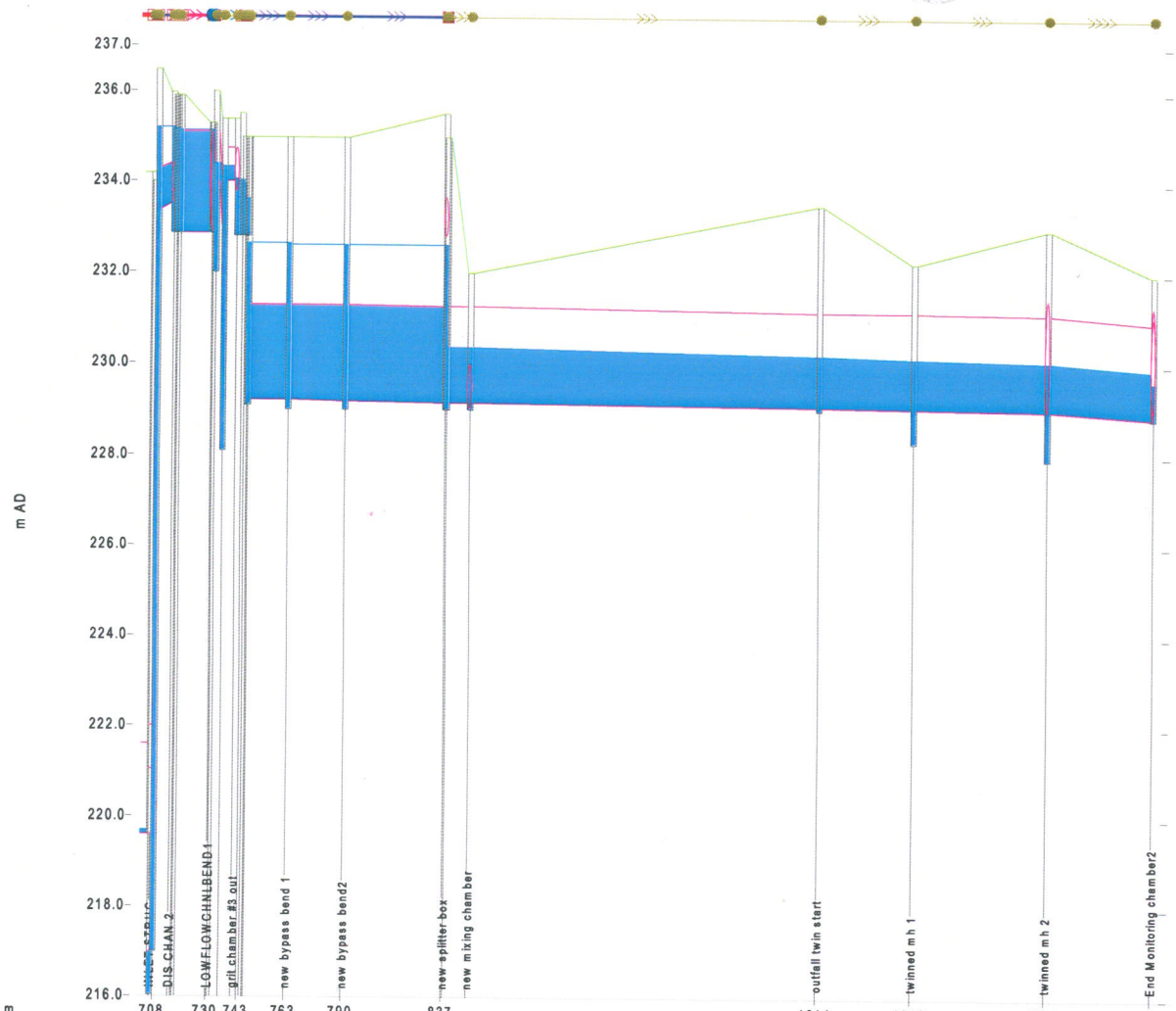


SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Profile - Secondary Clarifier to UV Building



m		998		1029	1032		1058	1064	1075		1101	1113		1142		1158	1164	1173		1185	1194	1207	1213
Link	-	LDC EVEN IN.P	-		SC 1 IP ELBOW.P	-	-	-	bypass JCT.P	-	NEW SC 4 CONN.1		-	-	-	-	-	-	-	-	-	1.M
DS Flow (m3/s)	60 -	2.85360	-		0.38839	-	-	-	0.57279	1.90534	1.97994	2.01760	-	-	-	-	-	-	-	2.01760	-	
DS Velocity (m/s)	9 -	0.527	-		0.537	-	-	-	0.115	0.383	0.398	0.406	-	0.315	-	0.367	0.178	1.296	-			
Node	-	-		-	-	SC #1	-	-	bypass JCT	SC 3 CONN	-	NEW SC 5 CONN		-	-	-	-	-	-	-	1	tw inn
level (m AD)	-	232.522		232.519	232.060	232.052	-	-	231.009	231.009	231.007	231.002		-	-	-	-	-	-	-	-	230.1

SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Profile



m		708	730	743	763	790	837		1014	1059	1122	1171
Link	-	-		-	-	-	-	new mixing chamber.1	-	tw inned mh 1.1	tw inned mh 2.1	
DS Flow (m3/s)	-	-		-	2.56900	2.56900	-	2.86540	2.86540	2.86540	4.88300	
DS Velocity (m/s)	-	-		0.706	0.706	0.706	-	1.485	1.539	1.632	2.820	
Node	IC			-	-	-	-	new mixing chamber	outfall tw in start	tw inned mh 1	tw inned mh 2	-
level (m AD)	0			-	-	232.632	-	230.388	230.234	230.182	230.101	-

SEP Infowork Model Output Headworks to River
Flow 4.88 m3/s 422 ML/d
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Max Level (m AD)	Max Flood Depth (m)	Volume balance (%)
x1	220.319	-9.781	-57.7	0	220.319	-9.781	0
UV W 2	230.566	-2.104	-2.1	0	230.566	-2.104	0
uv lamps 1	230.567	-2.103	-2.1	0	230.567	-2.103	0
uv int mh 4	230.119	-2.551	-2.6	0	230.119	-2.551	0
uv int mh 2	230.966	-1.704	-1.7	0	230.966	-1.704	0
UV inflow	230.993	-1.877	-4.2	0	230.993	-1.877	0
uv eff out	230.119	-2.551	-145.4	0	230.119	-2.551	0
uv bend 3	230.16	-2.51	-2.5	0	230.16	-2.51	0
uv bend 1	230.966	-1.704	-1.7	0	230.966	-1.704	0
twinned mh 2	230.101	-2.899	-7.5	0	230.101	-2.899	0
SL 2	230.956	-1.714	-1.7	0	230.956	-1.714	0
SC 3 CONN	231.009	-2.163	-39.4	0	231.009	-2.163	0
SC 1&2 EDB	231.01	-1.756	-2.6	0	231.01	-1.756	0
SC 1 OR	232.076	-0.436	-0.4	0	232.076	-0.436	0
SC 1 IPC	232.068	-0.444	-1	0	232.068	-0.444	0
SC 1 IP ELBOW	232.06	6.091	0	0	232.06	6.091	0
SC #1 LAUNDER	231.519	-1.247	-79.8	0	231.519	-1.247	0
SC #1 DC	231.021	-1.745	-3.5	0	231.021	-1.745	0
SC #1	232.052	-1.12	-988.8	0	232.052	-1.12	0
Red River							
pump1	235.203	-0.797	-0.8	0	235.203	-0.797	0
PRE BR1	233.293	-1.098	-2	0	233.293	-1.098	0
PEC2	233.982	-0.768	-0.8	0	233.982	-0.768	0
PEC	233.982	-0.768	-3.8	0	233.982	-0.768	0
PCT 1 & 2 OR	234.021	-0.142	-0.1	0	234.021	-0.142	0
PC T 2 IN 2	234.011	-0.152	-0.2	0	234.011	-0.152	0
PC T 2 IN 1	234.011	-0.152	-0.2	0	234.011	-0.152	0
PC T 1 OUT	233.983	-0.172	-0.2	0	233.983	-0.172	0
PC T 1 IN 2	234.011	-0.152	-0.2	0	234.011	-0.152	0
PC T 1 IN 1	234.011	-0.152	-0.2	0	234.011	-0.152	0
PC T 1 DROP	233.983	-0.172	-0.2	0	233.983	-0.172	0
PC T 1 Aft Weir	233.983	-0.172	-0.2	0	233.983	-0.172	0
PC T 1 & 2 SL	234.011	-0.152	-0.2	0	234.011	-0.152	0
PC IN SPLIT	234.046	-1.056	-1.1	0	234.046	-1.056	0
OLD CCC	230.999	-1.561	-37.1	0	230.999	-1.561	0
NEW SC 5 CONN	231.002	-2.17	-39.5	0	231.002	-2.17	0
NEW SC 4 CONN	231.007	-2.165	-39.4	0	231.007	-2.165	0
new outfall mh	227.956	-4.294	-4.3	0	227.956	-4.294	0
NEW MLC EXT2	232.544	-2.076	-2.1	0	232.544	-2.076	0
NEW MLC EXT1	232.544	-2.076	-2.1	0	232.544	-2.076	0
MLC SPLIT 1	232.475	-0.697	-0.7	0	232.475	-0.697	0
MLC PRE SPLIT 1	232.518	-0.654	-0.7	0	232.518	-0.654	0
MLC BPC JCT 1	232.522	-0.649	-0.6	0	232.522	-0.649	0

SEP Infowork Model Output Headworks to River
Flow 4.88 m3/s **422 ML/d**
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Max Level (m AD)	Max Flood Depth (m)	Volume balance (%)
MID ANAOXIC12T1	233.107	-1.543	-1.5	0	233.107	-1.543	0
LOWFLOWCHNLIN	235.146	-0.769	-2.9	0	235.146	-0.769	0
LOWFLOWCHNLBEND2	235.141	0.039	0	0	235.141	0.039	0
LOWFLOWCHNLBEND1	235.142	0.04	0	0	235.142	0.04	0
LDC EVEN OUT	232.519	-4.481	-4.5	0	232.519	-4.481	0
LDC EVEN IN	232.522	-0.65	-0.7	0	232.522	-0.65	0
INLET STRUC	219.61	-10.51	-103	0	219.61	-10.51	0
grit chamber #1	235.067	-0.238	-19.9	0	235.067	-0.238	0
EX PC EFF CHNL IN	233.321	-0.613	-1.6	0	233.321	-0.613	0
END PRE-ANOXIC1	233.28	-1.37	-1.4	0	233.28	-1.37	0
End Monitoring chamber2	229.674	-2.326	-15	0	229.674	-2.326	0
END MLRZ1	232.809	-1.841	-1.8	0	232.809	-1.841	0
END IFAS2T1	232.865	-1.785	-1.8	0	232.865	-1.785	0
END IFAS1T1	232.918	-1.732	-1.7	0	232.918	-1.732	0
END ANAOXIC2T1	233.04	-1.61	-1.6	0	233.04	-1.61	0
END ANAOXIC1T1	233.229	-1.421	-1.4	0	233.229	-1.421	0
END ANAOXIC12T1	233.107	-1.543	-1.5	0	233.107	-1.543	0
END ANAEROBIC1	233.25	-1.4	-1.4	0	233.25	-1.4	0
EMC_22	229.658	-2.342	-14	0	229.658	-2.342	0
EFF TROUGH 1	232.545	-2.105	-2.1	0	232.545	-2.105	0
E WET WELL	217	-9	-394.2	0	217	-9	0
DIS CHAN 2	235.203	-0.777	-17.2	0	235.203	-0.777	0
bypass JCT	231.009	4.847	0.3	0	231.009	4.847	0
BR IN1	233.28	-1.37	-1.4	0	233.28	-1.37	0
BEG MLRZ1	232.809	-1.841	-1.8	0	232.809	-1.841	0
BEG IFAS2T1	232.865	-1.785	-1.8	0	232.865	-1.785	0
BEG IFAS1T1	232.918	-1.732	-1.7	0	232.918	-1.732	0
BEG ANAOXIC2T1	233.04	-1.61	-1.6	0	233.04	-1.61	0
BEG ANAOXIC1T1	233.229	-1.421	-1.4	0	233.229	-1.421	0
BEG ANAEROBIC1	233.25	-1.4	-1.4	0	233.25	-1.4	0
AT MLC 1 AT BPC	232.543	-0.628	-0.6	0	232.543	-0.628	0
6	219.837	-3.883	-3.9	0	219.837	-3.883	0
5	224.681	-7.269	-13.2	0	224.681	-7.269	0
4	227.421	-4.529	-42.1	0	227.421	-4.529	0
3!	228.88	-3.5	-3.9	0	228.88	-3.5	0
28	234.047	-1.055	-1.1	0	234.047	-1.055	0
27!	234.049	-1.053	-1.1	0	234.049	-1.053	0
27	234.049	-1.053	-1.1	0	234.049	-1.053	0
26	235.061	-0.041	0	0	235.061	-0.041	0
20	235.164	-0.751	-0.8	0	235.164	-0.751	0
19	235.185	-0.732	-3.8	0	235.185	-0.732	0
1	230.105	-2.155	-56	0	230.105	-2.155	0

SEP Infowork Model Output Headworks to River
Flow 4.88 m3/s 422 ML/d
Conduit Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
x1	1	0.099	0	0	0	0.00086	0.099	0	0	39.2
uv lamps 1	P	0.996	0.51897	0.117	0.367	9.00E-05	0.997	0.51897	0.367	13
uv int mh 4	P	2.319	1.0088	0.037	0.178	0.00001	2.319	1.0088	0.178	48.3
uv int mh 2	P	1.396	1.00801	0.085	0.315	4.00E-05	1.396	1.00801	0.315	29.1
uv eff out	P	1.048	2.0176	0.446	1.296	0.00096	1.06	2.0176	1.278	20.1
twinned mh 2	1	1.05	4.883	0.992	2.82	0.00362	1.06	4.883	2.785	86.9
SC 3 CONN	1	6.065	1.90534	0.015	0.383	1.00E-04	6.066	1.90534	0.383	59.4
SC 1&2 EDB	P	6.067	0.57279	0.004	0.115	0.00001	6.067	0.57279	0.115	29.3
SC 1 IPC	P	6.991	0.38839	0.025	0.506	0.00512	1.027	0.38839	0.588	0.7
SC 1 IP ELBOW	P	4.519	0.38839	0.027	0.537	2.30E-04	6.989	0.38839	0.506	19.1
SC #1 LAUNDER	P	0.898	0.28339	0.021	0.365	0.08873	0.086	0.28339	2.686	2.2
SC #1 DC	P	0.886	0.57279	0.042	0.737	8.40E-04	0.89	0.57279	0.737	3.9
pump1	1	1.703	0	0	0	-1.00E-05	1.803	0	0	5.4
PRE BR1	1	3.461	0.4996	0.054	0.974	0.00215	3.467	0.4996	0.974	1.3
PEC	1	1.877	1.154	0.039	0.168	0.00001	1.877	1.154	0.168	77.5
PC T 2 IN 2	P	1.446	0.57592	0.035	0.131	0.00001	1.446	0.57592	0.131	37.5
PC T 2 IN 1	P	1.446	0.86441	0.052	0.196	0.00001	1.446	0.86441	0.196	12.3
PC T 1 IN 1	P	1.446	0.28793	0.017	0.065	0	1.446	0.28793	0.065	9.3
PC T 1 DROP	P	4.443	0.57592	0.002	0.014	0	4.443	0.57592	0.014	2091
PC T 1 & 2 SL	P	1.446	1.154	0.069	0.262	2.00E-05	1.446	1.154	0.262	49.4
OLD CCC	1	1.937	2.0176	0.086	0.747	2.80E-04	1.938	2.0176	0.747	15.3
NEW SC 5 CONN	1	6.057	2.0176	0.016	0.406	1.10E-04	6.059	2.0176	0.406	81.1
NEW SC 4 CONN	1	6.06	1.97994	0.015	0.398	1.10E-04	6.063	1.97994	0.398	143.4
new outfall mh	1	1.282	4.883	0.731	2.482	0.00486	0.99	4.883	3.363	180.5
NEW MLC EXT2	1	1.505	0.7086	0.08	0.309	5.00E-05	1.506	0.7086	0.309	30.7
NEW MLC EXT1	1	1.506	0.7086	0.08	0.309	5.00E-05	1.506	0.7086	0.309	5.7
MLC BPC JCT 1	P	1.484	0.81535	0.079	0.3	3.00E-05	1.484	0.81535	0.3	6.8
MID ANAOXIC12T1	1	4.888	1.6246	0.005	0.036	0	4.888	1.6246	0.036	427.9
LOWFLOWCHNLIN	1	2.275	1.74225	0.091	0.546	1.50E-04	2.277	1.74225	0.546	46.1
LOWFLOWCHNLBEND1	1	2.274	1.1825	0.062	0.371	7.00E-05	2.274	1.1825	0.371	19.6
LDC EVEN OUT	P	1.48	1.50222	0.146	0.555	1.20E-04	1.481	1.50222	0.555	8.6
LDC EVEN IN	P	1.481	2.8536	0.138	0.527	6.00E-05	1.483	2.8536	0.526	154.5
EX PC EFF CHNL IN	2	3.475	0.4996	0.054	0.973	0.00395	1.203	0.4996	1.044	1.7
EMC_22	2	0.9	2.80691	0.83	2.181	0.00361	0.807	2.80691	2.51	252.9
EMC_22	1	0.824	-2.80691	0.599	-1.704	-0.0029	0.788	-2.80691	-1.781	8.9
EFF TROUGH 1	1	1.506	0.7086	0.08	0.309	5.00E-05	1.507	0.7086	0.309	32.8
bypass JCT	P	6.067	0.57279	0.004	0.115	0.00001	6.067	0.57279	0.115	130.8
BR IN1	1	5.061	0.7086	0.002	0.015	0	5.061	0.7086	0.015	372.1
BEG MLRZ1	1	5.59	1.6246	0.002	0.016	0	5.59	1.6246	0.016	300.6
BEG IFAS2T1	1	5.646	1.6246	0.002	0.016	0	5.646	1.6246	0.016	1734.9
BEG IFAS1T1	1	5.699	1.6246	0.002	0.015	0	5.699	1.6246	0.015	1770.7
BEG ANAOXIC2T1	1	4.821	1.6246	0.005	0.037	0	4.821	1.6246	0.037	1172.8
BEG ANAOXIC1T1	1	5.01	1.6246	0.005	0.035	0	5.01	1.6246	0.035	807.3
BEG ANAEROBIC1	1	5.031	0.7086	0.002	0.015	0	5.031	0.7086	0.015	496.5
6	6	1.093	4.88299	0.997	2.982	0.00379	1.225	4.88299	2.611	89.1
5	5	1.238	4.88299	0.783	2.579	0.08742	0.497	4.88299	8.456	43.2
4	3	1.094	4.88299	0.995	2.978	0.00316	1.268	4.883	2.513	1264.9
3!	1	0.996	2.80691	0.684	1.919	0.00254	0.9	2.80691	2.182	482
28	P	1.481	2.314	0.137	0.521	7.00E-05	1.482	2.314	0.52	41.3
27	P	1.482	2.314	0.136	0.52	7.00E-05	1.483	2.314	0.52	71.6
27!	1	1.484	2.314	0.136	0.52	8.00E-05	1.484	2.314	0.52	14
1	M	1.101	2.0176	0.279	0.916	0.00059	1.048	2.0176	0.963	13.4

SEP Infowork Model Output Headworks to River
Flow 4.88 m3/s 422 ML/d
Weir Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Froude number	US Velocity (m/s)	Volume (m3)
AT MLC 1 AT BPC	W	1.484	0.709	0.103	0.391	0	1.505	0.7086	0.1	0.386	0
END ANAEROBIC1	1	0.079	0.353	0.558	0.491	-	0.1	0.35305	0.391	0.387	0
END ANAOXIC12T1	1	0.09	0.9916	1.299	1.217	0	0.157	0.9916	0.558	0.693	0
END ANAOXIC1T1	1	0.107	1.0637	1.934	1.983	0	0.229	1.0637	0.62	0.929	0
END ANAOXIC2T1	1	0.018	0.64665	16.82	7.106	0	0.14	0.64665	0.793	0.927	0
END IFAS1T1	1	0.015	0.7724	7.038	2.727	0	0.068	0.7724	0.749	0.612	0
END IFAS2T1	1	0.009	0.76212	15.004	4.497	0	0.065	0.76212	0.788	0.631	0
END MLRZ1	1	-0.205	0.7086	0	0	0	0.059	0.7086	0.85	0.647	0
END PRE-ANOXIC1	1	0.05	0.33114	1.033	0.725	0	0.08	0.33114	0.517	0.457	0
grit chamber #1	W	0.759	1.1825	0.062	0.17	0	0.765	1.1825	0.062	0.169	0
MLC PRE SPLIT 1	W	1.437	1.50222	0.152	0.572	0	1.48	1.50222	0.146	0.555	0
PC T 1 Aft Weir	W	1.877	0.57592	0.008	0.033	0	1.878	0.57592	0.008	0.033	0
PC T 1 OUT	W	0.118	0.57592	0.205	0.175	0	0.118	0.57592	0.203	0.175	0
PCT 1 & 2 OR	W	1.446	1.154	0.071	0.266	0	1.456	1.154	0.07	0.264	0
SC #1	W	-0.523	0.28339	0	0	0	0.01	0.28339	0.85	0.267	0
SC 1 OR	W	1.03	0.38839	0.065	0.206	0	1.038	0.38839	0.064	0.205	0
uv bend 1	W	1.386	0.51897	0.072	0.264	0	1.396	0.51897	0.071	0.262	0
UV W 2	W	-0.14	0.51897	0	0	0	0.266	0.51897	0.85	1.373	0

SEP Infowork Model Output Headworks to River
Flow 4.88 m3/s 422 ML/d
Sluice Gate Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
20	1	2.279	1.74225	0.09	0.425	0	2.297	1.74225	0.421	0
DIS CHAN 2	3	2.318	1.74225	0.088	0.417	0	2.336	1.74225	0.414	0
INLET STRUC	1	-2.61	0	0	0	0	0	0	0	0
LOWFLOWCHNLBEND2	1	2.2	1.1825	0.284	0.849	0	2.274	1.1825	0.849	0
PC T 1 IN 2	S	1.418	0.28793	0.211	0.516	0	1.446	0.28793	0.516	0
uv bend 3	1	1.119	1.0088	0.198	0.657	0	1.16	1.0088	0.634	0
UV inflow	1	1.396	1.00801	0.142	0.526	0	1.423	1.00801	0.516	0

SEP Infowork Model Output Headworks to River
Flow 4.88 m3/s 422 ML/d
Orifice Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
26	1	1.484	2.314	0	2.946	0	2	2.496	99964.8	2.946
MLC SPLIT 1	O	1.038	0.38839	0	1.978	0	2	1.437	16778.62	1.978
PC IN SPLIT	O	1.456	1.154	0.133	0.504	0	2	1.481	49852.8	0.496
PEC2	1	1.216	0.4996	0	2.544	0	2	1.877	21582.57	2.544

SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Node Results

Node ID	Level (m AD)	Flood Depth (m)	Flood Volume (m3)	Volume Lost (m3)	Max Level (m AD)	Max Flood Depth (m)	Volume balance (%)
twinned mh 2	230.101	-2.899	-7.5	0	230.101	-2.899	0
twinned mh 1	230.182	-2.078	-5.4	0	230.182	-2.078	0
pump2	235.203	-0.797	-0.8	0	235.203	-0.797	0
pre heliscreen1	234.036	-0.464	-1.8	0	234.036	-0.464	0
pre grit chamber#3	234.411	-0.589	-0.6	0	234.411	-0.589	0
post spill weir1	233.647	-0.353	-0.7	0	233.647	-0.353	0
post new splitter box	230.396	-4.604	-4.6	0	230.396	-4.604	0
post heliscreen1	233.951	-0.049	0	0	233.951	-0.049	0
outfall twin start	230.234	-3.266	-11	0	230.234	-3.266	0
new splitter box	232.615	-2.885	-14.4	0	232.615	-2.885	0
new mixing chamber	230.388	-1.612	-1.6	0	230.388	-1.612	0
new bypass bend2	232.632	-1.368	-1.4	0	232.632	-1.368	0
new bypass bend 1	232.645	-1.355	-1.4	0	232.645	-1.355	0
new bypass 1	232.656	-1.344	-1.3	0	232.656	-1.344	0
LOWFLOWCHNLIN	235.146	-0.769	-2.9	0	235.146	-0.769	0
LOWFLOWCHNLBEND1	235.142	0.04	0	0	235.142	0.04	0
INLET STRUC	219.61	-10.51	-103	0	219.61	-10.51	0
grit chamber #3 out	234.054	-1.026	-1	0	234.054	-1.026	0
grit chamber #3	234.355	-0.725	-25.6	0	234.355	-0.725	0
End Monitoring chamber2	229.674	-2.326	-15	0	229.674	-2.326	0
E WET WELL	217	-9	-394.2	0	217	-9	0
DIS CHAN 2	235.203	-0.777	-17.2	0	235.203	-0.777	0
24	235.141	0.039	0	0	235.141	0.039	0
20	235.164	-0.751	-0.8	0	235.164	-0.751	0
19	235.185	-0.732	-3.8	0	235.185	-0.732	0

SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Conduit Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
x1	1	0.099	0	0	0.00E+00	0.00086	0.099	0	0	39.2
twinned mh 2	1	1.05	4.883	0.992	2.82E+00	0.00362	1.06	4.883	2.785	86.9
twinned mh 1	1	1.061	2.8654	0.57	1.63E+00	0.00127	1.111	2.8654	1.541	114
pump2	1	1.703	0	0	0.00E+00	-1.00E-05	1.803	0	0	5.2
pre grit chamber#3	1	1.357	1.30047	0.067	1.39E+00	0.01259	0.411	1.30047	4.094	3.1
post spill weir1	1	0.837	2.569	1	2.60E+00	0.00387	0.841	2.569	2.586	1
post new splitter box	1	1.223	2.569	0.39	1.23E+00	0.00054	1.224	2.569	1.226	23.1
outfall twin start	1	1.112	2.8654	0.522	1.54E+00	0.00114	1.143	2.8654	1.487	85
new mixing chamber	1	1.144	2.8654	0.494	1.49E+00	0.00092	1.222	2.8654	1.371	334.6
new bypass bend2	1	3.446	2.569	0.024	7.06E-01	0.00022	3.435	2.569	0.706	171.6
new bypass bend 1	1	3.442	2.569	0.024	7.06E-01	0.00022	3.436	2.569	0.706	97.7
new bypass 1	1	3.443	2.569	0.024	7.06E-01	0.00022	3.434	2.569	0.706	69.3
LOWFLOWCHNLIN	1	2.275	1.74225	0.091	5.46E-01	0.00015	2.277	1.74225	0.546	46.1
grit chamber #3	1	0.336	1.30047	1	1.82E+00	0.00329	0.354	1.30047	1.723	4.1
grit chamber #3 out	1	1.237	2.569	0.452	1.71E+00	0.00199	1.244	2.569	1.704	4.7

SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Weir Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Froude number	US Velocity (m/s)	Volume (m3)
post heliscreen1	1	-0.063	2.569	0	0	0	0.241	2.569	0.85	1.307	0
new splitter box	1	-1.604	2.569	0	0	0	0.615	2.569	0.85	2.088	0
LOWFLOWCHNLBEND1	2	0.801	0.55975	0.012	0.035	0	0.802	0.55975	0.012	0.035	0
24	1	-0.339	1.30047	0	0	0	0.391	1.30047	0.85	1.664	0

SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Sluice Gate Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
INLET STRUC	1	-2.61	0	0	0	0	0	0	0	0
DIS CHAN 2	3	2.318	1.74225	0.088	0.417	0	2.336	1.74225	0.414	0
20	1	2.279	1.74225	0.09	0.425	0	2.297	1.74225	0.421	0

SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Orifice Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
None										

SEP Infowork Model Output Headworks through Bypass
Flow 4.88 m3/s 422 ML/d
Screen Results

US Node ID	Link Suffix	DS Depth (m)	DS Flow (m3/s)	DS Froude number	DS Velocity (m/s)	Hydraulic Gradient	US Depth (m)	US Flow (m3/s)	US Velocity (m/s)	Volume (m3)
pre heliscreen1	1	0.596	2.569	0.457	1.105	0	0.681	2.569	0.967	0
19	B	2.297	1.74225	0.089	0.421	0	2.318	1.74225	0.417	0